

© Dorset Natural History and Archaeological Society
Production editor Jerry Bird
Typeset and printed in the United Kingdom by
4word Ltd, Unit 15, Bakers Park, Cater Road, Bristol BS13 7TT

Offprints from earlier *Proceedings* are available. Lists may be obtained from the Dorset County Museum. Please state the subjects you require.

Notes for contributors are printed at the end of this volume.

The Society gratefully acknowledges the generous assistance received in making this publication possible.

ISSN 0070 7112

PROCEEDINGS OF THE
DORSET NATURAL HISTORY
AND ARCHAEOLOGICAL
SOCIETY

Edited by
Paul Lashmar



Subject Editors:

Archaeology: Claire Pinder

Archaeology (Bournemouth University): Ian Hewitt

Biology: Nigel Webb Dorset Coast: Gordon Le Pard

Geology: vacant Literary Collections: vacant

Local History: Ann Smith

Chair of Editorial and Publications Committee: Roger Peers

Adviser to the Committee: Laurence Keen

Index: Claire Pinder

DNHAS publications website: John Palmer

<http://research.dorsetcountymuseum.org>

VOLUME 133

2012

CONTENTS

PAPERS

'Pretending to be seafaring men' – Vagrancy Law and Forgery with special reference to eighteenth-century Dorset <i>Audrey Eccles</i>	1
Making Georgian Faces: concept to curation <i>Gwen Yarker</i>	9
Naval Signal Stations on the Dorset Coast <i>David Clammer</i>	17
Coffee House Culture in Seventeenth-Century Lyme Regis <i>Judith Ford</i>	27
Hendrick de Keyser, Nicholas Stone, Inigo Jones and the founding of the modern Portland stone industry <i>Tom Williamson</i>	33
Chantmarle, Cattistock. Sir John Strode's Account of his Building, 1612 to 1623, and the Consecration of his Oratory or Chapel <i>Laurence Keen</i>	37
Digging in the Archives: W. Edward Bankes 1702–1729, The Young Bankes who went to India <i>Francesca Radcliffe</i>	43
The Opening of Powerstock School <i>T. P. Connor</i>	51
Identity and Loss: Discovering the identity of Tom Roberts's (1856–1931) pastel portrait of a young girl, at the Dorset County Museum <i>Gwen Yarker</i>	55

ARCHAEOLOGY

Dewlish Roman Villa: post-excavation report 2011 <i>Iain Hewitt</i>	65
The Archaeological Context of the Roman Coin Hoard from Nether Compton <i>John Oswin</i>	67
A Very Peculiar Practice: Preliminary Research into the Post-Firing Perforation of Late Iron Age/ Romano-British Pottery Vessels from South-East Dorset <i>K. Barrass</i>	69
A Lead Pendant from Cerne Abbas <i>Laurence Keen</i>	73
Three Romano-British Steles from Studland <i>Peter W. Cox</i>	75
The Excavation of a Late Bronze Age/Early Iron Age–Middle Iron Age Settlement at Home Field, Down Farm, Sixpenny Handley, Dorset <i>Chris Ellis</i>	77
Finds Reported to the Portable Antiquities Scheme in 2010 and 2011 <i>Giorstaidh Hayward Trevarthen</i>	99
Notes on Two Medieval Tiles <i>Laurence Keen</i>	101
Dorset Archaeology in 2011 <i>Bournemouth Archaeology Fieldwork 2011</i>	103

NATURAL HISTORY

Fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset <i>D.T. Donovan and M.B. Harvey</i>	117
Sea Pea, Abbotsbury Pease <i>Jo Draper</i>	126

NATURAL HISTORY REPORTS

General Weather Summary <i>John Oliver</i>	127
Dorset Rainfall <i>John Oliver</i>	128
Butterfly Report <i>W. Shreeves</i>	130
Hoverfly Report <i>E.T. and D.A. Levy</i>	135
Dorset Plant Gall Report <i>John A. Newbould</i>	135
Field Meeting Reports <i>John A. Newbould</i>	138

THE DORSET COUNTY BOUNDARY SURVEY

The Dorset County Boundary Survey <i>Katharine Barker</i>	145
Boundary landmarks in Anglo-Saxon charters <i>Della Hooke</i>	146
Ordnance Survey Boundary Remarks Books <i>Chris Slade</i>	154
Trees along the County Boundary <i>John A. Newbould</i>	155
The Botany of Boundaries, Some Thoughts <i>Robin Walls</i>	157

WORLD WAR II: DORSET AND THE HOME FRONT

World War II: Dorset and the Home Front <i>Katherine Barker and Alan Bailey</i>	161
The Worth of Worth: Radar at Worth Matravers <i>Dr Phil Judkins</i>	162
The Royal Naval Cordite Factory at Holton Heath <i>Bob Dukes</i>	166
Rehearsal for Disaster: Bridport's Beaches and the Dieppe Operation <i>Dr David Evans</i>	170
The Strategy and Tactics of World War II Pillboxes <i>John Hellis</i>	174

REVIEWS

T.L. Burton: <i>William Barnes's Dialect Poems: A Pronunciation Guide</i> . <i>Frances Austin-Jones</i>	177
Bournemouth Natural Science Society: <i>The Natural History of Bournemouth and the surrounding area</i> . Edited by R. Chapman. <i>Jim White</i>	177
<i>The Lymiad; a poem in the form of letters from Lyme to a friend at Bath written during the autumn of 1818</i> . Edited by John Fowles and John Constable. <i>Michael A. Taylor</i>	178

OBITUARIES

George Dannatt (1915–2009) <i>David Buckman</i>	181
Norrie Woodhall (1905–2011) <i>Angelique Richardson</i>	185
Philip Arthur Rahtz (1921–2011) <i>P. J. Woodward and R. N. R. Peers</i>	186

REPORT OF THE DORSET NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY FOR 2010 AND 2011

Chairman's Report	189
Director's Report	189
Hon. Editor's Report	190
Geology	191
Natural History	191
Archaeology	191
Art Volunteer Report	192
The Literary Collections	192
Social History	193
Photographic Department	194
Library	194
Dorset Archaeological Committee	195
The Dorset Local History Group	195
County Boundary Group Field Meetings	195
Dorset Record Society	198
Dorset County Museum Music Society	198
Dorset Record Society	198
Learning Report	199
Marketing Report 2011	200
Exhibitions Programme 2011	200
Event List for 2011	201
Field Secretary's Report	204
Membership and Visitor Figures	204
Lectures and Meetings	205
Researchers and Subjects	208
Index <i>Claire Pinder</i>	209
<i>Notes for Contributors</i>	215

The Dorset Natural History and Archaeological Society came into existence in 1928 with the coming together of the Dorset County Museum (founded in 1845) and the Dorset Natural History and Antiquarian Field Club (founded 1875). The County Museum was Dorset's first conservation body, coming into existence as it did in opposition to a plan of Isambard Kingdom Brunel to drive the line of his railway through Poundbury hill-fort west of Dorchester and Maumbury Rings to the east.

The Collection had several homes in Dorchester and Sherborne until the early 1880s when a public subscription headed by the Prince of Wales raised the money to buy the site of the George Inn and employ G.R. Crickmay to design the first part of the present building in High West Street. The museum was opened by the 'father' of British Archaeology, General Augustus Henry Lane Fox Pitt-Rivers on 7 January 1884. In 1938-9, Handel (now Williams) House was added to the property through the generosity of Sir Robert Williams.

Between 1963 and 1978 the Society launched a successful public appeal and the fabric was put in order, heating installed and an extension designed by Michael Brawne was built to provide a multi-purpose gallery for temporary exhibitions, lectures and conferences as well as a new archaeological gallery and schoolroom. All Saints' Church in High East Street, redundant in 1972, was converted to accommodate the largest archaeological reserve collection in the South West and more property has since been bought in Colliton Street for future expansion.

The Society exists to collect, conserve, record and publish the geology, palaeontology, natural history, archaeology, architecture, local history, fine and applied arts, textiles and literature as they pertain to the County of Dorset. These are promoted through displays and exhibitions, lectures, field meetings and the many events that comprise the annual programme. Dorset has a well-deserved reputation for its archaeology and geology and for its literary figures. The Society's collections are of international importance.

The Society also exists to promote research in these many Dorset-related fields. It publishes this annual *Proceedings* of academic papers and shorter contributions, reports from archaeological units working in the county and natural history reports. The well-regarded Dorset Monograph occasional series supplements the *Proceedings*, which allows for the publication of much longer reports. The Society also publishes books, pamphlets and postcards.

Over many years the Society has built up an important library housing a comprehensive collection of books, papers, articles, prints and drawings related to Dorset, and a number of rare sources available for research. The Society subscribes to a number of leading archaeology, geology and natural history journals.

The Society has two websites:

The Museum site is

<http://www.dorsetcountymuseum.org>

The Research site is

<http://www.dorsetcountymuseum.org/research>

The Research site presents a calendar of forthcoming events organised by the Society and its specialist interest groups, information about membership including an application form, and details of the Society's publications including a cumulative index to the *Proceedings* from Volume 1 to the present. An on-line form is provided for ordering copies of publications and offprints.

Articles intended for publication should be sent to the Hon. Editor c/o the Society. Please see Notes for Contributors at the back of this volume.



Goda. *Tom Roberts, 1908* (see page 56).

'Pretending to be seafaring men' – Vagrancy Law and Forgery with special reference to eighteenth-century Dorset

AUDREY ECCLES

Dorset, seamen, and vagrancy law in the eighteenth century

Dorset's geographical position as a maritime county situated between the great ports of Devon and Cornwall, and those of the Medway and London, meant that seafaring men were very commonly passing through en route between these centres. The authorities, from Parliament down to parish constables, were much pre-occupied by the problem of vagrancy, a long-standing concern in a country that had, from the sixteenth century onwards, made efforts to control the movements of the undeserving poor, and to support the deserving in their parish of settlement under the Old Poor Law. The repeated wars of the eighteenth century, all fought abroad, and imperial expansion, made seafaring increasingly important.

The law and passes

Vagrancy law was principally designed to prevent the poor 'wandering and begging', and to keep them in their parish of settlement, where they were entitled to relief if unable to work, and where the officers were supposed to find work for them if able-bodied.¹ Vagrants were taken before a justice of the peace, and might be whipped, imprisoned up to one month or committed until the next Quarter Sessions, which could order longer imprisonment and further whippings. The justice or the court could then issue a pass which served as the authority for sending them back to their settlement escorted by constables or vagrant contractors;² if they crossed a county boundary en route they were obliged to have the pass countersigned by a local justice. In the eighteenth century it seems sheer numbers meant that the majority were merely passed.³

The penal clauses of the 1744 Act did not, however, apply to 'soldiers wanting subsistence, having lawful certificates from their officers or the Secretary at War, or to mariners and seafaring men licensed by some testimonial or writing under the hand and seal of some justice of the peace setting down the time and place of their landing or discharge, and the place to which such soldiers and mariners are to pass, and the names of the chief towns or places through which they are to pass, and limiting the time of such their passage, while they continue in the direct way to the place to which they are to pass, and during the time so limited'.⁴ These passes did not actually entitle the holders to relief, but parish officers normally gave them a few pence subsistence, and often members of the public did likewise.

There was no statute against forgery in general, only statutes against the forgery of particular documents, mainly financial instruments.⁵ Fake passes and petitions were not among them, being more easily prosecuted under the vagrancy clauses against giving false information, or pretending to be soldiers or seamen.⁶ Some passes were no doubt genuine documents but issued by magistrates imposed upon by plausible tales, and therefore undetectable, but others were forged.

Richard Burn, a Westmorland justice and author of the most widely used handbook for justices of the period, experimented in one year by getting a sample of the handwriting of the mayor of Newcastle upon Tyne and comparing it with the passes of sailors said to be landed there that year, 'and out of eleven passes of that kind which came into my hands, the mayor's own proper hand writing was but set to two, and the other nine were forged'.⁷ In 1815 the clerk to the Lord Mayor of London mentioned a man in St Giles in the Fields who got a genuine pass to copy and could imitate the magistrates' handwriting, and concluded 'it is all trick and fraud'.⁸ It is with vagrants accused of using forged passes or false petitions that this paper is chiefly concerned.

Frauds and false pretences

There was an awareness that the exemption from punishment for persons with passes had opened up loopholes which could be exploited by the work shy, using false claims, false documents and various frauds. Middlesex in 1757 complained of swarms of beggars, some in real distress, but others who by 'artfull Disguises of Wretchedness' lived idle, and in 1805 the Bath Society for the Suppression of Vagrants estimated impostors as high as one fifth of all beggars. Those who went to London in 1786 to report the wreck of the *Halsewell* to the East India Company took the precaution of informing the magistrates en route that the survivors would be following, lest their journey 'should be rendered more miserable by unjust suspicions'.⁹

Parliamentary committees in the early nineteenth century heard that beggars borrowed or rented children to gain sympathy, feigned illness and 'collapsed' in the street, scarified their feet to make them bleed, chewed soap to foam at the mouth in fake fits or strapped up limbs to appear disabled. This latter ruse was particularly plausible in view of the long wars against France. The chief clerk at the Guildhall listed among the impostors the magistrates saw there 'persons going about representing themselves as soldiers or sailors, with an arm or a leg off', and the beadle of St George Bloomsbury reported having taken up four or five impostors claiming

to be disabled the previous Saturday.¹⁰ In 1821 the secretary to the Kendal society for suppressing vagrancy had come across impostors 'who pretend to be lame by twisting the fingers and wrist of the left hand, never the right, and bending the elbow so as to appear lame'; he appears to have decided they were impostors because he had only ever seen officers wounded in the right arm.¹¹ Other witnesses, to whom the committee gave less credence, said they had never come across such impostors and stressed that there were other less blameworthy reasons for mendicity. Very likely the food shortages of 1795 and 1801, plus wartime inflation and an increasing population had multiplied the numbers resorting to begging and to deception.¹²

Although actual cases before Quarter Sessions are by no means numerous, even in the eighteenth century many writers on the poor claimed imposture was rife.¹³ A few persons pretending to be dumb appear in most counties and in Dorset John Raven was apprehended for disturbing the peace 'pretending to be mad'.¹⁴ In some cases no further detail is given beyond the charge of being an impostor. Middlesex calendars (lists of persons admitted to prisons or appearing in court) and the vagrant contractor's expenses claims often noted vagrants as sick or lame, but they seem to have been genuinely so, and certainly greatly outnumbered the impostors.¹⁵

The present writer has found only one bogus disabled seaman in six counties.¹⁶ In 1793 John Ward was apprehended begging in Hackney with his arm wrapped up, claiming to be a disabled seaman. The constable examined his arm and found nothing wrong with it; Ward was, however, an American who had never gained a settlement, and it is not clear what the justices did with him.¹⁷

False petitions

In 1740 a girl of fifteen and her nine-year-old brother were found begging with a false petition in Weymouth. It turned out that it had been written by John Randyll, a man they met when staying at the same alehouse in Fordington. It read 'All Gentlemen and others whom these may Concern. The Bearer your Petitioner being in great Necessity and Raly and object of Charity her father and mother being Lately dead and she left in a miserable Condition and now being bound for portsmouth it being the place of her abode she doth now humbly Request the Charity of all well Disposed Christians to assist she and her brother on their jorney they never being used to any such occupation before in their Lives and in performing so Charitable and act your petitioners will be Ever In Duty bound to pray for all such Good gentlemen as shall Extend their Charity they being very [poor] and mean and no Imposture'. The children went out begging with this paper and when they returned to the alehouse Randyll and his female com-

panion Susannah Tinny took the money and spent it on drink. There is no record of what happened to Randyll, and Susannah Tinny was apparently not apprehended, but the boy later died in the bridewell.¹⁸

Although the insurance business had begun to make an impact in the eighteenth century it was still possible for persons who had lost property by fire, storm or shipwreck to obtain a brief, or patent (often loosely called a 'pass') allowing them to reclaim taxes paid on such commodities as malt and salt damaged by fire or flood, or to travel about collecting money from the charitable to compensate for losses. John Elmer was committed in July 1759 with his wife Catherine, charged with begging in Okeford Fitzpaine using a false certificate of losses by fire. From an army background and born in the East Indies, he was no longer a young man, indeed if his examination is to be believed he must have been nearly sixty, and had been travelling about picking up occasional work ever since his discharge from the army after Culloden. He confessed to begging with the certificate, which he said a stranger at the Angel in Shaftesbury gave him to help him on the road. The justices confiscated the fake certificate and sentenced him to six months in Sherborne bridewell, although his wife was most likely discharged – at least she does not appear in the bridewell bread bills with him.¹⁹

In Cambridgeshire an unusually well documented case reveals how forged papers might be obtained. In January 1772 John Graham was taken up as an impostor begging with a false brief. He told the examining magistrate that he formerly had a licence from the Hawkers and Pedlars Office but being reduced to distress had since sold goods without licence (also an offence under vagrancy law). He had often lodged at a public house called the Bankers Arms at Eye in Northamptonshire and when he called there a little before Michaelmas 1771, he told the landlord he was in distress and did not know how to raise money to buy some goods. The landlord told him, as he had several times before, that he was formerly a schoolmaster in London and could help him.

The landlord drew up a paper in the name of Thomas Pattin, headed 'County of Northampton', giving him licence for nine months to collect and receive voluntary contributions for the sum of eight hundred pounds lost by thunder and lightning on 10 July 1771 at Newton near Oundle. The licence stated the lightning had set fire to his house, stable and outbuildings and that he had a wife and six children. The landlord added false names and seals of Northamptonshire justices and fictitious parish officers' names confirming this loss, and told him he might collect money with it.

He admitted he had since done so in Northamptonshire and elsewhere by permission of several justices of the peace, presuming his letter of licence was genuine and his loss real, until he was taken up and committed to Cambridge County Gaol. He did not know the name of the landlord at the Bankers Arms, but

said he had a mark or wen at the side of his nose and had lived there for some time past and that the landlord's wife was the only witness to the goings-on in the parlour. He admitted having collected a total of £1 2s 0d from various people in the Cambridge area. Unfortunately the outcome of the case is unclear.²⁰

When Dorset justices checked the story of William Davis, suspecting his brief to be forged, their suspicions were confirmed. He was taken up 9 June 1766 lodging at an alehouse in Sherborne. John Hutchings Esq. wrote to the clerk of the peace in July explaining that Davis had brought him a 'pass' on 7 June which he claimed had been given him by two Welsh justices certifying a loss of £600 by a ship being burnt at sea, which he signed, not suspecting any fraud. However, later that day a fellow magistrate called on Hutchings and told him that Davis had been begging at his house the day before, so they began to smell a rat, and had him apprehended. Hutchings took Davis' examination, of which he enclosed a copy, and wrote to the overseer of Battle, Sussex to check his story.

Davis claimed in his examination to have been born, and settled, at Battle and brought up in the woollen manufactory. With his wife and two children and one Samuel Johnson of Battle, he had gone to London in November 1765 and boarded a merchant ship, the *Brilliant*, to go to New England; they took with them all their goods, worth £600, of which Davis' share was worth £60. After they had been at sea about nine days the ship caught fire by the captain's servant drawing rum from a firkin, but they were rescued by the *Elizabeth*, a Liverpool merchant ship. They were on board this vessel nearly six months, but on 20 May 1766 they were in Swansea and the captain of the *Brilliant* obtained the pass from two local justices for Davis, his children and Johnson to go to Battle.

They were in Yetminster on 6 June, where John Vincent Esq. gave them 3d relief, but refused to sign the pass, saying they were not going on the right road. Johnson and the children had gone ahead on the road to Cerne, but Davis fetched them back and they slept at the Black Lion alehouse at Holnest on the Friday, and came to Sherborne on the Saturday, when Mr Hutchings signed his pass. Davis admitted begging in Sherborne, and said the overseer had given him a shilling. He was apprehended the same night at the Boot alehouse, where he stayed because he had the rheumatism, while Johnson and the children went on towards Wimborne taking the pass. He added, probably in response to a question, that his wife died in the fire at sea.

All this sounded plausible, and the dates and places fitted, but when Nicholas Palmer, overseer of Battle, replied to Hutchings' letter of enquiry, he said the only William Davis of Battle was the son of William Davis and his wife Anne; he was thirty-five and in 1758 had enlisted as a dragoon in Mordant's regiment. He had two sisters Anne and Mary, and a brother Thomas who had heard from some soldiers of the regiment that his

brother William died in Germany of fever. Palmer added that there had been nobody called Johnson in Battle, a shopkeeper or of any other trade, for forty years.

'We believe the Person you have committed to Prison to be a Cheat [...] so Sir you may ask what Questions you think proper from this Information. We have no other family of the name of Davis But the above in the Town'. Armed with this information, and no doubt after further questioning, the court sentenced Davis to be whipped and discharged; whether Johnson and the two children ever existed is unclear. Two other men arrested at the alehouse with him, probably during a privy search, who seem to have had nothing to do with Davis, were also whipped and discharged.²¹ Vagabonds taken up during a privy search were 'required' to be whipped, but if the court had been inclined Davis could have been sentenced to up to two years as an incorrigible rogue under s. 9 for making a false statement.²²

Although there is little evidence that the justices in other counties were either as vigilant about false representation as those in Dorset, or as meticulous in seeking information, on at least one occasion the Dorset justices were the recipients of the enquiries. James Wadman of Imber, Wiltshire wrote to William Templeman, the Dorset clerk of the peace, for further information about a William Hancock, who had been committed to Devizes bridewell for begging with a false certificate of losses of £340 and upwards by a fire at a farm he rented at Langton on the Isle of Purbeck. Mr Wadman had made enquiries there and had been told by the minister of Langton that Hancock's whole account was not true, and that such a man lived at Wimborne, Dorset and had been taken up about a year before and flogged for the same thing. Mr Wadman asked for information about this conviction and punishment for use in prosecuting Hancock at the next Quarter Sessions: 'I think such Rogues ought to be made Examples of.' Naturally, the existence of previous offences both tended to confirm suspicions and to ensure a heavier sentence.

Wadman reported Hancock's statement that he was seventy, born at Dunsborne Abbot, Gloucestershire, and was discharged from Dorchester Gaol in 1737 under the Act of Insolvency.²³ He also gave a description of Hancock, who was about 5'6" or 5'7", and lame in the right hand, which was shrivelled and had two or three holes in it now healed. Hancock claimed it had been healed by Queen Anne touching it while she was in mourning for the death of Prince George, implying it was caused by the 'king's evil', but on another occasion that it was caused by a fall when he was about seventeen. He wore a brown cloth coat, serge waistcoat with yellow buttons, dark brown plush breeches with white buttons and a brown cloth greatcoat. He wore no wig but his own hair, grey and a little curling. The petition and certificate suspected to be false were signed by William Freeman of Corfe Castle and John Gill of Bridport, who according to Hancock, signed them at Wareham petty sessions. Mr

Wadman particularly wished to know if these gentlemen were Dorset justices and where they lived.

Mr Templeman was greatly indisposed, but a reply was sent on his behalf on 6 April 1751, confirming that William Hancock was indeed released from Dorchester Gaol in 1737 as an insolvent debtor, charged as William Hancock of Dunsborne Abbot in the County of Gloucester yeoman, at the suit of seven named persons for debts amounting to £920 13s 0d. Mr Templeman had also learned that a William Hancock, who seemed to be the same person, worked as a mason at the stone quarries near Langton on the Isle of Purbeck but left about seven years ago and entered himself on board a man of war and had not been heard of since. The description fitted, but as to the losses, he must be an impostor, there were no justices in Dorset called Freeman or Gill, nor had there been any fire in Langton for many years past. Mr Templeman also sent Mr Wadman a letter he had found among the sessions records mentioning a Mr Freeman, who seemed to be a confederate of Hancock, and which he thought Mr Wadman might find useful for his case. No doubt the Wiltshire bench, thus armed, handed down a suitably severe sentence.

Bogus seamen

Although cases of persons begging with false briefs or false military passes are rare in other counties, in Dorset over fifty people were suspected of using false papers in the period 1740–95, far more even than in populous Middlesex. Dorset was bedevilled by men claiming to be distressed seamen, or to be victims of shipwreck or fire at sea. Some made these claims verbally in their examinations, others were carrying false documents. The more convincing forgeries had sometimes been signed by several unsuspecting magistrates.

It is perfectly possible that some or even most of these men had indeed been seamen at some time, but came under suspicion at the point when they were apprehended. We do not know, for example, if they were wearing the pea-jacket, petticoat breeches and small round hat commonly worn by seamen but not landmen, or how they walked and talked;²⁴ the historian cannot second-guess what contemporaries saw and heard, but in some cases the documents speak for themselves. In one or two cases (Timothy Downing for example, as we shall see) the suspect turned out to be exactly what he claimed.

Dorset constables and justices were clearly alert to the possibility of fraud, which helps to account for the high number of recorded cases in the county, and they did take pains to establish the facts, despite the obvious communication problems of the period – the only trace of a discharged soldier called Robert Dyer for example, is a certificate from the secretary's office, Dublin Castle,

addressed to the keeper of Sherborne bridewell and stating that Robert Dyer, formerly a soldier in General Wade's regiment, had been given a pass dated 19 January for himself and child to go to Medust, Kent. Evidently Dyer had been taken up either because he had lost the pass, or it was suspected to be false, the justices had made enquiries, and he was released on receipt of this letter.²⁵

Genuine seamen's passes do not normally survive, since they were only usable for a specific journey. John Macdonald was committed as a rogue and vagrant wandering and begging in Sherborne with a pass, after the expiry date for his journey and 'wandering backward out of the way directed by the pass' – the pass was not filed, but evidently specified the route and limited the time, as they were supposed to do. Maybe he had a good excuse as he was discharged at the sessions three days later.²⁶

Numbers of travelling seamen rose significantly at the beginning of wars, and equally large numbers were abruptly discharged on the cessation of hostilities, often at ports remote from their settlements and with no arrangements made for their return home. Wars were frequent in the eighteenth century and hundreds of seamen with walking passes are listed in Dorset constables' accounts, especially in the last quarter of the century; hence most impostors in Dorset claimed to be seamen.²⁷

One of the first Dorset cases involving a charge of carrying false documents was that of Timothy Downing, a seaman taken up in Sherborne in 1745, as a deserter from a man-of-war, suspected of carrying a false pass. Examined in April, he said he was Irish by birth, and that at the age of sixteen or seventeen he bound himself apprentice in London to the master of the *Biddlecombe*, a merchant ship trading to the West Indies. There the entire crew was pressed except for the master, the mate, the boatswain and seven apprentices including himself.²⁸ The skeleton crew nevertheless took on their cargo of rum, sugar and cotton, and sailed for home, but about 150 leagues west of Cape Clare they were attacked and captured by a French privateer and taken to Bayonne. They were kept prisoners there about seven months, and then exchanged as part of a group of some 250 prisoners and landed at Falmouth.

Downing said the mayor of Truro had issued his pass, and he was going back to London. Two days after this examination was taken he appeared at Shaftesbury sessions and was probably confined awaiting further information. Many of those who actually were carrying false passes told very similar circumstantial stories, and, without doubt, tales of sea adventure were recounted in many a seaport alehouse, and could be imitated without too much difficulty. But in June his master Richard Brown wrote from Falmouth confirming his story that they had been landed from a French prison. Timothy Downing had written to him about his plight, saying that his pass was 'insufficient'.

Brown said Downing had been an honest lad, who for some unknown reason had stolen away with some of the other prisoners the day after they landed, but he had no idea where they were going. Other members of the crew had told him that the mayor had given Downing a pass, but since the mayor was in London at the time Brown wrote he could not get a new pass, but would send one from London on his arrival there. In July John Everett of Longbredy, clerk to the committing justice, wrote sending the informations of two men about the *Biddlecombe* crew, and enclosing a copy of Downing's examination which he happened to have – he had given the original to his master who had mislaid it. Presumably Downing was discharged on the strength of this confirmation since he did not appear in the following calendar.²⁹

By no means all the impostors were punished, although all spent some time in the bridewell awaiting the next sessions, but two men who begged with a false pass at a magistrate's house in Leweston in 1754 were sentenced to six months and to be whipped at Blandford, and Thomas Hole, apprehended in Dorchester begging with a false pass, was also whipped but not imprisoned.³⁰

Probably many more bogus seamen and soldiers made a nuisance of themselves in Dorset than those for whom evidence exists. Especially when they hunted in packs, it might be impossible for a parish constable to take them into custody. For example, twenty-two inhabitants of Lowbarrow complained in 1747 that a great many beggars, vagabonds and other disorderly persons had recently been begging in their hundred. The constables had apprehended four of them who behaved very insolently, demanding money and refusing to move on without it, claiming they had lately been prisoners in Spain and had been landed at Gosport from a cartel ship in April. They had a pass suspected to be false, since one man tried to destroy it when they were apprehended. One of the four, James Spender, swore he had been at sea for twelve months, although he had been seen begging in Lowbarrow in November 1746 and in March 1747, and was begging again when he was taken up on 13 May 1747.

All four of those apprehended broke prison while under the care of the constable; one got away at that time, and another while they were being examined at Dorchester. The inhabitants hoped they 'would meet with the reward due such offenders'. James Spender was certainly in the bridewell 17 May to 28 June, but only awaiting the sessions. The other three, if they were ever retaken, are unidentifiable from the calendars, and there is no evidence that James Spender himself met with the reward the Lowbarrow inhabitants hoped for.³¹

Solomon Brown, William Brown, Thomas Offaly and George Robinson on the other hand were not so lucky. They were apprehended by the two constables of Marchwood on 12 April 1754. They had a pass dated 5 April 1754 from Ilfracombe, Devon, stating they were

seafaring men lately on board the *Spye* merchant ship of London, which was unfortunately burnt at sea on her outward passage from London to Naples, and most of the crew perished, and that the bearers being landed at Ilfracombe had requested a certificate recommending them to all proper officers for relief on their journey, they being real objects of charity. The pass specified a time not exceeding the space of twenty days to accomplish their journey to their respective abodes in the county of Norfolk.

The pass itself appeared genuine, but John Tucker Esq. committed them and took their examinations 12 April 1754 – at least, he tried to take them, but Thomas Offaly refused either to be sworn or examined (which automatically made him an incorrigible rogue) and George Robinson, having sworn his settlement was Wells, Norfolk, where his father was a parishioner, then refused to sign. The other two made their marks. Solomon Brown said he was born in New England and had never gained a settlement, and William Brown that he was settled by birth at Kings Lynn, Norfolk.

The background to the case emerges from a letter written a fortnight later by Mr Tucker, the committing magistrate, to the clerk of the peace. He regretted he would not be attending the sessions, but said he had committed Solomon Brown and three other vagrants 'who had behaved extremely Ill in this Neighbourhood, particularly Solomon Brown, who I relieved at Hawkchurch about three Weeks before with a Pass for himself one more that was with him and three more in Company; Wednesday the 10th he was at Nash [Mr Tucker's residence] and pretended that he wanted a pass to be made and signed; and Pretended he was landed in this County; the Friday following he came to Nash with three more of a Fresh Gang or Company, who all behaved extremely Ill in this neighbourhood as appeared on the Oath of one Mary Lane and others; I desire my Compliments to the Justices and should be Glad if these Fellows were Severly punished, the Fellows Examinations are sent to Mr Ring' [the bridewell keeper].³²

The miscreants were imprisoned until the next sessions, when they were all ordered to be whipped and discharged. The whole business cost the county £3 11s 0d, including 40s reward for apprehending the four vagrants, £1 3s 0d for guarding and conveying them twenty-three miles to the bridewell with four men and horses, and 8s for maintaining them for two days before their committal.³³

Four other men, John Johnston, Thomas Orchard, William Blackburn and Benjamin Sharp were committed in 1741, charged as idle and disorderly, and on suspicion of forging a pass pretending to be mariners. In December three of them came to Ann Cartwright's house with a pass signed by William Okeden Esq. bearing the words 'Dorsett (to Witt) Permitt ye Bearers to Pass this County Dec 9th 1741'. They said this was an

authority to receive money of every parish officer, who was obliged to relieve them. Perhaps Ann Cartwright's husband, who was out at the time, was a parish officer, and she gave them 6d but they were not satisfied and imposed on her for another 2s before they would leave. She laid an information and complaint against them, saying that there were several witnesses to this episode; her signature was witnessed by two of these bystanders.

It is not clear where the fourth member of the group was at this point, but he was with the others by 12 December when they were taken into custody by Mr John Thorne mercer, probably with assistance, and committed by Thomas Gundry Esq. This gentleman wrote to Mr Thorne just before the January sessions 'It will be very proper that you attend the Sessions (as my health will not give me leave to be there) to give an account of the behaviour, of the Persons you brought before me on suspicion of going about the Countrey with a false Pass, and shew Mrs Cartwrights letter to the court, and to prefer a Bill of Indictment against them'.

They were all examined at the next sessions 15 January 1742. Thomas Orchard said he had used the sea 'from infancy', and about two years before had gained a settlement in Swansea by hiring and service. He then worked in the fishery at Falmouth for about three months, and then went on board the *George* bound for Leghorn, Captain Pye master. After about three months in Leghorn he returned in the *Concord* having landed at Newhaven, Sussex about two months before. He seems to have met the other three on board the *Concord* and admitted that John Johnston, Benjamin Sharp and himself had then 'procured a person in Sussex' to make a pretended pass with which they had wandered and begged from place to place for a month, until apprehended in Blandford Forum.

Benjamin Sharp said he was born at Beaumaris, Isle of Anglesey, and had served an apprenticeship to a fisherman there. He then went to London with John Johnston and shipped on board the *Elizabeth*, Thomas Jones master, which foundered at sea. They next sailed to Rotterdam and about five years ago went on board the *Goodwill* bound for Venice, James Duncombe master, where they met William Blackburn. Sharp's examination continued with substantially the same story as William Blackburn's, that the *Goodwill* was captured by Algerians and carried to Algiers, and they were galley slaves for four years and eight months. Then the ship they were on was taken at sea by the Knights of Malta and carried to Leghorn, where after about seven weeks the British Consul put them on board the *Concord*, William Smith master. They landed at Newhaven on 9 November 1741 – Thomas Orchard's examination gave the date of their landing as 9 December, which may be a slip by the clerk, as that was the date William Okeden signed the pass. His examination also differed from Orchard's in that he said they got the pass made by a person near Portsmouth, not in Sussex.

John Johnston's story was similar, except that he said the *Goodwill* was taken by the Turks and they were slaves in Turkey 'nearly four years'. He was born in Caernarvon and had always used the sea. He did not mention the fake pass but admitted they had all been wandering and begging since their landing.

The pass itself looked authentic (Figure 1), and William Okeden had apparently accepted it at face value, although he probably did not read it through. It was made out for John Johnston, Thomas Orchard, William Blackburn with six other seafaring men belonging to the *Goodwill* merchant ship. It claimed that unfortunately the ship was taken by the Algerians, and the men carried prisoners to Algiers and kept as galley slaves for four years and upwards. It made the further dramatic claim that 'for attempting to make their Escape out of their hard and Cruell Bondage they were used in a Barbarous Manner by burning them with red hott Irons in Severall parts of their bodies cutting some of their tongues out'. It can hardly have been difficult to check this last picturesque claim, which may, together with the discrepancies in their stories, have led to their conviction as incorrigible rogues. On the other hand, they may have learned to swallow their own tongues, a trick allegedly used by three such impostors in Devon who were all transported.³⁴ They were sentenced to one month in the bridewell, and to be whipped. This may be seen as comparatively lenient – incorrigible rogues could be imprisoned for up to two years and whipped as often as the court decided.

They were not alone in claiming to have been captured by Barbary pirates and tortured for attempting to escape. Barbary pirates had indeed been a scourge in the late seventeenth and early eighteenth centuries, but hardly by 1752, when Charles Oneale and John Burch, among others, made the same claim.³⁵ Oneale stated in his examination that he was an Irishman aged forty-nine and had been in England some twenty years, and that he had followed the sea for the past twelve years. He had been on board the *William and John*, a Hamburg merchantman captured off Sardinia by pirates and taken with other crew members to Algiers. Attempting to escape, he was retaken and had his tongue or most of it cut out. He was then on board a Sallee galley, presumably as a galley slave, until the galley was captured by two Maltese men of war. Landed at Leghorn, he was sent by the British consul to Rotterdam in a Dutch vessel and came back to England from there. He said he had since been supporting himself and family by harvest work and selling pedlary wares, but admitted begging 'obliged by decay of times'.

John Burch, another Irishman apprehended at the same time in Blandford Forum told a similar but not identical tale. He claimed he was servant to Captain De Coats in a merchant ship sailing to Venice, taken by Turkish galleys near Sardinia and then imprisoned two or three years in Algiers, and had his tongue cut out for



Figure 1: Forged seamen's pass for John Johnston and others, transcript

attempting to escape. Like Oneale he also claimed to have been rescued by a Maltese man-of-war and returned to England via Leghorn. He had, for a considerable time afterwards, worked on colliers sailing from Newcastle to London, but about eighteen months ago went to Lincolnshire and did harvest work until just before Christmas, and had since been begging. He had met Charles Oneale in Warminster and begged with him. The justices clearly believed they had cooked up these stories together and they were both publicly whipped and imprisoned for three months.³⁶

John Symson, one of several vagrants apprehended in Shaftesbury in November 1751, also claimed to have been captured by Algerian rovers while sailing on a Dutch ship, and kept prisoner in Algiers for two and a half years, but not to have been tortured. He said he had been landed with thirty-six others about a fortnight before and given a pass by the mayor of Plymouth, but could not produce it because some of the others had taken it away. This avoided a possible accusation of using a false pass, which may indeed never have existed, although he admitted begging. This group were all kept in the bridewell until the next sessions but then discharged without further punishment.³⁷

The same story was used as late as 1784 by Henry McCallister, a Scotsman apprehended with his wife and two other Scotsmen in Appleby, who claimed he was taken prisoner by a Sallee rover and 'used in a most barbarous manner' for trying to escape. Westmorland justices however merely passed them all over the border into Scotland.³⁸

The semi-literacy, lurid stories and wheedling tone of some forged passes probably led to discovery. To give only one example, the constable of Blandford Forum apprehended John Baker in 1764, suspecting his pass to be false, and he was committed to Dorchester Gaol. The pass, stitched to the usual coarse grey paper cover, read 'These are to Certify the Persons beriers [sic] hereof Thos Holland Jno Baker Seafaring Men Latley belonging to ye Rose Marchant Ship belonging to Liverpool in Lancertershire Outward bound to Jameca was Lost of ye Cape Saint Vincent in a Viliant Storme At Sea All hands perished Exepting six poor Soules Master & Mate was Saved and they poor Soules As had the Good Luck to be saved is Verry much bodely Wounded one in the thigh & otheres in their Leggs and Armes which is in a Verry Unhappy Condition. And I Jno Herring Master Proving this before one of his Majesty's Justices of the peace for the County of Dorset Doe therefor Recommend these poor Soules as Objects of Pitty To All Gentlemen or any Other Parsons Whatsoever Bayleys Constables & other Officer whome it may Concerne Or Any other Gentlemen as will Concider these poor Soules Great Callamity and In So Doing they will Allways be In Duty bound to pray. Signed by Me One of his Majesty's Justices of ye Peace for ye County of Dorset J. Hanning'.

Dorset justices checked with John Hanham Esq. of Corfe Mullen, who wrote stating that the signature on the pass was not his. In fact the signature on the pass is a fairly good imitation of Hanham's real signature (Figures 2 and 3), although evidently a mishearing of his name, and arguably the least telltale feature of this bizarre document, yet Baker was discharged by the court.³⁹

There may be other seaboard counties with a similar number of copiously documented cases of fraudulent petitions and forged seamen's passes, although few if any survive in Hampshire, Lancashire or Middlesex. But it is also possible that Dorset is unique in the survival of



Figure 2: Genuine signature of John Hanham Esq



Figure 3: Forged signature of John Hanham Esq. on pass for John Baker and Thomas Holland, 1764

these fascinating examples of a phenomenon alleged to be more widespread than the surviving evidence elsewhere would support.

The end of the passing system

The passing system which had enabled these frauds to be perpetrated survived well into the nineteenth century. Indeed it became extensively used by parishes, often equally fraudulently, to remove increasing numbers of Irish who had not committed any act of vagrancy, and an 1819 Act enabled parishes to do so legally.⁴⁰ The 1824 Vagrancy Act (5 Geo. IV c.83) dropped all mention of passing vagrants, among other changes, while leaving the 1819 Act in place. Many counties then eased their financial burdens by passing no more vagrants, claiming it was now illegal, while others continued employing contractors, who probably passed vagrants, as well as the Irish. The passing system petered out as counties found other ways to deal with the mobile poor problem.

ACKNOWLEDGEMENTS

I would like to thank the Dorset History Centre for the illustrations.

ENDNOTES

1. The law in force at this period was the 1744 Vagrant Act 17 Geo II c.5, hereafter 1744 Act.
2. On the vagrant contractors see A. Eccles: 'The eighteenth-century vagrant contractor' *Local Population Studies* 85 (2010) pp. 46–63; and idem: 'The Adams' father and son, vagrant contractors to Middlesex 1757–94' *Transactions of the London and Middlesex Archaeological Society* 57 (2006) pp. 83–91.
3. For the provisions of vagrancy law and the passing system in detail see A. Eccles: *Vagrancy in law and practice under the Old Poor Law* (Ashgate, forthcoming) chs 1 and 2.
4. 1744 Act s.3.
5. C. Emsley: *Crime and society in England 1700–1850* (1996) p.251.
6. 1744 Act ss 2 and 4.
7. R. Burn: *History of the poor laws* (1755), p. 490. Numerous documents in Richard Burn's hand survive in the Westmorland Quarter Sessions rolls, but none of these passes.
8. *Report from the Committee on the State of Mendicity in the Metropolis*. 1815. (473) Parliamentary Papers vol. 35 p.17, hereafter 1815 Mendicity Report.

9. London Metropolitan Archives hereafter LMA, MJ/O/C/006 21 April 1757; L. Radzinowicz: *History of criminal law* (1948–86) vol. 4 p. 45; H. Meriton: *A circumstantial narrative of the loss of the Halsewell (East Indiaman)* (1786) pp. 62–3.
10. 1815 Mendicity report pp.15, 108.
11. *Report of the select committee appointed to take into consideration the existing Laws relating to Vagrants and to report their Observations thereupon from time to time to the House*. 1821 (543) Parliamentary Papers vol. 4, pp. 108–09.
12. D. R. Green: *Pauper capital: London and the poor law 1790–1870* (2010).
13. Anon: *Vices of the cities* (1751) p.18; T. Hitchcock: 'The publicity of poverty in early eighteenth-century London' in J.F. Merritt (ed.): *Imagining early modern London 1598–1720* (2001) p.181.
14. Dorset History Centre, hereafter DRO, Midsummer 1740. Dorset Quarter Sessions rolls, which are unnumbered, are identified by the session and year.
15. For sick vagrants see A. Eccles: 'The Adams' father and son, vagrant contractors to Middlesex 1757–94' pp.83–91 *Transactions of the London and Middlesex Archaeological Society* vol. 56 (2006) and my forthcoming book chs.4 and 5.
16. The six counties were Cambridgeshire, Dorset, Hampshire, Lancashire, Middlesex and Westmorland.
17. LMA MJ/SP/1793/04/137.
18. DRO Easter and Michaelmas 1740.
19. DRO Michaelmas 1759.
20. Cambridgeshire Archives January QS roll 1772.
21. DRO Midsummer 1766.
22. 1744 Act ss 7 and 9.
23. Periodically Georgian governments passed acts allowing insolvent debtors to be released under certain circumstances even though they had not discharged their debt.
24. P. Earle: *A city full of people: men and women of London 1650–1750* (1994) p.74.
25. DRO Easter 1747.
26. DRO Midsummer 1762.
27. War of Austrian succession 1740–48, Seven Years War 1757–63, War of American Independence 1776–83, War against Revolutionary France 1794–1802.
28. It was illegal to press apprentices, since their labour was considered the master's property.
29. DRO Midsummer 1745.
30. DRO Epiphany 1754; Easter 1759.
31. DRO Midsummer 1747.
32. DRO Easter 1754.
33. DRO Easter and Midsummer 1754; QDV box 6 Order 25 May 1754.
34. G. Morgan and P. Rushton: *Eighteenth-century criminal transportation* (2004) p.82. However Professor Eccles of Southampton University informs me that this is anatomically impossible without choking.
35. M.S. Anderson: 'Great Britain and the Barbary States in the eighteenth century' *Bulletin of the Institute of Historical Research* XXIX (1956) pp.87–107; P. Earle: *Sailors: English merchant seamen 1650–1775*. (1998) pp. 115–9.
36. DRO Epiphany 1752.
37. DRO QDV Box 3 bundle 6.
38. Cumbria Record Office, Kendal WQSR 450/12,14.
39. DRO Epiphany 1765.
40. 59 Geo III c12 s33.

Making Georgian Faces: concept to curation

Georgian Faces: Portrait of a County, 15 January – 30 April 2011, Dorset County Museum

GWENYARKER, EXHIBITION CURATOR

Keynote Paper at the Georgian Faces, Understanding British Portraits Seminar Day organized by the National Portrait Gallery and DNH&AS, examining eighteenth-century portraiture and the curation of the exhibition Georgian Faces: Portrait of a County, held in the Victorian Gallery, Dorset County Museum, 2 Feb 2011.

The 2008 acquisition of Romney's portrait trio of the Rackett family, through enthusiastic local fundraising and generous awards from the Art Fund and Heritage Lottery Fund South West, formed the genesis of the current exhibition *Georgian Faces: Portrait of a County*.

For those funding applications we defined the significance of the three Romney paintings to Dorset and the Museum. The full-length of twelve-year-old Thomas Rackett amongst Romney's finest early child portraits (Figure 1), indicates the young boy's scholarly potential and awareness of natural history. His adult interests, conducted in Dorset as a rural vicar, confirmed the portrait's considerable interpretive scope to explore enlightenment ideas here. It was a revelation to discover the far-reaching extent of Rackett's circle of contacts, demonstrating Dorset was not a cut-off rural County. Rackett corresponded with an international network discussing discoveries, experiments and collections. Somewhat surprisingly this positioned Dorset as a centre of enquiry contributing significantly towards our awareness of an early understanding of Dorset's antiquarian, botanical, entomological and geological discoveries.

The artist and diarist Joseph Farrington described Rackett 'as being possessed of much taste in the arts, with some ingenuity in the practice of drawing'. Rackett's archive, deposited at the Dorset Local History Centre, reveals the extent of his large circle with diverse interests in antiquities, the arts, science (such as electricity and ballooning), mathematics, astronomy, music and natural history. In addition to being an accomplished topographical artist taught by the Sandby brothers, Rackett was a musician, poet, mathematician, taxonomist and collector. He spent three months each year in London, and though benevolent, dutiful and compassionate to his parishioners his reliance on his local curate defines him as an absentee parson. In London he engaged with fellow academics, attended lectures at learned societies, visited the theatre and concerts and enjoyed a busy social life.

Once the French Revolutionary War closed the continent to travellers, gentlemen scholars and antiquarians turned their attention away from Roman antiquities to what was under British soil. Wealthy scholar Richard Colt Hoare of Stourhead began excavating Dorset's prehistoric barrows with his childhood friend Rackett.



Figure 1: George Romney (1734–1802). Thomas Rackett the Younger (1756–1840), c. 1768, oil on canvas. DNH&AS

Hoare, who observed that 'we speak from facts not theory', contributed towards the foundations of forensic archaeology and Rackett's illustrations recorded discoveries and demonstrated an understanding of the need for accurate visual records and measurements. Physical remains showing ancient Britons began to be seen in terms of creating a national heritage and offer a more regionalized, i.e. West Country resonance, here.

Rackett and his circle recorded, illustrated and published their findings in learned journals. Like Hoare, Rackett was a fellow of the Society of Antiquaries and the Linnean Society and elected a Fellow of the Royal Society, under influential Joseph Banks's presidency. Rackett's sketch of *Stonehenge before 3 January 1797* illustrated a paper given at the Society of Antiquaries and appeared in *Archaeologia* in 1798. It reveals Rackett as an antiquary and artist in the age before photography, when accurate drawings were essential for identification

and comparison. His interests place him as a forerunner in the evolution of nineteenth-century museums such as the Dorset County Museum, created just five years after his death. Rackett's interests became the key disciplines of the museum, offering a benchmark in terms of the emerging areas of archaeology and natural sciences like geology and natural history.

Whilst Rackett's portrait opens an invaluable window into the life and working methods of an antiquary in Dorset and the South West, the great unifying element of eighteenth century Dorset was the Reverend John Hutchins's *History and Antiquities of the County of Dorset*. Published by John Nichols in 1774, Hutchins surveyed, parish by parish, the history, people, topography and customs of the county, literally defining Dorset. Thirty years in the making, his *magnum opus* involved the local nobility and gentry loaning archives and commissioning engravings of their houses for inclusion in the volumes.

Hutchins offers a fascinating lens through which to read eighteenth-century Dorset, and importantly provides the structure behind the exhibition. Listed on the dedication page to the first edition are names resonant of landowning eighteenth-century Dorset: Digby, Ilchester, Milton, Rivers and Frampton, who all sponsored engravings for the first edition. Since Dorset's movers and shakers all contributed to Hutchins, it is pertinent that their self-perception and awareness of family history, commissioned engravings of their houses and sponsorship of the volumes, speaks to us today. So it is with Hutchins in mind that the exhibition and catalogue are ordered: not chronologically, nor by artist, but by sitter. The portraits are grouped along social lines, from the King and powerful landowners to the 'merchant princes' of prosperous Poole, the scientists and antiquarians of Blandford and Dorset's painters and architects. The exhibition roughly covers the period from the death of George I in 1727 until the end of the century; more or less spanning the period from the beginning of Hutchins's research to the publication of the second edition (which Rackett worked on). It is therefore with justification that the exhibition, innovative in approach, and its accompanying catalogue, are entitled *Georgian Faces; Portrait of a County*.

Early exhibition planning took place without a director, which slowed the project and meant postponing the initial exhibition date. Dr Jon Murden's arrival in 2009 came at a critical moment for *Georgian Faces*, and his enthusiasm for the vision for the exhibition led to the decision for a more ambitious show. Despite an in-house budget of only £1,000, we began approaching national institutions for loans. Quite early on the offer of two grants from the Paul Mellon Centre for British Art to produce and research a catalogue of the exhibition considerably affirmed the project's validity.

Having recently produced the Public Catalogue Foundation's *Dorset Catalogue* I had a clear idea of what was publicly owned in the county and could provide the

nucleus of a show. An exhibition structure emerged with the process of identifying and locating key portraits, working in the libraries of the National Portrait Gallery, Paul Mellon Centre for British Art, Witt Library and Courtauld Photographic Survey. Initial approaches to lenders and research took place simultaneously and we consulted widely with fellow art historians and curators to whom we are most grateful for their sound advice and above all encouragement.

Consisting chiefly of oil portraits, *Georgian Faces* covers new ground in mapping Dorset patrons, and through them reveals Dorset's cultural, social and political developments in the eighteenth century. We have included the seasonal court of George III at Weymouth, the role of Dorset aristocracy and landowning gentry with the dominant merchant class in Poole, and the significant antiquarian and scientific community defined as Blandford's Enlightenment. To a lesser extent the exhibition charts the significant development in British portraiture during the Georgian period, through three Dorset-born artists; from the first painting academies founded by James Thornhill to the work of Thomas Beach, first pupil of fellow West Countryman Sir Joshua Reynolds. The work of Dorset-born artist and theoretician, Giles Hussey, demonstrates how, as a Catholic, he had a consistent set of commissions from major recusant families. Beach is currently considered to be a provincial and itinerant artist. The exhibition was intended to reveal that these artists' careers relied on a complex and intelligent circle of local patronage. Dorset's proximity to Bath was of course significant, since Dorset gentry travelled there to sit to Gainsborough. The exhibition also provides the opportunity to show family groups such as the Digbys, Fox-Strangways, Racketts, Welds, Lesters and Pitts. Thus the structure of the exhibition and the catalogue fell neatly into groups.

Crucial early support came from Ann Smith, archivist at Sherborne Castle whose enthusiasm for *Georgian Faces* provided portraits dealing with the major theme of the interconnectedness of the aristocracy. Six Digby brothers were to be shown collectively for the first time for many years, together with their mother Charlotte, née Fox. The Digby and Fox-Strangways families of Sherborne and Melbury intermarried a number of times during the century, forging a powerful union of two Whig families. When, in 1736, Sir Stephen Fox's eldest son Stephen, married Elizabeth Strangways Horner, he acquired the large Strangways estates of Melbury and Abbotsbury. His sister Charlotte married Edward Digby, eldest son of William, 5th Lord Digby of Sherborne Castle. Charlotte and Edward had six sons and one daughter (who died young) all very close to their Fox-Strangway cousins. The Digby peerage was Irish; with estates in Ireland and Warwickshire before inheriting Sherborne Castle. The warmth of the relationship between these two aristocratic families was evident. They frequently visited each other's estates, discussed projects and intermarried. Portraits of family members were

sometimes copied for both families and several of these are included in the exhibition, an intentional and innovative curatorial decision demonstrating that only one family member could display an original, other family members were content with second versions and copies.

The offer of eight portraits from Sherborne Castle formed a very strong basis on which to build and from this point the exhibition evolved organically, dictated in part by the availability of loans. Only sitters who lived in or regularly visited Dorset were to be included, so important collections of eighteenth-century portraits arriving in the county subsequently, most notably those from Holland House, were omitted. We felt it important to include less well-known pictures from other Museums in Dorset, as well as those from private collections. Although an attempt at showing the breadth of rural achievement, it could in no sense be encyclopaedic – several notable faces are absent such as those born in the county who made their careers elsewhere, like Thomas Coram and Thomas Masterman Hardy. We were thrilled by the positive support we received from our formal approaches to local Museums, private collections and national institutions – all saw the exciting potential of *Georgian Faces*.

Following on from the aristocratic sitters, the next section shows the County's diverse landed gentry families. With similar backgrounds and outlooks to the nobility, they were also landlords earning an income from rents, mortgages and investments, enabling them to live the comfortable, leisured life of a gentleman. They too, augmented their estates through purchase and judicious

marriages to heiresses. By the eighteenth century local families like the Bonds, Bragges and Trenchards settled into the affluent lifestyle of country gentlemen, fulfilling local roles as magistrates and MPs. The exhibition's room devoted to head-and-shoulder portraits of the gentry, demonstrates the choices available when sitting for their portraits to highly fashionable artists in London like Ramsay and Reynolds, Gainsborough in Bath or provincial travelling artists like Thomas Beach and John Downman. *Mary Bond*, (private collection), sat to the important portraitist Allan Ramsay in London, and a chalk study of Mary's pose and costume that survives in the National Gallery of Scotland reveals her clothes were painted by the most famous drapery painter, Flemish-born Joseph Van Aken. Hanging nearby is Thomas Gainsborough's 1767 portrait of landowner *John Bragge* (Figure 2), from the far west of the county (DNH&AS). He sat in fashionable Bath for his portrait, which is one of a pair with his wife Elizabeth, now in America. The third example, *Rebecca Steward* (Figure 3) (DNH&AS) sat to Thomas Beach in 1783 at her home in Weymouth. She came from large, powerful Dorset family who settled in and around Weymouth in the eighteenth century from St. Helena, and had close ties with the East India Company and Portland quarrying. Rather than travel to fashionable London or Bath, rising middle-class families such as the Stewards turned to Dorset's own portraitist, Thomas Beach. One of the stars of the exhibition, Rebecca, is shown dressed in loosely Van Dyckian costume, a relatively outdated format for the 1780s, and similar to that which Ramsay used with *Mary Bond* some thirty years earlier.



Figure 2: Thomas Gainsborough (1727–1788). John Bragge (1741–1786), 1767, oil on canvas, DNH&AS



Figure 3: Thomas Beach (1738–1806). Rebecca Steward (1766–1859), 74.8 x 62 cm, 1783, oil on canvas, DNH&AS

The national spotlight was thrown on Dorset when King George III, shown in a head-and-shoulders portrait by William Beechey of about 1800, (National Portrait Gallery), came to stay at Weymouth. Seaside resorts were in vogue by the late eighteenth century and in 1780 the King's brother William Henry, Duke of Gloucester built Gloucester Lodge, in Weymouth. The duke is represented in the exhibition in a hitherto unknown 1773 head-and-shoulders pastel portrait, dressed as a general wearing the Garter. It possibly commemorates the moment his secret marriage to Maria Waldegrave, some seven years earlier, became public knowledge. In 1789 he loaned Gloucester Lodge to the King, the Queen, and their eldest daughters, to help recover from the King's first serious illness. Based at Gloucester Lodge they were joined by members of the court and local dignitaries and stayed in Weymouth from June to the end of August, visiting twelve times between 1789 and 1805. Thus the British Empire and business of government was run from Dorset each summer; the Royal Mail delivered government dispatches to the King at seven o'clock every morning and returned to London by four o'clock each afternoon.

Remarkably the King was in Weymouth as the situation across the Channel increasingly threatened the French monarchy. The King and his family appeared accessible by maintaining a high profile in Weymouth. Each day the King rose early to walk and ride out or swim from a bathing machine. George III and his family became a fixture in the county, entertained by Dorset's aristocrats and landowners. This included several Digby brothers, Henry Digby, who as Lord Lieutenant was first to greet the King on his return to Dorset and Stephen Digby who had nursed the King through his first illness. During the King's first stay at Weymouth he visited the Ilchesters at Redlynch, Somerset, Lionel Damer at Came House near Dorchester, Lord Milton at Milton Abbey, sailed on board the *Southampton* to the Welds at Lulworth Castle, and visited Sherborne Castle. On these outings the King often asked to see portraits, particularly of people he knew, frequently commenting on likenesses. Because George III was ostensibly convalescing at Weymouth there is no evidence of artists commissioned to record the royal visits.

Manifestly the exhibition needed to include military portraits. Through its close proximity to France, coastal Dorset had an important role during the century when successive wars with France resulted in invasion fears for the county. In 1757 this led to the formation of the Dorset militia under Lord Rivers, (Figure 4) whose brief not only included defence, but also controlling domestic unrest following several failed harvests. His rare portrait of 1782 by Thomas Gooch is one of power and control, positioning him mounted on his horse against a backdrop of a Dorset militia camp. It is a smaller version of one exhibited by Gooch at the Royal Academy the same year. By the end of the century, the French Revolutionary Wars saw the formation of the Dorset

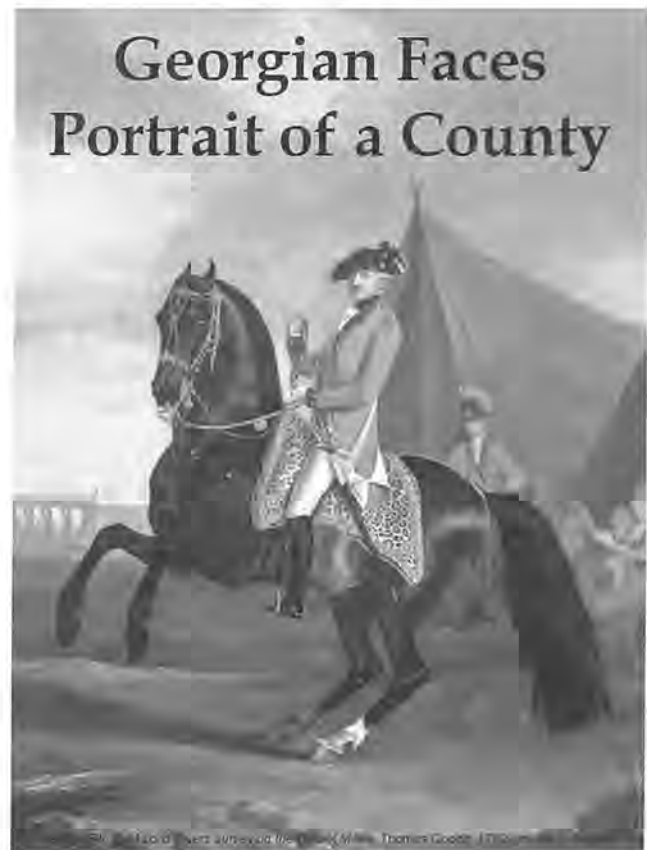


Figure 4: Exhibition leaflet showing Lord Rivers. *Georgian Faces*, DNH&AS

Volunteer Rangers, a light cavalry volunteer corps, by George Damer, Lord Milton, in 1794. Made up of prominent local landowners, Dorset was divided into divisions with each officer responsible for raising their own troop, both to defend against the French and again to be prepared to prevent civil insurrection in the county described as 'Riots and Tumults'. One of the officers, James Frampton, on the right, wrote an account of the Rangers: 'I thought it highly proper for everybody to shew themselves in such times as these and ready to do their utmost to defend their property and the County at large from all innovations the followers of the French system might try to introduce'. Mary Frampton's diary reveals his first hand experience of these 'innovations' when travelling in France in 1790. George III regularly inspected volunteer troops from around the country camped around Weymouth. Portraits by Thomas Beach, of a number of the Dorset Volunteer Rangers officers, were commissioned by the 1st Earl of Dorchester to hang in his library at Milton Abbas. In showing a self-regulating, volunteer force, Beach's portraits are highly unusual, affording a fascinating opportunity to study a local patronage circle.

Poole Museum's intriguing group of portraits of eighteenth-century merchants is a vital part of the rise of the characters behind Poole's wealth, and significant contributors to the history of Dorset. In the early eighteenth century, Newfoundland had the most prolific

fishing grounds in the world, which these merchants exploited by dominating the trade and becoming extremely wealthy. Poole's economic boom lasted for over a century and at its peak, was one of the busiest ports in Britain. Ships left Dorset with salt and provisions; cod was caught, dried and salted in Newfoundland. Laden with salted cod, furs and seal-skins, the Poole ships sailed to ports in Spain, Portugal and Italy to sell their goods and returned to Poole laden with wine, olive oil, dried fruits and salt, and the Newfoundland skins. This trade resulted in vast fortunes for Poole families such as the Lesters and Thompsons, enabling them to build mansion-houses in Poole, found dynasties, form an elite group through inter-marriage and alliances, and engage in local and national politics.

Three artists all born in Dorset were represented in the exhibition – Sir James Thornhill, Giles Hussey and Thomas Beach. The county remained an important influence on their careers. Thornhill returned to Dorset later in life and built a house there, as his London practice waned. Hussey, a Roman Catholic, was employed by other recusant families, revealing a very specific patronage circle within the county. Despite his metropolitan training under Reynolds, Beach remained reliant on Dorset patrons throughout his career. This has been neatly illustrated by the recent discovery of his diary for the year 1798, revealing his peripatetic existence, and the houses and families he visited in the county.

The exhibition comes full circle in revealing the enlightenment figures of Blandford Forum and the involvement of the Reverend Thomas Rackett, (private collection) Dr. Richard Pulteney (Linnean Society) and Tiberius Cavallo (National Portrait Gallery) in the compilation and production of the second edition of Hutchins's Dorset history.¹ There they incorporated their Dorset discoveries in botany, natural history and local biographies, and through this exhibition more information has come to light confirming Rackett's role with it. Richard Pulteney, the local Blandford physician and Rackett's mentor at the time Romney painted his portrait of him as a twelve-year-old remained an important influence on Rackett as an adult since they were also close neighbours. Pulteney, the local physician, preferred botany, published regularly in the *Gentleman's Magazine* and wrote the first English biography of Carl Linnaeus. Thomas Rackett remained rector of the Dorset village of Spetisbury for 55 years, and died in 1840. Rackett drew many of the illustrations for Hutchins's second edition, which Pulteney supervised into the presses. Cavallo's portrait shows him with a twin-frictional electrical machine of his own invention, a celestial globe at his feet and artist's materials on the far right. It may even be a self-portrait painted at Spetisbury.

Rackett's great friend the Neapolitan scientist Tiberius Cavallo often stayed with him in Dorset. Rackett and Cavallo combined to create a view of bearings from Badbury Rings, close to the home of Rackett's

childhood friend Henry Banks (National Trust, Kingston Lacy). A number of the sitters in the exhibition feature on the plan which they turned into an engraving for Hutchins's second edition. They also laid down a meridian line at Rackett's rectory, studied the stars and conducted balloon experiments there. Rackett's enlightenment friends in Dorset demonstrate a group which overlapped the rising middle class, gentry, merchants and nobility; just as the aristocracy and gentry all knew each other, so this group of natural philosophers and scholars were all interconnected. With other related material, Thomas Rackett's portrait is a window into the life and working methodology of an eighteenth-century antiquary, in this case working in Dorset and the South West. Through his groundbreaking work in archaeology, geology and natural history Rackett and his associates contributed to the awareness of eighteenth-century scientific activity of discovery and collecting in the South West.

With loans under way, and a budget of only £1,000 available for the exhibition, we turned our attention to seeking funding, a Herculean task in a falling market. As £1,000 would not cover the production of storyboards, let alone transport over 50 paintings, Jon Murden and I produced a comprehensive sponsorship proposal. Mindful of the need for a cost-neutral position, we defined national and local companies we hoped might support us. Central was approaching the Duchess of Cornwall, who had been shown Thomas Rackett's portrait when she visited the Museum in 2008, to ask if she might be prepared to write the foreword to the catalogue. This she very graciously agreed to do, and happily our funding approaches met with a very positive response. Many local trusts and private individuals offered their support and local companies like HY Dukes auction house and lawyers Humphries Kirk joined forces to sponsor us. Axa Art linked up with local art insurer R K Harrison and both proved to be equally superb sponsors. Dorset County Decorative and Fine Arts Society funded the internal walls of the exhibition and provided many of our stewards. Farrow and Ball donated all the paint and helped design the colours for the gallery. Henry Ling of Dorchester, whose close association with the Museum goes back to the nineteenth century, sponsored and printed the catalogue and were very generous with their time and expertise, working closely with me over many hours to design the catalogue. Graphic designer John Astle kindly gave his services free to design the catalogue cover and our accompanying leaflet. As a result of national press coverage and articles in national magazines, an extra donation of £5,000 arrived from an enthusiastic supporter of Joshua Reynolds, who had never visited the Museum before the exhibition.

So this became an exhibition about partnerships, with the loans from Sherborne Castle, Poole Museum, Russell-Cotes Art Gallery and Museum and Blandford Town Council, the National Portrait Gallery who also



Figure 5: Prince and Princess Michael of Kent with Lord Fellowes visit Georgian Faces, © author

helped us through their press office as well as providing this seminar day, National Trust, Linnean Society, Holburne Museum and importantly the large number of private lenders. They have all been interested, enthusiastic and very supportive and we sincerely thank them all.

More than 150 volunteers are acting as gallery stewards. Many are our Society members or from local NADFAS groups, all keen to be involved. Volunteers battled through the snow to help us paint the galleries, unwrap and hang paintings, dust frames and sculpture, arrange display cases, make endless cups of tea and coffee and provide sandwiches. They were the backbone of the project with a cheery commitment and dedication

we greatly appreciated. Every new volunteer is an ambassador, advocate and potential distributor of literature/leaflets/posters. Due to ill health, we were without the Museum's facilities manager, so Lulworth Castle thoughtfully loaned us their estate carpenter for a week. He was wonderful to work with, and we missed him very much when he left. As an independent Museum our partnerships have not just been with businesses – the corporate philanthropy we hear about – but with a highly capable, dedicated and enthusiastic band of volunteers – certainly the Big Society in action, although it has been happening here since 1845.

Outcomes

The outcomes from the exhibition are the resulting legacies of improved and upgraded security; exhibition display boards designed for their flexibility and maneuverability; lighting; heaters; and many more volunteers. Our raised profile has resulted in a big rise in our visitor numbers, shop sales are booming and we are raising revenue. We have an excellent programme of associated events, including free guided tours, which have been very oversubscribed. We have been supported by the Subject Specialist Network (SSN), Understanding Portraits, part of the National Portrait Gallery, to make today happen – which is a first for Dorset. The Paul Mellon sponsored exhibition catalogue is selling well (all proceeds donated to the Museum), contributing to our knowledge of the eighteenth century in Dorset and revealing hitherto unknown portraits. Philip Carter, editor of the ODNB created a page of the



Figure 6: Hanging Georgian Faces. Volunteers Dr Peter Down and Jonny Yarker, © author

sitters in the exhibition who feature in the online Dictionary. This new partnership provides another important source of publicity and research.

Conclusion

We want *Georgian Faces* to be a game changer for the Museum. We are attracting a lot of interest to the exhibition in print, on TV and radio and on the web through flickr, twitter and blogs and, importantly, word of mouth. This is an exhibition about partnerships, funding and loans, volunteers, benefits and legacies. That this project has resulted solely from the acquisition of the Romney portraits is highly significant. The entire process has forced the Society to rethink itself and its main message, leading to a reassessment of its Museum displays, and discussions are very much under way about improvements we need to make here. Our public profile has been significantly raised firstly through the acquisition, and now this exhibition, which has generated considerable press and national interest. Outside involvement has come through financial support, volunteering and attending, and participating in the various activities centred around the portraits. We want this exhibition to

demonstrate that even a small independent organization like ours receiving less than £103,000 public money annually, can aim high and achieve seemingly impossible major acquisitions.² We are a regional Museum with important national collections, and need to show we are worth knowing about and visiting. We now have an exhibition space to government indemnity standards and can begin to think strategically about offering higher quality exhibitions.³ Staff, trustees and volunteers have worked hard together for this exhibition and we are proud of what we have achieved. We look forward to building on this exhibition of portraiture so that we can secure the future of this organization, started back in 1845, just five years after Thomas Rickett's death.

ENDNOTES

1. The sensitive small pencil and wash portrait of Rickett from a private collection dates to about 1780 and is almost certainly by his great friend and teacher Paul Sandby.
2. At the time of going to press this grant from Dorset County Council has been reduced to £77,000, which shows how important high profile temporary exhibitions are to our survival.
3. This paper was read to the seminar several months before the DCM won the national competition to host the BM's touring exhibition of *Pharaoh: King of Egypt*.

Naval Signal Stations on the Dorset Coast

DAVID CLAMMER

When the war with Revolutionary France broke out in February 1793, it was immediately apparent that there would be a need for naval signal stations around the coast. On the one hand, there was the threat of invasion, and on the other French privateers were expected to cause problems for trade in the Channel. There was also anxiety that either privateers or French naval cruisers might attempt to stage coastal raids. The Admiralty therefore put in hand the construction of a chain of signalling stations to alert the naval and other authorities to the presence of enemy vessels.

Eventually, this chain was extended right around the south and east coasts, and the first batch to be built in 1794 were the twenty-five stations between Poole Harbour and Land's End. Thus Dorset was seen as being very much in the front line. Working from east to west, these stations were at Ballard Down, to the north of Swanage, Round Down to the south, at St Alban's (or Aldhelm's) Head, Hamborough Hill near Lulworth (also referred to as Hambury Head and Hambro Hill, and now known as Hambury Tout), Portland Bill and Pucknowle (now known as Puncknowle). One of the Devon stations, Whitlands, between Lyme and Seaton, also came under the Dorset organization.¹ St Alban's and Portland were amongst those designated as 'principal stations' of the initial chain and were allocated the numbers twelve and thirteen respectively. This enabled them to be used as reference points both as a navigation aid to friendly vessels, and a means of helping to fix the position of enemy ships.

The Dorset stations were all built at competitive prices compared with those in Devon and Cornwall, where costs rose as high as £120 in some cases. Costs were as follows:

Ballard Down	£97.15s.6d.
Round Down	£96.17s.0d.
St Alban's	£99.15s.6d.
Hamborough Hill	£95.5s.10d.
Portland	£23.12s.5d.
Pucknowle	£44.1s.10d.
Whitlands	£78.5s.4d. ²

Experience soon showed that some of the intervals between stations were too great. In 1796, Captain James Bradby was appointed to survey the south-west coast with a view to improving the defences, and he reported that the lieutenant at Whitlands was experiencing great difficulty in reading, and therefore answering, signals from other stations. Bradby reported that 'There is a hill called Golden Cup [*sic*] between Pucknowle and White Land eligible for a signal post.'³ A new station was accordingly erected on Golden Cap at a cost of £109. Bradby also commented that 'There is a general complaint that the glasses [i.e. telescopes] are not sufficiently

good for the purpose they are intended for' and that as many passing vessels failed to answer signals, a small piece of ordnance at each station would be useful. This recommendation seems not to have been acted on.

In 1798 the Admiralty issued orders to the captains of the Sea Fencibles along the coast to take the signal stations under their command.⁴ They were enjoined to visit the stations in their districts as soon as the business of enrolling their men allowed, and 'to observe whether they are placed in the most advantageous situations for conveying intelligence along the coast.' The officer appointed to the overall Sea Fencible command of the Dorset coast was Nicholas Ingram. Unemployed at the beginning of the war, and living in Bridport, he dealt with his responsibilities thoroughly, and almost at once decided that another station needed to be established on Portland, at the Verne (also known as North Point). There were however difficulties, and on 30 July 1798, Ingram wrote to Evan Nepean, the Admiralty Secretary, 'The weather has been so very bad lately that the carpenter and mason could not work on the signal house which is erecting in Portland, but I hope to have the mast up in a few days so that signals may be repeated.'⁵ In fact, it seems that the Verne station did not become fully operational until 1803.

By 1800, Ingram was concerned about the Pucknowle station: it was too far from Portland. He had ordered Lieutenant Henry Rosher who commanded it, to set off a blue light as a night-time experiment, but it was not seen on Portland. He therefore recommended to the Admiralty that the station be moved eastwards, to Abbotsbury Castle hill. It was higher, 'and [has] no back land behind it.'⁶ Signals from here would be more visible both at Portland and Golden Cap. This move was carried out in 1803. By the summer of 1803, Ingram had also decided that 'the Hamborough Hill signal station is very badly situated as the high land to the westward of it prevents the officer at the St Albans Station from seeing it and that it would be very much better placed on the high land which is called White Nothe.'⁷ Ingram and Captain Brine, one of the other Sea Fencible officers, had inspected White Nothe and were agreed it would be a suitable position. The only drawbacks were the lack of a water supply, which was a difficulty for a number of stations, and the fact that the bulk of Portland would shut White Nothe off from the Bill station. This, however, could be overcome by using the Verne station as a relay. He suggested that the Hamborough Hill house be moved first – the lieutenant and the others manning it could live elsewhere in Lulworth – and that the signal mast could be moved in one day, thereby minimizing disruption. Lt James Rains, commanding the Hamborough Hill station thought things would take longer, and on 15 August notified the Admiralty that the move was likely to take ten

days, and there would therefore be a break in service. Moving the station also caused other communication problems. In March 1804, Rains wrote again to the Admiralty complaining that he was experiencing delays in receiving the post. It was still going to Swanage, and it needed to be sent via Weymouth.⁸

Admiralty records show that towards the end of the war there may also have been a station on Bindon Hill, east of Lulworth Cove. One is listed there in April 1814. In the same document there is no mention of the White Nothe station, so it may have been shifted there, unless Bindon was a supplementary position.⁹

Despite the pressures of the war and the fear of invasion, the government was unwilling to requisition pieces of land for defences, and preferred to pay landowners rent. This included signal stations despite the fact that they occupied very little ground, and nationally the 'tenure under which the Ground upon which they stand is held by the Public' varied between a guinea and about £10 per annum. Occasionally there were disagreements. In June 1803 for instance, the Pucknowle rent was reported as 'not settled.'¹⁰ No rent was required in the case of the Portland stations, as the ground at the Bill was owned by Trinity House, and the Verne by the Crown. In some cases, the landowner patriotically waived the right to rent. The tenant at Ballard Down, Mr Richard Talbot, asked no rent, and the proprietor of the ground at Round Down, Mr Dampier, took the same line. So did the tenant at St Alban's Head. Mr Weld, on the other hand, required £2 per annum for the Bindon station. In the case of the Castle Hill station at Abbotsbury it was recorded that 'The Earl of Ilchester is Proprietor of the Ground', and he or his agent asked nothing. At the western end of the chain, Mr John Roper demanded £5 a year for the use of his ground, and Mr John Downe at Whitlands asked £3.¹¹

When the temporary peace began with the signing of the Treaty of Amiens in March 1802, the signal stations were closed down, and on 22 April the Admiralty issued fresh instructions to the lieutenants commanding them. Accounts were to be rendered, telescopes returned to the Navy Office, and all other stores sent either to the nearest naval yard or taken on board any suitable ship in the area. As for the signal house itself: 'On your quitting the Signal House provided for your accommodation (which you are to lose no time in doing,) you are to deliver the Key thereof to the Tenant of the Ground on which it has been erected...'¹² At St Alban's Head, Lt Leaver decided to hand over the signal house stores to the tenant as well, 'his being a respectable man,' and wrote to the Admiralty for official approval. The store keeper at Portsmouth dockyard demanded an explanation, however, and on 19 May Leaver was relieved of his problem by the arrival of the *Sea Flower* brig off St Alban's. An officer came ashore and the stores were taken on board.¹³

When the war resumed in May the following year, the tenants were required to return the keys to the

lieutenants returning to their posts. There seems to have been some confusion that summer as to the question of overall command. The Admiralty intended the Sea Fencible captains to take up their previous role, but this appears not to have been made clear to the lieutenants at the signal stations. Lt Young Appleby for instance wrote to Evan Nepean, the Admiralty Secretary on 18 July, stating that he had received orders from Captain John Cooke to place himself under Sea Fencible command. He had, however, received no instructions from the Admiralty, and 'I beg leave to solicit their Lordships' Directions.'¹⁴ And on the 25th McKey wrote from Portland asking for clarification as to whether he was under direct command of the Admiralty, or whether he should take orders from Ingram.¹⁵

What were the signal stations like? Lieutenants appointed to command them were informed that 'You will find upon your arrival at the Station a Temporary Building or Signal House, consisting of two Rooms, with the necessary Furniture, viz. One for the accommodation of yourself, the other for your assistants'.¹⁶ In reality, the design seems to have been a matter for local interpretation. The building at Greeber Head near Fowey for instance, had two rooms for the officer, a kitchen in which the men must have lived, and a 'ball room' for the signalling equipment.¹⁷ It was also built of stone with a slate roof, probably a reflection of local materials. In the case of the Purbeck and Portland stations, it may well be that stone was used: a mason as well as a carpenter is mentioned in the construction of the Verne building. At White Nothe a small section of masonry built into the Second World War observation post may also be associated with the Napoleonic station.¹⁸ Most signal station houses were of wood however, and given the relatively remote position of some of the Dorset headlands, and the fact that it was found possible to move the Hamborough Hill and Pucknowle stations quite easily, they were no doubt of timber construction. Excavation of the Golden Cap site indicates that the houses were probably built on brick foundations.¹⁹ The official list of stores to be provided for each house included 163 yards of canvas for covering the roof and 20 pounds of scupper nails to fix it down with.²⁰

Facilities inside the house were basic. A 'bath stove' was provided for the officer's room, and a fire grate (on which the cooking was presumably to be done) for the men's room. One set of fire-irons and a fender was allowed for each room, and the furniture amounted to one deal table and three ash chairs for each room. No official provision seems to have been made for beds or hammocks.²¹ This was not luxurious accommodation, and William Osborne at Ballard Down complained to the Admiralty in August 1796 about the 'wretched hovel and furniture allotted me'.²² On the other hand, the Golden Cap excavation has revealed the presence of bottle glass and a range of pottery associated with the Napoleonic period, including large bowls and tankards, tea bowls and a coffee can, in a variety of wares and

forms of decoration, which at least hint at a degree of domestic comfort.²³

The four men at each station were also provided with a standard inventory of naval stores to rig their mast and make signals:

Old Topmast 50 Feet long, fitted with a Cap, Crosstrees and Fidd to secure the Flag Staff.

One

Flag Staff 30 Feet long, fitted with a Truck, with two Sheeves.

One

Yard 30 Feet long, 5 Inches Diameter at one End, the other 3 Inches, with an Eye, Bolt and Hoop at each End.

One

Red Flag, 18 Breadths 7 Yards.

One

Pendant, blue, 5 Breadths 50 Yards.

One

Balls of 3 Feet 4 Inches Diameter, made with Hoops, covered With Canvas and painted black, with a small Eye Bolt At each End.

Four

Rope of 1½ Inch.

100 Fathoms

Ditto of 2½ ditto,

77 ditto

Small Block 6 Inches Diameter for the Balls.

Four

Iron-bound blocks of nine Inches.

Two

Large Wood Cleats, with Nails.

Six

Small Wood Cleats, with Nails.

Two²⁴

The dimensions of the mast were impressive, which would no doubt have helped in seeing the signals at a considerable distance. A telescope was also to be provided.

The officers appointed to command the signal stations were half-pay lieutenants, and officers entrusted with this charge were informed 'you are hereby required and directed to repair hither, without loss of time, and take upon you the Charge and Direction of making and repeating Signals accordingly'.²⁵ Nine pence per mile was allowed to lieutenants for travelling to their posts, though a suspicious Admiralty insisted that each was to submit a sworn affidavit to the effect that the claim was genuine, and based on the most direct route that could be taken.²⁶ They were also ordered 'to engage one intelligent Petty Officer (actually a midshipman) and two

trusty Men to assist you'. Since one person would quite often have to be absent in order to collect water or provisions, or to carry the post, Captain Ingram did point out to their Lordships that this was a very low level of manning.²⁷

The task which they were entrusted with was straightforward enough, though bearing in mind that the signal stations were very much the outer layer of the coastal defences, a very responsible one. The purpose of the signal posts was to ensure 'that no Ship or Vessel of the Enemy shall be able to approach the Coast without being discovered to be such from one of the Posts'. When an enemy ship was spotted, the appropriate signal was to be hoisted. Each station was to repeat signals made by the posts to the east and west, on which a close watch was also to be maintained. If one of the principal stations was making the signal, (Portland Bill or St Alban's), the intermediate stations were to indicate which principal station was involved. If the enemy vessel had been seen by one of the intermediate stations, the signal was to include the number of the nearest principal station in order that naval officers at the various ports along the coast could fix the position of the ship. If a vessel was within signalling distance, the lieutenant was directed 'to demand, by the Signal for that purpose, such Ship or Ships to shew the Private Signal for the day'. If the vessel failed to do so, the post was to signal that the ship was hostile 'or that you are doubtful' as to its identity. Accompanying these instructions, the lieutenant in question also received a copy of the private signals being carried by the king's ships. These were to be regarded as top secret. They were to be kept carefully concealed, 'and you are most strictly enjoined and commanded not to communicate them to any person whatever, except to such Officers as may be sent to relieve you by Us'. The presence of enemy vessels was also to be signalled to British warships in the vicinity, and to merchant ships which might be in danger from them 'from the course they are steering'.

The lieutenants were also ordered to keep a journal in which all signals made or repeated were logged, with the time of day, and the length of time they were kept flying, together 'with such remarkable Occurrences as may be deemed worthy of our Notice'. They also included observations on weather conditions, including wind strength and direction, and visibility. This would enable the Admiralty to locate cases of negligence if difficulties arose, and a fair copy of the journal (which in practice was simply a piece of paper ruled into tables) was to be dispatched weekly to the Admiralty Secretary. Very few seem to have survived for Dorset.²⁸

In addition to reporting the activities of privateers off the coast, there were several occasions on which the signal stations became involved in alerts over what were believed to be more serious threats. On 7 March 1797, Lord Cathcart, commanding the troops at Dorchester, received information 'that the French meditated sending

a few ships on a predatory expedition to land a small body of men on the Coast of Dorsetshire'. The lieutenants at the signal stations were instructed to communicate any information with the nearest officer of the Volunteer Rangers, who had gallopers in readiness to spread the warning across the county as swiftly as possible. This was of course a false alarm, though nobody knew it at the time. So was the alert in February 1798, when James Frampton at Moreton, one of the Ranger officers, received a message from the signal station at Ballard Down stating that 'a signal had been flying that a fleet of Enemy's transports were in sight off the Start Point'.²⁹ It was not clear why a threat from the west should have been reported by a signal station so far to the east, but it caused a full-scale response. And one night in April 1799 the western part of the county was thrown into a state of alarm when 'about ten o'clock an express arrived from a neighbouring signal-house to the Commanding Officer at Bridport, stating that an enemy was actually landing in the west, but their number and situation could not be ascertained before the morning.' The local troop of Volunteer Rangers, the Sea Fencibles and the Bridport Volunteers, all supported by two troops of the Somerset Provisional Cavalry stood to arms until the morning light, when 'intelligence was received that a mistake had been at the signal-house.'³⁰

From time to time there were difficulties over signalling. On 5 June 1795, Lt Christopher Roberts, commanding at Round Down, wrote a very worried letter to the Admiralty Secretary. The previous morning he had signalled a frigate that an enemy vessel was off Portland. The frigate had appeared not to understand the message, and Roberts complained that the present system did not allow him fully to state the nature of the French ship in question, 'and I humbly submit the utility of adopting such a signal to their Lordship's consideration'.³¹ In 1801, Henry Rosher at Pucknowle had a different concern. He understood that Lt Twisden at Golden Cap had received information about signals regarding some Dutch vessels employed on the king's business. Rosher was concerned that he had not, and wrote to the Admiralty for clarification.³²

In the event of an actual invasion, or attempted landing, the signal stations were ordered, if it was daylight, to make the appropriate signal. If it was dark, a large fire was to be lit and guns, if any, were to be fired. The lieutenant commanding was also ordered to send 'Expresses' – a difficult task with only a midshipman and two men to accomplish without a horse – 'and make such Intelligence known by every method you can devise.'³³ The members of the Volunteer Rangers living near the coast would have been the best means of doing this. In order to make a significant blaze, a separate Admiralty instruction directed that furze faggots were to be collected and piled into a stack 'with a narrow ridge at top, and thatching them over'.³⁴ The lieutenants were authorized to purchase the faggots, and also barrels of tar in order to ensure a good blaze.³⁵ In 1807 the

Admiralty became concerned that perhaps the methods of signalling should be supplemented with fire-frames – metal baskets on a high posts and containing combustible materials.³⁶ Nicholas Ingram replied to this suggestion on 31 Oct (and again on 1 Feb 1808 when his reply seems to have been lost), that as the signal stations on the Dorset coast were on high points, fire-frames seemed unnecessary, 'though it may answer well on flat coasts'.³⁷

In the early stages of the long conflict with France, some of the signal station lieutenants found time to consider other defensive measures, and to make recommendations to the Admiralty. At Ballard Down, William Osborne was concerned about the defence of Swanage bay. On 26 August 1796 he wrote a long letter to their Lordships detailing the state of the anchorage, conditions of wind and the threat from privateers. The answer, he suggested, was not the battery at Peverill Point, which he described as being in poor condition, but a new battery at his signal house 'within twenty yards of the Signal House there is a most eligible place for erecting a two or three gun battery of heavy metal which might be under my orders and would command the whole of Swanage bay'.³⁸ The following month, Hay Forbes was writing along the same lines from Hamborough Hill. His fear was not privateers but that the French might try to stage a large-scale raid. Up to thirty vessels drawing fifteen feet of water could enter Lulworth Cove and beach themselves he suggested, but this could be guarded against by placing two guns on either side of the entrance. Forbes told the Admiralty that he could find fifty men within two miles of the Cove who would serve in gunboats 'or attend a battery in case of an alarm; providing they were not liable to be sent on board a man of war; they are in general married men and would not leave home'. Forbes went on to explain that he knew an elderly man who had served in the American war, and who would get the guns properly sited, and manage the battery, for which ammunition might be obtained from the guard frigates at Weymouth.³⁹

In addition to their half-pay, the signal station lieutenants were paid five shilling a day plus two shilling and sixpence subsistence. The midshipman received the pay of a 4th rate (a 50-gun ship), that is £1.13s.9d. per lunar month and two shillings a day for subsistence. The men were paid two shillings a day. The payment of a subsistence allowance was no doubt an acknowledgement that the four men in each signal house were isolated and would have to fend for themselves. Initially, each station was also allowed £3 for candles per annum, and four chaldron of coals. In light of experience these allowances were increased in October 1800 to £4.10s. for candles, 'in consequence of the night signals' and six chaldron of coals.⁴⁰

The London chaldron, the standard in southern England, was approximately 28 cwt, the equivalent of 3,136 lbs or 1,422 kg, and represented the legal limit for

horse-drawn wagons. Shifting such quantities to remote Dorset headlands must have been a difficult and time-consuming task, whether carts or pack-horses were used, and the Admiralty probably underestimated the problems. In at least one case, the problem was compounded by the local landowner or tenant. On 9 Oct 1797, Lt William Read at Whitlands wrote to the Admiralty to state that the farmer who rented the land would not allow free access to the signal house on the grounds that wagons carrying coal would cut up the tracks. He asked their Lordships for guidance.⁴¹ There were also great difficulties with the provision of water in these waterless situations, and tight though financial management was, the Admiralty was obliged to make allowances. In May 1803 for instance, approval was given for Lt Young at Round Down to buy a water-cask, and Lt R G Leaver at St Alban's was allowed a 'water butt'.⁴² On 10 Nov 1807, Lt George Pace at Ballard Down was granted the considerable sum of 2s 6d. a week for 'procuring water'.⁴³ The officers at the other stations must have been granted similar allowances.

The lot of a signal station lieutenant was not enviable. The Admiralty *Instructions* recognized that either the midshipman or one of the men would sometimes need to be away to fetch supplies or carry messages, but the lieutenant was not 'to suffer above one of the Persons appointed to assist you to be absent at the same time, nor is the time of such absence to exceed 24 hours'. The lieutenant himself however was 'not upon any pretence whatsoever to be absent from your Station without our Permission'.⁴⁴ In other words, he was to be confined to the small wooden signal house and its immediate vicinity more or less indefinitely.

In October 1799, Captain Ingram informed the Admiralty secretary that he was going to inspect the Hamborough Hill station, commanded by Lt Forbes. If he considered the midshipman was competent to run the station, he proposed to give Forbes the leave for which he had presumably applied.⁴⁵ This suggests that leave was seldom granted, and by comparing a variety of original sources, it can indeed be seen that Dorset signal station lieutenants served for very prolonged periods.⁴⁶ William Osborne at Ballard Down, Christopher Roberts at Round Down and William Patey at St Alban's all served for the two years between September 1795 and October 1797. Joshua Thompson seems to have spent three years at the Verne between 1803 and 1806. James Rains at White Nothe, John McKey at the Bill and James Wilson at Abbotsbury Castle all appear to have spent four years in post, beginning in 1803. Henry Rosher, whose name appears at Pucknowle in September 1795, was still there in 1802 – a possible seven years. The Admiralty seems to have taken the view that officers were to be at their posts for the duration, as is illustrated by a letter from Lt Leaver dated 3 July 1802. He had been at St Alban's Head, but now that the signal stations had been closed down following the Amiens peace treaty, he wrote from Plymouth Dock requesting a

medical inspection. He had, he explained, lost his hearing 'when on actual service' and had been unable to seek medical advice 'from being appointed to the command at St Alban's Head Signal Station the Duty of which for four and a half years would not allow my leaving for further advice'.⁴⁷

Despite these conditions of service, a posting to a signal station had its attractions for some: the life of an aging half-pay lieutenant was impoverished, and the extra allowances could be a godsend. One such was Henry Beasant, 'on the beach' in Puddletown. He had heard that the lieutenant at the signal station near Chichester had died, and wrote on 2 August 1797 to 'beg leave to solicit their Lordship's favour of being appointed to that station, if not already disposed of'.⁴⁸ McKey wrote a similar letter from Weymouth when the war broke out again in May 1803, pointing out that he had been employed by Ingram in Weymouth before the temporary peace, in the Sea Fencible service 'without any emolument whatever', and asking for employment either at a rendezvous or a signal post.⁴⁹ Perhaps most telling of all however is the begging letter Lieutenant Christopher Roberts wrote to the Admiralty Secretary from Round Down on 23 June 1797, when he appeared to fear his removal: 'As I am far advanced in years, and also out-liv'd my Friends, I have no reason to expect preferment in the Royal Navy. I therefore crave, and solicit your good office, and kindness, to represent my request to their Lordships, to grant me the indulgence to remain at Round Down Signal House.' He went on to say that he had made some improvements to the signal house at his own expense, using some of the local stone.⁵⁰ Roberts must have had his way, because he was still at Round Down on 20 May 1799, when he wrote again. He had heard that Lt George Bell, commanding the gunboat *Scorpion* had died that morning at Poole. As he was on the spot, might he be promoted to the vacancy? He signed himself 'half-pay lieutenant'.⁵¹

One of the Dorset signal station officers had the unusual, and possibly unique consolation, of being commemorated in verse. In 1795 an anonymous poem entitled *The Monastery* was published, attacking Thomas Weld of Lulworth, who was a Catholic, for allowing some Trappist monks who had fled from France to establish themselves on his land. These agents of an alien power, as they were seen, were contrasted with the stalwart Royal Navy lieutenant at the Hamborough Hill signal station:

While on the summit of the cliffs that rear
On Dorset's coasts their towering heads to heav'n
Valla 'mid steaming banners sits, and far
Over the deep extends his ranging eye,
Ready to give alarm should hostile ship
Or squadron steering tow'rds our coast be kenn'd⁵²

'Valla' was actually Lieutenant John Watts, and he would probably not have recognized himself cast in this heroic guise.

In August 1804, at a time when the fleet was in need of every seaman it could find, the Admiralty issued an instruction to the Sea Fencible officers that they were to visit all the signal stations in their districts and 'to cause all seamen employed thereat fit for [...] service to be discharged therefrom and sent to the nearest port.' They were to be replaced by local men 'not being seafaring men fit for [...] service afloat', in other words, landsmen.⁵³ This may not have been a problem for the Dorset stations, though perhaps the age of some of the personnel was. Ingram, in sending his routine returns to the Admiralty, sometimes thought it useful to include supplementary information on the men under his command. One of the points to emerge is the considerable age of some of the midshipmen. At Abbotsbury Castle, George Moore was 41, Sam Mitchell at the Verne was 46, and Thomas Flower on White Nothe was 47. In other words, they were the sort of midshipmen who had failed to pass the examination for lieutenant, and were probably lucky to find any employment. Also at the Verne, there was a great contrast in the age of the two men employed. Henry Mitchell was 70, while Thomas Flann was only 15 – as was Rob Wilson at Abbotsbury Castle. At Portland Bill, Lt McKey had taken on two of the Trinity House lighthouse-men, Christopher Comben Snr, aged 51, and Christopher Comben Jnr, 25. He also employed Robert Comben, listed as a landsman. Although one fisherman – twenty-seven year-old Samuel Randell at Abbotsbury Castle – was identified, other men who can be picked out were all landsmen: Francis Champ and Samuel Medway at White Nothe, Samuel and Thomas Mitchell at the Verne, and Robert Wilson at Abbotsbury.⁵⁴

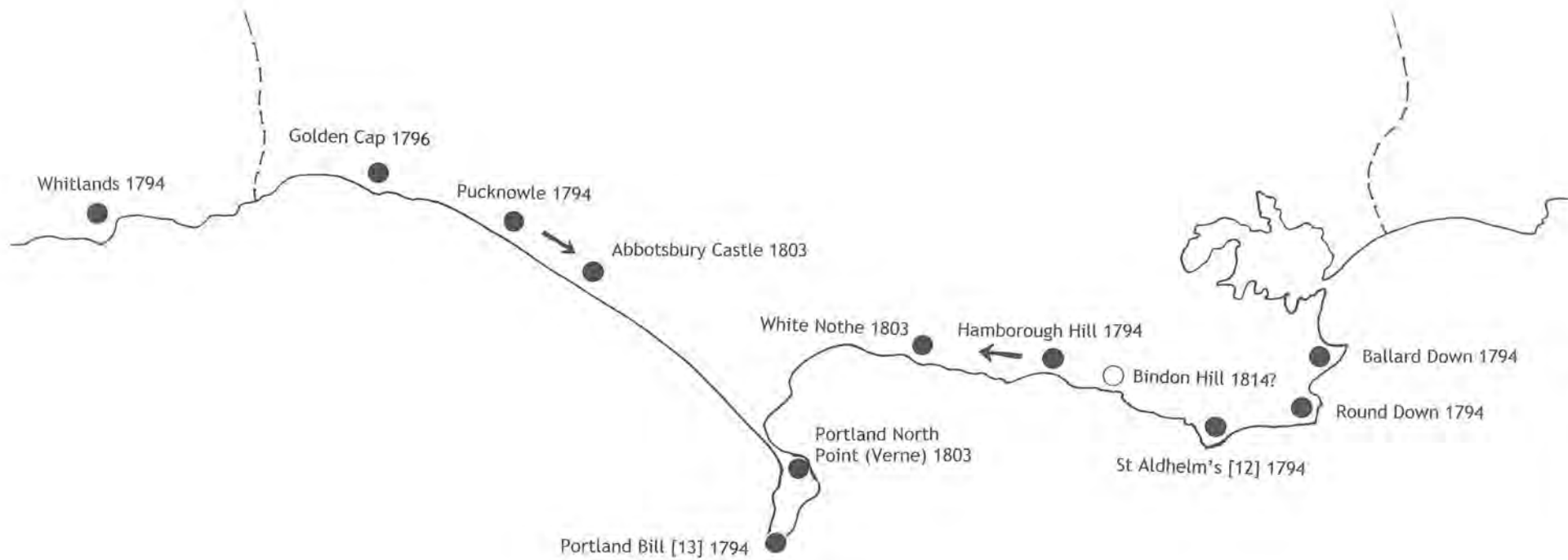
The Admiralty *Instructions to Officers* directed the Sea Fencible officers commanding each section of the coast, to visit the signal stations as soon as they could and to examine the condition of the telescopes and the signalling equipment. They were also 'to enquire into the conduct of the officers and men stationed at them; whether they constantly attend the signal house; whether they are alert in making or repeating signals when circumstances require them; and whether the officer has been sufficiently careful in keeping the secret signals from being seen by anyone'. In a separate directive, they were also asked to 'ascertain whether any of the Lieutenants had appropriated any part of the wages of their men to themselves'.⁵⁵ It was no doubt during these inspections that Ingram collected his extra information about the men. In March 1806 however, he discovered that Lt McKey at the Bill was misappropriating some of the funds. Reporting to the Admiralty on 30 March, Ingram announced that he had found everything in order except in the case of the Bill, where Lt McKey 'I am sorry to inform you has been so very imprudent as to enter his daughter who lives with him as Midshipman and she has received the pay'. It seemed that in addition to the two men, McKey had kept a boy whom he had paid himself. He had however been making returns for

three men instead of two, which Ingram had not suspected. Ingram took a surprisingly compassionate view of the situation, and went on to say: 'As he is a very old officer having been more than fifty years in the service [which would have put him in his mid-sixties], and I apprehend like now always attentive to his duty, I hope the Honourable Board will be as lenient to him as the case will admit.'⁵⁶ In future, wrote Ingram, he was going to attend the paying of the Portland signal station men in person, and was issuing orders to Captain Brine, in charge of the Sea Fencibles to the westward, and Captain Folliot to the east, to do the same.

McKey's was an unhappy case, probably brought about by a combination of isolation and poverty. He was in fact, as Ingram indicated, a conscientious officer. There is a series of letters from him, written to the Admiralty in June and July 1803 in which he detailed a great deal of extra work he had undertaken. Although based at the Bill, he had decided on his own initiative to take charge of the Verne, in the absence of another officer. He collected the stores, put repairs in hand, and ordered the flagstaff to be erected. He also put a local man, Sam Mitchell, into the Verne so that signals from other stations could be repeated, and that his own signals regarding privateers off the Bill could be relayed to ships in Portland roads.⁵⁷ The fact that McKey was at the Bill station as late as 1806 suggests that their Lordships did indeed take a lenient view.

Exposed as the signal houses were to the full force of the weather, it was inevitable that repairs and maintenance would be necessary. On 20 March 1801 for instance, Lt Read at Whitlands reported that the flagstaff, which was partly rotten, had that morning blown down in a gale. The signal station was temporarily out of action, but he had sent for the builder of the signal house to repair it. Meanwhile, he had informed Golden Cap and Beer of the problem so that they could repeat signals.⁵⁸ But their Lordships took a very parsimonious view of such matters, and in response to applications for money to make repairs from the signal station lieutenants, the Navy Office issued a notice on 1 August 1804 making it clear that applications of this kind were only to be made via the Sea Fencible captain commanding the area, and on a form specially provided. Minor maintenance was to be carried out by the lieutenants and their men, and at their own expense. There was one good piece of advice however: 'It having been found that, if instead of painting the outside of the Signal House, they are payed [*sic*] with a Composition of Tar and Ochre, with a little fine Sand thrown into it before it is dry, they will be better able to stand the Weather.'⁵⁹

It was, of course, sometimes necessary to officially inspect the signal houses and masts to ensure they were able to function efficiently. This was especially true when the war resumed after the breakdown of the Amiens peace agreement in May 1803. On 20 July 1803, an inspecting officer named Oliver Lang wrote from



Portland to Commissioner Fanshaw at Plymouth dockyard 'I have inspected the Verne, and Bill of Portland, Signal Stations, and have found the works of both stations complete – the House in a state of occupancy, and the Masts rigg'd, capable of making the signals which may be required'. He therefore intended to pay the tradesmen's bills. At Abbotsbury Castle, Golden Cap and Whitlands, Lang found the masts fully rigged but the houses incomplete. A carpenter from Lyme named Clark had promised to have the Abbotsbury Castle house completed by 19 August. Lang directed that a tent should be put up at the hill as temporary accommodation, using the canvas that had been intended for Pucknowle, so that the business of signalling could continue.⁶⁰

There was another round of inspections during the late summer and early autumn of 1803. At Ballard Down, the station under Lt John Lowe was reported as complete in regard to making signals, though the spy-glass was out of order – a serious problem – and spare ropes were needed. Lt Young Appleby's position on Round Down was complete and fully functional. The St Alban's Head station under Lt R G Leaver was complete, though the telescope was not good enough. White Nothe, where Lt James Rains was stationed, was not fully functional on 30 August as the house had been dismantled and was being moved from Hamborough Hill. Portland Bill, under Lt John McKey, was fully in service, though at the Verne Lt W. Nowell require spare signal balls and extra rope. On 6 September the Pucknowle station commanded by Lt James Wilson was simply reported as being removed to Castle Hill at Abbotsbury. John Twisden at Golden Cap was fully ready for service on 29 August, although at Whitlands, over the Devon border, Lt Peter Creed's house was still not complete on the 28th, and the carpenters were expected the following week.⁶¹ All this cost money of course. In 1804 for example, £27 10s. had to be spent repairing St Alban's Head, and £33 10s.6d. on Round Down.⁶² On 6 November 1806, Captain Shirley, commanding the Lymington district, wrote to the Admiralty from Swanage in response to an order to inspect the eastern Dorset stations. His report noted that the lower mast at St Alban's Head was rotten, the Round Down mast was in need of renewing, while at Ballard Down the rigging of the mast needed replacing. It must have been an incessant task, though good for local employment: his letter was counter-signed by Joseph Elis, a carpenter at Swanage, who was presumably going to do the repairs.⁶³

Napoleon abdicated in April 1814, and in November of that year, the signal station system was closed down. With the escape of the Emperor from Elba and the resumption of hostilities, the south coast stations were briefly reactivated in May and June 1815, but whether all the stations were functional seems doubtful.⁶⁴ Some of them however were handed over to the Revenue, to play their part in the struggle against that perennial Dorset problem – smuggling.

ACKNOWLEDGEMENT

I am grateful to Roger Hart for providing me with transcriptions of the Admiralty *Instructions* and Bradby's report.

REFERENCES & ENDNOTES

All references are to documents in the National Archives (PRO) unless otherwise indicated.

1. ADM 49/110 ff 5–6 Signal Station Papers 1803 – 1807.
2. ADM 49/110 ff 5–6.
3. ADM 1/1513 B 431–9 Capt. J. Bradby; reports and letters.
4. *Instructions to Officers*. Printed copy in ADM 1/2066 L142.
5. ADM 1/1990 I36 Captains' letters I 1799. Ingram to Admiralty, Weymouth, 24 May 1800.
6. ADM 1/1991 Captains' letters I 180 –1802.
7. ADM 1/1992 Captains' letters I 1803. Ingram to Admiralty, Weymouth, 4 August 1803.
8. ADM 1/3095 Lieutenants' letters R 1803–1804. Rains to Admiralty, Hamborough Hill, 15 March 1803.
9. ADM 49/116 Signal Station Papers, (Tenure of Ground), 1814.
10. ADM 49/112 Signal Station Papers (Rents) 1803–1808.
11. ADM 49/116.
12. ADM 49/110 f3.
13. ADM 1/2987 Lieutenants' letters L 1801–1802. Leaver to Admiralty, St Alban's Head, 30 April and 19 May 1802.
14. ADM 1/2741 Lieutenants' letters A 1803.
15. ADM 1/3012 Lieutenants' letters M 1803.
16. *Instructions to Officers appointed to Signal Stations* 15 February 1804, in ADM 49/110 f146.
17. ADM 49/109 Signal Station Papers 1803–1807.
18. G. Le Pard, 2008 'Two previously unrecorded earthworks on White Nothe' *Proceedings of the Dorset Natural History and Archaeological Society* 129, 274.
19. A. Cooksey, J. Draper, M. Papworth, 'Excavation of a Bronze Age Round Barrow and Napoleonic Signal Station at Golden Cap, Stanton St Gabriel' *Proceedings of the Dorset Natural History and Archaeological Society* 115, 51–62.
20. ADM 49/110 f86.
21. ADM 49/110 f86.
22. ADM 1/3056 Lieutenants' letters O. Osborne to Admiralty, Ballard Down, 26 August 1796.
23. A. Cooksey, J. Draper, M. Papworth, 'Excavation of a Bronze Age Round Barrow and Napoleonic Signal Station at Golden Cap, Stanton St Gabriel' *Proceedings of the Dorset Natural History and Archaeological Society* 115, 51–62.
24. ADM 49/110 f86.
25. *Instructions to Officers appointed to Signal Stations* 15 February 1804, in ADM 49/110 f146.
26. ADM 49/110 f123.
27. ADM 1/1990 I36. Captains' letters I 1798. Ingram to Admiralty, Weymouth, 30 July 1798.
28. ADM 49/110 ff146–148.
29. Thompson, C.W. *Records of the Dorset Yeomanry*, Dorchester, 1894, 23–27.
30. *Sherborne Journal* 8 April 1799, quoted in R. Hine, 1914 *History of Beaminster*, Taunton, 284.

31. ADM 1/3092 Lieutenants' letters R 1796–1797.
32. ADM 1/3094 Lieutenants' letters R 1801–1802. Rosher to Admiralty, Pucknowle, 15 June 1801.
33. ADM 49/110 ff147, 148.
34. ADM 49/110 f123. Jan 1804.
35. ADM 49/110 f9.
36. The design was very similar to the commemorative Armada beacons erected in recent times.
37. ADM 49/114 Papers relating to fire-frames.
38. ADM 1/3056 Lieutenants' letters O 1796.
39. ADM 1/2873 f68 Lieutenants' letters F. Forbes to Admiralty, 7 Sept 1796.
40. ADM 499/110 f9.
41. ADM 1/3092 Lieutenants' letters R 1796–1797.
42. ADM 17/96 ff 38,39 Signal Station accounts 1803.
43. ADM 17/98 f35 Signal Station accounts 1807.
44. ADM 49/110 ff146–148.
45. ADM 1/1990 I35. Captains' letters I. Ingram to Admiralty, Weymouth, 27 Oct 1799.
46. *The Times* 9 Sept 1795; *Steel's Original and Correct List* 1797, 1802; ADM 49/110; ADM 6/55; ADM 1/1993; ADM 49/113.
47. ADM 1/2987 Lieutenants' letters L 1801–1802.
48. ADM 1/3193 Lieutenants' letters B 1797.
49. ADM 1/3012 Lieutenants' letters M. McKey to Admiralty, Weymouth, 16 March 1803.
50. ADM 1/3092 Lieutenants' letters R 1796–1797. His reference to 'friends' meant that he was without 'interest', the influence without which promotion was almost impossible.
51. ADM 1/3093 Lieutenants' letters R 1798–1800.
52. *On the Building of a Monastery in Dorsetshire*, Oxford, 1795. Copy in Dorset History Centre, Weld Papers, D/WLC R17.
53. ADM 49/110 f23.
54. ADM 1/1993 I49 Captains' letters I. Ingram to Admiralty, Weymouth, July 1804, and ADM 49/113 f104. Signal Station Papers (Abuses). The men changed from time to time of course.
55. ADM 49/113 f115.
56. ADM 49/113 f115.
57. ADM 1/3012 Lieutenants' letters M 1803. McKey to Admiralty, Portland, 4 July 1803 and ADM 49/110.
58. ADM 1/3094 Lieutenants' letters R 1801–1802.
59. ADM 49/110 ff 126 & 214.
60. ADM 49/110 ff 124, 125.
61. ADM 49/110 ff 19–22.
62. ADM 49/110 ff 7, 8.
63. ADM 49/113 f39.
64. Kitchen, F. *The Napoleonic War Coast Signal Stations* *Mariner's Mirror* Vol 76, 1999, 344.

List of Signal Station Names:

- Abbotsbury Castle 1803
- Ballard Down 1794
- Bindon Hill 1814?
- Golden Cap 1796
- Hamborough Hill 1794
- Point (Verne) 1803
- Portland Bill [13] 1794
- Portland North
- Pucknowle 1794
- Round Down 1794
- St Aldhelm's [12] 1794
- White Nothe 1803
- Whitlands 1794

Coffee House Culture in Seventeenth-Century Lyme Regis

JUDITH FORD

During the early decades of the seventeenth century, English merchants of the Levant Company began importing coffee beans from the Middle East for their own use.¹ In the early 1650s the beverage made with hot water and ‘the excellent fruit of the humble coffee shrub’² became available to the public when the first coffee house opened in London.³ The habit of drinking coffee quickly spread throughout the capital and beyond, and by 1675 there were an estimated 3,000 coffee houses in England.⁴ These establishments provided a favourable setting for the dissemination of news, information and ideas, and coffee houses soon developed into centres of political debate, commercial transactions and education.⁵ As Bryant Lillywhite has observed, coffee houses ‘gained popularity, increased in number and derived their importance simply by satisfying a public need in the day-to-day business and social life of the community’.⁶ The history of these establishments has been told largely with reference to metropolitan coffee houses, partly because of their number and variety in that location. John Pelzer has noted that ‘London coffee-houses each began to develop its own specialised clientele, and each soon became identified as the meeting place for a particular occupation, interest group, or type of specialised activity’.⁷ London coffee houses have therefore provided rich and varied material for historians. Furthermore, it has been suggested that although documentary evidence of various types exists for coffee houses, ‘much of the most compelling history is literary’, and much of that literary evidence concerns London (such as the diary of Samuel Pepys).⁸ The history of the coffee house in England cannot, however, be complete without reference to provincial coffee houses, and the inventory of goods belonging to Mrs Sarah Bowdidge of Lyme Regis, drawn up after her death in 1695, provides valuable information on that subject.⁹

Sarah Bowdidge’s inventory was composed by Thomas Lyman and John Pitts (both of whom are identified in the document as merchants of Lyme Regis) on 21 October 1695. Mrs Bowdidge’s will, which accompanies the inventory, was ‘nuncupative’, that is, a written record of the verbal last wishes of a testator, and was drawn up on 17 October 1695, six days after her death.¹⁰ The essence of Mrs Bowdidge’s wishes was that she desired her goods to be sold, so that any outstanding debts could be paid and the residue of the money used for the ‘good’ of her daughter, Anne. Hence, the inventory was an important record of the value of Mrs Bowdidge’s personal estate.¹¹ Sarah Bowdidge’s goods are listed, as was the usual practice in inventory-taking, under the heading of the room in which each item was located. The document indicates that Mrs Bowdidge’s establishment (which was apparently her home as well as her business premises), was a fairly substantial house,

consisting of seven rooms and a gallery, as well two cellars, a ‘Court’ (a yard or garden) and a stable.¹²

After an initial entry recording the value of Mrs Bowdidge’s and her late husband’s ‘Wearing Apparel’, the inventory-takers listed goods that were located ‘In the Coffee Room’. The name given to this room reveals, early in the inventory, the character of Mrs Bowdidge’s business, and items recorded in this, and other rooms in the building, leave little doubt that Mrs Bowdidge was running a commercial enterprise that was, to some extent, tailored to the requirements and central business interests of the inhabitants of Lyme Regis in the 1690s. At the end of the seventeenth century Lyme had reached its height as a trading port and merchants of the town had well-established business connections with many parts of the world, including much of Europe, and the colonies of America and the West Indies.¹³ In the eighteenth century the inhabitants of Lyme Regis looked back to the 1690s as a period of prosperity since lost to them, when ‘The said borough consisted of a great many good houses inhabited by substantial merchants, who carried on an extensive foreign commerce’.¹⁴ Central to the port’s economy in the second half of the seventeenth century were exports of cloth, particularly to France and Africa, and imports of wine (much of it from France), as well as imports of ‘many tons of’ tobacco, and thousands of cases of sugar that were shipped directly to Lyme from the colonies.¹⁵ Given the diverse and long-established trade connections of the merchants of Lyme, coffee drinking in a domestic setting may have taken place in the town from the early decades of the seventeenth century, and it is not clear when coffee, as a drink, was first sold in the town on a commercial basis.¹⁶

The Coffee Room

The goods listed in Mrs Bowdidge’s Coffee Room indicate an area where customers could enjoy hot beverages, and a pipe of tobacco, in agreeable and stimulating surroundings. Recorded in this room are coffee dishes, coffee pots, sugar pots and a ‘Pype plate’ as well as a ‘small stool and Water pan’. For some of these utensils a brief description is given. Three of the six coffee pots in this room are noted as being made of copper and were valued together at 12s. The other three coffee pots are described as being ‘Latten very old’ and this group was valued at 6d. ‘Latten’ is thought to have been a ‘mixed metal’ resembling brass in its nature and colour.¹⁷ It is impossible to know precisely what was meant by the description ‘very old’, but some or all of these coffee pots may have been imported from Arabia. Coffee was traditionally brewed in that region in copper pots of conical or pear-shaped form with a long spout ‘set low on

the side of the vessel'.¹⁸ Coffee 'sets', composed of cups or 'dishes', a tray and a coffee pot, were imported by the Levant Company but it is believed that 'cost induced many [English] coffee houses to use coffee dishes of domestic production'. Customers of the Lyme coffee house may have enjoyed drinking from vessels that were of local origin; in the 1690s, tea, chocolate and coffee 'cupps' made of tobacco pipe clay from Poole, were available for purchase.¹⁹

Two 'Latin' sugar pots in the Coffee Room were also described as being 'very old', and, as with the coffee pots, their origins are unclear. It has been asserted that, during the second half of the seventeenth century, the addition of sugar to coffee was 'an expensive luxury [... and] tended to remain the preserve of domestic coffee consumption.'²⁰ But in Lyme, where in just one year (1686–7), 1,300 cases of sugar were imported,²¹ that substance may well have been used with coffee, on a commercial basis, by the 1690s. The sugar pots in Mrs Bowdidge's Coffee Room indicate that this was indeed the case. The presence of a 'Chocolate Mill' in the Coffee Room (valued with a number of other items at 1s 10d) also reflects Lyme's business connections with the colonies of the West Indies, where cacao trees were grown by the 1670s.²² No chocolate 'berries' are recorded in the Bowdidge inventory, but coffee berries are listed elsewhere in the coffee house, valued at 8s a pound, as is a quantity of tea, valued at 10s per pound (Despite the East India Company's promotion of tea, that commodity was more expensive than coffee, because, for a variety of reasons, including high excise duties, imports of tea 'remained irregular until the eighteenth century').²³

If some of the items consumed in the Lyme Coffee House reflect the port's trading connections with the wider world, other items located there indicate the proprietor's desire to provide equipment that was of particular utility to the merchants and mariners of a busy port. Listed in the Coffee Room is 'One great Map of the World' (valued at 2s 6d), as well as 'Six small Mapps', valued together at 2s 6d. A 'Sea Card' is also recorded, valued at 18d, which presumably provided information on the tides. 'A Kenning Glass' (a telescope or spy-glass) is another item listed in the Coffee Room (valued at 2s), and this entry provides a relatively uncommon, early record of this piece of maritime equipment.²⁴ The merchants of Lyme were apparently able to enjoy drinking coffee, discussing their business affairs, and keeping an eye on the horizon, in comfort. The ambience of the Coffee Room is indicated by the five leather chairs (there were also nine 'matted' chairs), window curtains and wax candles that are recorded as being located therein. Also listed in this room are a 'Round Table', valued at 4s and a 'Long Table', valued at 12s. Coffee Houses were meant to be egalitarian establishments where, for the price of a cup of coffee, individuals from a variety of backgrounds could mingle,²⁵ but it is impossible to know how far egalitarianism permeated

coffee-house society, and whether or not the great merchants of Lyme would have been content to sit on 'matted' seats, while those regarded as less important inhabitants of the town sat on the Coffee Room's leather chairs.

The Hall

Sarah Bowdidge's inventory shows that there was another section of the coffee house in the building. Under the heading 'In the Hall' (the second in the sequence of rooms listed in the inventory) the inventory-takers recorded items which suggest that this area of the building was the hub of the establishment. The 'Sign of the Coffee house', listed under items located in the Hall (and which presumably hung at the entrance to the house), was valued at '6d'. No details are provided about this sign. Of possibly equal attraction to passers-by, and a clear indicator of the character of the clientele of the Lyme coffee house, was a 'Cage and Red bird', listed first in this section of the document (suggesting that it too was in or near the entrance to the house). The 'Red bird' may have been an African Red Parrot or a Scarlet Macaw, both species that reflect Lyme's connections, in the seventeenth century, with Africa and with the New World.

Mrs Bowdidge's establishment was, apparently, not confined to the preparation and serving of coffee. Many of the goods listed in the Hall indicate that she provided customers with other items of food and drink. These goods include a mustard pot and cup (mustard was sometimes added to coffee²⁶), a butter melter, a grater, a flesh-pike, a dripping pan and skillet, a 'cheese timber plate', sugar cups, pepper and tea boxes, as well as platters, pewter plates, flagons, 'basons', porringers, 'two great Kettles', 'two small Kettles', nine pounds of coffee berries and nine ounces of tea. Also located in the Hall was a 'Coffee Kettle', valued at 5s, as well as a 'frying pan' (the latter item was, together with 'three spits', valued at 3s 9d). Although some of these goods would have been for the Bowdidge family's own use, there are items that are recorded in sufficient numbers to indicate commercial activity (there are, for example, over forty plates and 'platters' listed in this room).

The 'Coffee Kettle' and 'frying pan' may have been used in the preparation of coffee for drinking. It is known that in the second half of the seventeenth century, green coffee berries were 'put into a frying pan or like and [held ...] over an easy fire keeping it continually stirring'.²⁷ Antony Clayton has observed that coffee drink at that time bore no resemblance to the 'milky confections' served in twenty-first-century coffee shops. He describes seventeenth-century coffee in the following way: 'Brewed in great pots [or 'kettles'] of eight to ten gallons (one pound of beans was reckoned to produce two and a half gallons) the "bitter black drink", as Samuel Pepys called it, was originally served hot without

milk or cream.²⁸ As there was a 'water pan' located in the Coffee Room, it is possible that coffee was also brewed there and may have been of a superior quality to the coffee that was brewed and offered in the Hall. In the 1670s it had been suggested that 'ordinary' people could 'make do' with coffee grounds boiled several times in water, while gentlemen should be served with coffee made with fresh powder every time.²⁹

Although coffee houses were initially regarded as venues for the consumption of non-alcoholic drinks, alcohol was, apparently, on offer to customers of the Lyme coffee house; a 'Galon Glass bottle with two quarts of Nants [Nantes] Brandy' was listed in the Hall, valued at 6s. (Brandy in 'considerable quantities' was imported through Lyme in the second half of the seventeenth century³⁰). Rum, cider and beer are recorded in other sections of the inventory. A 'small spitting pot' is also listed in this part of the coffee house (no such item was apparently needed in the Coffee Room, or at least was not stored there). 'A long table board and form' are recorded in the Hall, indicating that customers in this area were expected to enjoy a communal atmosphere, although a screen of green baize consisting of 'six leaves' may have provided some privacy if desired. There are no leather chairs listed in the Hall; further seating in that room was provided by a settle and 'matt-chairs', as well as 'one childs chair'. This chair was probably for the use of Sarah Bowdidge's daughter Anne, but children were allowed in some coffee houses as customers. Parish accounts for St Stephen Walbrook, London, for the year 1683, for example, include the entry 'Spent at the Coffee House on the Children 19s 6d'.³¹ In keeping with the ethos of many seventeenth-century coffee houses as centres of self-improvement, eighteen books are listed in this part of the coffee house, although only 'three small Bibles' are identified. It is unclear whether the thirty-six pounds of 'old iron' in the Hall, valued at 1d a pound, represented another aspect of Mrs Bowdidge's business, or was lumber stored in a convenient corner. It is known that in some coffee houses 'commodities, ships, salvaged-goods as well as prizes of war were bought and sold'.³² The presence of the 'old iron' further emphasizes the difference between the Hall and the apparently more salubrious character of the Coffee Room. The Hall was not entirely without ornament; as well as the red bird, there were listed 'A Draught [drawing] of the ship Royal Prince', valued at 4s, and 'a pair of Buckshorns and a picture', valued, together with another item, at 2s. The two 'gilted frames' listed in this room may have had some depth to them and may have been used for displaying items that were for sale. In 1700, following a visit to a metropolitan coffee house, Londoner Ned Ward recorded that

The walls were decorated with gilt frames [...] in the frames were rarities; phials of yellowish elixir, favourite pills and hair tonics, packets of snuff, tooth-powder made of coffee grounds, caramels and cough lozenges.³³

Amid the paraphernalia of a busy catering business, sea-faring concerns were not forgotten; a spy-glass is listed in the Hall, described as 'One Timber – Kenning Glass', valued at 6d (a cheaper model, therefore, than the telescope that was kept in the Coffee Room).

The Post Office

Attached to Mrs Bowdidge's Coffee House was another enterprise of importance to the townspeople of Lyme and, particularly, for its merchants. Listed with the items in the Hall is the sign 'of the Post House' as well as the 'Partition of the Post Office and office board and the Bench'. By the 1690s there was a well-established association between post offices and coffee houses since, in the days before postal addresses, the latter provided a convenient and well-known location for the collection and delivery of mail.³⁴ Communication was central to the success of enterprises entered into by the merchants of Lyme Regis. This had been brought home very clearly to the inhabitants of Lyme in 1677 when they complained that the Postmaster of Crewkerne 'hath greatly neglected the conveying of our letters to us [...] which [...] may be of great concernes and Lost to the merchaunts of this place it being a Port of great Trade; Especcially upon the receipt of forreigne Bills for acceptance'.³⁵ It may have been as a consequence of this alleged neglect on the part of the Postmaster of Crewkerne that a post office was established in Lyme, and its location behind a partition within Mrs Bowdidge's Hall, may indicate that the coffee house was already established in 1677. Mrs Bowdidge also provided the materials for letter writing; listed in the Hall are an 'Inkhorn' and a 'whaffer box' and 'sand' box (for use in blotting ink). Two 'post horns', valued at 5s, would have announced the arrival and imminent departure of the mail. In the late seventeenth century mail was transported between 'posts' by a 'post-boy' on horseback, and it was the duty of the postmaster or mistress to deliver the mail in their own postal area. Postmasters and mistresses were meant to adhere strictly to Post Office regulations (although that does not seem to have worried the postmaster of Crewkerne in 1677), and were reprimanded if they did not provide an efficient service. In the second half of the seventeenth century, for example, the deputy postmaster-general found it necessary to write to several postmasters, with complaints about inefficiencies such as failing to provide the post-boy with a fit (and sometimes any) horse.³⁶ In Mrs Bowdidge's stable are listed 'Two Horses Bridles and Saddles' valued at £3.10s. The value of the horses and their tack was identical to that of 'A Boat in the Cob', listed towards the end of the document. The postmaster or mistress of Lyme may also have had the duty of ferrying mail to and from waiting ships. The location of the post office within the Coffee House would have made Sarah Bowdidge and her household vulnerable to thieves. The 'Two pistols one pair of holsters' and 'Two powder hornes', listed in the Hall, were probably kept in good working order.

Other rooms in the establishment

Not all the items related to Mrs Bowdidge's business could be accommodated in the Coffee Room, the Hall, or in other obvious locations in the property, such as the cellars. Listed 'In the [upstairs] Gallery' were thirteen boxes, four chests, one trunk, one 'flower-baril', two ranges, two sieves, one 'Butter Barril', one 'Beef Barril', two small chairs, five 'Empty Barrils', 'four gros [576] of Tobacco-pipes', two 'Blanketts' and one 'Cradle Rugg'. The establishment also had a 'Brew-house' in which were stored further items related to Mrs Bowdidge's business, including 'A Coffee-Mill', valued at £1 (apparently a larger piece of equipment than the much cheaper chocolate mill that was recorded in the Coffee Room).³⁷ In the bedrooms too, items are listed that were connected to the business. As well as beds and bed linen there were goods such as seven leather chairs (in one room), three Punch Bowls, coffee dishes, glasses, a box of tobacco and six bottles of lime juice (another product of the West Indies). There were also two swords, one 'Bow' and 'one half pike & a carbine'.³⁸ In two of the bedrooms were located a total of 24 pictures (the character of these pictures is not described). According to the inventory, only one of the bedrooms, 'the Little chamber', contained chamber pots (two are listed in this room, one 'Tinning', the other 'Earthen').

In 1695 Sarah Bowdidge's permanent household was, apparently, small. The household is listed in a census for Lyme for, the year 1695, and appears to be composed of Sarah (described as being a widow and as having died in that year), John her son (also noted as being 'dead'),³⁹ 'An' her daughter, and Robert Sanford and 'Jone' Carter, who are both described as servants.⁴⁰ Sanford and Carter were two of the three witnesses to Sarah Bowdidge's will, the other witness being Elizabeth Luce, who was Sarah's mother.⁴¹ It is unlikely that Sarah and her small household could have run the coffee house and post office without other employees; the census listed only those people who were resident in the household and it is probable that Mrs Bowdidge had further, daily, help. Sarah may not have been a widow for long when she made her last wishes known, and she may have opened, or taken on, the coffee house as a joint enterprise with her husband.⁴² Women were usually banned from being customers of coffee houses (perhaps child customers were accompanied by their fathers). It was not, however, unusual for women to run such establishments.⁴³ Sarah was not the only Bowdidge to be involved in the coffee trade. In 1701 Susanna Newell of Lyme Regis made the following bequest in her will:

Item I Give and devise all that messuage or house [...] situate in a street that leadeth from the Almes house towards the church unto Stephen Bowdidge of Lyme Regis aforesaid Coffee man and Jane his wife their heirs and assigns for ever.⁴⁴

It is not clear exactly what is meant here by the term 'Coffee man'. Stephen Bowdidge may have been an importer of, or dealer in, coffee, but it is also possible that he worked, but did not reside, in the Lyme coffee house and, perhaps, took over the establishment after Sarah Bowdidge's death. Sarah's will does not record what her intentions were regarding that enterprise. The cause of Mrs Bowdidge's last illness is not known, but after the deaths of her husband and son, the burden of running the coffee house and post office must have been considerable. The presence of her household servants when she uttered her last wishes, indicates that Sarah Bowdidge died at her home, perhaps not in the chamber located over the noisy hall, where the carbine and swords were kept, but in the 'Inner chamber' with its 'Callico-carpet' and a 'small painted trunk'.

Mrs Bowdidge appears to have run a successful business. Her goods and chattels were valued at £144. 14s 4d and this was, apparently, a realistic total. In her will, Sarah Bowdidge had instructed Peter Southwicke and John Edwards, both of Lyme Regis, to be trustees of her estate, and the two men agreed to sell her goods, settle her debts and keep the residue in trust for Sarah's daughter, Anne. A deed of 1703 shows that Southwicke and Edwards held £80 each in trust for Anne Bowdidge and that this allowed them to pay 40s a year towards her education.⁴⁵

The location of Mrs Bowdidge's Coffee House reflects Lyme Regis' focus on overseas and coastal trade in the late the seventeenth century. Although the inventory does not provide evidence of that location, information about the site of the coffee house is provided by other Dorset documents. A Lyme Regis Borough deed of 1777, for example, describes a building 'formerly a Coffee House together with two cellars and a small garden' as being

Bounded on the North with a certain street called Broad Street on the East with the way leading from Lyme town to the Cobb on the south by the Fort and on the west by the Bell Cliff.⁴⁶

This would place the coffee house on the south side of the seaward end of Broad Street, on the site of what is now Cobb Gate Car Park, and which would, at the end of the seventeenth century, have been close to warehouses and the customs house; an ideal spot from which the town's merchants could keep a close eye on incoming and outgoing ships and on their merchandize. That this is the site of Mrs Bowdidge's coffee house (it is possible that there was more than one such enterprise in early modern Lyme), is indicated by the proximity, in the 1695 census quoted above, of Sarah Bowdidge's household to that of Alexander Bowdidge, who is known to have run the Red Lion (now the Royal Lion) Inn on the south side of Broad Street, in the early years of the eighteenth century. The census appears to have been set out following a largely geographical sequence.⁴⁷

The coffee house apparently continued to trade into the second decade of the eighteenth century. A Lyme Regis Borough deed of 1713 concerns a shop 'now in the possession of Mary Hardy widow and two little chambers lying over the Buttery part of Widow Webbar's coffee house'.⁴⁸ When exactly Lyme's coffee house closed is unclear, but it appears to have been before 1733. A borough document of that date includes a reference to a 'messuage or tenement formerly known by the name of Old Coffee House'.⁴⁹ During the eighteenth century tea-drinking became more popular than coffee and many coffee houses either adapted to changing tastes or closed. The demise of Lyme's coffee house may also have been connected to the town's decline as a port. Among other goods in Mrs Bowdidge's 'Inner chamber' were 'Two Glasses [engraved] with King William & Queen Mary' which were valued, with other items of glassware, at 6s 8d. If the two specified glasses are an indication of Mrs Bowdidge's loyal feelings to William of Orange, such feelings must have been sorely tried during the 1690s; William III's war with France, declared a month after his accession in 1688, was to threaten and eventually destroy Lyme's trade in serges and linens with the merchants of Morlaix.⁵⁰ The focus of the town's prosperity had, in the late seventeenth century, been connected firmly to the sea, the customs house, and the Cobb. By the middle of the eighteenth century the impact of war and other factors, such as Glasgow's increasing dominance in the importation and distribution of tobacco, had begun to alter that focus.⁵¹ It is known that by the late 1700s Lyme's post office was no longer located very close to the shore, where merchants' letters and bills of exchange could be quickly ferried to and from waiting ships. The post office had moved to Coombe Street, and Lyme had begun to adopt the character of 'a small, uniquely attractive, coastal watering place'.⁵²

Mrs Bowdidge's inventory indicates that her house was largely given over to a thriving and diverse business enterprise that included a coffee house, post office, and, possibly, other commercial activities. Many of the characteristics of the coffee house reflect the central commercial concerns of Lyme Regis in the late seventeenth century and indicate that provincial coffee houses could cater for a 'specialised clientele'. The document provides a rare glimpse of the social, as well as the economic character of Lyme when the town was at its height as a trading port.

ENDNOTES

1. M. Ellis, *The Coffee House: A Cultural History*, 2004, 23.
2. Anon., *Coffee houses Vindicated in Answer to the late published Character of a Coffee-House*, 1673.
3. Ellis, *The Coffee House*, 23. Coffee drinking 'emerged as a practice in southern regions of the Arabian peninsula in the early fourteenth century' and was 'first certifiably noticed by a Christian European in 1573'. Ellis, *The Coffee House*, 14, 16.
4. History of Coffee, Wikipedia.org.
5. Ellis, *The Coffee House*, 157–160.
6. B. Lillywhite, *London Coffee Houses: A Reference Book of Coffee Houses of the Seventeenth and Eighteenth Centuries*, 1963, 17.
7. J. D. Pelzer, 'The Coffee Houses of Georgian London', *History Today*, vol. 32, issue 10, 1982, 40–47.
8. Ellis, *The Coffee House*, xii, 49–53.
9. Wiltshire and Swindon Archives (WAS), Probate Records of the Prebend of Lyme and Halstock, P16/134.
10. H. Swinburne, *A Brief Treatise on Testaments and Last Wills*, 1590, 44; Dorset History Centre (DHC), D1265/1/17.
11. Inventories were concerned only with an individual's goods and chattels; real property would not normally be included in the document. In many jurisdictions an inventory of a testator's goods remained an obligatory part of probate procedure until 1782. A. J. Camp, *Wills and Their Whereabouts*, 1974, 4.
12. The rooms are (in the order in which they appear in the inventory): 'The Coffee Room', 'the Hall', the 'Inner chamber', the 'Hall chamber', the 'Little chamber', the 'Gallery', the 'Brew-House chamber', the 'Brew-house', the 'Inner Cellar' and the 'Outer Cellar'.
13. For a discussion of Lyme's trade interests in the 17th century see F. J. Murphy, 'Lyme Regis: Trade and Population 1575–1725, A Period of Decline?', *Proceedings of the Dorset Natural History and Archaeological Society*, vol. 120, 1998, 1–18.
14. J. Hutchins, *The History and Antiquities of the County of Dorset*, 3rd edn (eds), W. Shipp and J. W. Hodson, 1861–1873, vol. 2, 50.
15. Murphy, 'Lyme Regis: Trade and Population 1575–1725', 6.
16. Sir George Somers of Lyme Regis (1554–1610), for example, was a founding member of the Virginia Company, a founder of the British colony at Bermuda in 1609, and his will indicates that he had trading contacts with many parts of the world including India and Turkey. See, for example, L. Parker, J. Ford and J. Draper, *Ethnic Minorities in Lyme Regis and West Dorset Past and Present*, Lyme Regis Museum, 2004, 22–24.
17. J. O. Halliwell, *A Dictionary of Archaic and Provincial Words: Obsolete Phrases, Proverbs and Ancient Customs from the 14th century*, vol. 2.
18. Ellis, *The Coffee House*, 121.
19. Ellis, *The Coffee House*, 127–129.
20. Ellis, *The Coffee House*, 123.
21. Murphy, 'Lyme Regis: Trade and Population 1575–1725', 6.
22. Lillywhite, *London Coffee Houses*, 283.
23. Ellis, *The Coffee House*, 124–5.
24. A. Morano (ed), *A nautical and technical dictionary of the English and Italian languages*, 1899.
25. Ellis, *The Coffee House*, 49.
26. A. Clayton, *London's Coffee Houses: A Stimulating Story*, 2003, 29.
27. Ellis, *The Coffee House*, 120.
28. Clayton, *London's Coffee Houses*, 29.
29. Ellis, *The Coffee House*, 122.
30. Murphy, 'Lyme Regis: Trade and Population 1575–1725', 6.
31. Lillywhite, *London Coffee Houses*, 456.
32. Lillywhite, *London Coffee Houses*, 25.
33. Pelzer, 'The Coffee Houses of Augustan London', 40.
34. Lillywhite, *London Coffee Houses*, 19–21.
35. J. Hoffman (transcription), 'Postal Troubles at Lyme', *Somerset and Dorset Notes and Queries*, vol. 29, 1969, 88.
36. C. Browne, *Getting the Message: The Story of the British Post Office*, 1993, 21.

37. In the 1660s new coffee mills were advertised in London at a price of 40 to 45 shillings each. Lillywhite, *London Coffee Houses*, 429.

38. A carbine was similar to, but smaller than a musket.

39. John Bowdidge was buried on August 27 1695, DHC/PE/LR/RE 1/1.

40. Marriage Duty Act censuses for Lyme Regis, DHC/DC/LR:H2; for a discussion of the manner in which 'households' are represented in the Lyme Marriage Duty Act censuses see J. Ford (ed), *Birth, Marriage, Death and Taxes: Lyme Regis Censuses 1695-1703*, Dorset Record Society, vol. 16, 2011, xxii-xxvi.

41. Ann Bowdidge is listed in the 1698 Marriage Duty Act census for Lyme in the household of her grandparents, George and Elizabeth Luce, DHC/DC/LR:H2.

42. See the administration bond for a John Bowdidge of Lyme Regis, dated 1694. Probate Records of the Prebend of Lyme and Halstock, WAS/P16/126.

43. Ellis, *The Coffee House*, 119-11.

44. WAS, P16/164.

45. DHC/D1265/1/17.

46. DHC/DC/LR/J/27.

47. DHC/LR/J/27.

48. DHC/DC/LR/J/27.

49. DHC/DC/LR/J/27.

50. Hutchins, *The History and Antiquities of the County of Dorset*, 68; During the 17th century Lyme imported some types of cloth, such as canvas, from France and exported to Brittany and elsewhere in France, other types of cloth such as Kerseys. Goods were landed from ships or barges, at the Cobb, at high water and transported to the Customs' House (a distance of about a third of a mile) by packhorse. Murphy, *Lyme Regis: Trade and Population 1575-1725*, 4.

51. Murphy, 'Lyme Regis: Trade and Population 1575-1725', 4.

52. Murphy, 'Lyme Regis: Trade and Population 1575-1725', 15.

Hendrick de Keyser, Nicholas Stone, Inigo Jones and the founding of the modern Portland Stone industry

TOM WILLIAMSON

More than any other building stones, the Jurassic (Tithonian) oolitic limestones quarried on the Isle of Portland have shaped the character of central London. After the Norman conquest of England, kings sometimes used Portland stone in their London buildings. Yet not until after Inigo Jones became Surveyor to King James VI and I in 1615 was stone from the Royal Manor of Portland widely used in the capital city. In 1616 or 1617 Jones chose Portland stone for Queen Anne's house in Greenwich (Chettle 1937). In 1620 he used it in larger amounts for King James's new Banqueting House in Whitehall (TNA: PRO E 351/3391). Later, during the 1630s, Inigo Jones used huge quantities of Portland stone for the repair of St Paul's cathedral and the addition to it of a new portico (Higgott, 2004, 171–190). Apart from interruptions during periods of war and civil strife, shipments of stone from Portland to London have barely halted since.

Why did Jones choose Portland stone for his building projects in the London area? Given that King James's spouse, Queen Anne, was Jones's first royal patron – she gave Jones his first royal masque commission in 1605 – perhaps Queen Anne had some special reason for asking Jones to use Portland stone in her new house in Greenwich. Indeed, in the first year of his reign in England, 1603/4, King James gave the Royal Manor of Portland, complete with its cliff-side quarries, to Queen Anne (Hutchins 1861–73 816). To build her own house using her own stones might have struck the Queen as being not only a fitting move but also a financially astute one.

But even if Queen Anne's links with the Royal Manor of Portland had played a part in bringing Portland stone to Jones's attention, it is likely that other factors were also involved. For example, in view of the precarious state of royal finances in 1619, Jones may have been attracted to the coastal quarries on the Royal Manor of Portland because of the opportunities they provided of raising ready cash by selling the stone to private customers.

A study of documents in The National Archives suggests that this is indeed what happened. The documents show that Jones allowed his masons to sell Portland stone to private customers 'for the ease of the king's charge'. In particular, Nicholas Stone, Inigo's mason-in-charge for the Banqueting House project, seems to have been planning to sell stones to his father-in-law, Hendrick de Keyser. As *Stadsteenhouwer* (city mason) of the wealthy and growing commercial centre of Amsterdam, de Keyser had access to funds at a time when Jones and Henry Wicks, Paymaster of the King's Works, had difficulty in finding cash to complete the building.

Hendrick de Keyser's interest in Portland stone may have begun as early as 1607. In that year, together with

the Amsterdam master mason Cornelis Danckerts, he travelled to London to study Sir Thomas Gresham's Royal Exchange in Cornhill (later destroyed in the great Fire of 1666) as a model for a new bourse to be built in Amsterdam (Neurdenburg, 1930, 8). Gresham's exchange, which included much carved stonework, was built by the Flemish architect Hendryck van Paesschen in 1570, and had itself been modelled on the well-known Antwerp bourse built by Cornelis Floris in 1531. Because Amsterdam had no local supplies of stone of its own, one of de Keyser's priorities in 1607 would have been to investigate sources of suitable stone for his Amsterdam building.

While staying in London – probably in Southwark, where a community of Dutch-speaking sculptors from the Low Countries had been established for years – de Keyser and Danckerts may therefore have taken the opportunity to look at English building stones that might prove suitable for the Amsterdam bourse. The community of sculptors and masons in Southwark would have stored a range of such stones in their workshops, including Jurassic oolitic limestones from Oxfordshire and Northamptonshire as well as Portland stone. At that time London masons were using Portland stone in relatively small quantities for purposes such as the carving of tomb effigies, for chimney-pieces and as cills and quoins in brick-faced buildings. As an experienced mason de Keyser may have quickly appreciated the material's potential. Moreover it had the advantage of being quarried at a coastal site from which stones could be directly shipped to Amsterdam.

However, the Amsterdam bourse project demanded reliable supplies of large quantities of stone. De Keyser may have concluded that it would be unrealistic to expect that the Portland quarries would be able to supply him with stone at the rate required for his project. In the end he decided to use other stones for the bourse – which was demolished in 1838.

Whether or not de Keyser showed an interest in Portland stone on his 1607 visit to London, he was certainly involved with the material some years later, as we know from some details concerning the life of his English son-in-law, the sculptor and mason Nicholas Stone. Probably born in 1586 in Woodbury, Devon, in 1607 Stone was working in Southwark as an apprentice to a sculptor of Dutch or Flemish origin who had taken the name of Isaac James (Havill 1982 11). While staying in London de Keyser met Nicholas Stone and perhaps as a result of a prior arrangement, perhaps because of the young man's exceptional talents, or perhaps simply because de Keyser was seeking young masons to help with the building of the Amsterdam bourse, he took

Stone back to Amsterdam and employed him as an apprentice sculptor.

In 1613 Stone married de Keyser's daughter, Maryken, (Havill 1982, 20) shortly afterwards returning to London, where he took up premises in Long Acre, and practised as a mason, sculptor, tomb-maker and architect. He quickly established a reputation as one of the most accomplished masons and sculptors in England. In 1619, after King James's 1609 banqueting house in Whitehall had burnt down, the royal Surveyor, Inigo Jones, appointed Stone as mason-in-charge of the project to build a new banqueting house in Whitehall, the building that still exists today.

The document linking de Keyser and his son-in-law with the Portland stone quarries consists of a note written by Nicholas Stone's relative Charles Stoakes. After the death in 1667 of Stone's last surviving son, John, Stoakes inherited Nicholas Stone's business books and in one of them he listed 'Some of the most Eminent Workes that my Uncle Mr Nickcolas Stone Senior did in England in Holland in Scotland'. One of Stoakes's entries reads:

Hee Desined & built a frontispiece at Westerne Kerke in Amsterdam for his father in law Mr De Kizer Master Mason of that City, hee Carved the 2 Lions at the Church, by doing thim Mr De Kizer bestowed his daughter on him & partt of her portion was all that portland stone that built the frontt of the inner Courtt of the banqueting house at Whitehall, for Mr. Dekizer had a great partt of the Quarrey then open in the Ile of portland this I know (Stone 1919, 137).

Charles Stoakes, apparently a jobbing builder by profession, lived until at least 1721 (Stone 1919, 31) and therefore would not have been born until many years after the events he described. So the source of his statement about Portland stone for the Banqueting House may have been an inherited document, such as a letter, or may have been an oral family tradition.

If Stoakes's source were a family tradition, we would not expect all his details to be correct. And indeed there are problems with his statement. Though Nicholas Stone did use Portland stone (together with limestones from Oxfordshire, Northamptonshire and Yorkshire, Beer stone and Purbeck stone) to complete the Banqueting House, the stone was not purchased from de Keyser or his daughter. It was the king's own stone from the Royal Manor of Portland (TNA: PRO SP 14/115 No.75).

So if de Keyser did not own part of the quarry that yielded stone for the Banqueting House, what connection did he have with the quarrying area that then stretched along the land-slipped sea cliffs on the north-east of the island? The obvious answer is that when Stoakes wrote 'Mr. Dekizer had a great partt of the Quarrey' he meant that de Keyser had purchased a large quantity of stone from these quarries. This would have been a logical move

for the city mason and leading architect of a rapidly growing city that lacked local supplies of stone, for while Jones was struggling to complete the Banqueting House in London, Amsterdam was undergoing an unprecedented building boom. In 1620 Hendrick de Keyser and his son Pieter were building two new churches, and several houses for wealthy merchants.

De Keyser relied on imported stone for all these projects, and he could have easily afforded to buy large quantities of Portland stone. He could have bought the stones through his son-in-law, who as mason-in-charge of the Banqueting House project had, under Inigo Jones, responsibilities concerning the supply of stone from the Portland quarries.

There is evidence that de Keyser did in fact buy, or attempt to buy, stone from the royal quarries while the Banqueting House was being built. By June 1619 the Privy Council had amassed sufficient cash – including a sum of £1000 taken from a fine imposed on Sir Thomas Lake for defaming the Countess of Exeter (Summerson in Colvin 1982 328) – to start preliminary work on the new building. But the finding of money to pay masons, quarriers and other workmen remained a problem for Jones, and one step he took to obtain cash was to allow his masons to sell stone from the royal quarries to private customers.

In early 1620 Jones added his signature to a document signed by Robert Pitt, Constable of Portland, granting such permission to Nicholas Stone and Luke Wilson, a mason supervising the quarrying of stone for the Banqueting House on Portland (TNA: PRO SP 14/115 No.75.i). The document permitted 'stones which weare left of the kinge's stones to be solde by Mr Wilson and Mr Stone for the ease of the kinge's charge'. The masons evidently intended to purchase stones from Henry Wicks, Paymaster to the King's Works, and then sell them at profit to their own customers. Wicks' account for the Banqueting House indeed includes an acknowledgement of 'money by him received of Edmond Kinsman ffreemason for stone sold unto him at the Quarry xxli xiis [£20-12s-0d]' (TNA: PRO E 351/3391).

Confirmation that the three masons were buying stone from Henry Wicks comes from a letter of 8 April 1620 from Kinsman to Wilson (TNA: PRO SP 14/113 no. 71). Excited by the news that commissioners had recently been appointed to organise repairs to St Paul's cathedral and that much stone would be needed, Kinsman, impatient for further shipments of stone from Wilson, wrote 'if it be monny you wante writ what monny I shall delyver to Mr Weekes [Henry Wicks] and I will do it not to faile'. Later in his letter Kinsman mentioned that when 'wee [Nicholas Stone and himself] were there in the Cuntrye' [Portland] they had left 'scantlynges' [measurements] for certain stones 'wch stones are betweene my Brother stone and my selfe'. Stone and Kinsman clearly intended to sell these stones to private customers.

Kinsman clearly intended to sell his stones to the authorities that had been recently appointed to repair St Paul's cathedral. In view of Charles Stoakes' testimony that Hendrick de Keyser had had a large quantity of stone from the Portland quarries, and that this stone was in some way linked with Nicholas Stone, we might strongly suspect that Stone intended to sell his stone to his Dutch father-in-law.

There is further support for this supposition. One Beare, the master of one of the barges carrying stone from Portland to London for the Banqueting House, reported that Luke Wilson had prevented him from loading stone at the pier on the island. The matter came to the attention of the Privy Council, who instructed three Dorset worthies; the justices Sir George Trenchard and Sir Thomas Freke and Arthur Gregory, Mayor of Lyme Regis, to investigate this incident, as well as various other alleged 'abuses' by Wilson, and to speed the shipment of stone to London. After interviewing Wilson and other 'eye witnesses', on 16 June 1620 the three men reported to the Council that they 'affirme that Wilsons deniall of Beare to lade, was a necessity and no refusall, for that at that instant the dutch shippe lay on ground at the Peere, & hindered the Coming in of his barque, and the Crane, by a mischance, was out of frame' (TNA: PRO SP 14/115 No.75).

In the light of Charles Stoakes's testimony, the sighting of a 'dutch shippe' attempting to load stone at the pier some time after Nicholas Stone had left measurements for certain stones to be sold privately strongly suggests that Stone's stones were indeed earmarked for sale to Hendrick de Keyser. However, this still fails to explain Stoakes' belief that the same stones had 'built the frontt of the iner Courtt of the banqueting house at Whitehall'. To explain that, there would have to have been some kind of intervention whereby stones intended for de Keyser were in fact allotted to Jones and Stone for use in the Banqueting House project.

In their report to the Privy Council, Trenchard, Freke and Gregory relate that after investigating the accusations against Luke Wilson, they 'restrayned all' future shipments of stones to private customers – apart from some stones of Kinsman's that 'overcharged and pestered the wharf, & wold otherwise have hindered the lading of his Maties Stones' (TNA: PRO SP 14/115 No.75). The confiscated stones would therefore have included all stones ordered by de Keyser that had not been loaded on the 'dutch shippe'. As the crane 'was out of frame' it is possible that the Dutch ship had departed without any stone at all.

All this provides a convincing explanation for the origin of Charles Stoakes' belief that a large quantity of stone owned by de Keyser had been used in the Banqueting House. If this story had been handed down orally, it could easily have acquired inaccurate accretions – such as the notion that the stone had formed part of Maryken de Keyser's dowry.

How many tons of Portland stone did de Keyser intend to purchase through his son-in-law? If Stoakes was right in his belief that de Keyser had some claim to 'all that portland stone that built the frontt of the iner Courtt of the banqueting house at Whitehall' the quantity would have been roughly equivalent to the amount Jones used in the Banqueting House.

Although Henry Wicks specified the costs and quantities of stone from other quarries used in this building (TNA:PRO E 351/3391), he did not specify amounts from the quarries on Portland, presumably because the Portland stone already belonged to the King and the Portland quarriers were paid directly. However, a letter written by Inigo Jones on 15 July 1620, to an unknown gentleman (possibly Trenchard or Freke) makes it possible to estimate the quantities of Portland stone used (The National Archives (TNA): Historical Manuscripts Commission (HMC) 15th report, Appendix, part II, 41). In his letter, in which he refers to the urgent need to complete the pier and carriageway on Portland, Jones estimated that at least a further four hundred tons of Portland stone were needed for the 'second order of Pillers and Cornish'. Assuming Jones had used a similar tonnage to complete the first order, and later about two hundred tons in the balustrade, he may have used a total of about one thousand tons of Portland stone in the Banqueting House.

Since Jones had paid £150 for 231 tons of Portland stone for work on Queen Anne's house in Greenwich a few years previously (Chettle 1937 98), the market value of one thousand tons of Portland stone in 1620 as delivered in the London area would have been about £650. As de Keyser's agents intended to collect their stone from Portland, de Keyser would likely have intended to pay Stone somewhat less than this and Henry Wicks may therefore have expected to receive around £500 from Stone.

A sum of this magnitude would nevertheless have seemed a godsend to Inigo Jones at this time – and he probably anticipated further orders from de Keyser. Finding cash to pay quarriers and masons on Portland was one of the Surveyor's biggest headaches, as indicated by the conclusion of Trenchard, Freke and Gregory, in their report to the Privy Council, that 'wee found the want of money to be the greatest & maine impediment in the proceeding wth speede' (TNA: PRO SP 14/115 No.75). The three Dorset worthies concluded their report to the Privy Council with the following advice:

And therefore wee Conceave that it is very requisite for the performance thereof, & making of so great expedicion as is presently required by his Maty, that yr hors take order for the making downe of 200 li monethly untill his Mats great worke shalbe furnished sufficiently.

It is ironic that by interfering with the apparent plans of Inigo Jones and Nicholas Stone to sell stone from the royal quarries on the Isle of Portland to Hendrick de

Keyser, Trenchard, Freke and Gregory may actually have exacerbated the financial problems dogging King James's Banqueting House project. But in the end, even without receiving the payments from Amsterdam, the Privy Council evidently scraped together enough cash for Inigo Jones to complete the project.

So whether or not Queen Anne's links with the Royal Manor of Portland played a part in Jones's decision to use Portland stone in her new house at Greenwich, the documents in The National Archives make it clear that by 1620, when large amounts of stone were needed for the new Banqueting House, Jones and his Works colleagues had come to appreciate the economic attractions of using Portland stone. Although costly to quarry and ship to London, the expenses could be offset by selling stone to private customers. In this context, it's no surprise that Jones was happy to approve the spending of more than seven hundred pounds of the Works money on the extended stone-loading pier and carriageway at Portland (TNA: PRO E 351/3391).

When Trenchard, Freke and Gregory disrupted this arrangement in June 1620, it was inevitable that, because of the incident at the pier, Luke Wilson would incur some blame. But at the same time the Privy Council seems to have recognised that a man with his skills could not be readily replaced. So, having cross-examined him in London, the Council in the end pardoned Wilson and sent him back to Portland to speed the progress of the Banqueting House work. His most urgent tasks were to complete the pier, which was made of large stone blocks and included a curved extension to protect stone ships from heavy seas driven by south-east gales, and to finish the steep cart way leading from the cliff quarries to the pier. But despite his responsibilities, the Privy Councillors prohibited Wilson from handling money and drawing up accounts (TNA: HMC 15th report, Appendix, part II, 40).

Though Wilson, and presumably also Stone and Kinsman, could now no longer act as middlemen, Jones and Wicks continued to raise funds for His Majesty's Works by selling Portland stone to private customers. In 1623 the Duke of Richmond paid Henry Wicks up to £800 for a thousand tons of Portland stone, delivered at Tower Wharf, for work at Richmond House in Holborn (Calendar of State Papers Domestic, James I, vol 146, June 12 1623) In 1625 the Duke of Buckingham bought, or was given by King James, a large quantity of stone from the quarries for use in Buckingham House (TNA: PRO E 351/3259).

So by the 1620s Inigo Jones and his masons had established the foundations of a modern stone industry on the Royal Manor of Portland. Despite the failure to fulfil Hendrick de Keyser's order, purchases of stone by other wealthy customers had helped to offset the expenses needed to maintain the vulnerable stone shipping pier and cart way. London courtiers and magnates could now appreciate the exceptional quality of the

stones and their suitability for carving the detailed classical forms of Jones's new Italianate architecture. When in 1633 the Privy Council appointed a committee to oversee the long-mooted repairs to St Paul's Cathedral, its members advised Jones to consider material from 'the third bed of Oxfordshire Stone, or of the soft Quarry of Portland stone' (TNA: PRO SP 16/213). Jones chose Portland stone. Having by now had the opportunity to compare the stone's weathering performance in London buildings with that of its competitor, the choice would have been an easy one for Jones to make.

ACKNOWLEDGEMENTS

I would like to thank James Derriman for transcribing a number of documents in The National Archives and for many ensuing clarifications. I would also like to thank Edward Chaney, of Southampton Solent University for general encouragement and Gordon Higgott and Roger Bowdler, both of English Heritage, for enlightening email discussions.

BIBLIOGRAPHY

- Betty, J., 1970 *The Island and the Royal Manor of Portland*. University of Bristol, Bristol.
- _____, 1992 'The supply of stone for re-building St Paul's Cathedral' *The Archaeological Journal*, 128, 176–185.
- Calendar of State Papers Domestic, James I, vol 146, June 12 1623.
- Chettle, G. H., 1937 *The Queen's House, Greenwich*. Trustees of the National Maritime Museum, London.
- Colvin, H. (ed.) 1982 *History of the King's Works*. Vol. IV 1485–1660. Part II. Her Majesty's Stationery Office, London.
- Havill, J., 1982 *Nicholas Stone: Statuary Mason and Architect*. Exeter.
- Higgott, G., 2004 'The fabric to 1670' In Keene, Derek, Burn, Arthur, and Saint, Andrew. *St Paul's: the Cathedral Church of London 604–2004*. Yale University Press, New Haven, Connecticut.
- Hutchins, J. (1861–73) *The History and Antiquities of the County of Dorset*. Vol 2. J. B. Nichols and Sons, London.
- Neurdenburg, E. 1930 *Hendrick de Keyser, Beeldhouwer en Bouwmeester van Amsterdam*. Amsterdam.
- Stone, N., 1919 *The Note-book and Account Book of Nicholas Stone, Master Mason to James I and Charles I*. Transcribed and annotated with an introduction by Walter Lewis Spiers. Printed for the Walpole Society by F. Hall at the University Press, Oxford.
- Summerson, J., 1993 *Architecture in Britain 1530–1830*. Yale University Press, New Haven, Connecticut.

Documents in The National Archives cited in the text:

TNA: PRO E 351/3259

TNA: PRO E 351/3391

TNA: PRO SP 14/113 no. 71

TNA: PRO SP 14/115 No. 75

TNA: PRO SP 14/115 No. 75.i

TNA: PRO SP 16/213

TNA: HMC 15th report, Appendix, part II, 40–1

Chantmarle, Cattistock. Sir John Strode's Account of his Building, 1612 to 1623, and the Consecration of his Oratory or Chapel

LAURENCE KEEN

Building accounts are important for providing details of a building plan, the supply of materials, costs of transport, names of craftsmen, their wages and summary costs. They also serve as an illustration of the employment of artisans in the context of the local and regional economy. For post-medieval houses in Dorset such documents are very rare. The notable exceptions are those for Mapperton Rectory, 1699–1703 (Machin 1983) and the details included in John Strode's account of his new house at Chantmarle. Sir John was born on 1 August 1561 and died, aged eighty-one, on 6 January 1642 (Dorset History Centre, D/BUL/ M4, fol. 1v; Hutchins 1863, 130). The long description of his building work in his memorandum book is not strictly a building account, rather a summary of work detailed, as he states (fol. 24r), in his book of receipts and expenses, including an account of the consecration of his new chapel. The two foundation stones, one laid by John Strode, the other by his wife Anne, are remarkable in a secular context. For large churches, foundation stones were laid with a certain amount of ceremony. Salzman refers to medieval examples, for instance at Durham Cathedral in 1093, Salisbury Cathedral in 1220 and York Minster in 1291 (1967, 87). In 1309, Dame Margery Tilney laid the first stone at Boston church 'upon which she laid £5 sterling' (ibid., 87). The inscribed lead sheet laid on the first foundation stone at Chantmarle is equally distinctive. The only other parallel so far found for an inscribed stone, is that cited by Salzman at St Albans for building work in 1326+: Richard Hetersete, almoner laid the first stone, 'on which stone was written his name' (ibid., 391).

The private chapel was consecrated on 14 September 1619 by the bishop of Bristol, Dr Rowland Searchfield (bishop 9 May 1619 to 11 October 1622), having been licensed in 1544 by Paul Bush, first bishop of Bristol (25 June 1542 to June 1544). The consecration service described is elaborate and may be compared with the form of consecration laid down for churches and chapels in 1715 (Wilkins 1737, 668–69).

The house at Chantmarle was undoubtedly completed to Strode's design 'to the forme I conceived & plotted it'. The relationship between Strode, as builder and patron, and Gabriel Moore, as surveyor and architect, has been discussed in the context of the authorship of house design by Eric Mercer (1962, 53, 58). The E-shaped plan, while a common sixteenth- and seventeenth-century design, was, as Airs has noted (1995, 13), specifically intended as a religious conceit, the letter E standing for *Emmanuel* (carved over the porch door), with *Sola Salus Servire Deo* over the chapel doors, and *Sit honos Trino Deo* over the parlour door. The choice of *honos*, instead of the more usual *honor*, is curious. The last inscription is also found on Strode's almshouses of

1630 in Beaminster (Hutchins 1863, 125; RCHME, 1952, 24b).

Alas, the house does not survive in its original form, two ranges of the E-plan having been demolished. Fortunately, a print and a water-colour drawing show the seventeenth-century frontage (Russell and Grindrod 2007, 52, reproduce an eighteenth-century engraving). The most informative description is that published by the Royal Commission on Historical Monuments (1952, 71–2), but a detailed analysis of Strode's design and description has yet to be attempted. Parts of Strode's Chantmarle entry in his memorandum book were published in Hutchins' third edition (1870, 4–7), but are inaccurate in spelling and capitalisation, and a substantial section of the manuscript remains unpublished, although Hutchins picked out some of the more important statements.

The text published by Hutchins is well known and has been cited frequently: in *Country Life* (anon. 1907), by Heath and Prideaux (1907, 55–62), in the account of the Society's visit in 1931 (*PDNHAS*, 53, lxviii–lxix); by Oswald (1950; 1959, 97–99), and recently by Russell and Grindrod (2007, 50–4). Malcolm Airs appears to be one of the few scholars who have consulted the original text, and many references occur in his seminal book (1998, *passim*).

No complete transcription of the text has been published, but it is sufficiently important, both regionally and nationally, to be printed here, in the hope that this rendition will encourage further academic comment.

Anticipating future analysis, several matters about Strode's building, the materials, architect and craftsmen, may be highlighted.

The plaster decoration in the chapel was executed 'by Eaton of Stoke gurzey' (Stogursey, Somerset). Robert Eaton's work, mainly in Somerset, but with examples in Devon, has been examined by John and Jane Penoyre (1994, 41–3). Edward Batten, of Salisbury, made the ceilings, pulpit, and pews for the chapel. Chinnery referred to his work at Chantmarle and added that he was a member of the Salisbury Joiners' Company and came from a large family of joiners (1979, 454). Eltringham gives details of the documents of the Salisbury companies, including the Joiners, but these have not been searched (1951–52). Gabriell Moore, 'a skilfull architect', 'my surveyor', 'born about Chinnock in Somerset', is not recorded as having worked other than at Chantmarle (Colvin 1978, 556). Oswald suggests that he may have been related to Robert Moore, freemason, who cut the arms of Edward VI over the doorway of the School House, Sherborne, in 1608

(1959, 97 – the date given, 1607, is incorrect, see RCHME 1952, 213; Fowler 1951, 355).

The chief masons, John, Joseph and Daniel Rowe, of Stoke-sub-Hamdon, Somerset, who worked the stone from Ham Hill, along with that from the Whatley quarry (Somerset), remain obscure. Unfortunately, Hutchins (1870, 7), RCHME (1952, 71b), and Russell and Grindrod (2007, 50), all give ‘Whetley’ incorrectly. The Ham Hill, and Whatley (west of Frome), quarries in Somerset are well known. Ham Hill stone is well represented in building accounts; Whatley not. Each quarry is still functioning (Croft and Aston 1993, 15, 52 and 116).

The vocabulary in the majority of the text needs no special comment, even with the occasional unusual spelling. Three technical terms, however, need explanation: ‘cherkstones’, if the reading is correct, may possibly be connected with *cerches* or *serches*, the meaning of which puzzled Salzman (1967, 109), but thought by Colvin to mean ‘stones cut as to form a segment of a circle’ (1971, 251); ‘crestable’ is most probably related to *crestes*, top stones of a parapet (Hope 1913, 597), or ridge-stones (*cresta*, in Latham 1965, 122); ‘poining ends’ are most probably gables.

The Manuscript

When cited by Hutchins (1863, 128) and used by Oswald (1959, 97) the manuscript was in the archive of Sir Henry Oglander, a descendent of Strode, at Nunwell, Isle of Wight. It is now in the Dorset History Centre, Dorchester (D/BUL/M4) and the catalogue states that it was presented by Mr E. Bullivant, of Parnham House, to the Dorset County Museum in 1955. The book is evidently a transcript of Sir John Strode’s manuscript, made for, or undertaken by, Thomas Strode in 1708 of ‘My Grandfather Sir John Strodes Manuscript’. The volume is bound in vellum and on the front cover is the inscription ‘Thos. Strode’. It has been rebound, with paper additions to the original folios, and consists of nine gatherings of paper sheets, on average 203 by 322 mm. There are sixty numbered folios, and at the end, an additional numbered twelve (a book of rents, 1628): the gatherings may be the same as the original, but there is no conservator’s note recording what work was carried out. The greater part of the volume consists of genealogical notes and details of the Strode estates in Dorset and Somerset. The Chantmarle entry for the new building begins on fol. 22v and ends on fol. 24v. The writing is in a confident eighteenth-century hand and is reasonably clear.

Editorial Method

Capitals and punctuation have been retained. Abbreviations, often with ‘:’ have been extended, except

for ‘vizt’ (*videlicet*), printed here as ‘viz.’. Spellings are as written. To aid clarity the abbreviations for pounds, shillings and pence, ‘li.’, ‘s.’, ‘d.’, have been kept, but are given in italics. Words in Latin have been changed to italics.

The Text

fol.22v

Capella Manerij Moreover & pertinently it is to be remembered that there did anciently belong to the Manor house of Chantmarle an Oratory or Chappell scituate within the house in which to celebrate Gods divine Service, unto the Family and Tenants of that Manor, because Chantmarle house is distant more than a great Mile from Catstock the proper parish Church. also this ancient Chappell had confirmation & was approved by Paulus the first Bishop of Bristol as appeareth by an instrument to that effect dated 20th May *anno Domini* 1544. This ancient Chappell being inconveniently placed in the house, low roofft, little, & dark. I therefore in the new building of Chantmarle house did erect and dedicate to the service of God, a new Oratory or Chappell Eastward upon the right hand coming to the house, in a place where formerly was a garden of herbs, the foundation stones are laid 8 foot deep in the ground, because there was sometimes a moat of water invironing the house & garden where the Foundation must necessarily be laid, also the Foundation walls are made of great Rock stones, sodered with new burnt Lyme, mixt with sand: And the first stone being laid by me, the second by Anne my wife 2^o Aprill 1612 on the south east part of the Chappell: I laid upon that first stone a peice of a sheet of Lead engraved by my selfe, *viz.* *Johannis Strode Armiger possuit hic primum lapidem in nomine Dei patris, filij, et spiritus Sancti Amen anno Domini 1612*, Likewise this signature engraved with Roman Letters is covered with another piece of Lead of the same breadth & Length: Also the Chappells foundation was first laid, and the Chappell first finished & covered before the rest of the dwelling house.

This Chappell hath his outside of Hambden stone, his inside is plaistered white & fretted over with the Sun, Moone, Starrs, Cherubims, Doves, grapes, and pomegranates, all supported with 4 Angells in the 4 corners of the Rooffe, which inside was wrought by Eaton of Stoke gurzey or Stoye in Somersett and finished 2^o *Decembris* 1615 who for his workmanship had 6*li.*16*s.* and for the Lyme, hair, timber, Laths, & Lath naylis I paid 5*li.* also the Carpenters had for sawing & setting up of Joyst 17*s.*

fol.23r

Againe to this Chappell Edward Batten of Salisbury did make and sett up sielings of wainscott, *viz:* in the North part a pulpit, the Ministers pewe, & another pewe, and two lower pew’s behind that, likewise on the South part,

two higher & two Lower pew's, and also seates be round the Chappell, which was all finished 20th February 1617, and for this Batten had of me by Composition 11li. 8s. 0d.

Furthermore this Chappell was by Dr Rowland Serchfielde Bishop of Bristol himselfe in person consecrated (Tuesday the 14th September Anno 1619) to Gods service by the name of the Chappell of God & the holy Trinitie in Chantmarle.

The manner of Consecration was as followeth, First the Lord Bishop being sett in A Velvet Chayre in the Oriell windowe and having a Communion table covered before him, one Mr. Morcum a Procter, came to the Table and read a writeing in Lattin, importing that John Strode Esqr. had erected this New Chappell, and dedicated it to the service of God and of the holy Trinitie, and therefore in John Strodes behalfe hee did desire it might be by the same Lord Bishop Ordinary or Diocesan of that place consecrated to that use for which it was Erected.

And then the Bishop pronounced in Lattin (which also hee read out of a paper to this effect, viz: That in as much as it was of a pious disposition in the Founder, erected and dedicated to that holy use, hee did of his Episcopall authority, and so much as in him was approve the building, and did consecrate the Chappell to God and to the holy Trinitie as was desired, and then kneeling downe at the table he prayed, and after his prayer hee rehearsed the confession & absolution, and then rising up he appointed Three speciall Psalmes proper to be read for this occasion, namely, the 84 psalme, the 122 psalme, and the 132 psalme, and the Bishop himselfe began, O how amiable are thy dwellings then Lord of hosts etc.

After the three Psalmes ended hee caused the Minister Mr Pistle to read the first Chapter for this occasion viz: the 6th Chapter of the 2d: of Chronicles, which being done, he began *Te Deum* etc., after which the Bishop read the 2d: Lesson, viz: the 21th Chapter of St Mathew. beginning, And when they drew near to Jerusalem etc., which ended the Bishop kneeling downe rehearsed the prayers for the King & Prince, & after rehearsed the Littany & prayers following, that, unto the grace of our Lord etc.,

fol. 23v

After this hee caused the 84th Psalm to be sung: how pleasant is thy dwelling place, O Lord of hosts to me, The tabernacles of thy grace, how pleasant Lord they be, etc. after the Psalm one Mr Downes being Chaplaine and Brother in Law to the Lord Bishop, went into the Pulpit, and after a long prayer, hee chose for his Text the 46th verse of the 19th Chapter of St Lukes Gospell, upon which Text he made a very good sermon, shewing the beginning of Synagogues Churches & Chappells, and the necessary use of them and of Christs presence

with us in them, also hee charged the Founder not to employ it to any prophane use, nor otherwise then only to Gods service, and after the making a Second prayer descended the Pulpit.

After this the Lord Bishop standing up made a second rehearsall of the whole act & instrument of Consecration of the Chappell to God and the holy Trinitie, which done hee kneeled down with his face to the Congregation (as always before) and then he pronounced a prayer for the Founder, and for the Foundation & employment of the Chappell to Gods service, and for Gods presence at it.

After which most of the Company departing, the Bishop administred the Communion, first to himselfe, and after to John Strode and to his wife & sisters Chaldecott & Strode & to Mr Doctor Hussey the Chancelor, Mr Parson Lecket, Mr Naymer, Mr May parson of Catstock & other Ministers.

After which ended the Bishop rehearsed a short prayer for confirmation of Children, and after hee laid his hand upon the heads of my Cosen Edward Rogers, John Richard, Robert, & Arthur Bingham, my son Bingham's Children, Francis Newborowe & upon some few others, and then kneeling down againe, he rehearsed another prayer for them all, and after went to Dinner, also after Dinner he went into the Chappell againe where hee confirmed 4 or 500 people young & old, and then being weary hee left some to confirming, and rode hence to Melbury where he Lodged that night with Sir John Strangwayes.

There were present at this Consecration of the Chappell Sir John Strangwayes & his Lady, Sir Thomas Trenchard Sir John Browne and Sir Edward Underwood of Warwickshire, Mr Doctor Hussey the Chancellor Robert Coker Richard Bingham, Roger Newborow Esqrs. [fol. 24r] William Penny Esqr. my brother Hugh Strode, my sister Chaldecott with her Daughters Newborowe, Champneys, Chetle, my Daughter Bingham, my sister Strode, Mr Glesson, Mr John Minterne & 40 Ministers with many others of good qualitie, some coming to see, & others to be confirmed by the Lord Bishop; whereof the greatest number were feasted in the house, the Poore had bread & Meat at the doores, and the rest were made to eat or Drink as they called for it.

Of the Consecration I have an act or Instrument under the Bishops seale

Memorandum Insuper, quod Dominus Deus, pater meus, mihi et filijs meis, et posteritate meo, de Novo edificavit, et nobis benedicendo dedit unum domum Mansionalem, apud Chantmarle que prospicit et frontem habet in Orientem, et constructa est in forma, de Littera (E) pro Emmanuel, id est, Deus nobiscum in Eternum:

This new building is of three story's high, and hath in the First a Chappell on the right hand of the sun rising,

on the Left hand a Parlour, and a Porch in the Middle, also each of these buildings have Oriels or Cant windows in their fore front.

Over the Chappell doores is engraved (*Sola Salus Servire Deo*) over the Porch doore (*Emmanuel*) and over the Parlour doore (*Sit honos Trino Deo*).

This first story hath likewise a hall, and Entry to the Parlour and to the Cellar, and to the Stair case, with a Study under the Stair case, with an Inner roome (all of stone) to the studdy, a Buttry below the Hall a liddle hall or Roome for the repast of [blank] a kitching & a pastry.

Over the Chappell in the second story it was not fitt to have any Chamber but over the Parlour there is a fair large dineing roome & a Lodging Chamber over it, over the Hall there is a faire bedchamber & an inner Chamber to it. Over the Buttry, & liddle Hall there is a convenient Bed Chamber [fol. 24v] and an inner roome to it. In the second and third story's over the Porch there are two lodging roomes, over the Kitching there is a large Chamber with a second roome over it, and from the upmost roome, there is over all the other roomes, *viz.* in the third story from the North extending towards the South end a Gallery of about 90 foot in Length and in breadth 10 foote.

The stair case above the Hall leading to the dineing Chamber & toward the Gallery, hath at the first landing a convenient Lobby, serveing as well to the dineing roome as to the hall Chamber, also all these buildings are so fitly adjoynd to the old buildings by the care & direction of old Gabriell Moore (a skilfull architect) as that they have good use of, and passages to the Chambers over the old Chappell & the Dairy houses, and likewise to the Chambers over the old Cellar & Brewhouses as if they had been built together with them.

Also my chiefe Masons (namely John Rowe Joseph and Daniell Rowe of Hambden in Somersett (preferred to me by Gabriell Moore my surveyor) took this new building to taske at 20*d.* a perch for the first story. & 2*s.* a perch for the two upper story's, the whole number of Perchwork by measure is 1373 perches & 14 foot which at the rate above said came to 27*li.* 8*s.* 3*d.*, and 11*li.* 9*s.* 3*d.* more they had for days work about setting up of the Tunnells to the Chimneys, setting of Stepes, hewing of cherkstones, setting on of Crestable, s[t]ones: 8 gable and poining ends etc. But upon the whole new building there was expended in money, in toto (*Deo dante* 1142*li.*, besides much stone, many Timber trees, and a very great number of carraiges of stones both from Hambden & Whatley quarrs freely given me by my Neighbours, especially of Beaminster & Netherbury, *viz.*

In stones, carraiges & Masons worke there was disbursed about 466*li.* In timber & Carpenters work about 220*li.*; In Iron & smiths work about 43*li.*; in plaistring work about 20*li.*; In cieling & wainscott about 30*li.*; In lead for the Oriell windows & else where about 20*li.*, in

Glass & Glaziers work about 32*li.*; in burning of 13 severall Lyme kilnes for the building about 40*li.*, and Gabriell Moore my surveyor born about Chinnock in Somersett had of me 20*s.* monethly with his dyett, for his paines only to survey & direct the building to the forme I conceived & plotted it

The rest *viz.* about 26*li.* more was bestowed upon Labourers, carriers of Stones & Mortar to the Walls, faggots to burne the Lyme *viz.* 4000 of Furse Faggots to every Lyme pitt, and in digging of sand to make Mortar etc, the particulars of all which are written in the latter part of my book of receipts & expences of that time *viz.* the book hath its beginning 1^o January *anno:* 1602: 45 *Elizabetha* & ends 31 December *anno Domini* 1623 & *Regis Iacobi* 21^o.

ACKNOWLEDGEMENTS

The author is grateful to the County Archivist, Dorset County Council, for permission to publish this text and to the staff of the Dorset History Centre, Dorchester for providing access to the manuscript and facilities to study it. Dominic Thornton and Mme H. Lawrence have kindly brought the writer's attention to several errors. Roger Peers has kindly checked the inscription built into the almshouses, Beaminster, and Polly Legg provided Victor Chinnery's details on Edward Batten.

REFERENCES

- anon. 1907 'Chantmarle', *Country Life*, 21, no. 532, 9 March, 344–48.
- Airs, M., 1998 *The Tudor & Jacobean House: A Building History*, Sutton Publishing and the National Trust, Stroud.
- Chinnery, V., 1979 *Oak Furniture: The British Tradition: A History of Early Furniture in the British Isles and New England*, Antique Collectors' Club Ltd., Baron Publishing, Woodbridge.
- Colvin, H. M., 1971 *Building Accounts of King Henry III*, Oxford University Press, London.
- Colvin, H., 1978 *A Biographical Dictionary of British Architects 1600–1840*, John Murray, London.
- Croft, R., and Aston, M., 1993 *Somerset from the air: An Aerial Guide to the Heritage of the County*, Somerset County Council, Taunton.
- Eltringham, G. J., 1951–52 'Salisbury Companies and Their Ordinances, with particular reference to the woodworking crafts', *Wiltshire Archaeological and Natural History Magazine*, 54, 185–91.
- Fowler, J., 1951 *Medieval Sherborne*, Longmans, Dorchester.
- Heath, S. and Prideaux, W. de C., 1907 *Some Dorset Manor Houses: with their Literary and Historical Associations*, Bemrose and Sons Ltd., London.
- Hope, W. H. St. John, 1913 *Windsor Castle an Architectural History*, *Country Life*, London.
- Hutchins, J., 1863 *The History and Antiquities of the County of Dorset...*, 3rd edn, ed. W. Shipp and J. W. Hodson, ii, Nichols, London.
- _____, 1870 *The History and Antiquities of the County of Dorset...*, 3rd edn, ed. W. Shipp and J. W. Hodson, iv, Nichols, London.
- Latham, R. E., 1965 *Revised Medieval Latin Word-List*, Oxford University Press, for the British Academy, London.

- Machin, R. ed., 1983 *The Building Accounts of Mapperton Rectory 1699–1703*, Dorset Record Society, 8, Dorchester.
- Mercer, E., 1962 *English Art 1553–1625*, Oxford History of English Art, vii, Oxford University Press, London.
- Oswald, A., 1950 'Chantmarle, Dorset', *Country Life*, 107, 30 June, 1966–71.
- , 1959 *Country Houses of Dorset*, *Country Life*, 2nd edn.
- Penoyre, J. and J., 1994 *Decorative Plasterwork in the Houses of Somerset 1500–1700*, Somerset County Council, Taunton.
- RCHME 1952 *An Inventory of the Historical Monuments in the County of Dorset*, i, West Dorset, HMSO, London.
- Russell, U., and Grindrod, A., 2007 *The Manor Houses of Dorset*, Dovecote Press, Wimborne Minster.
- Salzman, L. F., 1967 *Building in England down to 1540: A documentary history*, Oxford University Press, London.
- Wilkins, D., 1737 *Concilia Magnae Britanniae et Hiberniae, ab Anno MDXLVI ad Annum MDCCXVII*, iv, W. Bowyer, London.

Digging in the Archives: W. Edward Bankes 1702–1729, The Young Bankes who went to India

FRANCESCA RADCLIFFE

While listing the contents of the numerous boxes of the Bankes family of Kingston Lacy's archive, which the National Trust has deposited at the Dorset History Centre for safekeeping, I came across nine letters, written between 1726 and 1729, by Edward Bankes to his older brother John, from India.¹ These letters, written in handsome handwriting, on large sheets of paper, intrigued me, and having read them I could not help trying to find out more about the young man who wrote them. Some of the letters are annotated on the back, by his brother John, with the date of arrival, and in some cases the date they were answered. The letters took an average of a year or more to travel from India to Kingston Lacy.²

The first letter, from Bombay, is dated 31 January 1726. In it Edward announces that he had arrived there safely on 24 September 1725, sailing on the ships *Devonshire* and *Wyndham* (these two Indiamen were travelling together, and it is not clear in which he sailed). It had been a 'tolerably quick and pleasant voyage of five and half months'.³ But Bombay was as big a disappointment as he had been forewarned by 'ill descriptions on board', and it was now too late to change his destination. If he had known 'I would never had any thoughts of coming to it, but since it is my misfortune to reside at so bad a place am resolved to try a little longer to make the best of a bad market.' So who was Edward Bankes and why was he so unhappy to have landed in Bombay?

William Edward was born on 1 August 1702 at 2am, the seventh child of John and Margaret Bankes. On the first page of the family Bible, dated 1616 and still in the library at Kingston Lacy, his parents wrote down his name after those of his six older siblings. Margaret Parker had married John Bankes in 1683. She was the daughter of Sir Henry Parker and Margaret, daughter of Alexander Hyde, Bishop of Sarum.⁴ They had a number of children: five died in childhood and are buried in the crypt of Wimborne Minster, and seven survived to adulthood. Their eldest son John, to whom the letters were addressed, was born in 1692 and although Edward often mentioned that he also wrote to his mother, grandmother, aunts and other relations as well, only these nine survive.

From 1691 Margaret Bankes kept monthly accounts in the book for the family's expenses.⁵ It is an excellent record, and reading through it we can trace the development and progress of her family, with numerous references to Edward, his brothers and sisters, and Mr Bankes of course.

These records are a wonderful source and reveal a great deal of information about the life of a well-to-do household in eighteenth-century Dorset. Edward

(Neddy to the family), was first mentioned when at the age of five he was the recipient of two new frocks and a cap. The book painstakingly lists, page after page, the endless payments for 'shoes, stockens, gloves, breeches, boots, cloaks, wigs & powder' (which the Bankes children wore from the age of twelve, and yearly payments to the barber for shaving their heads and looking after their wigs), not to mention swords and belts, and payments to teachers for teaching mathematics, writing, singing and dancing. We learn that the doctor was called in to bleed Neddy, aged seven, who seems to have run into more scrapes than his brothers. Doctors Speed, Pitt and Friend were called in many times to look after him (and the family) and advice was sought from them regarding the sickly child. One day, Doctor Speed was called in for 'attending him' when Edward 'fell into the fountain at Stoneham'. A few years later pain in his eye required repeated visits by the surgeon Dr Goldwier. Tantalizingly we shall never know what was wrong with Neddy's eye, or his health for that matter. His health may not have been good; this we guess from the numerous bills paid to apothecaries and doctors, and for the various 'diets drinks' and ointments he required. But in spite of this it seems unlikely that he was left with permanent weakness or disability. Further payments were made to schools, and to the servants who looked after them when there.

Mr Bankes died in the last months of 1714; he must have been suffering for some time, as in 1713, and up to October 1714, doctors were often called to look after him; from 1715 no mention of her husband is found in Margaret's account book. At Michaelmas – then presumably the end of the financial year – Margaret Bankes, after adding up all the totals qualified them with the words 'Paid in this Book this year [...] For Mr Bankes, myself and children', and rather poignantly, in the first years the number of children was specified: six in 1701, seven in 1702 and 1703, eight in 1705, nine in 1706, eight in 1707, and seven in 1709. By 1710 we no longer have the number, just 'children', and from 1715 totals are for 'myself and children'.

Edward made at least one trip to London as a teenager: in 1716 he was kitted out with a sword and belt at a cost of ten shillings for his trip to the capital.

The Bankes boys, John, Ralph and Henry went to Eton and in due course Edward followed them there. The Eton College student records start in 1791, so all we know about the time they spent there is from Margaret's accounts.⁶ These recorded the payments made to the masters and under-masters, and for books, coaches and parcels sent from Kingston Hall to Eton. In April 1718 Edward arrived at Eton with his new trunk, his mother having paid 'the under master of Eaton School the



Figure 1: Kingston Hall, the seat of Henry Bankes, print, John Hutchings's *History and Antiquities of the County of Dorset*, 1774, vol. 1, p. 182, DNH&AS ART2524

entrance [fee] of £2.2.0^s for him. A Mrs Hanson looked after the Bankes boys at Eton, and if they were taken ill, they lodged with her.

In 1718 only Henry was still at Eton: the other two Bankes sons, John and Ralph, were travelling, one in France and the other in Italy – and many are the entries for the money their mother sent them – but the payments were described only as ‘to my son in France’⁷ (or Italy). Back from Europe John went on to Oxford, and Ralph to Cambridge. Ralph died in 1718, aged twenty two – while John, twice MP for Corfe Castle, became rather eccentric, miserly and reclusive, and died a bachelor in 1774. Henry went on to Cambridge, became a lawyer at the Inns of Court and died in 1776.

In 1718 Mrs Bankes re-married, to a Mr Thomas Lewes, and life at Kingston Lacy must have changed dramatically. As far as we are concerned one of the consequences is that the eldest son, John, as head of the family, took over the duty of entering the family expenses in the account book. His entries are not as detailed and do not make many references to his brothers and sisters, except to record the amounts due to them in interest moneys or their share of inheritance: brief entries only, such as in January 1719, ‘Pd to my B^r Edward part of interest money due at St Thomas day 1719, £4.19.06.’ John paid his brothers and mother the money due to them mostly ‘by the hand’ of different agents (Mr Hancock, Mr Hunt, James Keats), and the total of moneys Edward received from 1720 to 1724 was in the region of £425, including £160, the interest on his father’s settlement when he reached the age of eighteen. John’s accounts also show that he paid £42.00 in 1725 to Mr Lloyd, on Edward’s behalf, for boarding in his school

from Michaelmas 1714 to Feb 1717. He also recorded the money spent in October 1726 ‘for some wine sent as a present to Edward at Bombay’, as well as a present to him of £5.00; and two years later he sent him some beer, the cost was almost the same!

There is no record of when Edward left Eton, and whether he finished his studies there, or what he did once he left, before we find him on his way to Bombay in 1725.

In 1724 Edward received his share of his brother Ralph’s inheritance and legacies left him by Lady Bankes and Mrs Prince: £419.00 plus interest of £60.00. This money, part of his ‘Fortune’ as he described it in one of his letters [Letter 4], was used to set him up with all necessary items needed for his new life as a ‘Writer’⁸ with the East India Company.⁹

We do not know the reasons behind his decision to work for the East India Company. Perhaps the Parkers and Hydes – relations on his mother’s side – were working for the East India Company in India, maybe in London, and encouraged him to follow them.¹⁰ The family certainly had connections and strings to pull!

In one of his first letters [4] he stated ‘I cannot help often reflecting how wretched a thing it will be for me to live in this part of the world so long & to so little purpose, without the pleasure of seeing my relations or my native country, I have often wished since I have been here that I had followed the Sea Business, as I remember it was hinted once by my good friend Mr Boulton [...]’. He certainly wanted to make his fortune, his ambition was to get an ‘Estate in due course’ and perhaps he believed that working for the East India Company in

India would be easier and quicker than in England. But the job of a writer was not a piece of cake, it was in fact a 'drudge, writing days and night, scarcely a minute of pleasure to myself', as he stated in his first letter adding that he had no other thought than to return to England, and he hopes his brother will not insist upon his staying in India against his will. What he resented most was that he saw no way of making his fortune quickly, as the trade in the island (Bombay) was 'so entirely sunk and what little remains is engrossed by three or four people'. He also deplored and regretted not having stayed in London a year longer, and thus missed the opportunity to go to Bengal or Madras instead, where trading was more open and lucrative.¹¹ He repeatedly begged his brother to use any pressure he could with his East India Company acquaintances in London to have him 'recommended' and transferred to Bengal. Still in the midst of all his gloom he did recognize that he had a number of good friends, among whom was his cousin Parker,¹² who gave him some 'Comfort'. The Governor also showed him great civility by asking him, often, to dine with him 'which is look[ed] upon as a favour here'. He also greatly appreciated a gift of a chest of Galicia wine that his brother, aunt and grandmother had sent him: 'in these hot countries a little good wine is requisite to keep up one's spirits' [Letter 2].

In the same letter he writes: 'I may venture to say without bragging that I do as much business as any young fellow of my standing in the Service & I believe most here think the same', and went on to say rather endearingly 'I hope you will not neglect any opportunity of writing to me for was any ship to come without hearing from you I would immediately conclude you were all dead'.

Life in Bombay was not cheap either [3]: 'it is not to be imagined how dear everything is in this part of the World, the Company's allowance though tolerably handsome will not by a great deal maintain me'— even if he was far from being extravagant as apparently everybody else was 'in that place'. And 'notwithstanding all the care and good management that I was capable off [sic] & Mr Waters who assisted me in everything, it cost me upwards of £60,00 for things that I was under necessity of buying on my first arrival here'.¹³ He was employed in the secretary's office, and the Company's salary for a writer was £5.00 per annum plus an allowance of 30 rupees a month. Perhaps the Company was relying on their employees to set up deals on the side, as many factors were doing and as Edward was longing to do. Mr Waters helped 'me a little in Shipping' or 'Merchandizing' as he also called it, and he was hoping to make a little money in some of the 'voyages'. The 'Foreign Silver' that Edward had brought with him from England was transformed into rupees, and some of them (1000 rupees), were invested in the ship *Devonshire* which went from Bombay to Bengal. He was hoping to make 20%, if not more, on this deal. 1500 more rupees were invested in another ship, the *Boone*, which was

trading with China. These were great hopes which unfortunately did not materialize: the China ship 'arrived [...] And was immediately to Proceed to Surat to dispose of her cargo [...] But alas, such is the uncertainty of a merchant, that after the appearance of making a very prosperous voyage was on the 8th march last, accidentally blown up at Surat Barr to the Great Detriment of this place as well as others.' One third of her cargo was saved, but Edward's loss was 800 rupees (or £100). He was dejected (or rather suffered 'much uneasiness at first'), but not for long, as he reflected that 'it was the fate that often attended a merchant, & I soon contented my self'. The *Devonshire* did make 19% but that only gave him 200 rupees. He reassured his brother that he was endeavouring to retrieve his losses as soon as possible. However his brother may not have been too happy; we do not have John's letters to Edward but when Edward thanked him for his advice [5] he also agreed that 'I am sensible that I am come out to make a fortune and not to spend one'.

In March 1727 Edward, having received many letters from England the previous months, could hardly contain his delight, especially as he also had news of his 'happy & unexpected removal to Bengall'. This, he believed, was entirely due to John's efforts 'and solicitations' on his behalf, as the Company apparently did not often grant such transfers and to the end of his life he declared he would be indebted and grateful to his brother. There is a note in the court book of the East India Company which states on March 15 1726: 'That Edward Bankes a Writer at Bombay being much indisposed have leave to be removed to Bengall in hopes of recovering his health.'¹⁴ It took a full year for this news to arrive in Bombay.

But as soon as he had received permission to move, the departure from Bombay was swift; at the end of March 1727 he left by the ship *Hertford* on his way to Bengal.¹⁵ He looked forward to seeing 'almost all India viz' Surat, Mallabar coast, Fort St George & Gov^t Phipps has been so kind as to promise me a letter to Gov^t Franckland & I am in hopes of getting another to Mr Bouchier in Council at Bengall'.¹⁶ Edward seemed to have forgotten to describe his voyage, in his quest for recommendations, and requested even more from his brother. He was getting ready for his voyage, and promised to write more once settled in Bengal. He would also send a present to show his brother 'a little of our Bombay work in the head of a cane which you will be so good as to think worth of your acceptance', but not having found a proper cane yet, he hoped to find one soon. He promised to send Mr Boulton a 'Hogs head of Old Goa Arrack', as this was easier from Bengal than from Bombay. He hoped to send his mother, grandmother and Miss Packington something from Bengal, with a promise to give what description he was able of Bengal.

The mention in the East India Company records of Edward's ill health is surprising. It may have been only

on those grounds that the Company would agree to a transfer. Edward, in most of his letters stressed how well he felt and how good his health was.

On 30 January 1728 Edward writes, from Calcutta, the seventh letter to John, a very long letter in which 'I thank God am so very well contented with the place and the prospect I have of one day making a Fortune that I am entirely happy and satisfied with the choice I have made, especially the place which is infinitely beyond the rest on every respect, and I hope that what I wrote from Bombay at several times expressing the uneasiness I was under will not be construed as want of resolution to go through the profession I had undertaken. [...] I am so happy to be removed I must tell you that my being first settled at Bombay will prove of Great advantage to me; for I have settled a correspondence and have acquired an insight & knowledge of the trade of that side of India'. He left Bombay with the goodwill and love of everyone, and of course recommendations from Governor Phipps (Bombay) to Governor Frankland (Calcutta) and more are requested from brother John in London. And then 'I promised to give you what description of Bengal I was capable of and first as to the situation of the place, our factory is a very noble building preferable to any of the Company has standing, close to the famous Ganges'side. The country is very open and affords all manner of necessarys for life in Great Plenty, but its lying so extremely low makes it subject to damps and fog therefore not altogether so healthy a climate as one would desire, but I never enjoyed my health better than I have here notwithstanding I arrived in the Sickly season, which is rains & at this time of the year it's so very cold that I could very well bear an English fire, which you'll imagine to be very extraordinary in these Parts'. He went on explaining, or trying to, the 'notion of the Trade' in Bengal, 'especially for Young Beginners in what they call Inland Trade, which is to send up into the Country at such particular Times money from what goods & such a quantity of each sort as you think it is in your power to dispose off [*sic*] to the shipping that goes to all parts of India. The Great Benefit that accrues from this way of trading is that there is Little or no Risque to the run which in my opinion is a very good article in a Merchant Profession.' But there was 'a very Great Inconvenience' that he felt obliged to acquaint his brother with, and that was 'the Devouring Article of the Common Interest of 12%'. Still he was optimistic and meant 'to make any considerable advantage of, & I must assure you that even now I have such a share of Business that will permit me to trade for 30,000 Rupees per Ann. & I am in no doubt but will yearly encrease'. Brother John may have started to worry but as he read on, he probably thought that his younger brother was suffering from sunstroke: to 'his Tender and kind Brother' he made a request, being sure that 'you will indulge me in it when I tell you how much it will be for my interest'. So he begged him to lend him 'a thousand pounds for three or four years at the Common Interest', as his fortune 'tho' very handsome

would not permit him to trade without borrowing money in Bengal. At this point he must have realized that John would never have lent him such a large sum of money, even if (Edward's) 'maxim shall be little & sure'. And so knowing that there would be more family money due to him 'by this ship I have sent my Mother a Power of Attorney to receive from you the remainder of my Fortune & to send it me by the first Opportunity,¹⁷ [...] but on different ships, for the sooner I receive it the better[...]. In case of Mortality I have given the Power to my Brother Henry to act as an Attorney for me'. John's reaction can only be surmised; Edward in the following sentence thanked him for all the care he, John, had taken in managing his fortune, and for the kind present of beer, which 'was very good and acceptable!'. And, of course, he renewed his thanks for John's care in 'Recommendations', and congratulated him on his 'being rechosen at Corfe Castle'.

John, in a previous letter, must have suggested to Edward that he should study French and Latin, and Edward agreed that he 'is thoroughly sensible what an advantage both French and Latin will be to me & how far it will put me above the Common herd of Mankind', but he 'is no less Sensible that I am but still a Writer, & shall be far from taking upon me the Merchant'. He added the usual request for recommendations, news of the 'much lamented death of Governor Frankland', before announcing the arrival of a family who had lived in India for forty years, 'Mr Adams and his family famous for Generosity & Hospitality to strangers, and whose daughters are worth ten thousand pounds fortune.'

John did send the money to Calcutta,¹⁸ permission from the Council of the East India Company having been granted on 31 December 1729, and the money arrived in Bengal in 1730, but too late.¹⁹ The last letters from Edward from Calcutta [8 and 9], dated 25 February and 25 July 1729 are shorter, earnestly repeating the request for the £1000 to be sent to India at the earliest opportunity, stressing how important it would be for him to have 'unlimited credit to manage' and carry out his negotiations and 'what Business I please'. He also reassured his brother and thanked him for 'your caution against Play & must once more Assure you that Vice reigns very little in this Place, for my own part I am Persuaded it will never Affect me'.

This letter arrived at Kingston Lacy in April 1730. But Edward had died in Madras on 2 November 1729, and was buried the following day in St Mary's Church, Fort St George.²⁰ Why he had gone to Madras from Calcutta we may never know. No records about this could be found in the books and dispatches of the East India Company in the British Library. There is a brief mention of his death in the Bengal East India Company dispatches book, he was only a writer after all.²¹

His mother, Margaret Bankes, died in 1730, probably unaware that her beloved son Edward had died the

Dear Brother

I Wrote you last a Letter dated
 Jan^y. 30. of Fresham and its Duplicate for Miss
 Ailabie which was Dispatched the 18th Inst.
 This you'll receive by the Heathcote. And believing
 the sooner you hear from me the more
 Satisfactory it will be makes me Embrace every
 Opportunity of Writing. I must once more
 be Troublesome to you in Infringing on your
 Goodness in begging your Compliance with
 my Request of the former Letter as to the
 Lending me that Money. As the Disappointm^{nt}
 thereof will be very Great & a considerable
 Hindrance to me in my Negotiations. Besides
 the Reasons I have before hinted, the Having
 such a Sum sent out of England will
 me an Unlimited Credit among ~~the~~ Agents
 of this Place, that I shall not be at a Loss
 for money to carry on what Business I please
 Having nothing further at Present to add, my
 Duty & best Respects to all Friends I remain

Calcutta
 Feby. 25th 1728/9
 J^r Heathcote.

Dear Brother
 Your most Affec^t Brother
 & Hum^l Serv^t
 Edw^d Bankes

Figure 2: The last but one letter that Edward Bankes wrote from Calcutta to his brother John on 25 February 1729 (by kind permission of the National Trust who have the copyright and the Dorset History Centre)

previous year, this news probably taking more than a year to reach England. She was buried in the Bankes' family crypt in Wimborne Minster on 11 November 1730.²²

Edward Bankes' short life and even shorter experience with the East India Company is not unusual. Of the nine young men who are listed in the court book of the East India Company's minutes as having started work as writers at the same time as Edward himself, two were dead by 1728. Of the others, John Maynard died in Bombay in 1731, John Wood married Frances Lyons in Bombay in 1730, and died in Bengal in 1735, John Morley died in 1738 in Bombay, and Nathaniel Whitwell, the one who outlived them all, died in Bombay in 1748. No records could be found of the other three. The East India Company was never short of recruits, as young men of the upper and middle classes in the eighteenth and nineteenth centuries were eager to join the Company hoping to make a quick fortune, despite the great hazard to their health that going to the Far East entailed. Between 1707 and 1775 the death rate amongst the Company's employees was 57% in Bengal. New factors and writers were recommended and selected very carefully by the Court of Committees: they had to be of blameless character, were expected to have some particular aptitude 'in navigation and calicoes' or 'in Merchant accountant and arithmetic', and a knowledge of a foreign language such as Portuguese, Arabic or Turkish was encouraged (Keay 1993, 34–5). Once approved, they worked as writers for anything up to five years before they became factors and three years later they would have become fully fledged junior merchant, if alive and still working for the Company. When joining, the Company exacted a bond of up to £500 as a precaution against private speculation. This was the result of the miserly salaries the writers and factors received and so, in order to realize the expected financial reward, they often resorted to private speculations or merchandising before it was permitted, i.e. as merchants. Surrounded by tempting opportunities, most of the factors 'followed their entrepreneurial instinct', and many, after a number of years working for the Company, returned home having accumulated large fortunes, (Keay 1993, 34–5).

ACKNOWLEDGEMENTS

My thanks to the Staff of the Dorset History Centre and particularly to Mark Forrest who read my text and offered valuable suggestions, to Margaret Makepeace at the British Library who was most helpful in providing sources for my research of the East India Company and to Derek Andrewes for his help in transcribing Edward's letters.

BIBLIOGRAPHY

Keay, J., 1993 *The Honourable Company, A History of the English East India Company*. Harper Collins, London

ENDNOTES

1. Dorset History Centre (DHC), Bankes of Kingston Lacy Archive, D/BKL Box 8C/66.
2. In all the quotes in the text I have adopted Edward and John Bankes' spelling.
3. In the British Library (BL) I looked up the records and log-books of these ships, but unfortunately – although confirming the good weather & good winds they enjoyed in the long voyage – there is no mention of the names of the passengers which sailed in them: each carried eight passengers and ten soldiers as well as the crews. L/MAR/B/230A 1725/26: Windham & L/MAR/B272B Devonshire 1725/27.
4. Her grandfather, on her mother's side, was Bishop Townsend and Bishop Davenant was her uncle. The Parkers were an old and highly respectable Devonshire family. From an *Historical Account of the Bankes Family* from the *Dorset Free Press* of July 17 1874.
5. DHC D/BKL Box 8C-55 "An account of the Expenses of the Family from October 1691 to April 1741".
6. Enquiries at the Eton College Archives revealed that Kings' Scholars only are recorded from 1660 onwards and that both Ralph and Henry were Kings' Scholars and attended the school from 1711–1717 and 1715–1720 respectively. Mrs P Hatfield, pers. com.
7. DHC D/BKL Box 8C-55 Personal and Family Papers, John Bankes in the Account Book for the year 1721 records the legacies left by Ralph to his brothers and sisters at his death. Ralph had died in Cambridge of smallpox in December 1718. Dr Patricia McGuire, Archivist King's College Cambridge, pers. com.
8. A 'writer' was the lowest of the four classes into which the East India Company's Civil Servants were divided. The other being Factor, Junior Merchant and Senior Merchant. In the early years of the Company these juniors servants were employed to record all aspects of its business operations: director's decisions, accounting details, minutes of the Court meetings etc. This rank came to an end in 1841.
9. A 1800 list of "Necessaries for a Writer to India" included a book of Arabian poetry, a Persian dictionary, wax candles, tobacco and all sorts of clothes from striped gingham trousers, cashmere breeches to fancy waist-coats and fine hats.
10. There is a record in the *East India Company Minutes Book* of a Samuel Hyde who arrived in India in July 1722, working as a Factor at a salary of £15. He became a member of the Council in 1729. 'A List of Persons in the Service of the Right Hon. United English East India Company on the Coast of Choromandell', Oct 1729, page 43. He may have been the same Samuel Hyde to whom his mother, Martha Hyde, sent a box valued £15 at Fort St George in 1725, 'Dispatches from England XXIV–XXXVII, 1721–17332', 45. We can perhaps speculate that he too was related to Margaret Bankes and encouraged Edward to join the East India Company.
11. The Writer post fell within the patronage of the Company Directors and there were only a certain number each year for each presidency. Margaret Makepeace pers. com.
12. In his first letter he complained that he was 'prevented to write to all his relations including his uncle Parker by the great hurry of business, he had not really been in bed these eight nights before two in the morning and then out again by a little after six, as my cousin Parker will inform'. In November 1715 a Lawrence Parker was in the East India Company Council in Bombay and became Deputy Governor in 1717–1719. There is also a record of a Henry Parker dying in Bombay 1724. It is not known whether either was related to Margaret Bankes. BL O/6/37, Bombay Civil Servants 1712–1752.
13. The East India Company records in Bombay show that in 1715 a Thomas Waters was a Young Factor, he became a Factor in 1721 & member of the Council in 1725 and 1726, and did become chief of Persia in 1729 as Edward mentioned in one of his letter.
14. BL India Office, B/59 Court Book (Minutes of the East India Company), 207.

15. In a subsequent letter he mentioned that the ship he sailed on was called Hailford, which left Bombay the 23 March 1727 and arrived in Bengal the 15 July.

16. BL L/F/10/1 Bengal 1706–1760, Mr Richard Bouchier was a member of the East India Council & had arrived in India in 1726.

17. This power of Attorney is in the Kingston Lacy Archive, DHC D/BKL Box 8A/79 Personal and Family Papers,

18. DHC D/BKL Personal and Family Papers, Box 8C/55. John Bankes' entry in the family Account Book, dated Feb 1729 reads: "To my brother Edward Bankes the remenant of his fortune as by Rec from my mother Mrs Lewes... whom he impowdered to receive it by virtue of a letter of Attorney dated 30th Jan 1728/29. This sum of a Thousand pounds was remitted to him in Jan 1729 in pieces of Eight on board the Crags bound for Fort William in Bengal & sent over in the Treasury of the East India Company".

19. BL B/60 Court Book, Minutes of the EIC 3 April 1728–3 April 1730: on 31 December 1729 "...that John Bankes Esq have the liberty to send to his brother Mr Edward Bankes £1000 in foreign silver, all on the Company usual terms".

20. Madras Burial Book, page 228, Ecclesiastical Returns Madras, BL N/2/1 1698–1784, vol 1 IOR.

21. BL, L/F10/1 Bengal 1706–1760, List of the Hon^{ble} Company Covenant Servants with the Bay of Bengal according to their station: "On 2nd November 1729 Mr Edward Bankes departed this life at Madras, buried on November 3^d, 1729. Enquiries if the grave may still exist in the Cemetery of St Mary's Church in Madras proved negative. The huge cemetery has been taken over by the jungle. Henry Brownrigg, pers. com.

22. Edward's will which he drew on 24 March 1724, a few days before he sailed from England, is still in the Bankes Archive. In it he, "Edward Bankes, Writer to the East India Company and bound on a voyage to Bombay in the East Indies" being in good health and of sound mind and having recommended his soul to God left the sum of £50 each to his dearly beloved mother Margaret Lewes, and to his sister Mary Janson. All the rest of his estate was bequeathed to his bother Henry who was appointed sole executor. The will was witnessed by Richard Booth, James Kelleck and Joseph Seward. DHC D/BKL Box 8A/80.

The Opening of Powerstock School

T P CONNOR

Among the irreplaceable losses caused by the fire at Powerstock School in October 2011, was this record of the opening of the village's first school in May 1850. An anonymous watercolour, found at a local sale some years ago and generously given to the present school, shows a substantial procession, led by the local dignitaries, which marked the first completed effort of the new vicar, Revd Thomas Sanctuary, to reform the village in his charge.¹ Leading figures in the procession can be named from the account in the *Dorset County Chronicle*, including Robert Williams III of Bridehead, a local landowner, church builder and restorer, the Rural Dean A.C. Broadley, from Bradpole, and Sanctuary himself.² Besides giving an accurate picture of the unrestored parish church, and a somewhat flattened topography, one tomb in the foreground is given particular prominence. This belonged to the Shepherd family, of West Milton, who gave the site for the new school.

The procession, with its great length and several banners may seem exaggerated, but it matches closely a contemporary account of the opening of the school at nearby Rampisham in 1846. There, the new incumbent, Revd Frederick Rooke, had been appointed to the wealthy living in 1844 and was able to start building immediately. He employed A.W.N. Pugin, who visited

Rampisham to discuss designs for the new rectory and the chancel to the parish church. There is no proof that the village school was also his design, but this remains a strong possibility. The procession that opened it, on St Mark's day (25 April), might have been modeled on an illustration from the second edition of his polemical *Contrasts* (1841). The procession was led by

a boy with a banner – which was made of red velvet with a silk fringe, suspended from a cross of carved wood by a silk cord, the device on it being a yellow cross with a *vescia piscis* at its intersection, and in it, on a blue ground, IHS, (a cross patée being between each arm of the cross); next in order were two singing men and four choristers, two and two, next three priests in line vested in surplices, hoods and stoles, next, another, boy with a banner, (being of purple velvet with a silk fringe, suspended from a carved cross by a silk cord, its device being a plain red cross dividing it into four parts, in each of which there were three yellow fleur-de-lis); next the rector in surplice, hood and stole; next a girl with a banner (being a red floriated cross with a blue ground with 'Glory to God' on it); next the school mistress and a lady and twelve singing girls two and two; next a boy with a garland, followed by the rest



The opening of Powerstock School, May 1850.

Anonymous water-colour. The best surviving image. In the original a narrow strip extended to the left linking the front of the procession in the foreground with the line in the middle distance

of the schoolboys two and two, carrying banners, garlands &c.; and lastly the parishioners two and two.³

The route taken went from the Rectory, then barely finished, to the church, where a service took place and then back to the school room,

singing *Benedicite* antiphonally with bare heads, and upon reaching the gate to the green in front of the school, over which was an arch dressed with laurels, the church bells rang out a merry peal whilst the procession moved through the rooms and round the grounds. When they had returned into the schoolroom, the rector set apart the building for its intended use by offering up some collects; and after a short address had been made to the people, the national anthem was sung on the green.⁴

Rooke's elaborate liturgical arrangements for the opening of his school was in keeping with his advanced churchmanship. He had been at Newman's college, Oriel, between 1835 and 1838, and in the opinion of the architect Benjamin Ferry 'was more than half inclined to think that everything Roman must be right'.⁵ His impact at Rampisham was immediate and controversial. He advocated the cause of the degrading poverty of agricultural workers in newspapers, but his style of churchmanship found immediate local opposition among the 420 villagers.⁶ The nonconformist *Sherborne Journal* reported that

In this retired village a new place of worship was opened on Christmas-day, with two public services which were very numerous attended... The origins of this place of worship is connected with certain recent movements in the parish, on the part of the officiating clergyman, which have given offence to a large proportion of the inhabitants, as, in their opinion, partaking too much of the modern "Anglo-Catholic" or 'Puseyistic" character. The result is, that the seceders from the church, including the choir of singers, &c., have, voluntarily, and unsolicited from without, availed themselves of the provisions of the Toleration Act, and provided, as above stated, for their own religious accommodation.⁷

Powerstock's formal procession, with its flags and banners, the children walking two by two, preceded by clergy and gentry would not be suspected from the account in the *Dorset County Chronicle*. 'The New School Room' it says, was opened 'in the presence of a numerous and select company, consisting of all the influential persons residing in that extensive place', including twelve clergy.⁸ After divine service and an 'excellent' sermon, the party merely 'adjourned' to the school room for its dedication, followed by 'an abundance of cakes and tea' for the children. Banners are visible in the painting, though what they depicted can no

longer be known, and there is no mention of Latin singing. Sanctuary was to be a firm supporter of the High Church majority of the West Dorset clergy, but he was not as extreme as his neighbour.

School building, financed mostly by private subscription, was then a substantial activity in rural Dorset. The decade saw schools built at Whitchurch Canonorum, Broadwindsor, Chideock, Piddlethenthide, and elsewhere, besides Rampisham and Powerstock. Education was articulated by religious affiliation: the National Society, founded in 1811 for Church of England schools, and the British and Foreign Bible Society for nonconformists, supported or replaced local initiative. From 1833 onwards these societies administered a grant paid by the Treasury, initially of £20,000. From 1839 onwards this annually-increasing sum was administered by a Committee of the Privy Council on Education. Rooke's school at Rampisham was built during the administration of Sir Robert Peel, whose Ecclesiastical Commission had done much to promote the established church. Sanctuary, appointed to Powerstock in 1848, soon raised sufficient money to build the school. But he was operating in very different political circumstances. Peel's Tory government had disintegrated over the repeal of Corn Laws, and power now lay in the hands of Lord John Russell and the Whigs. This was to lead to a major convulsion within the Church of England a few months later when the High Church wing was profoundly affronted to witness the Privy Council, a secular body and, worse, controlled by Whigs, intervene to determine a major case of religious doctrine.⁹ To avoid such profane interference, it was emphasized that Powerstock School, was

built by the exertion of the Vicar and Parishioners without any assistance from Parliamentary Grant. Its founders felt they could not subject themselves to the interference of the Committee of the Privy Council (who have the administration of that grant) with respect to the management of their school, because the Committee will not apportion any part of the public money to schools, the management of which is vested in the Minister and Churchwardens as they wished them to be.

Although aspects of the Rampisham procession may have been influenced by the artistic and religious ideas of Pugin, processions themselves, secular as well as religious, flourished in an age before motor traffic. The laying of the foundation stone of the Mechanics Institute in Bridport, the reconsecration of churches at Misterton or Melplash, or the procession to open Bridport General School with the mayor and 'fellow townsmen, composed of gentlemen of all parties and sects, Protestant and Roman Catholic, Episcopalian, Independent, Friends, Wesleyan, Unitarian and Baptist', are examples of public spectacles fully reported at the time.¹⁰ It is their visual effect that is so rarely recoverable, and so fragile.

ABBREVIATION

DHC: Dorset History Centre.

REFERENCES

Chadwick, O. 1971; *The Victorian Church*, 3rd. ed.

DCC; Dorset County Chronicle.

Ferry, B. 1861, *Life of Pugin*, 1861.

ENDNOTES

1. This was the first school building, designed by R.C. Carpenter, now an agricultural store; earlier schools had been in private houses. The building destroyed by fire was designed by G.R. Crickmay in 1873 [DHC, D/CMY:194].

2. *DCC*, 8 May 1850. Robert Williams's Diary, DHC, D/WIB/F8 'in the afternoon to Poorstock for the opening of their schools [;} service at Poorstock. home to tea'.

3. *Ecclesiologist*, V, Jan. 1846, p. 267.

4. *ibid.*

5. Ferry, 1861, 161.

6. His was one of the letters used by Richard Brinsley Sheridan, MP, to draw attention to the miserable state of the poor in Rampisham in a speech in November 1843, in advance of Rev. the Hon. Sidney Godolphin Osborne's well-known letters in the *Times*. *DCC* 2, 9, 16 Nov 1843 etc.

7. *Sherborne Mercury* 4 Jan 1845.

8. See Note 2.

9. Chadwick 1971, 250–71 'The Gorham Judgement'.

10. *Western Flying Post*, 9 Jul. 1832; see T. P. Connor, 'Too Late for the Dictionary? Joseph Galpin and Late Georgian Architecture in West Dorset' *Georgian Group Journal* XVII, 2009. 153–4; *Sherborne Mercury* 1 Jun. 1840; *DCC*, 23 May 1845; 24 Jan. 1850.

Identity and Loss: Discovering the identity of Tom Roberts's (1856–1931) pastel portrait of a young girl, at the Dorset County Museum

GWENYARKER

Introduction

This paper looks at three works of art by Tom Roberts, which came into the collection of the Dorset Natural History & Archaeological Society (DNH&AS) at the Dorset County Museum in 1942.¹ Dorchester born Roberts was a painter whose work in Australia has long held iconic status. The paper examines the circumstances leading to the production and subsequent acceptance of the three works in question by the DNH&AS Council. This has resulted in solving a seventy-year mystery behind the true identity of the sitter of one of the three works, Roberts's pastel portrait of a young girl, Goda, now his sole surviving work in the Society's collection. The paper makes a general, rather than a specific point about collections management, using the loss of two of the Roberts works of art as the exemplar. Combined with the failure to claim a Roberts landscape from Australia, they act as a judicious warning about the potential pitfalls of de-accessioning in ignorance. The present needs always to turn to the past to avoid putting other objects of the DNH&AS collection at similar risk in the future.

Discovery

During the tense, dark days of 1941, Lieutenant Colonel C. D. Drew, Curator and Secretary of the Dorset Natural History & Archaeological Society at the Dorset County Museum received a letter from Sir Wyndham Dunstan (1861–1949) of East Burnham End near Slough (Figure 1).² Introducing himself as a neighbour and friend of Drew's relative A. F. Drew of Farnham, on 29 October 1941 Sir Wyndham wrote

East Burnham End, Near Slough,
Buckinghamshire

Dear Sir

I do not know whether you have heard of Mr Tom Roberts – the founder of Australian landscape painting and the painter of the opening by the Prince of Wales of the First Commonwealth Parliament now at St James's Palace. He was born at Dorchester, his father being the Editor of the Dorset County Chronicle. His work is nearly all in Australian Galleries but I have a pastel of a child and a bust in plaster which I should be happy to present to the Dorchester Museum [sic] if you consider them suitable.³

Yours truly

Wyndham R. Dunstan⁴

(Correspondence file No. 4595, DNH&AS archive)

Dunstan volunteered no further details about the identity of either the child or the sitter of the bust.

On 31 October 1941 Drew replied to Dunstan.

Dear Sir

I have been obliged to give up all my work at the Dorchester Museum [sic] until happier times, as I have command of a Home Guard Battalion, which demands almost every moment of my time.

I am therefore passing your letter to the Acting Curator, who will place it before the Museum Council at their Meeting on Tuesday next. I am sure there is no doubt as to what their reply will be. We are always delighted to add to our collection of the work of Dorset painters and as we have no examples of the work of Mr John Roberts, your very kind offer is all the more welcome.

Yours very truly

C.D.D



Figure 1: Sir Wyndham Dunstan. © Mike Dunstan. Permission to publish granted

It is instructive that Drew revealed the desire to collect the work of Dorset painters for the Society. On 4 November Acting Curator, Mr. R. Bunting wrote on behalf of the Society's Council accepting Dunstan's offer of both the pastel and the plaster bust by 'Mr John Roberts' confirming that the Council was 'most grateful to have examples of that artist's work'.

Dunstan ignored any misgivings that neither the curator nor the Museum Council had any idea who Tom Roberts was, and persisted on 6 November.

'the artist is TOM not John Roberts. I will later on send you some particulars of his career for your catalogue and labels. My house in London was damaged in a raid. The frame of the pastel has one small breakage, which can readily be repaired. The bust is much dirtied by soot and will need to be cleaned and perhaps you may think it well to have it protected by a wax preparation which is now in use.'⁴

The archive of the Tate Gallery includes a brief entry for 1941 listing the refusal of a gift by Sir Wyndham Dunstan of a work of art (unspecified) by John Roberts (TG 4/6/3/17, Tate Records: Tate Collections: Gifts: Gifts declined: Series 1, 1930–1950). So it appears Dunstan had already approached them with the same or a similar offer, and happily, the Tate's inability to read Dunstan's handwriting any better worked to Dorset's advantage. The pastel (Figure 2) and bust duly arrived at



Figure 2: *Goda*. Tom Roberts, pastel, 1908. © DNH&AS

the Dorset County Museum via the art handlers James Bourlet and Sons Ltd, who also oversaw their renovation and cleaning following the bomb damage. Later Bourlets was also bombed and most of its records destroyed, so it is not possible to find out any more about the time these works were in transit, though packet 4595 (DNH&AS) includes a letter from Bunting to Bourlet, dated 13 January 1942, revealing that the cost for the work and transportation to Dorchester was three pounds eighteen shillings and sixpence.

Rather late in the day Bunting wrote to Sir Wyndham on 31 March 1942 asking to whom 'the titles of these works – 'The Director' and 'Goda' refer'. The pastel had a strip of paper pasted to the glass with the words 'Goda Tom Roberts pastel 1908' scrawled on it.⁵ We can only infer that the plaster bust had lettering inscribed 'The Director', long a convention for sculpture. Dunstan replied in May, 'Goda is now Mrs Henry Bowles', tantalizing information which subsequently proved to be frustratingly elusive. More significantly he added that

'The Director is myself when Director of the Imperial Institute. At the request of the Australian government I was in charge of Roberts when he was at work on his large picture' (Correspondence file No. 4595, DNH&AS archive).

The arrival of the two works was reported in the Council minutes of 7 April 1942 and the pastel was accessioned as 1942.10.1 and the bust as 1942.10.2. Dunstan supplied the Museum with a biography of Tom Roberts on 17 January 1942, together with a very brief description of the two works he had donated, though his account lacked pertinent biographical details of the sitters. Dunstan dated the plaster bust to 1907, the scrawled label on the pastel dated *Goda* to 1908; Dunstan further stated that both works were executed in London. Bunting accepted this information with gratitude in a letter to Wyndham dated 20 January 1942, concerned that 'enquiries here have not been very fruitful'. He confirmed that Tom Roberts was not well known in his home-town, and that although they had 'scrappy information regarding his father' there was 'practically nothing of the artist.'⁶

Following the Dorset County Museum's acceptance of his gifts on 1 May 1942 Wyndham again wrote to the museum with an even more remarkable offer

Dear Sir.

I have now heard that the Executors of the late Mr Tom Roberts are willing to present to the Dorchester Museum [*sic*] a landscape by Tom Roberts. It is not likely that the picture can leave till after the conclusion of the War but you will be informed.

Yours very faithfully

Wyndham R Dunstan.

A deafening silence from Dorchester ensued, compelling Dunstan to write again on 20 May 1942

Dear Sir,

As I have not heard from you since my last letter I conclude that everything is now in order and that you require no further information. You will no doubt have made a note of your records of the intention of the Executors of the late Mr Roberts to present to the Museum after the war, a landscape by Tom Roberts,

Yours very truly

Wyndham R Dunstan.

It is to be deeply regretted that this highly significant and generous offer was not followed up after the war, either by Roberts's Australian executors or the Dorset County Museum. In consequence a truly important opportunity for Dorset, to own a Tom Roberts Australian landscape, was missed.⁷

With the identity of *The Director* securely established we should turn our attention towards this generous and persistent benefactor, who also made donations of works of art to Southampton City Art Gallery in 1942, (Frederick Lee Bridell, *In the Austrian Tyrol*) and the Ashmolean Museum in 1947, (Joseph H. Vignoles Fisher, *Summer Evening*).⁸ Wyndham Roland Dunstan's long and distinguished career as a chemist, scientist and bureaucrat merits substantial entries in the *Oxford Dictionary of National Biography* and *Who Was Who* and various professional journals including the Royal Society ('Obituary Notices' from *Fellows of the Royal Society*, Vol. 7., pp. 62–81). Son of John Dunstan, Constable of Chester Castle, Wyndham Dunstan lectured in science and medicine at Oxford, Cambridge and the University of London. In 1886 he married Emilie Maclean – they had a son Geoffrey and a daughter Rosalie, neither of whom married. Emilie died in 1893 soon after Wyndham became Professor of Chemistry at St Thomas's Hospital where he remained until 1900. He then travelled the world as Director of the Imperial Institute between 1903 and 1924 and was knighted by George V on his retirement. In 1900 Wyndham Dunstan was married for a second time to Violet Mary Claudia *née* Hanbury-Tracy.⁹ On 28 October 1901 their only child, a daughter, Goda Viola Tracy Dunstan was born.

After sixty years it can be firmly established that Wyndham's daughter, Goda Dunstan, was the seven-year-old Edwardian sitter for Roberts's pastel drawing now in the Dorset County Museum. Goda's descendant, Lord Sudeley, revealed that the child's name came from an ancestress Goda, daughter of Ethelred the Unready.¹⁰ As a family name it was still in current family use, since Goda's mother had a younger sister called Gwyneth Rose Goda Hanbury-Tracy. On 29 July 1926, Goda, aged 24, did indeed marry a Henry Bowles whom

Lord Sudeley believes was part of the family connected with Northwick Park near Moreton-in-Marsh, Gloucestershire. Henry died in 1971 while Goda lived on until June 1994; when their only child Ann died unmarried in 2005, the direct Dunstan trail ended.

Research into Roberts's early time in London led to the archives of the National Portrait Gallery and to a black and white photocopy of an oil painting by Roberts of a young girl, put up for sale at Christie's auction twenty-five years earlier (Figure 3). The portrait was signed by Roberts and dated 1909. The close resemblance of the oil painting to the pastel portrait leaves little room for doubt that it is also of Goda. Following the production of her pastel portrait, the Dunstans almost certainly commissioned Roberts to produce the oil version of Goda one year older. She was the subject of the painting sold at Christies, South Kensington in 1986 as *Unknown Girl*.¹¹ The existence of this portrait explains Dunstan's offer to the Dorset County Museum of the pastel portrait, as he still owned the oil portrait of his young daughter.

The existence of these Goda images, together with Dunstan's portrait bust entitled *The Director*, provide the evidence that Wyndham Dunstan and Tom Roberts knew each other during the first decade of the twentieth century. Until now their relationship in the context of the DNH&AS Roberts acquisitions, and the circumstances of their friendship, has never been explored, Dunstan sat



Figure 3: Goda. Tom Roberts, oil on canvas laid on board, 1909. © Christie's. Permission to publish applied for

to Roberts for his bust in 1907, and since portrait busts by Roberts are very rare, it indicates a particular intimacy between them. This interpretation is also based on the knowledge that Roberts produced a plaster portrait bust of his son Caleb, now in the National Gallery of Australia, in the same year. In the light of this, whilst Dunstan's plaster bust could have been a preparatory work for a commissioned bronze portrait, it was more likely a personal gesture of friendship by Roberts to Dunstan.

Tom Roberts's Early Life

It is useful at this point to provide a very brief narrative of Roberts's early life leading up to the meeting between Roberts and Dunstan in London. Born in Dorchester in 1856, Thomas William was the son of Richard Roberts, the well-known editor of the *Dorset County Chronicle* and Matilda Agnes Cela, *née* Evans. Thomas (always known as Tom) was educated at Dorchester's grammar school, and demonstrated an early interest in painting.¹² He was thirteen when his father died in 1869, and the family fell on hard times. Tom, with his widowed mother, brother and sister joined the millions seeking a new life in the colonies and emigrated to Melbourne, Australia on the *True Briton*. As a keen artist Roberts attended several schools of design in Australia, and was amongst the first painters to identify in paint the special character of Australia and its landscape. By 1881, he had raised enough money to return to England to study at the Royal Academy Schools, travelling from there to Spain, Italy and France including a spell in Paris at the *Académie Julian*, where a large number of British and American artists chose to study. He also contributed illustrations to the *Graphic*, and it is instructive that Roberts sought a traditional European artistic training before returning to Melbourne in 1885. There he worked with a number of artists including Frederick McCubbin and Arthur Streeton to produce atmospheric evocations of the Australian lifestyle and landscape in a broadly British impressionist style, whilst making his main living as a portraitist. In April 1896, he married Elizabeth Sarah Williamson and their son, Caleb, was born two years later. Their life in Australia was comfortable at this stage, but despite his success as a portrait painter he later implied that he found his life there constraining, not helped by the lack of patrons and a poor economic climate. He was also aware that his work was not receiving the recognition he wanted in Australia.

The Big Picture

An unexpected turn of events soon presented Roberts with the opportunity to return to England. As private citizens Tom and his wife attended the ceremony of the first Federal Parliament in Melbourne, on 9 May 1901, opened by the Duke of Cornwall and York. Representing his father, the new King Edward VII, the Duke read the

Proclamation from a raised dais. Afterwards the Australian Arts Association Pty Ltd, invited Roberts to record the event in paint, after their appointed artist unexpectedly declined. The Association regarded the event as offering an attractive commercial venture through an oil painting and associated prints.¹³ The commission also provided Roberts with the all-important guarantee of a place on the walls of the Royal Academy as part of the deal. Roberts signed a contract with the Australian Arts Association Pty Ltd, with the resulting canvas, *The Opening of the First Parliament of the Commonwealth of Australia by H.R.H. The Duke of Cornwall and York (Later King George V), May 9, 1901* (1903), due to be completed by March 1903. Roberts hoped that accepting the challenge would promote his career, particularly in England. To this end he later wrote to his son Caleb, 'You can guess my son how your father felt. For the first time his work seemed wanted.' (Croll, 1935, p.62),

Roberts believed the subject and scale of this momentous event in Australia's story merited a modern history painting, the summation of the highest artistic expression in the hierarchy of painting. His contract, for which he was paid 1,000 guineas and expenses, required at least 250 correct representations of all the key people present at the ceremony in an official capacity; it was essential that they were all recognizable. To work on the massive painting which he variously described as his 'Big Picture', or 'the "c" opus', Roberts was given a room in the Royal Exhibition Building where the ceremony had taken place. Figure 4 is a photograph of Roberts adding the portrait of Senator Lieutenant Colonel Cameron, revealing the scale and complexity of the composition.

Driven by ambition and his desire to create a major work worthy of this significant national event, Tom considerably complicated his task by adding other less important figures into the work. Undoubtedly swayed by the seductive contractual guarantee of one guinea for



Figure 4: Tom Roberts working on his painting, *The Opening of the Commonwealth Painting*. Senator Lieutenant Colonel Cameron is shown sitting to the artist wearing a black arm band in mourning for Queen Victoria, gelatin silver photograph, 1902. State Library of Victoria. Out of copyright



Figure 5: The Opening of the First Parliament of the Commonwealth of Australia by HRH The Duke of Cornwall and York. Tom Roberts, oil on canvas, 1903. The Royal Collection © 2011, Her Majesty Queen Elizabeth II. Permission applied for and pending

each sketch, he increased the number of people in the painting from 250 to 269. Some dignitaries allegedly paid Roberts extra money to position their portraits prominently, though not accurately, in the painting. Ultimately Tom received nearly 2,000 guineas for the completed work.

In planning his painting Roberts was highly influenced by the structure, scale and composition of William Powell Frith's *The Marriage of the Prince of Wales, 10 March 1863*, commissioned by Queen Victoria and completed in 1865. Roberts saw the painting when it travelled to Australia and exhibited at the International Exhibition of Arts, Manufactures and Agricultural and Industrial Products of all Nations in Melbourne in 1880–1881. Frith's career never recovered from this impossible royal commission, and in planning his own royal painting Roberts should have been alert to this. Royal crowd scenes present not only compositional problems, but also almost insurmountable difficulties arranging numerous portrait sittings. By referencing Frith, Roberts looked backwards rather than creating a contemporary image suited to the new world order. His compositional decisions, the enormous practical difficulties faced in completing the vast 10 by 16½ feet canvas, and the need to work from numerous portrait studies pieced together after the event, proved a daunting task and inevitably he fell behind with the project. By March 1903 Roberts was forced to renegotiate his contract with the Australian Arts Association Pty Ltd, putting back completion of the painting until November 1903.

By now the royal family and many dignitaries had returned to England, and so the only way Roberts could complete the commission was by bringing the painting to England to paint the sitters there. This was a prospect he seized upon with relish, not least because he was convinced that his art would at last receive due recognition by the London art world. The Association agreed to meet the cost of freight for the painting and rental of a studio in London. With Roberts paying the fare for himself and his family, on 17 March 1903 Tom and Lillian left Melbourne for London where they took temporary lodgings in Manchester Square before moving to 44 Kenilworth Court, Putney. They had arrived in an Edwardian London both energetic and exciting described to Roberts on 8 January 1901 by a fellow Australian artist Arthur Streeton as:

'London & England what a mighty thing it all is ...London seems even too large & almost beyond the management of the capable men now directing it – the rate of its growth increases each day – its wealth stupendous.' (Galbally and Gray, 1989, pp. 85–6)

As the largest city in the world, London's vibrancy attracted artists, musicians and writers from Ireland, America, Australasia and Europe. The Australian opera singer Nellie Melba was at the pinnacle of her success and the celebrated Russian ballerina, Anna Pavlova was also thrilling London audiences. Amidst this heady mix, Roberts sought to complete his work, immediately



Figure 6: Portrait photograph of Tom Roberts in London. H. Walter Barnett, gelatin silver toned photograph, 1903. Out of copyright

commencing the sittings of the royal portraits. He worked on the Big Picture in the South Africa room of the Imperial Institute at South Kensington. Built to mark Queen Victoria's Golden Jubilee in 1887 the Institute was a research base established 'as a monument to the emerging imperial sentiment', promoting the Commonwealth and exploring the potential for industrial commercial operations in the dominions and colonies. Whilst working on the painting, Roberts was assigned to the director of the Institute, a scientist named Wyndham Dunstan. In this capacity Dunstan was not only in charge of the scientific investigation of economic products, but also supervised any other work carried on by the Board of Trade in the building at South Kensington, including the collection of products of the empire. Thus Roberts's project to finish the painting fell under Dunstan's general brief and accounts for the friendship between the two men, leading to the Dunstan family portraits produced by Roberts.

In addition to actual sittings for the Big Picture, Roberts worked from official photographic portraits of the royal couple and produced further portrait sketches. He took extensive measurements of the subjects including their age, height, weight, hat size and where they were born, to ensure their final portraits were correct not only in terms of each subject but relative to others in the painting.¹⁴ Roberts later claimed he had been shabbily treated as the future George V only granted him one sitting, however this seems at odds with the *Times* account of 5 July 1904:

'The Prince and Princess of Wales who have displayed great interest in the progress of the work, gave several sittings in Melbourne and afterwards in London at the Imperial Institute where the painting was finished. The King also inspected the picture during this time and made several valuable suggestions for its completion.'

The interest shown by the royal family is borne out by a *Times* report that Queen Mary, curious to find out what had happened to him in the intervening years, visited Roberts's solo exhibition in February 1914, held at Walker's in New Bond Street. At the expense of the Australian Arts Association Pty Ltd, Roberts also travelled around England making portrait sketches of various dignitaries. Most guests, chiefly male, had worn black at the ceremony as they were in mourning for Queen Victoria, who had died four months earlier; an arm band is visible on the arm of the sitter in Figure 4. This feature also echoes Frith's painting, since Queen Victoria is shown wearing mourning following the death of Prince Albert in 1861. To detract from such a black impression, Roberts visually balanced the effect by the use of a dramatic shaft of sunlight. Contemporary newspaper accounts commented that these rays animated the scene and directed the viewer's gaze to the Duke of Cornwall and York as the focal point of the painting.

It was two-and-a-half years before Roberts finally completed his icon of federation, on 16 November 1903. The Commonwealth Government presented the painting to Edward VII who commanded it to be shown at the forthcoming annual summer exhibition of the Royal Academy. As part of the Royal Collection, the painting hung in St James's Palace, London, from 1904 to 1957 and was then sent on loan to Australia in 1958 by Queen Elizabeth II. Still part of the Royal Collection, it now hangs in Parliament House, Canberra in a location specifically designed for it.

The Big Picture fell far short of Roberts's aspiration for a history painting documenting a great moment in the new Australian nation. Fiercely ambitious, Roberts experienced a conflict of identity and allegiance in London as a result of the painting. Despite his initial exhilaration at the commission it was, and still is, regarded as a failure, described by Souter as 'less a work of art than a feat of organisation' (Souter, 1976, p.72). Although the painting evoked something of the grandeur of the occasion, it arguably failed to be truly monumental through its lack of focus. The British press was supremely indifferent, either downgrading it as a painting of a colonial event, or ignoring it altogether, regarding the event itself as remote and irrelevant to a London audience. Albeit naively, Roberts had hoped the commission would boost his career in England, bringing social contacts, financial reward and further commissions in its wake. Yet in Britain the very colonialism of the subject of the painting denied him credibility and status by the British art establishment.

The Photogravure

Photogravure reproductions for public sale were a condition of producing the major painting. Profit for the Australian Arts Association Pty Ltd was behind the desire to include so many recognizable faces, since it was anticipated that each person included in the painting would wish to purchase the associated print. The prints were produced in various editions and prices; sold for 30 guineas on parchment, 15 guineas on Japanese paper or on India paper for 3½ guineas. Roberts signed over his copyright, enabling the Association to benefit financially from the sale of these reproductions, and in so doing recover not only the costs of the painting, but return a profit on its investment. In November 1903, the picture was therefore sent to Paris for engraving at Goupil. Roberts subsequently signed 500 of the prints.¹⁵

In July 1942 Wyndham made another offer to the Dorset County Museum.

I have a large proof photogravure of Tom Roberts great picture 'The Opening of the First Commonwealth Parliament of Australia by HRH The Duke and Duchess of Cornwall and York... It is signed by the artist with a sketch of himself and of the head of King Edward VII. It was

specially autographed by the Duke and Duchess. The proof is slightly water stained (and the frame should be retouched) but this can be readily repaired. All the portraits including the Duke and Duchess were painted from special sittings and include many distinguished people. The size is about 4' x 3'. If your committee would care for it I shall be glad to present it to the museum of his native town.

Yours very truly

Wyndham R Dunstan

(Correspondence file No. 4767 in the DNHAS archive)

The Society and Museum's Council accepted the offer on 21 July but felt that they wished to receive the picture in its existing condition, intimating that they intended to repair the frame in-house. This suggestion brought forth a letter of alarm from Dunstan on 8 August 1942,

I trust that no attempt will be made to restore the Royal Autographs except with expert advice

Yours faithfully

Wyndham R Dunstan



Figure 7: The Opening of the First Parliament of the Australian Commonwealth, 9th May 1901, by HRH The Duke of Cornwall and York – with *remarque* of Edward VII, after Tom Roberts. Printed by Goupil and Co for the Australian Art Association Pty Ltd., Melbourne, photogravure, 1903. National Library of Australia: Accession Number NGA 60.14. Permission to publish granted but image not purchased

He advised the Museum to ask Bourlets to 'attend to the photogravure. There is not much required but it is delicate work'. He even suggested it travelled as a part load, since he was also donating a painting to Southampton City Art Gallery at the same time. The photogravure arrived in Dorchester on 6 October 1942, was duly acknowledged and accessioned by the Museum and entered in the relevant accessions register as 1942.25.1. Despite extensive search by staff and volunteers of the Museum over the last decade it has not yet been located.

Several explanations offer themselves for the plight of Roberts's photogravure, as well as his plaster bust of Wyndham Dunstan, each equally troublesome in terms of current collections management. Roger Peers (curator and secretary 1959–1992) confirms the bust and photogravure were not known by the late 1950s, so if they were disposed of it was within the first twenty years of their arrival in the museum. Perhaps after the war their significance and relevance to Dorset was not understood (and the promised Roberts Australian landscape not claimed), and they may have been de-accessioned or otherwise disposed of, or less likely, been stolen. Though there is still the distant hope that the photogravure may be rolled up inside another chart and awaiting discovery, we have to accept the plaster bust has gone. If their disappearance was due to de-accessioning then the loss highlights how vital it is for those making decisions about objects in museum collections to fully understand the individual relevance and significance of every object in their care and to make exhaustive searches to understand why each is in the collection. The correspondence files for the objects survive and their entries remain in the accession register, but are not accompanied by any explanatory note indicating their subsequent fate.

The loss of the Roberts items has a wider resonance than just the Dorset County Museum. Following a long period when de-accessioning was not considered by British museums, the recent dropping of the Museum Association's guidelines on a 'presumption for retention' from its *Ethics Handbook*, means a new generation of curators are considering disposals for the first time. This story therefore serves as a timely warning about care before disposal; a salutary tale for all, about the need for careful research and proper documentation, both before and after disposal occur. Gone too was the remarkable opportunity to claim one of Roberts's iconic landscapes which would have done so much to promote Roberts and highlight his Dorset roots.

Despite his British birth, Roberts was viewed as a colonial painter, who had produced a painting whose status in the Academy's scale of values was not recognized. That over eighty years later Christie's placed the sale of the *Goda* oil painting in a 'foreign' i.e. specifically non-British sale, is evidence of the extent to which Roberts's British origins are still overlooked. The London recognition and patronage Roberts anticipated and sought at the

beginning of the twentieth century never materialized, and over the next few years his work was often rejected by the Royal Academy. This period of his life merits close attention but is not the point of this paper.¹⁶

The loss by the Dorset County Museum of three of four Tom Roberts works of art, acts as a metaphor for Roberts's own life in this country, his feelings of failure and lack of recognition. It is to be hoped that despite the sorry story of the fate of the objects discussed, the fortunate survival of *Goda* from both the dangers of London bombing and museum ignorance, will act as a beacon for a brighter future for Roberts's status in Dorset. His commemorative plaque in Durngate Street, Dorchester and local celebrations around the 150 years of his birth in 2006, demonstrate an increased recognition for Roberts, ironically through Australian support. This son of Dorchester travelled thousands of miles from home and made a unique and distinguished career for himself at a crucial moment in Australia's emerging sense of identity and national culture. Dorset needs to fully acknowledge this man of Dorset who lives on in his home-town through the small pastel portrait of a young girl, *Goda*, whose own identity has been revealed here for the first time.

SOURCES

Correspondence files and accession registers of the Dorset Natural History and Archaeological Society.

The Times.

Oxford Dictionary of National Biography.

Who Was Who, 1941–1950, Oxford online.

Topliss, Helen, 'Roberts, Thomas William (Tom) (1856–1931)', *Australian Dictionary of Biography*, National Centre of Biography, Australian National University, <http://adb.anu.edu.au/biography/roberts-thomas-william-tom-8229/text14405>, accessed 18 December 2011.

BIBLIOGRAPHY

- Croll, R.H. 1935. *Tom Roberts: Father of Australian Landscape Painting*, Sydney.
- Galbally, A., and Gray, A. 1989. *Letters from Smike: the letters of Arthur Streeton*, Melbourne.
- Graves, A. 1905. *The Royal Academy of Arts Exhibitors, 1769–1904*, London.
- Jarman, A. ed. 1981. *The Royal Academy of Arts Exhibitors, 1905–1970*, London.
- McQueen, H. 1996. *Tom Roberts*, Sydney.
- Rickard, J. 2009. Tom Roberts London years. *Australians in Britain: The Twentieth-Century Experience*, edited by Bridge, Carl; Crawford, Robert; Dunstan, David. Melbourne: Monash University ePress, pp. 5.1 to 5.13.
- Souter G. 1976. *Lion and Kangaroo. The Initiation of Australia, 1901–1919*, Sydney.

ENDNOTES

1. Throughout the text there are references to the DNH&AS, Society and Museum. The Dorset County Museum formed in 1845, amalgamated with the Dorset Natural History and

Antiquarian Field Club in 1928. The new body became the Dorset Natural History and Archaeological Society (referred to as the Society), owning both the Museum and its collections. The Council of the Society has managed the affairs both of the Society and the Museum since 1928, so the manuscript references to the Museum Council and Society Council can be read as the same body.

2. Photograph kindly supplied by Sir Wyndham Dunstan's distant descendant Mike Dunstan.

3. DNH&AS Correspondence number 4595.

4. Dunstan's London house was 87 Chester Square, London, SW1. It is possible he was referring to the heavy bombing which took place over the weekend of 18–19 April 1941.

5. Also inscribed in pencil on the reverse backing board 'Goda Tom Roberts 1908'

6. Letter from R. H. Bunting, Acting Secretary, to Sir Wyndham Dunstan, 20 January 1942.

7. Prolonged illness prevented Dunstan from following this up, and he died in Windsor on 20 April 1949.

8. Dunstan was at Oxford with Dugald Sutherland MacColl (1859–1948) the painter and critic who was Keeper at the Tate Gallery, 1906–1911 and the Wallace Collection, 1911–1924. Dunstan was actively interested in art and served on the Sudeley Committee (for the Improvement of Picture Galleries) for over 25 years. The committee, which promoted museums and their increased use by the general public, existed between 1923 and 1946.

9. Daughter of Frederick Stephen Archibald Hanbury-Tracy, fifth son of Thomas Charles Hanbury-Tracy, 2nd Baron Sudeley.

10. Private communication between the author and Lord Sudeley, 2006.

11. *Pictures, Drawings, Watercolours, Prints and Sculpture particularly of American, Canadian, Africa, Eastern and Australasian interest*, Christies South Kensington, 10 June 1986, lot 214A, signed oil and dated '9', by Thomas William Roberts 'Unknown Girl', 48.5 x 36.2 cm. The hammer price was £26,000.

12. A note in an unidentified hand in DNH&AS packet 4595, dated 22 January 1891, suggests that Roberts 'first gained his knowledge of art at Mr John Pouncy's, South Street'.

13. See Souter, p.91.

14. Unpaginated catalogue entry from Government House, Canberra, supplied by the Royal Collection picture library.

15. Proof photogravure, 'The Opening of the First Commonwealth Parliament of Australia by HRH The Duke and Duchess of Cornwall and York', afterwards King George V and Queen Mary. It is signed by the artist with a sketch of himself and of the portrait head of King Edward VII', plate-mark 52.9 x 90 cm, sheet 64.8 x 96.9cm.

16. During the First World War, Roberts served as a hospital orderly in London. He returned to Australia in 1923 and pursued a successful career as an artist. After his first wife died in January 1928, Roberts remarried later that year. He became ill in May 1931 and had surgery for cancer in June. He retired to his home in the Dandenongs, where he died on 14 September 1931.

Dewlish Roman Villa: post-excavation report 2011

IAIN HEWITT

Bournemouth University

Excavation of the villa began in 1969 and interim reports were printed in the *Proceedings of the Dorset Natural History and Archaeological Society* each year until the 1978 season. This last entry promised, 'a publication of final plans and a summary of the excavations [...] in the next issue' (Keen 1980, 113–4). In the event, this proposed eleventh interim report never appeared and it was not until 2007 that the excavator, Dr W.G. (Bill) Putnam, published an illustrated overview of the villa in the second edition of his book *Roman Dorset*. This may be regarded as the much-delayed interim report of 1979. A more detailed excavation report had been intended, and to this end, post-excavation research was carried out until the death of Dr Putnam in 2008. The School of Applied Sciences at Bournemouth University took the decision to revive the Dewlish research project, with the aim of publication as originally intended (Hewitt 2010).

Appraisal of the Dewlish excavation archive revealed that a considerable amount of work needed to be done. However, the archive had become dispersed since the time of the excavations and before the backlog could be fully assessed it was first necessary to centralize storage. At an early stage of the excavation project, some finds had been deposited at the Dorset County Museum where they remain on display in the Archaeology Gallery. These items include a fine roof finial, a dwarf column and a number of small finds. Two large mosaic pavement fragments are mounted in the Museum's entrance lobby. Boxed artefacts and the grey literature were spread between the excavator's home, Bournemouth University, and an agricultural barn. For the most part, all but the Museum displays are now at the University but there is a continuing problem with the many boxes of painted wall plaster that have been exposed to contamination in the barn. For reasons of health and safety, these are likely to remain beyond potential for further study and publication of the wall plaster will rely upon pre-existing photographs and earlier scientific analysis of the material.

Building plans and site phasing are being reconsidered. Some of the site plans from 1976 are missing in spite of the most diligent search. The extensive collection of 35 mm slides is lacking in quality for the 1978 season as the site camera malfunctioned. Nonetheless, the director's site diaries and individual grid records make up for the deficiencies and to date it has been possible to write a draft interpretation of the earliest wing of the villa buildings that lies to the south-west of the courtyard. The *domus* (to the north-west) presents a more intricate and demanding challenge. As part of the re-evaluation of the physical layout of the site, a new geophysical survey has been started (2011) and for this I am pleased to

thank my colleague Paul Cheetham, and post-graduate student Hannah Simpson.

Mosaics: During the course of the excavations of the *domus*, Dr Stephen Cosh visited the site and produced detailed reports on the mosaic pavements. These were published in their entirety with some photographic illustrations (Putnam 2007) and with plans and detailed drawings (Cosh and Neale 2005). Recently, Dr Cosh has kindly revised his mosaic reports for the benefit of the current project.

Coins from the site were listed by Dr Richard Reece and, with reference to this work and further correspondence with Dr Reece a report was drafted by Bill Putnam and Astrid Mick. The coin lists have been re-examined by Dr James Gerrard who has written a contextual re-evaluation of the Dewlish coins that significantly updates the previous work and has implications for the phasing of the villa.

Faunal remains: A number of undergraduate student studies have been based upon artefacts, geofacts and ecofacts from the Dewlish excavations. In general, these have not been used. However, a study of the faunal remains by Brian O'Connell (1992), supervised by Dr Mark Maltby, is considered to be of a high calibre. Subject to appraisal and appropriate revisions, it is of sufficient quality to form the basis of this section of the site report.

Environmental samples: The excavation records allude to the collection of samples but none of these has survived.

Overall, the challenge of bringing the Dewlish excavations into the public domain is much greater than originally envisaged. Previously, specialist attention had escaped a number of the artefact groups and it has been necessary to seek contributions from a number of scholars. The following new work has been undertaken or is now in progress:

Glass from Dewlish is largely from the windows of the villa and this has been examined and listed by Dr Denise Allen. The assemblage is relatively small but expert examination has raised some interesting issues. The items of glass on display at the County Museum have been included by kind permission of its Director, Dr Jon Murden.

Human remains: Three deposits of infant inhumations were recovered during the excavations, in each case sealed by floors. No report had been forthcoming but in



Figure 1: Excavation of the domus of Dewlish villa by students of Weymouth College in 1975. The floors and walls of the building were covered by c. 0.30 m of topsoil but in many areas the plough had removed floors, and many walls had been reduced to foundation trench level or worse. A box grid system of excavation was employed from 1971 until the end of the field project in 1979

the past year, Anna Rognbogner has carried out a full examination of the remains which has revealed that one deposit contained the bones of one individual, the second represented two individuals whilst the third and potentially earliest grave contained a minimum of five individuals.

Architectural stonework has been considered in depth for the first time and this has been made possible by the contribution of Dr Kevin Hayward. This analysis has made it possible to pose questions about the source of the building materials and their phase and function in the villa complex. Trev Haysom of Haysom (Purbeck Stone) Ltd, has been advising Dr Hayward on the identification of the probable source of limestone roof tiles from the Purbeck quarries.

Pottery from Dewlish was displayed in its entirety at Stratton Village Hall during April 2011 and this attracted a number of visitors. The event provided an opportunity to appraise the whole of the assemblage for the first time which made it possible to identify stratified groups of pottery for full form and fabric analysis. This work is being carried out by Rachael Seager-Smith of Wessex Archaeology supported by a grant from the Dorset Archaeological Committee. The pottery assemblage includes pre-Roman Iron Age forms, Wareham – Poole Harbour Black Burnished wares, New Forest types and some Oxford colour coats. Examples of South East Dorset Orange Wiped Wares are present. These are considered to be of late manufacture, arguably in the Poole

Harbour area (Gerrard 2010). Jo Mills has produced an interim report on the Samian Wares.

Small finds include items of lead, copper, iron, shale and worked bone and these are being listed and categorized by Maureen Putnam. When this process is complete, a decision will be made regarding any further work that needs to be done.

ACKNOWLEDGEMENTS

I would like to thank Maureen Putnam for her enthusiastic and committed help in taking the project forwards. Tracey Minall has given her own time to organise and manage the archive. Joleen Perriam has worked on new drawings where needed and Lilian Ladle has carried out some early proof reading.

REFERENCES

- Cosh, S.R. and Neale, D.S. 2005 *Roman Mosaics of Britain. Vol. 2 South-West Britain*. London. Barham: Illuminata, for the Society of Antiquaries of London.
- Gerrard, J. (2010) Finding the Fifth Century: A Late Fourth- and Early Fifth-Century Pottery Fabric from South-East Dorset. *Britannia* 41, 219–32.
- Hewitt, I. (2010) Archaeological Archive (including the Dewlish site). *Proceedings of the Dorset Natural History and Archaeological Society* 131, 169.
- Keen, L. (1980) Dorset Archaeology in 1978: Dewlish. *Proceedings of the Dorset Natural History and Archaeological Society* 100, 113–4.
- Putnam, W.G. (2007) *Roman Dorset* (second edition). Stroud. Tempus.

The Archaeological Context of the Roman Coin Hoard from Nether Compton

JOHN OSWIN

Bath and Camerton Archaeological Society

A hoard of approximately 22,700 base metal coins was found by a member of the Yeovil Metal Detector Club in a field just east of Kitton Lane, Nether Compton, in February 1989. The event was reported in a single paragraph (Keen, 1989, 107). The hoard was not considered treasure trove according to the rules then current. It was deposited at Dorset County Museum, Dorchester.

The hoard was subject to perfunctory inspection but it was beyond the resources of the museum to analyse fully, and it lay in storage for some years before it was reclaimed by finder and landowner. It was subsequently broken up for sale and dispersed, mainly overseas. Recent publication (Toone, 2009, 396) has provided limited detail and suggests a very tight chronology, between 330 and 339 AD, for its deposition and noted the large number of irregular, underweight and blank coins within the hoard.

Nether Compton lies midway between Yeovil and Sherborne, on the eastern side of the valley of the River Yeo, which forms the border between Dorset and Somerset at this point. Kitton Lane is a track on the eastern side of the village, between it and the hamlet of

Stallen. The track runs along a ridge which rises to Charlock Hill, the site of a known but unexplored Romano-British settlement (Fowler, 1951). The east field forms the side of a deep and secluded coombe, the west field forms a promontory which juts out from the ridge and which has extensive views to the west and northwest. To the north, the view is terminated by the rise of Charlock Hill. To the west, it overlooks the recently discovered Romano-British site at Lyde Road, Yeovil, a site which has also produced coin blanks (Budd, 2010, 206).

A geophysical survey was carried out by the author between 2009 and 2011 of the field in which the hoard was found, and also the field to the west of Kitton Lane. The two fields will be referred to in this text as 'west' and 'east'. West field was reputed to have a Roman villa, but there was no formal record. The principal survey instrument was a Bartington 601-2 twin fluxgate gradiometer, operated at four readings per metre on lines one metre apart. Earth resistance and ground-penetrating radar techniques were also tried, but provided little extra information.

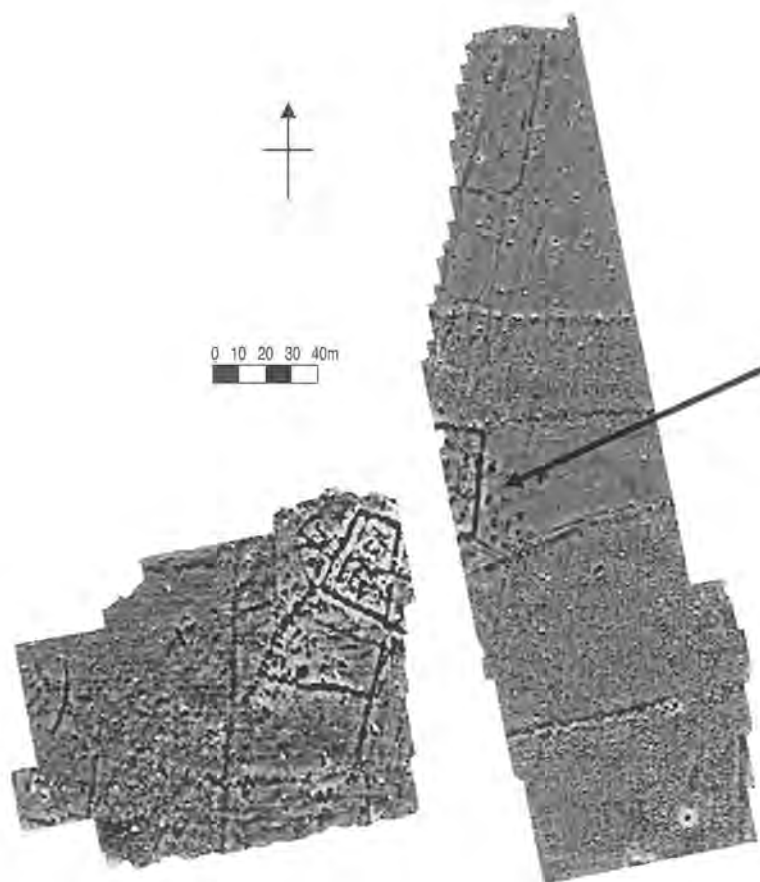


Figure 1: Geophysical survey of east and west fields at Kitton Lane, Nether Compton. North is to top, Scale is 40 m. Arrow indicates site of coin hoard find. Kitton Lane runs in the gap between the fields

The results of the survey are shown in Figure 1. North is to top. The visible scale is 40 m. The arrow indicates the position of the hoard find. The two surveys were conducted on independent grids, as there was almost no intervisibility between the fields. The gash through the middle is the line of Kitton Lane, which forms a deep hollow way at the south, rising to nearly field level to the north end of the west field.

The west field is bisected by a ditch (invisible on the surface) and the amorphous signals to the west of this suggest that this might have been a pre-Roman promontory fort. To the east of the ditch, the strong signals suggest a major Roman site. There are no obvious signs of building foundations, so it may be an agricultural or industrial site. At the north-west edge of this area, a semi-circular feature with radiating spokes could possibly be a corn drier (Morris, 1979, 176).

The east field shows a number of east-west lines which appear to be mediaeval field boundaries. These are just visible on the ground in suitable light. They are shown on the Tithe map (1840) and some even appear in 1947 vertical aerial photographs. The striations indicate previous ploughing. It is notable that the portion containing the hoard shows no plough marks, and was indicated as an orchard on the Tithe map.

The hoard find was located by eight-figure grid reference, giving 10 metre precision, and appears to have come from the area of the horseshoe shaped pattern of post holes. These are not likely to be just tree-throws as there are none elsewhere around them. Immediately west of the find spot is a rectangular feature with internal structure and with rounded corners, reminiscent of Roman military work. The feature is truncated by Kitton Lane and it is impossible to tell whether it is linked to the site in the west field. Further north, a

second, larger rectangular enclosure is also truncated by Kitton Lane. The line through it may represent an earlier course for the lane.

Geophysics cannot provide dates, so the features found cannot be firmly linked to the coin hoard. That would require excavation. However, the hoard does appear to have been deposited in a locality of intense Roman activity. This would distinguish it from the recently found Frome hoard (Moorhead, 2010), which was somewhat earlier, but appears to have been deposited in isolation.

ACKNOWLEDGEMENTS

The survey was initiated by Elizabeth Adam of Nether Compton, and her daughter Catherine. Thanks to landowners and tenants, messrs Penrose, Foot, Carpenter and Kellaway. Thanks are also due to Lee Toone, to the Dorset History Centre and the Dorset County Museum.

REFERENCES

- Budd, C, 2010 'Lyde Road, Yeovil' *Proceedings of the Somerset Archaeological and Natural History Society* 153, 206–207.
- Fowler, Joseph, 1951 *Mediaeval Sherborne*, Dorchester, Longmans.
- Keen, L, 1989 'Roman coin hoard from Nether Compton' *Proceedings of the Dorset Natural History and Archaeological Society* 111, 107.
- Moorhead, S, 2010, *The Frome Coin Hoard*, London, The British Museum.
- Morris, P, 1979, *Agricultural Buildings in Roman Britain*, Oxford, British Archaeological Reports, BAR 70.
- Toone, L, 2009 'The Nether Compton Hoard', in P.E. Abdy, C. Ghey, and I. Leins (eds), *Coin Hoards from Roman Britain*, Volume XII, Moneta, Wetteren, Belgium, 396.

A Very Peculiar Practice: Preliminary Research into the Post-Firing Perforation of Late Iron Age/Romano-British Pottery Vessels from South-East Dorset

K. BARRASS

Introduction

This paper is based on an undergraduate dissertation, submitted at Bournemouth University in 2011. The research focussed on the post-firing perforation of pottery vessels. Recording and analysis were designed to identify trends which may explain this apparently illogical activity and fit it into the wider context of perforated vessels.

Methodology

A random sample of 62 perforated sherds/pots from four sites, were observed in detail. From these, 59 perforations were individually recorded in detail. Whilst this is a small sample for the period and sites involved, Fulford & Timby draw conclusions from a sub-sample of twenty-two perforated sherds/vessels (2001, 294), which sets a reasonable precedent. The study sites are: Tarrant Hinton, Barton Field Roman Villa; Dewlish Roman Villa; Goldfields near Sixpenny Handley and the North Down banjo enclosure near Winterborne Kingston.

Data and Results

The results of this preliminary study indicate potential trends detailed below.

A preference on three of the study sites for drilling holes post-firing

Of the 62 sherds/vessels, thirty-seven (60%) had perforations made post-firing. Twenty (32%) were made pre-firing, with five (8%) indeterminate (Figure 1).

At Tarrant Hinton over 90% of the sample was perforated post-firing (Figure 2). At North Down, just over 60% of the sample was perforated post-firing and at Goldfields, 60% of the sample was perforated post-firing. At Dewlish, the opposite appears to be true, with over 80% of the sample perforated pre-firing.

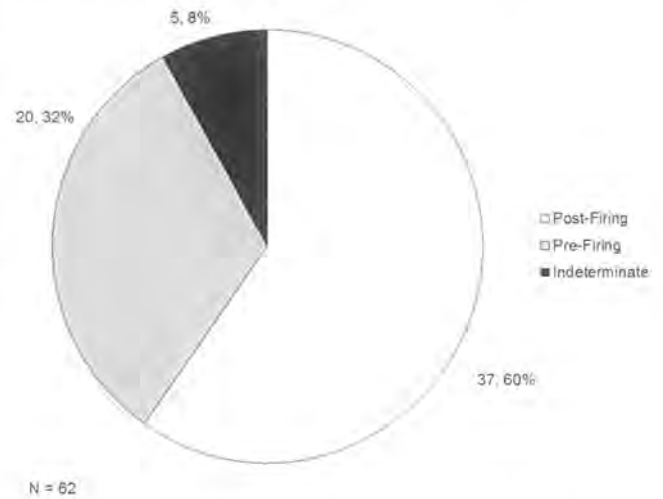


Figure 1: Perforation technique used – all sites

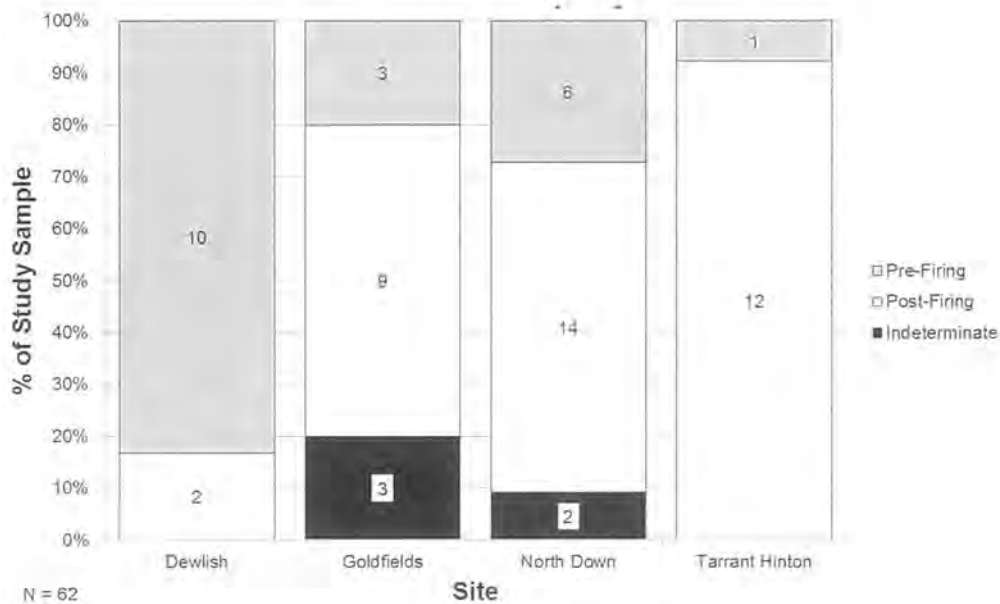


Figure 2: Perforation technique by site

A preferred base diameter for perforated-base vessels

Of the 62 perforated sherds/vessels, twenty-two were from a base which had a measurable diameter (two could not be measured). Measurable perforated bases ranged from 40 mm to 200 mm in diameter, with nineteen of the twenty-two (86%) being 80 mm or less. Twelve of the sherds/vessels (55%) had a base diameter of 80–89 mm (Figure 3).

Vessel bases in the 80–89 mm range were common across all four sites, with North Down and Goldfields having the highest incidence (Figure 4).

A preference for vessel base rather than body perforation

From the 62 perforated sherds/vessels, 59 perforations could be individually recorded in detail and were analysed by their position on the vessel (Figure 5). Forty-three (73%) of these 59 perforations were in the base. Perforations on the vessel body comprised slightly less than one quarter of the sample (14, 24%).

When analysed by site, perforations in the vessel base formed the majority of the samples from each of the four sites (Figure 6). The Tarrant Hinton sample contained the greatest proportion of base perforations at nearly 90%.

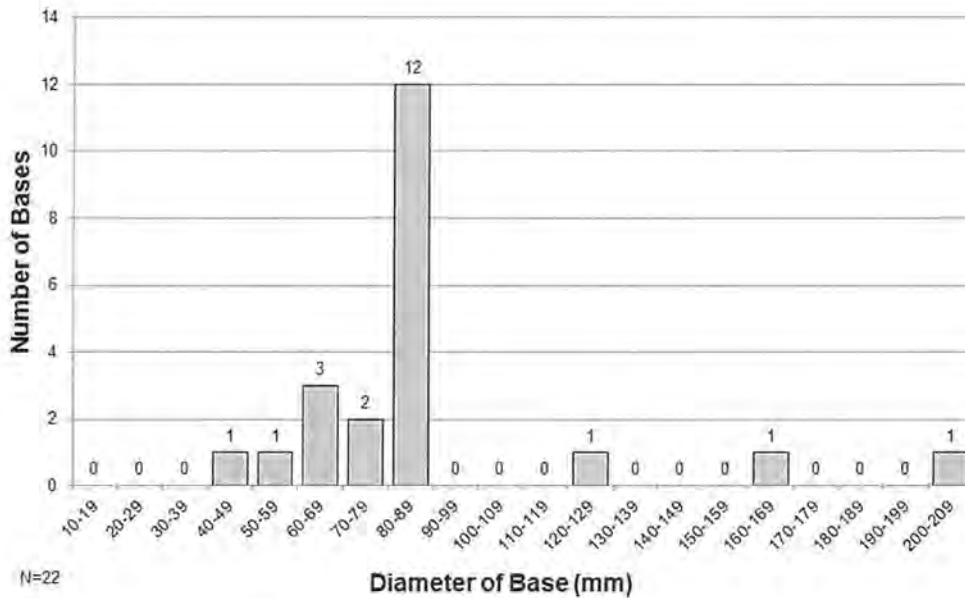


Figure 3: Base diameter of perforated sherds/vessels

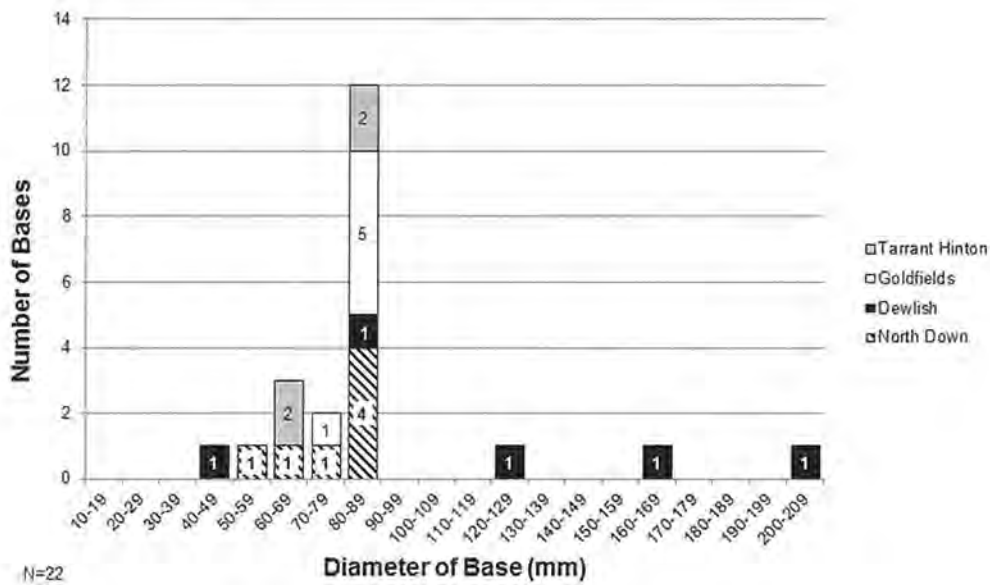


Figure 4: Base diameter of perforated sherds/vessels by site

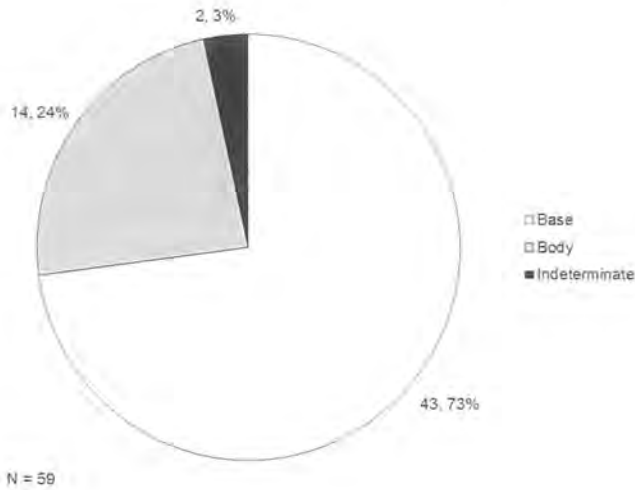


Figure 5: Individually recorded perforations by position on vessel

A preferred minimum diameter for holes made in the bases of vessels

Forty of the forty-three base perforations could be measured for the inner minimum diameter. These were analysed by size and site (Figure 7).

Dewlish had the greatest range of base perforation inner diameters from 2–20 mm. North Down and Goldfields showed similar ranges with 4–19 mm and 5–20 mm respectively. Tarrant Hinton had the smallest range of diameters, from 4–10 mm. North Down and Goldfields have similar profiles using this analysis.

The two base perforation diameters found on all four sites are 5 mm and 7 mm.

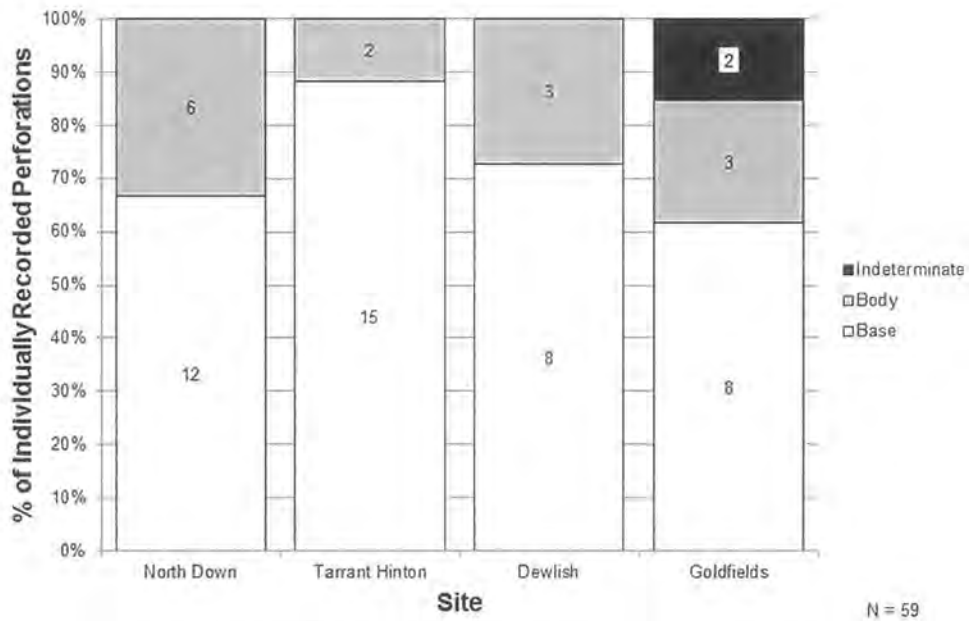


Figure 6: Individually recorded perforations by position on vessel and site

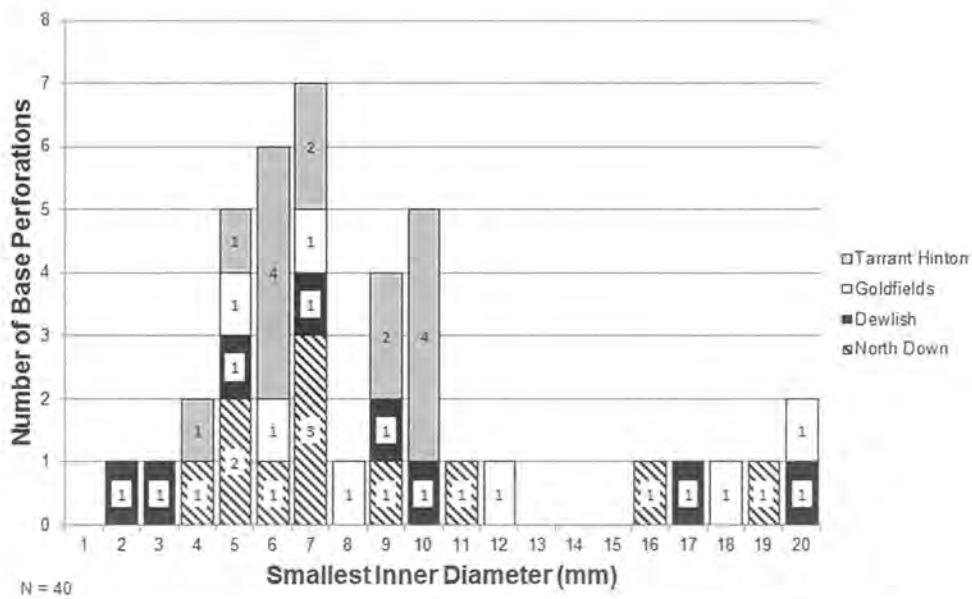


Figure 7: Individually recorded post-firing base perforations: Smallest inner diameter by site

Analysis and Discussion

At three of the study sites, it was more common to perforate vessels after firing, than to make or obtain vessels with perforations already present.

Base diameters may indicate that a particular size or form of vessel was selected for base perforation on all four sites, with the apparent preferred base size of 80–89 mm indicating a small-scale, domestic activity rather than an industrial or bulk function.

The prevalence of base over body perforation, may indicate a commonality of function for perforated pots across the four sites. It may also show a regional difference between the Durotriges and Atrebates (Fulford & Timby 2001, 293–297).

An apparent perforation diameter preference may indicate a potential commonality of function and/or perforation technique. A preference for post-firing base perforation was found in the study sample.

In existing research, Copley et al. (2005a, 895–908; 2005b, 485–503) discuss Durotrigian Iron Age vessels drilled post-firing, as part of the Maiden Castle pottery lipid analysis. Whilst dairy lipids were present in these vessels, the perforations cannot be directly linked to dairying and may have been drilled after the lipids had been absorbed (Copley et al. 2005b, 491). Reference is made to suggested Neolithic 'cheese strainers' in Copley et al. 2003 (1524) and Copley et al. 2005a (895) citing Bogucki 1988. However, Copley et al. 2005b (491) point out that these are very different in form to post-firing perforated Iron Age pots, which have a smaller number of larger perforations. In addition, Copley et al. 2005a (904) propose that butter was the most likely source of the dairy lipids in smaller vessels of that study, as opposed to lipids from the cheesemaking process.

Bogucki (1988, 89) draws attention to Continental Neolithic, Bronze Age and Roman vessels manufactured with a series of small perforations 2–3 mm in diameter made pre-firing, spaced at approximately 10 mm intervals. These are identified as pots for straining whey or honey. However, again, the Iron Age/Romano-British pots of the current study with fewer, larger perforations made in the base after firing, do not seem to directly correlate with these models.

Conclusions

The study has identified several potential trends around the perforation of late Iron Age/Romano-British vessels from south-east Dorset, as discussed above. No conclusions can yet be drawn regarding the reasons for base perforation, or the peculiar practice of perforating vessel bases post-firing. However, earlier lipid analysis suggests their use for food preparation or processing.

Due to the limited size of the current study sample and the lack of precise dating information for each study site (three were unpublished and still undergoing post-excavation analysis at the time of research), this paper constitutes preliminary research indicating potential directions for future study.

PostScript: During the 2011 excavation season at North Down, two perforated-base pots were recovered from pits, where they had been placed upside-down. They were full of a dark and apparently organic material, quite distinct from the chalk rubble pit fills. It is hoped that further analysis of the pot contents will take place. The material bears a remarkable resemblance to potting compost.

ACKNOWLEDGEMENTS

Sincere thanks to my long-suffering dissertation supervisor at Bournemouth University, Dr. Miles Russell, who oversaw my research. Thanks also to the many others who assisted.

REFERENCES

- Bogucki, P.I., 1988. *Forest Farmers and Stockherders: Early Agriculture and its Consequences in North-Central Europe*. Cambridge: Cambridge University Press.
- Copley, M.S., Berstan, R., Dudd, S.N., Docherty, G., Mukherjee, A.J., Straker, V., Payne, S. and Evershed, R.P., 2003. Direct chemical evidence for widespread dairying in prehistoric Britain. *Proceedings of the National Academy of Sciences of the United States of America*, 100 (4), 1524–1529.
- Copley, M.S., Berstan, R., Dudd, S.N., Aillaud, S., Mukherjee, A.J., Straker, V., Payne, S. and Evershed, R.P., 2005a. Processing of milk products in pottery vessels through British prehistory. *Antiquity*, 79, 895–908.
- Copley, M.S., Berstan, R., Dudd, S.N., Straker, V., Payne, S. and Evershed, R.P., Dairying in antiquity. I. Evidence from absorbed lipid residues dating to the British Iron Age. *Journal of Archaeological Science*, 32, 485–503.
- Fulford, M. and Timby, J., 2001. Timing devices, fermentation vessels, 'ritual' piercings? A consideration of deliberately 'holed' pots from Silchester and elsewhere. *Britannia*, 32, 293–297.

A Lead Pendant from Cerne Abbas

LAURENCE KEEN

In the list of accessions to the museum in 1931 (*PDNHAS*, 53 (1931), 7) is a lead disc, found at Alton Lane Farm, Cerne Abbas, and presented to the museum by J. A. Marsh, aged 11. David Ashford has kindly produced the documentation, which confirms the accession date as November 1931, the object having been found by Joseph A. Marsh, aged 11, 'on the wall board of a shed at Alton Lane Farm, Cerne Abbas', and donated by him. Kelly's *Directory of Dorsetshire* for 1931 lists a Chas. Hubert Cyril Marsh, farmer, Long Street, Cerne Abbas, who may have been the young man's father.

The disc (Figure 1) is about 32 mm in circumference, and has a maximum thickness of 7 mm. Cast, rather than stamped, on the obverse is a raised cross *pattée*, with a single dot between each arm: the two to the left are not as clear as those on the right. The raised parts are about 0.5 mm above the main body. Within the top plain circumference is a hole of 2 mm diameter, accommodated within a slight enlargement. The back is plain and the item weighs 48.41 g.

Col Drew, as Assistant Curator, received the object and recorded the relevant details. With its obvious religious overtones, he suggested that it might have been a 'weight for holding down priest's vestments', a thought printed in the acquisitions list.

No parallels for the object have yet been found. However, two lead discs with incised crosses may be related. The first, from St Augustine's Abbey, Canterbury, is 28 mm in diameter, and has a suspension hole (Sherlock and Woods 1988, 196, no. 54, fig. 60). As a parallel, a similar disc from the Dominican Priory, Oxford, is cited. This is 28 mm in diameter, and has a cross incised into one face: there is no suspension hole, but, as the rim is damaged, it could have had one (Lambrick and Woods 1976, fig. 12.33).

These three items should be compared with the extensive series of lead tokens. These tokens are cast or hammered and have no suspension holes. Even though some have raised crosses, and one has been excavated at

Battle Abbey (Hare 1985, fig. 48, 6), the crosses and monastic provenance need not imply a use similar to the pendants from Cerne, Canterbury and Oxford.

No firm conclusions about the function of these discs can be proposed. Col Drew's interpretation for the Cerne disc is unlikely. Rather, there is a distinct possibility that they were intended as mortuary discs to be placed on the breasts of monastic burials.

If this suggestion is correct, the discs need to be compared with a series of lead mortuary crosses, found not only in England, but in France, for the liturgical use appears to be similar. Ward Perkins (1940, 290) catalogued 'twenty-seven small, plain, leaden mortuary crosses', found with burials on the site of the Grey Friars, Newgate Street, London, perhaps fourteenth century in date. He refers to publications on crosses found in Canterbury and France (see Potts and Akerman below), and to a collection from Bury St Edmunds (Campbell below). From St Augustine's Abbey, Canterbury, a lead cross with incised inscriptions on both surfaces has a date of 1063 (Potts 1924). At least eight whole or fragmentary 'absolution' crosses, from the abbey cemetery at Bury St Edmunds, were found between 1849 and 1902, and others were found in 1791. Some have an incised inscription, and the letter forms suggest a twelfth-century or earlier date (Campbell 1998, 73–4, n. 54, and pl. XXVIIA).

In France, one was found in a garden in Angers. It was exhibited in London, and had inscriptions on both faces, one with the date 1136, and the name Claricia on the other (Akerman 1856–59).

There are probably many more examples from France of a similar date. The French literature has not been searched thoroughly, but the *Corpus* of French medieval inscriptions has published eight eleventh- to twelfth-century examples, with inscriptions from Périgueux, along with a clay mould, from burials of religious (*Corpus*, 1979, nos 23, 34–40, 42): an article by abbé Cochet is cited (1855–56), who referred to a cross found in the cloister of Lincoln cathedral, and another, found in the Chichester cathedral cemetery in 1830 (*ibid.*, 319).

With any consideration of lead crosses found in graves, the enigmatic lead cross of King Arthur, found in Glastonbury, needs a brief mention: while of an acceptable eleventh- or twelfth-century form, the epigraphy is earlier and the date of deposition uncertain (Alcock 1971, 73–80; Keen 1989, no. 33).

It is interesting to note that, in the ceremony for the burial of a dead monk, described by Lanfranc in the late eleventh century (Knowles 1951, 130), writings of absolution were placed on the body and read by the brethren:

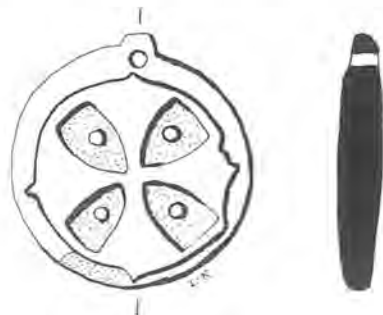


Figure 1: Cerne Abbas lead disc. Scale 1:1.
Drawn by Laurence Keen

Illi [fratres] diligenter illud in sepulchro componant, et absolutionem scriptam, et fratribus lectam, super pectus ponant. Knowles translates *absolutionem scriptam* as 'the scroll of absolution': the Latin could more likely refer to anything written, and covers the possibility of an inscribed lead cross, like those described above.

The Cerne Abbas pendant, probably of a late-fourteenth- or early fifteenth-century date, if it is correctly identified as a mortuary pendant, introduces a new class of lead mortuary cross. This note is published in the hopeful expectation that further examples may now be identified.

ACKNOWLEDGEMENTS

Ciorstaidh Hayward Trevarthen, Finds Liaison Officer (Dorset), Portable Antiquities Scheme, kindly searched the PAS database for parallels for the Cerne Abbas disc and provided extracts from the *Leaden Tokens Telegraph*. The author is indebted to Adrian James, Society of Antiquaries of London, for providing copies of some of the sources cited.

REFERENCES

- Alcock, L., 1971 *Arthur's Britain: History and Archaeology AD 367–634*, Allan Lane The Penguin Press, London.
- Akerman, J. Y., 1856–59 *Proceedings of the Society of Antiquaries of London*, 1st ser., 4, 211–13.
- Campbell, M., 1998 'Medieval Metalworking and Bury St Edmunds', in A. Gransden, ed., *Bury St Edmunds: Medieval Art, Architecture, Archaeology and Economy*, British Archaeological Association Conference Transactions, XX, Leeds, 69–80.
- Cochet, J. B. D., 1855–56 'Croix d'absolution placées sur les morts au moyen âge en France et en Angleterre', *Bulletin du comité de la langue, de l'histoire et des arts de la France*, 3, 306–24.
- Corpus 1979 R. Favreau, B. Lepland and J. Michaud, *Corpus des inscriptions de la France médiévale*, v, Dordogne, Gironde, Centre d'études supérieures de civilisation médiévale, Université de Poitiers, Poitiers.
- Hare, J. N., 1985 *Battle Abbey: The Eastern Range and the Excavations of 1978–80*, HBMCE, Archaeological Report 2, London.
- Keen, L., 1989 *William Barnes: The Somerset Engravings*, Somerset County Council Library Service, Taunton.
- Knowles, D., ed., 1951 *The Monastic Constitutions of Lanfranc*, Medieval Classics, T. Nelson and Sons, London.
- Lambrick, G., and Woods, H. 1976 'Excavations on the Second Site of the Dominican Priory, Oxford', *Oxoniensia*, 41, 168–231.
- Potts, R. U. 1924 'An eleventh-century burial cross at St. Augustine's, Canterbury', *Antiquaries Journal*, 4, 422–25.
- Sherlock, D., and Woods, H., 1988 *St. Augustine's Abbey: Report on Excavations, 1960–78*. Kent Archaeological Society, monograph iv, for HBMCE, Maidstone.
- Ward Perkins, J. B., 1940 *Medieval Catalogue*, London Museum Catalogues, 7, London Museum, London.

Three Romano-British Steles from Studland

PETER W. COX

During the archaeological monitoring of the construction of a new garden store at Hill Close, Studland (NGR SZ 0320 8221), in October 2011, three marker stones, or steles, were found in a deep soil overburden containing other dumped stone rubble. One of the three objects is made from Purbeck limestone (Figure 1a) while two are made in local heathstone (ferruginous sandstone) and may be incomplete (Figures 1b, c); each is an approximate frustum of a cone with a flat top and flat-tish base.

The limestone stele (a) is 600 mm tall. It has a generally smooth, dressed, surface with some natural fissuring and one slightly flatter face. There is no trace of an inscription, nor widening of the base to provide an anchor below ground. Object (b) is 900 mm tall. It has a carefully pecked surface on its upper sides and top; its base is left largely unworked and irregular, to provide an anchor. There is no trace of an inscription. The third example (c) is 850 mm tall and similar to (b), but with less working, rougher surfaces and with a more angular top and sides. The base is also left undressed. There is no trace of an inscription.

Although there is no direct dating evidence for the objects, their style and discovery within *c.* twenty metres of the (scheduled) Romano-British settlement at Woodhouse Hill (Field, 1966), as well as the presence of third- to fourth-century AD pottery in subsoil features in the immediate vicinity, indicate that they are of Romano-British date. Indeed object (b) is remarkably similar to a stele, found reused, in a third- to fourth-century AD wall foundation at Ower (Woodward 1987, 105-6). Steles in south Dorset are rare examples of a

tradition which may have originated in north-west France and which demonstrate the influence of cross channel links during the Roman occupation. A further example, broken, but seemingly in situ, has been recorded at Bestwall Quarry (Ladle, 2012).

The presence of these objects, associated with the Woodhouse Hill settlement, raises the possibility that steles were being manufactured on the site, using 'imported' limestone and local outcrops of sandstone. Such deposits occur on Woodhouse Hill and across much of Godlingston Heath to the west. The objects' presence also raises the possibility that a predominantly agricultural function for the 'cottage' site at Woodhouse Hill, as suggested by its excavator, should be reconsidered and a more diverse economic base attributed, at least during the later Romano-British period.

The steles have been returned to the site owners and will be erected in the garden. A detailed report on the site monitoring has been submitted to the Dorset County Council; Historic Environment Record. Illustrations are by Dan Carter.

REFERENCES

- Field, N., H., 1966 'Romano-British Settlement at Studland' *PDNHAS* Vol 87, 142-207.
- Ladle, L., 2012 'Excavations at Bestwall Quarry, Wareham 1992-2005, Volume 2: The Later Iron Age and Later Landscape' *DNHAS* Monograph series.
- Woodward, P., J., 1987 'The excavation of a Late Iron Age settlement and Romano-British Industrial site at Ower, Dorset' in Sunter, N., and Woodward, P., J., 'Romano-British Industries in Purbeck' *DNHAS* Monograph no. 6.

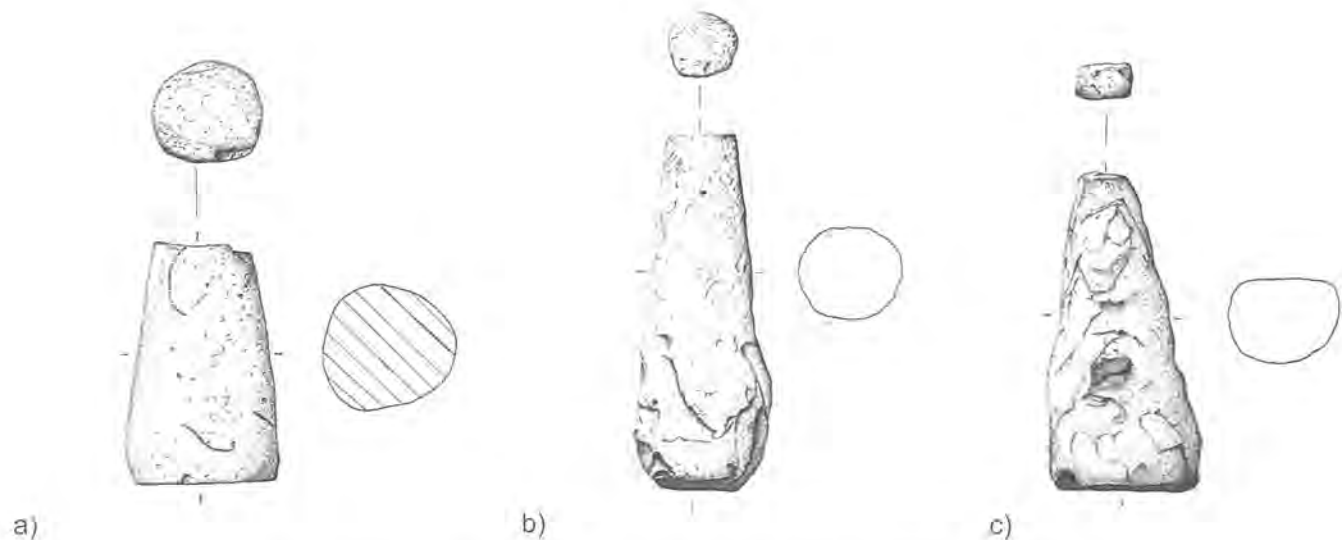


Figure 1: Romano-British steles from Studland (a) Purbeck limestone (b/c) Heathstone

The Excavation of a Late Bronze Age/Early Iron Age–Middle Iron Age Settlement at Home Field, Down Farm, Sixpenny Handley, Dorset

CHRIS ELLIS

with contributions from Pippa Bradley, Jessica Grimm, Matt Leivers, Jacqueline I. McKinley, Lorraine Mephram, Chris J. Stevens and Sarah E. Wyles

Summary

Excavation showed that an enclosure built in the Late Bronze Age/Early Iron Age (8th/7th centuries BC) was occupied for c. 300–500 years, before being abandoned in the Middle Iron Age. At least one Iron Age roundhouse, four and six-post post structures, pits and quarry hollows were found. The farming regime was a mixture of arable and pasture. Weaving and perhaps bronze and iron working were practised. The enclosure was later incorporated into a ‘Celtic’ field system that formed part of the Gussage Cow Down complex. There was some evidence for an earlier, unenclosed phase of Late Bronze Age/Early Iron Age settlement and also for activity in the Late Neolithic/Early Bronze Age and the Middle Bronze Age.

Introduction

The Down Farm Training Excavation was a five season (2004–2008) excavation of an enclosed settlement of later prehistoric date. The Home Field site (centred on NGR 399753 114545), lies in the middle of Cranborne Chase (Figure 1), one of the richest and most significant archaeological landscapes in southern England. A small number of watercourses within valleys which feed the Rivers Avon and Stour to the south cut across Cranborne Chase and drain to the south-east. The Home Field enclosure was sited on the south side of one of these valleys, the Allen Valley and lies at 76 m above Ordnance Datum (aOD) on a gentle, north-facing slope, with the ground rising to Gussage Cow Down to the south to a height of 110 m. The underlying geology is Upper Chalk which has a c. 50 mm thick tabular flint layer within it which sometimes is exposed at the surface.

Previous Work

The first investigations on the Home Field enclosure were by Martin Green between 1985–88 (Green 1986), with further work in 1995. This followed aerial photography by Christopher Sparey-Green in 1976, which showed a number of soil marks in Home Field, including a large enclosure associated with ‘Celtic’ fields and a large east–west meandering lynchet. A linear soil mark runs from the eastern side of the enclosure before turning north towards the lynchet (Figure 1). This complex of soil marks was considered in a RCHME commissioned aerial survey of the Bockerley Dyke area (Bowen 1990) which showed that enclosure lay within an extensive

‘Celtic’ field system running southwards up to the banjo enclosures on Gussage Cow Down (Figure 1). The survey also showed that a meandering lynchet north of the site, seen in 1976, continuing eastwards before ending at a sub-oval enclosure at Drive Plantation 900 m away (*ibid.*) at which Early Iron Age and Romano-British pottery and metalworking waste has been found (M. Green *pers. comm.*; Corney 1991). The Plantation Drive enclosure was later bisected by Ackling Dyke, the Roman road running from London to Exeter via Old Sarum. Investigations of the soil marks of the southern part of the field system on Gussage Cow Down by Charlie French recorded a thickening of the ploughsoil corresponding with the soil marks indicating where field banks (possibly hedged) used to stand, although there were no subsurface features or buried soils with associated finds to date them (M. Green *pers. comm.*).

Geophysical surveys of the Home Field enclosure, to the north and south of it and across the lynchet, were undertaken by Bournemouth University in 2004 and by Wessex Archaeology in 2007 and 2008 (Wessex Archaeology 2008). These surveys were undertaken with a fluxgate gradiometer (magnetometer) and all the results were inconclusive. Excavation has shown that this is due to the features being relatively shallow and being filled predominantly with chalk rubble.

In 1985 Martin Green initially investigated an oval soil mark immediately east of the enclosure and revealed two Early Iron Age ‘working’ or ‘quarry hollows’ (F1, F2) as well as a small number of mostly undated post-holes some of which may have been from a four-post structure (1197) (fig. 2; Green 1986). The larger quarry hollow (F1) contained a small quantity of abraded pottery and animal bone, a bone awl, a few pieces of bronzeworking waste, and a relatively large quantity of worked flint from two knapping clusters on the base of the feature (*ibid.*, 172).

A westwards extension of the trench in 1987–88 recorded another group of undated post-holes as well as a c. 4 m wide band of relatively unweathered chalk coincident with the soil mark of the eastern side of the enclosure, but there was no evidence for a ditch (Figure 2). This suggests that an enclosure bank, since removed, had protected the chalk from ploughing. There were two post-pits (F4–5) at the west of the trench, both 0.75–1 m across, 0.45 m deep and 2.8 m apart, with a post-hole (Ph17), possibly associated, between them. Both post-pits contained worked flint (14/1656 g) and Middle Iron Age pottery (29/342 g). Post-pit F5 contained more

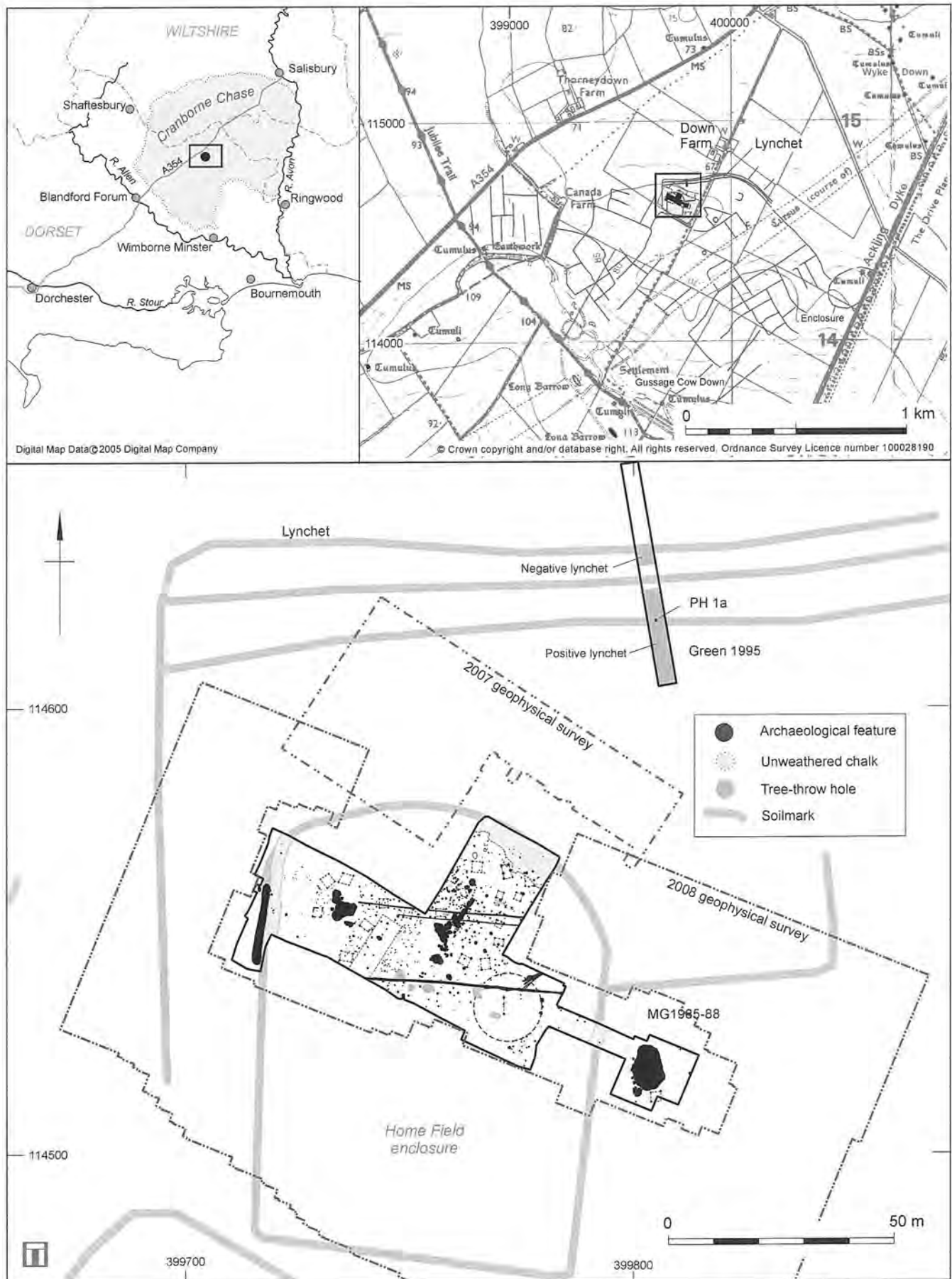


Figure 1: Location of Down Farm, Home Field and excavated areas



Figure 2: Phase plan of excavation

finds including animal bone (3/134 g), three clay loom weights (99/5099 g), and two large quern fragments (2/3942 g). Quern fragments were also found in F4 (6/8026 g).

In 1995 Martin Green investigated the lynchet in Home Field, *c.* 50 m to the north of the Home Field enclosure (Figure 1). This seemed to be a component of the extensive Gussage Cow Down field system and it survives as an earthwork. In the north of this trench a *c.* 4 m wide and 0.14 m deep shallow, concave feature represented the negative lynchet. To the south a 0.14 m deep and *c.* 11 m wide band of light brown silt, represented the positive aspect of the lynchet and contained a single sherd of Late Bronze Age/Early Iron Age pottery. A single, undated, possible post-hole (PH1a) was also recorded.

Methods

The Wessex Archaeology training excavation continued Martin Green's investigations, including the area excavated previously in a 107 m long transect across the width of the northern end of the Home Field enclosure (Figure 2). Some 0.23 ha. was excavated of which most (*c.* 0.2 ha. 87%) was in the interior of the enclosure. Topsoil and subsoil were removed by machine, the exposed chalk was then hand cleaned and brushed, and all excavation was undertaken by hand. The excavation was mapped using GPS surveying equipment. All smaller discrete features (post-holes, pits) were at least half-sectioned but those that were part of structures, or contained a 'placed deposit', were fully excavated. Larger features such as quarry hollows were partially excavated with quadrants and ditches were sectioned. A large number of small stake-holes were recorded but only a small number of these were sectioned. All excavated features were backfilled with spoil.

At the end of each season an interim report was produced and posted on Wessex Archaeology website: www.wessexarch.co.uk/training/index.html

In post-excavation the records were collated in a database to enable the use of GIS software to study finds distributions and to attempt to define post-built structures.

The Home Field Enclosure

The sub-rectangular enclosure recorded from soil marks is 0.70 ha. in extent, aligned roughly north-south with a curved northern side (Figures 1–2). It is approximately 100 m long and 80 m wide long and there is a discernible difference in the soilmark along the west side. To the west and east of the enclosure's north end are sub-rectangular soilmarks that clearly respect the enclosure, as does the lynchet clearly visible to the north (Plate 1). No features within the enclosure have been recorded from aerial photographs.

In the 2004–2006 seasons, a 32 m length of the west side of the enclosure was investigated (Figure 2). This showed the marked difference in the soil mark along this side of the enclosure was due to the presence of an 18 m long ditch (237). The ditch had rounded terminals and was 1.12–3 m deep, shallowing slightly to the north, and was generally 1.5–6 m wide with steep/near-vertical sides and a 0.5–0.6 m wide flat base (Figure 3). A number of antler pick marks were recorded in the base of ditch segments 217/241 and clearly reflected the exploitation of cleavage planes in the natural chalk.

There was no evidence in the ditch fills for an internal bank but a *c.* 3.5 m wide band of relatively unweathered natural chalk immediately east of the ditch coincided with the soilmark further to the north. This would seem to indicate the location of an internal bank and this may be supported by the evidence for the land snails from the ditch.

A small quantity of finds was recovered from the ditch and included worked and burnt flint, residual Beaker (2400–2100 BC), Early Bronze Age (2200–1600 BC) and Middle Bronze Age (1500–1100 BC) pottery, fired clay, iron slag and stone. A possible placed deposit, the right side of a cattle skull, was found near the base of the ditch (Figure 2). A small quantity of Late Bronze Age/Early Iron Age pottery (8th/7th centuries BC; 18 sherds/43 g), came from the primary fills. The ditch cut two post-holes (278, 288), one of which (288) also contained Late Bronze Age/Early Iron Age pottery. Combined with the location of quarry hollows F1 and F2 and the two six-post structures (1427, 1428), this evidence suggests that there was some settlement on the site in the Late Bronze Age/Early Iron Age before the enclosure was built. A small quantity of Middle Iron Age pottery (400–100 BC) was recovered from the secondary fills of the ditch.

Post-built structures

Some 335 post-holes were recorded, many of which (76) are part of post-built structures, particularly four and six-post post structures, but some are from one, or possibly two, roundhouses. Careful analysis of the dimensions of the post-holes was undertaken using a database but this did not identify any additional structures but a number of possible alignments may represent fence lines.

Four and Six-post structures

There was a concentration of four-post structures (seventeen in total) in the northern and western parts of the excavation. The four-post structures are generally roughly square or rectangular, generally *c.* 1.9–2.4 m, with two being *c.* 2.8 m by 1.8 m (1109–10). The post-holes were generally 0.3–4 m in diameter and 0.2–4 m deep with vertical sides and flat bases. In the few cases where post packing of rammed chalk or flint was present (718, 1110, 1583), these indicate the timber posts

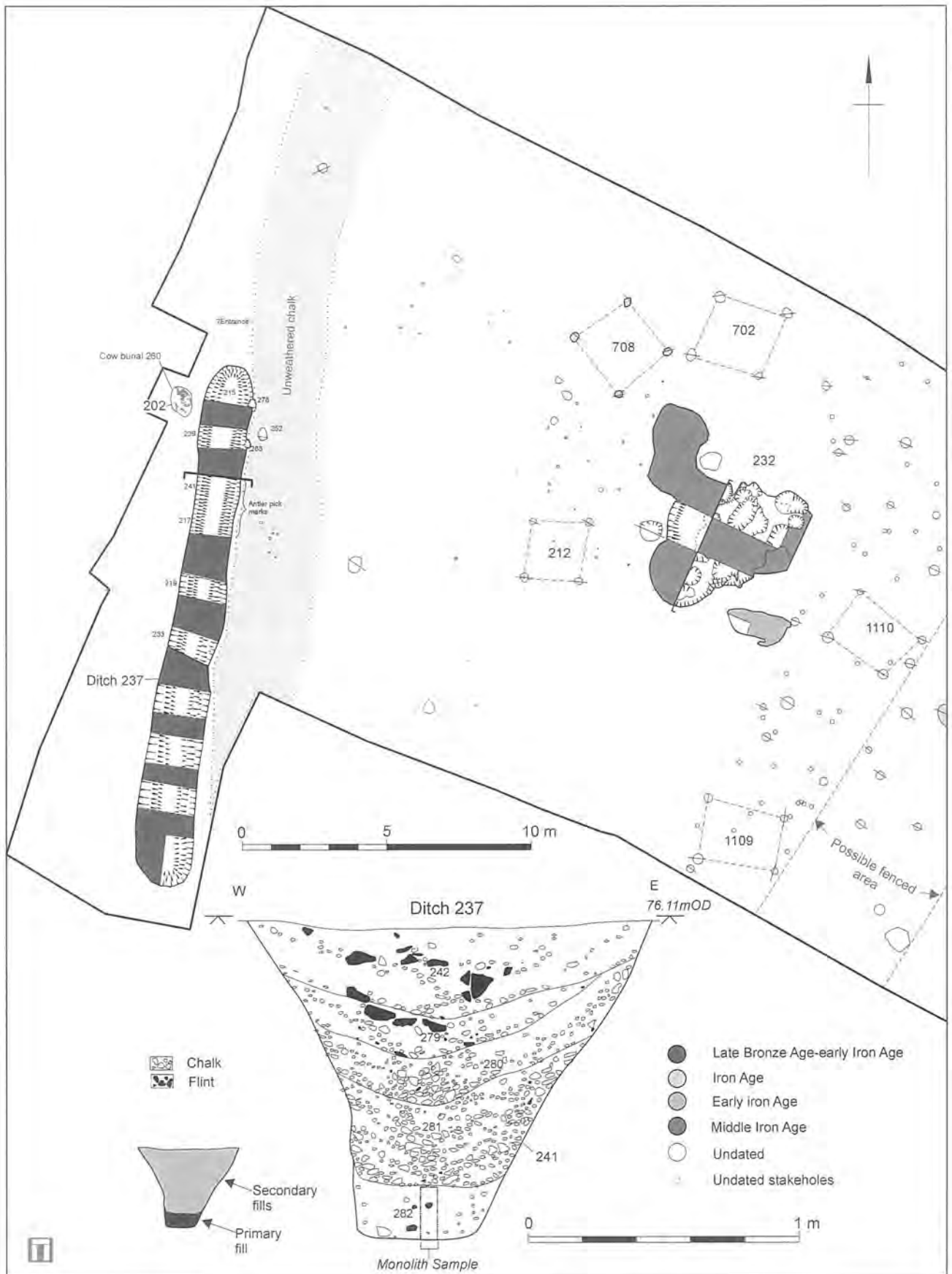


Figure 3: Sections of enclosure ditch 237

originally erected within them were 0.17–2 m in diameter. Only five of the four-post structures were dateable to the Late Bronze Age/Early Iron Age (1584–6) or Iron Age (718, 1430) although a small amount of worked and burnt flint, animal bone and a single piece of iron slag (601) was recovered from these and other structures.

In the north of the excavation two six-post structures (1427–8) were recorded. Both lay partially in an area of the unweathered chalk that was coincident with the enclosure soil mark. Their position suggests they belong to the earlier, open, phase of settlement. These two structures were *c.* 3.5 m by 1.9–2.3 m in extent and the post-holes were generally 0.3–0.5 m diameter and 0.17–0.3 m deep. The post-holes contained worked and burnt flint and 1428 also contained Iron Age pottery. Post-pipes in structure 1427 indicate that the posts were 0.18–0.26 m diameter, a similar size to the four-post structures. Both 1427–8 fall with the ‘Type A’ category of large six-post structure defined at Danebury (Cunliffe 1984a, 91). These structures are widespread in the later prehistoric period and are usually thought to be granaries or stores.

Roundhouse 142

Two features (F4–5) recorded in 1987–8 proved to be the entrance to a roundhouse (142) (Figure 4). Further post-holes from the building were excavated in 2004, but were generally very truncated and contained little except a few pieces of worked and burnt flint and sandstone. The other post-holes of the building were probably destroyed by ploughing. The roundhouse would have been quite large, with a diameter of 15 m and an east facing entrance, 2.8 m wide. The majority of the finds a came from the entrance post-pits.

Three post-holes of similar size and with similar fills (105, 109 and 122) lay within the roundhouse and are possibly contemporary. They contained a small number of finds including worked and burnt flint and Middle Iron Age pottery. The alignment of these and their central location might suggest a small screen or other internal division of the roundhouse.

Another possible roundhouse entrance, or two-post structure (774), was recorded in the central eastern part of the excavation area. Post-pits 556 and 569 lay 2.70 m apart (Figure 4) and were sub-oval in shape (*c.* 0.7–8 m) and 0.45–8 m deep. Post-pipes were clearly visible in both suggesting the timbers were 0.26–8 m diameter. A total of 31 kg of flint blocks and flint nodules had been used as packing in 556. Finds included worked and burnt flint as well as three sherds of Early Iron Age pottery from the primary fill of post-pit 569.

Quarry hollows

As well as the two quarry hollows (F1–2) outside the enclosure examined by Martin Green, similar features were found in the west (232) and central northern parts

(192, 1115–16) of the excavation, including six discrete pits (Figure 2). They were all irregular in shape (generally 2–4 m in extent), sometimes linear in arrangement (5–7 m), with irregular bases (0.3–7 m deep). This reflects their *ad hoc* development from numerous discrete, but partially inter-cutting, small quarries. The fills contained more chalk rubble towards the bases, suggesting that in part they were deliberately backfilled. The upper fills contained more soil, suggesting natural infilling. The quarry hollows contained most of the finds by number, especially worked flint (59.5%), pottery (*c.* 60%) and animal bone (64%).

Pits

Thirteen pits were found and unlike many Iron Age settlements on chalk downland, no large grain storage pits were found. The small pits were generally sub-oval or sub-circular, 0.3–1.4 m in extent and only 0.12–36 m deep. A few had noteworthy finds.

Pit 906 was sub-circular, 0.65 m across and only 0.2 m deep. It had been backfilled with a burnt charcoal-rich material that included over 21 kg (32%) of all the burnt flint from the site. There was no evidence for *in situ* burning, suggesting that the burnt material came from nearby hearths. One quarter of an Early Iron Age All Cannings Cross bowl had been placed against the southern side of the pit (Figures 5, 6).

Pit 947 was sub-circular, 2.5 m by 1.6 m in size and again only 0.2 m deep. A deposit (995) containing Middle Iron Age pottery, worked and burnt flint, animal bone and a human femur had been placed upon a 0.15 m thick layer of burnt flint and chalk nodules (948) in the centre of the pit. The deposit included a relatively large number of potsherds (59/154 g) that represented at least two vessels, including part of the rim possibly from a saucepan pot and a decorated body sherd. The flints included eight flakes, two flake cores and one scraper of Late Neolithic/Early Bronze Age date. It is possible that they had been curated before being deposited as part of the deposit.

Undated pit (202) was located to the west of the northern ditch terminal and contained a cattle burial (260) – (Figure 3; Plate 2). The oval pit was aligned north/south and was 1.4 m long, 0.95 m wide and only 0.12 m deep, with concave sides and an irregular base. The burial (260) was fully-articulated and laid on its right side with the head to the north, though the skull and most of the left side of the skeleton was missing, perhaps from plough damage.

Stake-holes

Some 305 undated stake-holes were recorded over most of the excavation area, but particularly in the north and central parts. There were no stratigraphic relationships with dated features. The stake-holes were clearly visible as small sub-square or sub-circular features but only

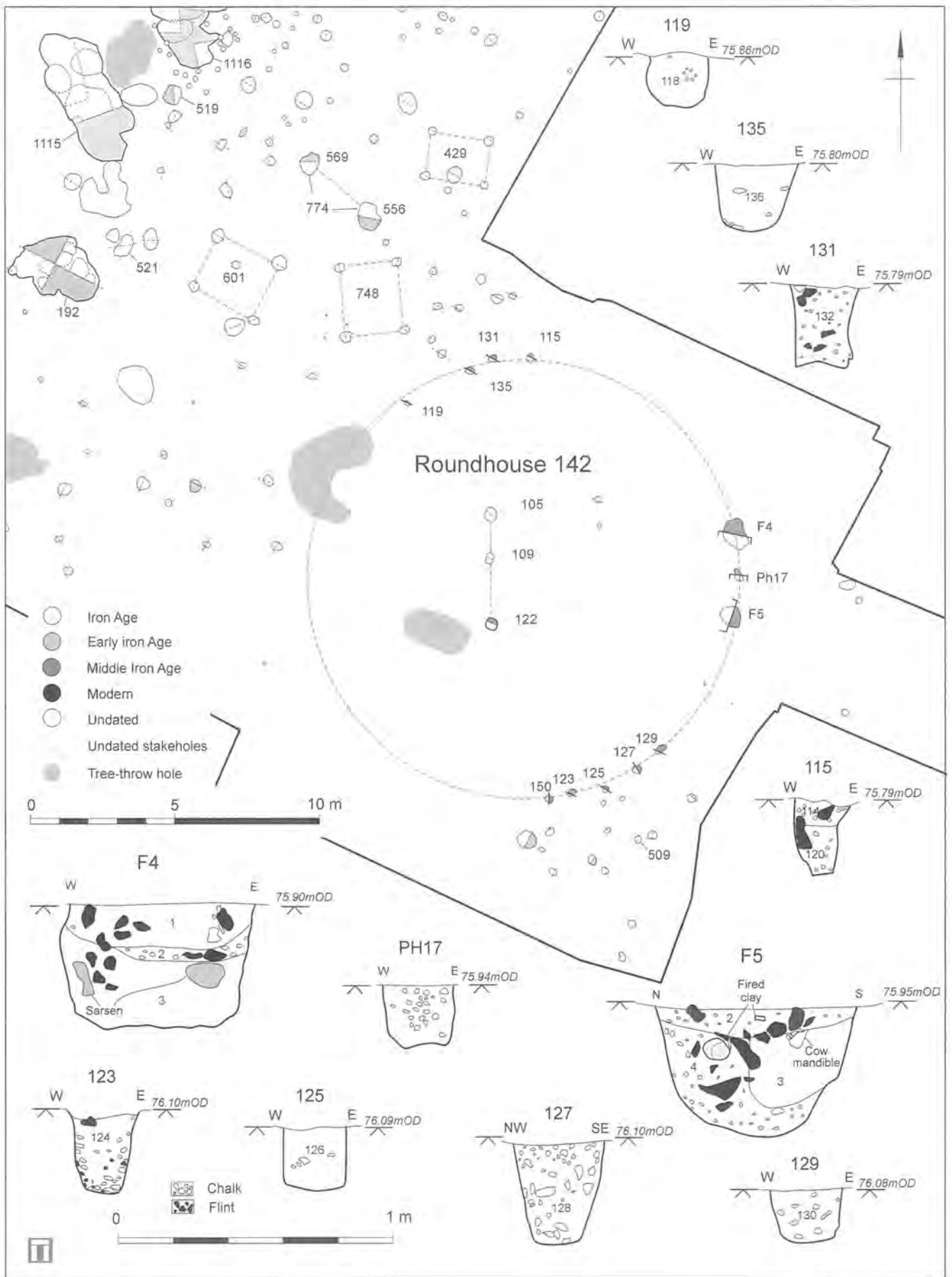


Figure 4: Plan and sections of the post-holes of roundhouse 142

nine were sectioned and recorded. The stake-holes were generally 50–60 mm in extent and 0.03–0.20 m deep with near-vertical flat sides and concave bases giving a narrow 'V-shaped' profile. They were filled with mid to dark brown silty clay containing very common very small chalk inclusions (<2 mm). In the west of the excavation two clusters of stake-holes are separated by a rectangular area *c.* 7 m wide and may define a pen for animals or similar structure that was repaired or rebuilt several times (Figure 2).

Tree-throws

Eight small tree-throws were identified. They were irregular features, only 0.5–1.2 m in extent and 0.1–3 m deep with irregular bases. They contained very few finds suggesting that they antedate the settlement.

Pottery *Matt Leivers*

Introduction

The pottery comprises 935 sherds weighing 4,308 g ranging in date from Beaker to Late Roman, but with the majority belonging to the Early and Middle Iron Ages, where the prevalence of long-lived shell-tempered and sand-tempered fabrics inhibits the dating of featureless sherds. The material consisted for the most part of small and highly abraded featureless body sherds in shell-, sand-, or sand-and-flint tempered fabrics, with a few grog-tempered sherds and a single sherd having limestone/calcite temper.

The material was analysed in accordance with the nationally recommended guidelines of the Prehistoric Ceramics Research Group (PCRG 1997). Sherds were examined using a X20 binocular microscope to identify clay matrices and tempers, and fabrics were defined on those bases. No petrological analyses have been undertaken: the predominant fabric types meant that such a technique would not have been particularly enlightening. Information was recorded on a database.

The condition of sherds was assessed on the basis of the degree to which edges and surfaces were abraded. The assemblage was dominated by sherds in moderate to poor condition, as reflected in the average sherd weights. There was consequently a general lack of diagnostic sherds and only a few reconstructable profiles (Figure 5).

Pottery by chronological period

In total eleven fabric groups were defined and these are detailed in Appendix 1. The breakdown by fabric group is given in Table 1.

Beaker and Collared Urn

The earliest material consists of seven residual sherds, all of which may originate from a single Beaker, from the

primary and secondary fills of ditch 237 (segments 217/241). All are in a grog and flint-tempered fabric. Decoration comprises bands of diagonal cross-hatching between two or three horizontal rows of rectangular-toothed comb impression. The top of the rim has further short comb impressions. Two other grog-tempered residual sherds from ditch secondary fills are not chronologically diagnostic, but on the basis of the fabric may belong to the Early Bronze Age – perhaps deriving from a Collared Urn.

Middle Bronze Age

One large body sherd, in a coarsely flint-tempered fabric with an applied vertical lug, can be identified as Middle Bronze Age, deriving from a bucket-shaped vessel of Deverel-Rimbury type from ditch 237 (Figure 5, 1). Other sherds in this same fabric (from the ditch and pit 849) are likely to be of this date.

Some other flint-tempered sherds from post-hole 885 and ditch 237, although undiagnostic, could be of similar date but are more likely to fall within the post-Deverel-Rimbury tradition of the Late Bronze Age to Early Iron Age. The material from Martin Green's 1987/88 excavation is perhaps Middle Bronze Age, although this date is by analogy with other material only, and consequently not secure. There are no distinguishing features amongst the sherds.

Late Bronze–Early Iron Age

In terms of type and date, a few of the sherds would appear to be Later Bronze Age or transitional Later Bronze Age/Early Iron Age. Sixteen flint-tempered sherds were recorded from primary and secondary ditch fills and quarry hollow 232, and appear to belong to coarseware vessels. A further sherd from the ditch primary fill has a raised cordon and may belong to a Post-Deverel-Rimbury tradition, and eighteen finer flint-tempered sherds from ditch 237, quarry hollow 232 and post-hole 288 maybe part of a small bowl. Otherwise the sherds are undiagnostic. On the basis of their fabric they are likely to be of Late Bronze Age or Early Iron Age date.

The bulk of the material belongs to the All Cannings Cross early style of the eighth and seventh centuries BC (Cunliffe 1991, 64–5), with a portion probably of All Cannings Cross–Meon Hill style, of the fifth to third centuries BC (Cunliffe 1991, 64–5, 71–2).

Rims tend to be simple, upright, rounded or flattened, generally with neutral forms, although open and closed examples are present. A few sherds have burnished and/or slipped and smoothed surfaces. Most are finewares, probably bowls, while thicker, coarse pieces probably derive from jars. One bowl has a sharp carination and upright concave neck (Figure 5, 2), a second is shouldered, with a short neck, everted rim, and vertical fingernail impressions on the shoulder and

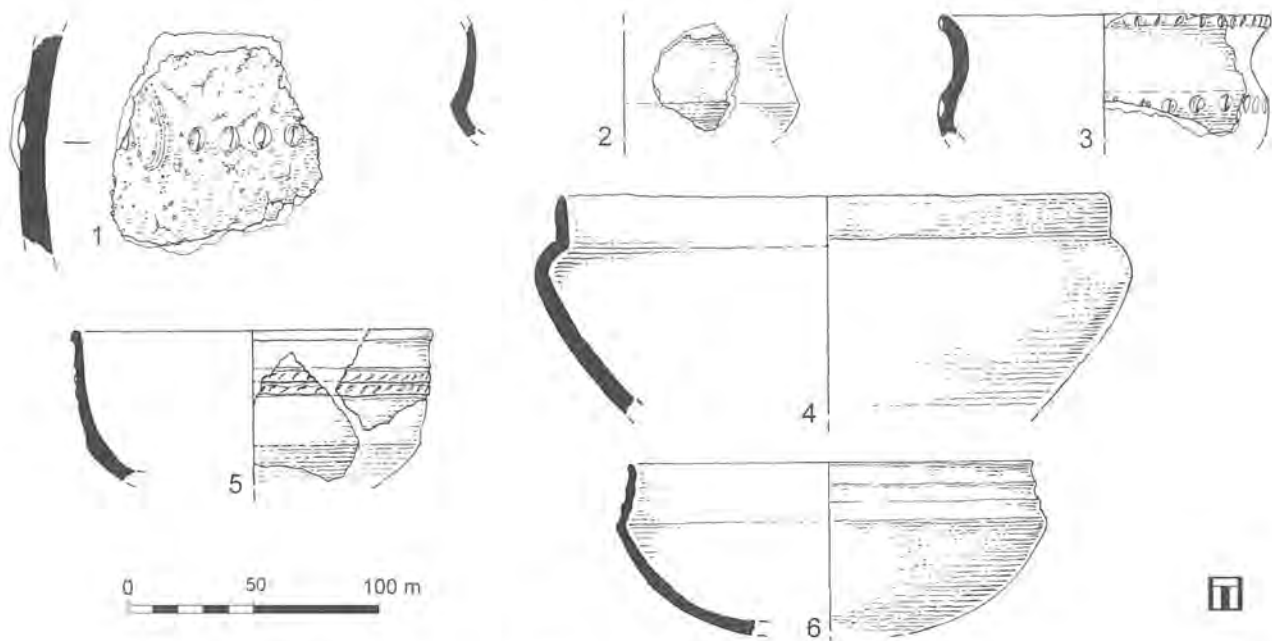


Figure 5: Prehistoric Pottery

- 1 PRN 168 One large body sherd in a coarsely flint-tempered fabric, with an applied vertical lug and finger tip impressions (context 362, ditch 305)
- 2 PRN 36 One sherd from a red-finished bowl with a sharp carination and upright concave neck (HF86 F1 spit 5)
- 3 PRN 61 One sherd from a shouldered bowl with a short neck, everted rim, and vertical finger nail impressions on the shoulder and rim (HF86 F1 SEQ)
- 4 PRN 91 Several sherds (some glued) to form part of a red-finished bowl with a high shoulder, no neck, and a plain upright rim (HF86 F1 SWQ spit 4)
- 5 PRN 172-3 Three sherds (two join) from a red-finished bowl with a high shoulder, shallow neck, and upright beaded rim. Decoration in the neck consists of three incised horizontal lines with short diagonal incisions on the intervening bas-relief (context 520, post-pit 519)
- 6 PRN 194 Approximately 25% of the rim of a fineware furrowed bowl, red-finished (context 907, pit 906)

rim (Figure 5, 3). Several sherds refit to form part of a red-finished bowl with a high shoulder, no neck, and a plain upright rim (Figure 5, 4). One fineware sherd has a sharp carination with burnishing and a single very fine incised line above the shoulder. Several sherds from pit 519 derive from a red-finished bowl with a high shoulder, shallow neck, and upright beaded rim. Decoration in the neck consists of three incised horizontal lines with short diagonal incisions on the intervening bas-relief (Figure 5, 5). Another fineware furrowed bowl, red-finished, came from pit 906 (Figure 5, 6). One sherd is perhaps from a coarser jar with shallow tooled diagonal lines below the everted rim; a second, from quarry pit 979, comes from a coarseware jar with finger-impressed shoulder.

Decoration consists of furrowing (several sherds may be from Furrowed Bowls – a few better preserved sherds are burnished and/or red-finished), scratch-marks, shallow blunt circular impressions, deeper triangular impressions on or below carinations, deep longitudinal incisions, deep circular impressions, finger nail impressions and applied cordons. One burnished sherd has deep rectangular-sectioned incised lines at right angles.

Middle Iron Age

Some sherds have been dated to the Middle Iron Age, largely on fabric grounds alone, most coming from quarry hollow 232 and ditch 237. Fabrics are predominantly sandy (39 sherds from quarry hollow 232 and post-hole 115, part of roundhouse 142, some with sparse flint temper (20 sherds from quarry hollow 232, ditch 237, a plough scar and unstratified). A further carinated sherd from 232 in a sandy fabric is very thin-walled and has been burnished on both surfaces, while another from the same context appears to be the base of a Saucepan Pot. Two sherds from 232 have shell temper.

Two small groups of sherds from pit 947, in well sorted, flint-tempered fabrics, can be dated as Middle Iron Age. This feature also contains a beaded rim from a convex vessel, possibly a saucepan pot form, and a body sherd with tooled decoration.

Other undiagnostic body sherds in sandy and shelly fabrics are broadly dated as Early/Middle Iron Age. The largest group (of thirteen sherds) come from a single vessel in post-hole 1206 (four-poster structure 1430). This is thin-walled and has a better surface finish (although still not especially fine) – the vessel was probably a bowl.

Romano-British

Two Romano-British sherds were recovered; one from the topsoil and the other unstratified. Both are rims and from Greyware vessels: one is an Early Roman form, the other Late Roman.

Worked Flint *Pippa Bradley and Matt Leivers*

A total of 803 pieces of worked flint was recovered (Table 2). The assemblage is largely composed of debitage with very few retouched forms recovered; characterising and dating the assemblage therefore largely relies on the technological traits of the material and, to a lesser extent, its contextual associations.

Raw Material

The majority of the assemblage is nodular flint. The predominant colour of the visible surfaces is pale grey to dark grey-brown. Almost all of the flint has a cream/white patina (most pieces are entirely patinated) and in many instances patination occurs over edge damage. Edge damage occurs on a few pieces, but it is not possible to distinguish between damage resulting from use and accidental damage. Given the context of most pieces, the latter is perhaps more likely. The source of the material is undoubtedly local, probably obtained from the Upper Chalk during the digging of pits and ditches or during cultivation. A few of the worked pieces were burnt.

Technology

The majority of the debitage consists of large, thick, rather crude flakes which have mostly been hard-hammer struck. Little care has been taken during reduction as evidenced by wide platforms, obtuse angles, the lack of core preparation and failed removals and knapping accidents such as hinge fractures. These attributes all indicate a later prehistoric date (*cf* Ford *et al.* 1984; Humphrey and Young 1999; Young and Humphrey 1999; Brown and Bradley 2006; Humphrey 2007). The cores recovered are all flake types which have mostly been fairly crudely worked, with little evidence for maintenance of working faces during knapping.

Very few retouched pieces were found (Table 2) and are confined to piercing tools, crude pounders or choppers and minimally worked scrapers, including a crude example from a post-hole (530). This limited range of retouched forms and their often perfunctory retouch has been recognised as a characteristic of later prehistoric flintworking. Retouch seems to have been used for functional reasons rather than aesthetic ones, for example to strengthen or re-sharpen a working edge (Humphrey and Young 1999; Young and Humphrey 1999; Brown and Bradley 2006).

A few blades or bladelets were recovered but technologically these pieces are indistinguishable from the rest

of the assemblage and are probably fortuitous removals rather than elements of a deliberate blade production. However evidence for more controlled knapping is hinted at by a small quantity of material which may be of Late Neolithic or Early Bronze Age date. Eleven pieces from pit 947, from layers either side of placed deposit 995 (contexts 948–9) are the clearest examples of earlier flintworking. Here a nodule seems to have been knapped, with a number of the larger fragments subsequently being used as hammers. A small neatly worked scraper would suggest that this material is earlier than the majority of the assemblage. Six rejuvenation flakes and a crested piece would also support the suggestion of limited Late Neolithic or Early Bronze Age activity.

Provenance

A large proportion of the flint came from quarry hollow F1 and consisted mainly of simple flakes in all stages of reduction (Table 3). Mostly, this was recovered from two distinct knapping clusters on the base of the feature (Green 1986, 172). One of the piercers and one pounder/chopper was also recovered from amongst this material.

Small quantities of flint were recovered from the fills of post-holes, pits, the enclosure ditch and quarry hollows. Other than F1, no context produced significant quantities of flint perhaps suggesting a background scatter across the site. A conjoin between a flake and a core was found in roundhouse post-pit F5, suggesting that knapping may have occurred within or close to the roundhouse (142) and its entrance.

Discussion

With a few exceptions the technology and typology of the assemblage is consistent with a Late Bronze Age or Iron Age date. The characteristics of later prehistoric flintworking have recently been reviewed (Humphrey and Young 1999; Young and Humphrey 1999; Young 2007) and identify a number of characteristics including: the use of highly localized raw materials, small assemblage numbers, crude hammers, simple irregular cores and squat flakes using direct hard hammer percussion, possible evidence for recycling earlier lithics and apparently unskilled knapping (obtuse-angled, thick, wide platforms; common hinge/step terminations; irregular dorsal scars; common chips and chunks; incipient cones of percussion on core striking platforms), coupled with a limited range of implement types. The assemblage displays a number of these characteristics and is perhaps the result of *ad hoc* knapping episodes when suitable raw materials were encountered.

The slight evidence for earlier flintworking indicates some possible Late Neolithic or Early Bronze Age activity in the area, comparable with the residual Beaker pottery and possible Collared Urn from the ditch, which probably reflects the known Late Neolithic and Beaker period activity recorded in Fir Tree Field to the east of Home Field (Barrett *et al.* 1991).

Other Finds *Lorraine Mephram*

Burnt Flint

A total of 2,201 fragments (66,305 g) of burnt, unworked, flint was recovered. By far the greatest quantity by weight (32%) was recorded from pit 906, which contained a placed deposit on a layer of burnt and unburnt flint. Several other features contained c. 300–800 g of material though a few pits contained larger quantities e.g. pit 849 (1,365 g), post-holes 760 (3,136 g) and 574 (2,426 g). This material is frequently associated with prehistoric activity and probably derives from domestic cooking activities or possibly industrial activities.

Fired Clay

Three cylindrical loom weights and 96 other fragments (5099g) were recovered from F5, part of the entrance to roundhouse 142, representing 96% of all the fired clay from the site. Two loom weights are complete, and have a single perforation through the upper end (Plate 3); the other is incomplete and unperforated.

Two fired clay fragments with impressed marks were recorded from the basal fill of quarry hollow 232. One had a wattle mark (>13 mm in diameter), and may therefore be daub from a building, the other example had faint parallel incisions on the surface, again likely to be daub. All other fragments were featureless.

Stone

In total seventeen pieces of stone were identified as worked or possibly utilised. A further 76 pieces of stone recovered showed no signs of working or utilisation, although some were in stone types that matched the worked objects (e.g. greensand).

Quern fragments were the most obviously identifiable pieces (ten examples). These occurred in greensand (ten fragments, two joining), and other sandstone (one example). The larger quern fragments came from quarry hollow F1, five (two joining) from post-pit F4, and one from post-pit F5 (both post-pits Middle Iron Age). A further fragment came from an Early Iron Age post-hole in the centre-south of the site (574). Of the greensand fragments, one rotary quern (F4) and two saddle querns (F4, F5) were recognised. Other fragments are smaller and exhibit worn surfaces, but are not attributable to any specific form.

Three rounded quartz pebbles are not immediately local to the site. Only one, from Middle Iron Age pit 947, shows definite signs of utilisation, in the form of distinct wear around one end, presumably resulting from use as a rubber. One other pebble, broken and slightly burnt, has possible wear in a similar position (F5). One small piece of chalk (20 mm x 18 mm), from pit 521, has a small roughly central perforation, although whether deliberate or natural is unknown.

Metal objects

Metal objects were recovered mainly from quarry hollows F1 and F2. The majority of pieces were small, featureless, fragments of copper alloy and iron. Recognisable pieces included a square-headed iron nail or pin and a copper alloy rivet, both from F1. A few small droplets of copper alloy might be derived from bronze casting. A single fragment of iron slag was recorded from the latest fill of quarry hollow F1. Other related material mostly comprised vesicular fuel ash slag from the latest fill of ditch 237 and post-hole 533 (four-post structure 601).

Human Bone *Jacqueline I. McKinley*

Only one human bone was recovered; the shaft of a left, adult femur from pit 947, which together with other material in layer 995 of the pit probably represents a placed deposit. The bone is in poor condition, being heavily etched and eroded; both articular ends are missing, the bone exhibiting old, dry-bone breaks.

The recovery of disarticulated human bone from a variety of deposit/feature types, commonly as fragments rather than entire bones and predominantly comprising either skull or long bone, is a well recognised phenomena across the Late Bronze Age–Middle Iron Age (Wilson 1981; Whimster 1981, 183; Walker 1984; Wait 1985; Needham and Spence 1996; Lawson 2000). It is accepted that many such assemblages must derive from activities other than just the disturbance of earlier graves and may be linked to complex mortuary rites, transformation processes and the ‘status’ attributed to human remains once the latter has been effected (Whimster 1981, 178; Cunliffe 1992; Brück 1995; McKinley 2008). The high frequency of femora amongst such disarticulated fragments is likely, at least in part, to be due to taphonomic factors, but the common predominance of the right side suggests deliberate manipulation and selection (*ibid.*).

The femur from Down Farm partly falls within this observed pattern, with the exception of its siding; the possible significance of the latter — e.g. selected material or ‘remnants’ following such selection — has been discussed elsewhere (Cunliffe 1995, 418; McKinley 2008), but the probability remains that the inclusion of the femur within pit 947 is unlikely to have been purely accidental.

Animal Bone *Jessica Grimm*

The type of features and the generally poor bone preservation mean that only small assemblages were recovered from individual features. None of the assemblages yielded sufficient identifiable material to render the results more or less valid for the whole site in any

particular period. All analysis results should therefore be treated with caution.

For each animal bone fragment, the following characteristics were recorded where applicable: species, bone element and side, fusion, mandible wear stages (following Grant 1982), sex and measurements (following von den Driesch 1976). The positions of butchery marks and burnt areas were described using the pictorial system of Lauwerier (1988). Ages were estimated using Habermehl (1975) and Jones (2006). Evidence of gnawing, condition (on a scale of 1 to 5) and zonation using the system of Serjeantson (1996) was also recorded.

Conjoining fragments were counted as one bone in order to minimise distortion. Fragments that could not be identified to species or family were recorded as small, medium or large mammal. A database with full details is in the project archive.

Taphonomy

The assemblage overall was in a poor condition, and bone surfaces were severely eroded (Table 4). This results in a small proportion of identifiable bones (24.5%). Equally, the number of complete bones (10.3%) is quite low and consists mainly of teeth. This high proportion of loose teeth can be explained by their resilience to adverse bone conditions; they were often the only identifiable remains in a context. It is likely that information on gnawing and butchery has been lost due to the erosion of the bone cortex. The low proportion of burnt bone shows that burning waste or using bone as fuel was not a common practice.

Late Bronze Age/Early Iron Age

The nine bones dating to this period come from the fills of ditch 237 (segments 217, 219, 239, 241). Among the identifiable bones were a cattle femur fragment and a right cranium fragment of a sub-adult animal. The size of the horn core fragment indicates a short-horned type. Three sheep/goat bones were also identified.

Early Iron Age

The largest assemblage dates from this period and comes from the fills of pits (906), post-holes (760, 1152), post-pits (519) and quarry hollows (192, 1116 and F1). The majority of the material came from quarry hollow F1. The identifiable bones indicate the presence of horse, cattle, sheep/goat, pig and a rodent species (intrusive). Horse was identified from a mandibular tooth. The fifteen cattle remains include a humerus fragment with a fused distal epiphysis, but a right femur fragment has an unfused proximal epiphysis.

The 50 identifiable sheep/goat remains consist mainly of maxillary and mandibular teeth ($n = 34$). Both femora have fused proximal epiphyses; a tibia has an unfused distal epiphysis. A right mandibula could be aged as stage G (four to nine years). Pig is represented

by thirteen maxillary and mandibular teeth. As pig bones are less resilient than the bones of larger mammals and sheep/goat, the absence of other bones is no surprise. Most teeth indicate sub-adult or juvenile animals. One lower canine belonged to a sow.

Middle Iron Age

The material of this period comes from a variety of types of feature including ditch 237 (segments 217, 233, 239, 241 and 355), pits (947), roundhouse (142) post-hole (103) and quarry hollows (232). Identified material includes the remains of cattle, dog/fox, hare, sheep and sheep/goat. The twenty-two cattle remains include a scapula and a proximal radius with fused epiphyses. A left tibia has a fused distal, but an unfused proximal epiphysis. A left mandibula belongs to an animal aged 15–18 months. The seven sheep remains consist of maxillary and mandibular teeth of juvenile and adult animals as well as a metapodial fragment. A right milk fourth premolar could be identified as being from a juvenile sheep (Payne 1985). A small canine probably belonged to a dog or a fox. A right radius and ulna belonged to a hare.

Iron Age

The bones dating more generally to this period consist of cattle, sheep/goat and dog from the fills of pit 849 and quarry hollow 1116.

Topsoil and undated

Apart from the cattle burial in undated pit 202, none of the undated finds are described here. The cattle burial (260) in undated pit 202 (Plate 2) is assumed to be of Iron Age date and consists mainly of bones from the right body side, and it is not certain that the burial was of a whole animal. The deposition of articulated/associated animal bone groups (ABG's) in pits and settlement enclosure ditches was a widespread practice in the Iron Age which has been interpreted as representing ritual behaviour (Grant 1984a; 1984b). The only butchery marks are a set of many fine horizontal cut marks just below the proximal articulation on the dorsal side. The marks are probably the result of skinning. As all epiphyses of the long bones had fused, the animal was at least 42–48 months of age. However, the epiphyses of the vertebrae had not fused, so the animal was probably not much older than this. A height of the withers of *c.* 107 cm (Matolcsi 1970) is indicated.

Charred Plant Remains

Sarah F. Wyles and Chris J. Stevens

Only very sparse quantities of charred plant remains were recovered by standard flotation methods from a total of eighteen bulk samples from a range of features across the site. The charred remains were poorly

preserved and only those which could be at least tentatively identified to a species group are tabulated below (Table 5), following the nomenclature of Stace (1997). Full details are available in the project archive.

While grains of hulled wheats, emmer or spelt (*Triticum dicoccum/spelta*), are known from the Neolithic period onwards, chaff is generally recovered less frequently and in lower numbers prior to the later Bronze Age. It is notable that previous work on a large number of samples from Bronze Age features within the Down Farm area only produced sparse charred remains, with more evidence for barley (*Hordeum vulgare* s.l.) than hulled wheats and no chaff fragments (Jones 1991). Much larger quantities of charred plant remains were recovered from the Iron Age settlement at Gussage All Saints, c. 4 km to the south (Evans and Jones 1979) than from Home Field. However, this may be a reflection of the type and depth of features sampled, as the features richest in plant remains at Gussage All Saints were pits. Overall, the poor charred plant assemblages recovered are more similar to those recovered from earlier Bronze Age features in the Down Farm Study Area (Jones 1991), than those from Gussage All Saints. They appear to reflect an area of low level agricultural activity, with a mixed land use of pasture and arable during the Late Bronze Age and Iron Age periods.

The finds of hazelnut shell (*Corylus avellana*) fragments from enclosure ditch 237 are of some interest. While commonly recorded on Neolithic sites, and often on Middle Bronze Age sites, they are more rarely recorded from Iron Age contexts apart from where accompanied by high remains of cereals and wood charcoal. Only a few hazelnut shell fragments were recorded from Neolithic contexts, and none from the Bronze Age features during previous work at Down Farm (Jones 1991), and none also from the richer Iron Age samples at Gussage All Saints (Evans and Jones, 1979). The retrieval of small quantities of hazelnut shell and sloe (*Prunus spinosa*) fragments from the enclosure ditch, may, rather than representing a significant exploitation of wild foods, simply indicate the small scale collection of such remains from hedgerows.

Land Snails Sarah F. Wyles

A series of twelve contiguous samples from the northern terminal of enclosure Ditch 237 (Table 6), segment 355 and three sub-samples from segment 217 of the Enclosure ditch were processed by standard methods (Evans 1972). Nomenclature is according to Kerney (1999).

Both sequences of mollusc assemblages through the enclosure ditch appear to show that although the ditch was built in an open environment, there were areas of localized shade. The sequences were dominated by the shade-loving species together with *Pomatias elegans* an

intermediate species. The presence of an internal bank would provide an ideal niche rock-rubble habitat for the rupestral shade-loving species such as *Helicigona lapicida*, *Acanthinula aculeata* and Clausiliidae (Evans and Jones 1973), while *Pomatias elegans* would thrive on patches of disturbed ground and short trampled grass on the bank. The other shade-loving and intermediate species are more indicative of long unkempt grassland, both within and along the edge of the ditch. There is no indication of any areas of arable in the immediate vicinity, as although the presence of *Pomatias elegans* in significant numbers can be seen as indicating the onset of cultivation nearby, the occurrence of open country species in significant numbers would also be expected.

Earlier molluscan analyses in the Down Farm Area by Entwistle and Bowden (1991) indicated that an area of a predominantly open landscape of grassland or arable had become established by the Iron Age. They concluded that although there were ecological differences between two of the study sites during the Iron Age, namely shady environments, mainly of scrub and long grass, in the vicinity of the Dorset Cursus 1984 sequence (c. 800 m to the east of Home Field) and of open areas of cultivation in the Wyke Down henge sequence, these developed from an already established division in the local land-use pattern.

Further molluscan work carried out on Iron Age sequences as part of the study on the prehistoric landscape development and human impact in the upper Allen valley showed similar open landscapes and environments (Allen 2007). For example, at Gussage Cow Down the mollusc assemblages indicated that the Iron Age ditch was cut through an area of loose soil created by clearance or cultivation and that stable grass or arable landscapes existed during the period in which the main fills of the ditch formed. At Monkton-up-Wimborne, c. 2 km to the north-east, the assemblages from the colluvial sequence are thought to probably represent arable and mixed pasture at the base and an open arable landscape or a landscape stripped of turf at the top (*op. cit.*, 176).

The predominant local landscape environment during this period appears to be a mixture of areas of arable and pasture, with areas of localized shade.

Discussion

Though the excavations in Home Field, Down Farm have been relatively limited, a transect 80 m long and 20–45 m wide across the full width of the northern part of the enclosure was completed.

The recovery of small quantities of Beaker, possibly Early Bronze Age, and Middle Bronze Age pottery as well as worked flint of Late Neolithic/Early Bronze Age date, all suggest that there was some earlier activity on the site. This material is no doubt to be associated with

the nearby Grooved Ware, Beaker, and Middle Bronze Age settlement at Fir Tree Field (Barrett *et al.* 1991; Green 2000; French *et al.* 2007).

The post-holes cut by the enclosure ditch, as well as six-post structures and quarry hollows close to or outside the later enclosure suggest that the building of the enclosure was preceded by a short phase of unenclosed settlement in the Late Bronze Age/Early Iron Age. As the enclosure itself dates to the eighth/seventh centuries BC there may not have been much a gap, if any, between these two phases.

The enclosure had a ditch along part of its western side but the remainder of it appears to have been an earthen bank. This bank is represented by a soil mark caused by relatively unweathered bands of natural chalk. Even though the presence of a flanking ditch might be thought likely geophysical surveys have not confirmed its existence.

As recorded, the enclosure has as an extended D-shape, measuring *c.* 100 x 80 m and enclosing 0.70 ha and is comparable in size and character with many relatively small Iron Age enclosures in Wessex (Cunliffe 1984b). These represent the settlements of single or small numbers of related households, sometimes occupied over many generations, with links to local and regional exchange networks for materials and finished products. The Home Field enclosure was occupied for *c.* 300–500 years before being abandoned in the Middle Iron Age (5th–3rd centuries BC). As relatively little Middle Iron Age pottery was found, this suggests that occupation did not continue long into this period.

Most of the excavated features are undated and some may be associated with the Late Bronze Age/Early Iron Age open settlement (and residual Late Bronze Age/Early Iron Age pottery was also found in some later features) and possibly the Late Neolithic to Middle Bronze Age activity. Of those features that can be dated, most belong to the Early Iron Age or more broadly to the Iron Age. A small number date to the Middle Iron Age and include post-pit F4 in roundhouse (142), a large quarry hollow (232) and the pit (947) that contained a placed deposit.

It is difficult to discern specific activity areas within the excavated area though the comparative rarity of houses and material from them such as daub may suggest that residential areas lay outside the excavation. A significant concentration of post-holes, many undated and unallocated to structures, was recorded in the northern and western parts of the excavation yielding, for a comparatively small excavation, a relatively large number of four and six-post structures in comparison to settlements like Little Woodbury, Wiltshire (Bersu 1940), Gussage All Saints (Wainwright 1979) and Old Down Farm, Hampshire (Davies 1981). Traditionally interpreted as raised granaries, these structures could also have had other uses. There were few storage pits and

they were all quite shallow, the large beehive shaped pits characteristic of so many Iron Age settlements in Wessex were absent.

At least one large roundhouse (142) was recorded in the eastern part of the excavation, with another possible example or a two-post structure (774) in the centre. Although no hearths were recorded the burnt flint and charcoal-rich filling of Early Iron Age pit 906 seems likely to derive from hearth rakings. As large roundhouses tend to date to the Early rather than Middle Iron Age (e.g. Harding *et al.* 1993) it is possible that the Middle Iron Age pottery from roundhouse 142 relates to the dismantling or abandonment of the house. Against this possibility is the point that larger roundhouses often have a double ring of posts, and also the presence of Middle Iron Age pottery in the row of three postholes in the centre of the house which, if contemporary with the house, may be part of an internal screen of the sort seen in the large Early Iron Age house 3 at Longbridge Deverill Cow Down, Wiltshire (Chadwick Hawkes 1994, 65 fig. 4) and closer to Down Farm, perhaps also at Pimperne (Harding *et al.* 1993, 32–3, fig. 16).

The charred plant remains and also the land snails suggest a mixed land use of areas of pasture and arable with relatively low level agricultural activity, with hulled wheats, emmer or spelt, being grown. The presence of chaff indicates that the crops were processed at the settlement. In comparison to nearby Gussage All Saints only relatively small quantities of cereals were found but this may reflect the type of features excavated as most of the more abundant samples at Gussage came from large storage pits. The small quantities of hazelnut and sloe may reflect the gathering of wild foods.

The small quantity of animal bone was in poor condition but the presence of sheep (hoat) cattle and pig is typical of Iron Age sites as is the presence of horse, which occurred in large numbers at Gussage, dog (or fox), and the occasional wild animal, in this case, hare (Hambleton 1999). Although the assemblage is biased towards the resilient teeth, other parts of the animal body were present, indicating that animals were slaughtered on or near the site.

In pit 947 animal bone and a single human bone was included in a deposit deliberately laid on a layer of burnt and worked, and unworked flint. The human bone was a femur, typical of the isolated bones found on later prehistoric settlement, though most of these tend to be from the right side, not the left side as is the case at Home Field.

Manufacturing activities at the settlement included textile manufacture, as represented by the loom weights, and the working of copper and iron is suggested by a few droplets of bronze and a single fragment of iron slag. The flint assemblage is typical of the Late Bronze Age/Early Iron Age with simple tools being produced from local materials, but the quartz pebbles, perhaps

used as rubbers, came from slightly further afield. It is notable that the loom weights are cylindrical, which are typical of the Bronze Age, and not the triangular form typical of the Iron Age. The presence of the weights in a post-pit that was part of the entrance to roundhouse 142 may further suggest that the Middle Iron Age pottery from the entrance does not date its construction.

The presence of greensand and sandstone quern fragments, with two saddle stones and one rotary stone being represented, indicate exchanges over a distance of c. 10–30 km distance. Only the droplets of bronze hint at wider contacts but bronze could have arrived at the settlement in the same local exchange networks as the querns.

Roundhouse (142) had an east facing entrance, which corresponds well with the known orientations of Iron Age roundhouses (Oswald 1997). This pattern has been suggested to point to the significance of the sunrise to mark time in the agricultural cycle and also to divide the space within roundhouses (Oswald 1997; Fitzpatrick 1994; 1997; Parker Pearson 1996; 1999), although Pope has suggested more prosaic reasons for these patterns (Pope 2007). These spatial and depositional patterns might also explain the location of the (undated) cattle burial near to the northern terminal of the enclosure ditch, with part of a cattle skull from a sub-adult animal nearby in the base of the ditch. Perhaps an entrance was located along the western side of the enclosure; east and/or west facing entrances to enclosures being the norm in the Iron Age (Hill 1993; 1995; 1996).

The enclosure can be set within its immediate landscape. It is situated at the northern edge of the Celtic field system that is draped across the north facing slope of Gussage Cow Down. The northern limit of this system is defined by the c. 900 m long, meandering, east–west aligned lynchet or boundary which is clearly visible on the aerial photograph (Figure 1; Plate 1). This lynchet, which runs immediately north of the Home Field enclosure also marks the geological boundary between the chalk and the hill-wash deposits and gravel of the Allen Valley to the north (Green 2000, 129). The differing geologies were probably used differently in Iron Age farming. The west end of the lynchet respects the enclosure but the chronological relationship between them is not clear (Figure 1; Plate 1). The eastern end of the lynchet terminates at the oval shaped enclosure at Drive Plantation. The limited dating evidence for the lynchet from the 1995 excavations, a single sherd of Late Bronze Age/Early Iron Age pottery, hints that it may be broadly contemporary with the Home Field enclosure.

The field systems to the south of the enclosure do not encroach on it but again the chronological relationship is not known. The more regular pattern of the field system to the south and east may indicate a different date from this part of it; the banjo enclosures at Gussage Cow Down 700 m to the south are of middle or Late Iron Age

date (Corney 1989). If the more irregular fields close to Home Field and on the north facing chalk slope are contemporary with the enclosure, they may have been used for arable with the lynchet marking the boundary of pasture in the lower lying Allen Valley. Although the Home Field settlement was abandoned in the Middle Iron Age, the enclosure may have continued to be used as part of the Late Iron Age field system.

Postscript *Margaret Bunyard*

The project was established and primarily funded by Wessex Archaeology as a training excavation which included workshops on specialist subjects and demonstrations of iron smelting, flint knapping and pottery. Daily reports were posted on the Wessex Archaeology website, including podcasts: www.wessexarch.co.uk/training/index.html

Overall 140 people took part in the training excavation, ranging widely in experience and age. Many were keen to learn all aspects of archaeological excavation and recording whereas others preferred to extend their knowledge of particular aspects of archaeological practice including surveying, or the analysis of pottery, animal bone, worked flint or palaeoenvironmental evidence. The feedback from all the courses was excellent and many participants went on to further their knowledge and experience in archaeology. In both archaeological and learning terms, the project was a great success, and this is in no small part due to the energy and enthusiasm of all the people that took part.

ACKNOWLEDGMENTS

The project could not have been undertaken but for the generosity shown by Dr Martin Green, the landowner and accomplished archaeologist. Wessex Archaeology would like to thank him for his continued support during the five seasons work in Home Field, Down Farm and access to his excellent museum and on-site facilities during the fieldwork. On-site seminars by Wessex Archaeology and other specialists were given by Matt Leivers, Stephanie Knight, Kayt Marter-Brown, Pippa Bradley, Mike Allen, Charlie French, Chris Stevens and Jessica Grimm. A number of demonstrations were also by Martin Green and Phil Harding (flint knapping), Jake Keen and Mike Tizzard (iron smelting), and John Winterbottom (pottery manufacture). We would like to thank all the participants for showing such enthusiasm, good nature and a zest for learning, even on the hottest or wettest of days!

The fieldwork was directed at various times by Chris Ellis, Catriona Gibson and Dave Godden with assistance from Andy Armstrong, Cat McHarg, Doug Murphy, Talla Hopper, Ellie Brook, Barry Hennessy, Gemma White, Cat Matthews and Christo Nicolle. The geophysical surveys were undertaken by Paul Baggaley

and Ben Urmston assisted by Louise Tizzard and Stephanie Arnott. The post-excavation archiving and database work was completed by Jens Neuberger, Paul Cripps, Cat Matthews, Richard Potter and Simon Reames. The illustrations are by S. E. James and

Christopher Sparey-Green kindly gave permission to use the aerial photograph of Home Field. The project was managed for Wessex Archaeology by Margaret Bunyard, Education Manager, and this report was edited by Andrew Fitzpatrick. IT 29



Plate 1: Home Field viewed from the north-west in 1976. Photograph courtesy of Christopher Sparey-Green



Plate 2: Cattle burial 260, pit 202. Viewed from the west.
Scale: 1 m



Plate 3: Loom weights from roundhouse post-pit F5.
Scale: 50 mm

Table 1: Prehistoric pottery fabrics totals (Number/Weight)

Fabric	No. sherds	Weight (g)	Average Sherd Weight (g)
C1	1	7	7
F1	115	360	3.13
F2	5	127	25.4
F3	2	28	14
G1	7	24	3.43
G2	2	19	9.5
Q1	92	385	4.18
Q2	342	1277	3.73
Q3	147	588	4
SH1	210	1417	6.75
SH2	12	76	6.33
Total	935	4308	4.61

Table 2: Summary of worked flint

Flakes	Blades, bladelets	Cores, core fragments	Retouched forms	Total
Wessex Archaeology excavations (2004–08)				
189 (including 2 crested pieces and a rejuvenation flake)	2	13	6 (3 scrapers, 3 choppers)	210
Martin Green excavations (HF 86–88)				
563 (including 5 rejuvenation flakes)	7	18 (16 cores, 2 core fragments)	5 (3 pounder/ choppers, 2 piercers)	593
Total	9	31	11	803

Table 3: Summary of flint from quarry hollow F1

Flakes	Blades, bladelets	Cores, core fragments	Retouched forms	Total
543 (including 5 rejuvenation flakes)	7	12 (10 flake cores, 2 flake core fragments)	2 (1 pounder, 1 piercer)	564

Table 4: Taphonomic data for the faunal assemblage

Period	N	NISP	Burnt %	Loose teeth %	Preservation
Late Bronze Age/Early Iron Age	9	5	–	11	Poor
Early Iron Age	432	81	2.5	12.3	Poor
Middle Iron Age	73	32	1.4	20.5	Poor
Iron Age	6	5	16.7	33.3	Poor
Topsoil	37	8	–	–	Poor
Undated	145	41	–	5.5	Fair
Total	702	172	1.9	11.3	Poor

Table 5: Summary of charred plant remains

Feature	Context	Sample	Vol	Flot size	Comments
Pit 906	907	28	20	200	<i>Avena/Bromus</i> sp (C)
Post-hole 1376	1377	35	10	15	<i>Triticum</i> sp grain frags (C)
Enclosure Ditch 237, seg 217	218	2	30	500	? <i>Hordeum vulgare</i> sl grain frags (C), <i>Vicia/Lathyrus</i> sp (C), <i>Corylus avellana</i> frags (B)
	272	3	30	100	? <i>Hordeum vulgare</i> sl grain frags (C), <i>Prunus spinosa</i> frags (C)
	275	4	20	25	? <i>Hordeum vulgare</i> sl grain frags (C), <i>Triticum dicoccum/spelta</i> glume base (C), <i>Corylus avellana</i> frags (C).

KEY: A = ≥10 items, B = 9 to 5 items, C = <5 items.

Table 6: Land snails from Enclosure Ditch 237

Site Phase Feature Type Feature Context	Late Bronze Age/Early Iron Age Enclosure Ditch 237														
	Segment 355											Segment 217			
Sample	351		352			353						275	272	218	
Depth (m)	12	13	14	15	16	17	18	19	20	21	22	23	4	3	2
	1.1–	1.0–	0.9–	0.8–	0.7–	0.6–	0.5–	0.4–	0.3–	0.2–	0.1–	0.0–	spot	spot	spot
Weight (g)	2000	1500	1500	1500	1500	1500	2000	1500	1500	1500	2000	1500	1500	1500	1500
Open country species															
<i>Pupilla muscorum</i>	–	–	–	–	–	C	–	–	–	–	–	C	C	C	–
<i>Helicella itala</i>	C	–	–	–	–	C	C	–	–	–	–	B	C	C	C
<i>Vallonia</i> spp.	C	–	–	–	–	–	–	–	–	–	–	–	C	B	B
Introduced Helicellids	–	–	–	–	–	–	–	–	–	–	–	–	–	C	C
Intermediate species															
<i>Trichia hispida</i>	B	C	–	–	–	–	C	C	C	C	C	B	C	B	A
<i>Pomatias elegans</i>	–	–	–	–	–	–	–	A	–	A	A	A	+	C	B
<i>Cochlicopa</i> spp.	–	–	–	–	–	–	–	C	–	–	–	C	C	C	B
<i>Cepaea/Arianta</i> spp.	–	–	–	–	–	–	–	C	+	C	C	+	C	–	–
<i>Punctum pygmaeum</i>	–	–	–	–	–	–	–	–	–	–	–	C	–	C	C
Shade-loving species															
<i>Carychium</i>	C	–	–	–	–	C	–	A	B	C	C	A	C	A	A
<i>Discus rotundatus</i>	C	–	–	–	–	–	–	C	C	C	C	A	C	A	A
<i>Acanthinula</i>	–	–	–	–	–	–	–	C	–	–	–	C	–	C	C
<i>Oxychilus</i>	–	–	–	–	C	C	C	C	C	–	C	B	C	B	B
<i>Aegopinella</i> spp.	C	–	–	–	–	–	–	C	C	C	C	B	C	B	B
<i>Vitrea</i> spp.	–	–	–	–	–	C	C	C	–	–	–	C	–	B	A
Clausiliidae	C	–	–	–	–	–	–	+	–	–	–	C	–	C	C
<i>Helicigona lapicida</i>	–	–	–	–	–	–	–	C	C	C	C	C	–	C	C
<i>Ena</i> spp.	–	–	–	–	–	–	–	–	C	–	–	–	–	C	C
Burrowing species															
<i>Ceciloides acicula</i>	–	–	–	–	–	–	–	B	–	–	C	B	–	C	B
Approx. Totals	14	2	0	0	1	10	6	38	25	35	36	85	25	80	100

REFERENCES

- Allen, M.J., 2007 'Land use and Landscape development: the molluscan evidence', in French *et al.* 2007, 151–89.
- Barrett, J. C., Bradley, Green, M., 1991a *Landscape, Monuments and Society*. Cambridge University Press, Cambridge.
- Barrett, J., Bradley, R. and Hall, M. (eds), 1991b *Papers on the Prehistoric Archaeology of Cranborne Chase*. Oxbow Monograph 11, Oxford.
- Bersu, G., 1940 'Excavations at Little Woodbury, Wilts', *Proceedings of the Prehistoric Society* 6, 30–111.
- Bowen, H. C., 1990 *The Archaeology of Bokerley Dyke*. HMSO, London.
- Brown, A., and Bradley, P., 2006 'Worked flint', in A. M. Cromarty, A. Barclay, G. Lambrick and M. Robinson, *Late Bronze Age Ritual and Habitation on a Thames Eyot at Whitecross Farm, Wallingford. The Archaeology of the Wallingford Bypass 1986–92*. Thames Valley Landscapes Monograph 22, Oxford, 58–70.
- Brück, J., 1995 'A place for the dead: the role of human remains in the Late Bronze Age in Britain', *Proceedings of the Prehistoric Society* 61, 245–77.
- Chadwick Hawkes, S., 1994 'Longbridge Deverill Cow Down, Wiltshire, House 3: a major round house of the Early Iron Age', *Oxford Journal of Archaeology* 13, 49–69.
- Champion, T.C. and Collis, J. C., (eds), 1996 *The Iron Age in Britain: recent trends*. J. R. Collis Publications, Sheffield.
- Corney, M., 1989 'Multiple ditch systems and Late Iron Age settlement in central Wessex', in M. Bowden, D. Mackay and P. Topping (eds), *From Cornwall to Caithness: some aspects of British field archaeology*. British Archaeological Reports (British Series) 209, Oxford, 111–28.
- Corney, M., 1991 'Iron Age metalwork, coins and imported pottery from Cranborne Chase', in Barrett *et al.* 1991b, 242–50.
- Cunliffe, B., 1984a *Danebury. An Iron Age hillfort in Hampshire. Vol. 1: the Excavations 1969–1978: the Site; Vol. 2: the Excavations 1969–1978: the Finds*. Council for British Archaeology Research Report 52, London.
- Cunliffe, B., 1984b 'Iron Age Wessex: Continuity and Change', in B. Cunliffe and D. Miles (eds), *Aspects of the Iron Age in Central Southern Britain*. Oxford University Committee for Archaeology Monograph 2, Oxford.
- Cunliffe, B.W., 1991 *Iron Age Communities in Britain*. 3rd edition. Routledge, London.
- Cunliffe, B., 1992 'Pits, Preconceptions and Propitiation in the British Iron Age', *Oxford Journal of Archaeology* 11(1), 69–87.
- Davies, S. M., 1981 'Excavations at Old Down Farm, Andover, Part II: Prehistoric and Roman', *Proceedings of the Hampshire Field Club and Archaeological Society* 37, 81–163.
- Driesch, A., von den, 1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Peabody Museum of Archaeology and Ethnology, Bulletin 1, Cambridge/Massachusetts.
- Entwistle, R. and Bowden, M., 1991 'Cranborne Chase; the molluscan evidence', in Barrett *et al.* 1991b, 20–48.
- Evans, J.G., 1972 *Land Snails in Archaeology*. Seminar Press, London.
- Evans, J.G. and Jones, H., 1973 'Subfossil and modern land-snail faunas from rock-rubble habitats', *Journal of Conchology* 28, 103–29.
- Evans, A.M. and Jones, M.K., 1979 'The plant remains', in Wainwright 1979, 172–5.
- Fitzpatrick, A. P., 1994 'Outside In: the structure of an Early Iron Age house at Dunston Park, Thatcham, Berkshire', in A.P. Fitzpatrick and E.L. Morris (eds), *The Iron Age in Wessex: recent work*. Association Française pour l'Étude de l'Âge du Fer/Trust for Wessex Archaeology, Salisbury, 68–72.
- Fitzpatrick, A. P., 1997 'Everyday life in Iron Age Wessex', in Gwilt and Haselgrove (eds), 73–86.
- Ford, S., Bradley, R., Hawkes, J., and Fisher, P., 1984 'Flint-working in the Metal-Age', *Oxford Journal Archaeology* 3(1), 157–74.
- French, C., Lewis, H., Allen, M. J., Green, M., Scaife, R., and Gardiner, J., 2007 *Prehistoric Landscape Development and Human Impact in the Upper Allen Valley, Cranborne Chase, Dorset*. McDonald Institute for Archaeological Research, Cambridge.
- Grant, A., 1982 'The use of tooth wear as a guide to the age of domestic ungulates', in B. Wilson, C. Grigson and S. Payne (eds), *Ageing and Sexing Animal Bone from Archaeological Sites*. British Archaeological Reports (British Series) 109, Oxford, 91–108.
- Grant, A., 1984a 'Animal Husbandry', in Cunliffe 1984, 496–547.
- Grant, A., 1984b 'Survival or sacrifice? A critical appraisal of animal burials in Britain in the Iron Age', in C. Grigson and J. Clutton-Brock (eds), *Animals and Archaeology*. British Archaeological Reports (International Series) 227, Oxford 221–7.
- Green, M., 1986 'Excavations in Home Field, Down Farm, Gussage St. Michael', *Proceedings of the Dorset Natural History and Archaeology Society* 108, 171–33.
- Green, M., 2000 *A Landscape revealed: 10,000 years on a chalkland farm*. Tempus, Stroud.
- Gwilt, A. and Haselgrove, C. (eds), 1997 *Reconstructing Iron Age Societies*. Oxbow Monograph 71, Oxford.
- Habermehl, K.H., 1975 *Die Altersbestimmung bei Haus- und Labortieren*. 2nd rev edition. Paul Parey, Berlin/Hamburg.
- Hambleton, E., 1999 *Animal Husbandry Regimes in Iron Age Britain: a comparative analysis of faunal assemblages from British Iron Age sites*. British Archaeological Reports (British Series) 282, Oxford.
- Harding, D.W., Blake, I.M. and Reynolds, P.J., 1993 *An Iron Age Settlement in Dorset: excavation and reconstruction*. University of Edinburgh, Department of Archaeology Monograph 1, Edinburgh.
- Haselgrove, C. and Pope, R. (eds), 2007 *The Earlier Iron Age in Britain and the near Continent*. Oxbow, Oxford.
- Hill, J. D., 1993 'Can we recognise a different European past?', *Journal of European Archaeology* 1, 57–75.
- Hill, J. D., 1995 *Ritual and rubbish in the Iron Age of Wessex: A study of the formation of a specific archaeological record*. British Archaeological Reports (British Series) 242, Oxford.
- Hill, J. D., 1996 'Hill-forts and the Iron Age of Wessex', in Champion and Collis (eds), 1996, 95–116.
- Humphrey, J., and Young, R., 1999 'Flint use in Later Bronze Age and Iron Age England – still a fiction?', *Lithics* 20, 57–61.
- Humphrey, J., 2007 'Simple tools for tough tasks or tough tools for simple tasks? Analysis and experiment in Iron Age flint utilisation', in Haselgrove and Pope (eds), 2007, 144–59.
- Jones, G. G., 2006 'Tooth eruption and wear observed in live sheep from Butser Hill, the Cotswold Farm Park and Five Farms in the Pentland Hills, UK', in D. Ruscillo (ed.), *Recent Advances in Ageing and Sexing Animal Bones*. Oxbow, Oxford, 155–78.
- Jones, M., 1991 'Down Farm Woodcuts: the carbonised plant remains', in Barrett *et al.* 1991b, 49–53.
- Kerney, M.P., 1999 *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*. Harley, Colchester.
- Lauwerier, R.C.G.M., 1988 *Animals in Roman times in the Dutch Eastern River Area*. Rijksdienst Oudheidkundige Bodemonderzoek, Amersfoort.
- Lawson, A. J., 2000 *Potterne 1982–5; Animal Husbandry in Later Prehistoric Wiltshire*. Wessex Archaeology Report 17, Salisbury.

- Matolsci, J., 1970 'Historische Erforschung der Körpergröße des Rindes auf Grund von ungarischem Knochenmaterial', *Zeitschrift für Tierzüchtung und Züchtungsbiologie* **87**, 89–137.
- McKinley, J.I., 2008 'Human Remains', in C. Ellis and A. B. Powell. *An Iron Age Settlement outside Bantlesbury Hillfort, Wainminster and sites along the Southern Range Road, Wessex* Archaeology Report **22**, 71–83.
- Needham, S. and Spence, T., 1996 *Refuse and Disposal at Area 16 East, Runnymede*. Runnymede Bridge Research Excavations 2, British Museum, London.
- Oswald, A., 1997 'A doorway on the past: practical and mystic concerns in the orientation of roundhouse doorways', in Gwilt and Haselgrove (eds) 1997, 87–95.
- Parker Pearson, M., 1996 'Food, fertility and front doors in the first millennium BC', in Champion and Collis (eds) 1996, 117–32.
- Parker Pearson, M., 1999 'Food, sex and death: cosmologies in the British Iron Age with particular reference to East Yorkshire', *Cambridge Archaeological Journal* **9**(1), 43–69.
- Payne, S., 1985 'Morphological distinctions between the mandibular teeth of young sheep, Ovis, and Goats, Capra', *Journal of Archaeological Science* **12**, 139–47.
- Pope, R., 2007 'Ritual and the roundhouse: a critique of recent ideas on the use of domestic space in later British prehistory', in Haselgrove and Pope (eds), 2007, 204–28.
- Serjeantson, D., 1996 'The animal bones', in Needham and Spence 1996, 194–223.
- Stace, C., 1997 *New Flora of the British Isles*. 2nd edition. Cambridge University Press, Cambridge.
- Wainwright, G. J., 1979 *Gussage All Saints: An Iron Age settlement in Dorset*. Department of Environment Archaeological Report **10**, London.
- Wait, G.A., 1985 *Ritual and Religion in Iron Age Britain*. British Archaeological Reports (British Series) **149**, Oxford.
- Walker, L., 1984 'The deposition of the human remains', in Cunliffe 1984, 442–63.
- Whimster, R., 1981 *Burial Practices in Iron Age Britain*. British Archaeological Reports (British Series) **90**, Oxford.
- Wilson, C.E., 1981 'Burials within settlements in southern Britain during the Pre-Roman Iron Age', *Bulletin of the Institute of Archaeology London* **18**, 127–69.
- Young, R. and Humphrey, J., 1999 'Flint use in England after the Bronze Age: time for a re-evaluation?', *Proceedings of the Prehistoric Society* **65**, 231–42.

Appendix

Pottery Fabric Descriptions

- C1 fine silty matrix; common angular medium calcite
- F1 slightly micaceous sandy matrix; sparse to moderate fine and medium crushed calcined flint
- F2 coarse laminar fabric; occasional very large crushed calcined flint; moderate fine to medium crushed calcined flint
- F3 soft silty fabric, moderate medium calcined flint well sorted
- G1 fine silty matrix, sparse shell, sparse to moderate grog
- G2 laminar fabric; moderate coarse grog
- Q1 coarse sandy matrix; sparse fine shell
- Q2 fine sandy matrix; sparse fine to medium shell
- Q3 fine sandy matrix; sparse fine shell; sparse fine grog
- SH1 coarse sandy matrix; moderate coarse shell
- SH2 fine sandy matrix; common fine and medium shell

SHORTER CONTRIBUTIONS

Finds Reported to the Portable Antiquities Scheme in 2010 and 2011

CIORSTAI DH HAYWARD TREVARTHEN

Introduction

The Portable Antiquities Scheme (PAS) has been operating in Dorset since 1999, recording archaeological finds, discovered by members of the public such as metal detector users, amateur field walkers and casual finders. Finds are recorded on the PAS database at finds.org.uk. Full details of the PAS, including its aims and the definition of Treasure, are available on the website.

Overview

In 2010 and 2011 a total of 3,129 records of Dorset finds were added to the PAS database for finds from Dorset. These represent an estimated 7,993 objects (estimated because of the inclusion of an as yet unquantified coin hoard). The data includes several hoards and 1,865 records transferred from the Celtic Coin Index, which was incorporated into the PAS database in 2010. These groups have been excluded from the breakdown of the data which follows in order to avoid skewing the figures.

In terms of date, the largest percentage of objects come from the Roman period (45.5%), followed by medieval (18.5%) and post medieval (13.5%). 1.5% was Mesolithic and a combined 15% were Neolithic to Bronze Age. Iron Age material makes up 3% of that recorded and 1.5% was early medieval. The remaining 1.5 percent are finds of Palaeolithic, modern or unknown date. The bulk of the finds are of metal (70%) with the remainder being of stone (18%) and ceramics (12%). Only two objects are of other materials.

Finds from Dorset were recorded mainly by the Dorset Finds Liaison Officer (FLO), but also by Laura Burnett (Somerset FLO) and other FLOs and PAS volunteers around the country. In addition 140 records have been added by members of the public under the new self-recording pilot scheme.

Treasure Finds from 2010 and 2011

This combined report for two years has provided an opportunity to examine a larger number of Treasure finds (reported under the Treasure Act 1996 (revised)) and give a flavour of the range of material that is covered recorded under the legislation.

In 2010 and 2011 there were thirty-five cases of Treasure reported from Dorset. All but one were reported by metal detector users, the exception being a silver strap fitting found during community archaeology excavations in Sturminster Newton, directed by Dave Durkin (2011 T418).

The most unusual case, in terms of what is generally reported, was an Iron Age mirror burial from near Portesham. The mirror was found together with a crouched inhumation burial, glass and stone beads, a brooch and a plated copy of a Roman Republican *denarius serratus* (pierced for suspension). It is the presence of two or more pieces of prehistoric metalwork which qualify the find as Treasure under the Treasure Act. The find was discovered by a metal detectorist who first unearthed pieces of the mirror which had been fragmented by ploughing and brought into the topsoil. On seeing bone fragments he stopped excavating and made concerted and repeated efforts to alert authorities and archaeologists to the find. His efforts were successful and Claire Pinder, Dorset County Council Senior Archaeologist (Promotion and Liaison), and the Finds Liaison Officer were able to visit the site, and a team from Bournemouth University generously undertook to excavate and record the burial.

Nine of the cases reported were coin hoards, dating variously from the Late Iron Age through to the early post medieval period. The earliest is a hoard of twenty-seven South Western Uninscribed (Durotrigian) staters found in the Tarrant Valley (2010 T543, PAS Database DOR-A7B395). This is the second hoard of staters from the area which also has settlement evidence of the period. Twenty-three were recovered by members of the Stour Valley Search and Recovery Club and the remaining four were unearthed during a small excavation of the site carried out by Terrain Archaeology. No evidence of the original deposit was found and it is thought that the hoard had been dispersed from its original position by plough action.

Four of the hoards are of Roman date and together span the most of the Roman period in Britain. The earliest is a mixed group of fifteen coins found in a small area at Owermoigne. The group comprises eight base metal coins of Claudius, two Roman Republican silver coins, a *denarius* of Tiberius and four late Iron Age uninscribed (Durotrigian) staters. This is a very early group for Dorset (the latest coins are those of Claudius AD 41–54) and are possibly evidence of Roman military presence in the Owermoigne area at or soon after the time of the conquest.

The largest hoard recorded in 2010 to 2011 is an as yet un-quantified deposit of Radiate coins of late-third-century date (estimated to be around 4,000 coins) found in Pamphill parish. This was deposited in two separate pottery vessels found next to each other. The vessels had both been heavily truncated by deep



Figure 1: A Sestertius of Claudius with a countermark on the obverse. 2010 T404

ploughing, and a number of the coins were unearthed in a mixed soil above the remnants. The hoard is now at the British Museum awaiting cleaning and cataloguing. Archaeological investigation was carried out on the site. There were two hoards from the Gussage All Saints area. One is a group of 58 silver *denarii* (2010 T575) containing coins from Vitellius (AD 69) to the end of the reign of Antoninus Pius (AD 138–161). The other was a find of a small pottery flagon which contained 662 silver coins dating from AD 355 to 402 (2010 T177). These were mainly small *siliquae*, but in the top of the vessel were nine larger denomination coins known as *miliarenses*. The finder had taken pains to keep the coins in the vessel, which allowed their controlled removal at the British Museum. The British Museum reports for these hoards were compiled by Dr Eleanor Ghey and the detailed information regarding dating is drawn from these.

Three of the coin finds are of Medieval date and comprise a group of two short cross coins of King John from Compton Abbas (2011 T230), a group of four short cross coins (three of King John) from Shillingston (2011 T230) and a hoard of 83 silver coins from Winterborne Kingston (2011 T184).

The remaining hoard (2011 T777) is from Iwerne Minster and is of early post medieval date and includes



Figure 2: A double patard of Charles the Bold. 2011 T777



Figure 3: Silver gilt dress fitting. 2011 T374

one groat of Henry VII (dating from 1486 to 1504) and four groats of Henry VIII (dating from 1536 to 1544) and a double patard of Charles the Bold (1467 to 1477).

Twenty-three objects were recorded as Treasure in the period concerned. These included a number of medieval and post medieval items of dress such as finger rings, pendants, dress hooks, strap fittings and brooches. For example 2010 T390 is a Medieval lozengiform silver annular brooch from near Blandford. This find has been acquired by the Dorset County Museum. 2011 T383 is a medieval silver iconographic finger ring with a male, bearded figure on one side and a female figure with head covered on the other. 2011 T374 is a silver gilt dress fastener or fitting, in the form of a cherub head between outstretched wings.

Other object types include two post medieval seal matrices (one with a design of a heart pierced with two arrows saltire (2011 T372) and the other (2010 T55) with a fleur-de-lys), a silver bodkin (2011 T156), a pair of silver tongs (2011 T140) and a Bronze Age gold penannular ring (2011 T229)

The final disposition of many of the cases has yet to be decided. Several are awaiting valuation and museum acquisition while others have, or will be, returned to the finders following disclaimer.



Figure 4: Bronze Age gold penannular ring. 2011 T229

Notes on Two Medieval Tiles

LAURENCE KEEN

In one of the display cases in Calke Abbey, Derby, is a medieval inlaid tile, with the label 'Old tile found in Dorchester'. Riannon Simpson, the National Trust's Assistant House Manager, has kindly provided details. It is 135 by 140 mm square, 15 mm thick and has five circular scoops, 25 mm in diameter, on the back. The collection no. is 1154. The inlaid design is recorded by Emden (1977, design 216) from Cerne Abbas: the tile is in the Edkins Collection in the Victoria and Albert Museum (acc. 1297–1892). How the tile came to be in Calke Abbey is a mystery. The design is not recorded from Dorchester, and the circumstances of its discovery are not known.

Claire Pinder has brought to the writer's attention a small fragment of plain, green-glazed tile, found in the Frome Terrace allotments, Dorchester, in about 2000. It is 23 mm thick, and has the character, fabric and glaze of tiles imported from Normandy: more complete examples are known from excavations on the site of the Methodist church, Dorchester, and recently from excavations by Peter Bellamy in the church of St Mary, Chickerell.

REFERENCE

Emden, A. B. 1977 *Medieval Decorated Tiles in Dorset*, Phillimore, Chichester.

Dorset Archaeology in 2011

BOURNEMOUTH ARCHAEOLOGY FIELDWORK 2011

Land adjacent to Doreys Pit, Arne, Church Knowle and Steeple Parishes

An archaeological evaluation of part of the proposed quarry extension at Dorey's Pit, Dorset (SY 9145 8441), was carried out by AC archaeology Ltd during December 2011. Three trenches near New Hall Farm, revealed no evidence for any archaeological activity. Two further trenches, across existing field boundary banks to the north, were also excavated. One of these boundaries forms the parish boundary between Arne and Church Knowle. No dating evidence was recovered for either boundary, although a review of historic maps indicates that both are likely to be of post-medieval date; the parish boundary probably being the later of the two, having been constructed after 1843.

Stephen Robinson, AC Archaeology

Rogershill Farm, Bere Regis

Bournemouth Archaeology was commissioned to undertake a programme of geophysical survey at Rogershill Farm, Bere Regis (NGR: SY 818 950) as part of pre-determination evaluation works for a proposed development.

A magnetometer survey was carried out over the area and a number of discrete positive anomalies and strong dipolar anomalies were recorded across the site. The majority of recorded anomalies were interpreted as being agricultural, geological or pedological in origin, however, a number of small discrete positive anomalies were identified with characteristics consistent with a range of archaeological features, such as pits and post holes.

Jonathan Monteith, Bournemouth Archaeology

Hall and Woodhouse Brewery, Bournemouth Road, Blandford St Mary

Archaeological monitoring was undertaken by AC Archaeology Ltd from January to February 2011 during the groundworks associated with the construction of a new brewery (NGR ST 886059). The works involved the excavation of a number of large pads that revealed a sequence of deposits of probable periglacial material in the form of stratified alternating layers of weathered chalk, flint and sandy clay silts. Several features of an archaeological origin were revealed while reducing ground levels; these included a probable post hole containing pottery and worked flint of a Bronze Age date, a discrete deposit of unclear nature containing prehistoric worked flint, and two other probable post holes containing no datable evidence. In addition, a linear feature of medieval date and a pit feature of either late medieval or early post-medieval date were identified and excavated.

Daniel Carter, AC Archaeology

Hengistbury Head, Bournemouth

An archaeological watching brief was carried out by Terrain Archaeology in March 2010 during construction of two new cattle handling areas on Hengistbury Head, Dorset (OS NGR SZ 16643 91058 and SZ 17200 90892). The small scale of these works, together with late modifications to the construction method (particularly the use of percussion-driven posts) meant that no archaeological deposits were exposed and no finds were recovered.

Mike Trevarthen and Peter Bellamy, Terrain Archaeology

Hengistbury Head, Bournemouth

An archaeological evaluation was undertaken by Terrain Archaeology in November 2010 on the proposed site of a new visitor centre and nature garden at the barn, Hengistbury Head, Bournemouth (OS NGR SZ 1662 9107). Four trial trenches were excavated; two on the southern edge of a metalled yard west of the barn (the land train storage area), and two within the garden immediately south and south-west of the adjoining Rangers' cottage. A brick-lined well was identified in the yard area. The brick used in its lining suggests it may be broadly contemporary with the construction of the barn in the 1860s, although it had more recently been capped with two rough-dressed limestone slabs, and modified to serve as a soakaway. No other archaeological features or finds were discovered.

Mike Trevarthen, Terrain Archaeology

Kinson Common, Kinson, Bournemouth

An archaeological watching brief was carried out by Terrain Archaeology in November 2009 during trenching for a 25mm water pipe across Kinson Common Local Nature Reserve, Kinson, Bournemouth (centred on OS NGR SZ 0664 9606) No archaeological remains or artefacts were discovered.

Mike Trevarthen, Terrain Archaeology

Bryanston School, Bryanston

Archaeological monitoring was undertaken during groundworks associated with the construction of part of a new block of classrooms on land at Bryanston School, Blandford Forum (Centred on ST 870 075). This initial phase of work was carried out by AC Archaeology Ltd. in July 2011. Monitoring was undertaken during the reduction of the ground level on an area of high ground known as 'the plateau'. This revealed two features of archaeological origin, the first of which was a possible ditch terminal or discrete pit containing Romano-British

pottery, the second was a slight curvilinear feature that may represent a form of enclosure ditch containing pottery of the same date.

Daniel Carter, AC Archaeology

St Marys Church, Chickereell

An archaeological watching brief was carried out by Terrain Archaeology between September 2010 and March 2011 during groundworks for a new vestry, service trench and under-floor heating system at St Mary's Church, Chickereell (OS NGR SY 6440 8060). Structural evidence was revealed for an earlier church, probably founded in the twelfth century, and for a number of later repairs and alterations to the existing church building. One hundred and twenty medieval and post-medieval graves were recorded: eighteen in the chancel, twenty in the nave and the remainder under the north aisle and in the churchyard.

An important collection of imported fifteenth- and sixteenth-century floor tiles included French plain tiles and motto tiles from the Low Countries. A fragment of roof slate found in the backfill of a medieval grave in the chancel was inscribed on both faces with a list of names in a late medieval cursive script. Mesolithic flint was found in residual contexts across the site.

Peter Bellamy and Mike Trevarthen, Terrain Archaeology

Church Hatch, 13 Church Street, Christchurch

An archaeological watching brief was carried out by Bournemouth Archaeology to the rear of 13 Church Street, Christchurch (NGR: SZ 159925), following the collapse of a section of Grade II* listed wall. The property, Church Hatch, is an original and unaltered eighteenth-century house and is Grade II* listed, as are the original iron railings, gates and red brick boundary wall (Listing NGR: SZ1597192608).

During the reconstruction works three exploratory test pits and a small test trench were excavated along the northern side of the wall, in an area of the presumed ditch which surrounded the Norman Castle to the immediate north. Three layers of soil were recorded to the base of the wall foundations, the maximum depth of which was 1.48 m below the present ground level. These layers contained a post-medieval pottery, dating to the later nineteenth and early twentieth centuries. It is probable that these layers constitute gradual accumulation of material, or a back fill of refuse material after the wall had been built. No other features of archaeological significance were identified.

Jonathan Monteith, Bournemouth Archaeology

Ower, Corfe Castle

Bournemouth Archaeology carried out a rescue excavation of a previously unknown human burial at Ower



Figure 1: Ower Farm tibiae and feet during excavation

Farm, Corfe Castle following unintentional disturbance to the remains by scouts who had been excavating latrine pits during a camping exercise along the edge of a field. The majority of the remains were found to have been removed by the scouts and only the tibiae and feet were scientifically excavated and recorded by Bournemouth Archaeology staff. The remains were removed under a licence from the Ministry of Justice under section 25 of the Burial Act 1857 (Licence Number: 11-0151). Evidence of previous disturbance was identified in the form of decomposing rubbish within the excavated area.

The remains comprised the 50% complete skeleton of an adult probable female who died between the ages of eighteen and twenty-five. She would have had a living stature of 154.6 cm \pm 3.66. No pathological lesions indicative of specific infections or disease were identified. A small lesion of new bone on rib surface possibly indicative of active infection of the respiratory system at the time of death, an area of new bone on one of the foot bones indicative of injury, and a fracture to one of the vertebrae were all identified through visual assessment. The fracture to the vertebra is indicative of bursts of strenuous physical activity being carried out by the individual, particularly high-impact activities with the upper limbs. This condition is known as a 'clay shoveller's fracture' and provides a rare example of an unusual injury in a potentially female individual.

Although all the remains were removed and all the spoil heaps were investigated for disturbed bones only 50% of the skeleton could be accounted for. The cranium, mandible, the majority of the ribs, most of the bones of the hands, the sternum, the kneecaps, the majority of the vertebrae and the right collar bone were all missing. In addition, all of the ex-situ long bones had multiple post-mortem breaks. The ribs, vertebrae and pelvic bones that were present were particularly fragmented, the right pelvis being fragmented into six separate pieces. Post-mortem damage was also evident in the long bones. The small assemblage of artefacts were recovered from disturbed contexts, and include late Iron Age and early Roman pottery sherds, two fragments of struck flint and small portion of copper-alloy pin, presumably from a brooch. The evidence suggests that the remains of this individual may have been disturbed at least once prior to this event, and it is likely that the excavation of latrine and rubbish pits along the field boundary over the last two decades is the cause of this disturbance.

Jonathan Monteith and Elizabeth Craig-Atkins,
Bournemouth Archaeology

A35 Weymouth Road Roundabout and Stinsford Roundabout, Dorchester

Context One Archaeological Services Ltd carried out an intermittent archaeological watching brief during initial groundworks (SY 68513 89016 and SY 70878 91228).

No archaeological features or deposits were revealed but much of the Site had been reduced previously to the level of the natural chalk when the Dorchester by-pass (A35) was constructed.

Richard Tabor, Context One Archaeological Services Ltd

Former Fire Station, Dorchester

Context One Archaeological Services Ltd carried out an Archaeological Field Evaluation prior to the determination of a planning application for proposed development of the site (SY 68365 90566). No archaeological features or deposits were located during the evaluation.

Richard Tabor, Context One Archaeological Services Ltd

The Grove, Dorchester

Context One Archaeological Services Ltd carried out an archaeological watching brief as a condition of granting planning permission for the erection of a new food store (SY 68928 91127). Pre-development geotechnical data and archaeological monitoring of initial groundworks provided conclusive evidence that the Site had been levelled and raised with imported material during the latter half of the twentieth century when the previous garage complex was constructed. No archaeological features or deposits were found.

Richard Tabor, Context One Archaeological Services Ltd

Unit 9A, Grove Trading Estate, Dorchester

An archaeological watching brief was carried out by Terrain Archaeology in March 2010 during the construction of a new office at Unit 9A, Grove Trading Estate, Dorchester (centred on OS NGR SY 6843 9107). Three ditches of probable Roman date were recorded. Along the western edge of the site two parallel V-shaped ditches may have formed part of the western boundary to a large Roman enclosure (Enclosure 4) previously recorded elsewhere in the vicinity. Another similar ditch, aligned NE-SW and containing first-century BC/AD pottery, could not be fitted into this boundary ditch pattern. A single pit of probable Iron Age date was partly exposed. In the south-west corner of the site a large sub-rectangular feature post-dating the Roman enclosure ditches was partially exposed and has been tentatively identified as a sunken-featured structure of late Roman or post-Roman date.

Peter Bellamy, Terrain Archaeology

Stratton House Campus, Dorchester

Context One Archaeological Services Ltd carried out an Archaeological Field Evaluation in anticipation of the sale of the land (SY 69106 90775). A total of five trenches cut into deep brown soils which are a clear sign

of ancient activity. In one trench, in an area north of Shire Hall, a second- or third-century AD tessellated floor was found. The walls of the building surrounding it had been robbed. A similar floor was found in 1957 about 15m further north-west. Another trench, north of Trinity Cottages, found a possible ditch or foundation trench of roughly the same date. The Romano-British deposits and features survive at depths varying from 0.75 m to 1.40 m below the surface. Modern walls were discovered in two trenches, one of which also revealed a probable garden wall of the eighteenth or nineteenth centuries.

Richard Tabor, Context One Archaeological Services Ltd

Victoria Terrace, Dorchester

An archaeological watching was carried out by Terrain Archaeology in August 2011 during groundworks associated with structural underpinning and rearward extension of 2 Victoria Terrace, Fordington, Dorchester (OS NGR SY 69749058). Hand digging of two underpinning pits beneath the rear wall of the house and a single external foundation trench spanning the rear yard revealed parts of three poorly dated ditches. Whilst not dated, the results of previous fieldwork in the locality (Startin 1981, Cox, 2006) suggest the ditches are unlikely to pre-date the medieval period.

Mike Trevarthen, Terrain Archaeology

Cox, P.W. 2006 'Proposed Residential Development at 3 Fordington Green, Dorchester, Dorset: Results of an Archaeological Trench Evaluation. Unpublished client report. AC Archaeology.

Startin, D.W.A. 1981 'Excavations at the Old Vicarage, Dorchester, Dorset', *Proceedings of the Dorset Natural History and Archaeological Society*, 103, 43–66.

East Holme Priory

An investigation was carried out at East Holme, near Wareham (SY 8977 5990), as part of an undergraduate thesis at Bournemouth University. The exact location of the Cluniac priory had been lost after the buildings fell into ruin, by which time architectural stone had been removed and re-used elsewhere. The exact site has remained unidentified for over two hundred and fifty years.

The priory was founded around 1107 (the exact date is unknown) on land given by Robert de Lincoln, under the Cluniac house of St Peter of Montacute. The French order's popularity grew haphazardly in southern Britain and was dependent upon gifts of land from Norman families such as the de Lincolns. These monastic houses' fortunes depended entirely upon political relations with France (Knowles 1979), and alien houses like East Holme were often isolated. Such small alien cells were generally occupied by six monks or less; although East Holme was originally intended for thirteen monks it is unlikely it ever reached capacity. Such small cells were less constrained to

the norms of monastic life and are therefore often unique and poorly understood (Knowles 1979). It is probably for this reason that the site slipped out of general consciousness and was ultimately forgotten.

A map regression exercise and a multiple technique geophysical survey (magnetometry, earth resistivity and ground penetrating radar) allowed the foundations of the priory and the priory church to be located. The original Norman chancel arch along with other salvaged material from the priory church was re-used in a church on a private estate at Creech Grange, where it stands today.

Hannah Simpson, Iain Hewitt and Paul Cheetham, School of Applied Sciences, Bournemouth University

Knowles D, 1979. *The Religious Orders in England*, 1st edition. Oxford University Press, Oxford UK.

Land adjacent to Brickfields Business Park, Gillingham

An archaeological evaluation for a proposed new office building on land adjacent to Brickfields Business Park, Gillingham, Dorset (ST 8079 2556), was carried out by AC Archaeology Ltd during August 2011. The evaluation revealed no evidence for significant archaeological activity across the proposed development site. The only subsoil features comprised part of a possible former drainage ditch or gully and of post-medieval date. A series of land drains, including one stone-filled and all of post-medieval date were also present in several trenches. A small quantity of 19th–20th-century pottery was recovered from the evaluation.

Stephen Robinson, AC Archaeology

St Marys Church, Glanvilles Wootton

An archaeological watching brief was carried out by Terrain Archaeology in November 2011 during excavation of a trench for a new electricity supply for St Mary's Church, Glanvilles Wootton (OS NGR ST 6800 0817). The new trench ran along the west side of the path from the north gate of the churchyard into the west tower of the church. The remains of a single probable grave of unknown date were recorded. No human remains or other finds were disturbed during the works.

Peter Bellamy, Terrain Archaeology

Home Field, Acton, Langton Matravers

An archaeological watching brief was carried out by Terrain Archaeology in August 2011 during mechanical excavation of seven geotechnical test pits in the southern part of Home Field, Acton, Langton Matravers (centred on OS NGR SY 9887 7773). The pits were dug to determine the presence and depth of suitable limestone deposits prior to submission of a planning application to open a new stone quarry at the site. No archaeological remains were identified within the test pits, but two large

sub-oval hollows up to 1m deep and some 15–20 m across probably attest earlier undated phases of surface quarrying within the proposed application area.

Mike Trevarthen, Terrain Archaeology

Lewis Quarries, Acton, Langton Matravers

An archaeological watching brief was carried out by Terrain Archaeology in October 2011 during mechanical excavation of six geotechnical test pits in the northern part of Home Field, Acton, Langton Matravers (centred on OS NGR SY 9890 7798). The pits were dug to determine the presence and depth of suitable limestone deposits prior to submission of a planning application to open a new stone quarry at the site. No archaeological remains were identified.

Peter Bellamy, Terrain Archaeology

St Marys Church, Litton Cheney

An archaeological watching brief was carried out by Terrain Archaeology in March and April 2010 during service-trenching and other groundworks at St Mary's Church, Litton Cheney, (OS NGR SY 55152 90704). Parts of the foundation of the late-fourteenth- or early-fifteenth-century west tower were recorded and service trenching through the south-western quarter of the churchyard exposed at least twelve previously unknown burials. One burial was cut by the foundations of the west tower but the remainder were not closely dated: skeletal posture and the absence of any evidence for burial in coffins suggests they are broadly medieval and/or early post-medieval.

South of the churchyard an artificially cut terrace formerly occupied by the church hall was investigated. A much ruined dry stone wall against the upslope edge of the terrace had been very crudely rebuilt on at least one occasion.

Mike Trevarthen, Terrain Archaeology

The Village Hall, The Causeway, Milborne St Andrew

Archaeological monitoring was carried out by AC Archaeology Ltd during groundworks associated with the construction of a multi-use games area adjacent to the Village Hall, the Causeway, Milborne St. Andrew, Dorset (NGR SY 802 975). The reduction of the topsoil largely revealed natural Chalk. A single ill-defined linear feature was identified, from the fill of which a single sherd of medieval pottery was recovered.

Sarah Cottam, AC Archaeology

Morecombelake to Charmouth, Stonebarrow Hill

An intermittent archaeological watching brief was carried out by Terrain Archaeology between February and November 2010 during the laying of a new gas main

between Morcombelake (SY 3997 9398) and Charmouth (SY 3787 9392) via Stonebarrow Hill (SY 3858 9343). No finds or features of archaeological significance were observed.

Peter Bellamy, Terrain Archaeology

Geophysical Survey Godlingston Heath Group of Round Barrows, Studland

On the west side of the Isle of Purbeck Golf Course and a just north of the Studland to Corfe Castle road lie a group of four scheduled Bronze Age burial mounds comprising three bell barrows and an unditched bowl barrow which has been constructed over the ditch of the northern barrow of the group on its south-west side (centred SZ 0072 8197).

These barrows have never been ploughed and the ditches and berms of the bell barrows are clear but they have been damaged by burrowing activity. In preparation for meshing the earthworks to exclude rabbits and badgers from the site, resistivity and magnetometry surveys were carried out.

The surveys revealed no significant new detail. The ditches and berms were revealed by the surveys and the disruption caused by the burrows was also clearly shown, particularly the extensive badger sett on the north-east side of the central bell barrow and to a lesser extent, the rabbit burrows on the north-east side of the north bell barrow.

Martin Papworth, National Trust

Land at Church Farm, Okeford Fitzpaine

An archaeological evaluation consisting of four machine-excavated trenches was undertaken by AC Archaeology Ltd on land at Church Farm, Okeford Fitzpaine (NGR ST 809 105) in December 2011. The trenches established the presence of deep soils derived from colluvial deposits, up to 1.75 m in depth below the present ground surface.

Stephen Robinson, AC Archaeology

Barford Farm, Pamphill, Kingston Lacy Estate

In 2011, research began into the origin and development of the manor of Barford, also known as Bereford or Bere in medieval documents. The site lies beside the Stour on the south edge of the Kingston Lacy Estate.

This manor had been merged with the Kingston Lacy Estate by the seventeenth century when the settlement had reduced in size to two farms known as Lower Barford and Upper Barford. Lower Barford still exists and is known as Barford Dairy. Upper Barford or Old Barford was damaged in a fire in 1872 and the farm was rebuilt on the other side of the Cowgrove Road to the north-west. Aerial photographs show the earthworks and parch marks of buildings and enclosures on either

side of a hollow-way linking Barford Dairy and Old Barford.

In November, a geophysical survey began on Old Barford picking up the west edge of the farm shown on the estate, tithe and enclosure maps. This survey was centred in the area of the pre 1872 farm (SY 96602 99911) shown on William Woodward's Kingston Lacy Estate map of 1774 (DHC D/BKL) Further documentary work and geophysical survey will take place in 2012.

Martin Papworth, National Trust

A Newly Discovered Roman Villa at Druce Farm, Piddlehinton

A geophysical survey was conducted on the site of a previously unknown Roman villa identified by field walking in 2010, by a group of East Dorset Antiquarian Society members (SY 7451 9537). This exercise produced a range of building materials, including tesserae. A multi-technique strategy was employed to locate the villa as field walking had failed to conclusively place any surviving buildings due to the extensive plough damage. Magnetometry and earth resistivity were employed here as complementary techniques and have successfully located the positions of three poorly preserved building ranges situated on the west, north and east of a central courtyard. The survey has also revealed associated enclosure ditches and trackways as well as field systems that pre-date the villa. The landowner is thanked for allowing the work to go ahead.

Lilian Ladle and Hannah Simpson, School of Applied Sciences, Bournemouth University

Lower Hamworthy, Poole

Bournemouth Archaeology carried out an archaeological watching brief and excavation required as a condition of planning consent at Lower Hamworthy in Poole (NGR: SZ000904).

Three phases of activity dating to the late second to early third century AD were identified in a relatively small area at the junction of Blandford Road and Rigler Road and consisted of a series of linear cuts and small pits, as well as a substantial pit and a series of deposits sealing these cut features.

The exact nature of the activity that was represented remains uncertain. Evidence of Roman period salt production which has been identified from previous archaeological investigations in the vicinity was not present here. Fragments of briquetage were present but not in sufficient quantities, and without supporting evidence, to suggest this activity was taking place. A fragment of box flue tile is indicative of a Roman building, however, no other evidence to support this was identified. A series of linear ditches were excavated which may represent land divisions. Their east-west orientation parallel to the

presumed line of the Roman road to the immediate south, may suggest that a series of fields existed between the road and the shoreline to the north. A large pit was recorded containing several large pieces of unworked wood which appeared to have been randomly dumped into the base of the feature, and at 0.40 m below the current sea level this pit may have been used to collect water.

The watching brief results indicate that substantial archaeological deposits are present in this area, in particular beneath Rigler Road and to the west of it, as well as being a good indication that significant archaeological assets may be present in the general area.

Jonathan Monteith, Bournemouth Archaeology

17 Sweethill Road, Southwell, Portland

Terrain Archaeology carried out an archaeological evaluation in May 2011 in the grounds of number 17 Sweethill Road, Southwell, Portland (centred on OS NGR SY 6852 6997) prior to submission of an application for outline planning consent to redevelop the site. Four evaluation trenches were mechanically excavated within the garden area, comprising a *c.* 0.5% sample of the land plot. These revealed undated colluvial deposits containing occasional Prehistoric waste flakes of Portland Chert, and trace amounts of probably late prehistoric pottery, over Late Pleistocene head deposits. A shallow north-west-south-east aligned feature exposed in trenching at the south-eastern end of the garden appears to be part of a levelled lynchet boundary, and is probably originally of medieval date.

Mike Trevarthen and Peter Bellamy, Terrain Archaeology

Extension to Shaftesbury Museum, Gold Hill, Shaftesbury

A small advance excavation and archaeological monitoring was undertaken by AC Archaeology Ltd, during construction of the new extension to Shaftesbury Museum (NGR ST 8629 2293) from 2009–10. The investigations identified features dating from the medieval period, structural remains dating from the post-medieval period and features possibly relating to the late-Victorian renovations to the adjacent Church of St Peter. In addition, an undated linear feature was recorded running underneath the church. A small section of wall foundation and associated construction trench was identified and recorded, as well as probable refuse pits dating to the medieval period; all of these show evidence for settlement on Gold Hill from the medieval period. Documentary evidence has shown that the site was occupied from the fourteenth century onwards, with the site later becoming part of a public house in the eighteenth century.

Daniel Carter, AC Archaeology

Land East of Shaftesbury The Maltings and Pembroke Gate

Archaeological monitoring was undertaken by AC Archaeology Ltd between 2009 and 2011 during residential development and associated works on land East of Shaftesbury, Dorset. The works were undertaken in four different fields, centred on ST 877 225. During groundworks for The Maltings phase of development several features of archaeological origin were identified and excavated. These included a small complex of pre-historic pits with a shallow scoop-like feature, a probable post-medieval boundary in the form of a double ditch and several small undated isolated pits. In addition, a complex of five features comprising of a mixture of pits and post holes containing pottery of a medieval date; one of these showed signs of burning in the vicinity, although whether this was of an industrial or domestic nature remains unclear. During groundworks associated with the Pembroke Gate development, four isolated probable post holes, one of which was likely to be of pre-historic date, were identified and excavated.

Daniel Carter, AC Archaeology

Land at Barton Farm and North of Marston Road, Sherborne

An archaeological evaluation, consisting of the excavation and recording of twenty-two machine-excavated trenches, was undertaken by AC Archaeology Ltd on land at Barton Farm (NGR ST 631 170) and north of Marston Road (NGR ST 629 176), Sherborne, Dorset, during January and February 2011. The evaluation followed an earlier geophysical survey of the site. The evaluation revealed sporadic evidence for archaeological activity across the proposed residential development area, with further evidence defined in the two areas proposed for balancing ponds. All of the features present within trenches in the proposed residential and employment development area reflect the anomalies recorded as being of archaeological origin on the geophysical survey. The northern extent of this area contained evidence for Bronze Age occupation, including possible industrial activity. The south-west extent also contained Bronze Age activity, represented by part of a substantial probable enclosure ditch which produced a moderate quantity of pottery. However, no associated features or deposits relating to this enclosure were present in any of the trenches in this area. The remaining archaeological features across the site comprised a series of post-medieval or undated linear features, some probably representing former field boundaries.

Two further areas of archaeological activity were identified north of Marston Road, in the location of the proposed balancing ponds. Two trenches revealed evidence associated with medieval occupation, including structural remains. The vicinity of these trenches includes a series of prominent earthworks, some of which may represent former boundaries or building

platforms. Deposits revealed in Trenches 19 and 21 appear to be associated with these. A moderate quantity of eleventh- to thirteenth-century pottery was recovered from deposits in both trenches.

Stephen Robinson, AC Archaeology

Interim Report on the Excavation of 3 Bronze Age Burial Mounds on Golden Cap, Stanton St Gabriel SY 40552 92706

On the summit of Golden Cap is a linear group of four round barrows aligned north-east to south-west.

At 192 m high, Golden Cap is the highest coastal cliff on the south coast and these barrows command spectacular views in all directions.

In June 1992, a section was excavated across the barrow at the south-west end of the group (DCC HER 11045A) This was the barrow most vulnerable to coastal erosion. It was estimated that at least half of the barrow had already fallen over the cliff edge by this time (Papworth 1993).

The soft geology of west Dorset means that coastal erosion is rapid here and it was only a matter of time before a large cliff fall at Golden Cap would mean the loss of more of this scheduled barrow group. A grant was made available for further excavation in May 2011. This was part of the 'South West Coast Path, Unlocking our Coastal Heritage Project' largely financed by the European Agricultural Fund for European Development. Money was also found to repair the Hardy Monument on the South Dorset Ridgeway as part of this project.

In March, the barrow group had been surveyed using a resistivity meter and a fluxgate gradiometer. The resistivity survey indicated that the north-east mound (DCC 11045D) was probably made of earth whereas the other barrows were composed of a harder material. It was concluded that they were probably cairns of chert rubble. Barrow 11045A was found to be composed of this material when excavated in 1992. The survey also showed areas of disturbance at the north end of 11045A and in the centre and north side of its neighbour 11045B.

In May, the north-west third of 11045A and the south-east halves of 11045B and 11045C were excavated. The north-east barrow, 11045D, is the least vulnerable as it is the furthest from the cliff edge and was left undisturbed.

On the surface, all of the barrows appear to be quite small, 10–12 m in diameter and 0.3–0.5 m high but on excavation it was found that 11045A–C had become buried by sand derived from the cliff face, driven there by the prevailing south-west wind. Each barrow would have been at least 15 m in diameter and over 1.5 m high.

The trench for barrow 11045A was 15 m long and 3 m wide. The excavation uncovered pottery and bone

dating from the Napoleonic period and revealed the buried soil below the pile of large lumps of chert rubble. Charcoal and soil samples were taken from the buried surface. Two large blocks of chert on this surface were 0.7 m long by 0.4 m with voids containing quartzite inclusions but most of the stones for the cairns were 0.1–0.3 m³.

The trench across 11045B and 11045C was 35 m long and 5 m wide and revealed the same pattern of stratigraphy. The upper deposit contained modern camp fires, plastic tent pegs and aluminium ring pulls. A high magnetic anomaly in the centre of 11045C proved to be the sawn off base of a twentieth-century metal signpost.

Below this was a scatter of late-eighteenth- and early-nineteenth-century degraded animal bone, pottery, and occasional fragments of brick and mortar mixed with some nails and metalwork. Two coins of George III were found.

These finds continued to the surfaces of the chert mounds and were recovered from the lowest archaeological levels between barrow mounds 11045B and C. Here, the edges of the barrows had been cut back to create a level more sheltered area. Perhaps a structure was built here, but this was presumably some form of freestanding shed, as only one post hole was found cutting into this 2 m wide area.

The centres of both barrows had been disturbed but these excavations had not continued to the buried pre-historic surfaces below the cairns. Both of these pits were 1.5 m in diameter. 11045B was 1.2 m deep and 11045C 0.8 m deep. These features and finds relate to the Golden Cap Napoleonic signal station in service 1798–1814 and commanded by Lieutenant John Twisden [See paper in this volume].

There was no evidence for the use of the site between the eighteenth century AD and the eighteenth century BC. The section through the chert cairns showed that the core material had very little soil between the stones. However, the 2–3 m wide bands at the outer edges contained dark grey to black sandy loam. This soil had presumably accumulated from vegetation that had colonized the cairn. Later, the tops of the mounds appear to have been levelled and the slopes of the mounds had slumped over time. Environmental samples have been taken from surviving soils within the mounds and from the surfaces beneath the barrows.

On the north-east side of 11045B, was an arc of larger stones cut by the Napoleonic activity, this was interpreted as the remains of a kerb marking the edge of the mound before the cairn material slumped.

At the centre of 11045B was a deposit of charcoal, similar to that found in 1992 beneath the centre of 11045A. Some charcoal was also found within a buried soil mixed with a scatter of worked flints. These flints were only found under the north-east half of 11045C

and it is presumed that any occupation levels further to the south-west were removed as part of the barrow construction process, as careful excavation failed to recover any finds but charcoal in this direction.

The flint finds from 11045C included three scrapers and a barbed and tanged arrowhead, together with about twenty struck flakes.

The charcoal samples will enable comparative radiocarbon dates of three of the burial mounds within the group, and, together with pollen and environmental analysis, will be a useful addition to early Bronze Age studies of this part of Dorset.

Additional documentary material for the signal station network in the South West and for Golden Cap has been researched by Maive Roberts, which, when combined with the archaeological information, will enhance the interest for visitors to this beautiful but often harsh and exposed place.

Many thanks to Dave Stewart who carried out the geophysical survey and to the many volunteers who helped with the excavation, particularly Robert Brotherston, Fay Pendall, Roy Page, Milly Goswell, Kate Mees, Aimee Skillen, Steve Tatler, Chris Tripp and Honey Sawyer supervised by Nancy Grace.

Martin Papworth, National Trust

Papworth, M., 1993, 'Excavation of a Bronze Age Round Barrow and Napoleonic Signal Station at Golden Cap', *Proceedings of the Dorset Natural History and Archaeological Society* 115, 51–62.

Land Adjacent to Povington Pit, Steeple

An archaeological field evaluation, consisting of a geophysical survey by gradiometer and the recording of eleven machine-excavated trenches, was undertaken by AC archaeology at Povington Pit, Steeple (NGR SY 8978 8250) during October and November 2011. The geophysical survey identified a small number of magnetic anomalies, and areas of magnetic disturbance, of possible archaeological origin. Trial trenches were positioned to locate and examine these features, as well as a sample of magnetically 'quiet' areas. Although the trial evaluation revealed evidence for archaeological activity, most of the archaeological features present did not correspond to magnetic anomalies considered to be of archaeological origin in the geophysical survey. The most significant of these features was in the northern extent of the area and contained evidence for Romano-British occupation, including part of a possible large ditch and bank enclosure. The south-east extent also contained Iron Age activity, represented by part of an occupational soil horizon and possible associated features, and containing significant quantities of pottery. The remaining archaeological activity was present in the southernmost positioned trench on the site and comprised a deep soil horizon of uncertain nature, and a former possible boundary ditch, both containing medieval

and earlier pottery. This particular activity appears to correspond to a large magnetic anomaly recorded by the geophysical survey.

Stephen Robinson, AC Archaeology

Grimstone Reservoir, Stratton

Context One Archaeological Services Ltd (COAS) carried out an Archaeological Field Evaluation in June and July 2011 to determine the most appropriate location for an extension of Grimstone reservoir (SY 64594 95307).

The archaeological work confirmed that anomalies identified by geophysical survey on three sides of the reservoir reflected the underlying archaeology. The orientation of the anomalies strongly suggests that the scheduled field system north of the reservoir was merely part of a larger system which included fields identified from air photographs to its south. The current evaluation, and one by Wessex Archaeology in 2008, strongly support English Heritage's interpretation that the system dates to the Iron Age. More specifically, the finds suggest that it was in active use from at least the fifth century BC until the first century BC/AD.

The evaluation by COAS has retrieved fragments from vessels, some nearly complete, dated to the earlier part of this range which would be of significant value to Iron Age research in the region. Ideally carbon dating should be applied if suitable material is found in soil samples retained from the evaluation. The pottery assemblage ought to be made available to researchers through publication in a journal.

A small group of flints found with the pottery appears to have been worked at around this date. This represents a late use of flint which, although not unexpected, is usually difficult to demonstrate because it is mixed with earlier material. Also of note were five large half discs of chalk which have been submitted for further analysis.

Richard Tabor, Context One Archaeological Services Ltd

Land Adjacent to St Nicholas Church, Studland

An archaeological evaluation, by trial trenching, on land at St Nicholas Church, Studland, Isle of Purbeck, Dorset (SZ 0368 8257), was carried out by AC Archaeology Ltd during May 2011. The evaluation followed an earlier geophysical survey, by gradiometer, which identified a number of magnetic anomalies, or areas of magnetic disturbance, thought to derive from buried archaeological deposits. Extensive evidence for archaeological activity of late Iron Age / early Romano-British date was encountered in three of the trenches, situated in a low-lying area at the south extent of the site. This included briquetage artefacts relating to salt working. A quantity of late Iron Age pottery was recovered from two of these trenches where a significant number of archaeological

features were encountered, including part of a large probable enclosure ditch. Full excavation of these deposits within the trial trenches was not possible due to safety constraints arising from a very deep overburden.

Stephen Robinson, AC Archaeology

Frome House, Wareham

An archaeological watching brief was undertaken in March/April 2011 during groundworks associated with building works and the replacement of a gas pipe between the house and Worgret Road to the north (NGR SY 9213 8710). No archaeological features were present in the vicinity of Frome House itself; however, a large feature was evident in part of the services trench. This consisted of brick, limestone and raw clay together with 'muffle' material indicative of a clay tobacco pipe kiln. A layer of crushed brick suggested an ancillary building close by. The spoil by the side of the trench yielded over 2000 tobacco pipe wasters. A number of fluted pipe bowls were decorated with the initials 'A' and 'M' and have been identified as those made by Augustus Moore and produced between 1830 and 1834. The kiln was short-lived as Moore was transported to Australia in 1834 for theft.

During September 2011, East Dorset Antiquarian Society members investigated the site further and although the kiln itself was not located, the work implied that any remains may lie at a greater depth than that excavated. A further 4,536 fragments of clay tobacco pipe were found, together with kiln demolition material and contemporary pottery and metalwork.

Lilian Ladle, East Dorset Antiquarian Society

Pound Lane Car Park, Wareham

An archaeological evaluation, consisting of the excavation of four trial trenches and one trial pit, was undertaken by AC Archaeology Ltd in, and adjacent to, the former Council yard at Pound Lane, Wareham (NGR SY 9213 8728) in November 2011. The site is believed to lie within the former outer bailey of Wareham Castle. The trenches revealed a significant slope down to the north in the natural geology, overlain by a subsoil deposit, comprising black humic sand up to 2.2 m thick, above the natural sandy clay subsoil. This is a post-medieval soil accumulation widely recorded across the town. At the west end of the site several subsoil features cut into the natural subsoil contained sixteenth-century pottery. Other near-surface deposits comprised brick footings of former cottages along the West Street frontage, shown to have existed on OS maps of 1888.

Peter Cox, AC Archaeology

East Holton, Wareham St Martin

An archaeological investigation was undertaken by volunteers of the Sandford Heritage Project in October

2011 (NGR SY 9610 9130). Three offset trenches measuring 5 m long and 2 m wide were hand dug, and five features were identified in the central trench. These comprised a gravel spread, three discrete deposits of pottery and remnants of a possible hearth. The pottery (349 sherds weighing 4249g) was all quartz tempered and consisted of fragments, many of them large, from pitchers, jugs, cooking jars and bowls dating to the mid to late twelfth century. It is likely that contemporary settlement is in the near vicinity.

Lilian Ladle, East Dorset Antiquarian Society

Sandford Heath, Wareham St Martin

A small excavation was carried out in October 2011 as part of the community-based Sandford Heritage Project to investigate the origins of a straight trackway through the heath from Sandford to Holton Heath, known locally as the 'Roman Road' (NGR SY 9410 9018).

A single trench 1.2 m wide by 17 m long was cleared by a mechanical excavator. This cut through part of the track as well as through a series of linear banks and ditches on its north side. The trench was then cleaned by hand and the excavated section exposed a typical heathland sequence comprising an upper layer of decaying vegetation overlying bleached sands and iron pan. A small, serrated flint flake and a flint core are evidence of prehistoric activity in this area before the heath developed. There was however, no evidence for any road or track metalling. The banks and ditches are probably part of a tree plantation which was noted on the Tithe map of 1843.

Lilian Ladle, East Dorset Antiquarian Society

Worgret Road, Wareham

Bournemouth Archaeology undertook an archaeological evaluation on land at Worgret Road, Wareham (NGR: SY 913872), in response to a previous programme of geophysical survey, also carried out by Bournemouth Archaeology, in 2010.

A total of eight evaluation trenches were mechanically excavated to the depth of natural subsoil or until archaeologically significant deposits were encountered. The agricultural topsoil and subsoil consisted of very dark brown silty clay which varied in depth between 0.43 m and 0.65 m. A previous programme of evaluation trenches by AC Archaeology in 1992 failed to identify features of archaeological significance and failed to recognise this depth of soil overlying the archaeology.

The trenches varied in length between 25 m and 45 m in length, and were targeted in five key areas to investigate the nature and extent of geophysical anomalies.

The evaluation revealed that the majority of the anomalies identified by the geophysics survey were resolved to be modern features associated with the First

World War army training camp, which was constructed on the site in November 1914. These features included red brick drainage sumps and steel/iron reinforcing bars used in the construction of the camp. A small sherd of military pottery, with the words 'MY & AIR' and the initials 'N.A.A' was recovered from topsoil in one of the trenches. This small fragment is probably from a cup.

The military camp consisted of tents and wooden huts, and the evaluation results show that some effort was put into developing sufficient drainage and sewerage systems to cope with the thousands of soldiers that passed through the camp. The camp was eventually abandoned in the 1920s when all the troops were relocated to Bovington.

A substantial linear ditch was excavated in three of the trenches. It was orientated east to west across the site, turning NE at its eastern extent. It measured between 3–4 m wide with a maximum depth of 1.40 m, and contained a well-stratified sequence of layers.

A single base-sherd of pottery, dating to between the mid second and fourth centuries AD, was recovered from the uppermost layer of the ditch in one of the trenches. The fabric was a locally made coarse-textured, hand-formed, black sandy ceramic. Four pieces of struck flint were also recovered from this layer. Two sherds of Roman period pottery were also recovered from topsoil in two of the trenches, and are indicative of Roman activity on the site or in the immediate vicinity.

The lack of modern cultural material suggests the ditch is unlikely to be the result of military activity, and it is therefore interpreted as being earlier in origin. Due to the lack of diagnostic dating material from lower fills of this feature remains of uncertain date. The ditch may be associated with, and be an extension of, the documented dyke system on Wareham Common to the west of the site. Although the alignment of this ditch is somewhat different and much further south, it does follow the gradient of the field, which slopes gradually to the north beyond this point.

Jonathan Monteith, Bournemouth Archaeology

Bayard Dairy, Upwey, Weymouth

An archaeological evaluation was carried out by Terrain Archaeology in June 2010 on *c.* 2 hectares of agricultural land located immediately east of Bayard Dairy, Goulds Hill, Upwey, prior to determination of a planning application to construct new dairying facilities.

Eleven 30 m long trial trenches were mechanically excavated, comprising a *c.* 2.5% sample of the proposed impact area. No archaeological features were identified but all eleven trenches produced evidence for prehistoric flint and chert working, spanning the Neolithic and the Bronze Age. Significant numbers of stone tools were recovered including scrapers, retouched flakes, awls/piercers and a hammerstone. The greatest

concentrations of flaked stone lay in the central and south-eastern parts of the site.

Mike Trevarthen, Terrain Archaeology

69 Mount Pleasant Avenue, Weymouth

An archaeological evaluation was carried out by Terrain Archaeology in August 2010 in the garden of number 69 Mount Pleasant Avenue South, Weymouth, Dorset (centred on OS NGR SY 6704 8140), prior to determination of planning consent for redevelopment of the site. The property lies in an area of Weymouth known to produce Roman artefacts and widely believed to form part of the immediate hinterland of a Roman port facility on Radipole Lake.

Two trial trenches of 6 m and 9 m length were excavated south and east of the existing bungalow. No pre-modern features were discovered and no Roman finds were recovered, suggesting the site instead lies outside any area of Roman settlement. A large extraction pit or small quarry may have exploited local limestone to feed a nearby limekiln in the nineteenth century.

Mike Trevarthen, Terrain Archaeology

Portland House, Belle Vue Road, Weymouth

An archaeological watching brief was carried out by Terrain Archaeology in November 2010, during the digging of the inspection pits for three boreholes in the grounds of Portland House, Belle Vue Road, Weymouth, Dorset (centred on OS NGR SY 680 780). No features or deposits of archaeological significance were observed.

Peter Bellamy, Terrain Archaeology

St Andrews Church, Preston, Weymouth

An archaeological watching was carried out by Terrain Archaeology during September and October 2011 during excavation of new service trenches at St Andrew's church, Preston, Weymouth (OS NGR ST 7058 8296). Four medieval or early post-medieval un-coffined burials were identified near the north porch. A skull potentially belonging to a fifth burial was noted immediately north-west of the west tower.

Episodes of soil dumping and ground levelling were identified around the western end of the church. Those on the south side of the church appear to mark at least two phases of deposition — the first undated but potentially relating to construction of the south aisle in the sixteenth century, and the second possibly of mid-nineteenth-century date associated with reduction of internal floor levels to install under-floor heating. Heavily worn ceramic floor tile from this layer included decorated pieces of late-fifteenth- to early-sixteenth-century date, which may have been taken up as part of the mid-nineteenth-century refurbishment programme. One fragment bearing a geometric interlace motif is in Emden (1977), 188, and may be of Dorset manufacture.

The dump to the north and west of the church was of imported dark rubbly soil containing small amounts of medieval pottery, but no human bone.

The depth of trenching was insufficient to determine whether *in-situ* graveyard deposits survive extensively beneath the dumped layers.

Mike Trevarthen, Terrain Archaeology

Emden, A.B., 1977 *Medieval Decorated Tiles in Dorset*. London and Chichester, Phillimore.

Redlands Sports Centre, Weymouth

An archaeological watching was carried out by Terrain Archaeology in March 2011 during groundworks associated with construction of a new car park at Redlands Sports Centre, Weymouth. The existence of Roman remains at Redlands has been recognised since the late 1970s (Keen 1979), and elucidated by more recent evaluations and watching briefs (McMahon 1998, Valentin 1998, Whelan and Evans 2009).

The site was stripped of topsoil and only selective investigation could be undertaken. A mid-first-century boundary ditch was investigated, and later-Roman remains included a 'T-shaped' corn drier or malting floor, part of a building footing, a large rubble- and soil-filled hollow or working area and a truncated cremation burial in a Black Burnished Ware jar. The presence of South East Dorset Orange Wiped Ware amongst the pottery from the site suggests that its occupation continued into the late fourth or early fifth century AD.

Post-medieval remains comprised a shallow boundary ditch and several comparatively recent rubble-filled land drains.

Mike Trevarthen and Peter Bellamy, Terrain Archaeology

Keen, L. 1979 'Dorset Archaeology in 1979', *Proceedings of the Dorset Natural History and Archaeological Society* 101, 141–42.

McMahon, P. 1998 'Weymouth, Redlands Sports Ground', *Proceedings of the Dorset Natural History and Archaeological Society* 120, 120.

Valentin, J. 1998 'Weymouth, Redlands Sports Ground', *Proceedings of the Dorset Natural History and Archaeological Society* 120, 108.

Whelan, J. & Evans, P. 2009 *Report on an Archaeological Evaluation at Redlands School, Weymouth, Dorset*. Unpublished AC Archaeology report ACW143/2/0.

Sandsfoot Castle, Weymouth

In October 2010, Terrain Archaeology carried out an archaeological evaluation within Sandsfoot Castle, Weymouth, Dorset (SY 6748 7737) to inform a proposal to open up the castle to the public. A single trench was excavated in the passage leading into the basement. The evaluation revealed that the stone-flag floor of the passage and the basement had been robbed out, exposing the footings beneath and a drain running through these footings. The ashlar facing of the passage was also

recorded. The passage and the basement had been back-filled with tips and dumps of stone and mortar rubble containing eighteenth- and nineteenth-century pottery to a depth of 1.5 m. These deposits probably derived from the robbing of the floor and the facing stone of the walls of the castle.

A lead shot from a wall-piece or swivel gun was the only find recovered that relates to the period of use of the castle.

An archaeological watching brief was carried out in November 2010, during the digging of the inspection pit for a borehole in the area of the seventeenth-century earthwork bastion of the castle (SY 6747 7739). A thin layer of mortar debris, stone fragments, clinker and oyster shell was encountered below the topsoil. This sealed an earlier probable topsoil layer at a depth of 0.39 m below ground level. No dating evidence was recovered. The layer of mortar debris may be associated with the construction, or robbing of the castle.

Peter Bellamy, Terrain Archaeology

Rear of No 8 The Square, Wimborne Minster

An archaeological evaluation consisting of two hand-excavated trial pits, was undertaken by AC Archaeology Ltd at the rear of number 8, The Square, Wimborne Minster (NGR SU 009 000) in April 2011. The site lies to the rear of properties that occupy the former medieval street frontage, and in a zone shown by previous excavations to have the potential to contain significant heritage assets. The trial pits revealed a deep post-medieval soil deposit, up to 1.1 m thick above the natural gravel subsoil. A small quantity of nineteenth-century artefacts was recovered.

Stephen Robinson, AC Archaeology

St Giles House, Wimborne St Giles

Archaeological monitoring was undertaken during excavation of the trenches for the electric cabling associated with the installation of new photovoltaic arrays in the grounds of St Giles' House, Wimborne St Giles (centred on SU 3261 1591). The work was undertaken by AC Archaeology Ltd between October and November 2011. Several features of probable archaeological origin were recorded along the route of the cable trenches, the majority of which most likely represent old field boundaries and drainage gullies that contained no datable evidence. In addition, features datable to the late post-medieval period and/or Victorian era, such as pits and drains were also noted.

Daniel Carter, AC Archaeology

Worth Matravers

An archaeological watching was carried out by Terrain Archaeology in August 2010 during mechanical excavation of a new service trench and electrical transformer base south and south-east of the Square and Compass

public house, Worth Matravers, Dorset (centred on OS NGR SY 9754 7759). No features or deposits of archaeological significance were observed.

Mike Trevarthen, Terrain Archaeology

Football Field, Worth Matravers

Excavations were carried out between February and May and during July and August 2011 prior to building development (NGR 3974 0778). Well stratified material was encountered underneath a stone boundary wall on the extreme south-western edge of the field.

The deep, ditch-type feature encountered in 2010 was further investigated and finds of flint, including a leaf-shaped arrowhead, and Neolithic and early Bronze Age pottery attest to its early origins and later in-filling.

Nine post holes, seven of which yielded early late-Bronze Age pottery represented approximately one half of a roundhouse. The modern road covers the remainder of this structure. The pottery, which included large chunks, may have been closing deposits associated with the end-use of this building. The house was sealed by a layer of small limestone cobbles, a continuation of the 2010 'hard standing'. A midden deposit of pottery, shale and bone had accumulated over this, and the range and date of the material (*c.* 700–500BC) compare with that found previously. Two deep pits were cut through the midden and into the natural subsoil. Both were filled with material contemporary with the midden deposit.

Part of the western wall, together with a doorway of the late Roman building recorded in 2010, was located. The doorway was well preserved with a large exterior entrance stone, a threshold with bolt holes, and padstones to support a door frame. Further infant burials were encountered in the vicinity of the doorway.

A small cemetery was located about 100 m from the site entrance. This consisted of twenty-one graves; of these seventeen were single burials, three contained two individuals and one contained three individuals. The graves were aligned east–west and set out in five rows. The northern and western extent of the burial ground was identified but its south and east extent has yet to be determined. The graves were of seven types: (1) earth-cut; (2) rubble lined; (3) vertical stones at head and foot; (4) stone-lined cists; (5) stones at either side of the head and irregular arrangement of slabs at the feet; (6) one vertical stone at the head or foot; (7) horizontal slabs on top of the burial. A small triangular-shaped buckle was retrieved from the pelvic area of one of the skeletons and has been dated to the mid sixth century AD. The cemetery shows marked similarities with a similar site at Ulwell, Swanage (Cox 1988). Generally the skeletal material is poorly preserved.

Lilian Ladle, East Dorset Antiquarian Society

Cox, P.W., 1988 'A seventh-century inhumation cemetery at Shepherd's Farm, Ulwell near Swanage', *Proceedings of the Dorset Natural History and Archaeology Society* 110, 37–47.

St Aldhelms Head, Worth Matravers

In September 2011 Dorset Police contacted Bournemouth Archaeology regarding human remains identified on a section of beach close to St. Aldhelms Head, near Swanage. The remains consisted of a right proximal femur and had been discovered by a walker. Upon receiving the bone Bournemouth Archaeology carried out anthropological assessment of the bone.

Two post-mortem breaks were identified, which appeared to have occurred some time before recovery as the broken surfaces were weathered and smooth. The bone is most likely that of an adult male of European origin with a living stature of 162 m \pm 6.10 cm. No pathological features were identified and no other remains were identified. A survey of the beach and surrounding area provided no additional information on this discovery and the origin of the bone remains unknown.

Jonathan Monteith and Elizabeth Craig-Atkins,
Bournemouth Archaeology

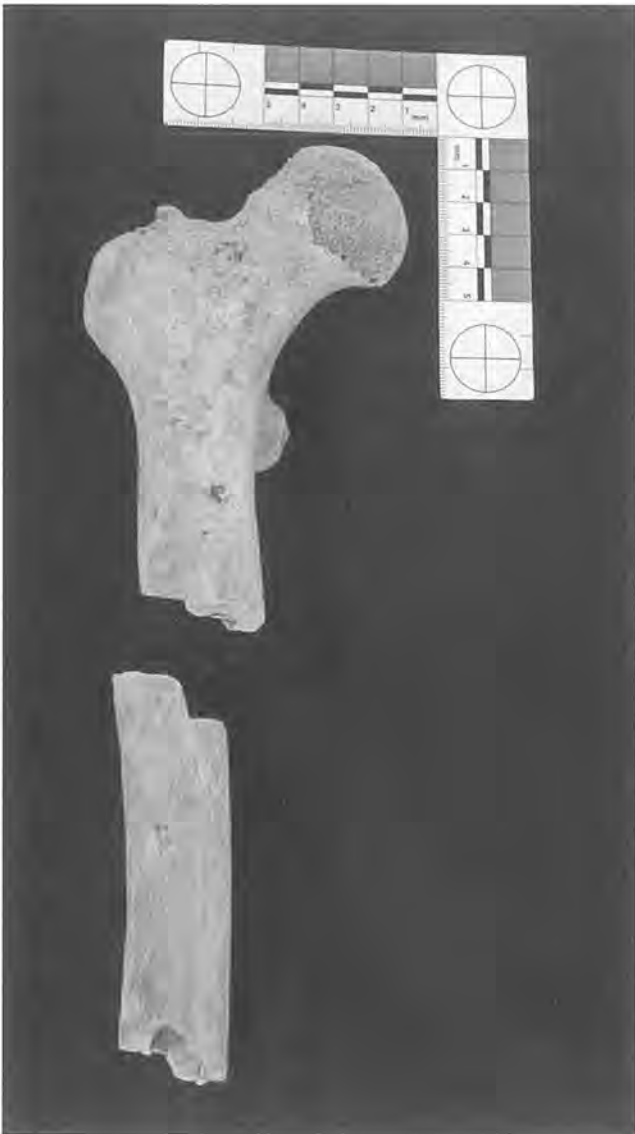


Figure 2: St Aldhelms Head proximal femur during anthropological assessment

Lady St Mary Church, Wareham

Bournemouth Archaeology carried out a programme of geophysical survey in part of the graveyard at the Church of Lady St Mary, Wareham (NGR: SY 925 872). Following a health and safety concern regarding collapsed graves the survey was commissioned in order to provide data which could be used to identify further sub-surface voids or areas of potential future collapse.

Resistivity and ground penetrating radar surveys were carried out over an area of the oldest part of the cemetery measuring approximately 90 m by 30 m where one previous collapse had occurred. The surveys were undertaken in an attempt to investigate sub-surface evidence of known burials, map their position and compare their location with the standing evidence of burial activity, in the form of grave stones and sarcophagi. The position of all standing features was recording using GPS and the results used to cross-reference the geophysical results.

Two areas of geophysical anomalies were highlighted as potentially representing evidence of stacked burials containing air voids or areas of sub-surface voids that may be prone to some level of collapse in the future.

Jonathan Monteith, Bournemouth Archaeology

NATURAL HISTORY

Fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset

D. T. DONOVAN¹ & M. B. HARVEY²

Abstract

New finds of the cephalopod upper jaw *Rhynchoteuthis bucklandi* from the Upper Sinemurian and Lower Pliensbachian stages (about 190–185 million years ago) of Somerset, England, are described. They are of interest, because they are well dated in terms of the ammonite zonal scheme, while the original description of the species was based on specimens of unknown geological age from the Dorset coast. Study of about forty examples has given useful information about variation in size and shape in the species. The possible nature of the animal to which these jaws belonged is reviewed, but the new specimens are not closely associated with fossils of any known cephalopod species, so that their affinity remains uncertain. The rocks in the area belong to the Charmouth Mudstone Formation. There are no natural outcrops of rock but collecting from temporary exposures has proved a sequence of zones defined by ammonites, lying approximately east and west across the area.

Introduction

In the course of collecting fossils from the Charmouth Mudstone Formation (formerly Lower Lias Clay) in the area north-west of Chilthorne Domer, Somerset, one of us (MBH) found small objects which turned out to be cephalopod upper jaws of uncertain affinity. They are described below, following an account of the geology and stratigraphy.

The specimens on which the present paper is based have been deposited in the Palaeontology Department, Natural History Museum, London (abbreviation: NHMUK PAL PI) and their registered numbers are cited below with the prefix CC.

Local Stratigraphy

The rocks of the area under consideration belong to two informal subdivisions of the Lower Lias described in the Geological Survey memoir (Wilson, Welch, Robbie & Green, 1958, 25): ‘Clays and Shales’ succeeded by ‘Belemniferous and Micaceous Marls’. These are approximately equivalent to the Black Ven Marls and Belemnite Marls respectively of W. D. Lang (Lang & Spath 1926; Lang *et al.* 1928) on the Dorset coastal

sections. These rocks now form part of the Charmouth Mudstone Formation.

Wilson *et al.* (1958) note that the belemniferous marls locally form a strong feature rising about 15 m to 30 m above the nearly flat ground of the ‘clays and shales’ and that is the case in our area, the top of the feature being at about 45 m above OD near Sock Farm and Hill Farm (Figure 2) while the ‘clays and shales’ to the north lie at about 15 m above OD.

There are no natural exposures of rock in the area. Cleaning of ditches and ploughing have from time to time yielded fossils which enabled the recognition of ammonite zones and subzones. The zonal sequence is shown in Figure 1 and the distribution in Figure 2.

The lowest zones are hidden beneath the alluvium of the River Yeo. The earliest horizon proved is the Resupinatum Subzone of the Semicostatum Zone, with *Euagassicerus* sp and *Arnioceras semicostatum* (Young and Bird), found at several localities east of Sock

Stage	Zone	Subzone	
Lower Pliensbachian	Davoci	Figulinum Capricornus Maculatum	Non-sequence on Dorset coast
	Ibex	Luridum Valdani Masseanum	
	Jamesoni	Jamesoni Brevispina Polymorphus Taylori	
Upper Sinemurian	Raricostatum	Aplanatum Macdonnelli Raricostatum Densinodulum	Non-sequence on Dorset coast
	Oxynotum	Oxynotum Simpsoni	Non-sequence on Dorset coast
	Obtusum	Denotatus Stellare Obtusum	
L. Sinem.	Turneri	Birchi Brooki	
	Semicostatum	Resupinatum	

Figure 1: Ammonite zones and subzones mentioned in the text.

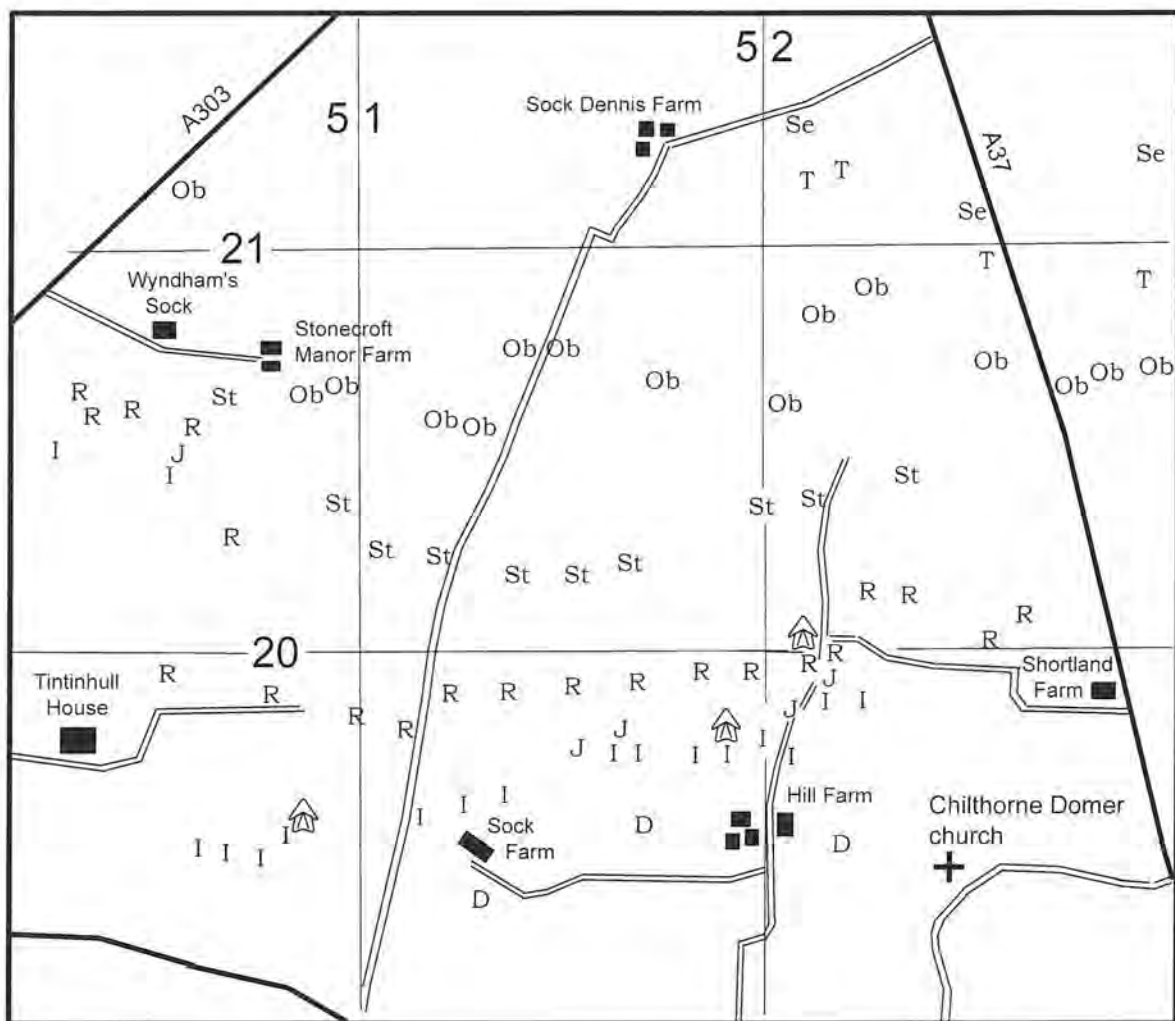


Figure 2: Sketch map showing locations at which ammonite zonal or subzonal evidence has been found. Se = *Semicostatum* Zone, *Resupinatum* Subzone; T = *Turneri* Zone, *Birchi* Subzone; Ob = *Obtusum* Zone, *Obtusum* Subzone; St = *Obtusum* Zone, *Stellare* Subzone; R = *Raricostatum* Zone; J = *Jamesoni* Zone; I = *Ibex* Zone. National Grid lines are in 100-km square ST

Dennis Farm. The *Turneri* Zone is proved small distances (100–200 m) to the south of the *Semicostatum* Zone. The upper *Birchi* Subzone of the *Turneri* Zone was recorded by the Geological Survey (Green 1958, 32) south of our records but the location is not very precise. The north-south ditch referred to in the memoir was redug twelve years ago and yielded *Microderoceras birchi* (J. Sowerby), *Caenisites turneri* (J. de C. Sowerby) and the body chambers of large *Epophioceras* at ST 522 212 some 525 m ESE of Sock Dennis Farm. The large body chambers of *Caenisites* sp. similar to *C. bordoti* (Guérin-Franiatte) occurred 80 m south of this point with thin cementstones containing *Microderoceras inexpectans* Spath from the top of the *Birchi* Subzone at ST 521 210.

The *Obtusum* Subzone of the *Obtusum* Zone is characterised by *Promicroceras precompressum* Spath, crushed *Arnioceras semicostatoides* Spath and the body chambers of *Asteroceras obtusum* (J. Sowerby) and *A. confusum* Spath. This is followed by the *Stellare* Subzone, the two subzones fall in west-east belts east and south of Stonecroft Manor Farm. South-west of this

farm the belts are interrupted by a north-south fault with higher beds occurring east of the fault, south of Wyndham's Sock. The *Stellare* Subzone is represented by two distinct belts; the northern one yielding *Promicroceras planicosta* (J. Sowerby), *Xipheroceras dudressieri* (d'Orbigny) with rare *Asteroceras stellare* (J. Sowerby) type body chambers. The southern belt is composed of several layers of septarian nodules from the top of the subzone with *A. blakei* Spath, *Aegasteroceras sagittarium* (Blake) and immature *Xipheroceras* sp. possibly *X. trimodum* (Dumortier) [redescribed by Corna and Dommergues 1988].

There is no evidence for either the *Denotatus* Subzone of the *Obtusum* Zone or for any part of the *Oxynotum* Zone and the non-sequence present at this level on the Dorset coast is inferred to exist here also. In the Dorset coast section the non-sequence comprises the *Denotatus* Subzone, the whole of the *Oxynotum* Zone and the lower part of the *Densinodulum* Subzone (Page 2010, 42, 43). There was a shrinking of the area of sedimentation during the time represented by these zones (Donovan *et al.* 1979, 171).

The sequence resumes with the *Raricostatum* Zone at a number of points 300 to 500 m south of the *Stellare* Subzone. Just east of Hill Farm its outcrop is shifted northwards east of a north–south fault shown on the one-inch geological map (sheet 312, 1958). West of this fault at ST 5209 1993 a bed about 50–75 mm thick yielded numerous broken and worn belemnites, bivalves, brachiopods and a few ammonites. Two specimens of *Rhynchoteuthis* were found here (see below). This bed is evidently a condensed deposit.

Wilson *et al.* (1958, 25) found little evidence for the *Raricostatum* Zone but it is characterized by a low ridge running intermittently west–east parallel with the base of Chilthorne Hill. Although thin, this zone has yielded *Crucilobicerus densinodulum* S.S. Buckman, *Glevicerus* cf. *guibalianum* (d'Orbigny), *Echioceras raricostatum* (Zieten) and *Leptechioceras planum* Trueman and Williams, indicating that the lowest three subzones are all present. In the coastal section both the *Macdonnelli* and *Aplanatum* Subzones are missing, so the sequence in our area is more nearly complete.

The *Jamesoni* Zone is proved at several places but its outcrop must be narrow. Green (1958, 33) recorded a section in Tintinhull, west of our area, showing the base of the Belemnite Marls (Stonebarrow Marl Member of Page, 2010, 34) at approx. ST 495 204, which proved the *Jamesoni* Zone, *Taylori* Subzone. In the area considered here he noted a section in the banks of the lane at approx. ST 521 198 with *Phricodoceras* aff. *taylori* (J. de C. Sowerby) and numerous belemnites including *Bairistowius charmouthensis* (Mayer). Most of the exposure of about 15 m of strata lies within the *Taylori* Subzone but near the top of the exposure and again in a disused marl pit immediately to the east of the lane several *Bairistowius junceus* (Phillips) have been discovered with *Coeloteuthis stantonensis* (Lang) occurring at ST 522 199 to the east of a fault running parallel with the lane. According to Doyle (2010, 4) both these belemnites are associated with the base of the *Polymorphus* Subzone. Examples of both *B. junceus* and *C. stantonensis* were also found at ST 505 204 on the north facing hill 500 m southwest of Stonecroft Manor Farm suggesting the presence of the *Polymorphus* Subzone here also. The two upper subzones of the *Jamesoni* Zone are unproved. In the area east and south-east of Evercreech, about 20 km NNE of our area, the upper part of the zone is represented by the lower part of the Spargrove Limestone (Bristow *et al.* 1999, 25), presumed to indicate a shallowing of the sea, and it may be that there is a non-sequence in the present area.

The *Ibex* Zone outcrops along the northern brow of Chilthorne Hill and was proved at a number of places south of the *Jamesoni* Zone. Both the zonal index fossil *Tragophylloceras ibex* (Quenstedt) and the Valdani Subzonal index fossil *Acanthopleuroceras valdani* (d'Orbigny) were discovered at several sites. A detailed section through part of the zone is given below. The

Davoei Zone was found by Green (1958, 34) south of Sock Farm at ST 5130 1942 with *Androgynoceras lataecosta* (J. de C. Sowerby) indicating the middle, *Lataecosta* Subzone. We have found it in the same place and in the form of crushed *Androgynoceras* sp. in the steep sided gully 300 m east of Hill Farm, and *A. lataecosta* body chambers on the highest point of Chilthorne Hill 200 m west of the farm. A single example of *Androgynoceras maculatum* (Young & Bird) indicates the presence of the lower, *Maculatum* Subzone. Green (1958, 34) recorded it only at Rimpton about 10 km east of our area. On the Dorset coast the *Maculatum* Subzone is thin and incomplete, the index species having a range of only 2.0 m compared with about 11.6 m for *A. lataecosta*. We have not found evidence for the *Figulinum* Subzone. Green (1958, 34) recorded the characteristic ammonite genus, *Oistoceras*, near Tintinhull. On the Dorset coast the *Figulinum* Subzone is at least 12.8 m thick so it may be present in the ground south of the area studied here.

Wilson *et al.* (1958, 25) assuming a [southerly] dip of about 2°, and working from the relative altitudes of exposures, produced the following estimates of thickness for the Chilthorne Domer area (converted from feet to metres):

<i>Stellare</i> Sz	about 18 m maximum
<i>Obtusum</i> Sz	about 17 m
<i>Turneri</i> (Birchi Sz)	7.0 m maximum

It is clearly hazardous to make estimates of thickness in an area of low relief and poor exposure. From our data the outcrop of the *Obtusum* and *Stellare* subzones could be up to 1000 m wide, in land with little relief, and the dip of about 2° assumed by Wilson *et al.* (1958, 25) would give a combined thickness of about 35 m which agrees with Wilson *et al.*'s estimates.

The *Raricostatum* Zone could be up to 15 m from outcrop width and topography, and this is close to the thickness of 13.7 m on the coast.

Occurrence of *Rhynchoteuthis*

This genus was found at two places north of Hill Farm:

At ST 5209 1993 a bed about 50 – 75 mm thick yielded numerous broken and worn belemnites, bivalves, brachiopods and a few ammonites indicating the *Raricostatum* Zone, *Densinodulum* Subzone. Two specimens of *Rhynchoteuthis* were found here (CC 575, 576).

A ditch at ST 5191 1970 yielded abundant fossils of the *Ibex* Zone and was deepened by one of us (MBH) to provide the stratigraphical section below. Fossils were recovered mainly by sieving clay samples.

Bed	Metres
a Red snuff box concretions, 50 mm diameter, unfossiliferous	

b	Orange clay, unfossiliferous	2.0
c	Grey clay with belemnites: <i>Belemnites</i> sp., <i>Dayiceras</i> sp., <i>Lyticeras</i> cf. <i>fimbriatum</i> (J. Sowerby), <i>Brachybelus</i> sp., <i>Hastites clavatus</i> (Schlotheim), <i>H. spadixari</i> (Simpson), <i>H. stonebarrowensis</i> Lang, <i>Pseudohastites apicicurvata</i> (Blainville), <i>Passaloteuthis pessula</i> (Simpson), <i>Rhynchoteuthis bucklandi</i> (Voltz), many bivalves and brachiopods.	0.075
d	Brown clay with belemnites: <i>Acanthopleuroceras valdani</i> (d'Orbigny), <i>Belemnites</i> sp., <i>Tragophylloceras ibex</i> (Quenstedt), <i>T. cf. loscombi</i> (J. Sowerby), belemnites as in bed c)	0.050
e	Brown clay with concretions: belemnites as in beds c), d).	0.025
f	Brown clay with belemnites: <i>Acanthopleuroceras maugenesi</i> (d'Orbigny), <i>T. undulatum</i> (Wm Smith), <i>Hastites</i> spp., <i>Passaloteuthis</i> spp.	0.075
g	Limestone, soft, with ammonites: <i>Angeloteuthis michael</i> Lang, <i>A. raphael</i> Lang, <i>Ps. apicicurvata</i> , <i>Pa. pessula</i> .	0.100
h	Grey marl with belemnites seen	0.450

Nomenclature of belemnites follows Doyle (2010, 263).

The beds clearly fall in the Ibex Zone, Valdani Subzone, and probably in the Valdani horizon of Page (2010), equivalent to bed 119 on the Dorset coast (Lang *et al.* 1928). In the Yeovil area Wilson *et al.* (1958, 25) noted that the Ibex Zone is 'usually represented by brown and grey marly clays containing many belemnites', about 2.5 to 3.7 m thick (recorded as about 8 to 12 feet), and suggested that they were a condensed deposit. This formed the upper part of their Belemniferous Marls. Green (1958, 33) described a ditch section east of Ash, about 4 km west-north-west of the present locality, which exposed about 8 feet of reddish brown and grey mottled sandy clay with calcareous nodules with the same belemnite genera as recorded here. Green also (1958, 33, 34) recorded the Jamesoni and Davoei zones in the Tintinhull – Chilthorne Domer area but did not have evidence for the intervening Ibex Zone.

Systematic palaeontology (D.T.D.)

Genus *Rhynchoteuthis* d'Orbigny

There has been confusion as to the year of d'Orbigny's proposal of this genus. Sherborn in his *Index Animalium* (page 5513) gives 'Moll. viv. et foss. [1847]'. The problem arises because d'Orbigny's *Mollusques vivants et fossiles* was an ambitious work that was never finished, indeed never got beyond some of the cephalopods. Parts of it were also intended to form a work to be called the *Paléontologie universelle*, and the bibliography is compli-

cated. D'Orbigny himself gives the year as 1847 in his text. This was in the third section of the work to be published, the year of publication not stated. 1847 has been accepted by authors.

D'Orbigny included eleven species in the genus, most of them new. *Rhynchoteuthis astierianus* d'Orbigny [1847], page 598 was designated as the type species of the genus by Teichert, Moore and Zeller (in Moore 1964, K478). This species was said to be Senonian in age (i.e. Upper Cretaceous). D'Orbigny illustrated it in 1849, fig. 143 on p. 271.

Generic synonymy: Twentieth century authors including Bessler (1938), Gasiorowski (1973) and Till (1909) have placed the species and its synonyms in the genus *Hadrocheilus* Till 1907. Since *Rhynchoteuthis* is a valid name and its type species is closely similar to *R. bucklandi* I see no reason to do this. Riegraf and Schmitt-Riegraf (1995, 76–78) place several later generic names for cephalopod mandibles in synonymy with *Rhynchoteuthis*.

Geological range of *Rhynchoteuthis*: *R. bucklandi* is the stratigraphically earliest species. The record from the Raricostatum Zone, Densinodulum Subzone, in the present paper is the earliest occurrence of the species and genus. The examples figured by Andrews *et al.* (2010, 91, fig. 15) are recorded only as from the Belemnite Marl and are therefore of approximately the same age as the ones reported here. In south-west Germany *R. bucklandi* is recorded from the Jamesoni to Margaritatus zones (Riegraf & Luterbacher 1989; Riegraf & Schmitt-Riegraf 1995, 85).

Nemoto and Tanabe (2008) recorded *Rhynchoteuthis* from the early Maastrichtian of Japan. Riegraf and Schmitt-Riegraf (1987) recorded *Rhynchoteuthis* sp. from the Lower Maastrichtian of Bavaria. These may be the youngest well dated records.

Rhynchoteuthis bucklandi Ooster, 1859.

- 1836 Rhyncholites, Buckland 2 p. 67, pl. 44', figs. 3a–c.
 1849 Rhyncholithen. Quenstedt pl. 34, figs. 9a, b (copies of Buckland figs. 3a, c).
 1859 *Rhynchoteuthis bucklandi* Ooster, p. 7.
 1869 *Rhynchoteuthis liasina* Zittel, 120, pl. 13, fig. 6a–c.
 1883 *Rhyncholithes palatus* Quenstedt, 609, pl. 48, fig. 7, 8.
 1909 *Hadrocheilus Fraasi* Till, 583, pl. 19, fig. 1a–c.
 1909 *Hadrocheilus extensus* Till, 591, pl. 19, fig. 15a–c.
 1938 *Hadrocheilus rügeri* Bessler, 70, fig. 6a, b1, b2, c.
 1938 *Hadrocheilus sagittiformis* Bessler, 71, fig. 3a–c.
 1938 *Hadrocheilus excisus* Bessler, 71, fig. 1a–c.
 1938 *Hadrocheilus davoei* Bessler, 72, fig. 5a–c.
 1938 *Hadrocheilus regularis* Bessler, 72, fig. 2a–c.
 1938 *Hadrocheilus crassus* Bessler, 73, fig. 4a–c.
 1973 *Hadrocheilus regularis* Bessler, Gasiorowski, text fig. 48, no. 1.
 1995 *Rhynchoteuthis bucklandi* Ooster, Riegraf & Schmitt-Riegraf 1995, pl. 22,, figs. 1–4, pl. 23,

figs. 1–6, pl. 24, fig. 2, pl. 25, figs. 1, 2, 4, 5, pl. 26, figs. 1–5.

A longer synonymy is given by Riegraf and Schmitt-Riegraf (1995, 84, 85) who included the two new species described by Till (1909), and the six described by Bessler (1938). Bessler's new species were illustrated only by line drawings which can be closely matched by specimens in the present collection.

Lectotype: Buckland (1836, plate 44ⁿ) figured two specimens, his fig. 3a and figs. 3b, c, here reproduced in Figure 3. The larger, fig. 3a, is here designated lectotype of the species. The originals have not been recognised in the Buckland collections at Oxford University Museum (W.J. Kennedy *in litt.* 30 May 2005). The geological age of Buckland's specimens is unknown. They could have come from almost any horizon in the Sinemurian or Lower Pliensbachian. Buckland relied on local collectors, mainly Mary Anning and Elizabeth Philpot who would have known where their finds came from, but there was then no stratigraphical framework for recording such information.

Material: Forty-five specimens collected by Harvey were passed to Donovan for study. These are now in the Natural History Museum, Palaeontology Department. They comprise individually numbered specimens CC559 to CC572 and CC575 to CC577, two numbered CC 573 and a further 26 specimens under the

number CC574. Additional specimens were found later and remain with the collector. They are not included in the present study.

Description: As no type material exists the present collection is of interest as being near the Dorset coast (about 32 km SSW) where Buckland obtained his specimens, and from known stratigraphical levels.

A diagram of *Rhynchoteuthis bucklandi* showing the names of parts is given in Figure 4. A selection of our present finds is given in Figure 5. Most of the specimens are well preserved, but a few, e.g. Figure 5: 2a, b are worn. The posterior part of the shaft tends to be incomplete, suggesting that it was incompletely calcified. In dorsal view the hood overlaps the shaft, which has two ridges diverging at a smaller angle than the apical angle. In ventral view the division between hood and shaft is not usually apparent. A median ventral ridge extends posteriorly from the apex, usually becoming weaker rearwards. In side view the tip of the hood curves slightly downwards (Figure 5: 1c, 3c, 7).

Measurements of total width and the apical angle were attempted on 34 specimens. Length was not measured because the posterior end is almost always incomplete, so that the original length is uncertain. Measurements are given in Table 1. The lectotype is 11.0 mm wide, 80°–85° apical angle, and is at the larger end of the range from the present sample for these

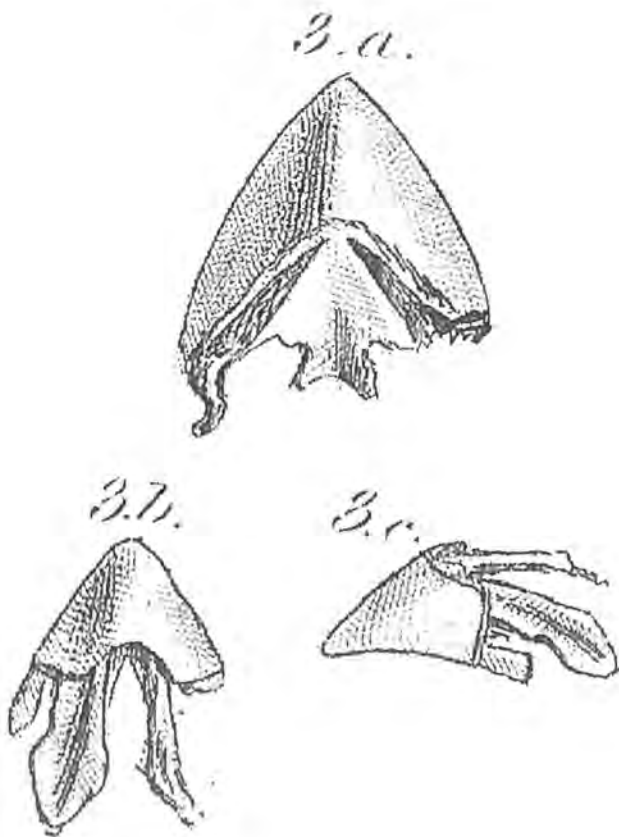


Figure 3: *Rhynchoteuthis bucklandi* Ooster. Copies of Buckland's (1836) figures

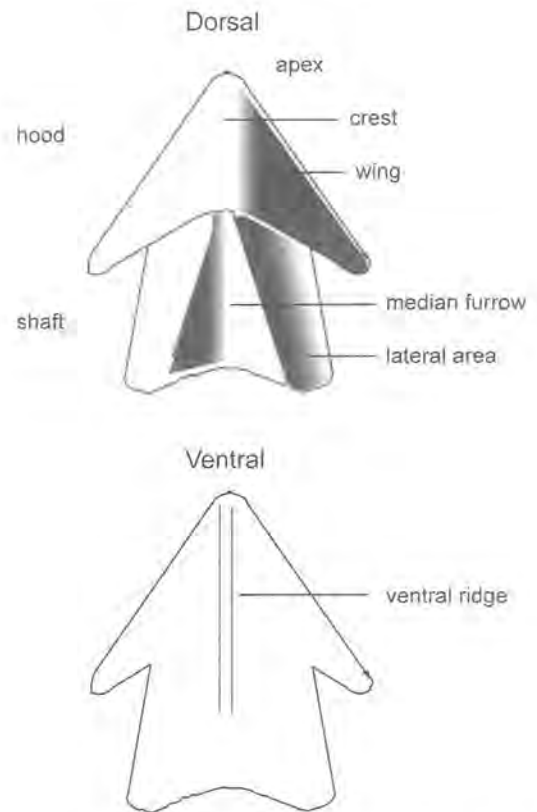


Figure 4. Diagram of *Rhynchoteuthis bucklandi* to show the terms used for different parts. Simplified from Riegraf & Schmitt-Riegraf 1995, plate 1

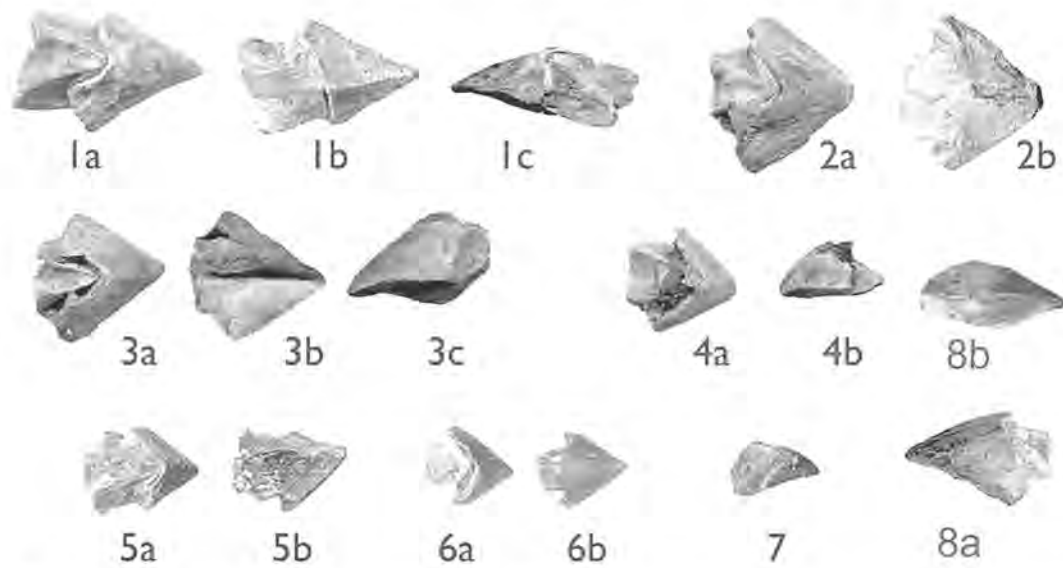


Figure 5: *Rhynchoteuthis bucklandi* 1a–c. CC560. Dorsal, oblique ventral and left lateral views. Maximum width 6.0 mm. 2a, b. CC561. Dorsal and ventral views. Maximum width 9.4 mm. 3a–c. CC563. dorsal, ventral and left lateral views. Maximum width 6.6 mm. 4a, b. CC564. Dorsal and left lateral views. Maximum width 4.7 mm. 5a, b. CC567. Dorsal and oblique ventral views. Maximum width 3.0 mm. 6a, b. CC569. Dorsal and ventral views. Maximum width 3.2 mm. 7. CC570. Maximum length 3.1 mm. 8a, b. CC566. oblique left lateral and oblique right lateral views. Maximum length 5.1 mm

Table 1: Measurements of maximum width and apical angle of specimens of *Rhynchoteuthis bucklandi* from Chilthorne Domer. NHM registered numbers are shown for specimens which have them. The others are a group with the collective number CC574

Reg. No.	Width mm.	Angle	Reg. No.	Width mm.	Angle
CC559	7.9	78°	CC572	2.1	71°
	8.2	67°	CC573(a)	2.8	71°
CC560	6.0	58°	CC573(b)	2.8	
	5.4	70°		4.7	77°
CC561	9.4	75°		3.8	65°
CC562	7.7	73°		4.3	66°
CC563	6.6	70°		3.9	67°
	5.7	64°			68°
CC564	4.7	73°		4.0	77°
CC565	4.5	74°		5.0	78°
CC566	3.6			4.8	77°
CC567		74°		5.7	70°
CC568	2.7	76°		3.7	77°
	2.4	74°		3.9	70°
CC569	3.2	69°		3.9	67°
CC570	1.9			6.8	
CC571	3.0				

measurements. For Buckland's other figured specimen the width is 5.9 mm and the angle 65°.

Width ranges from 2.1 mm to 9.4 mm, but only in five specimens is it greater than 6 mm. The mean value ($n=31$) is 4.68 mm. The distribution is thus skewed towards the smaller sizes. In more complete examples length is about 1.5 times the width, so that the largest were probably about 14 mm long or a little more. The apical angle ranges from 58° to 78° but only one specimen is below 64°. A scatter diagram of width against apical angle (Figure 6) does not indicate any correlation between the two measurements, but this has not been tested statistically.

Riegraf and Schmitt-Riegraf (1995, pl. 21) gave a bar graph of length for two assemblages of fossils identified as *R. bucklandi*. Those from the Middle Pliensbachian (Jamesoni – lower Margaritatus Zone) of Schömburg, Baden-Württemberg, Germany, are tiny, the modal class being 0.5 – 1.0 mm. The second group, from a similar horizon at a locality south of Salzburg, Austria, is larger, the mode being the 2.0 – 2.5 mm class. Both are skewed to the left, like the present assemblage, and both are smaller. Riegraf and Schmitt-Riegraf did not measure the apical angle. The specimens figured by them show that the apical angle varies and the range of values is probably similar to that of the present sample.

Bessler whose six new species from the Davoei Zone, Maculatum Subzone of Kettigheim, near Wiesloch, Baden-Württemberg, are here included in *R. bucklandi*, did not give individual measurements but stated that they were all from 0.4 to 1.0 mm in length (1938, 69).

The question arises whether this range of sizes and apical angles belong to a single species. The bar graph

for apical angle is in fact bimodal, with peaks at 70°–71° and 76°–78° ($n=30$), but that for width is not. Statistical tests have not been done but it is considered unsafe to partition the group on the basis of such a small sample.

Andrew *et al.* (2010) figure and discuss briefly *R. bucklandi* from the Belemnite Marl of Charmouth. Their figured specimens agree closely with the present material.

Affinities of *Rhynchoteuthis*

The question as to what animal group *Rhynchoteuthis* was the upper jaw of has been discussed for a long time, without much progress being made. It was summarized and discussed by Riegraf and Schmitt-Riegraf (1995, 9–25) and more briefly by Nemoto and Tanabe (2008, 305). Nemoto and Tanabe wrote that 'Coleoids are safely excluded' as the bearers of rhynchoteuthids, on the grounds that known Recent and fossil coleoids lack jaws with a calcareous element. They favoured the view that rhyncholites were the upper jaws of phylloceratid and lycoceratid ammonites, partly because the ranges in geological time are similar, though this could be said of other fossil groups. This view had been put forward by Riegraf and Luterbacher (1989). By 1998 the upper mandibles of phylloceratids and lycoceratids were still unknown (Tanabe & Landman 2002). Ammonite mouth parts have been much studied in recent decades and no positive evidence to associate rhynchoteuthids with ammonites has come forward; the fact that *Rhynchoteuthis* is quite different from known ammonite upper mandibles argues against this identification.

The genus *Rhyncholites* Faure-Biguet 1819 differs from *Rhynchoteuthis* only by the hood having a V-shaped

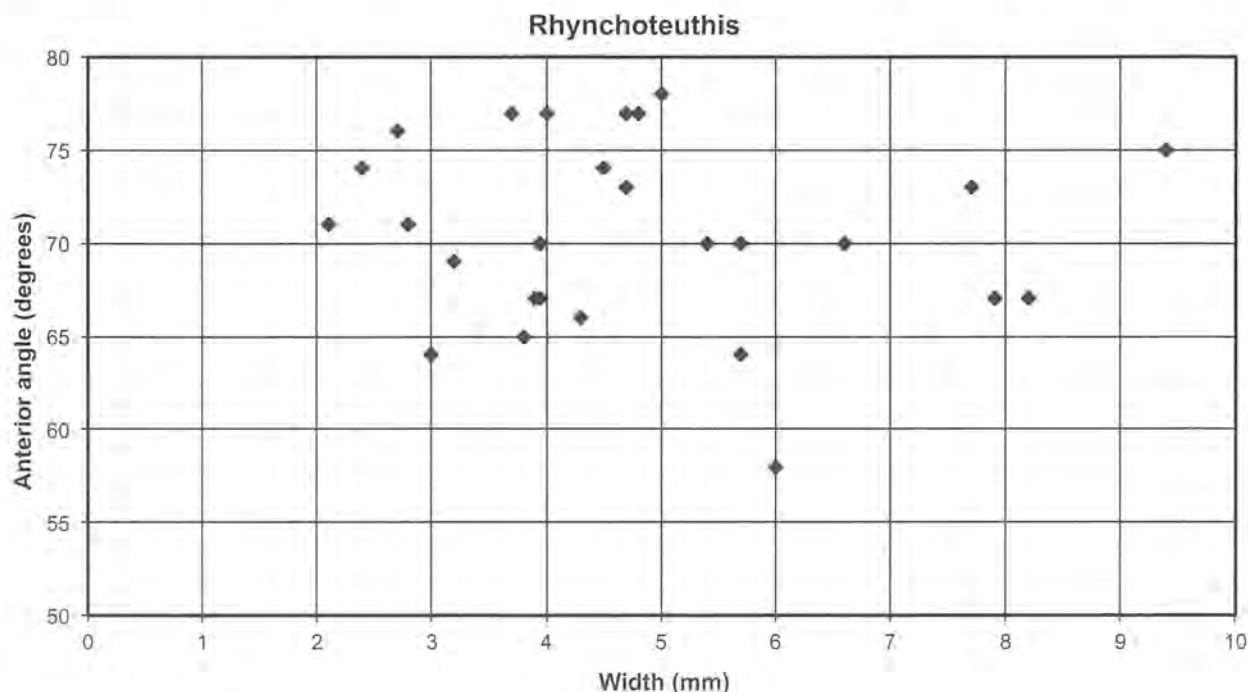


Figure 6: Scatter diagram of anterior angle: maximum width for 27 specimens for which both measurements could be made

posterior margin in dorsal view, in place of the re-entrant or inverted V of *Rhynchoteuthis*. The two genera are otherwise identical and surely belonged to the same animal group. Typical *Rhyncholites* have been reported from the Eocene (Teichert & Spinosa 1971; Teichert & Stanley 1975). This clearly has implications for the identity of the animal to which these jaws belonged. Ammonites became extinct at or about the K-T boundary and are inellegible as the bearers of *Rhyncholites*, and surely as the bearers of *Rhynchoteuthis* also.

Recent *Nautilus* has upper and lower mandibles which are partly calcified, and nautilids are thus an attractive possibility. However Jurassic and Cretaceous nautilids are well known and of modern type, so far as can be judged from the shell, and *Rhynchoteuthis* is not like known Recent and fossil nautilid jaws. Nemoto and Tanabe (2008, 305) reject the possibility for this reason. An unknown, extinct nautilid group seems improbable.

Buckland in the explanation to his plate 44', figs. 3a–c (1836, 2, 67) wrote 'Rhyncholites, found in contact with Belemnites in the Lias at Lyme Regis.' The figures are not referred to in Buckland's main text in volume 1. Belemnite jaws have been described recently (Klug *et al.* 2009) and prove to be of typical coleoid pattern, not calcified. Buckland included in belemnites the ink sacs, sometimes associated with nacreous shell, which are illustrated in his plate 44. These are called Belemnosepia on the plate, and indeed plate 44' is labelled 'Illustrations of the genus Belemnosepia'. In the main text (Buckland 1836, 1, 378, footnote†) we read of '...the Belemnite, or internal shell of Belemnosepia' so it is evident that the two words meant the same thing to Buckland. The ink sacs on plate 44 however belonged to the genus *Phragmoteuthis* and it is possible that the figured jaws were associated with specimens of *P. montefiorei* (Buckman 1880), these being regarded as belemnites as late as 1907 by Crick (Donovan 2006, 674). They are often preserved with the arm crown, although if Buckland knew of them it is odd that he did not illustrate one. The earliest Phragmoteuthida are Triassic and the youngest are Toarcian in age so there is a mismatch with the age range of *Rhynchoteuthis*, Upper Sinemurian – Maastrichtian.

ACKNOWLEDGEMENTS

Dr Wolfgang Riegraf for providing a photocopy of Riegraf and Schmitt-Riegraf 1995 and for discussion. Dr Michael Howarth for a critical reading of the text and for providing a copy of Bessler 1938. Professor Susan Evans for taking the images of *Rhynchoteuthis bucklandi* which illustrate this paper. Professor W. J. Kennedy for information on the Buckland collection, Oxford University Museum. Dr Kevin Page for help with identification of ammonites, and Hugh Prudden for information on and discussion of the local geology. The Cooke, Davis, Dowding, Frampton and Pickford families all kindly allowed access and collecting on their private land.

REFERENCES

- Andrew, C., P. Howe, C. R. C. Paul and S. K. Donovan, 2010 'Fatally bitten ammonites from the Lower Lias Group (Lower Jurassic) of Lyme Regis, Dorset', *Proceedings of the Yorkshire Geological Society* **58**, 81–94.
- Bessler, J. 1938 'Funde von *Hadrocheilus* Till im oberen Lias Gamma (Davoei-Schichten) der Langenbrückener Senke', *Beiträge zur naturkundlichen Forschung in Südwestdeutschland* **3**, 66–75.
- Bristow, C. R., C. M. Barton, R. K. Westhead, E. C. Freshney, B. M. Cox and M. A. Woods 1999 *The Wincanton district – a concise account of the geology*. Memoir of the British Geological Survey, Sheet 297 (England & Wales).
- Buckland, W. 1836 *Geology and mineralogy considered with reference to natural theology*. William Pickering, London. 2 vols. xvi + 600; viii + 128, 87 pl.
- Buckman, J. 1880 'On the *Belemniteuthis Montefiorei*', *Proceedings of the Dorset Natural History and Antiquarian Field Club* **3**, 141–143.
- Crick, G. C. 1907 'On the arms of the belemnite', *Proceedings of the Malacological Society of London* **5**, 13–16.
- Donovan, D. T. 2006 'Phragmoteuthida (Cephalopoda: Coleoidea) from the Lower Jurassic of Dorset, England', *Palaeontology* **49**, 673–684.
- Doyle, P. 2010 '12. Mollusca – Belemnites', in A. R. Lord and P. G. Davis (eds), *Fossils from the Lower Lias of the Dorset coast*. The Palaeontological Association, London.
- Gasiorowski, S. M. 1973 'Les rhyncholites', *Géobios* **6**, 127–196.
- Green, G. W. 1958 'Northern area' in V. Wilson, F. B. A. Welch, J. A. Robbie and G. W. Green, *Geology of the country around Bridport and Yeovil*. Memoirs of the Geological Survey of Great Britain. HMSO, London, 32–34.
- Klug, C., G. Schweigert, D. Fuchs and G. Dietl, 2009 'First record of a belemnite preserved with beaks, arms and ink sac from the Nusplingen Lithographic Limestone (Kimmeridgian, SW Germany)', *Lethaia online*, 10.1111/j.1502-3931.2009.00203.x
- Lang, W. D. and L. F. Spath, 1926 'The Black Marl of Black Ven and Stonebarrow, in the Lias of the Dorset coast', *Quarterly Journal of the Geological Society* **82**, 144–187.
- Lang, W. D., L. F. Spath, L. R. Cox and H. M. Muir-Wood, 1928 'The Belemnite Marls of Charmouth, a series in the Lias of the Dorset coast', *Quarterly Journal of the Geological Society* **84**, 179–257.
- Moore, R. C. (ed). 1964. *Treatise on Invertebrate Paleontology Part K. Mollusca* 3. The Geological Society of America and The University of Kansas Press.
- Nemoto, T and K. Tanabe, 2008 'New record of a rhyncholite (cephalopod upper jaw element) from the Maastrichtian of Hokkaido, Japan', *Palaeontological Research* **12**, 303–306.
- Ooster, W. A. 1859 *Pétrifications remarquables des Alpes suisses. Catalogue des Céphalopodes des Alpes suisses*. Part 2. 34 p., pls. 4–7 (publisher?)
- Orbigny, A. d' [1847?] *Mollusques vivants et fossiles ou description de toutes les espèces de coquilles et de mollusques classées suivant leur distribution géologique et géographique*. **1**, 577–? Gide, Paris.
- Orbigny, A. d' 1849 *Cours élémentaire de paléontologie et de géologie stratigraphiques*. **1**. Victor Masson, Paris.
- Page, K. N. 2010 'Stratigraphical framework', in A. R. Lord & P. G. Davis (eds), *Fossils from the Lower Lias of the Dorset coast*. The Palaeontological Association, London, 33–53.
- Quenstedt, F. A. 1849 *Petrefactenkunde Deutschlands. I Abt. I Bd. Cephalopoden*, Atlas. Fues, Tübingen.
- Quenstedt, F. A. 1883 *Handbuch der Petrefactenkunde*. 3 Auflage. 12 Lieferung. Laupp, Tübingen.

- Riegraf, W & H. Luterbacher, 1989 'Jurassic and Cretaceous rhyncholites (cephalopod jaws) from the North Atlantic Ocean (Deep Sea Drilling Project Leg 1-79) and their European counterparts. Evidence for the uniformity of the Western Tethys', *Geologische Rundschau* **78**, 1141-1163.
- Riegraf, W. and C. Schmitt-Riegraf, 1987 '*Rhynchoteuthis minima* von der Marck, 1858 (rhyncholite, cephalopod jaw) from the latest Campanian (Cretaceous) of Westfalen (NW Germany)', *Stuttgarter Beiträge zur Naturkunde* **B 135**, 1-35.
- Riegraf, W and C. Schmitt-Riegraf, 1995 'Mandibula fossiles ammonitorum et nautilorum (Rhyncholithi et rhynchoteuthes, excl. aptychi et anaptychi)', *Fossilium Catalogus* 1: Animalia. Pars 134. Kugler, Amsterdam.
- Sherborn, C. D., 1930 *Index Animalium* Part XXII. British Museum, London.
- Tanabe, K. & N. H. Landman, 2002 'Morphological diversity of the jaws of Cretaceous Ammonoidea', *Abhandlungen der Geologischen Bundesanstalt* **57**, 157-165.
- Teichert, C., Moore, R. C. & Zeller, D. E. N. 1964. Rhyncholites. In Moore, R. C. (ed.) *Treatise on Invertebrate Paleontology Part K. Mollusca* 3, K467-K484.
- Teichert, C. and C. Spinosa, 1971 'Cretaceous and Tertiary rhyncholites from the western Atlantic Ocean and from Mississippi'. *University of Kansas Paleontological Contributions Paper* **58**, 10 pp.
- Teichert, C. and G. D. Stanley, 1975 'Eocene Rhyncholite from California', *Geology* **3**, 178-180.
- Till, A. 1909 'Die fossilen Cephalopodengebisse', *Jahrbuch des kaiserlich-königlichen geologischen Reichsanstalt* **58**, 573-608.
- Wilson, V., F. B. A. Welch, J. A. Robbie and G. W. Green, 1958 *Geology of the country around Bridport and Yeovil*. Memoirs of the Geological Survey of Great Britain. HMSO, London.

ENDNOTES

1. School of Earth Sciences, University of Bristol; 4 North Grove, Wells, Somerset, BA5 2TD.
2. Vale Cottage, Chilthorne Hill, Chilthorne Damer, Yeovil, Somerset, BA22 8QZ.

Sea Pea, Abbotsbury Pease

JO DRAPER

The sea pea (*Lathyrus japonicus ssp. maritimus*) is a rare plant which has found its niche on shingle banks where little else can survive. It has been known from Abbotsbury since as early as the 18th century, and was recorded in print by Pulteney in 1799 (Mansel-Pleydell 1895, 78). It still occurs in patches in the shingle at Abbotsbury, Bexington and along Chesil Beach (Bowen 2000, 149).

Researching for something quite else, I found a description of a visit to Abbotsbury (the swannery) in the late 1870s. On the beach

...the land side of the shingle is covered in places with white campions, growing thickly, while higher up there is a crop of peas, the offspring of a shipload wreck there some years ago. They are, however, intensely bitter, and are only eaten by the sheep — horses, and even donkeys, resolutely refusing to touch them. They spring out of the stones themselves, and there is not a handful of earth anywhere near where they can be nourished. (Panton 1882, 182)

This is a lovely combination of observation, information and legend. The sea pea is distinctly different from

the garden pea as a plant, never mind growing in a shingle bank by the sea, and it had been botanically identified a hundred years before. As an unusual plant, local explanation is needed, hence the shipwreck depositing the seeds. The visitor saw a thick crop, and it may have been the regular feeding to the sheep which led to a decline in the plant. Something refused by donkeys is indeed unpalatable, as they are well known for eating almost any plant.

In the famine year of 1555, the poor people of the Suffolk coast were reduced to scavenging the pea pods at the shoreline, and this must be the same sea pea which still grows at Orford Ness and other places near there. Suffolk also has a pea-laden ship breaking up offshore and its cargo feeding the locals, but here they don't seem to tie the existence of the plants to the event.

REFERENCES

- Bowen, Humphrey. 2000 *The flora of Dorset*.
Mareen, Pete. 1999 *Britain's rare flowers*.
Mansel-Pleydel. 1895 *The flora of Dorsetshire*, 2nd ed.
Panton, J.E. 1882 *Country Sketches in Black and White*.



The sea pea (Lathyrus japonicus ssp. maritimus), photographed by Colin Varndell [www.colinvarndell.co.uk].

Natural History Reports

GENERAL WEATHER SUMMARY 2011

The warmest year on record

January

The first week was rather cold and unsettled with rain or showers at times. Surface air temperatures were low enough for the precipitation to fall as snow at times on 3 Jan. Heavy rain on 6 Jan. resulted in falls locally above 25mm and some 'wet' snow on high ground but with little accumulation. The period from the 8–17 January remained unsettled but as the wind backed into the south-west it became progressively milder with daytime temperatures up to 12°C. Barometric pressure built strongly across the UK on the 18 Jan. and the remainder of the month was mainly dry and anti-cyclonic but with northerly winds it was rather cold with night frosts. Day maxima only just climbed above zero Celsius on 29 January, and fell to –5°C widely by dawn on 31.

February (Mildest since 2002)

This was a mild and cloudy month (the duller at Weymouth since 1997) with mainly south-westerly winds and day and night temperatures about 2°C above average. The 24 Feb. was the mildest February day (14°C) since 1998. Rain fell frequently but not heavily and totals were generally close to the average. The four recorded nights of frost at East Stour was the lowest February total since 1995.

March (Driest since 1990)

The month was much drier than usual under anti-cyclonic conditions with rainfall generally less than 30% of the recent thirty-year mean. Most of the rain fell in the period from 12–18 and on 30 March. The first few days were rather cold but overall the month was a little warmer than usual and the temperature reached 19°C in places on the 25th – the highest March temperature since 1999. The sky was frequently clear at night and this allowed the temperature to tumble with frost recorded on up to ten nights. Readings of –5°C were recorded at several stations on the 8 March.

April (Driest since 2007)

This was an exceptionally dry, sunny and warm April with the general rainfall only 13% of the average. It was the driest April overall since 2007 but in a few places since 1984. Many stations reported no rain at all after the 14 April. Temperatures were consistently high and exceeded 21°C inland on seven consecutive days from the 19th and peaked at 27°C on the 23rd at Blandford and Wimborne – the highest April temperature since 2003.

May

This was an 'average' month in terms of rainfall, sunshine and temperature. There were no very warm days – the absolute maximum temperature of 21.1°C at Dorchester and 22.0°C at East Stour was the lowest for this month since 1994. Most of the rain fell in the first week and it was heavy at times, especially on the 6 and 7 May, when it was accompanied by thunder in many places.

June

Apart from a few warm days at the beginning and end of the month with temperatures locally up to 27°C, June was disappointingly cloudy and cool with rain at times. The mean maximum temperature was the lowest for at least nine years. 12 May was a very wet day with rainfall totals of 25–40mm in many places and a maximum temperature close to 14°C. A brief ground frost was recorded at some sheltered sites early on 7 May with air temperatures as low as 3°C.

July

The mainly dry weather at the end of June continued until 4 July with increasing amounts of sunshine and temperatures up to 24°C. After a brief cloudier and cooler period (5–7 July) with some heavy rain at times, it became drier again with some sunshine and temperatures returned to at least the average. Pressure fell rapidly on the 15 July heralding a change to nearly a week of very cool unsettled weather with rain at times. The temperature on the 18th and 20th was only 16°C at best. The month redeemed itself somewhat during the last 11 days, being mainly dry and with a marked rise in temperature and sunshine amounts. 25–28 July was very warm with maxima up to 26.5°C at Wimborne on the 25th.

August (Wettest since 1997)

The first three days of the month were sunny and very warm – 2 August was generally the hottest day of the summer with the temperature up to 28°C at Thornford and Blandford. Heavy overnight rain on the 3rd with falls locally exceeding 30mm brought an abrupt end to this summery spell and the month overall was cool and unsettled with double the average rainfall in places. Exceptionally heavy rain accompanied by thunder led to flash-flooding in the Bournemouth area on the 18th. Falls of around 20mm in an hour were recorded in places and in the Wareham area more than 80mm was collected in a six hour period from 0600hrs GMT. It was also unusually cool across the county with a brisk north-east wind and a top temperature of around 14°C.

September (Warmest since 2006)

The first three weeks were unsettled with rain at times, much of it light but with some heavier outbreaks especially on the 17 September, when 36mm was measured at Thornford. The last ten days of the month were mainly dry. Temperatures were well above average by day and night for much of the month with 18°C the minimum in many places on the 10th. Maxima of up to 26°C was recorded inland on the 2nd but more remarkable, was the similar values reached as late as the 30th.

October (Warmest since 2006)

Temperatures were well above average by day and night throughout October with some record-breaking heat during the first two days. At Thornford and East Stour 27°C was reached on the 1st. The coolest day was the 20th with a maximum temperature of around 12°C following the first frost of the season. Rainfall was generally about 60% of the average with most of it falling between 24 and 27 October.

November (Mildest since 1994 and driest since 2004)

This was an exceptionally mild month with the mean temperature about 3°C above the average and day maxima the highest for more than 50 years. The temperature reached 16.9°C at Weymouth on the 3 November, and 17.1°C at Hurn on the 12th. One or two slight frosts were noted late in the month. The month was quite unsettled with frequent spells of rain but daily accumulations were not large.

December (Mildest since 1988)

This was a generally very mild and unsettled month with frequent but not particularly heavy rain, except on 12

December, when falls of up to 40mm were reported. A brief rather cold period in mid-month resulted in a few slight frosts and restricted maxima on the 16th to about 5°C. The Christmas period just about remained dry and was very mild. The temperature in Dorchester at dawn on Boxing Day morning was 10°C – an incredible 22°C higher than at the same time in 2010. The month ended with the mildest New Years Eve on record with maxima locally up to 13°C.

DORSET RAINFALL 2011**The Driest Year Since 2003**

The general rainfall across Dorset in 2011 amounted to 756.6mm and this represented 82% of the 1981–2010 average. It was the driest year over the county as a whole since 2003, but locally since 1975 or 1973. The wettest station was Stratton with 956.8mm, and the driest with 516.4mm was Portland Bill. The highest rainfall total from a single event was 83.6mm at Trigon (Wareham), recorded in just a few hours on the morning of 18 August but bridging the rain-days of 17 and 18 August. The spring and autumn seasons were exceptionally dry with rainfall totals just 36% and 62% of the average respectively. The former was the driest since 1990 but the summer period June to August was 40% wetter than the recent thirty-year mean. The longest dry periods during the year occurred in the spring months and many observers reported no rain at all for at least 15 days from 14 April. The monthly distribution of rainfall and the updated thirty-year averages is given in Table 1, with the full series of rainfall averages used since 1890 shown in Table 2.

Table 1: Monthly rainfall and thunder days

Month	Rain days* > 0.2mm	Rainfall* (mm)	1981–2010 av. (mm)	% of av.	Days of thunder
January	15	105.7	97.2	109	2
February	18	72.9	71.3	102	0
March	7	20.5	72.2	28	1
April	5	8.1	62.3	13	3
May	10	39.0	57.6	68	3
June	16	84.3	52.7	160	3
July	11	45.6	51.8	88	1
August	17	107.8	62.8	172	3
September	14	53.5	71.3	75	1
October	12	62.6	109.2	57	2
November	16	60.2	109.3	55	1
December	23	96.4	107.2	90	0
Year	164	756.6	924.9	82	20

* Rainfall and Rain day averages have been calculated from the stations that record rainfall to an accuracy of 0.1mm.

Table 2: 30-year averages of Dorset rainfall

Years	mm	Years	mm
1861–1890	871	1921–1950	916
1871–1900	867	1931–1960	926
1881–1910	833	1941–1970	924
1891–1920	875	1951–1980	915
1901–1930	913	1961–1990	883
1911–1940	930	1971–2000	910
		1981–2010	925

Thirty-year Averages

From 2011 the standard thirty-year reference period in use for establishing a 'recent average' has been updated to embrace the years from 1981 to 2010. The complete series of thirty-year averages used in Dorset Rainfall is shown in Table 2. This is believed to be a fair representation of changing rainfall trends but it should be borne in mind that the Rainfall Network itself is also ever changing with regard to the number of contributing stations and their location.

The Main Rainfall Events of 2011

Rainfall totals exceeding 25mm at one or more stations were recorded on 11 days during the year compared to 13 days in 2010. The wettest days of 2011 are detailed below:

12 June

Rain associated with the warm front of a depression (1000mbs) to the south west of the UK reached Dorset around 0300hrs GMT and continued, heavy at times until at least 1900hrs. The rainfall totals were split at the observation hour (generally 0900hrs GMT) across the rain-days of the 11 and 12 June. The highest combined rainfall totals for the calendar day were recorded across the south of the county, away from the coast at 40–50mm. The Environment Agency (E.A) automatic gauge at Tollerdown measured 50.2mm. Over north Dorset and along the coastal fringe falls were limited to 15–25mm. The maximum temperature was generally no higher than 15°C, the cool feel accentuated by a brisk south-easterly wind gusting 35–40mph. Twenty-three stations credited more than 25mm to the rain-day of the 12th and for ten of them it was the wettest day of the year. (Milborne St Andrew 45.8mm; Winfrith Newburgh 45.0mm; Sydling St Nicholas 40.7mm)

18 August

At 0000hrs GMT on 18 August, the UK was positioned in a col between high-pressure centres to the NE and SW, and low pressure systems to the SE and NW. At the same time a warm front lay west to east in the English Channel. Rain reached the Dorset coast before dawn

and it became heavy and thundery during the morning as it extended north-eastwards. The heaviest rain occurred between 0900hrs and noon GMT south-east of a line from the Channel through Wyke Regis, Overmoigne, Blandford and Fordingbridge. Up to 50mm of rain fell in places during this three hour period, with a quite localized intense fall of 75mm in the Wareham area. At Trigon the total rainfall recorded was 83.6mm and the Environment Agency (EA) gauge at nearby East Stoke collected 82.8mm. Other high totals include Winterborne Zelstone 66.5mm; East Burton (EA) 65.6mm; Holdenhurst (EA) 61.8mm and Lytchett Matravers (EA) 61.2mm.

The heavy rain caused some flash flooding with the Lulworth, Poole, Bournemouth and Christchurch areas all badly affected. Several people had to be rescued from their stranded vehicles and evacuated from homes and businesses. In Bournemouth the lower and central pleasure gardens were submerged. In the town centre itself, manhole covers and sections of the road surface were lifted by the pressure of the water from the overwhelmed drainage system. Some roads were flooded to a depth of one metre and the Borough Council received 1000 calls relating to flooding in 120 locations. The fire service dealt with more than 100 incidents in a two hour period. The air displays had to be cancelled on the first of the four-day Bournemouth Air Festival for safety reasons.

12 December

Frontal rain affected the whole area during the evening and overnight period and it was very windy with gusts inland to 50mph. The rain was heavy over most of the county with falls generally exceeding 25mm except for central south Dorset where totals were less than 20mm and only 8.8mm fell at Portland. Twenty-one stations reported more than 25mm of rain on this day and for ten of them it was the wettest day of 2011. (Thornford 42.0mm; Blandford (Forebridge View) 37.0mm; Tarrant Monkton (E.A) 36.7mm)

Thunderstorms

Thunder was heard on twenty days during the year compared to just eight days in 2010 and a twenty-nine-year average of thirty days. This was the fourth consecutive year with a below average occurrence of thunder. As in recent years the thunder was generally associated with passing showers or cold fronts and the rather cool 'Atlantic' summer resulted in the absence of heat-generated storms from the south. There were only five days in 2011 when thunder was heard at more than half of the twenty-four reporting stations.

January 17 (14 stations)

During the evening thunder was heard across the county in association with a small low in the Channel. The accompanying rain was heavy in places with hail.

May 6 / 7 (19 / 18 stations)

These were the most thundery days of the year. During the early evening (6 May) outbreaks of rain spread from the south with some thunder, principally around 2000hrs – 2100hrs GMT with occasional lightning seen until midnight. On the 7 May thunder was heard soon after dawn in the West Moors and Wimborne areas, but the main activity was much later in the day. Rain became persistent and heavy at times from 1630hrs – 1730hrs GMT and again from 2100hrs with some distant lightning observed until nearly midnight.

August 18 (12 stations)

Thunder was heard in the Weymouth and Dorchester areas at around 0810hrs and at Wimborne at 0900hrs. The storm intensified as it spread further north and east with some lightning and flood damage (described earlier) in the Bournemouth area.

August 26 (12 stations)

This was a day of sunny intervals and heavy, thundery showers. At least ten peals of thunder were heard between 0945hrs – 1025hrs GMT in the Weymouth and Dorchester area where the latter received 21mm of rain in less than 45 minutes with some localized flooding. At East Stour thunder was noted at 1136hrs and in the Blandford area around 1350hrs GMT.

Snowfalls

Most stations reported snow and sleet showers on 3 January and in places that produced a temporary light covering. Shaftesbury was the only station to record snow lying in 2011 and that was limited to one day with a 1cm cover on the morning of 14 December. Many other inland stations reported snow or hail falling in the showers at times between the 13 and 17 December.

BUTTERFLY REPORT 2010–11

Bill Shreeves

This report covers both years 2010 and 2011 in order to go a little way towards compensating readers for my failure to meet the publication deadlines in 2010! It begins with an explanation of the records upon which the report is based. This should help new readers who may hopefully be inspired to take part in the important and enjoyable activity of butterfly recording in the future. Butterfly atlases are now published, for the whole of the UK as well as for Dorset, every five years. We are at present working on the 2010–14 atlas.

The Butterfly Records for 2010–11

The backbone is made up of the regular twenty-six week Transect walks carried out each year, 61 of them in 2010 and 62 in 2011. New walks have been added at Black

Hills, Chard Junction and Ferry Road West. Sadly the walk at West Moors, coordinated and walked by Keith Powrie for twenty-six years, has ceased to exist because the route has become impossible to walk. Additional data comes in from six 'mini walks' along the Purbeck Chalk Ridge and three single-species walks concentrating on the Silver Studded Blue. These walks do not require the full twenty-six weeks. Another national walking system, known as Wider Countryside Butterfly Monitoring, collected records from thirty Dorset km squares in 2010 and thirty-three in 2011. These squares, which are intended to cover ordinary countryside, as opposed to the older walks which are often on nature reserves, are randomly selected for Dorset by computer. To these are added records for the rarer species, which are collected by teams of surveyors organised by regional coordinators to visit known sites at least once every five years. On top of this are the so-called 'individual casual records' from anyone who records any butterflies anywhere in Dorset. These range from one-off sightings, through visits to places visited regularly like golf courses, to organised surveys around local kilometre squares recorded on a once per month basis. These records are sent to me on special paper lists or on electronic sheets which I can provide. Other people recorded in their gardens: 116 gardens in 2010 and 114 in 2011. An increasing amount of data is sent to the Dorset Butterfly Conservation website and all sightings are automatically passed on to me for inclusion in the atlas. In 2011 a new type of electronic recording started to become available. Throughout July and August Butterfly Conservation and Marks & Spencer organised the national 'Big Butterfly Count'. In Dorset over 350 groups of people/families took part and recorded 11,000 butterflies in 360 km squares. They entered all their records on line into a 'Google-style' map. The Dorset Environmental Records Centre has now made a similar 'Living Record' map entry system available to all their recorders of everything, not just butterflies. Just register on the DERC web site to begin. All butterfly records are extracted from the maps to be verified & entered into the national atlas. Free copies of the new 6th edition of *Counting Dorset's Butterflies and Moths* (2012), which explains how to record them, can be obtained from Lyn Pullen [01305 853946]. Please see the list of where to send records at the end of this article.

How did 2010 and 2011 rate as Butterfly Years?

The question is, of course, rather meaningless since for butterflies it is all a matter of 'swings and roundabouts'. A hot dry July might do wonders in one year, but would sow the seeds of destruction for a species like the Duke of Burgundy in the following year. This is because this sort of weather dries up their caterpillars' cowslip food plants. The data from the Transect walks, collected regularly under comparable weather conditions, could, in theory, solve the problem by showing how many butterflies were counted. Dorset 2011 (total count 108,226)

might be slightly better than 2010 (100,719), but worse than 2009 (110,249). The National Monitoring System actually ranks years by this method, but they have the advantage of using sophisticated statistical methods like log-linear regression and 'bootstrapping' to compensate when walks are added or lost. Without these our Dorset totals remain crude. Another way of answering the question, is to add up the number of species which were over 50% up on their annual average counts, and on the previous year, on the majority of walks. A second list can be made for those which declined on the majority of walks. Thankfully this produces a similar result to the crude butterfly count method. Again 2011 ranks slightly better than 2010, having ten species up but only two down compared with 2010 having eleven up but a massive thirteen down. In contrast to 2007 and 2008, which had twenty-four and twenty-two species down, both 2010 and 2011 seem quite respectable!

Which species were the main 'winners' and 'losers'?

The leading winners in 2010 were Adonis Blue and Brown Argus followed by Common, Holly and Small Blues, and Small Heath. All had very high, sometimes record, counts compared with both 2009 and their annual averages. What they had in common was that they were largely double brooded. This enabled them to take full advantage of the warm and dry, April to June, weather to give both broods a welcome lift-off. Although 2011 also started with above average warmth and below average rainfall in March, April and early May, the rest of the summer was colder than normal. This resulted in the single brooded Orange Tip, with its early flight period, emerging as the only runaway winner with a record total count on all walks put together, and even on many of the oldest individual walks. The reason for this unusual performance must go back to the warm and dry April–June 2010 which set down the foundations with a larger than usual egg lay. It is likely that the unusually cold and dry winter of 2010–11 enabled a higher than normal percentage of the pupae to survive. With an above average warm and dry February to April 2011 the scene was set for the record Orange Tip totals. It must be admitted that these may have been boosted a little by some double counting, as the patrolling male Orange Tips bowled round and round the hedgerows in the unusually sunny April weather. This could be described as rather like the same handful of theatrical soldiers circling around a stage to give the illusion of a whole army!

The collapse of the later summer weather in 2010 was probably the main reason for the huge number of species falling well below their average, or 2009, counts on a majority of sites. These ranged from rarer species like Lulworth Skipper, Small Pearl-Bordered Fritillary, Wood White, Grayling and Grizzled Skipper, to commoner wider countryside species like Purple Hairstreak, Gatekeeper, Small Tortoiseshells and Skippers. Probably most of these species had fallen so far that the cold

June to August summer of 2011 showed a much lower number of losers. The warm and dry spring of 2011 even enabled the Grizzled Skipper to bounce back as a winner on the majority of its sites. However, well down on their 2010 totals, on a majority of their sites, there remained the Peacock (55% of sites) and, for a second year running, Lulworth Skipper (75%) and Small Tortoiseshell (68%). Hopes that the improved total Small Tortoiseshell count in 2009–10 (1,072 and 998) might be pointing to the first steps back to a recovery towards the 6,229 of 2003, were dashed by a relapse to only 655. It seems likely that the spring brood larvae were hit by the drought, and the mid-summer larval brood was further decimated by the attacks of the alien *Sturmia bella* parasitic fly as well as its normal native parasites.

2011: Year of record early and late sightings

It is the record officer's duty to verify the accuracy of records, and at one time a reliable indicator that a recorder might be mistaken was the date. After I had queried many records on the grounds that such a date must be impossible, and then had to eat humble pie as more and more came in, including those I saw myself, it became clear that 2011 was out of the ordinary! The record which made this absolutely certain came in a list of species seen on 28 April at Durdle Door sent in by an unchallengeable authority, Martin Warren. He had watched 12 Lulworth Skippers (usually late June at the earliest) in the unlikely company of twenty-three Dingy Skippers, twenty-two Small Blues, five Common Blues with a backing of one Brown Argus, and Walls and Small Heaths. From then on more and more species reported early, so that by the end of June there seemed little left to make a first appearance. However, the cold June, July and August gradually put on the brakes, until species like Chalkhill Blue were only a few days early and Silver Spotted Skipper not at all. Then in September came further records, impossibly late this time, which seemed to suggest that the flight-period tables might have to be thrown out of the window. On 15 September came the first of several Marsh Fritillaries at the Cerne Giant and on 1 October a fresh Marbled White at Durdle Door, and even more unlikely, a Silver Studded Blue on 9 October near the East Dorset Golf Club. Unaware that the cynicism of the Dorset Records Officer had by then been totally exploded, most of the records came with photographs from recorders who did not expect to be believed! The most likely explanation for these and other late sightings, is probably that they did not come from second broods but from delayed development in caterpillars. Half-starved by the drought earlier in the year, helped into maturity by more rain in July–August they were encouraged eventually to emerge from the chrysalis stage by a warmer September.

Migrants in 2010–11

For Dorset's regular three common migrants these years were very barren. The regular Transect Walk

counts provide the most reliable evidence with the big reservation that, of course, they exclude anything before 1 April or after the end of September when walking ceases. The total Clouded Yellow count in 2010, at seven, was the second lowest since 1996, and the thirteen in 2011 was the third lowest. The 2010 Painted Lady total of forty-nine for all walks was the lowest on record since 1996, and the 98 in 2011 was fourth lowest. All rather an anticlimax after the big migration of 2009 had produced a count of 5,035 on the Transects. The year had started with an amazing photo of seventeen Painted Ladies found packed together in a pansy bed in West Bay on 1 March. Only one was ever seen to manage flight and the most likely explanation is that they had been dumped there as the unwanted offspring from one of the winter breeding kits now on the market. In September and October there were quite a few late sightings of both Clouded Yellows and Painted Ladies which might have been new migrants or offspring of the small numbers arriving earlier in the year. Red Admirals on the Transect Walks did rather better with a total count of 1,685, the fifth highest since 1996. There does appear to have been a southward reverse migration in late September with records of butterflies heading out to sea. An angler at Pitman's Pond, Wytch Farm reported on 15 September to the website '50 Swallows flew down the pond followed a few minutes later by about 15 Red Admirals in a group all flying in a southerly direction.' However, what were the 'dozens' of Red Admirals seen moving north-east across Portland on 6 November doing? Could they have been new migrants just arriving, or 'natives' moving along the coast before heading south? Reports of Red Admirals, which had evidently not headed south, continued right through December and I even saw one in my Shaftesbury garden on 2 January 2012. Swedish research, which makes use of stable hydrogen isotope chemical markers ingested with the food-plant by caterpillars, and later transferred into the wings, has been tested in Europe. It holds out the tantalizing prospect that we might eventually have a means of ascertaining where our Red Admirals (and possibly other migrant species) originally came from!

The story for other more exotic migrants in 2010–2011 can be quickly told. Roy Eden reported a Pale Clouded Yellow on 17 September 2010 in his garden at West Bexington. The only other 'rare' migrant for 2010, a Long-tailed Blue, was photographed by Val McCormack on 8 September in Cheyne Weares, Portland. Weather backtracking and the sightings of migrant moths at this time, suggested that this was a genuine continental 'flight' migrant and not the offspring of a caterpillar brought in from overseas on lentils, or mange-tout peas. It was interesting though, that another Long Tailed Blue was reported by the Portland Observatory in the following year, 2011, around Easton on 28 September. Altogether 2011 was better for migrants with the first record coming on 8 April. This was a Camberwell Beauty which was

watched by Martin and Julie Read flying and resting on the classroom wall at Carter Community School, Hamworthy, while they were waiting for their son to embark on a coach for a ski trip to Austria. Had this been in hibernation from a cluster said to have been released in Dorset the previous year? Had it just been released from somebody's breeding cage, or could it, as suggested by Martin and Julie, have come off the coach? All that can be said with certainty is that it was the seventeenth recorded sighting in Dorset since 1995. This was the last since the Brownsea Island sighting photographed on 27 March–4 April 2008, and a worthy successor to the famous Camberwell Beauty caught at Tyneham House back in 1923. This one was famously commemorated in the stained glass window in the village church. On 7 June, near Holworth House in Purbeck, the thirty-four Large Tortoiseshell seen in Dorset since 2005 was watched through binoculars by John and Carolyn Kennedy. Between 2005 and 2008 there had been thirty-two sightings along the Dorset coast ending with just one in 2009, in Broadstone. It may or may not be relevant that this year nine were seen on the Isle of Wight between 7 March and mid April. In August Continental Swallowtails were seen. The first was photographed by Nigel Burton on 3 April at Bindon Hill. Although Continental Swallowtails were thought once to have bred on the Dorset chalk in the late 1940s, records lately have been scarce – since 1995 this was only the third. Another was seen by Mike Wells and others in Marnhull gardens on 16 August and it seemed probable that one observed over Shaftesbury on 14 August by Sarah Gregory was the same insect. On 10 September at Ringstead, Dorset's tenth Monarch since 2005 was recorded and photographed by Shelley Cunningham and Shane Austin. Although there are now Monarch colonies breeding in Spain, and in the Azores and Canary Islands, most Monarchs seen in Britain are blown across the Atlantic from America in late September to early October. On the other hand many have escaped from butterfly houses so the origins of this butterfly cannot be known.

Selected Species where there have been significant new trends or records since 2009

Thymelicus acteon (LULWORTH SKIPPER): This species is going through a troublesome period. The Transect walks at Ballard and Durlston, the mini walks along the Purbeck chalk ridge and the survey organised by Butterfly Conservation all agree that numbers are crashing. On the other hand the data held in the Dorset Butterfly Conservation Access database shows that the flight period has been expanding. Since the start of the twenty-first century there has been a steady increase in the number of April–June sightings of Lulworth Skippers culminating in the last few years with around 20% of all records coming for April, May and June. Considering the general fall in numbers it was amazing to report evidence of expansion along the west Dorset

coast. In late June and early July 2010, Nigel Bourne (Butterfly Conservation Officer for the UK) and Phil Hack (Hants branch), acting quite independently, recorded at Doghouse Hill [SY430915] and Thorncombe Beacon [SY441914] the first ever sightings west of the colony at Burton Bradstock, itself a strange isolated outlier from the species' Purbeck base. Unfortunately searches in 2011 failed to find them in the new areas, but the flight periods are now so uncertain that surveying is becoming difficult.

Erynnis tages (DINGY SKIPPER): All over Dorset a large number of Transect walks (Ballard, Stonebarrow, Cerne, Lankham Bottom, Chard Junction and Hogcliffe Southfield) have now recorded a second brood of this species in late July/August. The Access database has revealed the first ever post 15 July Dingy Skipper record as 1983. By the end of the century in 1999 there had been eighteen. Into the twenty-first century the pace quickened, so that by 2009 the count was 72, climaxing with a record twenty-one for 2009 alone.

Pyrgus malvae (GRIZZLED SKIPPER): In 2010 possible second broods were seen at Garston Wood on 8 August, and one was counted on the Hod Hill Transect walk on 25 September by Graham Poynter. So far, although this is uncommon, four out of the six found after 15 July in the Dorset database were recorded in the twenty-first century.

Strymonidia w-album (WHITE-LETTER HAIR-STREAK): 2010 produced three interesting records. On 19 July Chris Morgan photographed one at Badbury Rings [ST 963034], the first record for the area since the 1970s. There followed two completely new records. On 23 July, Dudley Hull counted one on the Pamphill Transect walk and on 31 July, Tony and Anne Taylor found another on thistles at the edge of an arable field near Spetisbury [ST 909026]. Sadly in 2011 no clear elm colony was discovered near any of these. At Alner's Gorse, Dorset Butterfly Conservation's reserve, they are numerous and low enough to be counted regularly on the Transect walk, six in 2010 and nine in 2011.

Aricia agestis (BROWN ARGUS): This species has been successful in expanding its range northward and adapting to different habitats. Research in the Dorset Access database suggests that this has also been happening here on a local scale. In 2010 Brown Argus was recorded in 57 kilometre squares where it had never been recorded previously. Many of the new squares were outside its usual chalk down/rock rose comfort zone. We need research to determine whether the species is now using new food plants like Dove's-foot and Cut-leaved Cranesbills, and Common Stork's-bill.

Hamearis lucina (DUKE OF BURGUNDY): Reduced to around five scattered colonies, this is one of Dorset's most threatened species. However, single new sightings keep popping up. On 31 May 2010 Keith Miller recorded one on the old railway line between Toller

Porcorum and Maiden Newton [SY 569979]. In 2011, three more squares emerged: 3 May at the edge of Fontmell Wood (Nigel Kemp) not far from old colonies; 5 May, Black Hill [ST 667006], photographed by John Down in a completely new kms: 11 May Lankham Bottom counted on the Transect walk by Kathy Henderson in another entirely new kms. At the Cerne Giant, the Transect walk registered a record count of thirty-two in 2011.

Ladoga camilla (WHITE ADMIRAL): 2010 was a good year coming below only 2006 for numbers counted on Transect Walks – 95 & 151 respectively. In 2011 numbers fell to thirty-nine, but Richard and Lyn Lambert saw an amazing thirty-two during a visit to Horton Wood on 14 June, by far the highest number other than on Transect walks ever recorded on a single Dorset visit.

Apatura iris (PURPLE EMPEROR): On 6 July 2010 Steven Andrews saw, and photographed, a male in Chase Woods. From then until 24 July the area was visited by Roger Smith and many of the other Purple Emperor research team members, with positive sightings including females. Other sightings came from just over the Wiltshire border. There was a suspicion that the Emperors may have been introduced by persons unknown, as members of the public had reported seeing a female being caught and taken away from a Wiltshire wood which had a colony. However, Roger Smith had previously classed this area of Chase Woods as good quality habitat, so there was a chance that breeding might take place. In 2011 this proved to be the case, as there were continuous sightings of both males and females from 4 July to 16 July. Sadly, in admittedly very poor weather, a joint Dorset/Wiltshire visit on 17 July failed to find any Emperors and none were seen after this, despite many visits. Nick Butt took numerous photos including one of two males together. Analysing all his photos later, he believed that he had seen four different females. Hopefully, by means uncertain, Dorset may at last have regained the Purple Emperor as a species, but much work will be needed on all stages of the butterfly to ascertain whether this colony has a future. At the much earlier date of 24 June, Hilary Chittenden glimpsed a Purple Emperor near Verwood [SU 089108], but the earlier date makes it seem likely that this may have been a home bred release.

Boloria selene (SMALL PEARL-BORDERED FRITILLARY): With the only surviving Dorset colonies at almost opposite ends of the county at Stonebarrow and Bindon Hill, the future of this species looks very grim. However, slightly better news came in 2010, with a report from Colin Nunn of twenty-one being counted near the Purbeck golf course site, on which they had been thought extinct since scrub burning got out of control. In 2011, both this and another small colony near Studland, discovered and monitored by Jon Bellamy, were still doing well. A high priority for future years must be to visit the army ranges near Povington to discover whether that small colony still survives.

Boloria euphrosyne (PEARL-BORDERED FRITILLARY): After the last Dorset specimen was seen at Stubhampton Bottom in 2002, this species was deemed extinct in the county. However, my last report to DNHAS for 2009, explained how 'Phantom Fritillaries', including Glanville and Pearl-bordered, had turned up in different parts of Dorset and were thought to have been 'introductions' by persons unknown. Predictably none of these were found again in 2010, except at Powerstock. Many recorders who encountered these, understandably identified them initially as Small Pearl-bordered, because Pearl-bordered had last been seen back in 1985–86. Study of their photographs suggested that they were in fact Pearl-bordered and when 'small' Fritillaries appeared again at Powerstock in 2011 as early as 24 April (no Dorset Small Pearls were around until late May), the photos once again looked like Pearl-bordered. So it seems as if an attempt by persons unknown to re-introduce Pearl-bordered Fritillaries at Powerstock may have succeeded and that small numbers could be breeding. Sadly, it now appears that Small Pearls have in the meantime gone extinct, with their passing blurred by the 'introduction' of the Pearls. From 2012 onwards more research is clearly needed.

Euphydryas aurinia (MARSH FRITILLARY): In 2010 Dorset's calcareous colonies did amazingly well. Large numbers of butterflies were seen all along the North Dorset downs from Melbury and Zig-zag Hills in the north, through Melbury, Compton, Clubmens, and Fontmell Downs in the centre, and via small groups in Combe Bottom and Brookmans, right down to Hod, and even a few on Hambledon Hill. The icing on the cake even further north, was a small number photographed by Gordon Cryer on Breach Common, near Shaftesbury, and 'extra jam' in the far south, by a trio counted on the Badbury Rings walk by Bobby and Edward Knowles. In 2011, although established colonies had not been secured at Breach Common or Badbury Rings, numbers in North Dorset and in the west chalk, at Cerne, Hogcliffe Southfield and Lankham Bottom, remained excellent. There was also better news for the traditional marshy sites at Powerstock, where both butterfly and larval web counts showed signs of improving.

Lasiommata megera (WALL): With falling Transect walk totals in 2010–11, and becoming very rare in North Dorset, it was a real joy to receive a 'feel-good' report for 3 August 2011 from Dudley Hull. He and his wife had walked up the quaint storybook Colmer's Hill near Symondsbury, west of Bridport [SY 441932]. Near the top they were welcomed by around forty Walls which were clearly taking part in the little understood custom of 'hill topping'. Many other species like Painted Ladies and Red Admirals often head for the highest ground in the same way that Hairstreaks head for the tops of trees. Do the local Walls gather on Colmer's Hill for both broods in every year, or was this just a one-off? Recorders in West Dorset might like to do some research!

ACKNOWLEDGEMENTS

My thanks go to all those who have helped to record butterflies, and entered data on to computers, and to the Transect Walk & Regional Action Plan Coordinators. A special tribute to Colin Nunn, who retires this year as Purbeck Records Coordinator, for all the hard work he has put in over the year and a welcome to Jon Bellamy who will be taking over from him. Thanks also to Adrian Neil who has taken charge of garden recording, and been the Dorset champion for the Wider Countryside Recording Scheme. Last but not least thanks to the new Dorset Butterfly Conservation Computing team:

Transect Walks & Living Records Officer: Martin Raper, 4 Hollymoor Close, Beaminster, Dorset. DT8 3NQ. Tel: 01308 86130. Email: martin@mgtr.me.uk

Levana Atlas Officer: Bernard Franklin, 63, Chickereil Road, Weymouth, Dorset. DT4 0BU. Tel: 01305 786201. Email: bernard_franklin_h@msn.com

Officer in charge of data research, the Access Data Base & Liaison with DERC: Robin George, Clarence House, Cemetery Road, Gillingham, Dorset. SP84BA. Tel: 01747 824215. Email: rab.george@which.net

Please help with recording for the remaining three years of 2012–14 for the Dorset Atlas by sending in your records to ONE of the following as appropriate:

1. Dorset Records Officer: Bill Shreeves, 5, Butt's Mead, Shaftesbury. SP7 8NS. Tel: 01747 852587. Email: w.shreeves@btinternet.com. Records can be sent on paper or electronically, but please do not use your own design of form, as it will probably be difficult to put it through into the system electronically. Ask the Records Officer for the standard paper or electronic forms.

2. Dorset Butterfly Conservation Garden Records Officer: Adrian Neil, 15, Littlemoor Road, Weymouth, DT3 6LA. Tel. 01305 832937. Email: Adrian.neil@madasafish.com. All garden records should be sent to Adrian. The standard forms can be obtained from him or downloaded from the Website.

3. Dorset Butterfly Conservation website: www.dorset-butterflies.com. Any records sent to the website are eventually passed on to Bill Shreeves for verification. To make sure your records can be used for the Butterfly Atlas please try to supply OS grid references and tick the yes box if you will also be sending in the record on paper or as part of a Transect walk. This will make sure the computer does not double count. Paper recording forms can be downloaded.

4. Dorset Environmental Records Centre: Dorset History Centre, Bridport Road, Dorchester, DT1 1RP. Tel: 01305 225081. E-mail: derc@dorsetcc.gov.uk. By logging on at the website www.derc.org.uk records can be entered into the new Living Record System via a Dorset map. Butterfly records are passed on from DERC to Bill Shreeves for verification and eventual data

entry. Data entered into Living Records is extracted by Martin Raper for verification and inclusion in the Dorset atlas. If possible recorders should avoid double entries with the other methods above. If you have nevertheless done so please let Martin Raper know.

Counting Dorset's Butterflies and Moths

A booklet explaining how to record Dorset's butterflies, 6th edition (2012), obtainable from Lyn Pullen (01305 853946]; E-mail: lypullen@tiscali.co.uk. This is free, and highly recommended for anyone planning to record butterflies in Dorset. It includes instructions on OS grid referencing!

Records urgently needed in the next few years from the cuttings along the Weymouth relief road. Thanks to Dr Phil Sterling, Dorset County Ecologist, these have been planted out with chalk downland butterfly food plants. We need data to determine how quickly they are colonized.

DORSET COUNTY HOVERFLY REPORT 2011

E. T. & D. A. LEVY

Quite a good year for recording Hoverflies, despite the strange and extreme weather and climatic conditions. Certainly Autumn in this region has been dryer and warmer than we can recall, and the mild temperatures encouraged second generation flowering by many hedgerow plants, especially Hogweed, which was found in bloom right through till the end of the year.

Dave has especially targeted Puddletown Forest, with surveys on twenty-nine dates between April and September. We have also continued to record Hoverflies on DWT reserves and the interesting woods at Bishops Caundle. We are grateful to Ken Dolbear for his Hoverfly lists based on his photographs – mainly Portland, and to Angela Vivien – for records received. The scarce and elusive *Triglyphus primus* – was found at Throop woodlands by Mick Parker, which counts as new for Dorset, since the ancient record we found among museum specimens was not quite within Vice County 9, though still within the modern County boundaries. 109 species were recorded in total, and the following are the more interesting records:

<i>Chrysotoxum elegans</i>	Portland 23 June to 21 August (four dates).
<i>Didea fasciata</i>	Puddletown Forest 23 July.
<i>Epistrophe nitidicollis</i>	Portland 1 and 6 May, Lodmoor 11 May.
<i>Eupeodes bucculatus</i>	Puddletown Forest 2 September.
<i>Lapposyrphus lapponicus</i>	Puddletown Forest 30 July.
<i>Megasyrphus erraticus</i>	Puddletown Forest 29 May.
<i>Paclisphyria ambiguum</i>	Puddletown 8 April.
<i>Parasyrphus annulatus</i>	Yellowham Wood 21 April.

<i>Platycheirus tarsalis</i>	Yellowham Wood 21 April, Puddletown Forest 26 April, 13 May, Holt Hill Woods 6 May.
<i>Scaeva selenitica</i>	Puddletown Forest 9 July to 6 August (four dates).
<i>Sphaerophoria batava</i>	Puddletown Forest 8 July to 7 August (six dates).
<i>Sphaerophoria philanthus</i>	Puddletown Forest 15 July to 26 August (four dates).
<i>Sphaerophoria taeniata</i>	Puddletown Forest 15 July to 19 August (four dates).
<i>Xanthandrus comtus</i>	Puddletown Forest 29 May.
<i>Xanthogramma citrofasciatum</i>	Portland, Bottomcombe Quarry 5 May, Portland, Culverwell 9 May.
<i>Arctophila superbiens</i>	Powerstock Common 16 August.
<i>Brachypalpoidea lentia</i>	Puddletown Forest 29 May.
<i>Brachyopa scutellaris</i>	Puddletown Forest 21 and 23 April.
<i>Chaleosyrphus nemorum</i>	Puddletown Forest 24 and 29 April, and 13 May.
<i>Cheilisia carbonaria</i>	Ryewater nursery 13 May.
<i>Cheilisia latifrons</i>	Puddletown Forest 29 April and 3 September.
<i>Cheilisia ranunculi</i>	Forde Abbey 30 April.
<i>Cheilisia vulpina</i>	Puddletown Forest 29 April, 19 and 26 June.
<i>Criorhina floecosa</i>	Puddletown Forest 24 and 26 June.
<i>Eristalinus aeneus</i>	Portland 11 and 17 April, 14 and 28 August.
<i>Eumerus ornatus</i>	Puddletown Forest 13 May to 3 July (four dates).
<i>Microdon analis</i>	Puddletown Forest 23 April to 21 May (five dates).
<i>Neoascia obliqua</i>	Little Bredy 13 May.
<i>Parhelophilus fractorum</i>	Chickereil Wood 3 May.
<i>Pelecocera trineincta</i>	Puddletown Forest 8 July to 3 September (ten dates).
<i>Pipiza lugubris</i>	Throop Woodlands 10 September.
<i>Sphagina sibirica</i>	Puddletown Forest 23 April to 19 June (four dates).
<i>Tropidia scita</i>	Weymouth 21 May.
<i>Triglyphus primus</i>	Throop Woodlands 2 and 3 September.
<i>Volucella inanis</i>	Puddletown Forest 6 August.
<i>Volucella inflata</i>	Puddletown Forest 23 July.
<i>Volucella zonaria</i>	Sherborne 23 July, 24 August, Radipole Lake 14 August, Puddletown Forest 19 August.

DORSET PLANT GALL REPORT 2008–11

JOHN A. NEWBOULD

The last plant gall report 2008 was published in the *Proceedings* 130, 260–263.

Records have been made on Society field visits, including both Dorset Flora Group and Dorset Invertebrate

Table 1: Records made in the period 2008–11

Year	2008	2009	2010	2011
No of records	266	417	214	327

Recording Group meetings, together with surveys undertaken for the National Trust and Dorset Wildlife Trust. In addition, there is a certain amount of casual recording. During the period 2008–11, 1,224 gall records have been made with the assistance of a small number of helpers.

During the four-year period, 184 gall causers have been identified on 104 host species. There is a considerable amount to do just to equal the number of species photographed in *Britain's Plant Galls*. Included in the 1,224 records is one species new to Great Britain and at least one new to Dorset. Records have been obtained from 126 localities in 187 1 km squares. (see Figure 1).

Looking at four examples, 104 (8.50%) records were found on hawthorn (*Crataegus monogyna*); 35 records (2.86%) were found on meadow-sweet (*Filipendula ulmara*); 63 records (5.15%) were found on ash (*Fraxinus excelsior*) and 171 records (13.97%) of the total were found on pedunculate oak (*Quercus robur*). There is however a variation in the annual numbers but what conclusions can be drawn? (see Table 2)

Crataegus monogyna:

Of the 104 records found on Hawthorn just five gall causers were recorded. There was just one record of *Anthonomus bituberculatus* from Preston, Weymouth in 2009 with the gall containing a weevil larva (Redfern et al., 2011). Just two examples of the in-rolled leaf gall *Rhopalosiphum insertum* caused by aphids were recorded in 2008 from Litton Cheney and Sutton Poyntz. There were five examples of the dipterous gall *Dasinetura crataegi* between 2009–11 across Dorset. There were 46

Table 2: Comparison of the number of gall records on four host species.

Species	2008	2009	2010	2011	Total
<i>Crataegus monogyna</i>	10 (3.76%)	40 (9.59%)	24 (11.21%)	30 (9.17%)	104 (8.50%)
<i>Filipendula ulmara</i>	25 (9.40%)	8 (1.92%)	nil	2 (0.31%)	35 (2.86%)
<i>Fraxinus excelsior</i>	13 (4.89%)	19 (4.56%)	12 (5.61%)	19 (5.81%)	63 (5.15%)
<i>Quercus robur</i>	38 (14.29%)	71 (17.03%)	21 (9.81%)	41 (12.54%)	171 (13.97%)

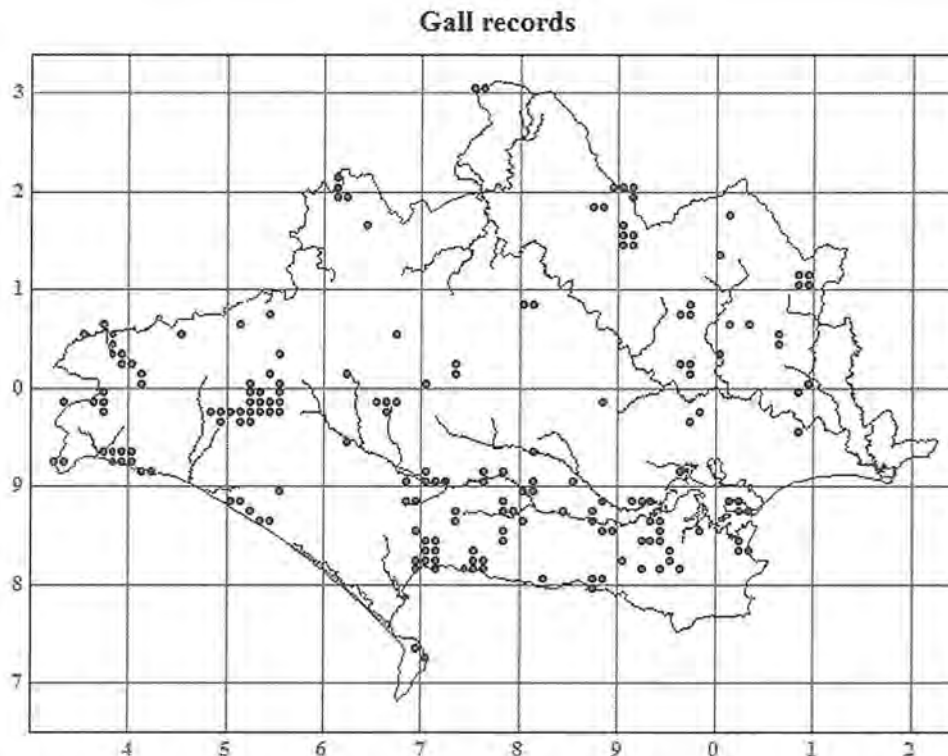


Figure 1: Location of Plant Gall Records in Dorset 2008–2011 © Dorset Environmental Records Centre

records of both the mite galls *Eriophyes crataegi* and *Phyllocoptes goniothorax* with 2008 being a poor year for the former with just one record and seven records for the latter.

Filipendula ulmaria:

With 35 records found on Meadow-sweet, two dipterous galls and one fungal gall were recorded. *Dasineura pustulans* was recorded 11 times whilst *D. ulmaria* was recorded 22 times. In 2008 in the Kingcombe and Powerstock areas, there were often both species in the same ditch. The fungal gall *Triphragmium filipendulae* (revealed by bright orange aecia), has only been seen twice on Galton Heath in 2009 and Sutton Poyntz in 2011. The number of 2008 records could well be explained by recording effort on the clays of Kingcombe and Powerstock in west Dorset that year.

Fraxinus excelsior:

Eight gall causers have been recorded on Ash. Two of these, *viz.* *Nectria galligena* (a large woody canker found on the trunk) and *Pseudomonas syringae* (also a canker considered caused by a bacterium [Redfern *et al.* 2011]) were identified by Laurence Taylor whilst on a gall hunt at Turnworth Down in September 2011 and are probably more widespread. There was a single record of *Aceria fraxinicola* from Lyme Regis in 2008, two records of *Aculus fraxini* from East and West Holme in 2009 and three records of *Dasineura fraxinea* from Turnworth, Wareham and Tyneham in 2011. *Dasineura acrophilia* made twelve records mainly in 2008, whilst both *D. fraxini* and *Psyllopsis fraxini* accounted for the remaining records in equal proportions.

Quercus robur:

Chinery (2011) estimates that there are fifty species of galls on Oaks in the British Isles, mostly caused by gall wasps with galls found in all parts of the tree. With around 14% of our records from 21 gall causers, I have located just under half the British list in Dorset. With many oak galls commonly present during the season e.g. *Andricus kollari* (27 records), *A. fecundator* (19), *Neuroterus numismalis* (24), information is provided on the less commonly recorded species. *A. curvator* (1) was located on Brownsea Island on the 2011 Society visit. *A. grossular* was only found in 2009 at Sutton Poyntz and East Holme. *A. legitimus* was located on the county boundary group visit to Lambert's Castle in October 2011. I have just two records for *A. lignicola* (2011 Kingston Lacy and 2009 Gotham). *A. lucidus* has been seen three times all in 2009 at Chalbury Corner, Morton and Sutton Poyntz. *Cynips divisa* has become increasingly scarce in recent years, but was seen in 2011 at St Gabriel's whilst *C. longiventris* was found in 2011 on the Society visit to Turnworth in September. Working with cecidologists from out of the County helps considerably to locate new species. Bill Ely (a Yorkshire Naturalists'

Union entomological recorder) showed me *Macrodiplosis roboris* in VC62 in early October 2011, resulting in me subsequently finding two Dorset locations at Kingston Lacy and Wareham and on his first brief visit to Dorset Bill Ely located *Trigonaspis megaptera* at Tyneham.

Approximately 130 of the records relate to species seen less than five times. Whilst some of the low scoring species are found on woody plants, others occur on herbs. Examples include:

Contarinia scrophulariae, a Diptera gall on *Scrophularia nodosa*.

My attention was first drawn to this gall on a Dorset Flora Group visit to Chetterwood (VC9) (ST 972 079) on Common Figwort (*S. nodosa*) growing amongst Bracken along a ride adjacent to a coniferous plantation on 9 June 2011. To my great surprise, accompanied by Adrian Norris, I found the same gall in a similar habitat in Newtondale (SE 823 939) on 9 July 2011 whilst on the YNU VC62 excursion. The flowers of the plant are swollen and remain closed and in both instances all the flowers on the stem were affected. Returning home, I checked the distribution on the NBN Gateway (<http://data.nbn.org.uk/directory/browse>). I found just two squares with records – one in north-east Scotland and the second in Sussex. Dorset Environmental Records Centre has no records (D. J. Hunisett pers. comm.) whilst the YNU Diptera recorder Andrew Grayson reported three published records *viz.*: *Naturalist* 48 pp 14 (1923) Mr W. Falconer reported the gall on 'Knotted Figwort' from Lister Park; *Naturalist* 58 pp 40 (1933) J.M. Brown recorded the gall in the Skipton area (both VC64) and *Naturalist* 84 pp 22 (1959) Miss C.M. Rob recorded the gall at Kirkham Abbey (VC61). The 2011 record is new to both VC9 and VC62 based on information available. The British Plant Gall Society also holds records from VC10, 23, 32 and 44.

Myopitesimulæ dyssentericae, a Diptera gall on *Pulicaria dysenterica*

Bryan Edwards first alerted me to this gall, described by Redfern *et al.* (2011) as rare in SE England, at Toller Porcorum (SY 556 985) in October 2008. Bowen (2000) maps Common Fleabane through Dorset with the exception of the north-east agricultural belt. Despite the host plant been found in many damp meadows and hedge bottoms together with extensive searching by myself, this gall has only been re-located at Hartland Moor (SY 947 848) in August 2009 on a Dorset Flora Group visit and Stoborough Heath (SY 921 846) in 2010. However, this species may be more widespread in Dorset with four 10 km squares shown on the NBN gateway. Two NBN records were located at Eype's Mouth, one on White Nothe Cliff but Gateway access is quite restricted.

Xestophanes brevitaris, a Cynip gall usually on the aerial stems of *Potentilla erecta* and *P. anglica*.

The NBN Gateway again shows very few records for this species with three from Scotland, three from Wales and five from England. Two of the English records originate from Rotherham where Bill Ely is a specialist *Hymenoptera Parasitica* recorder. I have searched many patches of tormentil in Dorset for this gall with little success until 2009 when I found a single gall on Stoborough Heath SY 945 862 and in October 2011, Laurence Taylor and Una Garland came across many examples on a roadside verge south of Lambert's Castle SY 373 986. Should we only be searching acid habitats for this species?

Discussion

The report contains just a small selection of the species recorded, whilst the Excel data shows constancy of presence of some species but substantial variations of numbers present with other species. One of the fascinating things about galls is that for a gall to occur, environmental conditions have to be just right for the gall causer to reach maturity, and that this maturity is synchronised with the optimum cell growth in the host species (Redfern 2011). I also draw your attention to old Society journal reports as being a useful source of records before the computer age. Whilst the NBN gateway is becoming a useful tool, care needs to be taken in interpreting data derived from it.

ACKNOWLEDGEMENTS

Dorset Environmental Records Centre for the map and archiving records. The following individuals have assisted with finding species: Bryan Edwards, Michael Edwards, Laurence Taylor, Una Garland, Robert Aquillena, Robin Walls, Angela Peters and John Winterbottom. Janet Boyd (Database Manager – the British Plant Gall Society) provided information on *Contarinia scrophulariae*. Tom Higginbottom (immediate past Chairman of the British Plant Gall Society) is a constant source of help and encouragement.

APPENDIX (Recording methodology):

Cecidologists have been encouraged by the publication of three books on plant galls. In April 2011, Collins published *Plant Galls* in the New Naturalist series. This is not an identification guide, but a volume explaining the biology of gall causers and the effects on their hosts. During August 2011, two identification guides were published:

British Plant Galls published by the Field Studies Council. This expanded work has been substantially redesigned with keys based on the host plants including both fungal and animal gall causers. This work included a large number of

name changes including galls types being assigned a different gall causer.

Britain's Plant Galls – a photographic guide published by the British Plant Gall Society is a small A5 book with excellent colour photographs of over 1000 plant galls of considerable assistance to the new cecidologist.

Since 2008, data have been processed in Excel using a format agreed with Dorset Environmental Records Centre to include both the gall causer and the host. This allows the smooth transfer of data into Recorder 6, the main database used by Dorset Environmental Records Centre. Excel also allows the recorder to analyse and validate data using the data functions provided in the software package. PC users may also validate data using the NBN data validation tool.

By using the VLookup function in Excel, the database has been upgraded to take account of name changes and species merging. For example two galls found on Field Maple (*Acer campestre*) have new names viz. *Aceria aceriscampestris* now *A. myriadeum* and *A. macrochelusis* now *A. macrochela*. *Cecidophyes galii* material was re-examined by J.C. Ostojá-Starzewski who has determined the species does not exist in Britain and is actually *C. rouhollahi* resulting in seventeen records being renamed. *Eriophyes prunispinosae* found on Blackthorn (*Prunus spinosa*) is now *E. similis* found also on *P. domestica* increasing the number of records of *E. similis* to forty-one. Using the group function in Excel allows a recorder to quickly total species counts on an annual basis.

BIBLIOGRAPHY:

- Bowen, H. (2000) *The Flora of Dorset*. Pisces Publications, Newbury.
- Chinery, M. (2011) *Britain's Plant Galls – A photographic guide*. British Plant Gall Society and Wildguides Ltd, Old Basing Hampshire.
- Ostojá-Starzewski, J.C. (2009) 'Is the eriophyoid mite *Cecidophyes galii* truly present in Britain? A request for specimen.' *Cecidology* **24**, 16.
- Redfern, M. (2011) *Plant Galls*. Collins New Naturalist Library **117**, London.
- Redfern, M. and Shirley, P. (2011) *British Plant Galls*. Field Studies Council Aidgap series, Shrewsbury.

FIELD MEETING REPORTS 2011

Field Meeting Secretary: John A Newbould.
3 Brookmead Close, Sutton Poyntz, Weymouth
DT3 6RS Email: john_newbould@btinternet.com

The Dorset Wildlife Trust celebrated its 50th Anniversary in April, following the establishment of its first nature reserve on Brownsea Island in 1961. With this in mind, meetings were arranged during April to visit Brownsea Island and do some research

into the possible pollinators of Early Spider Orchid (the Trust's logo). We also visited one of the Trust's newest reserves Hibbit Woods, Halstock. Dorset also celebrated the 10th anniversary of the establishment of the Jurassic Coast as a World Heritage Site. It was, therefore appropriate that field meetings were arranged on the coast. In addition, members undertook coastal surveys for the National Trust at Ringstead, Cogden and West Bexington.

16 April 10.30am; Hibbit Woods DWT Reserve, Halstock (Map ref. ST 547 076), leaders Tony Bates and Robin Walls

This is a recently acquired Dorset Wildlife Trust reserve, which is under-recorded. The woodland, donated to the Wildlife Trust recently, is located in an area of Halstock known as Adam's Green and has been re-named in honour of the donor. The nature reserve is composed of two units north and south of the road. The northern area is known as Harper's Hill Copse, whilst the southern area is known as South Clarkham Copse. The field to the east of Harper's Hill Copse is now pasture but is shown on the 2nd edition of the OS Maps as coniferous plantation. Both of the existing woodlands follow the boundaries of the 2nd edition of the OS map. For management purposes, DWT have divided the woods into compartments.

In Harper's Hill Copse, the north-west portion slopes west from 110 m AOD and is separated from the middle portion by a steep wet ditch. There are numerous Ash saplings through the wood together with many Pedunculate Oaks (*Quercus robur*), Field Maple (*Acer campestre*) and Dog's Mercury (*Mercurialis perennis*) ground flora. Most of the wild flowers in the wood were common. Wood Anemone (*Anemone nemorosa*) was present in open areas but it was the large amount of Wood Goldilocks (*Ranunculus auricomus*), which surprised the members, as it is present throughout Harper's Hill Copse. The middle and southern compartments were more species rich, with a substantial wood bank separating the middle compartment from the southern compartment. There are Ash and Oak pollards in the canopy. Many of the oaks had a diameter of 1 m, with the occasional tree measuring 1.5 m at breast height suggesting an age of around 150 years. The shrub layer has Field Maple, Hazel (*Corylus avellana*) and Holly (*Ilex aquifolium*). There were many fallen oaks with a potential for saproxylic insects and a considerable amount of leaf litter. Interesting herbs included: Early Purple Orchid (*Orchis mascula*), and the following, considered by Kirby (2006) to be ancient woodland indicators for Dorset: Sweet Woodruff (*Galium odoratum*), Wood Anemone, Sanicle (*Sanicula europaea*), Wood Speedwell (*Veronica montana*), Wood Sedge (*Carex sylvatica*) and Yellow Archangel (*Lamium galeobdolon*).

South Clarkham Copse has a small meadow adjacent to the road approximately 400 x 50 m with a wood bank

to the south marking the wood boundary. There are many Cowslips (*Primula veris*), Wood Anemone, bird's-foot trefoil (*Lotus corniculatus*), Common Knapweed (*Centaurea nigra*) with Carnation Sedge (*Carex panicea*) and an occasional Common Twayblade (*Listera ovata*). To the east of the meadow is a substantial hedge bank with Hazel, Hawthorn and Blackthorn, running through the woodland to its southern boundary.

Once again in South Clarkham Copse, we have many oaks and Ash but also plenty of Hazel coppice. Bluebells (*Hyacinthoides non-scripta*) and Dog's Mercury are plentiful. Once again, using Kirby's list of ancient woodland indicators, (in addition to those mentioned above) we added Hairy Wood-rush *Luzula pilosa*) and Wood Sorrel (*Oxalis acetosella*). It was also pleasing to find a small area of Wild Daffodil (*Narcissus pseudonarcissus*) and Primrose (*P. vulgaris*). We did note one large Ash coppice stool measuring around 1 m, suggesting the presence of woodland over 200 years old.

Later in the afternoon, we moved to some newly acquired meadows adjacent to the Bracket's Coppice Reserve known as Corscombe Meadows. In approximately one hour we looked at three coaxial wet meadows, each separated by hedge banks containing both standard and coppiced oaks, Ash, Spindle, Hazel, Crab Apple (*Malus sylvestris*) and Blackthorn, with a ground flora including Wood Anemone, Bluebell and Dog's Mercury. The meadows were covered in Cuckoo Flower (*Cardamine pratensis*), Yellow-rattle (*Rhinanthus minor*), Bird's-foot Trefoil, Common Knapweed and Spring Sedge (*Carex caryophylla*) amongst many others.

18 April; Dancing Ledge

The July 2010 edition of the *Journal of Ecology* (Hutchins, M.J.) identified that Early Spider Orchid is self-pollinating, but one rare solitary bee (*Andrena nigroaenea*) could be involved in pollination. In the afternoon, the weather was favourable so a small party set off for the chalk downs. *En-route*, we stopped to photograph a violet oil beetle (*Meloe violaceus*) crossing the footpath from the car park in Langton Matravers.

Arriving at the National Trust's Dancing Ledge property, we selected an area of calcareous grassland dominated by Tor-grass (*Brachypodium pinnatum*) where the Early Spider Orchid (*Ophrys sphegodes*) was in good flower. Michael Edwards collected a number of specimens. A male he took on the orchid keyed out as *A. nitida*. It compared very well with one in his reference collection checked for him by David Baldock. To be fair it did only flit on and then off the three orchid flowers – no extended stay as one imagines pseudo-copulation might be. The majority of the females he saw were also *A. nitida*. The only other sizeable females he saw were *A. cineraria* and *A. haemorrhoea*.

Thursday 28 April; Stonebarrow (NT Golden Cap estate)

The purpose of the day was to monitor Green-winged Orchid (*Orchis morio*) and the spring bird migration. During 2011, on field trips, we noted an increase in Bullfinch, which although still a National Biodiversity Priority Species has been downgraded from red-listed to amber-listed. On the visit we had two sightings on Stonebarrow, together with a Yellowhammer, which was perched on the same bush for over three hours. A pair of Goldcrest on Stonebarrow was a nice find as we had expected the harsh winter to take a toll on this small bird, whilst a tree pipit near the cliff tops was a really nice sight. Linnet numbers on Stonebarrow appeared down on previous surveys.

The party was taken to a field south of Westhay Farm where Green-winged Orchid are found and we were pleased to report an increase in the population, from 2010 adjacent to the footpath. The main populations are in some fields south-west of Monument Coppice and these were easily seen from the footpath but we did not undertake a detailed survey, but rather concentrated on other potential pasture fields adjacent to the coast. These produced negative results suggesting that, here the hay meadows are the most suitable places for this species.

Saturday 30 April; Brownsea Island

It will be a little over fifty years since the Dorset Wildlife Trust opened its first nature reserve on the island. A small party met on the jetty at 11.00am and we were fortunate to meet and be guided round by Rex Bale, who has worked as a volunteer for DWT clearing Rhododendron from the Wildlife Trust's reserve on the island. He was pleased to report that DWT had completed the task on their part of the Island but the National Trust has still to make some clearances.

Jon Campbell, whose sharp eyes spotted Sandwich Tern carrying Sand Eels whilst on the short ferry crossing from Sandbanks, ably assisted with bird identifications. As usual, it is the Lagoon where the birds are seen with around sixty Oystercatchers, forty Shelduck, over 100 Sandwich Tern, over 100 Common Tern, five Bartailed Godwit and ten Black-tailed Godwit, whilst we saw just five Greenshank with one bird coming within 5 m of the hide. The East Lake had not only Shelduck, but Gadwall and Tufted Duck. We saw a Treecreeper just ten metres away and a Cuckoo was calling from behind the villa together with Green Woodpecker.

We noted three species of *Odonata* viz. Azure Damselfly, two records of Broad-bodied Chaser and Large Red Damselfly. Just four species of butterfly were seen on what was quite a dull day including two records of Holly Blue. Nine species of plant gall were seen including *Taxomyia taxi* on Yew (*Taxus baccata*). This gall seems to be quite scarce in Dorset. I also had my first record in four years for the wasp gall *Andricus curvator* on *Quercus robur* near to the villa.

Saturday 14 May; Ashmore Wood and Stubhampton Bottom, leader Peter Hatherley, report John Newbould

Whilst undertaking a preliminary survey on 7 May, PH reported that he had seen three Hares (a UK National BAP species) to the east of Earl's Hill. Although we only saw one Hare as we started our walk we were not disappointed. Our route took us from north-west of the hamlet of Stubhampton to Hanging Coppice, which is the southern area of one of the largest woodland areas in Dorset. This is an area of abundant Hazel coppice where Ash is rare but is accompanied by Field Maple and an occasional Pedunculate Oak. Bluebells and Lesser Celandine are plentiful but also we found five spikes of Greater Butterfly Orchid *Platanthera chlorantha*. This small area of woodland had five Dorset woodland indicator species: viz; Columbine (*Aquilegia vulgaris*), Wood Anemone, Yellow Archangel, Wood meadow-grass *Poa nemoralis*) and Sanicle.

We then turned in a north-easterly direction to walk along the south-east boundary of Ashmore Wood using the Wessex Ridgeway along the Tarrant Gunville/Ashmore parish boundary. Ashmore Wood is mainly coniferous plantation, but the margins were left as deciduous woodland. Ten ancient Field Maples mark the parish boundary. In the shrub layer we also found younger Field Maple, Hazel coppice, Spindle, Holly, and Wayfaring-tree (*Viburnum lanata*). Pedunculate Oak and Ash also form standard trees, whilst in Upper Broadridge Coppice, there is Beech (*Fagus sylvatica*). Again this deciduous margin contains six Dorset ancient woodland Indicator plants viz. Columbine, Wood Sedge, Wood Spurge (*Euphorbia amygdaloides*), Sweet Woodruff, Yellow Archangel and Wood Speedwell. Pignut (*Conopodium majus*) and Dog's Mercury are scattered along the edge; Crosswort (*Cruciata laevipes*) was present. Bowen (2000) indicates that Crosswort is mainly found in the Purbecks in Dorset with occasional records elsewhere. Bluebell appears to be absent here. Near the hilltop we turned northwards walking through Broadridge Coppice, which has a completely different character. Two ancient woodland indicator species were noted viz. Yellow Pimpernel (*Lysimachia nemorum*) and Wood Melick (*Melica uniflora*). Wet areas had Remote Sedge (*Carex remota*) and Greater Bird's-foot Trefoil (*Lotus pedunculatus*).

Leaving the woodland behind, we walked to Gatehouse Row, turning left and walking back towards Stony Bottom. To the south-east is a magnificent ancient hedge bank with a 1 m diameter Whitebeam (*Sorbus aria*) coppice, an ancient Holly, Ash and a large Field Maple together with a number of Pedunculate Oaks. On the bank, Wood Melick, Pignut, Sanicle, Yellow Archangel, Wood Violet (*Vila riviniana*) and Dog's Mercury give a hint of past woodland.

Returning via Stony Bottom to Stubhampton Bottom, there is a steep south-west facing calcareous

slope from Ball Coppice to the track, which has evidence of calcareous grassland becoming invaded by scrub (ST903151) but nevertheless herbs such as Rock-rose (*Helianthemum nummularium*), Marjoram (*Origanum vulgare*), Thyme (*Thymus polytrichus*) and Burnet Saxifrage (*Sanguisorba minor*) are found. Dingy Skipper butterflies were also noted in this area. It was also in this area where Buckthorn (*Rhamnus catharticus*) was noted.

Birds recorded by Peter Hatherley included Mistle Thrush on two occasions, Linnet and Yellowhammer.

Saturday 21 May 10.30; Corfe Common, leader and report Ted Pratt

A group of about fifteen recorders met at West Street car park in Corfe to look at known sites for Vipersgrass, (*Scorzonera humilis*), on Corfe Common and attempt to find new sites. Those attending first had a chance to see the plant and get the look of it lodged in their brain by visiting the site where John Wright found it in 2010. This was in an area of the common quite distant from the location where it has been known for years. The group gathered round the plant, which was quite large, with a good number of flowering heads. Once we felt we had the gis in our heads, we divided into smaller search groups and went off to search the common valley by valley. Unfortunately, although we saw the original plant in its enclosure and looked all around that area, as well as elsewhere, no further new plants were found. Patches of Ribwort Plantain (*Plantago lanceolata*), which has similar long narrow leaves, occasionally raised hopes, but closer examination always led to disappointment. We hope that botanists will find new sites in years to come but for the moment two locations seems to be the total. The meeting closed at about 2.30pm with general agreement that good company and the pleasure of visiting such a rich site largely compensated the lack of new sites for *Scorzonera*.

Interestingly, a return visit a few days later found all the flower heads eaten from the plant, making it far less easy to spot. It remains possible that more sites exist but are missed due to the plants being reduced by browsing.

Thursday 9 June 10.30; Chetterwood, leader Robin Walls

This meeting was planned as a search for Bastard Balm (*Melittis melissophyllum*) in its remaining known Dorset site. The wood is private and members are asked to respect access and follow marked bridleways and footpaths. For a third time this season, we visited coniferous plantation, where wide rides allowed deciduous woodland ground flora plants to survive, together with deciduous trees where the light is adequate.

The survey went well with just two flowering spikes of Bastard Balm seen hidden in bracken after walking some quarter of a mile. A little later we found an area where there were twenty-five flowering plants on each

side of the ride in shorter more open grassland, and then around 100 spikes in a more open area to the south-west. In addition, we recorded a number of plants of Columbine and in an area of Hazel coppice, Wild Liquorice (*Astragalus glycyphyllos*). Bowen (2000) describes this species as plant of calcareous soils being on the western end of its range in Dorset and gives only one post-1990 record. To add to our collection of unusual species, JAN recorded the gall *Contarinia scrophulariae* on Figwort (*Scrophularia nodosa*). This species is reported in the Plant Gall Report within the *Dorset Proceedings*. (Newbould 2012, in press).

Showing the diverse soils of the woodland, we found Parsley Piert (*Aphanes arvensis* s.l.), and Dwarf Gorse (*Ulex minor*) typical of sandy soils in addition to most of the Dorset ancient woodland indicator plants mention earlier. We even saw Round-leaved Fluellen (*Kickxia spuria*) on a field margin adjacent to the woodland edge.

Saturday 9 July 10.30; Arne Moors, ILeader and report Ted Pratt

A pleasant day began with a walk along the roads, and sightings of Dorset Heath (*Erica ciliaris*) – the county flower, Dorset Hybrid Heath (*Erica x watsonii*), Zigzag Clover (*Trifolium medium*) and Des Etang's St John's Wort (*Hypericum x desetangii*) among other plants. Then we turned along the track into The Moors RSPB reserve. The first of several plants of Cyperus Sedge (*Carex pseudocyperus*) appeared in the ditch. Going through gates into private farmland (with permission) a west-east ditch yielded many more species – Tubular Water-dropwort (*Oenanthe fistulosa*) and Unbranched Bur-reed (*Sparganium emersum*) among them. After a while we turned south and entered a small wood to see Marsh Fern (*Thelypteris palustris*) and, on the wood edge, we got close to Great Fen-sedge (*Cladium mariscus*). Other sedges awaited us in the wet field, including Greater Tussock Sedge (*Carex paniculata*), Brown Sedge (*C. distichia*) and Long-stalked Yellow Sedge (*C. lepidiocarpa*). Another ditch had Least Bur-reed (*Sparganium natans*) just coming into flower. After that we retraced our steps and had our lunch at our original *rendezvous*. After lunch, almost all came on the optional extension to see Whorled Caraway (*Carum verticillatum*) and the greatest rarity, Vipers Grass (*Scorzonera humilis*) in its best and, at one time, only British site.

Saturday 6 August 10.30; Tamarisk Farm, West Bexington' leader Peter Cramb, report Peter Cramb and John Newbould

This meeting was arranged to look at arable plants on an organic farm in a beautiful setting above Chesil Bank to the east of West Bexington. Despite a poor weather forecast, twenty members met at the farm, where the farmers, Adam and Ellen Simon, had kindly allocated us a field for parking. Peter and Margaret Cramb had

surveyed this farm during the summer of 2009 as part of a Farming and Wildlife Group and Dorset Flora Group survey of arable weeds. A poster prepared, after their survey, provided evidence that the farm is of international importance for its arable weeds. In addition, the farm provides numerous other habitats for wildlife with ponds in field corners, an orchard, and especially adjacent to the private road, species-rich hedges. There is a mixture of pasture, grazed by Hebridean Sheep, organic wheat and fallow fields under clover, which is subsequently ploughed in to provide soil fertility for the subsequent year's crop. All fields have a 6 m set-a-side strip, providing habitat for wild flowers including Grass Vetchling (*Lathyrus nissola*) and Yellow Vetchling (*L. alphaca*) (two plants mainly confined to the West Dorset coastal strip); associated insects and grassland birds. The National Trust owns the farm. Adam described how the farm is managed organically with frequent cultivation being used for weed control.

Under brightening skies we spent the morning touring several of the arable fields, familiarizing ourselves with the arable plants, while Adam provided helpful comments on crop management. A broad bean crop was highly productive for interesting arable plants including Dwarf Spurge (*Euphorbia exigua*), Round-leaved Fluellen (*Kickxia spuria*), Sharp-leaved Fluellen (*Kickxia elatine*) and vast numbers of Stinking Chamomile (*Anthemis cotula*), while on the edge of the field Jonathan Cox pointed out Pepper-saxifrage (*Silaum silaus*). In the next field we saw the delicately attractive Corn Parsley (*Petroselinum segetum*) surviving in barley stubble and, soon afterwards, Knotted Hedge-parsley (*Torilis nodosa*), Sea Clover (*Trifolium squamosum*) and Yellow Vetchling (*Lathyrus aphaca*) in a field of wheat. Finally, in a similar field, we found Tamarisk's speciality, Nit-grass (*Gastridium ventricosum*); the presence of both young and mature plants enabled members to get a feel of how the grass looks at different stages of development.

We then returned to our starting point past an area of waste ground, where John Winterbottom found Greater Burdock (*Arctium lappa*). On reaching the cars about half the party departed leaving the remainder to have lunch in Ellen's mother's delightful garden, where Adam kindly provided an urn of tea and we had the opportunity to purchase some of the farm's organic produce. Over lunch Adam showed us a sample of Small-flowered Catchfly (*Silene gallica*), which used to grow in good numbers in an arable field belonging to Ellen's brother, now sown with grass and used to graze ponies; we discussed several ideas on how the population of this endangered species could be salvaged.

After lunch the remaining members divided into two groups – one led by Robin and the other by Peter – to survey a wheat field. Both groups found a good number of arable plants, including Slender Tare (*Vicia parviflora*), but the undisputed winners were Robin's group with a find of Nit-grass in a previously unrecorded

location! Under a darkening sky we hurried back to the cars and the meeting dispersed shortly after 4.00pm. Many thanks to Adam and Ellen for enabling us to have such an interesting and rewarding day.

Dorset Heath (*Erica ciliaris*) and Dorset Hybrid Heath (*E. x watsonii*)

Distribution Survey Studland & Godlingston Heaths (National Trust) Purbeck, leader and report Rev. E.A. Pratt

Background

Erica ciliaris is a Nationally Rare heather species restricted to the wet heaths of South-east Dorset (with high populations on the Isle of Purbeck), West Cornwall, Devon and Hampshire. The hybrid of *E. ciliaris* and *E. tetralix*; *E. x watsonii* is also rare and is restricted to areas where both parent species are present. Loss of habitat to coniferous plantations and agricultural intensification has caused *E. ciliaris* to be on the British Red Data list.

Method

The volunteer recording day was organised for 23 July, when eight NT and Dorset Flora Group volunteers surveyed *E. ciliaris* and *E. x watsonii*. Using maps showing old records, provided by Ted Pratt, the site was divided into sections of Studland and Godlingston Heaths and allocated to the volunteers. Standing in the middle of a patch of *E. ciliaris*/*E. x watsonii* the grid reference was recorded using a GPS device, and the amount of plants was noted in every location on a ten square metre basis. The locations not covered on the day were surveyed a few days later. Plants found during other recent field visits were also mapped. A distribution map was produced.

Results:

493 *E. ciliaris* and 88 *E. x watsonii* plants were found. Compared to old records of *E. ciliaris*, Five new sites where found, one holding 58 plants. A seemingly isolated population was found in the dunes behind Shell Bay. The highest population of plants was found in a location in the south-west area of Godlingston – 64. Other populations had twenty-five plants or less, with the majority having under ten plants at one grid reference.

**Marsh Gentian (*Gentiana pneumonanthe*)
Distribution Survey. Studland and Godlingston Heaths (National Trust), Purbeck, report Rev. E.A. Pratt**

Background

Due to habitat fragmentation *Gentiana pneumonanthe* has a scattered distribution across the UK, though there are a few strongholds on the eastern heaths of the New Forest and on Dorset Heaths. Found on wet heaths, not

marshes(!), *G. pneumonanthe* is often more frequent on sites which have been recently burnt. It is declining in numbers in the rest of Britain, and is Nationally Scarce.

Method

A National Trust and Dorset Flora Group volunteer survey day was organised for 10 September, with a good turnout of fifteen volunteers. Existing records had been compiled by Ted Pratt and produced on maps, to show areas where *G. pneumonanthe* had been recorded before. Volunteers were split into small groups of two or three and given areas to cover. Any *G. pneumonanthe* found were counted and then recorded by standing in the centre of a group of plants and noting down the eight figure grid reference using GPS devices. Part of Western Valley on Godlingston Heath was not covered, but was surveyed a few days later. A map was produced of the distribution.

Results

The survey found large areas of *G. pneumonanthe*; one large area found at the southern end of Central Valley has several clumps of up to twenty-three plants (per 10m²). Another clump of 56 plants was found in Western Valley. Comparing old records of *G. pneumonanthe* with the new 2011 data there is one possible new site west of Hill-cut-in-two, though due to the inaccuracy of the old records they might have been recorded here before. A total of 1,297 plants were found.

Frome Valley Winter Wildlife Survey

For the eleventh year, this survey continued starting at Lower Bockhampton, and finishing near Wareham on

the first Thursday of January, through to April and October, November and December.

Regrettably, 2011 was a very disappointing year. We only made 337 records compared with 485 records in 2010 despite losing December 2010 due to snow. For the first time in eleven years in November 2011, we actually had to stop surveying due to a torrential down-pour after just two visits.

The year opened on 6 January with good numbers of fieldfare and smaller numbers of Redwing at Lower Bockhampton, but absent from Morton Parks where they are usually present in good numbers during January. Kingfisher, a resident at Morton Ford, was seen in January and is also resident between Lower Bockhampton and Stinsford. The numbers of Mute Swan seen were considerably lower in 2011 than previous year – a trend which continued through to the autumn recording season. The watercress beds at Tincton and Bere Regis are usually worth stopping at with Green Sandpiper, Grey Wagtail and Little Egret regular visitors, but Snipe was missing this season. Lapwing is only seen occasionally with thirty at East Stoke in February.

Another bird, which usually makes an appearance, missing in 2011 was Cetti's Warbler, in places where there is good cover. Little Grebe made its usual winter appearance at Wool Bridge in February 2011 where we also recorded House Sparrow sheltering in Hawthorn. Bindon Meadows has dropped from being one of the most interesting places to go to, often reporting only one or two birds with just four Teal in February due to an excess of Soft Rush.

The Dorset County Boundary Survey

KATHERINE BARKER

It is a pleasure to be able to publish here papers arising from the fourth day school of October 2010, 'Midlands, Marches and Meresmen' held over from vol. 132 (see DNHAS Report, p.8). Dr Della Hooke from the University of Birmingham shared with us her expertise both on Anglo-Saxon charter bounds and the making of Mercia, the medieval kingdom which bordered Wessex and Dr John Davey of the University of Bristol who took as his theme integrated landscape studies in South Somerset and North Dorset.' The day also provided an opportunity to catch up with current research by members of the Group and included here are contributions by Robin Walls and by Chris Slade.

Katherine Barker, leader of the Group, spoke on 'Discoveries, Insights and Potential: studies in the hercology of Dorset's county boundary 2006–2010' which may usefully be summarised here, the principal themes to be explored in the forthcoming '*Aldhelmus episcopus: the shiring of the Sherborne diocese*'.

The word *hercology* she coined in 1982 (*Antiquity* LVI, 214). She first used it with reference to the early boundary structure of the Devon/Dorset estate at Lyme (Barker 1082). At the end of last year (2011) members of the County Boundary Research Group put together an agreed system of field recording, a 'hercological record', with the aim of creating a secure foundation for future work.

Since the launch of the Survey in 2006 the distinctive man-made boundary bank presented at Lyme (Barker 2009, 2010a) has proved to be far from unique, and it is clear that the county boundary as a whole is well worthy of enquiry; its physical form, its wider historical and topographical context, its botanical significance, and not least the number of veteran trees not hitherto recorded and assembled by John Newbould for the Natural History Reports. It was the Glastonbury Uplyme charter boundary of 938 that first drew attention to 'gate' names (Barker 2010b) in relation to other lengths of the shire boundary. Presented elsewhere on the Dorset/Somerset borders a wider context is suggestive of border controls, a seventh-century Merovingian-style re-instatement of the old Roman *portoria*, a system of revenue collection associated with established boundaries well-evidenced for the medieval continental Germanic states (Arnold, 1991).

While these may relate to the formal later seventh-century institution of Dorset and Somerset they may as plausibly be related to the making of the Sherborne bishopric which belongs to the same years.

It is posited (forthcoming) that the bishopric comprising two *-saete* designated counties-to-be (Lewis, 2007) represents the re-instatement of an earlier later Roman territorial grouping with some adjustment of the

borders. Such strategic adjustments included that length of the boundary at Lyme in the establishment of an episcopal south coast *portus* for a landlocked bishopric; founder-bishop Aldhelm's words imply that such was cut out of an already existing Glastonbury estate (Barker 2010a).

This has prompted a fresh look at the vexed, and unresolved, question as to both the character and origins of the tax order presented by the landscape of the episcopal estate at Sherborne and to the 'reading' of the prominent northern salient of Dorset occupied by the home manor coincident with its tax immunity, its *immunitas* (Barker 2010c). A 'salient' which plausibly represents an early removal from the Somerset-to-be. That prominent northern salient of Dorset occupied by the royal manor of Gillingham presents the only *-ingas* name in the county. It is clear from Aldhelm's words that there were fluent Latin speakers in seventh-century southern Britain, and not to be omitted here is Latin *Gillo*, the name of a legacy hunter (Lewis and Short, 1879, 815). In short, recent work in Dorset has raised an awareness of the possible early fiscal significance of 'salients' presented along stretches of other county boundaries.

Echoed here for the later seventh century are the pragmatic policies of Theodore of Tarsus, Archbishop of Canterbury from the Byzantine East, in a re-ordering, re-structuring of bishoprics on a territorial and fiscal basis; episcopal trading syndicates were well established in the Eastern Mediterranean. As Della Hooke pointed out Theodorian policies are well expressed in the founding of the diocese of Worcester to serve the former British Midland kingdom of the *Hwicce* and that of Hereford to serve their western neighbours the *Magosaetan* (1985). John Davey has interesting new insights on the integrated landscapes of those two *-saete*-named counties which were to play a seminal part in the making of the Sherborne bishopric.

There follow notes by two members of the Group, Robin Walls Dorset vice-county recorder for Botany on 'The Botany of Boundaries' and by Chris Slade on a unique source on the county boundary in the Public Record Office, the OS meresmen's notebooks.

ENDNOTE

1. Editor's note – John Davey's substantial contribution is held over for publication in a later volume of *Proceedings*.]

REFERENCES

- Arnold, B., 1991, *Princes and Territories in Medieval Germany*, (Cambridge), 167–172; 176–180.
- Barker, K., 1982, 'The Early History of Sherborne' in (ed) Susan M Pearce, *The Early Church in Western Britain and Ireland*,

- Studies presented to C. A. Raleigh Radford. BAR British Series 102, Fig 7.6.
- _____, 2009, 'Lyme Regis is in Dorset, Uplyme is in Devon. ...' *Dorset Procs.*, 130, 223–232.
- _____, 2010a, 'Usque Domnoniam: the setting of Aldhelm's *Carmen rhythmicum*. literature, language and the liminal' in (ed) K. Barker with N. Brooks, *Aldhelm and Sherborne essays to celebrate the founding of the bishopric* (Oxbow, Oxford), 15–54.
- _____, 2010b, 'Usque Domnoniam: Sherborne, Glastonbury and the Expansion of Wessex' in *ibidem*, 94–97; Fig 2.9.
- _____, 2010c, 'The Dorset–Somerset county boundary at Yeovil: Roman order from imperial to episcopal, taxation and the landscape' *Dorset Procs.*, 131, 219–236.
- Hooke, Della, 1985, *The Anglo-Saxon Landscape The Kingdom of the Hevices* (Manchester), 12.
- Lewis, C. P., 2007, 'Welsh Territories and Welsh Identities in Late Anglo-Saxon England' in (ed) N. J. Higham, *Britons in Anglo-Saxon England*, Manchester Centre for Anglo-Saxon Studies, Woodbridge.
- Lewis, C. T. and Short, C., 1879, *A Latin Dictionary* (Oxford).

Boundary landmarks in Anglo-Saxon charters¹

Della Hooke

Estate documents incorporating written boundaries begin in England only in the late seventh century, when kings were granting rights to land, especially to the Church, and the latter had scribes able to record such transactions. As written charters became regarded as of immense value in proving the extent of land rights, more and more of these documents were to include descriptions of the boundaries of the estates over which their holders held rights. Over time the number and complexity of boundary clauses grew, especially in the ninth century. Although some charters claim to date from the earlier seventh century, these are undeniably suspicious.

Many of the earliest authentic charters, granting rights over land, refer to lands in Kent being donated by the kings of Kent to newly founded minsters at Canterbury and Thanet, or other churches in the later seventh century. Although there may be added detail about additional rights in swine-pastures, fisheries, etc, they are not accompanied by boundary clauses until the mid-eighth century. The question of the authenticity of these documents has bedevilled researchers in the past, but detailed studies of each ecclesiastical cartulary under the sponsorship of the British Academy are beginning to resolve the issue. In the West Midlands research into the boundary clauses has been facilitated by the fact that many were reliably transcribed by the monk Hemming before the Norman Conquest, so that they undoubtedly describe the early medieval landscape. While the body of the charters are normally in Latin, the language of the Church, the boundary features are usually described in the vernacular language of the time – Old English.

The early medieval period was one of immense estate fragmentation (Hooke 1985, 54–5). There would be added impetus, therefore, to describe estate boundaries at this time. Many such boundary clauses seem to have been composed very soon after the initial grant (S. Keynes, pers. comm.). Local representatives would walk or ride around a boundary describing obvious landmarks. Once described in this way, however, the boundary features would be remembered locally and could be referred to in any future dispute. Some boundaries may already have been in place and known orally but there is little sign of any characteristics such as alliteration which could have aided memory. Yet a considerable number of estates have no recorded boundaries until long after the original grant, with a boundary clause added to an earlier authentic charter sometimes as late as the eleventh century when it became customary for the bounds to be written down (such as the large Worcestershire estate of *Wican*: Hooke 1990, 69–78). In such cases there must already have been some way in which the boundary was remembered locally.

Describing boundaries already had a very long history. In the Macedonian Museum at Thessaloniki there is a boundary stone on which is engraved the landmarks that defined the boundary between 'certain cities' to the north of Chalkidiki dating from 350–300 BC. Descriptions of boundaries were also common in Italy under the Romans in the first century AD and Roman surveyors like Frontin and Hygin refer to the practice (Hooke 2010, 174). Many of the Italian charter documents, however, referred to quite small parcels of land. The earliest Anglo-Saxon boundary clauses of England are seldom detailed, often only giving the landmarks to be found at four cardinal points, but over time the bounds were to become ever more complex with greater use of adverbs such as 'northwards', 'downwards' etc.

Topographical Features

Given the complexity of the Anglo-Saxon landscape, it was obviously easier to follow a boundary that made use of clear topographical features, and such features as watercourses, valleys, ridge-tops, etc, may be expected to have influenced the line taken in the first place. Watercourses varied from large rivers (often with their own individual names, some of British origin), through bourns (OE *burna*), and brooks (OE *brōc*) down to streamlets (OE *riðig*). A few estates were almost entirely surrounded by watercourses: the bounds of the Cornish estate of Lamorran, for instance, were able to follow watercourses around the entire land unit apart from a short stretch less than a kilometre long where they made their way over a narrow watershed and crossed a route way near a white marker stone (Sawyer 1968, S 770; Hooke 1994, 41–2). Similarly the bounds of Abbots Bromley in Staffordshire followed watercourses all the way around the estate except where they crossed a short watershed at the northern extremity; here the boundary ran through marshland and woodland with the bounds

noting a road and trees (Sawyer 1968, S 878; Hooke 1983, 88–91). Watercourses were relatively stable features and kinks in a boundary to accommodate a water-mill are probably usually later amendments. Water mills were beginning to be built in the ninth and tenth centuries, and in Dorset one finds a *mylenburna* in Bradford Abbas and Thornford (S 422, S 516) (also in the place-name of Milborne St Andrew), a *mylebroce* 'mill brook' in Portisham (S 961), and a mill dyke in Wyke Regis on Portland – all tenth- or eleventh-century in date.

Other water features are found as charter landmarks, many of the terms also occurring in place-names. Thus an *ēg* was a virtual 'island' within boggy or damp land, *mōr*, *merse* and *fenn* might describe marshy land, *slōh* a slough or a mire, while meres and springs served as excellent landmarks as they could be precisely located (although the *wylle* 'spring' might also refer to the headwaters of a streamlet). The OE terms could differ slightly in their spelling according to the dialect in which they were written – *wella*, *welle*, for instance, is the Mercian form of West Saxon *wylle*. Many such features had descriptive names – a 'holy spring' is mentioned in a Dorset charter of Portisham in AD 1024 (S 961) and many springs elsewhere are associated with trees (especially the ash).

Valleys were variously described, the commonest terms *denu*, *cumb* or *sled*, with *hop* common in the borderland; *trōg* 'trough' might describe a deeply incised valley. While *denu* seems to have denoted an open, through valley, a *cumb* was one enclosed by higher land (Gelling and Cole 2000, 103–23) and this is the type most commonly referred to in Dorset charters. In the author's experience *sled* seems often to have referred to a small tributary valley, often wooded, while Gelling and Cole translate *hop* as 'remote, enclosed place' (ibid., 133).

Hills were generally less useful as landmarks, which needed to refer to a specific point. Reference to the huge Oolitic limestone outlier of Bredon Hill in Worcestershire, for instance, would usually have been of little use, although one charter, for Bredon's Norton, does note its western end before moving onto a 'stone knoll' (S 1405; Hooke 1990, 368–70) and another for Overbury and Conderton does pass along the 'edge' of the hill (S 216, Hooke 1990, 125–9). There were several terms used in Old English to refer to hills of different shapes (Gelling and Cole 2000; Hooke 1997, 32–5), including *dūn*, usually a large whale-shaped hill, *hōh*, a spur with a concave end, an *ofer*, one with a convex end, and *hrycg* 'ridge' etc (Figure 1), *cnæpp* 'top, summit' (as in the 'maple knap' of the Uplyme, Devon, boundary clause S 442), *cnoll* 'knoll', and *torr* 'rocky outcrop'. *Crūc* and *beorg* referred to 'barrow-shaped hills' as well as to actual tumuli. Charter boundary clauses help to confirm these interpretations because the features they refer to can be precisely located, something that is not always possible in the case of place-names. A *hall*, 'nook, hollow', could also have been used in a topographical sense.

Land Use

But in the early medieval period the countryside was already a busy landscape, full of man-made features, and the features described depend upon the nature of the countryside at the time. Most boundaries were running around the perimeters of estates away from main centres of settlement so that these are not readily picked up – only when settlements survived close to boundaries do they find any mention. These tended to be small hamlets or farms referred to by the terms *cot* 'cottage' (pl. *cotu*), *wīc* or *word*. The latter were probably single farms and several are noted in Dorset charters, where most seem to



Crutch Hill, Worcestershire



Tysoe, Warwickshire



Haselor, Warwickshire



Crookbarrow Hill, Worcestershire



Bredon Hill, Worcestershire

Figure 1: Old English terms used to name hill shapes

lie in the north of the county: *bilian wyrthe* in Stalbridge Weston (S 423), *ealdmannes/heldmannes wyerde/wyrde/wrthe* in Thornton (in Marnhill), Fontmell and East Orchard (referred to in four separate boundary clauses S 656, S 419, S 445 and S 710), and *wænecan wyrde* in Horton (S 969) – all in 10th- or 11th-century charters. *Cot* ‘cottage’ is less common in Dorset but *corf getes westan cotan* ‘the western cottages of Corfe Gate’ is noted in a boundary clause of Portisham (S 961) and *anne hus* ‘a house’ on the boundary of Compton Abbas (S 630) (for early translations of the Dorset charters see Grundy 1933–40).

Agricultural Regions

In the more intensively cultivated regions open field farming had already been introduced. It is clearly referred to in the body of a number of ninth-century charters (Finberg 1972, 487–91) and the fields were already reaching estate boundaries in some parts of the country. Certain terms such as *furh* ‘furrow’ and *hæafodland* ‘headland’ denote features of the open field system, the former a man-made furrow dividing the field systems of adjacent townships; in the later period *æcer* and *furlang* were also terms used in such field systems, the former often used for an arable strip (Hooke 1981b).

Very often the area under cultivation can be accurately located from the boundary evidence. In the Vale of the White Horse, for instance, formerly in Berkshire but now in Oxfordshire, the arable land lay on the slopes of the North Berkshire Downs with meadows in the Vale below and open pastures above (Figure 2) (Hooke 1987). On the meadows the bounds refer to various named meadows, watercourses – including a *lace* ‘slow-moving stream or man-made cut’ –, rushy areas, and, on the Fawler boundary of 963 (the western part of Kingston Lisle), ‘the king’s cow-sheds’; the grant of Fawler also adds *an hyrde wic æt bapalacing* ‘a herding establishment at Balking’ (S 713; Gelling 1976, 679, 691). As the Uffington boundary of c. 953 runs down the chalk hillside, however, the bounds run *syððenes dunrihtes be þes hæfild æceres west furh. dum ofer þa þwyr furh* ‘straight down by the west furrow of the head acre, down over the cross-wise furrow’ (S 1208; Gelling 1976, 686–9), a situation mirrored in a similar location in the charter-bounds of adjacent parishes. Lynchets (OE *hlinc*) are also common features here for the term refers to the step caused by ploughing away from one side of a boundary (or even in a Celtic field system) and is also common in the charter-bounds of Dorset on the chalk downland. Indeed, it was the occurrence of the ‘great lynch’ near the south-western corner of Cheselcombe that helped the author to identify the estate of *Uppidelen* confirmed by King Edgar to Shaftesbury Abbey in 966 as Piddlehinton alias ‘Up Piddle’ (S 955; S 744). The term *hlinc* could be used, however, on occasions, to refer to a similar natural slope. Routeways are frequently referred to in all regions and here in the Vale of the White Horse

the charters picked up both the Icknield Way and the Ridgeway crossing the region from east to west.

Obvious landmark features had to be found on the open downland above and in such a location archaeological features were often to be selected: burial tumuli, fortified sites, some dykes or even large marker stones. Among the former is a reference to the Neolithic chambered tomb of Waylands Smithy on the boundary of Compton Beauchamp (S 564). However, references to barrows (OE *beorg*) are more common on the North Berkshire Downs and on the chalk downs of Dorset. A *stancyste* or a *stancastel* (the former literally ‘stone chest’, perhaps in reference to a burial chamber, the latter ‘a camp’ but perhaps rightly *ceastel* ‘heap of stones’) occurs on the southern boundary of Cheselborne (S 955, S 342, S 334). Hill-forts may be referred to: the west Uffington boundary ran *in to æscæsbyriges sudgeate. and swa ut æt þam norðgeate* ‘in to Ashbury’s south gate and thus out at the north gate’, while the east boundary ran through *in to hremmesbyriges norðgeate. þurhut þa byrig. ut æt þam sudgeate* ‘in to the north gate of Raven’s Camp, right through the camp, out at the south gate’ (S 1208; Gelling 1976, 686–9). Similarly in Didlington, Dorset, the bounds ran *on cheoles burge eastgeat. þonon ut on þæt westgeat* ‘to Chalbury’s east gate then out at the west gate’ (S 519; with a slightly variant text in S 609). In Dorset, too, there are many references to *crundel* features – either a quarry or elongated stone digging, occasionally ‘a rocky ravine’ (Grundy 1922; Jope 1964). These are found in the charter-bounds of Plush in Buckland Newton, Cheselborne, Corfe and Blackenwell, Iwerne Minster and Corscombe. Pits (OE *pytt* or *sæað*) also occur on the chalk downs, as on the boundary of Cheselborne; these probably referred to chalk diggings, although *col*, as in the *colpytte* noted in Corscombe (S 975), is more usually associated with charcoal (unless this is *cōl* ‘cool’ referring to a water-filled hollow).

In Worcestershire, in the Vale of Evesham, the southern side of the River Avon was a similar area of intensive agriculture that included extensive open fields and water meadows (Hooke 1985, 213–22) (Figure 3). On the bounds of the estates claimed by the Abbey of Evesham are found references to furlongs, acres and furrows indicating open-field land, while two major saltways also crossed the region, used by traders carrying this important commodity from the inland salt-producing centre of Droitwich. Both of the saltways were referred to as a *sealt stræt*, suggesting a made-up road (one excavated by the author in the Avon valley in Warwickshire revealed a series of undated gravel surfaces). A hierarchy of roads is met in charter-bounds: from major roads referred to by the Old English terms *herepæd* or *stræt*, other tracks referred to as *pæð*, *lane* or *stīg* (the latter sometimes an up-hill path) to the ubiquitous ways (*weg*). Most roads crossed watercourses by fords although the occasional bridge is recorded (as in Uddens, Dorset: S 609), while a *stapol* was usually a signpost (Fontmell: S 419).

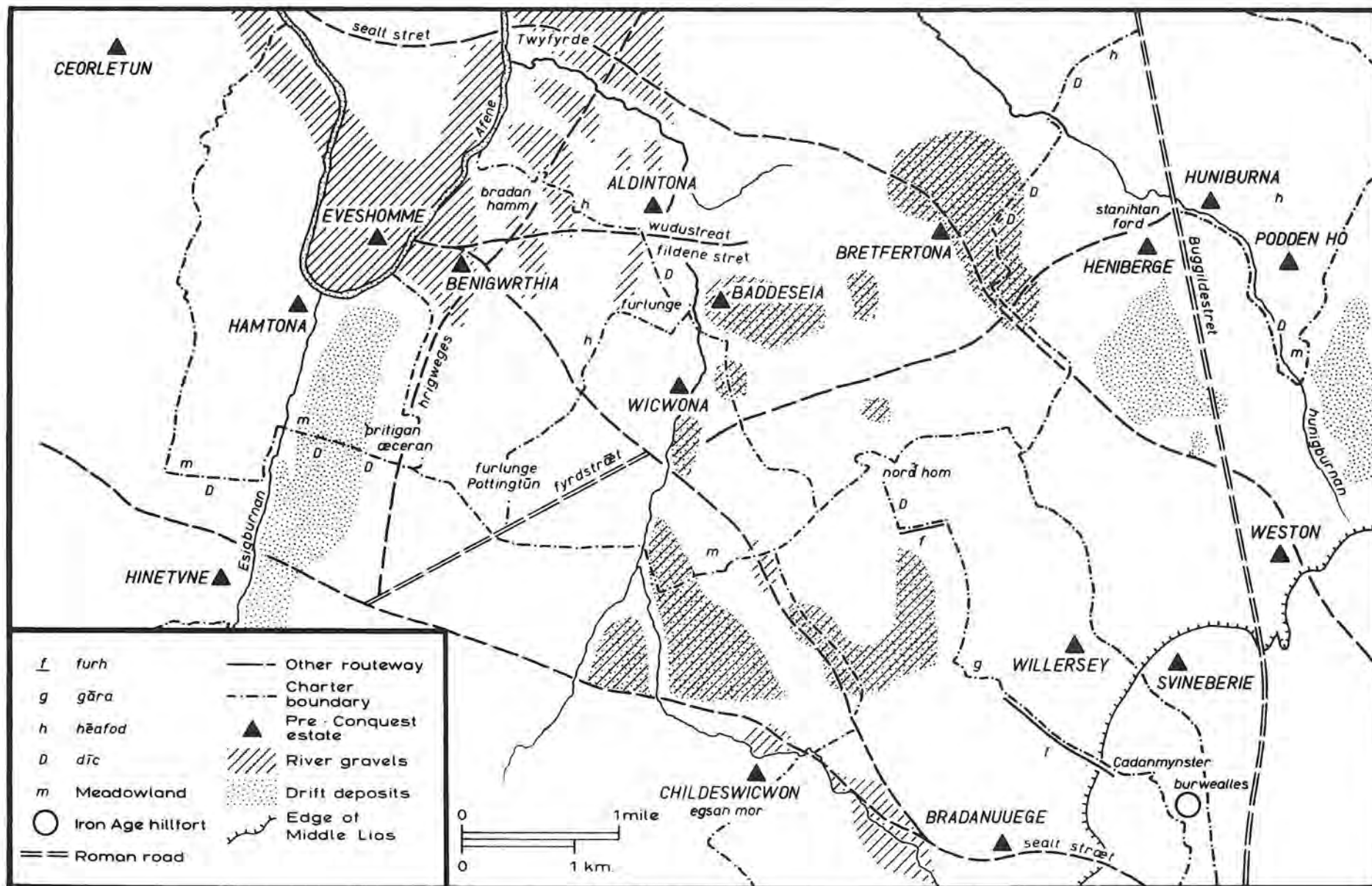


Figure 3: Early medieval parishes, land use and boundary features in the Vale of Evesham, Worcestershire

Developing Regions

It can be seen from the above how charter-bounds help to identify the landscape regions of Anglo-Saxon England. Central Worcestershire, however, presents a different kind of countryside (Hooke 1985, 238–42, fig. 53). Open fields were less developed here, frequently restricted to the interior of townships, although ploughland is recorded on the boundary of Himbleton in the more developed southern part of the parish and headlands on the northern boundary of Cudley (Figure 4). However, enclosed fields referred to as crofts, and an occasional *gærstūn* ‘grass enclosure, paddock’, are more frequent and hedges seem to replace the dykes of the Vale of Evesham, suggesting that the open fields had at that time by no means reached their maximum extent. One hedge is referred to as ‘the roe-deer hedge’ as if meant to protect grain fields etc from these animals. Woods were also frequent along estate boundaries, often described by the term *lēah* (below) – again a *deor lēah*, probably ‘deer wood’, is recorded in the north of the parish of Oddingley (Hooke 1990, 250–3). Although the charter bounds normally only refer to features lying along an estate boundary, the incidence of woodland, ploughland etc can often be corroborated by later field-name evidence.

Woodland Regions

The *lēah* term is the commonest wood term encountered in charters. It is found in both place-names and charter boundary clauses and the extent of woodland in Worcestershire at the time is confirmed by the statistics in Domesday Book (Monkhouse 1971, 245, fig. 82). At first this term seems to have been applied to extensive areas of wooded countryside but in time it became attached to small remnant woods (Hooke 2008). These were not, however, necessarily dense patches of woodland for they were intensively used not only for timber and lesser wood production but for wood-pasture. Pigs, especially, would have been taken into woodlands to forage for beech-mast (in southern England) or, more generally elsewhere, for acorns from oak trees in autumn. Other ‘wood’ terms include *grf* ‘grove’, *wudu* and *holt* ‘wood’ (the latter perhaps one dominated by a single species: Gelling and Cole 2000, 233) and *hyrst* ‘wooded hillock’ (Hooke 2010, 123–30). Studfolds for rearing horses and other animal folds often occur in such wooded regions but, although a ‘fold hedge’ is recorded at Halstock (S 290), the studfolds in Dorset are recorded on the Isle of Purbeck (S 534) and in Corfe and Blackenwell (S 632) close to the sea.

One other term is encountered in the more heavily wooded areas: OE *haga* ‘enclosure’. Grundy was correct in interpreting this as a ‘game enclosure’ although the bounds are normally passing along the bounds of such an enclosure (Grundy 1922, 57–8; Hooke 1981a, 236–7). German nineteenth-century dictionaries give one meaning of *hagen* as ‘an enclosure of a wood in which

game are preserved’ (Heyne 1977, 151; cf modern German *hag* ‘enclosure, fenced pasture’) and *Hagenrecht* was a middle German word for the right or duty to provide and install material to direct animals towards the huntsmen: ex inf. Rudolf Kiess). The Anglo-Saxon *haga* as an enclosure boundary must have been a strong bank and ditch, probably also comprising a hedge (*haga* is also the name of the haw of the hawthorn and a dead hedge of thorns would have been particularly effective). The term implies some kind of defensive or protective feature, for it became attached to enclosures within the newly defended burhs of Anglo-Saxon England, later becoming merely ‘a message’ (Hooke 1981a; see also a passage in Munster 1554, 857–8, quoted in Hooke *ibid.*, 235). It was not merely a hedge, however, and the OE *hegge* term occurs in different locations, even in the same boundary clauses (e.g. Fontmell S 419, Woolland S 277), although the Normans replaced *haga* in Domesday Book with their own term *haie* which became ‘hedge’ in modern French (Barker 2009, 29–33).

In Worcestershire such features were almost all to be found in the more remote heavily wooded regions in the west of the county and most are found on what were initially royal estates. Several such boundaries were recorded within the area of the later Forest of Malvern, two described as a *wulf* (wolf) *hagan* and a *swin* (swine) *hagan* (Hooke 1989, 125–9); indeed, Norman forests were frequently established in regions previously used for hunting by the Anglo-Saxons (Hooke 1998). The ‘hays’ were, according to Domesday Book, for capturing deer and many were indeed superseded later by licensed deer-parks, some still referred to as *hagan* or *hayes*. In size these must have varied from small ‘trap’ fences and enclosures to large reserves. A hay was also later a sector or bailiwick of a Norman forest. However, at this early stage it is unlikely that the *haga* should be interpreted as a fully fledged deer-park and some *haga* boundaries extended for many kilometres in Berkshire and northern Hampshire (Hooke 1989 and 2011). In the latter county it was the red deer that was the main object of the hunt, later to be superseded by the fallow deer re-introduced in large numbers by the Normans – an animal that takes more kindly to restricted enclosure.

In Dorset, *haga* features are found mainly in the Vale of Blackmoor, in the more heavily wooded part of the county, much it underlain by heavy clay soils (Figures 5a and b) (see, too, Hooke 1997, 40–3, figs 3.7 and 3.8). *Haga* boundaries ran for well over a kilometre along the boundaries of Stalbridge, Sturminster Newton, Weston, Buckland Newton, Woolland and Fontmell, all parishes with *lēah* place-names. Buckland Newton had no fewer than four *haga* features along its boundary and a medieval deer-park was recorded here at Duntish in the mid-thirteenth century (Cantor 1963, 147–9). The *haga* of Woolland coincided with that of the later park of Melcombe and the boundary was marked by a substantial bank (Cantor and Wilson 1964, 145–8). This region was to become the royal forest of Blackmoor with the

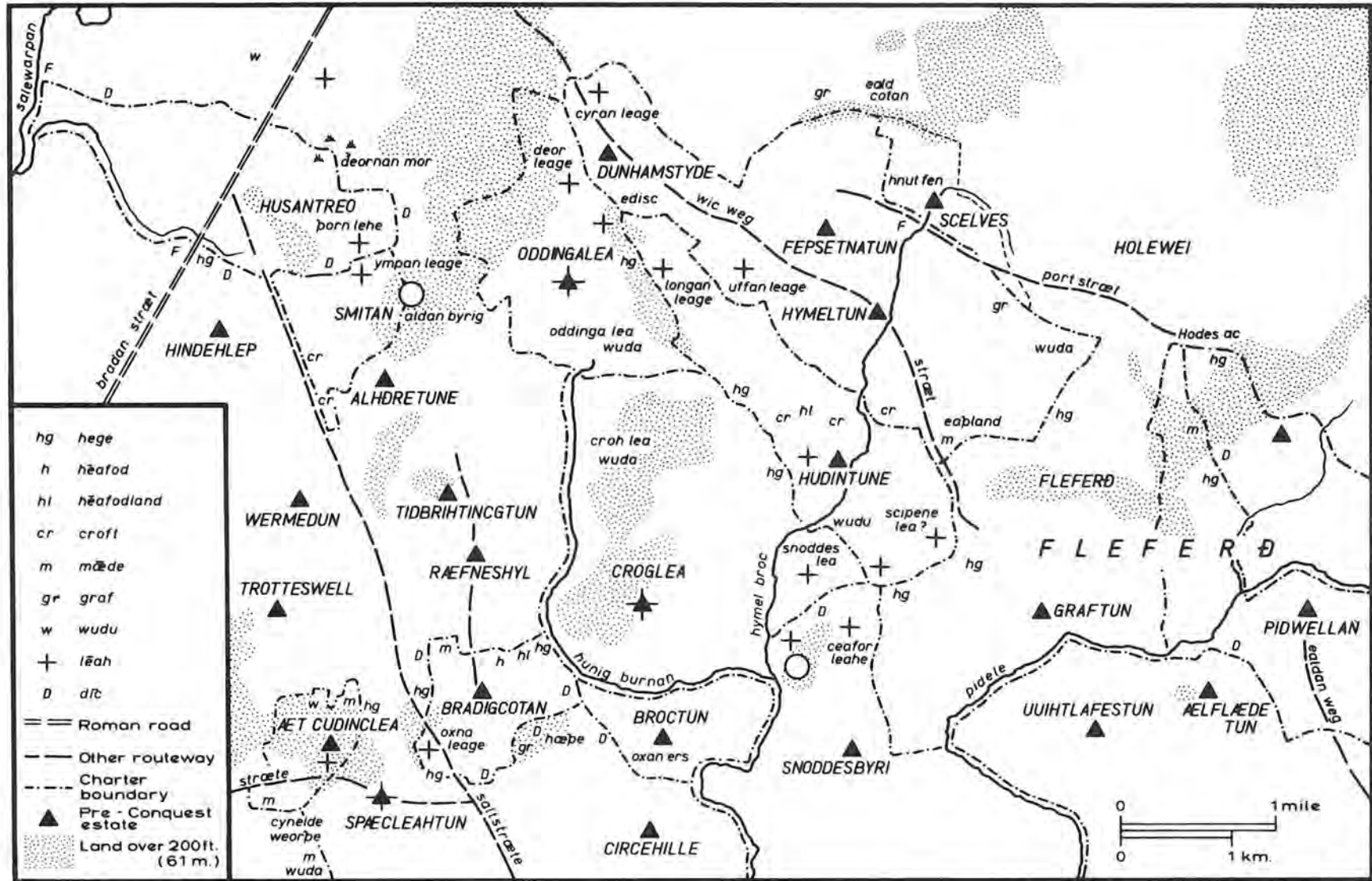


Figure 4: Early medieval parishes, land use and boundary features in central Worcestershire

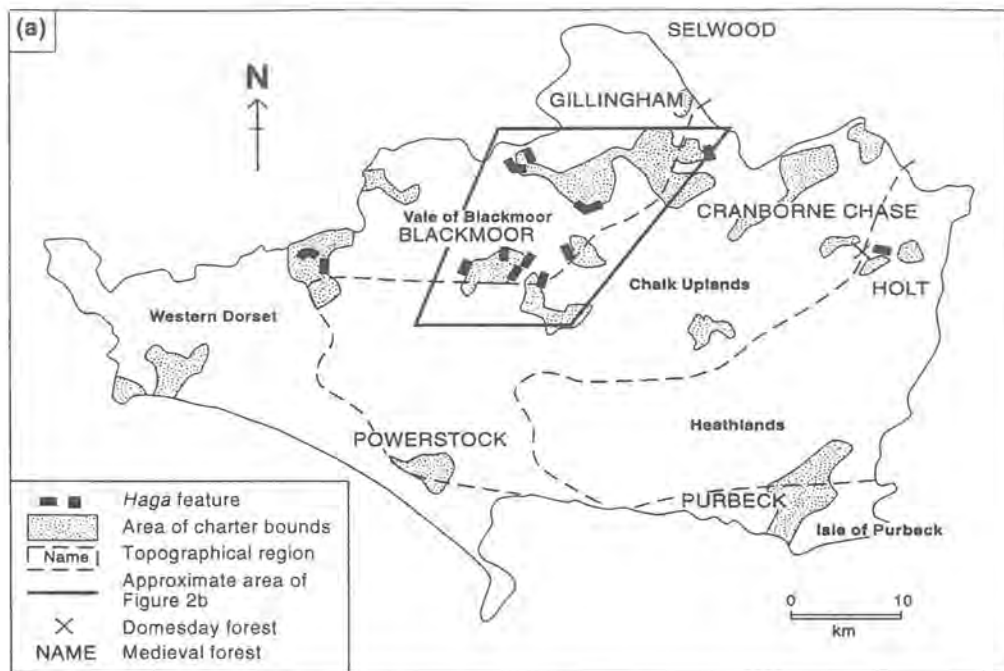


Figure 5a: Pre-Conquest haga features in the county of Dorset recorded in charter boundaries

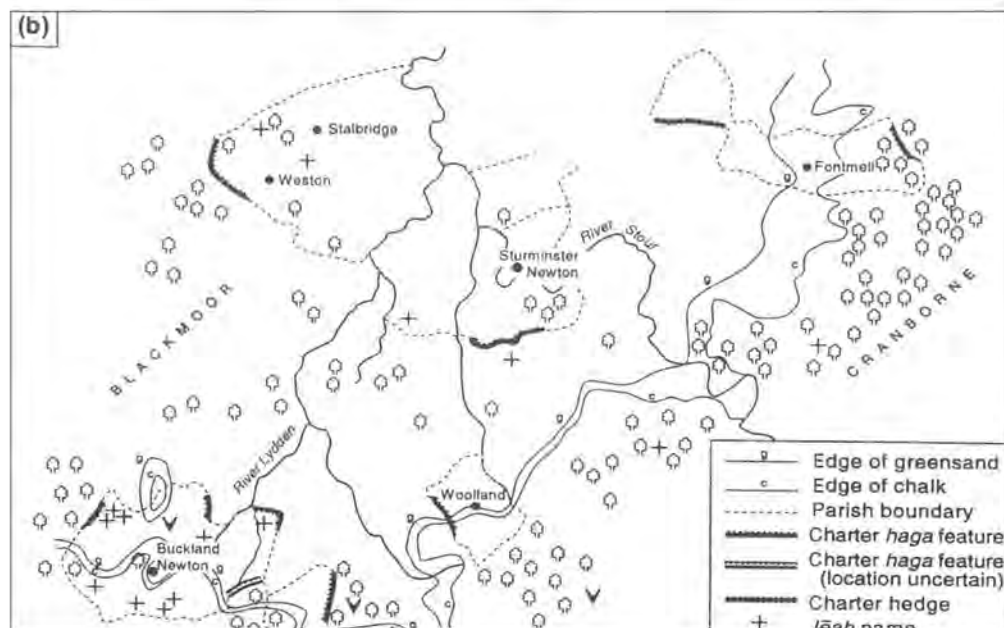


Figure 5b: Early woodland features in the Vale of Blackmoor

forest of Gillingham to the north, while outlying references also occur on the margin of Cranborne Chase and Holt Forest. There is also mention of a ‘leap-gate’ in both Orchard and Corscomb (S 710, S 975) which would have allowed deer entry but not exit. In this county, too, such woodland regions were in marked contrast to the downlands further south where the charter-bounds record features of open pasture (such as barrows) or cultivated land (?indicated by lynchets).

Other Landmarks

Sometimes a precise landmark was required which only inadvertently fits into the above categories. Trees were especially useful makers, especially to mark precise points on a boundary such as a sharp bend. They lived for at least several generations. Yet the distribution of particular species in place-name and charters can be illustrative of the nature of the countryside (Hooke 2010). The commonest tree in most counties, including

Dorset, was the thorn (which included the blackthorn and varieties of hawthorn). This grows readily on land left at the edges of cultivated ground, on lightly grazed pastures or on boundaries in general – in heavily cultivated regions it was often the only common tree or shrub. In Dorset, this tree is recorded on about eighteen separate occasions in the charter-bounds: in Plush in Buckland Newton the charters record a ‘thorny coomb’ and in Cheselborne a ‘thorn hill knap’; six thorns together are recorded on the boundary of Mapperton in Almer (S 347, S 955, S 490). The thorn is also the most common tree found in place-names recorded in the county by 1086 – including Thorncombe, Thornford, Mosterton, Thornhill, Thornton, Thornham and Turnworth. Other trees noted in charter-bounds in Dorset are apples, oak-trees and willows with rather fewer alder, ash, birch, broom, elder, furze, hazel, holly, lime, maple, pear, sallow, sloe and wych-elm.

One landmark found in Dorset but never, of course, met within the West Midlands is the sea. In Dorset three sets of bounds reached the coast: those of Purbeck, Wyke Regis and Corfe Castle (S 534, S 938, S 573, S 598).

Charters are, therefore, a veritable treasure trove of information – for the first time in English history we can get a glimpse of the real countryside through written documents, rather than relying upon hit-and-miss archaeology. And we are also privileged to be seeing this through the eyes of those alive at the time.

ENDNOTE

1. Paper presented to Dorchester Natural History and Archaeological Society Dorset County Boundary Survey, ‘Midlands, Marches and Meresmen’, October 23, 2010.

REFERENCES

- Barker, K., 2009. ‘Ancient bounds and borders: shires, counties and the limits of the AONB’, in *The chase, the hart and the park*, ed. K. Barker, Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty Occasional Papers Series 2, Cranborne Chase and West Wiltshire Downs AONB, pp. 13–36.
- Cantor, L. M., and Wilson, J. D., 1963. ‘The medieval deer-parks of Dorset: II’, *Proceedings of the Dorset Natural History and Archaeological Society*, 84, 145–53.
- _____, 1964. ‘The medieval deer-parks of Dorset: III’, *Proceedings of the Dorset Natural History and Archaeological Society*, 85, 141–52.
- Finberg, H. P. R., 1972. ‘Anglo-Saxon England to 1042’, in Finberg, H. P. R. (ed.), *The agrarian history of England and Wales, Volume I.ii A.D. 43–1042*, 483–506 Cambridge.
- Frontin, *Loeuvre gramatique, Corpus agrimensorum Romanorum IV Iulius Frontinus*, Cost Action G2. Luxembourg, 2000.
- Gelling, M., 1976. *The place-names of Berkshire, Part III*, English Place-Name Society Vol. 51. Cambridge.
- Gelling, M., and Cole, A., 2000. *The landscape of place-names*. Stamford.
- Grundy, G. B., 1922. ‘The meanings of certain terms in the Anglo-Saxon charters’, *Essays and Studies*, 8.
- _____, 1934–40. ‘Dorset charters’, *Proceedings of the Natural History and Archaeological Society*, 55–61.
- Heyne, M. (ed.), 1877. *Deutsches Wörterbuch von Jacob Grimm und Wilhelm Grimm*. Vierten Bandes, zweite Abteilung. Leipzig.
- Hooke, D., 1981a. Anglo-Saxon landscapes of the West Midlands: the charter evidence, *British Archaeological Reports* 95. Oxford.
- _____, 1981b. ‘Open-field agriculture – the evidence from the pre-Conquest charters of the west midlands’, in Rowley, T. (ed.), *The origins of open field agriculture*, 39–63. London.
- _____, 1983. *The landscape of Anglo-Saxon Staffordshire: the charter evidence*. Keele.
- _____, 1985. *The Anglo-Saxon landscape: the kingdom of the Hwicce*. Manchester, repr. 2009.
- _____, 1987. ‘Anglo-Saxon estates in the Vale of the White Horse’, *Oxoniensia*, 52, 129–43.
- _____, 1989. ‘Pre-Conquest woodland: its distribution and usage’, *Agricultural History Review*, 37ii, 113–29.
- _____, 1990. *Worcestershire Anglo-Saxon charter-bounds*. Woodbridge.
- _____, 1994. *Pre-Conquest charter-bounds of Devon and Cornwall*. Woodbridge.
- _____, 1997. ‘Lambere leie, dillameres dic: a lost or a living landscape?’ in Barker, K., and Darvill, T. (eds), *Making English landscapes*, Bournemouth University School of Conservation Sciences, Occasional Paper 3, Oxbow Monograph 93, 26–45. Oxford.
- _____, 1998. ‘Medieval forests and parks in southern and central England’ in Watkins, C. (ed.), *European woods and forests. Studies in cultural history*, 19–32. Wallingford.
- _____, 2008. ‘Early medieval woodland and the place-name term *lēah*’, in Padel, O. J., and Parsons, D. N. (eds), *A commodity of good names. Essays in honour of Margaret Gelling*, 365–76. Donington.
- _____, 2010. *Trees in Anglo-Saxon England: literature, lore and landscape*. Woodbridge.
- _____, 2011. ‘The woodland landscape of early medieval England’, in *Place-Names, language and the Anglo-Saxon landscape*, ed. N. Higham and M. Ryan, 143–74. Woodbridge.
- Hygin, *Loeuvre gramatique, Corpus agrimensorum Romanorum V Hyginus*, Cost Action G2. Luxembourg, 2000.
- Jope, E. M., 1964. ‘The Saxon building-stone industry in southern and midland England’, *Medieval Archaeology*, 8, 91–118.
- Monkhouse, F. J., 1971. ‘Worcestershire’, in Darby, H. C., and Terrett, I. B. (eds), *The Domesday geography of Midland England*, 217–72. Cambridge.
- Munster, S., 1554. *Cosmographiae Universalis Libri VI*. Basle.
- Sawyer, P. H. 1968. *Anglo-Saxon charters: an annotated list and bibliography*. Royal Historical Society. London.

Ordnance Survey Boundary Remarks Books

Chris Slade

The Ordnance Survey Act 1841, laid on the Ordnance Survey the duty of recording all public boundaries, i.e. administrative areas, in the United Kingdom. The position of a boundary on the ground was to be determined in relation to surveyed physical features and incorporated in new editions of published maps. Included among these are those lengths which run with the county boundaries.

Paragraph 1 of the Act required Justices of the Peace to appoint meresmen to assist the Master General of the Board of Ordnance in 'examining, ascertaining and marking out the reputed boundaries of each County, City, Borough, Town, Parish'.

The meresmen tended to be local people of good standing and local knowledge. Probably they would be members or officers of the parish Vestry, the Overseer maybe, or have some status and respectability, but knowledge of the boundary was the most important qualification. This dates back to a time when 'beating the bounds' was routine.

The survey took many years to complete and it was not until the 1880s that the survey reached Dorset. Often the surveyor was a Royal Engineer, a reminder of why the Ordnance Survey was created; to move and use heavy guns most effectively.

The surveyor would first consult what reliable written sources were available, for example Tithe and Inclosure maps. Then he would walk the line of the boundary with surveying tools in hand, mapping in a notebook, the 'Boundary Remarks Book', exactly where the boundary lay in relation to physical features. Usually these were condensed to the abbreviations familiar to map users e.g. FF – Face of the Fence; 6ft RH – six feet from the Root of the Hedge; CR – Centre of the River (or Road) and so on.

Often the Boundary Remarks Books carried a few words of explanation, perhaps because the boundary was not in an obvious place, but crossing a field, for example. The surveyor and the meresmen for both sides of the boundary signed each page of the survey book. Normally there was no dispute and so the findings of the Surveyor and meresmen became recorded for posterity on future OS maps. There were procedures for resolving disputes. After examination of all the evidence the Director General made the decision.

The Boundary Remarks Books are deposited in the National Archives at Kew under the reference OS26. The index needs to be consulted. It is based on counties in alphabetical order, divided into parishes in alphabetical order, with maybe half a dozen numbered volumes for each parish. They remain a unique source of information and with particular relevance for the county boundary survey.

Trees along the County Boundary

John A. Newbould

During 2010 six formal visits have been made. On 4 April Pen, Yeovil, following the River Yeo, in Barwick (Somerset) parish, was visited. Here the county boundary follows the river and one of its tributaries with the Dorset parish of Bradford Abbas to the east in a typical valley alder riverside woodland community (NVC type

W6) (Rodwell, 1991). Alder is a tree of wet stream sides, often on clay. There were a number of stools of >1m but aging them is quite difficult. Significantly, where the boundary turns south-west along a tributary (NG ST675149), it is the alder outlining a dry ox-bow, which indicates the county boundary line and not the course of the stream. Rackham (2003) observes that the presence of alder pollen in the archaeological record will give some indication of the length of time it has been present in a locality. In East Dorset Alderholt (in 1285 O.E. *Aleholt*) a place name indicating alder woodland is on the county boundary (Mills, 1986).

On 29 and 30 April two parishes with Saxon charters viz. Sixpenny Handley – part of the Cranborne Chase A.N.O.B. and Uplyme-Lyme Regis (South Dorset A.O.N.B.) were visited together, with Professor Oliver Rackham. At Handley and its adjoining Woodyates parish we were able to show Professor Rackham large coppice stools of whitebeam (*Sorbus aria*). One of these, in particular, measured around 4m diameter. There is little in the literature on whitebeam. Read (1999) states that: 'there is limited experience on working with *Sorbus* species with few pollards'. Professor Rackham (pers. com) stated that the tree was undoubtedly quite old, situated on a wood bank of a former larger parcel of woodland, but it was the first time he had experienced such a tree. Such coppice stools are present along the county boundary through the Chase woods as far east as Vernditch Chase. The Natural England citation for the Cranborne Chase S.S.S.I. describes this feature as unique in England. Along with maple, (haw)thorn, crab-apple and holly, it provided essential winter browse for the animals of the Chase in earlier times. The Saxon charter of 956 describes oak at the point where the parish boundary turns south at the north-east corner of Pribdean Wood. Oak is still present here today, but the few trees are not large enough to be classed as veteran trees. Along the northern boundary of Pribdean Wood, we encountered a very large ash, which had been laid in the past. A stump measuring some 2 m had laid branches of 1m diameter, with shoots sprouting to form a very solid boundary. In the eighteenth century, such woodland management techniques were used to keep the beasts of the forest to the older compartments, only removing the upward growth when coppice is at least five years old. In Pribdean Wood, the public footpath runs some 0.2 to 0.3 m below the hedge bank indicating that the boundary was formed on the southern edge of a woodland compartment of a cleared area situated in the Bower Chalk parish of Wiltshire.

On 30 April we visited one of the best-researched lengths of the county boundary, which follows the 938/1516 Glastonbury Abbey Uplyme boundary thus defining the 774 Sherborne estate at Lyme Regis. During the morning, we walked along Shire Lane comparing and contrasting the two (double) hedgerows on typical Devon hedgebanks. The Uplyme charter of 1516 refers to a 'land shire ash' located at SY3278792836.

The size of this ash stool is over 4m. It was interesting to learn from Professor Rackham that there is – as yet – no accurate way of dating very old veteran tree stools. However, as an indication of how opinions differ, Reed (1999) comments that a coppiced ash stool 1m in diameter is around 250 years old, whereas Rackham (2006) comments that a 1m diameter ash stool could be around 400 years old. This boundary is described in a Devon charter for Uplyme parish dated 938. The excellent interpretation of the Old English of the charter by H.S.A. Fox allows many features to be identified on the ground today. In the same 400 m hedgebank, there is also a field maple stool over 4m in diameter. Maple is much slower growing than ash, with maiden trees rarely having a similar diameter to old ash maidens. One is only left to wonder just how old the maple here is. Muir (2005) comments that the employment of landmark trees as meeting places for courts, seems to have occurred throughout Western Europe. Was the land-shire-ash a meeting place? In surveying parish boundaries across the UK, I have found it significant that a venerable tree (often a coppice), marks the boundary of two parishes or a turning point in the direction of a parish boundary. Muir goes on to comment that border zones were conventionally the place for public gatherings and that trees associated with such places feature in Saxon charters of 1000 years ago.

In common with Britain's landscape today, the county boundary is at the mercy of man's activities. To the north, from the Red Post on Raymond's Hill, the county boundary has switched from the south-east to the north-west side of the B3165. To the south, the boundary is characterized by numerous maiden and pollard oaks, occasionally forming a double hedgebank. There are also a number of ash stools of 2–3 m diameter along this boundary. None of the oaks is particularly old, but many are over 1m in diameter and are classed as veteran trees. Towards Blackpool Corner, the landowner has in the past introduced beech on top of a typical Devon hedgebank of around 1m high. Beech is quite shallow-rooted and if left unmanaged would soon uproot in strong winds. Many of these trees have been coppiced but recently left unmanaged. In the area of Wyld Warren, and Dodpen Hill, beech is the dominant tree of the pre 1974 county boundary and is even planted on the low hedgebank on both sides of the Soldiers Road to Lambert's Castle.

To the east of Winyard's Gap, the county boundary once again becomes marked by old oak and ash, with significant trees and coppice stools marking turns of the boundary. One outstanding feature of our visit there was to walk across Chedington Golf Course where the county boundary is a substantial hedgebank with many veteran oaks and fairways running on both the Dorset and Somerset side of the boundary. How many places may people play golf in two counties on the same course?

There are three other interesting trees of substantial size associated with the county boundary. The rarest of these is juniper (*Juniperus communis*), where a single male bush is found on the Hampshire side of the county boundary at Bockerley Dyke. The status of juniper in Dorset is reviewed in the *Dorset Proceedings* 131, 185–6. Juniper is a BAP priority species in lowland Britain, subject of a special project by Plantlife. However, all of Dorset's Junipers are male plants found within the Cranborne Chase A.O.N.B. To the north of Motcombe parish, the county boundary with Somerset to the west of Peake Farm is marked by yew (*Taxus baccata*). Whilst yew is not uncommon in the county, this tree is the only one we have observed so far on the county boundary. The third tree, which is often found of a substantial size, is holly (*Ilex aquifolium*). This is often found where the county boundary follows an old route e.g. at Sessions Gate to the north-west of Pribdean Wood and Pen Mill Farm (*Dorset Proceedings* 130, 230 131, 191–2). I have seen coppice stools at least 4m wide in some places. Holly would have been an important browse shrub when animals were kept overnight whilst being moved to market.

All the interesting old trees seen on our surveys have been logged on an Excel database, which is supplied to Dorset Environmental Records Centre. These include some substantial trees not actually on the county boundary (past or present) but adjacent to it. The social history of why these trees have been retained in the boundary banks would be a fascinating subject to study.

BIBLIOGRAPHY

- Barker, K., 2008. 'Lyme and the Devon–Dorset county boundary', *Dorset Procs* 129, 197–208.
- _____, 2009. 'The County Boundary Survey', *Dorset Procs*, 130, 223–32.
- _____, 2010. 'Usque Domnoniam: Sherborne, Glastonbury and the Expansion of Wessex' in (eds) K. Barker with N. Brooks, *Aldhelm and Sherborne: essays to celebrate the founding of the bishopric*, Oxbow, 55–109.
- Fox, H.S.A., 1970. *The Boundary of Uplyme*. The Devonshire Association and Transactions (102) 35–47. Mills, A.D. (1986) *Dorset Place Names*, Countryside Books, Newbury.
- Muir, R., 2005. *Ancient Trees: Living Landscapes*. Tempus Publishing, Stroud.
- Newbould, J.A., 2010. Society Field Meetings 2008. *Proceedings of the Dorset Natural History and Archaeological Society* 131. DNHAS, Dorchester.
- Rackham, O., 2003 *Ancient Woodland*. Castlepoint Press, Dalbeattie.
- _____, 2006 *Woodlands*. Collins New Naturalist series, London.
- Redfern, M., Shirley, P. and Bloxham, M., *British Plant Galls*. F.S.C., Preston Montford.
- Reed, H., 1999. *Veteran Trees: A guide to good management*. English nature, Peterborough.
- Rodwell, J.S. ed., 1991. *British Plant Communities I. Woodlands and Scrub*. Cambridge University Press, Cambridge.

The Botany of Boundaries, Some Thoughts

Robin Walls

This paper originated as a presentation to the Dorset County Boundary Survey day school Midlands, Marches and Meresmen held on 23 October 2010.

Vice-counties

My interest in the boundary is as the botanical recorder for the vice county of Dorset. So, before discussing the main topic, a word of explanation for the non-botanists would seem to be in order. VCs were conceived by an influential botanist, H.C. Watson as a systematic way of recording the distribution of species before we had the national grid. He used the county boundaries at that time and split the larger counties to arrive at a set of units of similar area and published this, at rather a small scale, in 1852 (Watson 1852). Subsequent publications improved on this and the official version is now that published by the Ray Society (1969), from which Figure 1 is taken. This is still not as detailed as modern OS maps so the National Biological Network (NBN) has digitised the boundary to provide a definitive map for practical purposes.

Since 1852 the administrative boundaries have been changed for political reasons but we have maintained the VCs as originally set out. This stability has helped us follow changes in distribution patterns. For most of Dorset the Watsonian VC9 is the same as the modern boundary; the big difference is the addition of Bournemouth and Christchurch to Dorset in 1974. These districts are, of course, still in VC11 (S. Hants).

The VC system is also used by zoologists for recording other groups, such as butterflies, grasshoppers and birds, when plotting at the large scale, and for dividing up the task of keeping track of species over the British Isles. Wildlife trusts and county record centres usually adhere to the modern boundary.

Introduction

A large proportion of our county boundary is the coast, or at some distance off the coast if you prefer. There are obvious floral characteristics in the maritime zone, but they are due to the geomorphological discontinuity, not the existence of a political boundary, however old. The botanical signature here adds nothing to our hercological understanding and will not be discussed in this paper. I want to explore the situations where the



Figure 1: The Watsonian vice-county of Dorset. Note differences from the modern county boundary in the NW and around Martin in the NE. Also, Bournemouth and Christchurch are not shown as Dorset because this map was published in 1969. Vice county, continuous line; administrative county, dashed line

flora or the micro-habitat might indicate a long established human boundary, even in the absence of other clues. When all fences, banks and other physical features are lost, does a ghost of the boundary remain in the flora?

All our boundaries are, of course, arbitrary. They are agreements, perhaps a little forced at times, that ownership or jurisdiction changes at a particular point in the landscape; there is no intrinsic force shaping the niche or habitat that derives from these purely human arrangements. So perhaps we should not expect the botany to be different along these imaginary lines, any more than we expect a change as we cross a grid line or longitude. The reason I believe a signal could exist, at least on the older boundaries, is that responses from small differences in management accumulate over time. Activities that take place either side do not happen *on* the boundary and land management is likely to be different each side, generating evolutionary paths that will eventually diverge sufficiently for us to detect.

We should remember that a line is two dimensional and has no width. The manifestation of the boundary has to be three dimensional, and with a timeline. Thus, studying boundaries on the ground adds another layer of arbitrariness. In practice maps are unlikely to indicate a boundary to a precision better than a few metres, and arguments as to whether the line is the top of a bank, the edge of the ditch, or the centre of a row of trees, are not helpful. The whole structure is the habitat, or the unit for present purposes.

An example of the sort of differences may be seen on a field boundary at Nether Compton (Figure 2). Scrub has developed on the bank whilst the field in the foreground is a perennial rye-grass ley. This sward will have been fertilized and probably sprayed with pesticides. In contrast, the unimproved grassland at foot of bank is

rougher and has a greater diversity. Also visible is a small 'cliff' left by ploughing up to the bank.

Theory

From purely theoretical considerations we might expect that a boundary will have some of the following characteristics:

- | | | |
|---|-----------------------|--|
| 1 | Edaphic stability | If undisputed or along an obvious feature such as a ridge, bank or stream. |
| 2 | Unmanaged understorey | Hedge trimming, wood taken for hurdles, fires, etc. do not affect the ground flora. Grazing may do so. |
| 3 | Narrow | Dominated by woody spp, but very different from woodland because of lower humidity, higher wind and light level. |
| 4 | Bank | Change of slope & elevation affecting insolation and run-off. |
| 5 | Ditch | A natural stream or from creating a bank; may be temporarily wet. May be infilled with different material from the surroundings. |
| 6 | Undefined or disputed | Across mires, rough grassland etc. Relict markers, but otherwise not strikingly different from adjacent land. |
| 7 | Fence / wall | Additional habitats to the soil / rock. |

The key assumptions are then:

1. the boundary is undisturbed, so the climax community will be approached.
2. in comparison with the surroundings, nutrients will accumulate or be depleted.



Figure 2: Field boundary at Nether Compton

3. the microbiological communities in the soil will also differ from the surrounding land.

Is there a reason why county boundaries should differ from parish or estate ownership boundaries, or even the divisions between fields? The counties are old institutions and often coincide with the parish or estate providing abundant opportunity for changes to have accumulated. They are more significant in tribal terms, which might accord them more respect. There may not be an intrinsic difference, but it could be more marked.

The real driver creating differences that we keep coming back to is age. This might seem obvious, but that does not make it true; it needs to be tested. There is some evidence for the importance of age in the case of hedges from Hooper's work in Wiltshire, Devon (Hooper 1965), Huntingdonshire and Cambridgeshire (Pollard et al. 1974). The proposition that the age of a hedge in centuries is equal to the number of shrub species in a 30m length is not universally accepted and is not applicable everywhere, so it is worth taking a moment to look beyond the popular simplification.

What Hooper established was a correlation in a few areas of England between the age of a hedge and the number of woody species. He also found an area in Shropshire where there was no correlation. The general rule has three caveats that must be stated:

- The parameters of the equation need to be determined for each area; i.e. the regression should be calibrated for each estate or region.
- It is not that the age of the hedge can be estimated by dividing the number of species by 100; it is that a hedge would *gain* a species every hundred years or so if left to its own devices. Thus a hedge planted from a single species will appear more recent than one of the same age where several species were used in its original construction if no allowance is made for this.
- There is a variance attached to the correlation and the regression equation indicates the mean. Thus, a hedge will gain 10 spp. in 974 years (to use his exact formula for the Northampton – Huntingdon border), but it is better to say that 95% of them will have taken between 800 and 1150 years to develop.

In summary, as Hooper points out (Hooper 1970), the theory is overruled by the personal preference of the planter.

There are a few anecdotal incidences of species associations with boundaries, but I am not sure we can claim these are definitive:

- Rivers – *C. elongata* (gingerbread sedge) – seasonally flooded woods, such as the Moors River valley.
- Ridge ways – *C. magellanica* (tall bog sedge) – on watersheds.

- Hants/Dorset at Ebblake – only site for a hybrid sedge *Carex x duccelleri* but claimed by two VCs.
- Markers like whitebeam (*Sorbus aria*) on the shire rack (Hooper 1970; Barker 2009), butchers broom (*Ruscus aculeatus*) on estate boundaries around Cranborne (not elsewhere), oak (*Quercus spp.*), holly (*Ilex aquifolium*), large hazel stools and other old trees often survive along old boundary banks and trackways.

In the case of the first two, the associations are due to the edaphic features, a specific water regime, not the existence of the boundary. The third is a unique instance, so far as I am aware.

A fruitful approach to detecting a change is often to devise a metric that discriminates the experimental result from a control and it might be possible to use something of this sort to indicate where a boundary was located. Some of the many indices used in plant ecology that might be pertinent are listed below:

- characteristic plants or habitats, variously combined (e.g. notable species used to chose SNCIs in Dorset)
- changes in diversity, evenness (often viewed as an indicator of the health of the community)
- gradient of change (typically on a transect to position an edaphic boundary).
- life forms, such as a prevalence of annuals, or bulbs or rosette forming plants.
- competitor – stress tolerant – ruderal plant strategy balance.
- Ellenberg indices.
- native – archaeophyte – neophyte – casual
- similarity statistics like Shannon or Simpson
- Hubbell's neutral theory (Hubbell 2001) – numbers of species and rate of entry into enter a community.

At present we do not have the data to see how well any of these might correlate with a boundary. Many of the indices can be calculated from a list of the species, but others require additional data, such as abundance, frequency, size or form. So far, I have not found a reason for preferring any of the indices.

The reality in Dorset

When asked to investigate this topic, I thought of collating information on the flora of the boundary. It was obvious that I would have to look at broad habitats because it would be no use comparing river habitats with chalk downland, for instance. The boundary is variously marked by rivers, banks, ridges (watersheds), or unmarked across common land etc., and it is too long to investigate in detail over the entire length. One way to tackle this was to take a sample, perhaps a stratified ran-

dom selection of 100 m lengths. The problem is that nobody could tell me the total length or the proportions for each of those broad categories of features. Mapping the boundary, noting the habitat and form of each section, is clearly a first step.

Secondly, a data collection and calculation protocol is called for. Species lists, ideally with an indication of abundance (such as the DAFOR scale) in selected lengths of hedges will enable some of the metrics or indices mentioned above to be calculated. The list is not exhaustive and without a clear preference for any one, a trial dataset should uncover which is the best compromise between convenience and discriminatory ability. Lists of species in the adjacent land or nearby field boundaries that are not of any other significance will provide an important control.

This naturally leads to more experimental approaches than just data collection. Recording a transect across the boundary and the land either side, for instance, might be the best way to establish a difference if there are no geomorphological indications. In the extreme, an archaeological trench or a series of soil pits might be dug to sample the below-ground conditions.

To summarize, the approach I am suggesting is to:

1. Map the habitats and geomorphology of the boundary. A good start can be made with an OS map and Google Earth aerial photographs. Ground truthing during field trips will refine and add to the detail.
2. Collect data suitable for applying some of the indices mentioned from well defined lengths of boundary. The best index would be one that is independent of the actual species, such as diversity or change, and is susceptible to statistical testing, probably of a non-parametric type.
3. Record transects across the boundary and a comparable field boundary nearby.

4. Where we can reliably date lengths of hedge from other sources, see whether there is a relationship between age and the number of woody species in Dorset hedges. We might extend this to other boundary features by testing other metric we have.
5. It will be exciting to find that the flora can provide a signal that indicates an old boundary, or better, a unique characteristic of our county boundary. But even if we fail, we will have a much more rounded understanding of Dorset's perimeter.

REFERENCES

- Barker, K., 2008. The Dorset County Boundary Survey, *Proceedings of the Dorset Natural History and Archaeological Society*, 129, 209–212; Plates 5, 6, 7 and 8; p. 207.
- _____, 2009. 'Ancient Bounds and Borders: shires, counties and the limits of the AONB,' in (ed) K Barker, *The Chase, the Hart and the Park; an exploration of the historic landscapes of the Cranborne Chase and West Wiltshire Downs Area of Outstanding Natural Beauty*, Occasional Papers Series 1, Cranborne Chase and West Wiltshire Area of Outstanding Natural Beauty, 13–36.
- Hooper, M.D., 1965. 'Devon Hedges,' *Devon Trust for Nature Conservation*, 7, 263–266.
- _____, 1970. 'Rates of Hedgerow Removal' in Hooper M. D. and Holdgate M. W. (eds) *Hedges and Hedgerow Trees*, Monks Wood Symposium no 4, The Nature Conservancy.
- Hubbell, S.P., 2001, *The Unified Neutral Theory of Biodiversity & Biogeography*, Princeton University Press, Oxford.
- Pollard, E., Hooper, M.D. and Moore, N.W., 1974, *Hedges*, Collins, London
- The Watsonian Vice-counties of Great Britain*, publication no, 146, 1969, The Ray Society, London.
- Watson, H.C., 1852, *Cybele Britannica*.
- DAFOR is a commonly used scale for recording the abundance of plants in a defined area. The letters stand for dominant, abundant, frequent, occasional and rare.
- NBN Gateway (www.searchnbn.net/index_homepage/index.jsp). Enter a species that does not occur in the county and go to the interactive map. Click vice-county boundary and refresh the map.

World War II: Dorset and the Home Front

KATHERINE BARKER AND ALAN BAILEY

'World War II: Dorset and the Home Front' was the title of a day school organised and presented by members of the Dorset Local History Group on 20 November 2010.

Sited along the English Channel coast Dorset occupied both a very strategic and very vulnerable position during the Second World War. As those years between 1939 and 1945 recede from living memory a panel of speakers was invited to explore various aspects of this unique period in the county's history; its surviving and often forgotten on-the-ground defences, field monuments, munitions and radar installations, and the everyday wartime world. It is a pleasure to be able to publish here papers and notes based on the presentations made which represent a wide range of different topics treated in different ways and which may well, in due course, provide some of the source material for an exhaustive, scholarly study in years to come. A useful example is provided by David Evans (see below) with reference to the range of unpublished sources on a single subject, the Dorset 'Yukon' exercise. As Christopher Taylor observes in the 2004 re-issue of his book *Dorset in the Making of the English Landscape Series of 1970* (3), 'More importantly, the Second World War, which I had lived through, was not [then] regarded as history at all. So the place of the radar towers at Ringstead and the airfield at Warmwell in the history of the air defence system of this country was missed.'

Convenor was Alan Bailey who introduced the theme of the day. It was in the November of 1996 that a study day was held in the Dorset Record Office which begun with a talk on the newly-founded *Defence of Britain Project* (1995–2002).¹ This was to carry out a survey of all World War II defences and which created a database of many thousands of records, over three hundred for Dorset. These defences consisted of the coastal crust, stop lines along rivers (as anti-tank ditches) and many towns and villages became anti-tank islands. A unique item in Dorset is Fort Henry at Studland, built by Canadian engineers as an observation bunker.

Faced by the threat of invasion, just as in earlier phases in Dorset's history, it was the organisation of defences along the coast which was the first priority in 1940. Most vulnerable to attack, were the natural routes into the county, along the river valleys of the Frome and the Stour. This was a theme developed by Andy Elliott with 'The Defences of Maiden Newton' complemented by Michael Le Bas with 'The Defences of Blandford.' As the latter notes below, the River Stour makes its way through a gap in the hills at Blandford where the floodplain is also at its narrowest. Thus Blandford (like Maiden Newton on the Frome) was designated a 'tank island' by military commanders to be strongly defended against a perceived powerful German army. It may be

recalled that back in Roman times, Hod Hill had commanded that gap. Strategy does not change. The role of St Aldhelm's Chapel on the headland at Worth Matravers as a 'radar target' lends a mid twentieth-century dimension to a structure which represents a look out-cum-beacon site from at least the seventh century (Barker, 2004, 151–156).

It was Phil Judkins who spoke about the crucial work carried out by a team of scientists and engineers at the radar research station there of which next-to-nothing now remains. The team at Worth Matravers played a critical part in the successful outcome of the War; of that, there seems little doubt. Much more remains of Bovington Camp (now the Tank Museum) which – with Lulworth Camp – was the subject of Chris Copson's paper. Bob Dukes spoke about the role of the nearly mile-square Royal Naval Cordite Factory at Holton Heath.

David Evans took as his subject the little-known 'Yukon' exercise which took place along the West Dorset coast as part of the preparations for the disastrous attack on the French coast at Dieppe. Touching everyday Dorset life was the building (and manning by the Home Guard) of dozens of strategically placed pillboxes across the countryside. John Hellis, as Pillbox Study Group co-ordinator, offered us a rare insight into the origins and significance of these mid twentieth-century fortifications of which so few now remain.

Colin Churchill, author of *Dorchester versus Hitler*, (Dovecote Press 2006), opened the day with a unique eyewitness account of everyday life in Dorchester in those years between 1939 and 1945, and in one of the breaks Terry Hearing described hitch-hiking from London to Weymouth. 'The Harbour and most of the beach were out-of-bounds behind barbed wire [...] covered in invasion barges, just back from landing troops in Normandy.' Dorchester's Town Crier, Alistair Chisholm, read C Day Lewis' poems 'The Stand-to' and 'Watching Post' from which latter these evocative words are taken:

Among the stubble a farmer and I keep watch
For whatever may come to injure the countryside
Light-signals, parachutes, bombs or sea-invaders,
The moon looks over the hill's shoulder, and hope
Mans the old ramparts of an English night.

Julian Walther gave a short talk about his mother and her wartime diary, a unique 'snapshot' of everyday life in Blandford in 1941 and 1942. *Dorset in Wartime; the Diary of Phyllis Walther*, was published by the Dorset Record Society in 2009.

The day was admirably complemented by a collection of Home Guard memorabilia assembled by John Pidgeon; see his note below. Over the weekend of 18–20

June he attended 'Maiden Newton at War,' a second very successful 1940s weekend with army re-enactors, civilians in period costume and a procession of tanks and armoured vehicles. Dale Johnson of 'The Real Dad's Army' attended the Dorchester day in Home Guard uniform and parked his Home Guard van on the pavement outside the County Museum.

Among the booklets and leaflets on display was Colin Churchill's *Dorchester versus Hitler* and *Dorset in Wartime; the Diary of Phyllis Walther* (for both see above); Colin A Pomeroy, *Military Dorset Today; Second World War scenes and settings that can still be seen 50 years on* (Silver Link Publishing, 1995), Graham Smith, *Dorset Airfields in the Second World War* (Countryside Books 1999/2006) and M R Bowditch and L Hayward, *A Pictorial Record of the Royal Naval Cordite Factory, Holton Heath* (Finial Publishing, 1996).

The papers published here do not follow the same order as they were given on the day.

REFERENCES

1. *The Council for British Archaeology*, Defence of Britain Project; www.britarch.ac.uk/cba/projects/dob.
- Barker K, and Le Pard G, (2004), 'St Aldhelm and the Chapel at Worth Matravers' *Proceedings of the Dorset Natural History and Archaeological Society* **126**, 148–156.
- Taylor, Christopher. *The Making of the English Landscape: Dorset* (1970; re-issued with a new introduction, Dovecote Press, 2004).

The Worth of Worth: Radar at Worth Matravers

Dr Phil Judkins

I imagine every Dorset reader has sailed or driven past Swanage towards Lulworth on a warm summer's day, and looked across at the sleepy countryside. Nothing very much seems to happen there – in good weather at least – and St Aldhelm's Head makes a good vantage point for HM Coastguard, nothing more.

But for a time, during the Second World War, this was Britain's Silicon Valley, and its first line of defence against invasion, and also the place where our first precision bombing attacks and the guidance of our invasion of Europe were planned.

In May 1940, 200 of our top scientists moved to Worth Matravers to concentrate on the highly secret development of radar – so important that within only two years their numbers had grown tenfold, to 2,000 scientists, engineers and technicians. This was where the 'best of our best' produced the radar equipment we take for granted in our aircraft and our boats.

But Purbeck didn't just do research in the war, important as that was. It had the highest concentration of operational radars of all types in the country:

- Early warning, low-level early warning, and ground control of night fighters at Worth itself
- Radio-navigation for bombers and ships from Brandy Bay, Tyneham
- Blind bombing beams controlled from Tilly Whim, Durlston Head

The research at Worth led to on-board air interception radar for fighters and blind bombing radar for bombers, as well as, in a roundabout way, the magnetron which powers your microwave oven.

There were radar spy stations at Acton and in Swanage, and radar training schools too at Forres (Purbeck View), at Renscombe, and at Langton.

Our radar scientists originally did their researches at Orfordness, then at Bawdsey (both in Suffolk) then on the outbreak of war evacuated to Dundee. But the need was for a much bigger research site than Dundee could provide, so – because France was then not thought likely to surrender, and because Worth was beyond the reach of bombers operating from Germany – that research centre was built at Worth, and came to be called TRE, the Telecommunications Research Establishment. Its scale was vast – as recorded above, over 2,000 scientists, engineers, technicians and support staff worked there, and were billeted over all the surrounding areas.

Within days of the scientists arriving here in May 1940, the Germans invaded France, which fell within weeks. From being a location safe from air attacks from Germany, Worth was in the front line of attacks from France.

The scientists had, of course, been building our radar early warning system since 1936, and by the time of the Battle of Britain that early warning system, called 'Chain Home' extended round most of the East and South coasts. Part of it was positioned at Worth. Able to see over 100 miles, its operators could spot German formations building up over France, and provide the warnings to our Hurricanes and Spitfires to get into the best positions to intercept them. 'Chain Home' was far from perfect – it was tricky to operate and was often inaccurate, but the female operators of the WAAF were usually able to provide a good warning in plenty of time.

The importance of Worth is obvious if you look at the area over which the Battle of Britain was fought. Worth – though only intended for research use, and hastily pressed into operational service – became the southern anchor of the early warning chain, the more important since Ventnor on the Isle of Wight had a lot of difficulty estimating the height of attackers, and was in any event out of action for some time after a bombing attack. Worth covered the approach tracks from France to Portland, a major naval base, and to Bristol – it was in a key position, and it discharged its duty well. In just fifteen minutes fighting over the local area on 27 September 1940, six Messerschmitt 110s were shot

down, and another exploded in the air after being rammed head-on by the Spitfire of P/O Miller, an Australian pilot of 609 Squadron from Warmwell. 609 and 152 Squadron's Spitfires claimed twelve kills and four damaged on that day, one of the hottest in the Battle.

But in the midst of the Battle, strangely peaceful scenes could be seen – an old biplane towing gliders up and launching them in mid-Channel to glide back to Worth. The missions were deadly serious – the Germans had used gliders to assault the Belgian frontier forts some weeks earlier (later, the Allies would use them too, to invade Normandy in 1944) and the British wanted to be sure wooden gliders would show up on radar, so Dorset's defences wouldn't get a nasty shock. Gliders did show on radar, though faintly, but were never used against the UK. I'm sure the German fighter pilots must have been fascinated by these experiments, and the glider pilots deserve either a medal, or sectioning under the Mental Health Act, for flying gliders in the middle of the Battle of Britain. 'What did you do in the war, Daddy?' – 'You'll never believe this, son...'

At Renscombe Farm, by the way, the farmer, Mr James, stuck to his farm throughout, though he only had land left for pigs and poultry; however, he made a few pence by selling tea and buns to the scientists on the site.

The Germans also tried to fly in 'under the radar' – quite literally, the first time anyone tried this. Here again Worth was ready, but only just – and with a crudity we today find unbelievable. Our low-level early warning radar was called 'Chain Home Low', and instead of tall towers it had the sort of aerial you might see on an airfield today. The aerial at the top rotated back and forth (we couldn't do 'round in a circle' quite yet), the operators watched and could read off the range of the target, but not yet its height. They knew its bearing from the bearing of the aerial when the target was in view – but how was the aerial being turned? By hand! We couldn't yet motorize the aerial – we had our hands full trying to get the radar to work at all – so the scientists just modified a pushbike frame for hand operation, with the bike chain turning the aerial and an airman turning the pedal cranks by hand. The aerial-turning task was not much in demand. The airmen doing it were called 'binders', hence the later radio popular show of RAF life called 'Much Binding in the Marsh'. In a true PC spirit, on at least one site, Wherwell, the task was carried out, and carried out well, by the ladies of the WAAF who also operated the radar. The key point was – it worked.

But Worth never lost its sense that the important mission was to attack rather than simply defend, and one unimpressive piece of ironmongery was a key to that, as well as playing a part in almost all of Dorset's kitchens today. In February 1940, two researchers at Birmingham, Randall and Boot, were experimenting with trying to generate high powers at microwave frequencies. To their surprise, they succeeded with a thing

called the 'resonant cavity magnetron', which works rather like a series of whistles connected together and surrounded by a powerful magnet. Other researchers contributed ideas to make it even better, and then GEC worked out a way of being able to mass-produce it.

The importance of the magnetron was that the size of radar aerials is a result of the frequency you generate your power at – if you generate it simply at high frequencies, you have a huge aerial like Chain Home; if you generate it at very high frequencies, you have an aerial like Chain Home Low, or like an old TV aerial; but if you generate it at microwaves, you have a small dish, like Sky, or a scanner, such as you may have on your boat. No prize for guessing which the Air Marshals and Admirals wanted. This was the basis of a lot of the work at Worth – and indeed of the microwave oven.

But we had another secret weapon – the now departed Grosvenor Hotel, Swanage. The reason is simple, but most organisations never discover it – it was a place where everybody came to solve problems. The head of Worth, 'Jimmy' Rowe, held what he called 'Sunday Soviets' to crack the technical problems of the war, and to them came Ministers of the Crown, Air Marshals, Admirals and their staffs, operational airmen, sailors, and the scientists, to discuss problems, with the only rule being that anyone could say anything just as long as it was relevant. As Churchill said, 'In war, you don't have to be polite, you just have to be right.' There was nothing remotely like this in Germany or Japan – indeed, nothing much like it in the USA – but it solved many of our military problems.

The first of those problems was helping our bombers find their way at night. It had been assumed they were doing well with astro-navigation (star shots with a sextant) and radio D/F, but in 1941 a report prepared for Churchill showed that most of our bombers were not bombing within seventy-five square miles of the target. This is not very surprising if you think of taking a star shot on a bumpy aircraft on a cloudy or stormy night while you were being shot at.

An idea called GEE, which a scientist called Dippy had thought of before the war, had already been resurrected from its file, and was now put on the URGENT list. The idea was pretty simple, and we can describe it by thinking of the four stations of what was called the Southern GEE chain – Bulbarrow Hill, West Prawle, Truleigh, and Brandy Bay.

Bulbarrow Hill would transmit a pulse of radio energy; when it received that, Truleigh Hill would transmit one too; after a fraction of a second's delay, Bulbarrow Hill would transmit another pulse, and when West Prawle received that, it would transmit a pulse of its own, whereupon the whole cycle would start again. A ship, or an aircraft, out in the Channel, would receive the two sets of pulses, and by looking at them as two lines on a display screen and putting some calibration 'pips' in

place, could obtain two sets of co-ordinates which it could relate to a special map, and find its position where the lines representing the two co-ordinates crossed. A lot simpler, and more accurate, than a star shot, especially if it was stormy or you were being shot at; and the big advantage of GEE was that you didn't need to transmit to find your position, because in war, transmitting gives your position away to the enemy. All the kit you needed in your aircraft or your ship was just two small black boxes, a receiver and an indicator unit.

GEE was very extensively used by both the RAF and the Royal Navy after its first operational use in August 1941, and demonstrated its power in the first thousand-bomber raids of 1942. The crews liked it because of its simplicity – sometimes it was called the 'Goon Box', as 'any Goon could use it'.

Now, what did Brandy Bay do? The critical job of monitoring the other stations to see that they were transmitting their pulses properly. Brandy Bay itself didn't transmit anything – it just received. The story that Brandy Bay directed gunfire from Upton Fort at Osmington that sank a couple of German E-boats on a raid into Weymouth Bay in March 1944 is unfortunately not true; I've looked up the records in the National Archives, and Upton Fort had been reduced to care and maintenance months before, plus the E-boats' own records say that when they made that raid, there was a violent storm and the two boats which sank had simply crashed into each other.

What *is* true of Brandy Bay is much more important – it controlled the navigation signals which made D-Day, our invasion of Normandy, possible, because every one of the 3,000 ships and aircraft had to be accurately positioned – and each of them carried a GEE-box, as they called it, to make sure they were. So it was that Brandy Bay invaded Europe, or at least ensured the Allies did, successfully. So heavy was the reliance on GEE that there was some talk of re-naming the event GEE-day rather than D-Day.

But back to another part of Purbeck – Leeson House at Langton Matravers. It was here that much of the potential of the magnetron for making compact, accurate radars which could be fitted even in small ships and aircraft, was exploited. One of the key men making this possible was Bernard (now Professor Sir Bernard) Lovell, today world-famous for radio-astronomy, but then a researcher in microwave radar and the application of the magnetron. His first endeavours were to use the magnetron to improve our Air Interception radar, putting an aerial dish like a satellite dish in the nose of our night-fighters, but in November 1941 a colleague identified that by tilting the dish aerial downwards, the radar set would trace out a shadowy map of the ground beneath.

This was the origin of the blind bombing and navigational aid called H2S. What did the navigator see when

he switched his H2S on? Well, if he was lucky and the set was working and conditions were good, he might see something like a map of the ground or sea beneath. Coastlines showed up sharply, and towns could be identified as smudges. This was a lot better than anyone expected – and indeed when Jimmy Rowe as head of TRE saw a photo from a research flight, he exclaimed: 'This is the turning point of the war!' In practice, it took quite some time to bring into operational use – the first sets reached 35 Squadron in December 1942, and only 150 planes were equipped a year later. The results could be pretty variable – you might imagine trying to navigate from one smudge to another smudge when there wasn't a coastline visible – but it was light-years better than anything else and was intensively used in 1944–5. The big advantage of H2S was that it was carried in the plane and so its range was as long as the plane's – no need to worry about ground stations in England. Its problem was that the Germans soon learned how to track the bombers from their H2S transmissions.

And what, you might ask, did the scientists first use as their radar target when they were developing their equipment? The chapel on St Aldhelm's Head. As things developed, and a smaller moving target was needed, they did also ask one of the technicians ride a bike around the fields while carrying a sheet of corrugated iron; the bike – much modified – still survives, but Health and Safety forbids riding it while carrying corrugated iron and being irradiated by radar. Later targets, of course, were deadly serious.

If you can look down from an aircraft with a dish aerial and see on a radar screen what is below you, then that applies as much at sea as on land. German submarines, U-boats, were already wise to earlier types of Air to Surface Vessel radar, and listened for them on special receivers. The Allied jump to microwaves was not expected, and for a while Allied aircraft, equipped with centimetric radar, could swoop down unexpectedly on the U-boat. The effect was even more terrifying at night, when the aircraft would approach almost silently and then suddenly switch on a searchlight, the Leigh Light.

The ability to design microwave radars small enough to fit on almost any Navy escort vessel was, of course, pure gold for the hard-pressed convoy escort groups of the North Atlantic. It had been difficult to get enough space on the mast to mount large aerials for short-wave radar, but with centimetric radar it was possible to design a complete structure which could be fitted to the destroyer, frigate or sloop while in dock at the end of a convoy.

There were many different factors in the defeat of the U-boat in the North Atlantic – the breaking of the Enigma codes, the creation of escort carriers, the availability of more destroyers, frigates, corvettes and sloops, high-frequency direction finding (called 'Huff Duff'), the very long range Liberator, better anti-submarine weapons and better training. But radar, whether

mounted on a ship or on an aircraft, played a significant role in the hunting down of many submarines, and Leeson House played a role in its development.

Tilly Whim also has its role in history, as one of the ground stations of a blind bombing system called 'Oboe' – the reason for this name being that a guidance beam was transmitted in the form of a tone which the pilot heard in his headphones, and one of the early pilots thought it sounded like an oboe. The idea of the system was fairly simple, although the electronics were quite complicated – one ground station in Britain transmitted a radio beam, which triggered a transmitter in the aircraft to reply. Using this reply, the aircraft could be kept at a constant distance from the ground transmitter, flying along the arc of a circle only about thirty-five metres wide. The aircraft meanwhile transmitted a signal back to a second ground station in Britain, which measured its position and transmitted a signal telling the aircraft to drop its load of marker incendiaries – incendiaries, because the system was mainly used by the Pathfinder aircraft of 8 Group, which went in front of the Main Force bombers to mark their targets with flares and incendiary bombs called 'Christmas trees' or 'Pink Pansies'.

'Oboe' was extremely accurate, but it had three drawbacks – it was fairly short range until a way was found of putting repeaters in aircraft; it needed the aircraft to transmit and so give its position away; and most of all, early versions could only be used by one aircraft at a time (hence its use by Pathfinders for the Main Force). The system was conceived in Worth by Alec Reeves, and pushed into operation by Frank Jones, the first trials taking place in April 1942, and the first operation that October. It was used mainly in 1943–5 after the scientists had left Worth.

The Oboe ground station in Purbeck, at Tilly Whim, had a couple of incarnations – one as a group of Nissen huts stuffed with electronics; and once as a collection of trailers, again full of electronics, but this time mobile, so that as we invaded the Continent, the trailers could advance with our troops and project their guidance beams further and further into Germany.

The aircraft very often used by 8 Group Pathfinder Force was the all wooden Mosquito, and the complicated electronics filled up the cockpit, leaving limited room for the pilot and navigator. Many of these aircraft made over 100 missions to mark targets, a couple even managing over 200, and you can imagine the bravery required for that.

The benefit of accurate marking was considerable – for example the Askania works in Berlin was almost completely flattened by such a raid – the importance of this works is that Askania made guidance systems for the V-weapons, the V-1 'buzz-bomb' or 'doodlebug' (today we would say cruise missile) and the V-2 rocket, a ballistic missile.

An unexpected secret part of the war comes from a thicket a couple of hundred yards from Craig-Y-Don in Swanage. This was the site of a Coast Defence (CD) radar, used to direct coastal gunnery, and hence manned by the Army. However, in 1944, the greater need was to spy on German communications, so the station was taken over for what was called a 'JWatch', equipped with a whole new set of aerials and receivers, and eaves-dropped on German radio signals in the months leading up to D-Day. Another radar spy station was at Acton, between Worth and Langton.

But we should return to 1942, when Worth took a part in a daring mission to capture a radar system from the Germans. Radar signals had been detected from Bruneval on the French coast, and then a daring Photographic Reconnaissance pilot managed to obtain several photographs, which showed a strange bowl-fire-like object in front of a house. It was immediately recognised that we could get small boats very close to the cliffs nearby, and the idea was mounted of a commando raid to steal as much of the equipment as possible and bring it back to the UK. The plan was for a parachute drop of commandos, one of their number being an RAF Flight Sgt, F/Sgt Cox, a radar specialist, who would identify the key parts of the equipment, draw as much of it as possible and dismantle it for the commandos to carry down a cliff path to fast motorboats which would be waiting at the bottom of the cliff.

The raid went reasonably well, but the Germans, once they had recovered from their surprise, put up a stiff resistance, and Cox found himself doing rapid dismantling of the radar with bullets flying past his ears. The last parts proved difficult to dismantle, so two commandos put a large boot on either side of the equipment rack and literally tore the equipment out of its mountings, following which they staggered down the cliff with it.

The Navy arrived just in time, and Cox and the commandos climbed aboard with their valuable haul. Cox reported at once to a scientist who had come with the boats, Don Preist. His first request was that of any landsman embarked on a forty-knot motorboat speeding over a choppy sea – 'Permission to be sick, sir?' Preist, not knowing if they'd get back, refused permission until a rapid description of the radar was gained, after which Cox went back on deck and we can draw a veil over the proceedings.

Safely home, the captured 'Wurzburg' radar yielded its secrets to the Worth scientists – not least of those secrets being that the construction of the German sets was far in advance of our own in its detail and its precision. However, what the Germans had not done – but the British had – was to weld all the parts of their air defence system together into a single whole. It was, amazingly, in organisation rather than in raw technology that the British had triumphed in the Battle of Britain. As Churchill said 'They had developed a technically efficient system, in some respects ahead of our own. But we

had woven all into our air defence system, and in this we led the world', or as the German General Galland said 'The British had from the first an extraordinary advantage, never to be balanced out at any time in the whole war – their radar and fighter control network. It was for us a very bitter surprise that Britain had a close-meshed radar system to the highest level of technique – we had nothing like it'.

Enough self-congratulation – back in 1942, it was not too long before someone high up had an 'Omigod' moment, as in 'Omigod, *we* landed a raiding party near a radar station close to the Channel, but *our* main radar research station is also on the shore of the Channel with an easy route to the sea – GET THEM OUT OF THERE!' A location as far from marauding Germans as possible – Malvern College in Worcestershire – was located, and the entire research establishment moved there, lock, stock and barrel, before the next full moon after the Bruneval raid. The operational radar stations at Brandy Bay and Tilly Whim, as well as the Chain Home and Chain Home Low at Worth, stayed where they were, of course, as did the training schools. Eventually, after the war, these closed, and the Worth site became a GEE monitoring station itself.

In time, all things end. In 1962, the aerial masts at Worth were demolished, and the entire site cleared, so that almost nothing now remains except a single building used as a youth activities centre (this is the post-war GEE site, where the aerial mast came down in 1967), and the overgrown foundations of the Chain Home Low building at St Aldhelm's Head; a few walls remain at Brandy Bay.

One thing does remain to cheer the traveller – the Square and Compass pub, little changed since the days when the scientists, who called it the 'Sine and Cosine', ate there. Worth Matravers sleeps peacefully now, with memories of days in the sun; but the worth of Worth is great, for it

- Defended a nation
- Created a major world industry, of radar as we know it
- Helped fight a war and invade a continent.

This is no mean feat for a Dorset village.

Dr Phil Judkins is Chairman of the Purbeck Radar Museum Trust.

The Royal Naval Cordite Factory at Holton Heath

Bob Dukes

It is, perhaps, convenient to start with a 'what, why and where' explanation of The Royal Naval Cordite Factory. Cordite is a propellant used to drive the shell up the

barrel of the gun. It consisted, essentially, of a mixture of nitroglycerin and nitrocellulose. Both are explosives – indeed nitroglycerin (NG) is highly explosive and very sensitive, such that some countries banned its production in the nineteenth century. Around the turn of the century government scientists at Waltham Abbey developed this mixture, which was much safer to handle and produced a slower burning explosive, ideal for propellant.

In 1914 Winston Churchill, who was then First Lord of the Admiralty, worried by possible shortages of munitions in the event of war, decided that the Royal Navy needed its own supply of cordite made to its own specification. The site chosen was some 550 acres of heathland at Holton Heath, just north of Sandford, on the shores of the Wareham Channel of Poole Harbour. Quite why Holton Heath was chosen we do not know, but it did have several useful attributes: a road to the north, a railway to the south, and with water access and comparative seclusion, but near enough to centres of population to provide a workforce. It came into operation early in 1916 and continued in production after the end of the First World War, since cordite decays with age and needs to be replaced at intervals. Thus, as World War II approached, the factory was already set up and working. Although there was a great increase in staff, 4,500 at its peak, as it moved to three-shift working, in essence the operations did not change.

So what was the average day like? Many employees arrived by train. The Admiralty had negotiated a contract with the London and South Western Railway, in World War I, to build a halt between Wareham and Poole at Holton Heath, and to stop trains as necessary. During World War II, dedicated sets of coaches were used between Swanage and Poole, and Christchurch and Wareham, and passenger numbers were such as to need two bridges to get people across the line in a reasonable time. The alternative was bicycle, and we know that staff cycled from as far as Blandford. The bulk of the staff would enter by the main gate (Figure 1), with the police office on one side and the hospital on the other, having deposited matches or lighters in pigeonholes outside. The time-clock stations were immediately inside the gates, and staff would then go to the changing rooms to put on their protective gear made of natural fibres with no metal fittings – no buttons or belt buckles – only ties and toggles. The natural materials gave protection against burns, the most common injury, whilst natural fibres reduced the possibility of static electricity causing sparks. For the same reason, metallic fasteners were not used. Of course, there was the ever present danger of detonation of the component materials.

Wages varied according to job. In 1940 the workers in the acid plant were paid two guineas, plus a bonus of twenty-seven shillings per week (forty-seven hours).

In addition, of course, there was the danger of enemy attack. Being nearly a mile square the factory was a big



Figure 1: The main gate was the entrance used by the majority of factory workers. During the war some 4000 people passed in and out through the gate on a three shift system

target although the individual buildings were well spaced, each in its own revetment. The Germans were well aware of the factory as Luftwaffe aerial photographs show. More importantly the Germans had detailed knowledge of the factory. On 23 June 1931 one of the two batch process nitroglycerin plants had a problem, and during attempts to rectify the difficulty, the plant exploded. In the mid 1930s a new continuous plant was built using stainless steel, buried in a large bunker; it is still there in a wood on the site, although blocked off. The experts in the welding of stainless steel in the 1930s were the Germans and they very kindly built the plant, and German engineers spent several weeks on the site. A detailed German reconnaissance photograph, taken in August 1940, is annotated with descriptions of the various sections of the factory, no doubt supplied by the contractors.

In case of air raids, refuges had been built at various points for staff, but the batch NG workers had to stay at their posts until the batch was complete. In 1938 there was a demonstration of the effects of a gas attack at the annual open day, so precautions were being taken before the war started.

To defend the factory from air attack, two AA towers were erected to the west and north-west of the factory. The first (Figure 2), is situated on Sandford Heath, and is easily accessible. It was in fact two separate structures, one to carry the cannon and one to carry the director.

They were situated to deter aircraft flying along the railway to identify the factory.

Perhaps more importantly, there were two decoy sites on the Arne Peninsula and in Wareham forest, where dummy buildings of scaffold poles covered with canvas, or sheet-metal salvaged from old oil drums were built. They were equipped with quantities of wood, oil and old cordite, which could be ignited to confuse the enemy. In fact, only the Arne decoy site was used in June 1942, but



Figure 2: Two anti aircraft positions were built to the west and north-west of the factory site. Each consisted of a cannon mounted on one of a pair of towers. The other tower carried the director for aiming the gun, the two being separated to avoid vibration upsetting the director



Figure 3: The Control Trench was a bunker which had communication with surrounding military defences and controlled warnings and alarms on the site. It also initiated use of the two decoy sites if a specific air attack on the factory site was deemed likely. Only one of the decoys was ever used



Figure 4: Bomb damage on the factory site was limited to minor burning on one or two wooden buildings. The fires were promptly dealt with by local fire teams. Most sections, even office staff, formed fire teams



Figure 5: Although the main site only received a few incendiary bombs a large unexploded bomb landed at the Holton Heath cross roads on the A351. It took several days to extract

the morning after it was set off the factory HG commander counted over 200 craters, some of which are still visible. The factory defence was coordinated from the 'control trench' (Figure 3), a small bunker on the site equipped with communications – with local radar, gun sites and, of course the decoys, and it was also responsible for raising the alarm on the site if necessary.

In fact the precautions seem to have been very effective, as although there were in excess of 1100 alerts during the war, and some bombs fell within the site, there was very little damage, such as from a small incendiary bomb which burnt the outside of one of the wooden buildings (Figure 4). However, a much larger delayed-action bomb landed by the local crossroads which took several days to remove (Figure 5). The factory, always equipped to do everything, had its own bomb disposal officer; Lt Woodrow RNVR. Nevertheless, Lord Haw Haw, the German propagandist claimed the factory had been totally destroyed on more than one occasion. Preparations had already been made, with schemes for camouflaging more obvious damage with poles and netting.

Despite little damage on site, there was one disturbing event in 1941 when the 5.19pm train from Holton Heath to Christchurch was bombed near Rocklea bridge. The train suffered superficial damage and many broken windows, but there were no serious injuries.

In addition to their normal duties, some 185 workers were members of 5 Company of the 7th Home Guard battalion of the Dorset Regiment (Figure 6). The Home Guard also manned the decoy sites on a twenty-four hour basis. Many other staff acted as fire watchers; because of the ever-present danger of fire there had



Figure 6: The Royal Naval Cordite Factory had its own Home Guard company who also manned the two decoy sites



Figure 7: Workers also contributed financially to the war effort both with regular savings and targeted savings weeks

always been fire teams, but during the war these expanded to include even office staff as shown here, with the typing pool team. Staff were also enjoined to raise money for the war effort. They had a clerk, N A 'Henry' Ford who was also something of an artist and he painted large (6ft x 4ft) posters for this purpose, some of which still exist (Figure 7). Despite all this activity, there was still a social life, and entertainments were produced, both official and home-grown, directed by Henry Ford.

Rehearsal for Disaster: Bridport's Beaches and the Dieppe Operation

Dr David Evans

Combined Operations Headquarters had decided on staging a major raid on France during the summer of 1942 for a multiplicity of reasons, and Dieppe was selected as the target. The Canadian forces, whose command had nothing to do with the initial planning, were

selected – after an initial suggestion of a composite British and Canadian force – to carry out the plan, code named RUTTER, and the 2nd Canadian Division under Major-General J. H. Roberts was duly earmarked (it should be mentioned that rumours were widely circulated among British troops at the time, that the Canadians were deliberately used for a hazardous operation, in order to reduce the excessive exuberance of their conduct). The 2nd Division was nominated at the beginning of May 1942. The Commander of South-eastern Command, of which the Division was a part, was Montgomery. On 15 May General McNaughton, the Commander in Chief of the First Canadian Army, accepted the outline plan for RUTTER. Intensive training commenced at once, and the Division moved to the Isle of Wight for this purpose.

After a brief but intensive work up it was decided to carry out a full scale exercise to simulate Operation RUTTER. On 4 June General Roberts conferred with the Station Commander at RAF Tangmere, presumably to discuss the provision of fighter cover as a part of this. Naturally, a piece of coast with a reasonable similarity to the topography of Dieppe was required, and on 7 June 1942 the C in C's Plymouth and Portsmouth and the Flag Officer Portland were informed that 'Reconnaissance has found satisfactory beaches off Bridport. Intend carrying out exercise at dawn 12th June [...] Exercise will be called YUKON'. On the same day a Combined Operations Staff meeting was held at the Harbour Inn, West Bay (so the COS War Diary: presumably the long deceased Harbour House Hotel) to discuss the exercise.

So it happened, through an accident of geography (the briefing drawings show that the similarity in profile between the coast at West Bay and that at Dieppe was as close as could reasonably be expected), that Bridport and West Bay were for the first, and to date, the last, time to interlock with a sequence of events that were to be of international significance. The object of YUKON was a raid on Bridport with limited air and military objectives, embracing the destruction of local defences and power stations, an (imaginary) aerodrome to the east of the town and the capture of a Divisional Headquarters at Bradpole. To achieve this, a force of infantry and tanks were to be landed in the Bridport area shortly before dawn to seize the town and vicinity.

The scenario was set out in the Operation Order. The enemy troops held the Bridport area in the strength of one infantry battalion. One company was disposed in the Walditch–Burton Bradstock–North Hill area, one company less a platoon in West Bay, a platoon in Seatown and other companies in uncertain locations. Their morale, equipment and training, for the purposes of the exercise, were deemed to be first class. Apart from the fixed gun defences, two Light Anti-Aircraft batteries and the batteries of an Artillery Regiment were disposed around Bridport. During the night a heavy bombing

attack would be carried out (theoretically) on Lyme Regis and the downland by the coast, and also on inland aerodromes.

The raid would be in nine phases:

1. The approach from the Isle of Wight.
2. Flank assaults at Eypesmouth and Burton Freshwater.
3. Capture of West Bay and Bridport.
4. Capture of the aerodrome.
5. Landing of the floating reserve.
6. Destruction of objectives in West Bay and Bridport.
7. Withdrawal.
8. Re-embarkation.
9. Disembarkation and dispersal in the Isle of Wight.

The outline of the plan ran in this way. There were to be four landing beaches: Blue at Eypesmouth, Red at West Beach at West Bay, White at East Beach, and Green at Burton Freshwater. The flank attack at Freshwater was to be made by the South Saskatchewan Regiment. One company was to capture the 6 pounder coast gun, two light AA guns and a radar station on the East Cliff, one was to clear Burton Bradstock village, and a third to take the strong point on North Hill. The remainder were to act as a reserve, consolidating the beach and later making contact with the Royal Hamilton Light Infantry at the East Cliff.

Simultaneously, in the other flank attack, a company of the Royal Regiment of Canada was to capture the battery and machine guns at Eypesmouth and a second company was to take Eype village. The remainder of the Regiment would deal with a four-gun battery and three Bofors guns at Watton, going on to capture Vearse Farm and the Iron Foundry (the realism of the orders goes so far as to say 'Operators should be taken alive if possible in order to have better results in destroying plant whilst it is running'). Support to these flank attacks was to be given by the dropping of parachutists at zero plus thirty minutes, two companies being landed to secure Colmers Hill, Quarry Hill, and Frogmore Hill, and a third north of Burton Common (the paratroopers turned out to be theoretical).

An hour after these initial assaults the frontal attack on West Bay was to take place. The Royal Hamilton Light Infantry were to be landed on the East Beach, one company joining up with the South Saskatchewans to capture the golf course, and a second capturing a four-gun battery at the western end of North Hill. A third would take a machine gun position at Wanderwell, advancing to control the road from Bradpole to Bridport. The remainder would co-operate with tanks, two troops of which were landed on the same beach, and destroy the batteries in the Coneygar Hill area. The

Essex Scottish Regiment were destined for the West Beach: two companies were to suppress the defences on the West Cliff and take West Bay Battery. The remainder would either act in support of this or of the flanking attack at Eype and Watton. Two troops of tanks would be landed in support, and would subsequently move to dominate the exits from Bradpole. More tanks would be landed on the East Beach and the 4th Infantry Brigade would establish its HQ at the corner of the harbour (almost certainly at *Querida*), while the 6th Brigade would set up its HQ at West Bay railway station. At zero plus 1 hour 45 minutes the Tank Brigade HQ would rendezvous with the 6th Brigade HQ and control the subsequent operations of the tanks.

At the same time as these frontal attacks, the Camerons of Canada were to be landed at Freshwater to sweep inland in the wake of the South Saskatchewans and carry out the main objectives of the raid, the capture of the aerodrome and the Divisional HQ in Bradpole in co-ordination with the tanks and RAF fighter support. Two defence perimeters would be established to cover the withdrawal and re-embarkation of the force. The outer perimeter, to be held by the South Saskatchewans Royal Hamilton Light Infantry, Royal Regiment of Canada and the tanks, was the line East Cliff–North Hill–Coneygar Hill–Allington Hill–Eype Down–Thorncombe Beacon. The inner perimeter was to be held until at least 1530 hours by the Fusiliers Mont-Royal who would cover the final embarkation. This line ran from East Cliff–North Hill–the road from Palmer's Brewery to Eype–Eypesmouth West Cliff. The tanks were to have all re-embarked, from either the East or West beaches, by 15.30, earlier if the tactical situation permitted, and the Bridport–West Bay road was reserved for their use until that time. The rearguard should have left by 1605 hours. Altogether 4,190 troops, 58 tanks and ten carriers would have been landed and re-embarked within twelve hours. A mighty crop of code words was generated for the exercise; every objective, however small, had its name and a corresponding word to indicate that it had been gained. No less than eighty different words were involved.

The execution

On the night of 11 June the force left the Isle of Wight; at dawn on the 12th all ships were due to be between Bridport and 15' to seaward. The big ships would then lower their landing craft and transfer the troops to them. After the landings were effected, the destroyers (apart from the HQ and 2nd HQ ships) were to return to Portland. They were to come back for the re-embarkation at 1230, which was to take place from Red and White beaches.

General Sir Bernard Paget, the C in C Home Forces, General Montgomery, C in C South-Eastern Command, the Canadian C in C Lt-General McNaughton and the Commander of the 1st Canadian Corps, Lt-General

Crerar were present to watch the exercise. It did not go well. The intensive but remarkably brief training had not accustomed the troops to the inconveniences attendant upon sailing in landing craft, and the air was loud with their complaints about getting wet. Coastal searchlights were opened up on the force at a range of four miles, and the light ships laid a smoke screen, but this had gaps in it. There had been no discussion of the naval fire plan with the officers concerned. The aerial photographs which had been taken for the briefing had not been seen by all the officers concerned, and, to make matters worse, they had been given no stereoscopes – which, in any case, they had been given no practice in using. The initial landing of the South Saskatchewan was fifteen minutes late. Furthermore, it was on the wrong beach, but at the time nobody knew this, whether officers or men, Army or Navy. They had been landed at Burton Bradstock beach. The Camerons of Canada, when they followed an hour later, had seen the initial landing and part of them, assuming that the intended beach had been used, repeated the error. The Saskatchewan had no cliff climbing equipment, and, much more disconcertingly, nobody knew how the minefield gaps were marked and they had no mine detectors. They had been expecting an Engineer to be standing by the minefields to point them out – the mines had, of course, been lifted only from the intended beaches, errors of this type apparently not having been anticipated. There were no Royal Engineer personnel with the leading detachments, and there appeared to be no liaison between the Infantry and the Engineers. The confidential report on the South Saskatchewan's performance stated that 'the worry about mines and the effects of an uncomfortable crossing [...] left officers and men in no state to get on with the job of pushing inland'. The War Diary of the South Saskatchewan says nothing of all this, blandly claiming 'Exercise proved very successful and interesting.'

The War Diary of the Camerons is considerably franker. They had made the entire voyage in their little R boats. 'It was almost impossible to sleep on craft. Night very dark – windy – rain, and a very rough sea. Many of the men and some of the Navy were quite ill [...] Part of the Bn. were landed on the wrong beach [...] loose shale, anti-tank, anti-personnel mines, anti-tank blocks made assembly of Bn. slow.' The tank landing craft had arrived in the wrong order, and as the squadrons' tasks had not been made interchangeable, the plans were upset. The unwanted prodigality of code words cannot have helped matters.

Things went no better at Blue beach. The records of the battery at Eypemouth show what went wrong there. At approximately 0530 tanks and men were seen landing at West Bay, which continued until about 0730. Troops were also seen to land at Seatown, but no landings were made at Eypemouth, the intended beach. The Marines captured a party of Canadians who were moving along the beach from Seatown. It was not until 0800 hours that three companies of Canadians managed to get round

and attack Eype and not until 0830 that the Battery was declared out of action. This would have given the Battery four hours to fire on the raiding force. Again, the War Diary of the Royal Regiment was somewhat less than self-critical of the unit's performance, stating 'A feature of this exercise was that the assault craft landed some two miles to the west of their proposed landing beach, and, despite the fact that the conformation of the ground, position of the ground, road, village etc., was very similar in both cases, the error was quickly discovered by the Battalion, and objectives were gained without undue loss of time'.

The principal error on White and Red beaches, where 'there was enough surf to provide difficulties for unwary coxswains', was the arrival of the tanks in the wrong order, though the time envelope was more or less right. The Churchill tanks broke through the tubular scaffolding obstacles with ease. The role of the West Bay shingle has been misrepresented in the past. It has been asserted that though the topography of the area was roughly similar to Dieppe, the nature of the shingle beach was different, and although the Churchills coped well with the West Bay shingle, that at Dieppe was composed of chert rocks between one and six inches in diameter. As a consequence one third of the Canadians' tanks broke their tracks on the beach there and were immobilized. This was not so: their tracks were broken by accurate German fire (information from the late Kenneth Macksey).

Further glimpses of confusion are provided by a message received at 1330 (an hour after re-embarkation should have begun) which said that Tank Landing Craft 124 had proceeded eastward, and had apparently gone ashore. R boat 23 had wandered as far as Exmouth, leaving there at 1237 to make its way home to Warsash. R 84 was also somewhat adrift, though not literally – she was beached at Sidmouth and it was hoped to get her afloat in the evening. It was to be 2046 before the first of the returning boats passed the Needles. Goronwy Rees, an old associate of Guy Burgess acting as an intelligence officer on Montgomery's staff, had as a matter of course attended the exercise. In his memoirs he misremembered the location, giving it as Studland Bay, 'where the division on landing fell into an indescribable confusion, which was in itself sufficient to throw doubt upon the feasibility of the operation [...] all of us suffered from the same fatal lack of imagination which prevented us from translating the depressing lessons of the rehearsal into the murderous consequences they would have in battle'.

YUKON replayed

The exercise was replayed on 23 June as YUKON 2. The unpublished confidential History of Combined Operations states 'The second rehearsal was ordered by the CCO [Mountbatten] because the Military Commander represented that the standard of precision

of the landing craft was not good enough for operations of this complexity. This second rehearsal, which was attended by the CCO proved more successful'.

A post-mortem on YUKON was held at the Drill Hall, Newport (IOW) on 14 June. On the next day, 15 June, Montgomery issued a series of recommendations with a view to improving the performance. Everything should be explained on a large model, and landmarks likely to be seen at night identified, so men landed in the wrong spot could orient themselves. Medicines against seasickness must be issued. Senior officers should meet round the model for a daily conference, preferably after dinner. All commanders down to section level should constantly be aware of the maxim (wholly characteristic of Montgomery) 'Is it quite clear to all under my command: What is to be done. Who is to do it. When it is to be done'. Good intercommunication was vital. 'It is fatal to assume that everything will go according to plan. It is almost certain that this will not be so. Officers must be prepared to face up to unforeseen difficulties, and must have that robust mentality which will enable them to do something about it quickly.'

The outline plan was the same as the first exercise, though there were several alterations in the composition of the naval force. This time the landing was to be supported by low-flying fighter attacks on the beach defences, with a close support squadron on call during daylight. Tactical reconnaissance patrols were to be flown from 0500 hours. The maximum intensity of fighter cover would be between 0500 hours and 0600 hours, and between 1300 to 1600 hours.

Seven fighter squadrons of Hurricanes, which type had now been largely relegated to ground attack, were to take part in the exercise in support of the landing. Spitfires were cast in the defensive role. At 0520 hours Hurricanes of 174 Squadron based at Manston were to carry out a dummy bombing attack on West Bay Battery, and as soon as they left the target the Hurricanes of 1 Squadron from were to make a simulated frontal attack using their cannon. At approximately 0525/0535 hours 3, 32, 43 and 253 Squadrons of Hurricanes were to attack the beach areas at West Bay, flying from west to east. Their attacks were to open when the landing craft were approximately 200 yards from the beach, and to cease as the first wave stepped ashore. Hurricanes of 245 Squadron from Middle Wallop were to be airborne by 0830 and patrol within a position five miles south of West Bay at under 1000 feet until detailed by radio to attack suitable targets. This would be over by 0900.

Four Mustangs, two each from 26 and 239 Squadrons, operating from Tangmere, were to fly tactical reconnaissance sorties between 1030 and 1230, covering the lines of approach to Bridport within the area bounded by the line Colyton–Chard–Crewkerne–Yeovil–Dorchester–Portland. Because of an entirely erroneous notion that the Mustang was similar in appearance to the Messerschmitt Bf 109 (that it was so

confused is another matter entirely), the Mustangs had a yellow band twelve inches wide painted around their wings, and all pilots were warned of the presence of these aircraft and their stripes. All this turned out to be largely theoretical. The opening air strike on the gun battery did not take place. No. 1 Squadron was ready for the exercise, but was grounded by bad weather. 174 Squadron's diarist recorded '0445 12 aircraft took off on exercise YUKON 2 to make dummy attacks on gun positions west of Bridport but owing to darkness and haze two aircraft had to return as they were unable to keep in contact with the rest of the Squadron. Low cloud and haze over the target area and the objective was not seen'. The Mustangs did not materialise to fly any tactical reconnaissance sorties. Co-operation with the Army was not the flavour of the month with most of the high command of the RAF at the time, and there was little enthusiasm at that level for 'wasting' time on exercises like these. The failure of the RAF to play a significant part in the exercise was one of the greatest shortcomings of YUKON. Had the Mustangs been used it might have been appreciated that their deployment as tactical reconnaissance aircraft without an appropriate communications system was pointless (at Dieppe ten were lost to no purpose).

A slightly improved production

Apart from the RAF's failure to play its part in the spectacle, things went a bit better the second time round. However, the Navy's performance still left much to be desired. The Royal Hamilton's diarist recorded 'Miscalculation by RN took us six miles or more WEST of our beach at West Bay. As we approached the shore it was recognised as the wrong beach, so we returned East and proceeded along the coast under heavy smoke screen from RN. Landed at West Bay at 0615 hours, 45 minutes late. A Company, [the] reserve Company, were to land 15 minutes after the assault force had landed, but had landed at 0545 hours, unaware of the fact that balance of Battalion were still at sea. Other than errors by RN, exercise went off very well'. This time the South Saskatchewan were landed at Freshwater, but the Camerons were to be landed at Burton Bradstock beach again, 'in spite of the fact that it was quite light and every Private could tell we were headed for the wrong beach'. A fortnight later Mountbatten made the slight understatement that YUKON had showed that however skilled the Naval crews, it was a very complicated business to set down the troops at the correct point. Montgomery wrote to General Paget that 'the Navy put us ashore roughly in the right places, and at the right times'. When Goronwy Rees visited Montgomery at his HQ he was 'surprised that the Army Commander should be so little perturbed about the risks of the operation. It was, he implied, an operation which had been decided on by the Chiefs of Staff, not by himself, and for reasons with which he was not concerned [...] There was nothing he could do to affect the result, and it would therefore have been a

waste of time and effort for him to worry about it. Being supremely logical where questions of command were concerned, he did not worry'. The results did nothing to decrease the determination of Mountbatten and his chief Naval Planner, Captain Hughes-Hallett to mount the Dieppe operation. For a variety of reasons Operation RUTTER was then dismantled, to be revived and staged later in the summer as Operation JUBILEE, with disastrous results.

Bridport, however, had been on the margins of history.

REFERENCES

The YUKON exercises have scarcely been touched on in print; they usually figure as one-line mentions in lives of Mountbatten and Montgomery. Perhaps the longest reference in the older books is in C.P. Stacey, *Six Years of War. The Official History of the Canadian Army in World War 2*, Ottawa 1955, p.334. In recent years some much more thoroughly researched books about Dieppe have appeared. In their different ways J.P. Campbell, *Dieppe Revisited – A Documentary Investigation*, London, 1993, and B.R. Villa, *Mountbatten and the Dieppe Raid*, 1942, Toronto, 1989, contain a mass of information, and a few references to YUKON. H. G. Henry, in *Dieppe through the Lens*, London, 1993, reproduces six photographs of Churchill tanks landing at West Bay and attacking the scaffolding obstacle behind the Bridport Arms, and also perpetuates the story of the geological differences between the gravel at West Bay and that at Dieppe, which was supposed to have had such a disastrous consequence. W. Whitehead and T. Macartney-Filgate, *Echoes of Disaster. Dieppe 1942*, Glasgow 1982, has more good photographs of R boats and Canadian troops at West Bay. Charles Carrington, in *Soldier at Bomber Command*, London, 1987, gives an indispensable account of the background to poor air/army co-operation. Goronwy Rees' memoirs are in *A bundle of sensations*, London 1960.

UNPUBLISHED SOURCES

The aerial photographs taken for briefing purposes for YUKON are held as sortie number AC/53 by the National Monuments Record, Swindon.

The plans for YUKON 1 are in ADM 179 222.

The plans for YUKON 2 are in ADM 179 223.

Reports on the training for YUKON and sailing details for YUKON 1 are in Canadian National Archives 24/10872/232 C2 CD34.

The operational orders, loading schedules and reports on YUKON 1 are in Canadian National Archives 24/10873/232 C2 D54.

Equipment tables for YUKON 1 are in Canadian National Archives 24/10769/222 C1 C210.

The War Diary of 1 Battalion, The Royal Regiment of Canada is in Canadian National Archives RG 24 vol. 17510.

The War Diary of the South Saskatchewan Regiment is in Canadian National Archives RG 24 vol. 17152.

The War Diary of The Camerons of Canada is in Canadian National Archives RG 24 vol. 17512.

The War Diary of the Essex Scottish is in Canadian National Archives RG 24 vol. 17513.

The War Diary of the Royal Hamilton Light Infantry is in Canadian National Archives RG 24 vol. 15215.

The War Diary of the 14th Canadian Army Tank Battalion is in Canadian National Archives RG 24 14242.

The unpublished history of Combined Operations is CAB 1063.

The operations record books of 174, 1, 3, 32, 43, 253, 26 and 239 Squadrons are AIR 27 1108, 3, 33, 362, 443, 1511, 318 and 1456.

Other information on YUKON held in England is very scanty. Some references are found in DEFE 2 2, DEFE 2 552, DEFE 2 564.

Correspondence relating to Beach Defences is in WO 199 1618.

Photographs of the tests of tubular scaffolding defences are in ADM 244 21, ADM 244 22, ADM 244 23.

Information on defensive works is in WO 199 48.

Information on coastal defences is in WO 199 1638.

The Strategy and Tactics of World War II Pillboxes

John Hellis

It is not uncommon, when out walking in the countryside or along a beach, to see large concrete pillboxes dotted around the landscape.

These reminders of World War II are monuments to the heroic efforts of both the people who built them and to the soldiers who stood guard in them for many long and cold nights during the particularly bad winter of 1940/41.

The majority of people today now know just what a pillbox is. Through the efforts of organisations such as The Pillbox Study Group and The Defence of Britain Project these unglamorous relics of the War are now readily recognised. Though the vast majority of the original twenty to twenty-four thousand pillboxes built in 1940 have been destroyed, it is now recognised by most people that we need to keep those that remain as monuments of this unique period of twentieth-century history.

So what do these pillboxes mean?

Dorset's position in World War II was vital to the country's security; the vital naval port of Portland would have been a primary target for any invading force. We now know that part of *Operation Sea Lion*, the German plan for the invasion of Britain, was to land a large force at Lyme Regis. This force would have had Portland as one of its main targets. The capture of the docks there and the harbour of Weymouth would have allowed the easy re-supply and reinforcement of the first units. This would in turn have offered a firm starting point for the final push to capture the rest of the United Kingdom.

Pillbox Strategy

The pillbox defence system arose from the withdrawal of the British Expeditionary Force from France: though we were able to bring back 338,226 soldiers, almost all of their weapons were left behind. 'General Ironside' had very few modern weapons at his disposal with which to defend Britain from imminent invasion. To add even

more problems he had no idea where Hitler was going to invade.

The only strategy open was to protect the whole country. As there were very few tanks (most had been left in France with all the other frontline equipment left by the British Expeditionary Force) it was decided to use the successful World War 1 system, using concrete pillboxes in lines and, later, in clusters (anti-tank islands) to slow down and break up the enemy advance across the country.¹

Pillbox Tactics

The first priority was the coastline, so every mile of the coast was organised into one of three classes; (1) not suitable for invasion (2) suitable for infantry only and (3) suitable for vehicles and infantry.

The first classification was lightly protected by patrolling soldiers looking out for commando-type raids. The second classification was protected by pillboxes, barbed wire, minefields and beach defence artillery batteries. The last classification was the most heavily defended of all; the defences of Class 3 beaches were 'beefed-up' with both anti-infantry and anti-tank mine-

fields, admiralty pattern anti-tank beach scaffolding and heavy concrete anti-tank blocks (often incorrectly referred to as 'dragon's teeth').

Chesil Beach south-east of Abbotsbury was classified as Class 1, suitable for infantry only. Some pillboxes and anti-tank blocks protected the beach at Abbotsbury from troops heading north-west. Burton Bradstock and Freshwater were classed as 3, and heavily defended. Weymouth was class 3, but because of the presence of the Royal Navy and the heavy coast battery at the Nothe Fort, there was little likelihood of an invasion on that beach.

The majority of the coast between Weymouth and St Aldhelm's Head was Class 1 and thus lightly defended.

Inland, lines of pillboxes called 'Stop Lines' were built to slow down the enemy advance. These consisted of a variety of pillbox types, depending on the prime purpose of the particular defence. In addition to the pillboxes there was an anti-tank defence consisting of natural features such as rivers, man-made features such as canals and railway embankments, and newly-constructed features such as anti-tank blocks.

An example of a 'Stop Line' was intended to run from Bridport to Poole with at least one anti-tank island



Figure 1: Map of three pillboxes (the centre pillbox is located at ST 3033 3895) on the banks of the River Parvett north of Bridgwater, showing the surrounding barbed wire entanglements for each one. Though not shown at this scale, there would have been supporting defences within the barbed wire. Most of the pillboxes north of Bridgwater are still extant and can be visited by walking along the footpath on the flood prevention bank. However, there is no sign of any of the external defence work that would have protected the pillboxes. This photograph shows part of one of the original wartime maps used in planning the Taunton Stop Line, and dates from July 1940 [Author's collection].

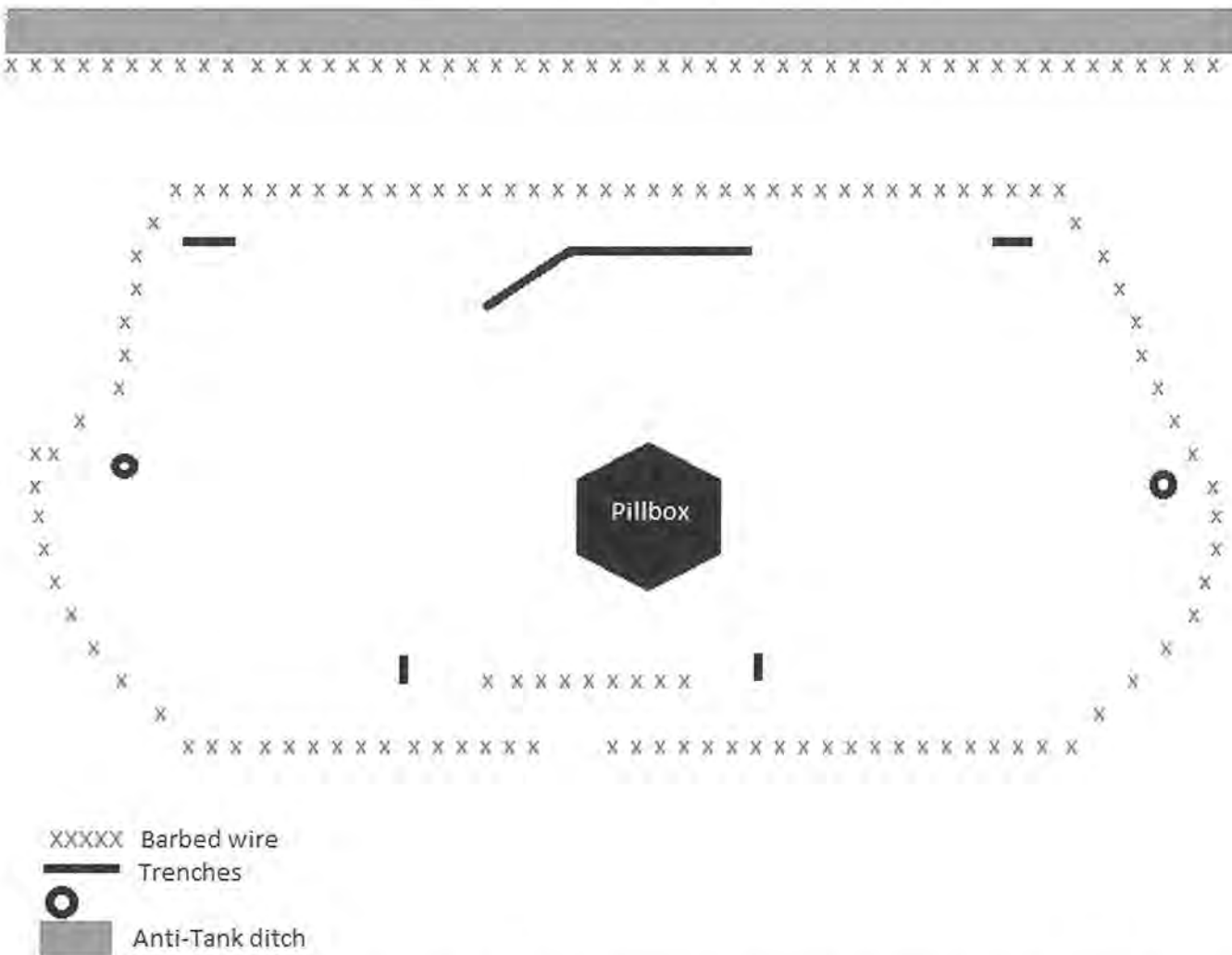


Figure 2: Stylized representation of the defences that would have supported most pillboxes, though spacing and types of external defences would vary according to topography; this plan illustrates a typical layout [Plan by author].

at Maiden Newton. Though few of the pillboxes on the line were built, the area around Maiden Newton is well defended and some of the intended pillbox line extends for some miles east of the town. If Operation Sea Lion had actually happened then this line would have had a very important part in the ensuing engagements.

Though not actually in Dorset, the very powerful, well defended, Taunton Stop Line running from Bridgwater on the River Parrett in Somerset to Seaton on the south coast offered a great deal of protection to Dorset from any attack from the far west, though again as we now know this defence would have had little effect on the outcome of *Operation Sea Lion*.

Though largely missing today, the pillbox lines and groups of pillboxes would have had barbed wire defences around them. In addition to all of this there would have been trench systems, fox holes, mortar pits and machine gun positions and many other devices adding to the defences. Thus the pillbox and its surrounding group of structures formed a strong, mutually supporting system of defence.

Some of these inland defence lines were deliberately designed to funnel enemy forces into a 'killing zone' where heavy anti-tank and machine gun fire could destroy large numbers of enemy troops and vehicles.

By September 1940 anti-tank islands had been constructed, these 'islands' mainly based around villages and towns. Ringed with pillboxes, machine guns, artillery and the few available tanks these islands were designed to threaten the flanks of an advancing enemy force.

It is clear to see that the odd surviving pillbox today is but a skeletal shadow of what would have presented round it in 1940.

John Hellis is Military Archaeologist and Pillbox Study Group Co-ordinator.

See the website at www.pillbox-study-group.org.uk

ENDNOTE

1. An example of how well an anti-tank island can be seen in the American 101st Paratroops defence of the town of Bastogne in Belgium where they held the town for a week in December 1944.

Reviews

T.L. Burton: *William Barnes's Dialect Poems: A Pronunciation Guide*. The Chaucer Studio Press: Adelaide and Provo. 2010. xx + 288 pp. ISBN 978-0-8425-2760-6

Professor Burton's *Pronunciation Guide* is a landmark in Barnes studies and its appearance is timely. Dialect pronunciation is rapidly disappearing and has diminished even within the thirty years I have been in Dorset. In any case, all pronunciation, including dialectal, is subject to change and the Dorset pronunciation of the twenty-first century is markedly different from that which Barnes would have known and in which he would have intended his poems to be read and, more importantly, heard.

While acknowledging that phonetics is a 'highly technical subject [requiring] the use of a specialized vocabulary and an array of what might seem to be offputting symbols', Burton sets out to make the subject intelligible to the non specialist and in his initial sections, providing the reader is willing to put in a modicum of effort, does this remarkably clearly.

The middle and perhaps main section of the *Guide* attempts to decide exactly what Barnes's pronunciation would have been. Burton looks at all the evidence available from a variety of different sources. He examines briefly Barnes's 'A Dissertation on the Dorset Dialect of the English Language' (printed in full in Appendix One), prefaced to the 1844 Collection of Poems, and looks at present-day recordings of Dorset speech, including some recordings of Barnes's poems. Then he considers all the known written sources and surveys of Dorset and west country dialects from the early nineteenth to the late twentieth centuries. There follows a very detailed analysis of individual vowel and consonant sounds, which takes into consideration all the previous evidence, including Barnes's various Grammars and Glossaries and the Dissertation. This section is perhaps most useful for reference, although it is remarkably readable, and for anyone reasonably well-versed in phonetics, quite compelling.

Perhaps the most valuable part of the book for most readers, and for Barnes studies generally, is a selection of poems taken from the 1844 and 1879 collections, plus a few additional ones. These are printed in the original spelling with a phonemic transcription on the facing page. For the 1844 poems, the 1879 version is also included. Most important, however, is the accompanying disc with Burton's own readings, so that whichever written version is being followed, the actual sound, as Burton has deduced it, can be heard.

Finally, three appendices reprint some of Barnes's own writings on pronunciation and spelling relevant to

the subject under discussion. It is the range of documents and opinions consulted in the *Guide* that is impressive in Burton's work, along with the care with which he considers each one before deciding on the most likely pronunciation which Barnes intended. Burton would be the first to say that after all the research it is impossible to be a hundred per cent sure of every pronunciation, but a more painstaking study would be hard to find. Students of Barnes's work and, indeed, all readers of his poetry, will in future be indebted to this very comprehensive *Pronunciation Guide*.

Frances Austin-Jones

Bournemouth Natural Science Society: *The Natural History of Bournemouth and the surrounding area*. Edited by R. Chapman. Wessex Books. 2009

Members of the Bournemouth Natural Science Society, sponsored by the Dorset Wildlife Trust, have produced an impressive volume cataloguing the wildlife and geology of the area, encompassing a zone of some fifteen miles around Bournemouth. This repeats a project carried out by their predecessors nearly one hundred years earlier. The book provides a review of the current status of many species of animals and plants, and there are interesting comparisons given in many of the species' accounts of their status at the time of the first publication.

There are chapters that set the background well, dealing with the history of the town including the archaeological context, and then a full and very readable account of the geology and geomorphology of the area. The chapter on fungi describes a very appropriate selection of noticeable species from such a wide choice, helped by some excellent photographs. The botany account is organised under the main rock or habitat types – chalk, limestone, heathlands, coastal, and a very apt section on alien plants, for which Bournemouth must be something of a hot spot. The explanation of the current planning protection for heathlands is both useful and up to date. It will be interesting to see how successful the much needed heathland protection has been a further hundred years on!

The invertebrate chapter has perhaps the hardest task, condensing such a broad range of species into a readable account that is not simply a list. The three authors of this section have chosen a good selection to describe, again often illustrated with excellent photographs, focussing on the more familiar and visible groups and species. The ornithology chapter is able to make extensive use of the historical information held by

the society with frequent comparison of birds' former and present status in the area. Other animal groups are covered in the next chapter – zoology – which deals with fish, herptiles and mammals, with this last account dealing too, slightly surprisingly, with extinct species such as wolf and pine marten. There is even a section on 'big cats' for which there seem to be records of sightings, if not ever certain confirmation.

The final chapter covers marine life, with a comprehensive account of the fishes of our local seas, and a reasonable selection of invertebrates and seaweeds found at Kimmeridge. There are sections on the harbours: Brownsea Island, the feature of our 'double' tides, Poole Bay and Studland, the latter sufficiently up to date to include the exciting discovery of two seahorse species resident here in the eelgrass beds.

Whilst the urban area of Bournemouth has changed and expanded hugely over the past century, the surrounding zone remains in many respects just as diverse and thrilling, if now inevitably better explored and recorded. With this area including a sizeable chunk of the New Forest, and the Isle of Purbeck, as well as the intervening heaths, river valleys and a long varied coastline, the hard choices the authors had to make to keep the book to a reasonable length can be appreciated. With different authors taking separate chapters, there is some variability in the treatments, a few omissions and a little repetition, especially in accounts of conservation. The book does appear very full, with the pages filled to bursting, but that just underlines what good value it is, and an enjoyable read too, well-sprinkled with fine images.

Jim White

The Lymiad; a poem in the form of letters from Lyme to a friend at Bath written during the autumn of 1818. Edited by John Fowles and John Constable. Lyme Regis Philpot Museum. 2011. viii + 191 pp.
ISBN 978-0-9527662-1-6

One of the treasures of the Lyme Regis Museum has long been the manuscript of the *Lymiad*, a long mock-epic poem of 1,820 lines, satirising late 1810s Lyme Regis. It has occasionally been used by historians such as the then curator, the late John Fowles, for his delightful *A short history of Lyme Regis* (1982), but such usage has inevitably been limited. It is now at last published in a fine new soft-back edition prefaced by Stephen Locke, Chairman of the Lyme Regis Philpot Museum Trust. The poem, transcribed mainly by Fowles, is complemented by his brief historical introduction nicely setting the Lymian context, a more substantial introduction by John Constable, and an apparatus of notes and comments to the poem and its allusions (but, alas, no index – though it is not a very long book).

The *Lymiad's* eight 'Letters', purportedly sent to cousin Maria from Lyme during the autumn of 1818, explore varied themes which include a description of Lyme, the Cobb (Lyme's harbour) and yachting, the Civil War siege and the Monmouth Rebellion, the social world as in the Assembly Rooms, local politics and personalities, and a local picnic outing. From the literary point of view, Constable's analysis demonstrates valuably that the *Lymiad* is playfully written in a number of contemporary metres, and he discusses possible source models. Constable interestingly argues that the poem is surprisingly subtly structured and comments that the 'descriptions are vivid, the humour genuine, and the pinch of saving malice generous though by no means excessive'.

For the historian, we have here an important insight into Regency Lyme Regis, and a key source for anyone interested in this period, especially if their subject features here (however thinly disguised – fortunately, the original MS had a list of identifications, reproduced here with comments). To take just one instance, historians of science will be pleased to find the young Henry De la Beche (1796–1855), not yet Director of the Geological Survey, as Sir Fopling Fossil, messing about in his yacht *Comrad*, of which a sketch from the De la Beche papers graces this edition's back cover. It may be useful to comment that the author's footnote to this section was plainly added later (before or after the fair copy of the poem was made?), as its mention of an *Ornithorhynchus*, i.e. Duckbilled Platypus, must refer to a paper delivered in April 1821 at the Geological Society of London and published in its *Transactions* later that year (De la Beche and Conybeare 1821); the shoulder girdle of that classic Lymian fossil reptile, the ichthyosaur, was being compared to that of platypuses amongst other vertebrates. The editorial note to this section, incidentally, doesn't really give De la Beche's Fellowship of the Geological Society full credit; in fact, the GSL was prestigious and expanding rapidly at a dynamic time for the young science.

The struggle for life was not confined to the fossil sea monsters of Liassic times. Constable's introduction argues that the poem is in part a very political effort written from a strongly pro-Whig perspective, and the *Lymiad* certainly gives an insight into this pre 1832 Reform Act era, when Lyme was dominated by the Fane family. Constable relates the unfortunate story of the lawyer and Lyme resident John Doble Burridge (1786–1845) who fell foul of the Corporation, and suggests Burridge (but only with reservations) as a possible author of the *Lymiad*. Intriguing as this study of small-town politics is, I have difficulty with Burridge's identification simply because the portrayal of his troubles in the poem seems unlike anything he himself was likely to have written, even had he wished to revisit his humiliations. Wouldn't he have written something rather more directly targeted at his enemies?

Rather, the *Lymiad* reads far more like a *jeu d'esprit* of exactly the kind one might expect of a visitor of some leisure time, and most probably a woman (which last was, incidentally, also John Fowles' opinion, at least in his *Short History* and in the prospectus for this new book). And here we come to the most obvious candidate, if only because her name was later pencilled on the manuscript: the 'Charlotte Wm Nth Skinner' who died, aged 87, in 'Bacton' in January 1872. Constable could find so little about her that he left the question open. But this seems unduly pessimistic (or perhaps was written some years ago), given the machine-retrievable archives now available: statutory and census records, and the British Library databases of nineteenth-century newspapers and magazines. Those offer a potent test in that their information can be compared with the poem's quite independent internal evidence which, effectively, predicts a female author, of at least middle class status, visiting, rather than resident in Lyme, and with a cousin called Maria who lived in Bath, or at least knew it well. A little searching soon finds that Charlotte Jane Skinner (c. 1785–1872) was the wife, and later widow, of William North Skinner; that at the 1871 census, she was living at Bacton vicarage, Norfolk, with her much younger cousins, James and Frances Wright; and that at the 1841 census, she was living in St Giles, Berkshire, with a Maria Wright of about the same age – a prime candidate for cousin Maria, as she bore the same surname as the Bacton clergyman.

So far, so good, and already Mrs Skinner must be taken seriously; but she must be left there, because of the limited space of this review, and because Hugh Torrens (pers. comm. 2012) has already arrived some years ago at the same conclusions, and confirmed and extended them considerably, as part of his research on Lyme fossil collectors such as Mary Anning the younger (1799–1847). Some of this work is to appear in a forthcoming book on Thomas Beddoes (1760–1808), the noted chemist and physician, by Trevor Levere, Larry Stewart and Hugh Torrens. Beddoes' first biographer was Dr John Edmonds Stock (c. 1774–1835), whose wife is one of the many Lyme women featured in the *Lymiad* – which, of course, again shows the *Lymiad*'s utility as a historical source.

Here is a fine production of a hitherto relatively inaccessible poem, which gives a real insight into the Lyme of two centuries ago. The editors and the Lyme Museum's governing body are to be congratulated for their very significant contribution to Dorset's historical literature, and to the literary history of Dorset.

REFERENCE

- De la Beche, H. T. and Conybeare, W. D., 1821 'Notice of the discovery of a new fossil animal, forming a link between the *Ichthyosaurus* and crocodile, together with general remarks on the osteology of the *Ichthyosaurus*', *Transactions of the Geological Society of London*, Series 1, Volume 5, 559–594.

Michael A. Taylor

Obituaries

GEORGE DANNATT 1915–2009



George and Ann Dannatt at his exhibition in the Atrium Gallery, Bournemouth, 1985

George Dannatt was an artist noted for his elegant abstract works. Over a long career he produced paintings, relief constructions, collages and drawings of harmony and balance, whose underlying lyricism stems from contemplation, concision and measured control.

He had three distinct yet overlapping careers; as a chartered surveyor, music critic and then artist, but was not able to concentrate on art full-time until he was in his 40s. When he was able to do so, the surveying and the music nourished his art, as did that of some contemporaries.

Dannatt readily acknowledged the influence of artists such as Ben Nicholson and Naum Gabo, as well as his friends John Wells, Alexander Mackenzie, Denis Mitchell and others working in Cornwall whose work he collected. In 1981 he wrote: 'Painters who strive only to be original are mistaken; one should be influenced by other painters provided that the influences are sublimated'.

Dannatt was born in Blackheath in 1915. His father was George Herbert Dannatt, an enthusiastic spare-time photographer; his mother was Jane Ellen Wood and he had one younger brother, Trevor, who became an architect. Dannatt's forebears were Huguenot sail makers and

chandlers, so he considered nearby Greenwich, with its thriving shipping industry, 'part of my heritage'.

The shape, texture and colour of the random collection of ships and ship-repairing remained 'a constant source of interest'. Trevor recalls George, relaxing from his education at Colfe's Grammar School, 1926–32, at work on meticulous model ships.

From 1930 Dannatt had an ardent interest in music. Aged fifteen, he was inspired by hearing Maurice Ravel's *Piano Concerto for the Left Hand* at the Queen's Hall, played by the man for whom it had been written, Paul Wittgenstein.

When Dannatt found that cut and sore fingers resulting from handling tools for model making hindered his piano practicing, music won. He reasoned that becoming a partner in the family estate management business would supply freedom to pursue music in his spare time. Early on, he wrote a number of songs to poetry, notably that of James Joyce.

From 1935 Dannatt was an articled pupil to surveyors, land and estate agents, attending London University's College of Estate Management. Qualifying as a Fellow of The Royal Institution of Chartered Surveyors, he joined the family business in July 1940, but was soon called up for war service.

After enrolment in the Royal Artillery, he was released to the War Office, requisitioning properties in Kent for Army training. After two successful stints and a return to the Royal Artillery, Dannatt suffered a breakdown, and in 1944 was invalided out. The previous year he had married Ann Doncaster. Dannatt rejoined the family business but now pursued twin careers. In addition to his daytime surveying, in 1941 he wrote his first concert notice and from 1944–46 with Scott Goddard he was music critic for the *News Chronicle*. He averaged three nights a week, plus writing widely for other outlets. In 1948 Dannatt was elected a member of the Critics' Circle music section, later an honorary member. He became an expert and wrote widely on the music of the composer Sir Arthur Bliss, whose friend he became.

When Bliss was 80, Dannatt created a painting based on his 1922 *Colour Symphony* for the composer's birthday. Bliss's last big orchestral work, *The Metamorphic Variations*, first performed in 1972, was stimulated by Dannatt's *Tantris* series of pictures, and dedicated to him and Ann. When Lady Bliss died a year ago, Dannatt succeeded her as president of the Arthur Bliss Society. Dannatt applied his punctilious and ordered mind to modernising the family business, eventually bringing in partners. Early retirement followed in 1970 and from then on Dannatt could concentrate on music and painting.

Dannatt's renewed interest in the visual arts stemmed from 1956. Like many accomplished artists he was an autodidact, demonstrating that (to paraphrase Ben Nicholson's comment) 'you can learn all you need to know about techniques in two lessons'.

The landscape of Dorset and Wiltshire gradually fed into his art. He and Ann had begun to make regular visits to Dorset in 1948, walking and taking photographs. Part-time residence near the Dorset–Wiltshire border began ten years later.

When Dannatt began to paint seriously, he restricted himself to gouache 'to gain discipline and experience', after eight years turning to oils and eventually other media. At first he did not aim to show his work, but when the artist Breon O'Casey, son of the dramatist Sean, saw some of Dannatt's paintings, he urged him to exhibit.

Dannatt paid his first visit to Cornwall in 1963, where he associated with Cornish based artists. His initial showing was at the Penwith Gallery in St Ives, Cornwall, in 1970, continuing there for fifteen years. In 1974 he exhibited at the Newlyn Art Gallery in Penzance, where a year later he became a member of the Newlyn Society of Artists.

In 1975 he participated in a three-man show with John Wells and Alexander Mackenzie at the Orion Gallery, Penzance, recalled as 'a personal turning point'. In 1980 he would have a solo exhibition at Galerie Schriber, in Basel, Switzerland. Like the Swiss master Paul Klee, Dannatt believed that 'Art does not represent what we see. It makes us see'.

The year 1981, in which the Dannatts left London to live near Shaftesbury, Dorset, was an important year for the artist. The Newlyn Art Gallery gave him a 1960–81 retrospective which included his 1980 oil on board *Coastal Flight*, in the collection of the Royal Air Force Museum, Hendon.

Also in 1981, Dannatt contributed to the exhibition *Kunst aus Cornwall* at Galerie Artrica, Cuxhaven, Germany, from 1984 having a series of solo shows there. In 1990 that gallery and Hobnob Press, Salisbury, published *One Way of Seeing*. This elegant monograph, with an appreciative essay by the critic Ilse Cordes, has a forward by Dannatt and is illustrated with his land based photographs and artworks, demonstrating how closely they were allied.

In 1986 the Dannatts had founded a charitable trust for 'the furtherance of education in the visual arts' and in 1994 offered to bequeath to Dorset County Museum their large collection of contemporary paintings and sculptures. A related exhibition was held at the Museum in 1997.

Until he died, Dannatt remained a prolific exhibitor in mixed and solo shows. *George Dannatt: Four Decades* was at the Osborne Samuel Gallery in London in 2005, with another show there last year. A further exhibition,

arranged before the artist's death, will take place at the Lemon Street Gallery, Truro, in February.

Obituary by David Buckman, published in The Independent on 28 December 2009, and published here by kind permission of the Editor of The Independent.

NORRIE WOODHALL the Last Hardy Player (1905–2011)



Norrie Woodhall and Mayor Leslie Phillips at the Dorset County Museum Millennium Exhibition, 2000

Norrie Woodhall (Augusta Noreen Bugler), the youngest of four children, was born at the Central Temperance Hotel, South Street, Dorchester, on 18 December 1905. It was the year that Emmeline Pankhurst led the first public protest of suffragettes at Westminster, a Liberal government that would remain in office for ten years came to power under Henry Campbell-Bannerman, and waves of political and social unrest spread through Russia. In the same year, in Dorchester, Thomas Hardy was finishing the second part of his epic verse drama, *The Dynasts*, and two hundred journalists on a driving tour through Dorset turned up for tea at Max Gate in horse-drawn carriages.

Norrie died on 25 October 2011, aged 105, Hardy's last acquaintance. Her father, Arthur Bugler, was a Dorchester confectioner and her mother, Augusta (*née* Way), the daughter of a dairyman, ran the family hotel.

The family's connections with Hardy went back to the nineteenth century. Hardy said that Augusta Way had first suggested the figure of Tess of the D'Urbervilles to him, as he saw her working as a milkmaid in her father's dairy at Kingston Maurward estate in the 1880s.¹ In 1908, Hardy was lending his support to Dorchester Debating Society (known after 1906 as the Dorchester Debating, Literary and Dramatic Society, once it began the performance of plays), in recognition of the places and people that had inspired his writing. He had by then returned from London, when he had lived at various times between 1862 and 1881, and had been living back in Dorchester for over twenty years, 'finding, or thinking he found, that residence in or near a city tended to force mechanical and ordinary productions from his pen, concerning ordinary society-life and habits'.² *The Trumpet-Major* was his first novel to be adapted for the stage. According to Evelyn Evans, the daughter of the producer Alfred H. Evans – a well-known Dorchester family chemist – Hardy had sat with Evans in his Max Gate study, 'deciding on the outline of the play, writing additional dialogue'.³ The Hardy Players rehearsed in the Central Temperance Hotel. Norrie recalls, as a young child, discovering a hole in the curtain between the living and dining rooms through which she would watch them in the dining room. (Hardy would later note that the office of the architect John Hicks, to whom he was articled for four years from 1856, and for whom he then worked as a paid assistant, became part of the hotel, and the room in which he himself used to draw remained unchanged).⁴ When she was four, Norrie saw a version of *Under the Greenwood Tree* called *The Mellstock Quire* (1910).⁵ 'I used to long to be part of it myself and I finally grew just old enough'.⁶

When Alfred H. Evans left Dorchester for London in 1910, he continued for a while as the producer. Thomas Henry (Harry) Tilley, builder and Mayor of Dorchester 1908–9, was then stage manager for the Hardy Players. He was a popular and generously minded public figure, even more popular than Evans, and Hardy found him most congenial. Norrie had met him as the stage manager of Casterbridge School plays. 'He loved children. He used to stand in the stage wings pulling the funniest of faces to amuse them. We all loved Mr Tilley'.⁷ Tilley would spot Gertrude Bugler (1897–1992), Norrie's older sister, in a performance of *As You Like It* by Casterbridge School in 1913, and soon after she joined the Society, which came to be known as the Hardy Players.⁸ She took part in *The Woodlanders* later that year, and Hardy declared her to be 'just the girl' he was thinking of when he created Marty.⁹ The *Daily News* remarked that if Bugler were to play Tess she might achieve 'the greatest dramatic triumph the Corn Exchange here has known'.¹⁰

When the First World War intervened, some of the Hardy Players, including Gertrude and Norrie, formed a concert party which they called 'The

Gypsies', offering entertainment through the war to villagers and soldiers.¹¹ Proceeds went to war charities. Hardy put together for the Hardy Players *Wessex Scenes from 'The Dynasts'*, writing in a part for Gertrude as a waiting-maid. She sang 'My Love's Gone a Fighting', set in Dorchester.¹² It was performed in 1916 at the Pavilion Theatre, Weymouth, and Dorchester Corn Exchange, with profits going to the Red Cross. J.M. Barrie attended the opening night in Dorchester.¹³ Following the war Tilley took over as adapter and producer, responsible for *The Return of the Native* in 1920, in which Gertrude played Eustacia. Gertrude married Ernest Bugler, a Beaminster farmer and her third cousin, in 1921. She was cast in the role of Cytherea in *A Desperate Remedy* the following year, until her pregnancy forced her to withdraw.¹⁴ The Dorchester plays were attracting the attention of the national press, and *The Times* critic Harold Child referred to 'a homely feeling' of the performances as part of their charm.¹⁵ In 1923 the Players put on the play Hardy had written for them to perform, *The Famous Tragedy of the Queen of Cornwall*, and the following year Gertrude played Tess, in Hardy's own 1895 adaptation of the novel, with her young baby attending rehearsals. Hardy wrote in his autobiography 'the company, self-styled "The Hardy Players", produced *Tess* with such unexpected success at Dorchester and Weymouth that it was asked for in London'.¹⁶ Harold Child declared in *The Times*:

In Mrs Gertrude Bugler they have a lady who, one might almost say, was born to act the part of Tess. To begin with, she is so like the Tess of the book in appearance, even to the trick of the smile, that did chronology allow it, she might have sat for the portrait of this imaginary girl, created before she was born. Another point is her voice, which is unusually sweet and appealing; and yet another, her undoubted possession of some of that mysterious actor-quality, which compels one to be interested in, affected by, every look and movement and word, and by every stillness also, of the player who has it. More than all, however, this impersonator of Tess has invaluable precision and restraint. You would say that she felt the part very deeply; and in expressing it she never attempts too much. What she does she does definitely, and she wisely leaves it at that. The result is a performance full of the right sort of simplicity and breadth, and of a most moving sincerity and beauty – more beauty, one imagines, than could have been achieved by one or two of the many eminent professional actresses who have longed to play this character.¹⁷

The Daily Express reported: 'People came from all parts of the country to see it [...] They have poured in from the furthest north of Scotland, from Ireland, from remote corners of Wales, and from every part of England'.¹⁸ They included T.E. Lawrence, Siegfried Sassoon, E.M. Forster, Lewis Casson, the husband and

manager of Sybil Thorndike, and Frederick Harrison, manager of the Haymarket Theatre.¹⁹ Profits were distributed among charities.²⁰ The play was produced in London the following year by the young Philip Ridgeway, with Gwen Ffrangcon-Davies as Tess. It was performed at the new Barnes Theatre, and then the West End's Garrick Theatre, where it ran for a further fifty-two performances. The BBC broadcast the confession scene, with the Hardys listening on their radio at Max Gate, and in December the Garrick cast performed at Max Gate.²¹ In the summer of 1929 Gertrude played Tess in sixty performances at the Duke of York's Theatre in London, with a short tour to the King's Theatre, Hammersmith, and to Margate.²² Billed as 'Thomas Hardy's Own Tess', she recalled being photographed around London by a newspaper reporter, with Ridgeway 'acting the impressario, complete with cigar'; 'I was expected to be the country girl both on and off the stage and I'll say some of their ideas about country folk were both weird and wonderful.'²³

Years later, in 1959, Gertrude recalled in a talk at the Corn Exchange that 'Thomas Hardy would attend a rehearsal now and again just to see how things were shaping and we Hardy Players knew how much pleasure those plays gave him'.²⁴ She remarked that 'he never forgot the sunshine of laughter'.²⁵ A manuscript manifesto of the Hardy Players, from around 1924 (the final version includes a note that it was 'corrected and approved' by Hardy himself), states: 'The Players enjoy the inestimable advantage & privilege of the presence of Mr. Hardy himself at Dorchester, whose advice, guidance, & ever-keen interest in their productions have very largely contributed to the success of their efforts.' It recorded 'they are local men & women who, pursuing their daily rounds amid Dorset dialect & scenery, have been long familiarised with the speech, the dwellings & the habits of the characters portrayed in the novels [...] By endeavouring to represent the old-world life of Wessex the players are undoubtedly performing a valuable literary & historical work'.²⁶ Norrie recalled the Hardy Players spoke the authentic Dorset dialect: 'the only time it has been spoken on the stage'; it was, she said, reputed to be the closest to the Saxon dialect.²⁷ 'It does me good to hear the Dorset dialect that Hardy loved too.'²⁸ Gertrude remarked that Hardy said she must speak Marty South's words just as she felt them.²⁹

Gertrude remembered 'with extraordinary clarity' the last time she met Hardy at Max Gate, in 1925: 'I can see him now as I saw him then, sitting in a low chair with his knees crossed and his hand resting idly on the head of Wessex his wire-haired terrier [...] He was not a tall man, rather spare, quick in gesture and animated in conversation. He wondered how I should like playing with professional actors and how I could bear to leave my baby in other hands; he asked a number of questions about her.' She recalled he saw her to the car at the end of the evening, and said 'If anyone asks you if you knew Thomas Hardy, say, "Yes, he was my friend".'³⁰

Norrie often spoke to friends, family and visitors to Dorset about her time with the Hardy Players, including being cast in the role of Liza-Lu, the sister of Tess (and understudy for Tess). One rehearsal was held in Wool Manor (now Woolbridge Manor); on a return visit in 2001 Norrie saw that the wall portraits of the Turberville family had become a mass of paint. And, at a dress rehearsal at Max Gate, Norrie recalled Hardy's twinkling eyes – 'he looked so happy'; 'I have always thought it must have been a great joy for Hardy to have seen Tess as he probably imagined her for he called my sister the impersonator of Tess. He leaned across the table and said to me "I haven't given Liza-Lu much to say have I?" and straight away wrote a whole line for me to say. A shy, kindly man, encouraging a very shy eighteen-year-old.'³¹ She was to greet her older sister, returned from Trantridge, with the words 'Tess, Tess, I'm so glad you have come home'.³² She remembered Lawrence of Arabia ('his intensely blue eyes caused me to enquire who he was') coming to a performance at the Corn Exchange.³³ Gertrude also recalled meeting T.E. Lawrence at one of the dress rehearsals at Max Gate. 'He told me he felt he could hardly bear to come along that evening because he thought it was impossible to put *Tess of the D'Urbervilles* on the stage. However, he didn't seem too unhappy about it then.'³⁴

In her recent autobiographical writing, looking back over a century, Norrie remembers Hardy, with great fondness, as a kind, shy man. She also recalls gaslight and coal fires, bread and puddings baked on the premises, family meals, her beloved dogs, walking to school, teachers in caps and gowns at Beaminster Grammar School, distinctions in History and French, five driving lessons and no test in 1922 before being on the road in a Humber (she continued to drive until she was 93 and never had an accident). And two World Wars. During the Second World War, Norrie worked as a volunteer messenger for the Air Raid Precautions and ran a poultry farm, without assistance or electricity, supplying produce to local troops. In 1941 she met Fransek Chmel, who had escaped occupied Czechoslovakia, stayed briefly in Dorset, and asked her to marry him. They corresponded, and in time she accepted his proposal, but he died soon after returning to Czechoslovakia following the war. Some years later, in 1962, Norrie married Frank Woodhall; their years together were to be the happiest time of her life.³⁵ Together, they travelled through the countryside of England, Scotland and Wales, and one of Frank Woodhall's friends, the artist Frank Pullen, taught Norrie to paint.

In 2005 the New Hardy Players were formed, as Norrie's wish to celebrate her hundredth birthday, and Norrie became their President. She recalls 'it really started off with Julian Fellowes coming to Dorset saying he couldn't believe there was somebody alive who knew Thomas Hardy, and he then managed to get a troupe together to do *The Return of the Native* which he staged at his home'.³⁶ With all proceeds going to local charities,

the New Hardy Players are now preparing to stage *The Woodlanders*. They have performed *The Return of the Native* (2005); *Under the Greenwood Tree* (2006); *A Life of Three Strands* (2007), a play about Hardy's life, written by Norrie and Devina Symes; *The Waiting Supper* and *The Thieves Who Couldn't Help Sneezing* (2008); *The Mayor of Casterbridge* (2009); *The Distracted Preacher* (2010); and, in 2011, at Norrie's special request, they performed *Tess of the d'Urbervilles*. 'I would like the Stonehenge scene done, which is exactly how Hardy ended the play', she had said.³⁷ Norrie attended the premiere at Dorchester Corn Exchange on 3 June 2011, where she had played Liza-Lu 87 years earlier. She was delighted that the script included the line Hardy had written for her. Norrie could recall the performance of 1924: 'you got the lighting, the dawn coming up, and then you got these figures coming on the stage and she gets up from the altar stone and says "I am ready" and down comes the curtain and then there'd be a dead silence for a long time after that. And when Tess was done in Dorchester they had to put on several extra performances. It brought down all the London producers, I mean, Dorchester was London then.'³⁸

In 2010, Norrie played a central role in a national campaign to raise funds to secure for Dorset the Tilley Hardy Players manuscripts that had come onto the open market, and were attracting the interest of an overseas university. In December 2009, the Reviewing Committee on the Export of Works of Art decided that this was the most important and coherent body of evidence surviving in Britain of the dramatic adaptation and staging of works by Hardy, and of their reception by the local community that inspired them. Margaret Hodge, Culture Minister, then placed a temporary export ban on the collection, on the grounds that 'the collection was so closely associated with the life of a particular region, one given an enduring literary identity as Hardy's Wessex, that its departure would be a misfortune'. A serious fundraising campaign followed. The star piece was a performance by the Hardy Players at Dorset County Museum, *Hardy's Night – Chapter and Verse: Words and Humour from Hardy's Pen*, with Norrie reciting poetry. Julian Fellowes, President of the Thomas Hardy Society, had earlier conducted a filmed interview with Norrie which was screened during the evening, and an auction was also held. Norrie was a talented artist, and she gave one of her paintings to be auctioned; another auction item was tea with Norrie, which was successfully bid for by a delighted group of students from the University of Exeter. The event was a tremendous success, and along with publicity, largely generated by the part played by Norrie, donations came in, £60,000 was raised, and the manuscripts were saved for Dorchester.

Thomas Hardy and Norrie Woodhall witnessed uncountable changes, their lives spanning an extraordinary number of years and memories. Hardy could recall that his great grandmother knew 'as very old women'

two women who had narrowly escaped being attacked by soldiers from the Battle of Sedgemoor, fought on 6 July, 1685, near Bridgwater, Somerset.³⁹ He also remembered as a young boy reading 'A History of the Wars – a periodical in loose numbers of the war with Napoleon, which his grandfather had subscribed to at the time, having been himself a volunteer. The torn pages of these contemporary numbers with their melodramatic prints [...] were the first to set him on the train of ideas that led to *The Trumpet-Major* and *The Dynasts*'.⁴⁰ In turn, Norrie lived through a time of horse-drawn wagons, when cattle were driven through the streets of Dorchester; 'no planes, just one or two cars'. 'That world has gone forever', she wrote.⁴¹ 'It was one in which nature and country people lived in peace with each other, at least they did in my very early days. A world at peace. Man working with Nature, gathering in the harvest when the weather allowed, using horses to plough and gather the crops'.

Dr Angelique Richardson teaches English at the University of Exeter.

ENDNOTES

1. Michael Millgate, *Thomas Hardy: A Biography Revisited*, Oxford, Oxford University Press, 2004, 271.
2. Thomas Hardy, *The Life and Work of Thomas Hardy*, ed. Michael Millgate, Basingstoke: Palgrave Macmillan, 1984, 154.
3. Evelyn L. Evans, *My Father Produced Hardy's Plays*, Beaminster: Toucan Press, 1964, 7, cited in Keith Wilson, *Thomas Hardy on Stage*, Basingstoke, Palgrave, 1995, 61.
4. Hardy, *The Life and Work*, 32.
5. Norrie Woodhall, *Norrie's Tale*, Wareham: Lullworde Publications, 2006, 8.
6. Hannah Phillips, 'Tea with Norrie', 1 April 2010 (unpublished transcript), 5.
7. Woodhall, *Norrie's Tale*, 15.
8. Woodhall, *Norrie's Tale*, 15.
9. Wilson, 79.
10. *Daily News*, 20 November 1913, cited in Wilson, 30.
11. Woodhall, *Norrie's Tale*, 17.
12. See Woodhall, *Norrie's Tale*, 15, and Woodhall, *Norrie's Second Century*, Wareham: Lullworde Publications, 2010, 49.
13. *Dorset County Chronicle*, 14 December 1916, in Wilson, 100.
14. Wilson, 116.
15. Harold Child, 'In a Wessex Setting – The Hardy Play at Dorchester', *The Times*, 19 November 1920.
16. Hardy, *The Life and Work*, 460.
17. Child, *The Times*, 27 November 1924.
18. *Daily Express*, 27 November 1924, in Wilson, 134.
19. Wilson, 134.
20. Dorchester Debating and Dramatic Society Minute Book, 50 (Dorset History Centre, D349/1), in Wilson, 185.
21. Wilson, 143; 151.
22. Gertrude Bugler, 'Personal Recollections of Thomas Hardy', Dorchester: The Dorset Natural History and Archaeological Society, 1964, 14. See also Wilson, 159.

23. Bugler, 11, 13.
24. Bugler, 5.
25. Bugler, 6.
26. Hardy Players Manifesto, 1924, Hardy Players Manuscripts, Dorset County Museum.
27. Woodhall, *Norrie's Tale*, 37; 39.
28. Woodhall, *Norrie's Second Century*, 77.
29. Bugler, 5.
30. Bugler, 8, 9.
31. Phillips, 1.
32. Woodhall, *Norrie's Tale*, 32.
33. Woodhall, *Norrie's Tale*, 33.
34. Bugler, 8.
35. Phillips, 6.
36. Phillips, 4.
37. Phillips, 7.
38. Phillips, 4.
39. Hardy, *The Life and Work*, 11.
40. Hardy, *The Life and Work* [entry for 1848], 21.
41. Woodhall, *Norrie's Second Century*, 76–7.

Emeritus Professor PHILIP ARTHUR RAHTZ MA FSA Hon MIFA (1921–2011)

Although Philip Arthur Rahtz (PAR) was only a member of the DNHAS for a relatively short period, from 1958 to 1978, he made a profound and long-lasting contribution to our Society and to Dorset's archaeology. PAR, a professional photographer and teacher, first practised archaeology from 1946, digging as an independent amateur in Somerset. In 1953, as a professional archaeologist, PAR joined Ernest Greenfield in the recording of a whole landscape in the Chew Valley, Somerset. So inspired, he began a lifetime's commitment to discovering and uncovering our common past within the developing discipline of archaeology, as described in his delightful and perspicacious autobiography.

PAR was a major figure in British archaeology, ending his professional career as the founding Professor of Archaeology at York University. PAR made many significant contributions to both knowledge and practice in the now established profession, and these have been celebrated country and worldwide in the many obituaries published in national newspapers and archaeological journals by his colleagues, former pupils and friends.

For a short period in the late 1950s, just before he took up his post as Lecturer at Birmingham University in 1963, he undertook four seminal excavations in Dorset: Shearplace Hill, Sydling St Nicholas 195; Holworth, Chaldon Herring 1958; Hog Cliff Hill, Maiden Newton 1959 and 1960; Bokerly Dyke, Pentridge 1959, for which he published detailed interim notes in our *Proceedings* from 1959 to 1961. All, but one,

were swiftly followed by full reports, making significant contributions to period studies. All continue to be cited in both books and journals, not least in the pages of our *Proceedings*.

However it was not simply in the results of excavation that PAR made an outstanding contribution to Dorset's archaeology, but also, and perhaps more profoundly, in the teaching and practical training he provided to a new generation of amateur archaeologists working in the county, both young and old. In 1957 the DNHAS formed a permanent archaeological sub-committee, including the newly appointed Assistant Curator RNR Peers. This committee, renamed the Archaeological Committee in 1958 and the predecessor of the Dorset Archaeological Committee, was able to plan a programme of excavations in the county with grants to the Excavation Fund. For the Society to implement both research and rescue excavation in the future, the experience and training of members in evolving 'professional' excavation techniques and practice was much needed. In 1957 the West Ringstead deserted medieval village earthworks, Osmington, recently surveyed by the Royal Commission on Historical Monuments (England), was under threat of destruction from the expansion of the nearby Radar Station. A rescue excavation was planned, supported by a generous grant to the Excavation Fund from Mr and Mrs Ashton-Hill. However this threat did not materialize, nor was access then possible. With PAR engaged by the DNHAS as Director and advice from the recently established national Deserted Medieval Village Research Group, and the investigators of the RCHM(E) working on the Inventory for South East Dorset, the research excavation of another deserted medieval village earthwork, nearby at Holworth, Chaldon Herring, was proposed as a training excavation for the Society's members. All was made possible in 1958 with the Ashton-Hills' grant and an access agreement with the farmer Mr House at Holworth Farm. The project was managed for the Society's Archaeological Sub-Committee [*sic*] by Norman Field, acting as organizing Honorary Secretary. PAR had been engaged to undertake excavations in August 1958, immediately following his work at Shearplace Hill, begun in May. The training excavation at Holworth was to have lasting results for Dorset's archaeology, providing a template for future projects and aspirations, both for the Society and archaeological research agenda. For the Society it was good value indeed!

The Holworth excavations were published swiftly. In 1959, the year following his appointment as Director, PAR completed a full report on the excavations for the PDNHAS, and on publication in 1960 deposited the finds and archive at the Dorset County Museum, an exemplary record in the context of modern professional excavation! The excavations were inspirational and at the cutting edge of strategy and technique, contributing to national research. The trenches were open-plan, and formed the first area excavation of a deserted medieval

village earthwork in the South West, producing valuable results that contributed much to future research excavations elsewhere. The project provided a lasting experience and training for the digging team, members of this Society, of whom many went on to work on future excavations in the county. Indeed two were to undertake the direction of excavations and substantial fieldwork for many years – as recorded in the obituaries for John Bailey and Ron Lucas.

PAR brought many skills to archaeology, not least those from his days as a professional portrait photographer in Bristol, at *Studio Rahtz*. Published here is PAR's group portrait of Holworth diggers, some of those sixty-seven registered diggers he inspired over the four weeks of August, so making these and future excavations such a success (Figure 1). Only five of that day's digging team have been identified from personal recognition – Ron and Joan Lucas (front third and fourth from left); John Bailey (standing, right); Rex Clive (second row from the back, far left); Mrs Hownam Meek (standing, second row right). In 2006 Andrew Bailey deposited eight prints of the Holworth excavation from one of his father's photographic albums, taken by John Bailey at the time when PAR was taking the final site-record photographs, of which one was a delicately balanced image of PAR at his photographic work. PAR stands on the ridge of the site hut, with two cameras to record the site in both black-and-white print, and colour slide, in the early years of his career as director, teacher, trainer and entertainer. It is a record of one of the most important archaeologists at work in the second half of the twentieth century. PAR inspired all with his vision and enthusiasm for field archaeology. PAR was that much needed catalyst for Dorset's archaeology and we have much to thank him for.

Abbreviations

DORCM	Dorset County Museum General Accession
DORCMC	Dorset County Museum Correspondence
DORCME	Dorset County Museum Entry
DNHAS	Dorset Natural History and Archaeological Society
DMVRG	Deserted Medieval Village Research Group
PDNHAS	<i>Proceedings of the Dorset Natural History and Archaeological Society</i>
RCHM (E)	Royal Commission on Historical Monuments (England)
DAYU	Department of Archaeology, York University

Publications

<i>Antiquity</i>	2012	Philip Rahtz, 11 March 1921–2 June 2011, www.antiquity.ac.uk/tributes/rahtz.htm
Aston, M	2001	Foreword in P A Rahtz, <i>Living Archaeology</i> , 6–7
Carver, M	2011	Philip Arthur Rahtz (1921–2011), <i>Med Arch</i> 55, 281–283
DAYU		Rahtz Colour-Slide Archive, teaching collection
DMVRG	1958	Holworth, Dorset, in J G Hurst (Secretary), <i>Other Excavations</i> , 6th Annual Report, London

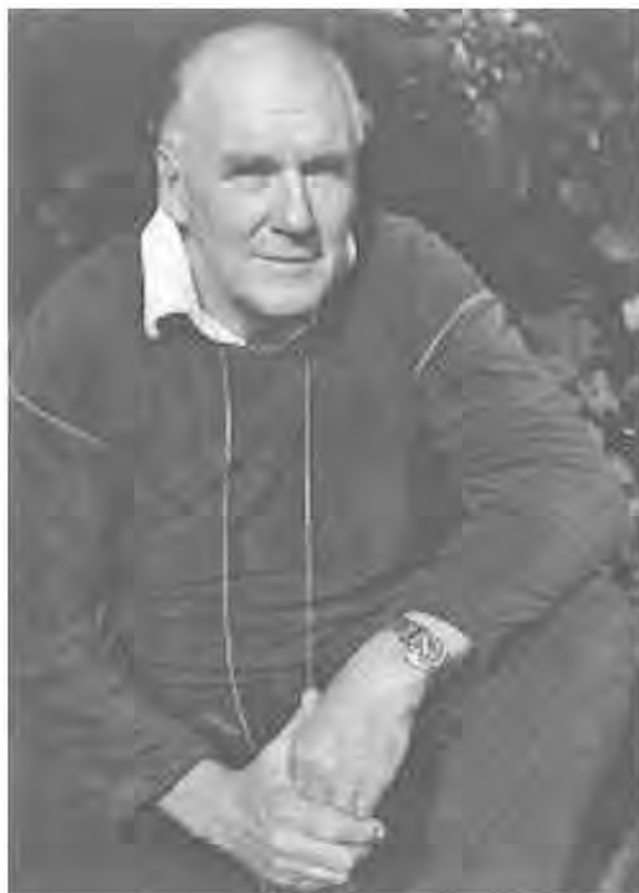


Figure 1: Philip Arthur Rahtz, Holworth Excavation 1958 (photo. C J Bailey)

DORCM		1960.7/AB131.1-11 Holworth Excavation Archives
DORCMC		16448, Rahtz and Holworth, 8 February 1958 to 14 April 1960, DORCM1960.7/AB131.8.1; 17171, Farrar, March 1959, DORCM1960.7/AB131.8.2
DORCME		5986, DORCM2006.18.2 Photographic Archive 19, DORCM1960.7/AB131.11
Hurst J G and Golson J	1953	Deserted Medieval Villages, Lecture to the Royal Archaeological Institute, March 1953, in <i>The Deserted Medieval Village Research Group (1953) First Annual Report</i> , London
PDNHAS 79	1958	<i>Report of the Council for the Year 1957</i> , 15
PDNHAS 79	1958	Council and Officers 1957, <i>Sub-Committees 1957</i> , 5
PDNHAS 79	1958	<i>Treasurer's Account for the Year ended 31st December, 1957, Excavation Fund</i> , 20
PDNHAS 80	1959	<i>Report of the Council for the Year 1958</i> , 16
PDNHAS 80	1959	<i>Treasurer's Account for the Year ended 31st December, 1958, Excavation Fund</i> , 20
PDNHAS 113		<i>Obituary – Ronald Norman Lucas 1920–1991</i> , 221–222
PDNHAS 114		<i>Obituary – Norman Hassell Field BA BSc FSA (1917–1992)</i> , 284–285
PDNHAS 127		<i>Obituary – Cecil John Bailey FSA (1914–2004)</i> , 195–197
Rahtz, P A	1959	The Excavations at Shearplace Hill, Sydling St.Nicholas, PDNHAS 80, 100–101

- | | | | | | |
|-----------------------------------|------|--|----------------------|------|--|
| Rahtz, P A | 1959 | The Excavations at the Medieval Village of Holworth in 1958, <i>PDNHAS 80</i> , 103–105 | Rahtz, P A | 1977 | <i>Excavations at Chew Valley Lake, Somerset</i> , HMSO, London |
| Rahtz, P A | 1960 | Holworth, Medieval Village. Excavation 1958, <i>PDNHAS 81</i> , 127–147 | and
Greenfield, E | | |
| Rahtz, P A | 1960 | Interim Report on Excavations at Hog Cliff Hill, Maiden Newton, <i>PDNHAS 81</i> , 94 | Rahtz, P A | 1987 | Excavations at Hog Cliff Hill, Maiden Newton, Dorset, <i>PPS 53</i> , 223–270 |
| Rahtz, P A | 1960 | Interim Report of Excavations at Bokerly Dyke, <i>PDNHAS 81</i> , 100–102 | Rahtz, P A | 2001 | <i>Living Archaeology</i> , Tempus, Stroud |
| Rahtz, P A | 1961 | Interim Report on Excavations at Hog Cliff Hill, Maiden Newton, <i>PDNHAS 82</i> , 83 | RCHM(E) | 1970 | <i>An Inventory of the Historical Monuments in the County of Dorset, South-East Volume, Chaldon Herring (20) and Osmington (27)</i> , HMSO, London |
| Rahtz, P A | 1961 | Excavations Bokerly Dyke, Pentridge, Dorset, <i>Arch J CXVIII</i> , 65–99 | | | |
| Rahtz, P A
and ApSimon,
A M | 1962 | Excavations at Shearplace Hill, Sydling St. Nicholas, Dorset, England, <i>PPS 28</i> , 289–328 | | | |

P. J. Woodward and R.N.R. Peers
January 2011

REPORT OF THE DORSET NATURAL HISTORY AND ARCHAEOLOGICAL SOCIETY FOR 2010 AND 2011

Chairman's Report 2012

The Society and the Museum have enjoyed a successful year. The financial improvement begun last year has continued and it is gratifying to report an operational surplus of £254,250. This comes from a near doubling of income from the extra number of visitors to the Museum, a large increase in shop sales and the successful launch of the tea room, combined with a significant saving in operational costs. The surplus includes legacies totalling £126,000 – which shows the continued benefit to the Society when members are kind enough to remember us in their will – and the result is even more gratifying because there was a significant reduction in the grant from the Dorset County Council and a temporary loss of rental income from our adjacent property.

The large increase in the number of visitors to the Museum reflects the success of the two exhibitions this year, *Georgian Faces: Portrait of a County* and *Pharaoh, King of Egypt*, which were very popular and raised the profile of the Museum both locally and nationally. Sandwiched between these exhibitions came the unveiling of the Weymouth Bay Pliosaur by Sir Richard Attenborough in June; it is possibly the finest example of this awe-inspiring reptile in the world.

All members of the Board newly elected in June 2011 were anxious to be closely involved in its decisions. Accordingly the Strategic Development Committee and the Finance and General Purpose Committee were disbanded and a meeting of the full Board took place every month. Individual projects have been led by small teams reporting to the Board regularly.

The Constitution of the Society has been out of date for some years with several inaccuracies and anachronisms. It has now been extensively revised and updated by John Palmer in conjunction with the Board and Russell Cooke LLP, specialist solicitors, and will be submitted to the Society for their approval at an EGM in June 2012. One immediate benefit will be that formal communication to members by email will be permissible in future with considerable savings in cost and time. A Conflicts of Interest policy for Board members has also been drafted to concur with the new constitution.

The care of the Museum's collections both in store and on display is a continuing concern. Arrangements for the re-roofing of the photographic collection store are almost complete and grants have been obtained to refurbish the Victorian Gallery to create a new display of the Museum's most iconic objects. This will be Stage 1 of an ambitious two stage project to build a new Collections Centre on the site of the Craft Centre behind the Museum. This has the support of the British Museum and a feasibility study will be commissioned

this summer. It will be expensive, running to several millions of pounds, but essential for the future of the Museum and I am confident that we will achieve our aims.

Our Director, Jon Murden, and his small team of paid staff have worked tirelessly to ensure our continuing recovery and we owe them a great debt of gratitude. Salaries in the museum sector are not overly generous and the staff clock up many hours of unpaid overtime. I would also like to pay tribute to our volunteers without whom the Museum could not survive. We have about 180 regular volunteers, working in all departments of the Museum, who give their time and expertise freely and generously. Finally, my thanks to all the members of the Board of Trustees for their support and advice. Two trustees retire this year. Gwen Yarker has served on the Board with distinction for eighteen years and has been a tower of strength. Her sound advice, professional contacts and knowledge of the museum world have been invaluable and she will be sorely missed. Tom Pomeroy also retires and we are especially grateful to him for his financial advice and guidance over the years.

Carola C. Campbell

Director's Report

The optimistic mood in which we ended 2010 turned out to be fully justified, as I believe 2011 will go down as something of a bumper year for the Society and its Museum as new initiatives and partnerships began to bear fruit.

The difficult choices made in the previous two years are reflected in 2011's financial results, as costs continued to be kept under control while new sources of income generation were established and exploited. Visitor numbers increased considerably, up by over 80% on 2010, largely due to the impact of a series of high quality and high profile temporary exhibitions, while the ongoing recruitment drive saw Society membership continue to increase at a healthy rate. An improved approach to purchasing and stock control saw overall sales, spend per head and profitability all increase in the Museum's retail operations. A significant new source of direct income also opened up in February, with the opening of the Museum Tea Room. This proved to be a tremendous new asset for the Museum, generating not only income but the further use of the Museum as a community space.

2011 started on an undoubted high with the opening of the temporary exhibition *Georgian Faces: Portrait of a County*. The work to curate this exhibition, write a stunning catalogue, secure sponsors and fundraise, carried

out by Gwen Yarker, resulted not only in a beautiful and insightful show, but also tremendous visitor figures, strong catalogue sales, enhanced reputational standing for the Society and a permanent legacy of upgrades to the Museum's infrastructure. This strong start was followed in May by a second successful *Museums At Night* event and the conclusion of the Heritage Lottery funded project *Hardy's Wessex Sprung To Life*. Based around the acquisition of the James Stevens Cox collection of papers relating to the Hardy Players, the finalisation of this project saw the completion of new permanent displays about the Hardy Players in the Writers' Dorset gallery and an acclaimed performance of Hardy's 'The Withered Arm' by our Museum Makers group.

Throughout the first half of the year work had also begun to alter the Jurassic Coast Gallery to accommodate a new and internationally important acquisition — the Weymouth Bay Pliosaur. Working in partnership with the Jurassic Coast World Heritage Site team and Dorset County Council, with funding from the Heritage Lottery Fund, the specimen was secured for Dorset, cleaned and conserved, and a unique mounting and display system was conceived and built incorporating interactive interpretation. The largest prehistoric marine reptile fossil ever found, one of the undoubted highlights of 2011 came when the Pliosaur was unveiled to the public and global media attention by Sir David Attenborough at the beginning of July.

Another significant development in 2011 was the establishment of what we hope will prove to be a long-standing partnership with the British Museum. In February 2011 a notice was circulated by the Museums Association on behalf of the British Museum as they sought a new partner to act as a venue for their touring exhibition *Pharaoh: King of Egypt*, after the late withdrawal of a major regional museum from the project. An application was made by the Society and, in the face of extremely stiff competition, Dorset County Museum was awarded the partnership, with the costs of bringing the exhibition to Dorchester paid for by the British Museum and the Dorset Foundation. This award was on the condition that upgrades were made to the lighting, showcases, security and access in the Victorian Gallery, which combined with the need to decant and decorate the space, lead to an extremely busy late summer. The exhibition itself opened in October and was a tremendous success, resulting in record visitor numbers and school bookings for that time of year, an enhanced regional profile, and also impacting positively on Society membership recruitment. As with *Georgian Faces*, *Pharaoh: King of Egypt* also leaves a long-term legacy, not only in physical upgrades to the Museum, but also in the establishment of close, positive links with the British Museum. An early outcome from this relationship should be seen in 2012 as we work together on a new permanent display in the Victorian Gallery celebrating the history of the Museum and its collections.

Although 2011 was clearly a very successful year for the Society and its Museum, we all remain mindful that significant challenges remain, particularly in the present very difficult economic climate. The pressure on public funding means that further reductions in grant aid are likely. These were absorbed in 2011, but possible future reductions mean we must continue to develop our own revenue streams and sources of income generation as an independent Society and Museum. The problems of our aging and undeveloped estate, the legacy of years of underinvestment in infrastructure and our overstuffed collections stores must now also be urgently grasped. However, it is my belief that we can now go forward and tackle these problems constructively and positively because we are now operating from a very stable and successful basis.

Jon Murden

Hon. Editor's Report

Katherine Barker retired as Honorary Editor of the *Proceedings* in 2011 after eight years in the post. Katherine's hard work and engagement over those years is widely acknowledged by DNHAS members and in the extensive scholarly community that keeps the *Proceedings* flourishing. I wish her well and I am sure she will continue to be at the heart of historical research in the county. You will see her continuing contributions in this volume. Thank you, Katherine.

I took over the post in July 2011. Most of my predecessors were historians, naturalists, geologists, archaeologists or antiquaries who also wrote. I am a somewhat different species, as a journalist who, in later career, is a full time academic at Brunel University. I have an enduring interest as an amateur in many of the areas within the jurisdiction of the *Proceedings*. My interest in matters historical dates back to childhood when I spent endless hours in the reference section of my local library. I have written on archaeology since the early 1980s and during my time on the staff of *The Observer* newspaper produced many articles on archaeology. The redevelopment of the City at the time, and the rise of Rescue Archaeology, resulted in a surge of new discoveries on which I was able to report. My own historical research has been largely confined to the twentieth century with articles, television programmes and books on the Cold War and Media.

The editorship of the *Proceedings* is a privileged position, as it guarantees that the most interesting scholarly work on many facets of Dorset will pass over my desk. I am already impressed by the breadth and depth of knowledge and scholarship of those who inhabit the sphere of interest that surrounds the Dorset County Museum. Dorset is rich in what the French Philosopher, Pierre Bourdieu, calls 'cultural capital'.

I would like to thank Roger Peers and the subject editors for the support they have already provided. DCM's Director Jon Murden's tireless energy and enthusiasm helps make the task of editor a delight.

I'd also like to thank Brunel University which encourages its academics to engage with the wider community. This is known in Higher Education language as 'Knowledge Transfer'. I have to say that mostly, I feel the knowledge is flowing to me, rather than the other way.

I have no plans to radically change the *Proceedings* and I am conscious that the format has evolved over a century and a half. I see the *Proceedings* as a long term commitment to scholarship presented with clarity. In the immediate future I am keen to improve the *Proceedings* online presence and attract a wider audience. If I have a vision it is to engage the younger audience in Dorset with local scholarly work so they can experience the excitement I felt as a child connecting with the ancestors and the natural world.

Paul Lashmar

Geology

The geology group settled into the work of putting information relating to most of the remaining geology specimens onto the museum's natural science database (Science and Nature Base, or 'SN Base'). It is estimated that around 90% of accessioned geological specimens had entries on this database by the end of December 2011. The increasingly comprehensive database allowed the geology group to search and locate objects requested by enquirers more effectively. Once again, a number of researchers utilised the geology collection through 2011, even though academia has been affected by cutbacks.

As the year progressed, the group began a process, with museum database volunteer John Hilton, of migrating the database's information into a Microsoft Access database, much like those being used for other non-natural science collections in the museum. This will store digital information in a more consistent way across the collections, and will also save the museum the annual SN Base licence fee.

Volunteers took over the role of updating the computer spreadsheet containing information about the Geological Manuscripts Collection, for ease of searching (this collection consists of paperwork with relevance to accessioned geological objects). Bridget Lowther accessioned a large quantity of new objects, while continuing to work through those in the collection's backlog. Bridget also took on the role of geology collection representative at the museum's Collections Management meetings, and she fed relevant information back to the group. Hilary Barton attended a useful training day with members of other of the museum's collections groups, and she too cascaded advice received to her colleagues.

The 'Swanage Crocodile' has returned to Dorset County Museum's geology collection after having been studied at Bristol University. The resulting paper published in 2011 concluded that it is a species new to science. It was put on display in the Jurassic Coast Gallery.

Last but by no means least, the Jurassic Coast Gallery became home to an additional, even larger inhabitant; the by now well-known pliosaur skull, with powerful jaws agape. The pliosaur's display was opened on 8 July by Sir David Attenborough, and it opened the mouths of the museum's record numbers of awestruck visitors throughout the summer.

Natural History

Peter and Margaret Cramb started work on Miss S.M. Payne's herbarium, which includes an interesting collection of specimens from Kingsettle near Shaftesbury, dating from 1831 and in remarkably good condition. Peter Cramb continued cataloguing the J.C. Mansel-Pleydell Dorset collection.

Robin Walls verified a substantial amount of the Capt. C. Diver herbarium, and mounted a significant proportion of the historically important Prof. R. Good Dorset collection, which the museum acquired shortly before. Both of these were deposited in the herbarium, but remained unsorted and unboxed. These projects will be ongoing through 2012.

As with the geology collection's computer database of object information, the natural history information stored in SN Base began a process during 2011 that will ultimately lead to its migration to a Microsoft Access natural history database. Added to this will be a spreadsheet of information about the museum's collection of water beetles, which Robert Aquilina continued his work on.

As the year drew to a close, thoughts turned to which of the museum's varied, and often significant, natural history specimens might sit well in the Victorian Gallery's forthcoming permanent display, celebrating Dorset County Museum's origins and founders. The process of initiating the selection began with the help of Mark North.

Archaeology

In 2011 we had one major deposition to the museum, in the form of the archive from Tinney's Lane in Sherborne. It was deposited by Exeter Archaeology and consisted of eleven boxes of paper archive and 53 boxes of artefacts. We have surveyed the store in All Saints church and have found spaces for about 900 additional boxes. We shall then be full. We currently store 11,729 artefact boxes, 990 paper archive boxes, 280 roll boxes and have eleven plan presses full of drawings, maps, etc.

It was a busy year for researchers. We had a grand total of seventeen who came to the church to see the collection, with interests ranging from beads to pottery and bones. Most of them were completing research as part of their academic study, but two were involved in producing publications on the Broom hand axes collected by Charles Bean and the Colliton Park excavation of the 1930s.

It has also been a good year for volunteers with eighteen turning up regularly on Tuesdays to work in the church. The computer records of the store are now up to date and we are currently working on the computer records for the archaeology gallery and the metalwork room.

We had an open day at the church when over 100 people came to see what we had. We are planning another open day in July 2012 and admission will be by timed ticket only.

We have been involved with the Effective Collections initiative in which we make loans of items to other museums in Dorset. It is paid for through money received from the County Council who provide a facilitator to match their individual needs to the artefacts stored in the metalwork room and the church. During 2011 we were working with five museums, viz. Portland, Langton Matravers, Beaminster, Bridport and Sherborne, but had made no loans by the end of the year. We are hoping to complete the loan transactions and address the remainder of the museums in 2012.

Art Volunteer Report 2011–2012

The Art volunteers continue with the seemingly endless task of checking the cataloguing and accessioning of the collection. The team has met with John Hilton who has tailored an 'art' database and trained us in data entry on the computer data system. With a museum laptop made available for us we can now see light at the end of the tunnel!

We very much enjoyed being involved with the highlight of last year, the hugely successful *Georgian Faces* exhibition. A full account appears in this year's *Proceedings*, which was a paper Gwen gave to the National Portrait Gallery seminar held at the museum in February 2011. We all helped steward the wonderful British Museum loan exhibition of *Pharaoh, King of Egypt*.

During the year we have fielded an increasing number of queries from the public. A number of researchers visit the reserve collection, including art historian Professor Pamela Gerrish-Nunn who looked at the Meade Falkner collection during her visit to the UK from New Zealand.

Last June there was national press interest following the BBC film on the Hardy-related works of John

Everett. Gwen took part in the programme and also one for the South West on our collection of Alfred Wallis paintings. As the oil collection is now online through the *BBC Your Paintings* website, we can now refer general enquiries to it.

A happy and successful year for the art collection.

Mary Frampton, Brigid Martin, Ann Ross-Skinner, Sue Taylor and Gwen Yarker

The Literary Collections

The literary collections form an important part of the DNH&A's holdings but do not always get the exposure that the more traditional collections receive. However, as an indication of the significance to the museum which the Director and Trustees attach to these Archives, the Chairman of the *Proceedings*, Roger Peers, has asked Morine Krissdóttir, one of the subject editors, to actively seek articles and reviews relating to Dorset authors for next year, as well as gathering reports from the curators of the various collections. Morine would be grateful to hear from members of any articles or review books they feel will be of interest.

Thomas Hardy Archive

Another busy year for the archive in terms of written enquiries, visitors, and special displays.

In July 2011, a group of students from an Oxford summer school were shown round the literary gallery. They were particularly interested in the special display on *Tess of the D'Urbervilles*, which marked the 120th anniversary of its publication. This display included rare volumes from the archive, illustrations from *The Graphic* magazine, where it first appeared in serial form, as well as photographs of the landscape of the novel and a map of Tess's wanderings. Our thanks must go to artist David Gunning, who loaned a steel engraving of Stonehenge. Many translations of the novel, from Icelandic to Hindi, also made a colourful contribution.

Continuing the Tess theme, September saw the successful staging in the Victorian Gallery of the museum of 'The Sound of Tess: Discovering Baron Frederic d'Erlanger and his Opera'. Barry Ferguson gave an illustrated talk on this work, performed in Hardy's lifetime at Covent Garden and other venues throughout Europe. Excerpts from the opera were sung by three singers with violin accompaniment, with members of the d'Erlanger family in the audience. The museum holds Hardy's copy of the score of the opera for piano and voices, and to enhance the evening's performance, hosted by the Thomas Hardy Society, it formed part of a special display of items connected with this opera from our Hardy collection. The Abbey Museum at Shaftesbury has also asked us to provide material for a special Hardy display on *Tess of the D'Urbervilles*. As another example of the continuing fascination of Tess, Michael Winterbottom's

latest film, *Trishna*, transports the story to rural India in an ambitious reworking. Closer to home, display material has been requested from the Puddletown Church Events Committee for their flower festival with a Thomas Hardy theme in June

Researchers continued to use the archive, notably one from Yale who was interested in Hardy as a visual artist and another from the University of Udine, who is making a study of Hardy's drawings and water-colours. General enquiries continued to flow in from the general public, writers, publishers and film-makers. Our long-standing cooperation with Professors Millgate and Wilson on Hardy's correspondence has drawn to an end and we are looking forward to the publication of Volume Eight of *The Collected Letters of Thomas Hardy*, which will be an important addition to Hardy studies. Many photographs from the archive have been supplied to Max Gate as the National Trust continues its work of reinterpretation and, as part of an effort to enhance the entrance to the Hardy Arcade in Dorchester, we have supplied Business Initiative Dorchester (BID) with photographs and a manuscript reproduction of a Hardy poem.

Helen Gibson and Jasmine Metcalfe

Sylvia Townsend Warner & Valentine Ackland Archive

Sylvia Townsend Warner's writings reflect her multifarious interests — music, politics, history, feminism, witchcraft to name a few. Inevitably these far-ranging interests provide postgraduate researchers rich fields for exploration. There have been many visiting the Archive in 2011, mainly from the USA, but a number from U.K. universities. There are also many requests for information from scholars who can't make the trek to Dorset. The museum has arranged for the STW Collection to have a wireless connection to their main server and our database has now been transferred to Access, thanks to John Hilton. This allows us to send results of a search request directly as an email attachment. The facility will be of great help to long-distance researchers who wish to know if we have material relevant to their topic. Enquiries concerning STW's friendship with Craske, Steven Clarke, Venn and Finzi, to name only a few, open up further lines of investigation by other scholars.

We have recently been given the letters of Sylvia to Rachel Monckton How, thanks to the good offices of Helen Sutherland who has catalogued them as well as adding helpful footnotes.

Two new volumes of interest are forthcoming. Peter Töhlhurst, owner of Blackdog Books, has been assiduous in bringing STW's writings to the fore. He will launch his latest book, *With The Hunted: Selected Writings of Sylvia Townsend Warner* at the June meeting of the Sylvia Townsend Warner Society. Peter Judd is writing a biography of Elizabeth Wade White, the woman who played

such an important role in the lives of Sylvia and Valentine. Presently in draft version, the book casts new light on this fraught relationship and deserves to find a publisher.

A most important event in the Warner/Ackland calendar will be the One-Day International Symposium held at the Museum on 29 June, 2012. This will be hosted jointly by the Centre for South West Writing, University of Exeter and the Dorset County Museum. The Symposium aims to mark the importance of Warner's writing and highlight her place as an original, generically resourceful and politically conscious 1930s woman writer at the heart of the literary avant-garde. It also aims to draw attention to the rich resources of the Sylvia Townsend Warner Archive housed in the Museum.

Morine Krissdóttir and Judith Bond

Powys Collection

The Collection manager has received numerous inquiries to do with the Powyses. There seems to be a growth of interest in the women connected with the family, and Janice Gregory, a relative of Alyse, came to look through Alyse's journals and found a reference to herself within a few minutes. We have received some letters and memorabilia, notably a small maquette of a portrait bust of JCP. Photos and letters from the Collection have been used by the newsletter on several occasions and several requests fulfilled for information for our sister publication in France, *La Lettre Powysienne*. A printer has been purchased for the Collection.

Michael Kowalewski

The Barnes Collection

The Barnes collection does not presently have anyone overseeing it. However Jon Murden reports that Frances Austin Jones has bequeathed her husband's fine collection of Barnes material, and these will be catalogued in due course thanks to the generosity of the donor.

Social History

2011 saw much valuable work carried out to improve the arrangement for the storage and display of our Social History collections. In the Stable Block loft storage area, volunteer member Tony McKinder continued to rearrange shelving, carry out object cleaning and essential conservation work. Over the summer, with help from students on work placement from Bournemouth University, work began on the ground floor of the Stable Block to prepare for essential repairs to the fabric of the building, followed by the installation of refreshed social history displays. Curated with assistance from newly recruited volunteer Jonathan Clayton, and to be completed in the first half of 2012, these new displays will

highlight aspects of rural life in Dorset during the nineteenth century, particularly focussing on craft skills, agricultural labour and domestic life.

One of the major pieces of work undertaken during 2011 was the transfer care for the Society's traction engine, Marshall 7 hp general purpose 'Hayden Princess', to the newly formed Hayden Princess Preservation Group. This group, formed by volunteers from the DNHAS Traction Engine Group, was established to better conserve, maintain and operate the engine and will ensure a long-term active future for the Hayden Princess in Dorset. Our thanks go to all the members of the Traction Engine Group for their efforts since the Society acquired the Hayden Princess in 1996, and we wish them well as they continue to look after the engine in their new organisation.

During the year many objects were prepared for temporary exhibitions. Objects from the Home Front during World War Two were exhibited within the *Ridgeway Voices* exhibition between May and June. Blueprints from the Lott and Walne collection, a lever action cheese press and a cow hair comber were included alongside Maurice Collins' collection of gadgets in *Whirrs, Cogs and Thingmabobs* between July and October. In addition, a selection of blue and white ware and other interesting pots from the Ceramics Collection were placed on display in the new Museum Tea Room.

Jon Murden

Photographic Department 2011

The volunteers have had another busy year. 1,091 postcards from the Terry Davis collection have been accessioned and also the last of the Mr and Mrs Skelly collection. People remain very generous in donating photographs to the collection. There have been at least 144 enquiries. Many of the photographs have been used for TV, in magazines and also for various exhibitions in the Museum. Three of the photographs were greatly enlarged and used for a blank wall in Durngate Street in Dorchester. Favourable comments have been received.

We are looking forward to having the roof repaired this year, and grateful that the trustees have decided to repair it and update the room generally, as so much of the room has been unusable because of the rain.

The volunteers, Patrick Fraser, Valerie Dicker, Mary Bennett and Eve Hanson have continued to work in the department, three mainly on the Davis collection. George Wickham continues his amazing work on the photographs preparing them for requests, exhibitions and the media, and we are so pleased that he is able to continue this work.

Library

This Spring after nine or ten years work by volunteers, the classification according to the Dewey Decimal System and re-cataloguing of the *Loan Collection* of books is finished. There is now a 'wall of books' to the right of the library door which may be borrowed by DNHAS Members. The *Dorset Collection* (already included in the New Card Catalogue) remains available for consultation in the library only. The items in the *Lang Pamphlet Collection* have been checked and all card entries transferred to the New Card Catalogues.

Volunteers continue to maintain the 'ephemera boxes' and it is hoped that work will soon begin on recording these items in the computer database – another substantial task.

We received 65 requests by email and at least two or three enquiries each week from personal visitors. There were 207 recorded loans but only eight reminder letters needed to be sent when a book had not been returned after a month. The library has also been able to support research for this year's displays and exhibitions.

We received several complimentary copies of books for which we were very grateful and were also able to purchase some new books.

As always our thanks go to the loyal team of volunteers for the mundane clerical tasks and the physical tasks involved in rearranging and storing books and journals in the library and the basement.

Thomas Hardy Collection

The flow of enquiries continues connected with many different aspects of Thomas Hardy's life and work. Particular interest was shown in Thomas Hardy's drawings and watercolours and the family music collection; many photographs from the archive have been supplied to Max Gate as the National Trust continues its work of reinterpretation. Volume Eight of *The Collected Letters of Thomas Hardy*, edited by Professors Michael Millgate and Keith Wilson, is soon to be published - a major research project to which we have been proud to contribute.

As part of an effort to enhance the entrance to the Hardy Arcade in Dorchester, we have supplied Business Initiative Dorchester (BID) with photographs and a manuscript reproduction of a Hardy poem. The Abbey Museum at Shaftesbury has asked us to provide material for a special Hardy display on *Tess of the D'Urbervilles*. As another example of the continuing fascination of Tess, Michael Winterbottom's latest film, *Trishna*, transports the story to rural India in an ambitious reworking of Hardy's most famous novel. Closer to home, display material has been requested from the

Puddletown Church Events Committee for their flower festival with a Thomas Hardy theme in June.

Helen Gibson & Jasmine Metcalfe

Dorset Archaeological Committee

The usual pattern of six meetings a year was maintained: all were held in the Dorset County Museum, thanks to the permission and help of the Director, Dr Jon Murden. During the year there were two major events. The first was the Committee's 12th Dorset Archaeological Awards. The ceremony was held on 8 July in the Tithe Barn, Hinton St Mary, by the kind invitation of Anthony Pitt-Rivers. Nine entries were received and these were judged by Cllr Les Ames, David Carter, Penny Copland-Griffiths, Ciorstaidh Hayward-Trevarthen, Francesca Radcliffe and Maureen Putnam (Chair). The Award was won by the *DIG IT!* project for archaeological work in connection with the extension to the Priest's House Museum, Wimborne Minster. The Worth Matravers Archaeology Project was runner-up, and Carl Walmsley (for reporting and recording of a treasure find) and the Dorset Historic Towns Project, were highly commended. The Ian Horsey Memorial Award went to Susann Palmer, for her long-standing contribution to Portland's archaeology. The prizes were presented by Professor Geoffrey Wainwright. The second important event was a joint presentation by Roger Peers and Professor Roger Ling on the Roman mosaic found at Hinton St Mary. This was held in the Dorset County Museum on 15 October: all tickets were sold and it was a pleasure that members of the family of John White, the finder, were present, as were Mr and Mrs Anthony Pitt-Rivers.

As was reported last year, the committee was pleased that the report on Dr Bill Putnam's excavations of the Roman villa, Dewlish, was being brought together by Iain Hewitt, Bournemouth University. The Committee received an application for a grant towards the pottery report. This was considered in July and a grant of £3,000 was awarded. It is anticipated that the text of the monograph will be submitted shortly. Lilian Ladle's second monograph on her excavations at Bestwall, Wareham, is in press and is eagerly awaited.

The Committee has received regular reports on a variety of archaeological work in the county. As significant work by the voluntary sector has always made major contributions to the county's archaeology, the committee has followed, with enthusiasm, the work being undertaken by the East Dorset Antiquarian Society at Worth Matravers. We have been delighted to learn that the major conservation projects at Wolfeton Riding House, Charminster, and at Sandsfoot Castle have been successful in obtaining funding. That for Sandsfoot will secure the immediate future of the castle and provide, for the first time, public access and

presentation. Important conservation work has been carried out on the Osmington White Horse.

With Historic Environment, Dorset County Council, the Committee's twenty-eight Archaeological Days during the year had been well supported.

There has been concern about proposed budget cuts in the heritage sector. Those for the National Trust have been reduced, but Gordon Le Pard's post has been lost in the County Council's Historic Environment team, and the County Council's grant to the Dorset County Museum has been reduced. Cuts have also affected The Red House Museum, Christchurch.

Following the retirement of Katherine Barker as the Society's editor over eight years, the Committee records its thanks for her contributions to its meetings, and welcomes Paul Lashmar as her successor.

Laurence Keen, Chairman

The Dorset Local History Group

Founded in 1986 the Local History Group has run an interesting series of talks, field visits and day schools over a period of nearly thirty years. Recent lectures include Dr Jim Davies on 'Dorset and the pirates of Barbary; four centuries of raiding and slaving', and Steve Fraser on the lost Dorchester library recorded in the unique 1631 catalogue. Both were published in recent editions of the Society's *Proceedings*. Also published were the memorable papers given at the 2009 day school 'Dorset and Disease; recent work on past pandemics'. In 2010 there followed a day on the theme of 'WWII: Dorset and the Home Front', embracing notes and papers and colourful displays of material rapidly receding from living memory, and this last November the Group hosted a day on 'Dorset Folklore: poetry, words and music' which attracted a capacity audience; a bringing together of new work in a diverting field. Recent field meetings have included visits to the Verwood Potteries, to Frampton 'from Roman to Victorian', to WWII sites at Blandford and most recently to Cerne Abbas; local history through the eyes of a geologist.

Katherine Barker

County Boundary Group Field Meetings

**Wednesday 6 April; Sandford Orcas and the present parish of Castleton.
Leader Jim Hart. Report John Newbould.**

The parish of Castleton was created in 1897. Originally confined to a small area around the Norman castle and medieval borough it was extended as to include the whole of the rural area east, north and west of Sherborne

thus confining the parish of Sherborne itself to that area around the town. The length of the boundary in the north will thus today run with Sandford Orcas. The visit was by permission of Sherborne Castle Estates.

Examination of the 2nd edition of the OS map shows an introduction of the coniferous plantation present today along the northern boundary of the golf course, together with additional plantation on Round Hill to the west. Nevertheless, the parish boundary, which joins Holway Copse to the east is marked by a number of substantial Oak pollards spread at intervals along the boundary together with an Ash coppice stool measuring 2.5 m diameter. Interestingly, the wood bank (formerly a hedge bank) forming the boundary has four Dorset ancient woodland indicator species. Moschatel or Townhall Clock (*Adoxa moschatellina*), Wood Anemone (*Anemone nemorosa*), Opposite-leaved Golden Saxifrage (*Chrysosplenium oppositifolium*) and Wood Sorrel (*Oxalis acetosella*) are all present on the bank together with Bracken and associated Bluebells and much rarer Barren Strawberry (*Potentilla sterilis*) and Primrose (*Primula vulgaris*). As usual, under the shade of the conifer plantation, there are no herbs.

Following the boundary westwards, there is a turn marked by an ash together nearby with two more oak pollards both > 1 m diameter in an area of plantation to the north. Here matters become more complex as the boundary is then mapped following a stream; running from Benchy Hill where Alder (*Alnus glutinosa*) appears in the woodland together with Ransoms (*Allium ursinum*) in quite wet ground. There is a similar ground flora but Peter Hatherley reported Columbine (*Aquilegia vulgaris*) another ancient woodland indicator species together with the species mentioned earlier. Ash is quite common in these woods, together with Hazel coppice, but Holly is scarce. Both Wood Violet (*Viola riviniana*) and Pale Wood Violet (*V. reichenbachiana*) are only found occasionally.

We crossed over Sandford Orcas Road to the woodland on the west side known as Round Hill where Gorse is found on the bank together with many Primroses on the east facing roadside bank. Here there are good views of the South Cadbury Hill-fort in Somerset to the north-east. This section joins woodland we visited in October 2010 known as Patson Hill. However, the boundary effectively follows a contour line, before passing in a south-westerly direction to the southern boundary on a plateau. Once again, we walked through an area of conifers to the south, but the lower slopes to the north were lined with very old Hazel coppice. Bluebells were common but only two ancient woodland indicator species were present *viz.* Moschatel and Wood Sorrel. Once along the plateau, we followed a fence line with a ground flora of Stinging Nettle. There were thousands of seven-spot ladybirds present on a hot sunny afternoon.

Wednesday 1 June; East Dorset county boundary. Leaders Danae Blank and Peter Hatherley. Report Robin Walls.

A large party consisting of DCBG members and our colleagues from the Hampshire Field Club met at Matchams view point in pleasant weather on 1 June. While we admired the splendid view of the Avon valley from Ringwood to the Christchurch Harbour, Hengistbury Head, and beyond to the Isle of Wight, we were informed of the background history and the plan for the day. Danae provided hand-outs and annotated maps of the itinerary she had prepared. The modern county boundary (1974 to date) follows the west bank of the River Avon from Ringwood down to Week Common and then the centre stream to the north of Christchurch, whilst the older boundary with Hampshire is to the west along the Moors River.

Having got the general landscape in our minds we descended to Wattons Ford where we could see the boundary at an ancient crossing point. The Avon is very wide here and sufficiently shallow for the swans to be standing rather than swimming. This crossing is shown on the current OS map as a BOAT; an apt abbreviation in these circumstances for a 'byway open to all traffic'. Interestingly the tracks either side of the ford are not BOATs. It is surmised that before the bridges on the A31 were built, this important route to the west headed for Palmers Ford to cross the Moors River.

We next travelled to Ebblake Bridge where the B3081 crosses the current county boundary at a small pool believed to be the *Biccan Pol* mentioned in the 961 charter for the perambulation of Ringwood. This is also the old county boundary and is formed of straight lengths along the canalised Ebblake Stream between here and where it meets the River Crane at the top of the Moors Valley Country Park. The definitive boundary line in Dorset Explorer tells us this boundary is centre of river in the Crane, but defaced along the Ebblake Stream.

After a lunch stop at Potterne Farm, which regrettably was too far from the boundary south of Ebblake we moved to the Moors Valley Country Park. This would have been interesting but for two problems: the high visitor numbers and the complete transformation of the landscape as a country park. The map shows the pre-1974 boundary as defaced, and following a line that was clearly the course of the River Crane/ Moors River. The situation is now that the valley has been widened into a lake and the main river has been diverted around the western side. The lake overflow channel is the original course of the river and the boundary continues at the centre of river downstream except for where it has been defaced due to river straightening.

An early draft of the hercological record form was completed at two sites: Wattons Ford and Ebblake Bridge.

Wednesday 3 August; The old Roman road at East Knoyle.

Leaders Graham Hodinott and Katherine Barker.

The purpose of this field meeting was to follow the course of the Roman road from Bath to Badbury Rings, where it enters Dorset above Ashmore at ST 918 199. Notes for this first walk will complement a second, held on 4 April 2012, when the Roman road route into the county was completed by beginning at Ludwell. Grateful acknowledgement to Robert Miller for his assistance and for making available his draft paper 'The route of RR46 (Margary no 46) from Ludwell to Monkton Deverill'.

The first walk was from the Seymour Arms on the southern edge of East Knoyle south along the old East Knoyle to Shaftesbury road, then bearing left along the lane to Lower Leigh Farm continuing along the footpath in the same direction, over the stream and up to the junction with Tokes Lane on the East Knoyle parish boundary, then north-east along Tokes Lane through Friar's Farm to Kinghay, thence northwest along the footpath running with a well-marked field boundary bank/hedge and back past Upper Leigh Farm to the East Knoyle, Shaftesbury road back to the Seymour Arms. A bypass now replaces the old north-south A350.

John Newbould commented that the survey of this old route generally followed modern field boundaries with mixed hedges of Hazel, Hawthorn, Blackthorn and Ash. However, one area on the northern boundary of West Tisbury parish contained a substantial Ash coppice, together with a number of standard oaks. The field was an irregular triangle with running water and appeared to have little modern use unlike its neighbouring fields.

Wednesday 6 October; Lambert's Castle – The Devon parish of Hawkchurch and the Dorset parishes of Marshwood and Whitchurch Canocorum

The Dorset County boundary remained essentially unchanged for over 1000 years until the middle part of the nineteenth century when minor adjustments were made with Devon and Somerset. In 1844, Dorset lost the parishes of Dalwood and Stockland to Devon, whilst gaining Thorncombe and parts of Axminster. There was a major reorganization of local government in 1888 with a subsequent tidying up in 1894, when Hawkchurch transferred to Devon, and with it Lambert's Castle. A further review started in 1961, with a result that the southern boundary of Hawkchurch was transferred to the Ridge resulting in Lambert's Castle with its excellent views over the Marshwood Vale and the sea at Charmouth returning to Dorset, together with adjustments at Monkton Wyld, (Wood 1981) and Raymond's Hill.

We initially surveyed the historic plateau of Lambert's Castle. Papworth (2011) describes Lambert's Castle as a univallate hill-fort. The one excavation undertaken in 1990 revealed little about its earlier occupants. We know that the Admiralty established a signal station in 1806, on the south-east summit, which allowed messages to be sent from London to Plymouth in around twenty minutes. From Hampshire, the route went via Pistle Down, Chalbury, Blandford (race-course), Belchalwell (now Bell Hill), Nettlecombe Tout, High Stoy, Toller Down, Lambert's Castle to Dalwood Common. A fair was held on 24 June each year until the 1950s, with a fair house located on or near the earthworks and horse races were held periodically. Evidence of the fair house and racetrack are present today.

Significantly, Lambert's Castle is located to the south of the present B3165, which runs from Lyme Regis, via Uplyme, Raymond's Hill, Marshwood and Clapton in Somerset to Crewkerne with links to the A30. By following the ridge, the route misses the wet clay grounds of the Marshwood Vale in the lowlands. This route provides a vital link for the Church based in Sherborne, and later Sarum, with the port and salt workings of Lyme Regis and may well have existed in pre-Roman times. (Good, 1966).

Lambert's Castle is situated on Greensand overlaying clay. The resulting lowland acid grassland (a scarce habitat in Britain today) is one of the few localities for Mat-grass *Nardus stricta* in Dorset today. The open grassland areas are cattle grazed leaving a sward composed of Bluebell, Heath Bed-straw (*Galium saxatile*) and Tormentil with Bracken on the southern slopes. There are many Crab Apple Trees, Rowan (*Sorbus aucuparia*) is scattered along with Pedunculate Oak and Silver Birch. Many of the south-western boundaries have Beech coppice, which is extensively planted as standards on the northern slopes. To the south is an extensive series of small fields, which were not surveyed in detail, but for example, contain a freshwater spring at SY 373 987 and boundaries containing holly e.g. at SY 3738 9902, important for winter browse.

Our second objective was to survey the pre-1894 boundary from Peter's Gore to Fishponds. Colin Bowditch and I had done a preliminary survey on April 29. From Peter's Gore eastwards the boundary generally follows the hedge line of the C road to Fishponds. However, it generally passes to the east of houses on this side of the road (e.g. the White House), using their garden hedge as the boundary. At Peter's Gore, Bilberry (*Vaccinium myrtillus*) covers the north side of the hedge bank. Bowen (2000) shows this plant scattered across heathlands and acid grasslands across Dorset, but this plant generally found on acidic grassland, heathland and moors in shade-tolerant situations. It is especially common in woods with a northern aspect and in the south of England it prefers humid or shaded sites as here. It is also not tolerant to frost. (Grime *et al.* 2007). Generally,

however, the roadside boundary is a Devon type full hedge bank varying in height from 2 m to around 0.5 m high. It is often covered in Bracken, with Yorkshire Fog (*Holcus lanatus*) and Bluebells forming the dominant vegetation. The woody vegetation cover includes Ash (including a 1 m diameter pollard SY 3738 9893), Hawthorn, Field Maple, Pedunculate Oak (including a 1.2 m pollard SY 37370 98861) and Silver Birch. Other herbs present include Cow Parsley, which is quite dominant in May, Greater Stitchwort (*Stellaria holostea*) and Red Campion.

At SY 373 986, a track cuts off to the right leading to Nash Farm. At this point, also, water from the Lambert's Castle springs leaves the road and passes into a deep natural gully, hidden by trees and lined with ferns. This then joins a watercourse leading to the old fishponds. The boundary passes to the south of the gully, crosses the road and follows a hedge-line to the east of the track for one field length before re-crossing the track and the northern boundary of a triangular field to rejoin the C road. Again at the northern end of the road passes behind houses before rejoining the road at Sandpit. Significantly (to me) at each of the points where the boundary deviates from the road, there is either a substantial coppiced Ash or Field Maple.

REFERENCES

- Bowen, H. (2000) *The Flora of Dorset*. Pisces Publications, Newbury.
- Good, R. (1966) *The Old Roads of Dorset*, 2nd edition H.G. Commin, Bournemouth.
- Grime, J.P., Hodgson, J.G. and Hunt, R. (2007) *Comparative Plant Ecology* 2nd Edn. Castlepoint, Dalbeattie.
- Hutchins, M.J. (2010). The population biology of the early spider orchid *Orphrys sphegodes* Mill. III over three decades. *Journal of Ecology* **98** 867-868. British Ecological Society, London.
- Kirby, K. (2006) Table of Ancient Woodland Indicator Plants in *The Wildflower Key* (ed.) Rose, F. and Reilly, C. Frederick Warne, London.
- Margary Ivan D., (1973), *Roman Roads in Britain*, 3rd edn, London
- Papworth, M (2011) *The Search for the Durotriges*. The History Press, Stroud.
- Wood, R.C.L. (1981) *Dorset — the County Boundary unpublished* paper for Dorset C.C.

Dorset County Museum Music Society

As I write this brief report on our year's activities, four of our season of seven concerts have taken place, and we are looking forward to the visit of Le Chimay String Trio; looking forward not only to what looks like a most attractive programme (Beethoven, Sibelius and Schubert), but also because this is the concert which will mark our 'return home'. When news of the impending Egyptian exhibition broke last summer, we had to act

fast to find an appropriate location for three concerts which had been firmly booked for many months. We were very lucky to be welcomed to the United Church which provided a very acceptable alternative venue – but where is there in Dorchester that can really match up to the Victorian Gallery? We quite understand the reasons for our temporary displacement and are delighted that the exhibition has been such a resounding success – but it will be a great relief to return to the DCM!

We continue our efforts to provide a series of concerts which maintain the highest standards of performance in programmes mixing mainstream fare with more unusual repertoire. Thus we have heard, or will be hearing, string quartets by Haydn and Beethoven, trios by Mozart and Mendelssohn and sonatas by Schumann and Rachmaninov – but we have also enjoyed visits from a brass ensemble and a most entertaining programme of Eastern European folk music and Argentinian tangos. Never let it be said that DCMMS is afraid to push the boundaries at times!

Although our regular subscription list has shrunk somewhat over the past few seasons, numbers of casual visitors (whom we are delighted to welcome) remain at a satisfactory level. At a time when some well-established societies of our type are experiencing serious difficulties or are even facing closure, we plan for the future with confidence. The excellence of the concert space we are able to use is hugely in our favour, and this would be the moment to record our gratitude to Jon Murden and his team for their unfailingly friendly and helpful approach. Some programmes of recitals and chamber concerts held in Dorchester in the 1950s and 60s have recently come to light, and while we may be unable to match the international prestige of the artists who were engaged then (Elizabeth Schwartzkopf and Gerald Moore amongst many others of their ilk gracing the stage of the Plaza), we are proud to continue to bring concerts of the highest standard to the town at very reasonable prices.

Richard Hall, Chairman DCMMS

Dorset Record Society

This has been a busy year for the Record Society, during which we published two volumes.

A Guide to Dorset Manorial Documents was launched, appropriately, on Michaelmas Day (29 September) at a reception attended by the Lord Lieutenant, Mrs Anthony Pitt Rivers. Written by Dr. Mark Forrest of Dorset History Centre, it explains the workings of the manorial system, and the types of document it generated. Well illustrated with examples (and transcriptions), it aims to help the reader understand and interpret these fascinating documents. A Glossary explains the unusual words often encountered. Manorial documents are often perceived as 'difficult', but the Guide opens the door to using them. This volume is No. 2 in the Dorset

Occasional Paper series, and is in A4 format with a glossy cover, priced £6.00.

Volume 16, *Birth, Marriage, Death and Taxes, the Lyme Censuses 1695-1703*, edited by Judith Ford, was launched at a Day School in Lyme Regis in November, organized by Dorset History Network as a joint event with the Record Society. The author gave a talk about the volume, which reproduces the assessments for the Marriage Duty Act, and lists almost everyone living in Lyme during the years in question. It has a full index, and is illustrated. This volume is hardback with a coloured jacket, as is our standard now, and retails at £19.95.

All our volumes can be purchased at the Museum, from the Museum website, or from the Secretary.

Dorset Record Society would like to record their thanks to the Mansel-Pleydell and Cecil Trust for a grant towards the publication of Volume 16, and to The National Archives for assistance with Occasional Paper No. 2. Further volumes are in preparation.

Mrs Ann Smith, Hon General Secretary

Learning Report

Our aim has always been to make the museum intellectually accessible, inspiring and meaningful for everyone. We have been able to expand the learning on offer, and develop new projects with funding from the HLF and other grants, and are now able to offer more approaches to enjoying and understanding the collections in Dorset County Museum than ever before.

Working with Schools

Planning and delivering schools' sessions continues to form a large part of our work, and the learning programme is immensely popular. Flexibility and adaptability lie at the heart of our success when working with schools.

- Tailor made sessions for primary and secondary aged children

Our aim is give as many children and teachers as possible the opportunity to engage directly with the Museum's collections and to demonstrate to them how integral and inspiring this can be to learning right across the curriculum. Our success in this area is demonstrated by the number of teachers and schools who work with us regularly, with more schools now building Museum sessions into their curriculum planning. *Pharaoh: King of Egypt* was understandably popular, providing a very valuable experience for many Dorset and South West pupils; allowing them to experience the magic of real, significant Egyptian artefacts without having to go to London or Cairo.

- Encouraging new schools to visit

The majority of our teaching takes place as the result of direct contact from the schools involved. This year our uptake from schools in the Somerset area has increased. Somerset schools that visited in the summer term returned for the Pharaoh exhibition.

- Outreach sessions

Our outreach sessions are an essential link to schools that, for a variety of reasons, are unable to visit the museum. The pupils are given intellectual access to the collection through artefacts and activities and this year a new development was to work for a day with a Bournemouth school 'excavating' their allotment area and recreating archaeological activities.

- Work Experience placements

We work closely with the Thomas Hardy School to provide work experience for their Year 12 and Year 13 students. We offer three-day placements, which allow the students to experience many aspects of life in a museum. This year we have increased our intake and included students from as far apart as Beaminster and Builth Wells.

Children and Families

- The Museum Club, monthly sessions for DNHAS Junior members

The Museum Club members are encouraged to explore and to express their own ideas and opinions. Highlights this year have included preparing their own case of objects for display in the Victorian Gallery and making a Roman catapult to fire on Maiden Castle.

- Family Activities every Wednesday in the school holidays

These sessions help adults and children to feel relaxed and secure in a museum environment; they also foster lasting curiosity and confidence; many families come repeatedly. Workshops allow us to introduce families to the collection and our increasingly ambitious programme enables them to experiment creatively. The range offers something for everyone.

- Free family trails

Family Trails continue to be popular and we have created new ones for visitors to pick up from reception. The Time Travelling Thomas trail enables families to explore parts of the collection they might not otherwise have found, or not known how to engage with. They also enable visitors to follow a theme throughout the collection travelling through time as they do so.

- Sleepovers

The annual family sleepover took place in October, during the Pharaoh: King of Egypt exhibition and was understandably popular; requests for tickets were being made before the summer holidays. We have been able to extend our sleepover offer to Guide and Scout groups, the uptake increasing as word has spread

Working with young people

Young independent visitors are historically a hard group to attract to museums. In order to bridge this gap we recognise that it is essential to work with young people directly, to shape events that are both relevant and stimulating.

We were very fortunate to be included as a partner in the Dorset Youth Association HLF bid, which has allowed us to work closely with a group of young people alongside their youth leaders. This has increased the skills of our learning team and we are working together with the young people to produce an exhibition at the Museum, celebrating 70 years of the Dorset Youth Service in July 2012.

Adult and Community

• Museum Makers

We are now in our third year of working with Museum Makers, a group of adults with learning disabilities from across the community. We offer the opportunity to engage independently, as part of a small group, at the Museum. The sessions we offer provide a safe and supportive environment in which to experiment and give participants a direct outlet for their creativity. By gradually building confidence, respect and self-esteem over the last three years the Museum Makers were able, this year, to stage a hugely successful public performance of 'The Withered Arm', an adaptation of the Hardy short story. This was produced and directed by Tim Laycock and filmed by Andy Worth of DCC, with the New Hardy Players providing costumes and additional actors.

Museum Makers has continued to be funded via grants from the HLF and DCC.

• Knit the Jurassic Coast

This funded project allowed older members of the village of Puddletown to teach Year 5 pupils to knit. Both the pupils and the village community then knitted a Jurassic Sea and filled it with knitted dinosaurs and marine reptiles. A professional musician directed Year 6 pupils and produced the Jurassic Fantastic rap, a local poet worked with Year 7 pupils who created a series of poems linked to the death and subsequent discovery of the Weymouth Bay pliosaur. Year 8 worked with a paper-mâché artist to craft an enormous model of the pliosaur's head. The school and community held an open day at the Museum to celebrate their work and the knitted panel will be exhibited in the Jurassic Gallery.

Marketing Report 2011

The year started on a high with record visitor numbers for Georgian Faces. Interest was kept alive by articles, continued press stories and adverts placed in arts magazines, Dorset Life and local publications. With help from volunteer John Grantham, national coverage for the exhibition was achieved in publications including *The Spectator*, *The Independent*, *British Art Journal*,

Burlington Magazine, *Museums Journal*, *Country Life*, *The Guardian* and the *NADFAS Review*.

The new tea room was successfully opened in February by the Mayor and Mayoress of Dorchester. Other popular events such as the book sale, Valentine fayre, Whitsun and summer holiday family activities and Museums at Night were widely promoted and achieved high attendance.

July saw the official opening of the Pliosaur display by Sir David Attenborough, with huge press and media coverage, following six months of planning and pre-publicity in coordination with the media team at DCC. Promotion continued around the summer exhibition, Whirrs, Cogs and Thingamabobs. Associated events including the Open Day and the Sci-Fi exhibition proved extremely popular with families.

Publicity for the Pharaoh exhibition began in August with bespoke posters and 10,000 flyers produced and distributed widely around the county. Specific advertising was run out to schools; stories, events and talks were covered in successive press releases. Record visitor numbers (11,000) were achieved in the first six weeks. The Cranborne exhibition was also heavily promoted from August, receiving much local coverage.

During the year over 80 advertisements were placed in twenty-seven different publications covering the whole of Dorset. Press coverage and considerable free publicity were obtained from the *Dorset Echo*, *Western Gazette*, *View From Dorchester*, *Dorset Magazine*, *Dorset Life*, *Art of England*, *Listed*, *Register Magazine*, *Marshwood Vale Magazine*, *Evolver*, the *Purbeck Gazette*, *Blackmore Vale Magazine*, the *Big Issue*, *Dorset Society* and *Dorchester Life* magazine.

Market research was carried out during the summer months and is continuing into 2012. The results will be further analysed at Easter 2012 to guide future decisions.

Rachel Cole

Exhibitions Programme 2011

Date	Exhibition Title
15 January – 30 April	Georgian Faces: Portrait of a County
12 May – 25 June	Ridgeway Voices
2 July – 15 October	Whirrs, Cogs and Thingamabobs: A History of Gadgets
15 October – 22 January 2012	Pharaoh: King of Egypt
22 October – 21 January 2012	Cranborne: Art in the Shadow of the Chase

Dorset Natural History & Archaeology Society Events List

January 2011 – December 2011

Date	Time	Event/Activity	Venue
Monday 10/01/11	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 12/01/2011	1900 – 2200	Geology Lecture	Victorian Gallery
Friday 14/01/2011	1800 – 2100	Georgian Faces Preview	Temp Exhibition
15/01/2011-30/04/2011		Georgian Faces: Portrait of a County	Temp Exhibition
Monday 17/01/2011	1000 – 1300	Museum Makers	Learning Base
Wednesday 19/01/2011	1900 – 2200	Music Society	Victorian Gallery
Thursday 20/01/2011	1830 – 2030	Georgian Faces Members Event	Victorian Gallery
Friday 21/01/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Saturday 22/01/2011	1030 – 1230	Museum Club – Be A Curator	Victorian Gallery
Tuesday 25/01/2011	1000 – 1300	Museum Makers	Victorian Gallery
Friday 28/01/2011	1900 – 2100	Six Digby Brothers – Georgian Faces	Victorian Gallery
Monday 31/01/2011	1000 – 1300	Museum Makers	Victorian Gallery
Thursday 03/02/2011	1000 – 1700	NPG Day School	Victorian Gallery
Friday 04/02/2011	1900 – 2100	Archaeology Lecture	Victorian Gallery
Saturday 05/02/2011	0900 – 1330	Austen/Hardy Workshop	Victorian Gallery
Monday 07/02/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 09/02/2011	1900 – 2100	Geology Lecture	Victorian Gallery
Thursday 11/02/2011	1830 – 2030	Art Fund Lecture – Georgian Faces	Victorian Gallery
Monday 14/02/2011	1000 – 1300	Museum Makers	Victorian Gallery
Saturday 12/02/2011	1030 – 1230	Museum Club – Up Up and Away	Victorian Gallery
Tuesday 15/02/2011	1100 – 1300	Museum Makers Art Group	Learning Base
Tuesday 15/02/2011	1300 – 1500	Dorset Youth Plan	Learning Base
Thursday 17/02/2011	1300 – 1400	Piano Trio Lunchtime Concert	Victorian Gallery
Friday 18/02/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Monday 21/02/2011	1930 – 2100	Dorchester Association	Library
Wednesday 23/02/2011	1030 – 1230	Family Activity: Paint a Portrait	Learning Base
Friday 25/02/2011	1900 – 2100	Lecture: Grand Tour Ottoman Empire	Victorian Gallery
Saturday 26/02/2011	1900 – 0200	Paranormal Investigation	Whole Building
Monday 28/02/2011	1000 – 1300	Museum Makers	Victorian Gallery
Friday 04/03/2011	1900 – 2100	Archaeology Lecture	Victorian Gallery
Saturday 05/03/2011	1030 – 1230	Museum Club – Pancake Race	Victorian Gallery
Saturday 05/03/2011	1900 – 2100	Travellers' Tales	Victorian Gallery
Monday 07/03/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 08/03/2011	1900 – 2100	Curating William Barnes	Victorian Gallery
Wednesday 09/03/2011	1900 – 2100	Geology Lecture	Victorian Gallery
Thursday 10/03/2011	1800 – 2130	Thomas Hardy School Exam Recital	Victorian Gallery
Tuesday 15/03/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 16/03/2011	1900 – 2100	Music Society	Victorian Gallery
Friday 18/03/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Saturday 19/03/2011	1200 – 2200	Summer Music Concert	Victorian Gallery
Monday 21/03/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 22/03/2011	1000 – 1300	Museum Makers Art	Learning Base
Tuesday 22/03/2011	1300 – 1400	Thomas Hardy School Recital	Victorian Gallery
Friday 25/03/2011	1900 – 2100	Lecture: 18th Century Dorset Doctors	Victorian Gallery
Monday 28/03/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 30/03/2011	1400 – 1600	Georgian Faces Guided Tour	Temporary Exhib
Friday 01/04/2011	1900 – 2100	Archaeology Lecture	Victorian Gallery
Friday 01/04/2011	1000 – 1430	Creative Writing Workshop	Learning Base
Saturday 02/04/2011	1800 – 2300	Merriott Ball	Victorian Gallery
Saturday 02/04/2011	1000 – 1630	Textiles Day School	Victorian Gallery
Monday 04/04/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 05/04/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Thursday 07/04/2011	1200 – 1400	Piano Trio Lunchtime Concert	Victorian Gallery

Date	Time	Event/Activity	Venue
Thursday 07/04/2011	1800 – 2100	Thomas Hardy School Exam Recital	Victorian Gallery
Friday 08/04/2011	1900 – 2100	The Bastard Brothers – Georgian Faces	Victorian Gallery
Saturday 09/04/2011	Overnight	Yetminster Scouts sleepover	Various
Monday 11/04/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 12/04/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Wednesday 13/04/2011	1030 – 1230	Family Activities: Make a Roman Shield	Victorian Gallery
Wednesday 13/04/2011	1900 – 2100	Geology Lecture	Victorian Gallery
Thursday 14/04/2011	1200 – 1400	DCMMS Lunchtime Concert	Victorian Gallery
Thursday 14/04/2011	1600 – 1830	Private View Georgian Faces	Temporary Exhib
Friday 15/04/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Monday 18/04/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 20/04/2011	1030 – 1230	Family Activities: The Tudors	Victorian Gallery
Friday 29/04/2011	1900 – 2100	Dorset Ramblers Play Reading	Victorian Gallery
Saturday 30/04/2011	1030 – 1230	Museum Club: Over to you	Victorian Gallery
Thursday 05/05/2011	1800 – 2000	Hardy Manuscript Launch	Victorian Gallery
Saturday 07/05/2011	1000 – 1600	Book Sale	Victorian Gallery
Monday 09/05/2011	1000 – 1600	Book Sale	Victorian Gallery
11/05/2011 – 25/06/2011		Ridgeway Voices	Temp Exhibition
Saturday 14/05/2011	1700 – 2100	Museums at Night	All Galleries
Wednesday 18/05/2011	1900 – 2130	Record Society Book Launch	Jurassic Gallery
Friday 20/05/2011	1300 – 1400	Cornerstones Lunchtime Concert	Victorian Gallery
Friday 20/05/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Saturday 21/05/2011	1030 – 1230	Museum Club – Maytime	Victorian Gallery
Monday 23/05/2011	1000 – 1300	Museum Makers	Victorian Gallery
Sunday 29/05/2011	1800 – 2100	Dorset Piano Trio Concert	Victorian Gallery
Tuesday 31/05/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Wednesday 01/06/2011	1030 – 1230	Family Activities: Ridgeway Voices	Victorian Gallery
Saturday 04/06/2011	1000 – 1300	Historical Fiction Judgement Day	Victorian Gallery
Monday 06/06/2011	1000 – 1300	Museum Makers	Victorian Gallery
Friday 10/06/2011	1930 – 2200	Ridgeway Voices, Storytelling	Victorian Gallery
Saturday 11/06/2011	1000 – 1700	Powys Study Day	Library
Monday 13/06/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 14/06/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Thursday 16/06/2011	1600 – 2030	Humphries Kirk Summer Party	Victorian Gallery
Thursday 16/06/2011	1930 – 2100	Fairgrounds at War	Library
Saturday 18/06/2011	1030 – 1230	Museum Club: Bug Hunt	Victorian Gallery
Monday 20/06/2011	1000 – 1300	Museum Makers	Victorian Gallery
Monday 27/06/2011	1000 – 1300	Museum Makers	Victorian Gallery
02/07/2011 – 15/10/2011		Whirrs, Cogs & Thingamabobs	Temp Exhibition
Monday 04/07/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 05/07/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Thursday 07/07/2011	1830 – 2000	Georgian Faces Stewards Thank You	Victorian Gallery
Friday 08/07/2011	0900 – 1900	Pliosaur Launch	Jurassic Gallery
Saturday 09/07/2011	1030 – 1230	Museum Club: Whirrs and Coggs	Victorian Gallery
Saturday 09/07/2011	1700 – 1900	Knit Jurassic Coast Evening	Victorian Gallery
Monday 11/07/2011	1200 – 1400	Thomas Hardy School Lunchtime Concert	Victorian Gallery
Monday 11/07/2011	1000 – 1300	Museum Makers	Victorian Gallery
Tuesday 12/07/2011	1000 – 1300	Museum Makers Art Group	Learning Base
Wednesday 13/07/2011	0900 – 2030	Museum Makers Hardy Performance	Victorian Gallery
Saturday 16/07/2011	1100 – 1600	Rotary Club – Roman Holiday	Learning Base
Saturday 16/07/2011	1830 – 2200	Regional Furniture Society Conference	Victorian Gallery
Saturday 23/07/2011	1000 – 1700	Museum Summer Fair	Victorian Gallery
Tuesday 26/07/2011	0930 – 1600	FBA Finds Identification Day	Library
Wednesday 27/06/2011	1030 – 1230	Family Activities: Whirrs and Coggs	Victorian Hall
Saturday 30/06/2011	2000 – 0200	Paranormal Investigation	Various

Date	Time	Event/Activity	Venue
Monday 01/08/2011	1000 – 1300	Museum Makers Party	Learning Base
Wednesday 03/08/2011	1030 – 1230	Family Activities: Meccano	Victorian Gallery
Wednesday 10/08/2011	1030 – 1230	Family Activities: Elastic Power	Victorian Gallery
Wednesday 17/08/2011	1030 – 1230	Family Activities: Crazy Colour	Victorian Gallery
Wednesday 24/08/2011	1030 – 1230	Family Activities: Meccano II	Victorian Gallery
Wednesday 31/08/2011	1030 – 1230	Family Activities: Make Some Noise	Victorian Gallery
Friday 02/09/2011	1530 – 1730	Whirs and Cogs Talk	Temp Exhibition
Friday 02/09/2011	1700 – 2000	Knit the Museum Open Evening	Various
Saturday 03/09/2011	1000 – 1700	Book Sale	Victorian Gallery
Monday 05/09/2011	1000 – 1700	Book Sale	Victorian Gallery
Monday 12/09/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 14/09/2011	1830 – 2030	Geology Lecture	Victorian Gallery
Thursday 15/09/2011	1600 – 2100	SVP/CA Conference Sessions	Various
Friday 16/09/2011	1900 – 2100	Dorchester Association	Victorian Gallery
Saturday 17/09/2011	1700 – 2200	Tess the Opera	Victorian Gallery
Monday 19/09/2011	1000 – 1300	Museum Makers	Victorian Gallery
Wednesday 21/09/2011	1800 – 2200	Music Society Concert	Victorian Gallery
Saturday 24/09/2011	1030 – 1230	Museum Club: Attack and Defence	Victorian Gallery
Monday 26/09/2011	1000 – 1300	Museum Makers	Victorian Gallery
Thursday 29/09/2011	1900 – 2200	Travellers Tales – UK to Beijing by Bicycle	Temp Exhibition
Friday 30/09/2011	1900 – 2100	Gala Lecture: Birth of Dino-Mania	Temp Exhibition
Monday 03/10/2011	1000 – 1300	Museum Makers	Learning Base
Friday 07/10/2011	1900 – 2100	Archaeology Lecture – Staffordshire Hoard	Temp Exhibition
Saturday 08/10/2011	1030 – 1230	Museum Club: Apple Day	Learning Base
Saturday 08/10/2011	All Night	Brownies Sleepover	Learning Base
Wednesday 12/10/2011	1900 – 2100	Geology Lecture: Building Stones	Temp Exhibition
Friday 14/11/2011	1900 – 2200	Dorchester Association	Temp Exhibition
15/10/2011 – 22/01/2011		Pharoah: King of Egypt	Victorian Gallery
Saturday 15/10/2011	1600 – 1930	DAC Public Lecture: Roman Mosaics	Temp Exhibition
Friday 21/10/2011	1700 – 2030	Official Preview of Pharoah	Victorian Gallery
22/10/2011 – 21/01/2012		Cranborne and Its Art	Temp Exhibition
Saturday 22/10/2012	1100 – 1300	Preview Party	Temp Exhibition
Saturday 22/10/2012	All Night	Egyptian Family Sleepover	Various
Wednesday 26/10/2012	1030 – 1230	Family Activity: The Big Draw	Learning Base
Monday 31/10/2012	1000 – 1300	Museum Makers	Temp Exhibition
Wednesday 02/11/2011	1900 – 2100	Travellers Tales: Monuments	Temp Exhibition
Friday 04/11/2011	1900 – 2100	Archaeology Lecture: Durotrigean Project	Temp Exhibition
Saturday 05/11/2011	0900 – 1700	DLHGp Day School	Temp Exhibition
Monday 07/11/2011	1000 – 1300	Museum Makers	Learning Base
Wednesday 09/11/2011	1900 – 2100	Jurassic Coast Lecture: Digging Chesil	Temp Exhibition
Thursday 10/11/2011	1000 – 1200	Bincombe Valley School	Learning Base
Monday 14/11/2011	1000 – 1300	Museum Makers	Learning Base
Wednesday 16/11/2011	1600 – 2000	Jurassic Coast Networking Event	Jurassic Gallery
Thursday 17/11/2011	1900 – 2100	Egyptology Lecture: Pharoah: the God in the Man	Temp Exhibition
Friday 18/11/2011	1900 – 2000	Lecture: Labourers Lots	Temp Exhibition
Saturday 19/11/2011	1030 – 1230	Museum Club	Learning Base
Monday 21/11/2011	1000 – 1300	Museum Makers	Learning Base
Tuesday 22/11/2011	1900 – 2100	DCMMS Meeting	Library
Friday 25/11/2011	1900 – 2100	Dorchester Association	Temp Exhibition
Saturday 26/11/2011	0900 – 1700	Dorset Local History Day School	Temp Exhibition
Monday 28/11/2011	1000 – 1300	Museum Makers	Learning Base
Thursday 01/12/2011	1700 – 2100	Christmas Cracker	Various
Friday 02/12/2011	1900 – 2100	Archaeology Lecture: Regional Politics	Temp Exhibition

Date	Time	Event/Activity	Venue
Monday 05/12/2011	1000 – 1300	Museum Makers	Learning Base
Wednesday 07/12/2011	1900 – 2100	Travellers' Tales: Gundhis in the Sahara	Temp Exhibition
Saturday 10/12/2011	All Night	Private Sleepover	Various
Monday 12/12/2011	1000 – 1300	Museum Makers	Learning Base
Wednesday 14/12/2011	1900 – 2100	Jurassic Coast Lecture: Pliosaur Fossil Secrets	Temp Exhibition
Thursday 15/12/2011	1900 – 2100	Egypt Lecture: Finding Pharaoh: Royal Mummies	Temp Exhibition
Saturday 17/12/2011	1030 – 1230	Museum Club	Learning Base

Field Secretary's Report

The Dorset Wildlife Trust celebrated its fiftieth anniversary in April 2011, following the establishment of its first nature reserve on Brownsea Island in 1961. With this in mind, meetings were arranged during April, to visit Brownsea Island and do some research into the possible pollinators of the Early Spider Orchid (the Trust's logo). We also visited one of the Trust's newest reserves – Hibbit Woods, Halstock. Dorset also celebrated the tenth anniversary of the establishment of the Jurassic Coast as a World Heritage Site. It was, therefore appropriate that field meetings on the coast were arranged. In addition, members undertook coastal surveys for the National Trust at Ringstead, Cogden and West Bexington.

Field meetings are held throughout the year to support various sub-groups within the Society

Dorset Flora Group: Six meetings were held to survey important botanical areas within the County. In particular, permission was given to visit Chetterwood where we located Bastard Balm at its only known Dorset locality. We were also pleased to find Wild Liquorice here, which is also considered rare within the County.

Dorset Invertebrate Recording Group: Two meetings, with the first at Dancing Ledge to look for pollinators of the Early Spider Orchid. The second was to survey the National Trust's Ringmoor and Turnworth property to record plant galls in the light of new identification guides and a New Naturalist book on the subject published in 2011.

Dorset County Boundary Group: Four public field meetings were held across the County to support this survey. In many instances, we are joined by members of our adjacent county's Natural History Society and by members of local history societies.

In addition, we have continued our winter wildlife survey of the Frome Valley, starting in Dorchester and finishing in Wareham, on its eleventh successive year. Recent results from this survey show the continued decline in Lapwing numbers across the area. The mild winter weather in late 2011 and early 2012 further meant that we did not see our usual influx of thrushes such as Redwing or Fieldfare.

Your Field Secretary represents this Society as a trustee of Dorset Environmental Records Centre. We continue to support the Records Centre with a broad

range of records both from our field meetings and other surveys.

He also represents the Society on the steering committee of the National Trust's Purbeck Teams Diver Project. Cyril Diver was a clerk in the pre-war House of Commons. Post-war, he was invited by Herbert Morrison to head and organise the Nature Conservancy.

During the recess he would visit relatives in Bournemouth, and whilst there, made a detailed study of the plants and animals of South Haven Peninsula. The results of his surveys were transferred onto 1:10,600 maps divided into 100 square yard squares. There were large collections of specimens. On his death, all materials and samples were transferred to Nature Conservancy, Furzebrook, and subsequently to CEH Winfrith. On the closure of Winfrith arrangements were made to transfer the invertebrate collection to the Hope Museum, Oxford University. The plant collection is with Robin Walls, who is cataloguing and mounting specimens for eventual transfer to our collections, whilst the huge volumes of paperwork are held at the Dorset History Centre.

The National Trust is seeking funding for a project officer who will supervise the transfer of data into a modern digital archive and also to encourage field naturalists to rework South Haven to look at change. We hope to assist with this project within our resources.

John Newbould

Membership and Visitor Figures

	2009	2010	2011
Visitor Numbers (excl. Events)	24,052	21,944	39,845
Events Visits*	n/a	6,074	7,326
Learning Encounters**	4,280	4,753	5,799
Society Membership (all types)	1,821	1,889	1,92

* 2010 is the first year from which an auditable method of recording attendance at special events has been in place since 2005.

** Including school visits to Dorset County Museum, Museum Club and Family Activity attendance, Outreach activities (schools and other sites) and the 'Museum Makers' group for adults with learning disabilities.

Lectures and Meetings in the Museum

Date	Event	Description	Speakers
12.01.11	Geology Lecture University of Oxford	Preserved in Amber: A New Dimension	Professor Martin Brazier,
21.01.11	Dorchester Association	History of Goulds	Roger Gould and Rebecca Murphy
22.01.11	Museum Club	Be a Curator	Pippa Brindley
28.01.11	Georgian Faces Lecture	Six Digby Brothers at Sherborne Castle	Ann Smith
03.02.11	Day School	Understanding British Portraits Seminar	National Portrait Gallery & DNHAS
04.02.11	Archaeology Lecture	Cursus Country – Continuing Researches on Cranborne Chase	Martin Green
05.02.11	Austen/Hardy	Workshop	
09.02.11	Geology Lecture	The Arrival of Man: Homo Sapiens vs Neanderthal	Professor Peter Andrews, University of Oxford
11.02.11	Art Fund Lecture	Georgian Faces: Portrait of a County	Gwen Yarker
12.02.11	Museum Club	Up, Up and Away	Pippa Brindley
17.02.11	Dorchester Piano Trio	Lunchtime Concert	
18.02.11	Dorchester Association	Cerne Abbas – A Timeline	George Mortimer and Anthony Garvey
23.02.11	Family Activity	Paint a Portrait	Pippa Brindley
25.02.11	Georgian Faces Lecture	The Grand Tour of the Ottoman Empire	Philip Mansel
04.03.11	Archaeology Lecture	Castles: How were they meant to be seen	Chris Moule
05.03.11	Museum Club	Pancake Race	Pippa Brindley
05.03.11	Travellers' Tales	Rajasthan, India	Roland Tarr
09.03.11	Geology Lecture	Unlocking Meteorites, Minerals and Natural Nanoparticles	Professor Andy Flee, History Museum
12.03.11	Georgian Faces	The 18th Century Gentleman's Pleasures and Pastimes	Marcus Cannon
18.03.11	Dorchester Association	The Changing Role of Museums	Jon Murden
25.03.11	Georgian Faces Lecture	William Cuming: 18th Century Dorchester Physician	Peter Down
01.04.11	Archaeology Lecture	Worth Matravers: Buildings and Burials, Rituals and Rubbish	Lillian Ladle
01.04.11	Workshop	Creative Writing	DNHAS
02.04.11	Day School	Tudor Textiles	Various
07.04.11	Dorchester Piano Trio	Lunchtime Concert	
08.04.11	Georgian Faces Lecture	The Bastard Brothers of Blandford	Polly Legg
13.04.11	Geology Lectures	New Life in the Ocean Depths	Jon Copley - National Oceanographic Centre
14.04.11	Lunchtime Concert	Mike Denham	
20.04.11	Family Activities	The Tudors	Pippa Brindley
22.04.11	Play Reading	The London Hermit: or Rambles in Dorsetshire	New Hardy Players
30.04.11	Museum Club	Over to you	Pippa Brindley
07.05.11	Book Sale	Volunteers	
09.05.11	Book Sale	Volunteers	
14.05.11	Special Event	Museums at Night	Rachel Cole and Pippa Brindley
20.05.11	Museum Club	Maytime	Pippa Brindley
20.05.11	Dorchester Association	Sir Ernest Debenham and Farming at Briantspuddle	Ann King
29.05.11	Lunchtime Concert	Mike Denham	
01.06.11	Family Activities	Ridgeway Voices	Pippa Brindley
11.06.11	Study Day	Powys Study Day	
15.06.11	Special Event	Fairgrounds at War	Kay Townsend
18.06.11	Family Activity	Bug Hunt	Pippa Brindley
08.07.11	Pliosaur Launch		Sir David Attenborough

Date	Event	Description	Speakers
09.07.11	Museum Club	Whirrs and Coggs	Pippa Brindley
23.07.11	Summer Fair	Stalls and stands in the Victorian Gallery	
26.07.11	CBA Festival	Finds Identification Day Trevarthen	Ciorstadh Hayward
03.08.11	Family Activities	Meccano	Jon Murden & Pippa Brindley
10.08.11	Family Activities	Elastic Power	Pippa Brindley
17.08.11	Family Activities	Crazy Colour	Pippa Brindley
24.08.11	Family Activities	Meccano II	Jon Murden & Pippa Brindley
31.08.11	Family Activities	Make some Noise	Pippa Brindley
02.09.11	Special Event	Whirrs and Coggs	Maurice Collins
03.09.11	Book Sale	Volunteers	
05.09.11	Book Sale	Volunteers	
14.09.11	Geology Lecture	Adapting to coastal change along the Coastal Jurassic Coast	Rupert Lloyd, Dorset Pathfinder Project
16.09.11	Dorchester Association	The Dorset History Centre – Present and Future	Sam Johnston
24.09.11	Museum Club	Attack and Defence	Pippa Brindley
29.09.11	Travellers' Tales	Why don't you fly?	Chris Smith
30.09.11	Gala Lecture	The Birth of Dino-Mania	Professor Hugh Torrens Keele University
07.10.11	Archaeology Lecture	The Staffordshire Hoard and its Relevance to Wessex	Professor David Hinton, University of Southampton
08.10.11	Museum Club	Apple Day	Pippa Brindley
12.10.11	Geology Lecture	Building Stones: Their contribution to Society the landscape of the Jurassic Coast	Mike Barr, Geological
14.10.11	Dorchester Association	Charminster: A Saxon Minster?	John Askew
15.10.11	DAC Public Lecture	The Hinton St Mary Mosaic	Professor Roger Ling, University of Manchester and Roger Peers
22.10.11	Sleepover	Activities surrounding Pharaoh	Pippa Brindley
26.10.11	Family Activity	The Big Draw	Pippa Brindley
02.11.11	Travellers' Tales	Monuments, Landscapes and Wildlife of Tamil Nadu and Kerala	Roland Tarr
04.11.11	Archaeology Lecture	Tribe and Prejudice: the Durotriges Project Excavations 2009–11	Miles Russell, Bournemouth University
05.11.11	Dorset Local History Group Day School	Kingdom and Civitas, Shire and See: the making of the counties of Wessex	Various
09.11.11	Geology Lecture	Shingle Wars: Chesil Beach	Malcolm Bray, University of Portsmouth
17.11.11	Egyptology Lecture	Pharaoh: the God in the Man	Professor Alan Lloyd, Swansea University
18.11.11	Special Event	Labourer Lots	Bonny Sartin
19.11.11	Museum Club	Rock 'n' Roll	Pippa Brindley
25.11.11	Dorchester Association	Women of Dorset	Diana Trenchard
26.11.11	Dorset Local History Group Day School	Dorset Folklore and Folklorists	Various
01.12.11	Christmas Cracker	Sci Fi Characters, Music by POP club	Various
02.12.11	Archaeology Lecture	South Dorset without Wessex	Stuart Needham
07.12.11	Travellers' Tales	Gundi-Hunting in the Sahara	Roger Peers
14.12.11	Geology Lectures	CT-scanning and geological material Science	Mark Mavrogordato University of Southampton
15.12.11	Egyptology Lecture	Finding Pharaoh: the discovery of the Royal mummies of Egypt	Aidan Dodson, University of Brunel
17.12.11	Museum Club	Christmas Party	Pippa Brindley

Public Bookings at Dorset County Museum

2011	Visits
Art Fund	1
Cornerstones	1
DCM Music Society	4
Dorset Local History Group	1
Dorchester Association	10
Dorchester Piano Trio	3
Dorset Ramblers	1
Dorset Youth Plan	
Historical Fiction	1
New Hardy Players	1
Paranormal Adventures	2
Powys Society	1
Private	6
Dorset Record Society	1
Regional Furniture Society	1
Dorchester Rotary Club	1
Symposium of Vertebrate Palaeontology and Comparative Anatomy	1
Thomas Hardy Society	4
Thomas Hardy School	4
William Barnes Society	1
	46

Field Meetings

Glossary

DCBG	Dorset County Boundary Group
DFG	Dorset Flora Group
DIRG	Dorset Invertebrate-recording Group

06.01.11	DNHAS Survey	Frome Valley Winter Wildlife
03.02.11	DNHAS Survey	Frome Valley Winter Wildlife
03.03.11	DNHAS Survey	Frome Valley Winter Wildlife
31.03.11	DNHAS Survey	Frome Valley Winter Wildlife
06.04.11	DCBG	Patson Hill
18.04.11	DIRG	Dancing Ledge
28.04.11	DFG	Stonebarrow (NT Golden Cap estate)
30.04.11	DIRG	Brownsea Island
14.05.11	DFG	Stubhampton Bottom
01.06.11	DCBG	Stour Valley
03.06.11	DFG	Sutton Poyntz Waterworks
03.06.11	DNHAS Archaeology Group	Poundbury Hill Fort
01.07.11	DNHAS Archaeology Group	Badbury Rings
29.09.11	DNHAS Survey	Frome Valley Winter Birds
29.09.11	DIRG	National Trust Ringmoor
10.09.11	DFG	Marsh Gentian on Studland and Godlingston Heaths
05.10.11	DCBG	Lambert Castle

Researchers and Subjects

Date	Name	Subject
11.01.11	A Basedon	Stur Newton
23.02.11	T. Hardy	St James, Kingston
21.03.11	J. Dillon	Thomas Hardy photographs
00.03.11	J. Davey	Anglo-Saxon pottery from Shaftesbury
06.04.11	J. Smith	Community plays
06.04.11	G. Pope	Community plays
13.04.11	J. Smith	Community plays
13.04.11	G. Pope	Community plays
19.04.11	B. Brooks	Oxford clay / blue lias ecology
20.04.11	J. Smith	Community plays
20.04.11	G. Pope	Community plays
21.04.11	G. Pope	Community plays
27.04.11	G. Pope	Community plays
00.04.11	R. Davis	Broom, axes and C.E. Bean
19.07.11	J. Slater	Maiden Castle metal-working debris
19.07.11	R. Doonan	Maiden Castle metal-working debris
19.08.11	E. Durham	Colliton Park and figurines
17.08.11	D. Riley	Maiden Castle skeletons and weapons
21.09.11	A. Bassant	University museum report
00.10.11	E. Schech	Iron Age beads
00.10.11	R. Davis	Flint artefacts from Blashenwell
23.11.11	Mr and Mrs Dunmore	Lott and Walne
28.11.11	H. Pioffet	Pottery from Hambledon Hill
00.11.11	K. Welham	Clavell's Glasshouse, Kimmeridge
00.11.11	R Hosfield	Flint axes from Broom

Index

- A35 Weymouth Road and Stinsford roundabouts, Dorchester, archaeological monitoring, 105
- Abbotsbury Castle, the site of a naval signal station during the war with Revolutionary France, 17–25
- Acton, Langton Matravers:
 archaeological observations and recording of geotechnical test pits in Home Field, 106–107
 archaeological observations and recording of geotechnical test pits at Lewis Quarries, 107
- Bailey, Alan, and Katherine Barker, *World War II: Dorset and the Home Front*, 161–162
- Ballard Down, near Swanage, the site of a naval signal station during the war with Revolutionary France, 17–25
- Bankes, W. Edward (1702–1729) and his letters from India, 43–49
- Barford Farm, Pamphill, archaeological investigations including geophysical survey, 107–108
- Barker, Katherine, *The Dorset County Boundary Survey*, 145
- Barker, Katherine, and Alan Bailey, *World War II: Dorset and the Home Front*, 161–162
- Barrass, K, *A Very Peculiar Practice: Preliminary Research into the Post-Firing Perforation of Late Iron Age/Romano-British Pottery Vessels from South-East Dorset*, 69–72
- Barton Farm, Sherborne, archaeological evaluation, 109
- Bayard Dairy, Upwey, Weymouth, archaeological evaluation, 112–113
- Bellamy, Peter, *St Mary's Church, Glanvilles Wootton*, 106
- Bellamy, Peter, *Unit 9A, Grove Trading Estate, Dorchester*, 105
- Bellamy, Peter, *Lewis Quarries, Acton, Langton Matravers*, 107
- Bellamy, Peter, *Morecombelake to Charmouth, Stonebarrow Hill*, 107
- Bellamy, Peter, *Portland House, Belle Vue Road, Weymouth*, 113
- Bellamy, Peter, *Sandsfoot Castle, Weymouth*, 113–114
- Bellamy, Peter, and Mike Trevarthen, *Hengistbury Head, Bournemouth*, 103
- Bellamy, Peter, and Mike Trevarthen, *Redlands Sports Centre, Weymouth*, 113
- Bellamy, Peter, and Mike Trevarthen, *St Mary's Church, Chickerell*, 104
- Bellamy, Peter, and Mike Trevarthen, *17 Sweethill Road, Southwell, Portland*, 108
- Bere Regis, geophysical survey at Rogershill Farm, 103
- Blandford St Mary, archaeological monitoring during construction of a new brewery for Hall and Woodhouse, 103
- Bournemouth:
 archaeological watching brief during construction of cattle handling areas and evaluation of site of new visitor centre on Hengistbury Head, 103
 archaeological observations and recording during laying of a water pipe on Kinson Common, 103
- Brickfields Business Park, Gillingham, archaeological evaluation of site of proposed new office block on adjacent land, 106
- Bryanston School, archaeological monitoring during construction of new classrooms, 103–104
- Butterfly report, 130–135
- Carter, Daniel, *Bryanston School, Bryanston*, 103–104
- Carter, Daniel, *Extension to Shaftesbury Museum, Gold Hill, Shaftesbury*, 108
- Carter, Daniel, *Hall and Woodhouse Breccery, Bournemouth Road, Blandford St Mary*, 103
- Carter, Daniel, *Land East of Shaftesbury, The Maltings and Pembroke Gate*, 109
- Carter, Daniel, *St Giles House, Wimborne St Giles*, 114
- Cattistock, Sir John Strode's building accounts for Chantmarle 1612–1623, 37–41
- Cerne Abbas, lead pendant, 73–74
- Chantmarle, Cattistock, Sir John Strode's building accounts 1612–1623, 37–41
- Cheetham, Paul, Hannah Simpson and Iain Hewitt, *East Holme Priory*, 106
- Chickerell, archaeological observations and recording of groundworks for a new vestry, service trench and under-floor heating at St Mary's church, 104
- Christchurch, archaeological observations and recording during repair of a wall collapse at Church Hatch, 13 Church Street, 104
- Church Farm, Okeford Fitzpaine, archaeological evaluation, 107
- Clammer, David, *Naval Signal Stations on the Dorset Coast*, 17–25
- Connor, T P, *The Opening of Powerstock School*, 51–53
- Corfe Castle, rescue excavation of a burial at Ower, 104–105
- Cottam, Sarah, *The Village Hall, The Causeway, Milborne St Andrew*, 107
- Cox, Peter, *Pound Lane Car Park, Wareham*, 111
- Cox, Peter W, *Three Romano-British Steles from Studland*, 75
- Craig-Atkins, Elizabeth, and Jonathan Monteith, *A35 Weymouth Road Roundabout and Stinsford Roundabout, Dorchester*, 105
- Craig-Atkins, Elizabeth, and Jonathan Monteith, *St Aldhelms Head, Worth Matravers*, 115
- Dannatt, George (1915–2009), obituary, 181–182
- De Keyser, Hendrick, and the founding of the Portland Stone industry, 33–36
- Dewlish Roman villa, report on post-excavation work in 2011, 65–66
- Dieppe Operation, World War II, the part played by Bridport's beaches, 170–174

- Donovan, D T, and M B Harvey, *Fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset*, 117–125
- Dorchester:
- A35 Weymouth Road and Stinsford roundabouts, archaeological monitoring, 105
 - former fire station, archaeological evaluation, 105
 - The Grove, archaeological observations and recording, 105
 - Grove Trading Estate, archaeological observations and recording, 105
 - medieval tiles, 101
 - Stratton House Campus, archaeological evaluation, 105–106
 - Victoria Terrace, archaeological observations and recording, 106
- Dorset County Boundary Survey:
- botany of boundaries, 155–160
 - boundary landmarks in Anglo-Saxon charters, 146–154
 - field meetings, 195–198
 - Ordnance Survey Boundary Remarks Books, 154–155
 - trees on the county boundary, 155–156
- Dorset County Museum:
- the concept and curation of the *Making Georgian Faces* exhibition, 9–15
 - Tom Roberts's (1856–1931) pastel portrait of a girl, 55–63
- Dorset Natural History and Archaeological Society:
- Archaeology, 191–192
 - Art Volunteer Report 2011–2012, 192
 - Chairman's Report 2012, 189
 - County Boundary Group Field Meetings, 195–198
 - Director's Report, 189–190
 - Dorset Archaeological Committee, 195
 - Dorset County Museum Music Society, 198
 - Dorset Local History Group, 195
 - Dorset Natural History and Archaeological Society Events List 2011, 201–204
 - Dorset Record Society, 198–199
 - Hon Editor's Report, 190–191
 - Exhibitions Programme 2011, 200
 - Field Meetings, 207
 - Field Meeting Reports 2011, 138–143
 - Field Secretary's Report, 204
 - Geology, 191
 - Learning Report, 199–200
 - Lectures and Meetings in the Museum, 205–206
 - Library, 194
 - The Literary Collections, 192–193
 - Marketing Report, 200
 - Membership and Visitor Figures, 204
 - Natural History, 191
 - Photographic Department, 194
 - Public Bookings at Dorset County Museum, 207
 - Researchers and Subjects, 208
 - Social History, 193–194
 - Thomas Hardy Collection, 194–195
- Down Farm, Sixpenny Handley, excavation of a Bronze Age/Iron Age settlement, 77–97
- Draper, Jo, *Sea Pea, Abbotsbury Pease*, 126
- Druce Farm, Piddlehinton, a newly-discovered Roman villa, 108
- Dukes, Bob, *The Royal Naval Cordite Factory at Holton Heath*, 166–170
- Dunstan, Wyndham R, his donation of a portrait by Tom Roberts to the Dorset County Museum, and subsequent events, 55–63
- East Holme Priory, archaeological investigations, 106
- East Holton, Wareham St Martin, archaeological investigations, 111–112
- Eccles, Audrey, *'Pretending to be seafaring men' – Vagrancy Law and Forgery with special reference to eighteenth-century Dorset*, 1–8
- Ellis, Chris, *The Excavation of a Late Bronze Age/Early Iron Age-Middle Iron Age Settlement at Home Field, Down Farm, Sixpenny Handley, Dorset*, 77–97
- Evans, David, *Rehearsal for Disaster: Bridport's Beaches and the Dieppe Operation*, 170–174
- Ford, Judith, *Coffee House Culture in Seventeenth-Century Lyme Regis*, 27–32
- Fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset, 117–125
- Frome House, Wareham, archaeological observations and recording of building works, 111
- Geology:
- fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset, 117–125
- Geophysical survey:
- Godlingston Heath group of round barrows, Studland, 107
 - Nether Compton, in the vicinity of the site of a Roman coin hoard, 67–68
 - Barford Farm, Pamphill, 107–108
 - three Bronze Age burial mounds on Golden Cap, Stanton St Gabriel, 109–110
 - Lady St Mary church, Wareham, 115
- Georgian portraiture in Dorset in the eighteenth century and the *Georgian Faces: Portrait of a County* exhibition at the Dorset County Museum, 9–15
- Gillingham, archaeological evaluation of site of proposed new office block adjacent to the Brickfields Business Park, 106
- Glanvilles Wootton, archaeological observations and recording of a service trench at St Mary's church, 106
- Goda, a portrait by Tom Roberts (1856–1931) in the Dorset County Museum, 55–63
- Godlingston Heath, Studland, geophysical survey of the Godlingston Heath Group of round barrows, 107
- Gold Hill, Shaftesbury, archaeological excavation and monitoring of construction of an extension to Shaftesbury Museum, 108
- Golden Cap, Stanton St Gabriel:
- excavation of three Bronze Age burial mounds, 109–110

- site of a naval signal station during the war with Revolutionary France, 17–25
- Grimstone Reservoir, Stratton, archaeological evaluation, 111
- The Grove, Dorchester, archaeological observations and recording during erection of a new food store, 105
- Grove Trading Estate, Dorchester, archaeological observations and recording during construction of a new office at Unit 9A, 105
- Hamworthy, Poole, archaeological excavation and observations during development at Lower Hamworthy, 108
- Harvey, M B, and D T Donovan, *Fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset*, 117–125
- Hayward Trevarthen, Ciorstaidh, *Finds Reported to the Portable Antiquities Scheme in 2010 and 2011*, 99–100
- Hellis, John, *The Strategy and Tactics of World War II Pillboxes*, 174–176
- Hengistbury Head, Bournemouth, archaeological watching brief during construction of cattle handling areas and evaluation of site of new visitor centre, 103
- Hewitt, Iain, *Dewlish Roman Villa: post-excavation report 2011*, 65–66
- Hewitt, Iain, Hannah Simpson and Paul Cheetham, *East Holme Priory*, 106
- Holton Heath, Wareham St Martin, Royal Naval Cordite Factory, 166–170
- Home Field, Acton, Langton Matravers, archaeological observations and recording of geotechnical test pits, 106–107
- Hooke, Della, *Boundary landmarks in Anglo-Saxon charters*, 146–154
- Hoverfly report, 135
- Jones, Inigo, and the founding of the Portland Stone industry, 33–36
- Judkins, Phil, *The Worth of Worth: Radar at Worth Matravers*, 162–166
- Keen, Laurence, *A Lead Pendant from Cerne Abbas*, 73–74
- Keen, Laurence, *Chantmarle, Cattistock. Sir John Strode's Account of his Building, 1612 to 1623, and the Consecration of his Oratory or Chapel*, 37–41
- Keen, Laurence, *Notes on Two Medieval Tiles*, 101
- Kinson Common, Bournemouth, archaeological observations and recording during laying of a water pipe, 103
- Ladle, Lilian, *East Holton, Wareham St Martin*, 111–112
- Ladle, Lilian, *Football Field, Worth Matravers*, 114
- Ladle, Lilian, *Frome House, Wareham*, 111
- Ladle, Lilian, *Sandford Heath, Wareham St Martin*, 112
- Ladle, Lilian, and Hannah Simpson, *A Newly Discovered Roman Villa at Druce Farm, Piddlehinton*, 108
- Lady St Mary church, Wareham, geophysical survey, 115
- Langton Matravers:
 archaeological observations and recording of geotechnical test pits in Home Field, Acton, 106–107
 archaeological observations and recording of geotechnical test pits at Lewis Quarries, 107
- Lewis Quarries, Acton, Langton Matravers, archaeological observations and recording of geotechnical test pits, 107
- Levy, E T and D A, *Dorset County Hoverfly Report 2011*, 135
- Litton Cheney, archaeological observations and recording of service trenches and other groundwork at St Mary's church, 107
- Lyme Regis, coffee house culture in the seventeenth century, 27–32
- Making Georgian Faces* exhibition at the Dorset County Museum, from concept to curation, 9–15
- Medieval:
 finds reported to the Portable Antiquities Scheme, 99–100
 lead pendant from Cerne Abbas, 73–74
 tiles from Dorchester, 101
- Milborne St Andrew, archaeological monitoring of groundwork for construction of a games area adjacent to the village hall, 107
- Monteith, Jonathan, *Church Hatch, 13 Church Street, Christchurch*,
- Monteith, Jonathan, *Lady St Mary Church, Wareham*, 115
- Monteith, Jonathan, *Lower Hamworthy, Poole*, 108
- Monteith, Jonathan, *Rogershill Farm, Bere Regis*, 103
- Monteith, Jonathan, *Worgret Road, Wareham*, 112
- Monteith, Jonathan, and Elizabeth Craig-Atkins, *A35 Weymouth Road Roundabout and Stinsford Roundabout, Dorchester*, 105
- Monteith, Jonathan, and Elizabeth Craig-Atkins, *St Aldhelms Head, Worth Matravers*, 115
- Mount Pleasant Avenue, Weymouth, archaeological evaluation, 113
- Natural history:
 fossil cephalopod jaws from the Charmouth Mudstone Formation of South Somerset, 117–125
 the Sea Pea at Abbotsbury, a late nineteenth-century description, 126
 butterfly report, 130–135
 hoverfly report, 135
 plant gall report, 135–138
- Naval signal stations on the Dorset coast, 17–25
- Nether Compton, a hoard of Roman coins and its archaeological context, 65–66
- Newbould, John, *Dorset Plant Gall Report 2008–11*, 135–138
- Newbould, John, *Field Meeting Reports 2011*, 138–143
- Newbould, John, *Trees along the County Boundary*, 155–156
- Obituaries:
 George Dannatt (1915–2009), 181–182
 Norrie Woodhall (1905–2011), 182–186
 Philip Rahtz (1921–2011), 186–188

- Okeford Fitzpaine, archaeological evaluation at Church Farm, 107
- Oliver, John, *Dorset Rainfall 2011*, 128–130
- Oliver, John, *General Weather Summary 2011*, 127–128
- Ordnance Survey Boundary Remarks Books, 154–155
- Oswin, John, *The Archaeological Context of the Roman Coin Hoard from Nether Compton*, 67–68
- Ower, Corfe Castle, rescue excavation of a burial, 104–105
- Pamphill:
- Bankes, W. Edward (1702–1729) and his letters from India, 43–49
 - geophysical survey at Barford Farm, 107–108
- Papworth, Martin, *Barford Farm, Pamphill, Kingston Lacy Estate*, 107–108
- Papworth, Martin, *Geophysical Survey Godlingston Heath Group of Round Barrows, Studland*, 107
- Papworth, Martin, *Interim Report on the Excavation of 3 Bronze Age Burial Mounds on Golden Cap, Stanton St Gabriel*, 109–110
- Piddlehinton, a newly-discovered Roman villa at Druce Farm, 108
- Pillboxes, strategy and tactics in World War II, 174–176
- Plant gall report, 135–138
- Poole:
- archaeological excavation and observations during development at Lower Hamworthy, 108
- Portable Antiquities Scheme, finds reported in Dorset in 2010 and 2011, 99–100
- Portland:
- naval signal stations during the war with Revolutionary France, 17–25
 - the foundation of the Portland stone industry, 33–36
 - archaeological evaluation at 17 Sweethill Road, Southwell, 108
- Pound Lane Car Park, Wareham, archaeological evaluation, 111
- Povington Pit, Steeple, archaeological evaluation, 110–111
- Powerstock School opening in 1850 and loss by fire in 2011, 51–53
- Prehistoric:
- excavation of a Bronze Age/Iron Age settlement at Down Farm, Sixpenny Handley, 77–97
 - finds reported to the Portable Antiquities Scheme, 99–100
 - excavation of three Bronze Age burial mounds on Golden Cap, Stanton St Gabriel, 109–110
 - geophysical survey of the Godlingston Heath Group of round barrows, Studland, 107
 - excavation of Bronze Age occupation at Football Field, Worth Matravers, 114
- Preston, Weymouth, archaeological observations and recording of service trenches at St Andrew's church, 113
- Puncknowle, site of a naval signal station during the war with Revolutionary France, 17–25
- Radcliffe, Francesca, *Digging in the Archives: W. Edward Bankes 1702–1729, The Young Bankes who went to India*, 43–49
- Rahtz, Philip (1921–2011), obituary, 186–188
- Rainfall report, 128–130
- Redlands Sports Centre, Weymouth, archaeological observations and recording during groundworks for a new car park, 113
- Reviews:
- T L Burton, *William Barnes's Dialect Poems: A Pronunciation Guide*, 177
 - R Chapman (Ed), *The Natural History of Bournemouth and the surrounding area*, 177–178
 - John Fowles and John Constable (Eds), *The Lymniad; a poem in the form of letters from Lyme to a friend at Bath written during the autumn of 1818*, 178–179
- Roberts, Tom (1856–1931), his pastel portrait of a young girl at the Dorset County Museum, 55–63
- Robinson, Stephen, *Land adjacent to Brickfields Business Park, Gillingham*, 106
- Robinson, Stephen, *Land adjacent to Doreys Pit, Arne, Church Knowle and Steeple Parishes*, 103
- Robinson, Stephen, *Land adjacent to Povington Pit, Steeple*, 110–111
- Robinson, Stephen, *Land adjacent to St Nicholas Church, Studland*, 111
- Robinson, Stephen, *Land at Barton Farm and North of Marston Road, Sherborne*, 109
- Robinson, Stephen, *Land at Church Farm, Okeford Fitzpaine*, 107
- Robinson, Stephen, *Rear of No 8 The Square, Wimborne Minster*, 114
- Rogershill Farm, Bere Regis, geophysical survey, 103
- Roman:
- buildings at Stratton House Campus, Dorchester, 105–106
 - buildings and occupation at Football Field, Worth Matravers, 114
 - coin hoard from Nether Compton and its archaeological context, 67–68
 - finds reported to the Portable Antiquities Scheme, 99–100
 - steles from Studland, 75
 - villa at Dewlish, report on post-excavation work in 2011, 65–66
 - newly-discovered villa at Druce Farm, Piddlehinton, 108
 - occupation at Lower Hamworthy, Poole, 108
- Royal Naval Cordite Factory, Holton Heath, Wareham St Martin, 166–170
- St Andrew's church, Preston, Weymouth, archaeological observations and recording of service trenches, 113
- St Giles' House, Wimborne St Giles, archaeological observations and recording of trenches in the grounds, 114
- St Mary's church, Chickerell, archaeological observations and recording of groundworks for a new vestry, service trench and under-floor heating, 104

- St Mary's church, Glanvilles Wootton, archaeological observations and recording of a service trench, 106
- St Mary's church, Litton Cheney, archaeological observations and recording of service trenches and other groundworks, 107
- St Nicholas church, Studland, archaeological evaluation of land adjacent, 111
- Sandford Heath, Wareham St Martin, archaeological excavation of the trackway known as Roman Road, 112
- Sandsfoot Castle, Weymouth, archaeological evaluation and subsequent observations and recording during restoration, 113–114
- Sea pea, *Lathyrus japonicus ssp maritimus*, at Abbotsbury, a late nineteenth-century description, 126
- Shaftesbury:
- archaeological excavation and monitoring of construction of an extension to Shaftesbury Museum, Gold Hill, 108
 - archaeological evaluation of land east of Shaftesbury, 109
- Sherborne, archaeological evaluation of land at Barton Farm and north of Marston Road, 109
- Shreeves, Bill, *Butterfly Report 2010–11*, 130–135
- Signal stations, naval signal stations during the war with Revolutionary France, 17–25
- Simpson, Hannah, Iain Hewitt and Paul Cheetham, *East Holme Priory*, 106
- Simpson, Hannah, and Lilian Ladle, *A Newly Discovered Roman Villa at Druce Farm, Piddletunton*, 108
- Sixpenny Handley, excavation of a Bronze Age/Iron Age settlement, 77–97
- Slade, Chris, *Ordnance Survey Boundary Remarks Books*, 154–155
- Stanton St Gabriel, excavation of three Bronze Age burial mounds on Golden Cap, 109
- Steeple, archaeological evaluation of land adjacent to Povington Pit, 110–111
- Stone, Nicholas, and the founding of the Portland Stone industry, 33–36
- Stratton House Campus, Dorchester, archaeological evaluation, 105–106
- Stratton, archaeological evaluation at Grimstone Reservoir, 111
- Strode, Sir John, his building accounts for Chantmarle 1612–1623, 37–41
- Studland:
- geophysical survey of the Godlingston Heath Group of round barrows, 107
 - Romano-British steles, 75
 - archaeological evaluation of land adjacent to St Nicholas church, 111
- Tabor, Richard, *Former Fire Station, Dorchester*, 105
- Tabor, Richard, *Grimstone Reservoir, Stratton*, 111
- Tabor, Richard, *Stratton House Campus, Dorchester*, 105–106
- Tabor, Richard, *The Grove, Dorchester*, 105
- Treasure Act 1996, finds reported in 2010 and 2011, 99–100
- Trevarthen, Mike, *Bayard Dairy, Upwey, Weymouth*, 112–113
- Trevarthen, Mike, *Hengistbury Head, Bournemouth*, 103
- Trevarthen, Mike, *Home Field, Acton, Langton Matravers*, 106–107
- Trevarthen, Mike, *Kinson Common, Kinson, Bournemouth*, 103
- Trevarthen, Mike, *St Andrew's Church, Preston, Weymouth*, 113
- Trevarthen, Mike, *St Mary's Church, Litton Cheney*, 107
- Trevarthen, Mike, *69 Mount Pleasant Avenue, Weymouth*, 113
- Trevarthen, Mike, *Victoria Terrace, Dorchester*, 106
- Trevarthen, Mike, *Worth Matravers*, 114
- Trevarthen, Mike, and Peter Bellamy, *Hengistbury Head, Bournemouth*, 103
- Trevarthen, Mike, and Peter Bellamy, *Redlands Sports Centre, Weymouth*, 113
- Trevarthen, Mike, and Peter Bellamy, *St Mary's Church, Chickerell*, 104
- Trevarthen, Mike, and Peter Bellamy, *17 Sweethill Road, Southwell, Portland*, 108
- Vagrancy in Dorset in the eighteenth century, 1–8
- Victoria Terrace, Dorchester, archaeological observations and recording, 106
- Walls, Robin, *The Botany of Boundaries, Some Thoughts*, 157–160
- Wareham:
- archaeological observations and recording during building works at Frome House, 111
 - archaeological evaluation at Pound Lane Car Park, 111
 - archaeological evaluation of land at Worgret Road, 112
 - geophysical survey at Lady St Mary church, 115
- Wareham St Martin:
- archaeological investigations at East Holton, 111–112
 - excavation of the trackway on Sandford Heath known as Roman Road, 112
 - Royal Naval Cordite Factory, Holton Heath, 166–170
- Weather reports, 127–130
- Weymouth:
- archaeological evaluation at Bayard Dairy, Upwey, 112–113
 - archaeological observations and recording of at St Mary's church, Chickerell, 104
 - archaeological evaluation at Mount Pleasant Avenue, 113
 - archaeological observations and recording at Portland House, Belle Vue Road, 113
 - archaeological observations and recording of service trenches at St Andrew's church, Preston, 113
 - archaeological observations and recording during groundworks at Redlands Sports Centre, 113
 - archaeological evaluation and subsequent observations and recording at Sandsfoot Castle, 113–114
- Williamson, Tom, *Hendrick de Keyser, Nicholas Stone, Inigo Jones and the founding of the modern Portland Stone industry*, 33–36

- Wimborne Minster, archaeological evaluation at the rear of 8 The Square, 114
- Wimborne St Giles, archaeological monitoring of trenches in the grounds of St Giles' House, 114
- Woodhall, Norrie (1905–2011), obituary, 182–186
- Worgret Road, Wareham, archaeological evaluation, 112
- World War II in Dorset:
- Bridport's beaches and the Dieppe Operation, 170–174
 - the Home Front in Dorset, 161–162
 - pillboxes, strategy and tactics, 174–176
 - radar at Worth Matravers, 162–166
 - Royal Naval Cordite Factory, Holton Heath, 166–170
- Worth Matravers:
- archaeological observations and recording of trenches and electrical transformer adjacent to the Square and Compass, 114
 - excavations at Football Field, 114
 - the development of radar, 162–166
 - human remains from the beach near St Aldhelm's Head, 115
- Yarker, Gwen, *Identity and Loss: Discovering the identity of Tom Roberts's (1856–1931) pastel portrait of a young girl at the Dorset County Museum*, 55–63
- Yarker, Gwen, *Making Georgian Faces: concept to curation*, 9–15

Notes for Contributors
Hon. Editor: Paul Lashmar
DNHAS, Dorset County Museum, Dorchester, Dorset DT1 1XA
paul.lashmar1@btinternet.com

Contributions for the *Proceedings* should be on subjects related to the archaeology, history, literature, geology or natural history of Dorset. While there is no fixed length, papers ideally should not exceed 7,000 words, although longer papers will be considered if of sufficient importance. Notes and shorter contributions are also welcome. The Hon. Editor will be pleased to advise and discuss with intending contributors at any stage during the preparation of their work. All papers submitted will be peer reviewed.

Deadlines: Papers must be submitted for consideration by 30 November, and shorter contributions and reports by the end of January for publication in June. These deadlines must be strictly adhered to – any contributions submitted late will be considered only for future editions of the *Proceedings*.

Typescripts must be complete and printed clearly on one side of the paper only, using a single style and size of font. Please use underlining and italics as you would wish them to be used in the printed version. Leave a left-hand margin of around 25mm, space the lines generously (minimum 1.15pt), and do not justify the right-hand margin — this should be left ‘ragged’.

Please include a word count at the beginning of the typescript. Please centre title and section headings, and justify sub-headings left. Use the return key after each paragraph, heading or sub-heading, but please do not indent the start of a new paragraph. If you are confident that you know which is appropriate, use en (–) or em (—) dashes, which are available in Word under ‘symbols’. If you prefer, you may represent an em dash by two hyphens — these will be replaced at the copy-editing stage. If you are unsure which to use, please refer to either of the standard style guides mentioned in the final paragraph of these notes (available by order from any decent bookshop).

Please submit two paper copies of the text, together with electronic copy on a CD Rom or memory stick, saved as Word, or Rich Text Format files — never as a PDF. Please refrain from using automatic formatting and do not include page breaks and/or page numbers, as these will have to be removed before editing and typesetting. However, printed copies should include some form of page numbering. This is probably best done by hand. Please include copies of illustrations, tables, maps etc printed separately from the text and numbered. Please mark clearly in the text where you envisage the illustrations being placed. Do not include embedded illustrations in the body of the text.

Illustrations must be clear and easily reproducible. Please bear in mind that illustrations may need to be enlarged or reduced during the typesetting process to fit the available space and/or column or page width. Therefore, if you have an illustration (e.g. a scale archaeological drawing) that needs to be printed to an exact size, please say so where this is necessary, and specify the precise dimensions. Please print copies of images (photocopies will do if submitting hard copy) and submit them with your typescript, numbered and in order, with a separate list of captions typed and spaced as the main body of the text, and saved as a separate Word file on the disk. The caption list should include full details of sources, attributions and copyright acknowledgements where appropriate (see below).

Copyright: Where the illustration is not the author’s, permission to reproduce must be obtained by the contributor, and the caption should include relevant copyright or photographic acknowledgement. In submitting illustrations for publication and an associated list of captions, the author indemnifies the publisher, the DNHAS and the editors of the volume against any action taken as a result of infringement of copyright. In addition all authors of accepted contributions will be required to sign a separate copyright indemnity agreement covering the use of both images and text, whether the author’s own, or extracts from other works cited in the author’s submission.

Photographic files should be submitted in grayscale only, and should be formatted with a minimum of 300dpi as jpeg or tiff files. Graphic images, such as line drawings, maps, charts and diagrams must also be submitted in the above formats but should be at least 600dpi (to check the dpi of any digital image, right-click on the icon of the file, select ‘Properties’, and then click on the ‘Summary’ tab, and go to ‘advanced’ if necessary). Please ensure all scanned illustrations are perfectly square on the screen before saving, as this cannot always be corrected later. Where appropriate, crop images to your satisfaction before submitting them. Please save all image files with the name of the contributor and the figure number which is to be used in the text (e.g. ‘SmithFig5’).

Original copies of illustrations, drawings etc up to A4 size may be submitted after acceptance of a paper or report at the owner’s risk, and returned only at their request. In this case, if cropping is required please indicate this using tracing paper or similar overlay. If your illustration is larger than A4 size, visit your local reprographic shop and ask them to scan it and save it on a disk for you, according to the above specifications.

Acknowledgements, Notes and References

should be printed at the end of the typescript using the same font size and spacing as the main body of the text. Please use endnotes wherever possible in preference to footnotes, and keep them to a scholarly minimum. Footnotes should be used more sparingly, and only for specific information that cannot be comfortably incorporated within the main body of the text. Do not include references in footnotes. Please check that all notes are present and correctly numbered in the text. For acceptance, the Harvard system of referencing must be used when including citations in the main body of the text. Please ensure that these correspond precisely to the relevant entry in the Bibliography (see below).

In the Harvard system of referencing, also known as the 'author-date' system, cues in the text take the form of the author's name and the (year) date of the publication within parentheses that enable the reader to identify the work in a list of full references at the end of the text. Full references should be presented as per the following examples:

A reference to a whole book cited in the text (Arkell 1933), will read in the Bibliography as: Arkell, W.J., 1933 *The Jurassic System in Great Britain*, Clarendon Press, Oxford.

A single reference to a passage in a book cited in the text (Mills, 1977, 230-1), will read: Mills, A.D., 1977 *The Place-names of Dorset, Part 1*. English Place-name Society, Cambridge.

A reference to a paper cited in the text (Hinton, 1994), will read: Hinton, David A. 'Some Anglo-Saxon charters and estates in south-east Dorset', *Proceedings of the Dorset Natural History and Archaeological Society* **116**, 11-20.

Proofs: Authors will be sent proofs edited in accordance with the 'house style' of the *Proceedings* before publication. These must be returned within the timeframe specified by the editor. The editor(s) will then incorporate any minor corrections and/or revisions that the author deems necessary into the previously edited version and send a single, final proof to the publisher. If authors do not return their proofs within the allotted time, the existing proofs will be used for the final published version.

All submissions are edited with reference to the MHRA (Modern Humanities Research Association) *Handbook for Authors, Editors, and Writers of Theses*, and the current *Hart's Rules — the Handbook of Style for Writers and Editors*. While every effort will be made to ensure that authors are happy with the final proofs, in matters of editing and style the decision of the Hon. Editor is final.

