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Romanesque Architectural Sculpture in Dorset: A Selective Catalogue and Commentary

SIMON ALFORD

SUMMARY

This paper takes the form of an Introduction, Catalogue and Commentary on 17 pieces of Romanesque stonework, mostly carved tympana, 'panels' and one lintel. Except for Damerham, these are all found in the county of Dorset (pre-1974 boundaries). The Introduction is partly historical background; it also sets the general sculptural context in Dorset. The Catalogue is based upon personal inspection, measurement and photography of the material, and gives details of: context, description, size, comparisons and bibliography. The Commentary takes the usual form of art-historical analysis, discussing: position, form, style, iconography and date, generally in that order. In conclusion, a mention of some salient points of interest is made.

Introduction

The Romanesque sculpture of Dorset has not hitherto been studied as a whole, or even extensively in part. There are several reasons for this: the ecclesiastical evolution of the county, the effects of time on the original corpus of sculpture, and the intractability of much of the surviving material. Dorset has been without its own episcopal see since 1075, when the Saxon see of Sherborne was moved east to Old Sarum under Hermann of Ramsbury. The lack of a cathedral workshop in the post-Conquest period in the county may have led to a slackening of local activity, and on the surviving evidence led to an import of new ideas from Old Sarum to Sherborne and elsewhere.

The majority of the artistic achievements of the Dorset monasteries in the 11th and 12th centuries have been lost. The county was already well colonised in the pre-Conquest period with Benedictine foundations at Milton (933), Cerne (c. 987), Sherborne (refounded 988), and Abbotsbury (c. 1040), as well as the Alfredian foundation of a Benedictine nunnery at Shaftesbury (c. 870). Wimborne was a most important collegiate minster-church. However, by the 12th century, the Dorset houses were relatively poor and undistinguished in the wider national perspective.¹

Their patronage of sculpture, however, may have been on quite a lavish scale, and of considerable quality, as far as it is possible to judge from the surviving fragments. Sherborne, Shaftesbury and Abbotsbury possess fragments of quality. At Milton and Cerne, the Romanesque churches have disappeared almost without trace, though sculptured fragments survive at the former. Wimborne has fared rather better, with the 12th century nave and crossing-tower still standing, both of which possess sculpture of quality. The losses altogether have been severe and have permanently affected our picture of the extent, growth and interconnections of Romanesque sculpture in the county.

The tympana, panels and lintels of the later 11th and 12th centuries in the county are the subject of this article. Of the 17 pieces catalogued and discussed here, 10 are figured subjects, one has geometric ornament (Godmanstone), while six are plain tympana. Only four out of the 11 sculptured pieces are whole and virtually undamaged: the tympana at Wynford Eagle, Hinton Parva and Damerham (Hants), and the doorhead at Fordington. The seven remaining pieces are either badly defaced: (Worth Matravers, Buckland Newton, Stinsford, Sixpenny Handley), or fragments: (Toller Fratrum and Tarrant Rushton), or heavily re-cut (Godmanstone). The badly defaced pieces and the Toller fragment all show signs of artistic merit. Their poor condition, however, makes stylistic comparisons with other works necessarily tentative, though not impossible.

¹ D. Knowles: *Monastic Order in England*, pp. 136, 179, 180.

The tympana, panels and lintels form a group based on their architectural function. They also possess considerable iconographic importance. On the whole, the sculptures do not show close stylistic relationships with one another, and it is necessary to look further afield for comparative material.

Stylistic grouping of material is possible to a limited extent, such as among the fonts of West Dorset, though to define a 'regional school' would at present be premature. A vital stylistic connection in the 1120s and 1130s does link Sherborne (abbey and old castle) with Old Sarum cathedral and castle, and probably incorporated Shaftesbury abbey as well. The role of bishop Roger of Salisbury is crucial in this context.²

The relationship of the pieces discussed here to other contemporary local material is rare. The flat drawing style of Wynford Eagle, Fordington and Tarrant can be seen in the treatment of architectural sculpture at Powerstock. The style of the Toller fragment belongs to the same milieu as the Milborne St Andrew ivory Magus. However the original provenance of this latter pair is not certain.

Fordington (Plates 1, 2, 3 and 4)

The church stands upon a small knoll on the south bank of the River Frome, and at the extreme eastern end of modern Dorchester. In the 11th century, it was an extra-mural suburb of Dorchester and did not form part of the borough in Domesday Book, where it is assessed separately.³

The architectural history of the church is extremely complex, having experienced major structural changes on six separate occasions since the early 12th century.⁴ These changes did not substantially affect the south doorway of the church or the south porch, though the latter was extended southwards in the 15th century.

For the extent of the pre-Conquest church, it is necessary to rely on Feacey's limited excavations, which established the line of a foundation-trench on the axis of the present south arcade.⁵ From this, and some footings extending out (north) from the third pier of the south nave arcade, he argued for an aisleless nave-and-chancel Saxon church. This is likely, though not now verifiable without further excava-

² R. Stalley in *JBAA*, 3rd S. 34 (1971), pp. 62-83.

³ Fordington was part of a royal manor of several dispersed estates: Exon, DB XII (*VCH Dorset III*, 65). The borough of Dorchester was assessed with the other Dorset boroughs in Exch. DB f. 75 (*VCH Dorset III*, 61).

⁴ The most useful article on the church is Jem Feacey's in *DNHAS* 30 (1909), 164 ff. Feacey was the local architect in charge of the major Edwardian restoration of, and extension to, the church. He was responsible for the 1905-7 excavations in the nave, prior to the lowering of the floor level.

⁵ See footnote 4, above.

tion. Without excavation, the plan of the early Norman church is not recoverable either. It may not have been a cruciform church, for nothing of the 12th century survives in the existing south transept.

The south aisle is an addition of the later 12th century, if the pointed south nave arcade can be trusted. It is therefore most probable that the sculptured doorhead was reset at this period, and had originally formed the doorhead to an aisleless nave, for it is unlikely stylistically to be contemporary with this later 12th century extension. It was probably set in the exterior face of the wall with a hood-moulding, or porch to protect it.

The form of the doorhead is extremely unusual, for the sculpture is not a tympanum, nor a lintel in the conventional sense. The head of the doorway is canted upwards to form a three-sided head, and the sculpture extends upwards from the roll-moulding, being on the same blocks as the door-frame, itself, (see Figure 1). There is a total of six stones of irregular dimensions. There is little comparative material in England. At Ampney St Mary, Gloucs, a canted lintel survives over the north doorway. There the field is trapezium-shaped, while the bottom of the lintel is horizontal, so it is not strictly comparable.⁶ Three-sided sculptures forming part of a tympanum are less rare, can be found locally at Hinton Parva, while others may be found at Little Barrington and Elkstone, both in Gloucestershire.

In manuscript illumination, the canted architectural canopy is more closely analogous to Fordington. In the Shaftesbury Psalter, the Virgin and Child enthroned (f. 165^v) are seated under an architectural framework that closely resembles a canted doorhead (Plate 2). The spandrels of the canopy in the miniature are divided up in a way

that recalls the Fordington arrangement. The Shaftesbury illuminator may have possessed a sketch of the new doorway at Fordington, or seen it himself. However, this canopy form also frequently appears in the St Albans Psalter, for example on p. 19, 'the Annunciation', where it forms the framework over the Annunciate Virgin. While it was straightforward for the miniaturist to vary his architectural canopies, the Fordington doorway and its sculpture were planned as one, as the continuity of the blocks onto the framing demonstrates.

The style of the doorhead, in its brisk left-to-right movement, its concentration on line and a limited amount of decorative detail, and in its overall shallow relief links it very closely to the embroidery style of the Bayeux Tapestry, and consequently the drawing-style of late Saxon manuscripts. The tapestry has been dated by Wormald to pre-1077, that being the year of the dedication of Bayeux Cathedral.⁷

The sculpture at Fordington has many parallels in the Tapestry (Plate 3). The horse's mane, bridle, bit and halter, saddle and stirrup are all close imitations of these features in the tapestry.⁸ The warriors clasped tunic and leggings also appear there, usually as a representation of the more important protagonists, while the pennoned lance is again commonplace. As for the other figures, the sculptor has shown the conventional 'saracenic' bosses on the shields to the right, and their 'enarmes', (the leather-strap hung around the neck in case the knight lost his grip).⁹ The Tapestry's marginalia in the Battle of Hastings scenes provide closely comparable knights.

The drawing-style of the doorhead, where line is of paramount importance, and modelling is played down, has

⁶ Thanks to Prof Zarnecki for drawing my attention to the Ampney lintel: Conway Library, Courtauld Institute of Art neg. no. A69/45. D. Verey: *Gloucestershire - The Cotswolds*, p. 87.

⁷ Stenton (ed.). *The Bayeux Tapestry*, p. 34.

⁸ Stenton (ed.): *Op. cit.*, for example, plate 28.

⁹ Stenton (ed.). *Ibid.*, p. 56 ff.



Plate 1. Fordington St George, south doorhead.

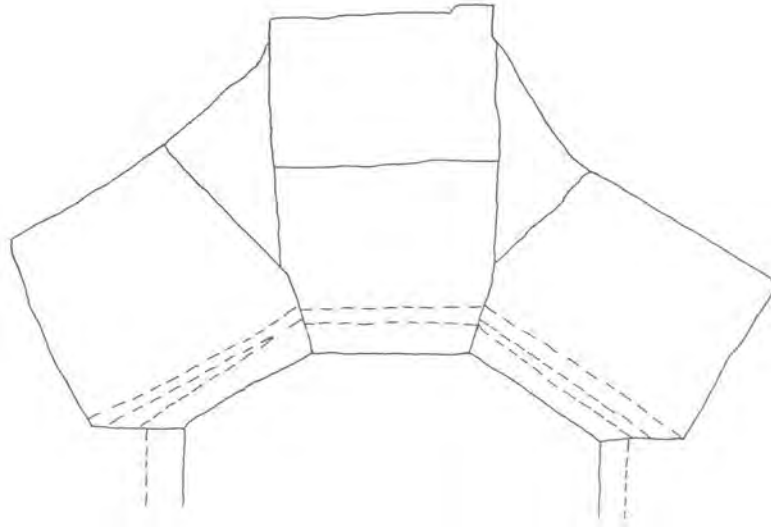


Figure 1. Fordington St George's, south doorhead, scale 1:20. --- moulding of door surround.

been achieved by a consistent use of flat surfaces by the sculptor. With relief limited to an inch on average over such a large surface, an illusion of modelling has been achieved by super-imposing flat surfaces upon one another, for example: the horse, the saddle-flap and the warrior's leg. Otherwise, very limited curves come out from the ground and quickly become 'front-plane-surfaces', such as the horse's rump. The style is clear, concise and vigorous, like that of the Tapestry itself.

The mounted warrior is nimbed and so must represent a military saint in battle. The church at Fordington is, and was, dedicated to St George. This is established by Bishop Osmund's charter of 1091 to his new cathedral chapter at Sarum, where the prebends of the canons are listed. Among them is 'Ecclesiam S. Georgii in Dorcestre, cum decimis et caeteris appendiciis . . . Scripta est autem haec carta et confirmata annon incarnationis dominicae MXCI^o.¹⁰ (1091). Although called the 'church of St George in Dorchester', it must be referring to Fordington, for none of the churches in the royal borough possessed this dedication.¹¹ The strong presumption that this is the Late Roman military saint, Saint George of Lydda intervening in a Norman context, is corroborated by a recorded 'intervention' of the saint on the First Crusade.

The crusaders were bottled up in Antioch in 1098, about to withstand siege from Kerbogha. Peter Bartholomew, a peasant visionary, provided a welcome morale-booster with his 'discovery' of a relic of the Holy Lance under the pavement of St Peter's cathedral (Antioch).¹² This relic, which played its part in the political machinations among the Crusade leadership, was carried into battle against the Saracen by Raymond of Aguilers, who was also one of the contemporary chroniclers. In the battle outside Antioch, the crusaders' victory was attributed to the lance-relic and to divine intervention, where the banners of a heavenly host are also mentioned:

'Exibant quoque de montaneis innumerabiles exercitus, habentes equos albos, quorum vexilla omnia erant alba. Videntes itaque nostri hunc exercitum, ignorabant penitus, quid hoc esset et qui essent, donec cognoverunt



Plate 2. Shaftesbury Psalter, Virgin and Child enthroned, fol. 165v. Copyright Conway Library, Courtauld Institute.

¹⁰ *Sarum Charters and Documents* (Rolls Series 78, I, 198).

¹¹ *VCH Dorset III*, p. 84 (Exon DB XXIII (144)). K. J. Penn, *Historic Towns in Dorset*, pp. 61-2 (DNHAS Monograph Series No. 1, 1980).

¹² For Peter Bartholomew, S. Runciman, *Crusades I*, p. 241 ff. For the Holy Lance, J. Sumption, *Pilgrimage*, pp. 27, 43.



Plate 3. The Bayeux Tapestry: William and Harold arrive at Bayeux Castle. Copyright Phaidon Press.

esse adiutorum Christi, cuius ductores fuerunt Sancti Georgius, Mercurius et Demetrius. Haec verba credenda sunt, quia plures ex nostris viderunt.¹³

At Fordington, St George's banner is a most prominent diagonal through the composition, and stands in for 'the white banners of the heavenly host', while the crusaders have actually propped up their own arms (lances and shields) in the corner of the sculpture. The doorhead thus commemorates a collective 'miraculous' experience on the First Crusade. In the wider context, it is yet another document of the widespread 'pursuit of the miraculous' in the period around 1100: a period which produced the 'Dicta' of Anselm, the collections of Miracles of the Virgin, and avid miracle-collectors like William of Malmesbury.¹⁴

The two kneeling figures, while representing the Crusaders in general, may represent the two local donor-figures, who were on crusade. The crusade was not strongly attended by Normans settled in England.¹⁵ William of Malmesbury may have been dismissive about the influence of the First Crusade in England, but the Fordington doorhead clearly documents this influence.¹⁶

The 'St George at Antioch' subject is rare in 12th century sculpture. Similar iconography is found on the tympanum at



Plate 4. Damerham St George, tympanum over south doorway.

Damerham (Hants), though it is by no means identical (Plate 4). The 'St George at Antioch' attribution is based both on the scene itself, and also on the dedication of the church to St George.¹⁷ The horseman is apparently not nimbed, though the top segment of the tympanum is renewed anyway, for the sword-blade is broken off. The Saracen can be identified by his bossed shield. The rider's skull-cap (helmet), mail-skirts and prick-spur all relate the figure to Fordington, though the horse's chest-band and mane are treated differently. The overall treatment is much less naturalistic than at Fordington, which is partly on account of the much lower field the sculptor had to work with. The Damerham sculpture is a much less accomplished work in the 'flat style', even accepting that it is partially defaced. The feature in the extreme bottom right hand corner appears to be a face turned upwards with open

¹³ For June 28, 1098: *Gesta Francorum* (ed. Hagemayer) cap. XXIX, p. 374. The 'Gesta' is a contemporary chronicle by an anonymous follower of Bohemond. It was first published in 1100, and reached the west by 1106, if not before, when Bohemond publicised it in northern France during his visit. The other contemporary source is: Raymond of Aguilers XII, pp. 259-61.

¹⁴ For the growth of miracle collections in this period: R. W. Southern in *M.A.R.S.* IV, 1958, pp. 176-216.

¹⁵ C. W. David in *Robert Curthose* (Appendix D) lists the known companions of Robert. Arnulf of Hesdin is listed: he was a Fleming who held lands in Dorset (see DB Dorset). However, this Arnulf died, while on Crusade (*Liber Monasterii de Hyda*, RS 45 (1866), p. 302).

¹⁶ William of Malmesbury: *Gesta Regum II*, 431. William says (trans.) 'but a faint murmur of Asiatic affairs reached the ears of those who dwelt beyond the British Ocean'.

¹⁷ *VCH Hampshire, Vol. IV*, p. 590 ff.

mouth: it may be therefore a Hell-mouth ready to receive the infidel.

The wall-paintings at Hardham, Sussex, bear some resemblance in one scene at Fordington. On the nave north wall, the west scene (lower tier) depicts a mounted warrior charging (to the right) to a dragon and the remains of tumbling soldiers. The soldiers are now the least well-preserved part, in the bottom right, but in 1901, when P. M. Johnston was concerned about them, embossed kite-shields and one or two arms and legs were apparently visible. A kite-shield can still be seen.¹⁸ The mounted figure is in better condition and shows a figure comparable to the Fordington saint. The major difference is that the lance-gonfanon has four tails instead of three. It is impossible to be certain of other details, owing to the fresco's condition. The subject is a very rare combination of St George and the Dragon, and (?) St George at Antioch.¹⁹ The present dedication of St Botolph replaced that to St George.²⁰ The St George at Antioch subject, as depicted at Fordington and Hardham, derives its arrangement from contemporary battlescenes in art, of which the most eminent is the Bayeux Tapestry.

This St George iconography is the rarest surviving type, the others being St George fighting the Dragon on foot, and St George mounted slaying the serpent.²¹ These both refer to St George legends ultimately written down by Jacobus de Voragine in the 'Golden Legend', and survive in greater

numbers than the particular St George at Antioch iconography. The infidel Saracens of Fordington thus represent a specific historical version of the more common general conflict between Good and Evil found on the other St George tympana.

Worth Matravers (Plates 5, 6, 7 and 8)

The plan of the church shows that the north and south doorways are placed directly opposite one another in their respective walls.²² They have both been substantially altered, so it is necessary to discuss the architectural context, which affects any argument about the original location and date of the tympanum. The north doorway, though now lacking its tympanum, shows the original arrangement of the doorways. A pilaster-buttress was placed either side of the doorway, and these join well above the present doorhead, to continue as one up to the corbel-table. The tympanum was at some unknown date filled with rubble-masonry. The head of this blocked area is not flat-headed, and so never corresponded in form with the Fordington doorhead, a suggestion made by the Royal Commission.²³ The lintel-block of the north doorway is modern.

The south doorway presents greater problems. The buttressing, contemporary with the early Norman church, was subsequently hacked off to make way for the jamb mouldings and the chevron-roll-moulding round the tympanum. The plinths of the buttresses are still visible inside the porch. The jambs, arch-order and tympanum are of the same stone, of freestone quality, unlike the rubble-masonry

¹⁸ P. M. Johnston: *Sussex Arch. Colls.* XLIV, p. 99 ff. Conway Library Courtauld Institute, neg. no. B59/658.

¹⁹ The awareness that Hardham shows a 'combined iconography' was mentioned in I. Nairn and N. Pevsner: *Sussex*, p. 234.

²⁰ In conversation with David Park (referring to his unpublished MA thesis, University of Manchester).

²¹ For these types, see e.g. Keyser: figs 149, 150, 151 and 152.

²² Plan of Worth Matravers church. RCHM, *Dorset II*, p. 410.

²³ RCHM, *Dorset II*, p. 411.



Plate 5. Worth Matravers St Nicholas, tympanum of south doorway.



Plate 6. Worth Matravers tympanum detail.

of the walling. The external width of the south tympanum is 62 ins (157 cm) which is 2 ins less than the external width of the blocked area over the north doorway. This blocking does not go through to the interior face, and so the now lost tympanum can have been of no great depth. Since the south tympanum and its architectural surround involved the destruction of earlier work, it seems probable that both tympana were not part of the early 12th century plan, but were inserted c. 1150.²⁴ The north tympanum may have been so badly defaced in 1645 that it was entirely removed and the area blocked, while the south tympanum was very badly defaced, but survived *in situ*.²⁵

The reasons for the 'Coronation of the Virgin with angels' attribution are set out in the catalogue. This attribution is given a firmer context through comparison with other Coronation scenes.

It is not easy to find a parallel for this scene in English tympanum sculpture, though fortunately the south doorway at Quenington, Gloucs. has an identifiable 'Coronation of the Virgin'. The actual treatment of the subject is very

different there, appearing as a rustic drawing-in-stone.²⁶ The other published example is on a capital from Reading abbey.²⁷ The Reading and Quenington works neither relate to each other, nor to the Worth 'Coronation'. However, the early dating of these two pieces may be considered as a 'terminus post quem' when trying to place the Worth tympanum among the 'Coronation' sculptures which survive.²⁸

A closer compositional analogy is found in France. There, around the mid-12th century, the Virgin of the cathedral tympana is of the Virgin and Child Enthroned (*Sedes Sapientiae*) type. It is not until the west portal of Senlis (c. 1170) that a 'Triumph of the Virgin' survives.²⁹ At Senlis, the Virgin is already crowned and in an attitude of prayer, showing a basic similarity with Worth, though at Worth the Coronation is still happening, in all probability. The 'true' Coronations in France are later than Senlis, appearing at Mantes collegiale (c. 1180, west portal, centre), where the Virgin and Christ-Redeemer are also very far apart. The Laon cathedral 'Coronation' (c. 1195+, west portal, centre) may be the first extant example to have closer 'formal' connections with Worth.³⁰ France adopted the Coronation iconography relatively late, in comparison to England.

The iconography, along with the Doctrine and Feast of the Immaculate Conception, most probably travelled from southern Italy to England and thence to France.³¹ Italian influence was the vital factor behind the growth of the liturgical observance of the Feast in England.³² This was a pre-Conquest phenomenon which prepared the ground for the new iconographic formulae in the younger Anselm's time. Anselm had been abbot of S. Sabas in Rome, before becoming abbot of Bury St Edmunds in 1121, and would have known the Sta. Maria in Trastevere mosaics.³³ Popular devotion to the Virgin was also growing in the later 11th and 12th centuries, a devotion encouraged by educated churchmen, such as archbishop Anselm.³⁴ In 1129 the Feast of the Immaculate Conception was re-affirmed at a legate council in London.³⁵ However its liturgical celebration spread slowly and was resisted in France by St Bernard, where on the surviving evidence Virgin iconography stultified for about 30 years. On historical grounds, a mid-century date is therefore most likely for the Worth tympanum, although any time after c. 1130 is possible.

Any discussion of Worth's style is limited by its poor surviving quality. The unusual lifting drapery at the Virgin's feet is the only safe part to discuss at all, since it has survived reasonably intact. Both this and her heavy lean are difficult to parallel. The French portal tympana do not relate stylistically to Worth. Their draperies are more liquid and the figures less lean. Locally, the lead font at Wareham shows apostles with lifting draperies (Plate 7), and since the font is based on mid-12th century 'Winchester' models (the large heads, oval damp-folds, swaying draperies bear this

²⁶ Quenington S. doorway: Keyser fig. 130, Conway Lib. photo. neg. no. 294/7(40).

²⁷ See G. Zarnecki in *JWCI*, 1950, p. 1 ff.

²⁸ The Reading capital has been dated to c. 1130 or soon after, *Ibid.*, p. 6. Quenington tympanum has been dated to 'mid 12th cent.', *Ibid.*, p. 10.

²⁹ W. Sauerländer, *Gothic Sculpture*, pp. 32-36 (text); plates 6, 19, 20, 34, 40; 42 (Senlis).

³⁰ W. Sauerländer, *Ibid.*, Illust. 48, p. 426 (Pre-restoration photograph). Laon has comparable half-kneeling angels with scrolls.

³¹ Knowles, *Monastic Order*, pp. 510-514 for the theological and doctrinal development of the Immaculate Conception of the Virgin.

³² See above, footnote 31. The Feast of the Conception: 8th December.

³³ D. Knowles, C. N. L. Brooke, V. London, *The Heads of Religious Houses, England and Wales 940-1216*, p. 32.

³⁴ Limitations of space prevent a discussion of the popular desire for 'Miracle of the Virgin' stories. See R. W. Southern, *M.A.R.S. IV*, 1958, pp. 176-216. The Virgin as 'our mother', as much as Christ's mother, is portrayed in Anselm's 'Great Prayer' to St Mary (3) in *Prayers and Meditations of St Anselm* (ed. Sr. B. Ward S.L.G.), p. 122, line 240 ff.

³⁵ Knowles, *Op. cit.*, p. 512.

²⁴ For dating, see arguments below.

²⁵ The 1645 destruction by Parliamentary forces from Poole is mentioned in *Architectural and Topographical Record I* (1908), p. 3.

out and are found in Nero CIV), there could have been some Winchester-trained artists working in Dorset.³⁶

The manuscript parallels, which are not many, are of mid-century date. In the Winchester Psalter, the general elongation of the figures is relevant, while in a miniature showing God crowning two kings, God's hemline flutters up dramatically on both sides, in a most uncommon manner (outside this artistic milieu)³⁷ (Plate 8). The Lambeth Bible, Dover Bible, 'Avesnes leaf' group of manuscripts also provide occasional examples of quite similar draperies, though in general the Lambeth Bible draperies are drawn downward to a point beside the feet.³⁸ Among earlier books, the Shaftesbury Psalter provides an interesting introduction to the theme of lifting swaying draperies, where it is not uncommon.³⁹

³⁶ Gentler swaying hems adorn the York Virgin, a work of much greater sophistication, though closely connected with Winchester through the Italo-Byzantine Virgin Enthroned in the Winchester Psalter, B. L. Cotton Nero C IV, f. 30.

³⁷ B. L. Cotton Nero C. IV, f. 4r; f. 27r the Ascension. Professor Wormald dated the Psalter to 'the Pontificate of Henry of Blois' (1129-71). A date around 1140-50 is most probable. *Winchester Psalter*, p. 125.

³⁸ Examples of lifting draperies: Dover Bible (CCC Cambridge MS 3-4); (1) MS. 3 f. 266v. Initial to Book of Wisdom; (2) MS. 4 f. 220v. Initial to St Luke. Lambeth Bible vol. 2 (Maidstone Mus. MS. P. 5) Psalm 109 initial: two figures are seated on the same bench but very far apart. Leaf from Gospels (Avesnes, Société Archéologique) St John: very mannered fluttering fold over the foot. The whole poise of this St John is oddly reminiscent of Worth with his head leaning over dramatically.

³⁹ For example, B. L. Lansdowne MS 383, f. 12v. (Angel Gabriel's hem).

Very little Anglo-Norman metalwork survives, and none of the altar-frontals in England. However, the portability of small metal objects meant they were an important medium for communicating artistic ideas. The swirling character of niello-work, such as on the sides of Roger of Helmanhausen's Paderborn portable altars, may have influenced other media more than is realised. The 'Liber Ordinacionum' of the German merchants in London testifies to a busy trade with Saxony, which included precious metal objects.⁴⁰ In Scandinavia, however, bronze-gilt altar frontals do survive and may represent the export of Anglo-Norman styles to the continent. The Lisbjerg and Broddetorp frontals both display figures with remarkable swaying zig-zag draperies that push out on both sides.⁴¹ The less flexible technique of stone sculpture occasionally derived its inspiration from metalwork designs, as in the 'Christ in Majesty' tympanum at Barfreton, Kent, though whether this was genuinely the case at Worth is 'not proven', and manuscripts provide a stronger analogy.

Doctrinal, historical, iconographic and stylistic factors point to a date soon after 1150 for the Worth tympanum, a sculpture that documents a major development in religious sentiment in its period.

⁴⁰ For 'Liber Ordinacionum', *English Historical Review* 17 (1902), 496, 499. See below, footnote 82.

⁴¹ Lisbjerg altar-frontal (now Copenhagen, Nationalmuseet) Broddetorp altar-frontal (now Stockholm, National Museum of Antiquities). P. Lasko: *Ars Sacra*, 170, 171. P. Anker and A. Andersson. *L'art Scandinave*, pp. 338-40.

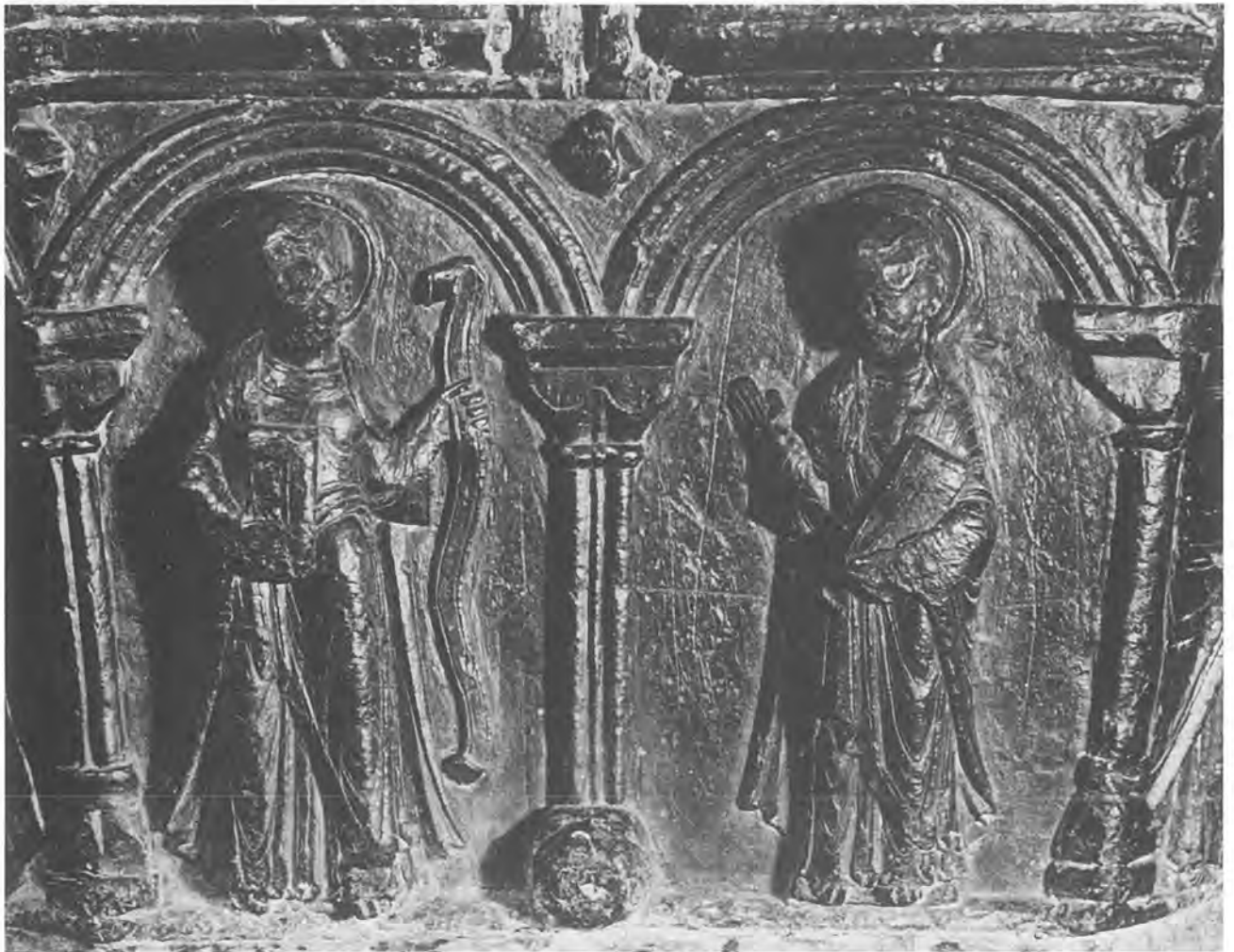


Plate 7. Wareham Lady St Mary, detail of lead font. Copyright the Warburg Institute, University of London.



Plate 8. Winchester Psalter, *God crowning two kings*, fol. 14r. Copyright Conway Library, Courtauld Institute.

Wynford Eagle (Plate 9)

The tympanum, which is intact, and now adorns the west wall of the small 19th century rural chapel, 'formed part of the ancient edifice, and . . . evidently constituted the head of a doorway'.⁴² Though the 1774 edition of Hutchins' County History does not mention it, this cannot be taken at its face value, for this first edition is most incomplete archaeologically. The tympanum and a fine scallop-capital, reused as a piscina, are all that survive from the Norman edifice.

The simplicity and shallow relief of the piece give it the impression of a drawing-in-stone. The confronting wyverns show an almost childish simplicity in execution, for the wings, claws and teeth have been merely scratched into the surface. The noteworthy qualities are limited to the fierce, balanced arrangement of the composition. It is not easy to find a closely comparable work, though confronting monsters as such are common in stone sculpture: on tympana, lintels and capitals.⁴³ The technique of embroidery is a valid comparison, considering the rather 'sketchy' dragons in the margins of the Bayeux tapestry.⁴⁴ The impressionistic

quality of the Wynford wyverns links them with the vivid marginalia of the embroideries.

The subject is a commonplace of Romanesque art. The purely decorative element is the impression conveyed, and this can be paralleled in the use of dragon-decoration on knights' shields in the Bayeux Tapestry (Stenton ed. plate 13, William's messengers galloping to Beaurain).

The inscriptions at Wynford Eagle give the names of the presumed patron and the sculptor, and are the piece's major claim to interest. The former reads: MAHALD DE L'EGELE, and the latter ALVI ME FECIT.⁴⁵ Both are lightly incised. The name Mahald is a recorded 12th century vernacular form of the name Matilda or Maud.⁴⁶ The 'Eagle', or Aquila family, originated from L'Aigle (Normandy), and the post-Conquest barony of Aquila was centred on Pevensey, Sussex.⁴⁷ Matilda was the sister of the 'household knight' Gilbert II de Laigle. She married Robert de Mowbray, Earl of Northumberland in 1095, the year of his rebellion and imprisonment. Subsequently she married Nigel d'Aubigny, a new member of the King's military household in 1107, having received the necessary Papal dispensation.⁴⁸

The Aquila family did not hold the manor of 'Wenfrot' (the DB rendering of Wynford) before 1096, for it is

⁴² Hutchins II, 701.

⁴³ Confronting monsters on tympana are common, but not good parallels. The Ipstones, Staffs tympanum (Keyser, fig. 47) is partly comparable owing to its recessed panel and shallow drawing style, though the tails become interlaced. The Alveston, Warwicks tympanum (Keyser, fig. 65) is in a shallow style, where the two monsters bite each other's tongues.

⁴⁴ The lower margin of the Tapestry depicts fork-tongued dragons on, e.g. plates 15, 19, 45 of Stenton edition, *The Bayeux Tapestry*. J. R. Allen, *Early Christian Symbolism*, p. 356 ff.

⁴⁵ I am grateful to John Higgitt for help with the 'patronal' inscription: correspondence, September, 1980.

⁴⁶ P. H. Reaney, *Dictionary of British Surnames*, p. 235.

⁴⁷ Hutchins II, p. 701.

⁴⁸ *The Ecclesiastical History of Orderic Vitalis* (ed. M. Chibnall), IV, p. 278-84 (Book VIII). J. O. Prestwich, 'The Military Household of the Norman Kings', *English Historical Review*, 96 (1981), p. 13 ff.



Plate 9. Wynford Eagle St Laurence, tympanum re-set in west wall.



Figure 2. Wynford Eagle tympanum: engraving from Hutchins, 3rd ed.

recorded in DB that Wenfrot was held in demesne by William of Eu.⁴⁹ William died in 1096 having been blinded and mutilated for his part in the 1094 plot against William Rufus.⁵⁰ This gives a 'terminus post quem' of 1096 for the tympanum.

The carver of the tympanum was one 'Alvi', a recorded form of the name Allvey or Alvy. The name is English, not Norman-French, deriving from Old English 'Aelfwig'.⁵¹ It is therefore likely that the carver was an Englishman working for a second generation Anglo-Norman family. This is the only (published) example in Dorset of a Romanesque sculptor signing his work.

⁴⁹ VCH Dorset III, p. 91. Exchequer DB entry no. 264.

⁵⁰ Anglo-Saxon Chronicle E text (1096). *English Historical Documents II*, p. 173.

⁵¹ P. H. Reaney, *op. cit.*, p. 7.

In Hutchins' engraving of the tympanum (Figure 2), the faded remains of another inscription are discernible on the lower border.⁵² Though nearly indecipherable, it is suggested here that the first word may have been 'ecclesie' and the last word 'fundator', which presumably relates to the foundation of the church under Matilda of Eagle. This inscription is no longer (1980) discernible on the tympanum.

The style of capital lettering around 1100 was not changing quickly in north-west Europe, so it cannot be used as a certain indicator of date.⁵³ Suffice it to say that the lettering is very close to the embroidered inscriptions in the Bayeux Tapestry.

In view of these arguments, the piece should be dated to soon after 1096.

Godmanstone (Plate 10)

The Godmanstone south doorway-surround and the actual tympanum need to be distinguished from one another, for they are not of the same period. An inspection of the south doorway suggests this, and is supported by a reference in Hutchins.⁵⁴

The whole work is of an arresting sharpness, and entirely covered in limewash. The completely detached jamb-shafts are uncharacteristic of Romanesque, while the neckings of the capitals are also of idiosyncratic section. These capitals, abaci and neckings can be shown to be of Victorian date by

⁵² Hutchins II, p. 707, where no explanation for the lower inscription is offered.

⁵³ I am grateful to Professor Julian Brown for comments on the letter-forms.

⁵⁴ The south doorway was at the same time (1848) made to correspond with an old Norman tympanum, by the latter being placed on circular jamb-shafts, from the capitals of which springs a hood-mould of the zig-zag pattern. Hutchins IV, p. 42.



Plate 10. *Godmanstone Holy Trinity, tympanum of south doorway.*

a close comparison with the architectural ornament of the Victorian doors. The profiles match up, though worked at a different scale. The arch-surround of the tympanum belies its Victorian date owing to its crispness of execution and the 'misunderstood' hood-mould, where a roll-moulding has been applied. It is quite possible that the Victorian carver of this surround used the nearby Maiden Newton north doorway as his model, or the now lost 12th century surround may have conformed to this pattern.⁵⁵

The tympanum itself, the only Dorset example with purely geometric ornament, is also quite sharp, though not to the extent of the Victorian framework. The fish-scale ornament faces upwards and decreases in size towards the top of the block. Upward-facing scale ornament is found occasionally, for example, locally at Wimborne Minster (S. nave arcade, easternmost corbel), and on the tympanum at Cherrington, Gloucs.⁵⁶ (However, the scale does not decrease further up at Cherrington.) Downward-facing scale is much more common.⁵⁷

The two bands of cross-saltire chip carving, forming a lintel area, can be found on a tympanum at Newton Purcell (Oxon), while at North Cerney (Gloucs) the whole tympanum and lintel are covered with saltires.⁵⁸ At Godmanstone, there is an inconsistency in the beading that embellishes the saltires (at the right hand end of the top row), which may

support a 12th century date, originally, for the piece. However, it appears to have been substantially re-cut, and may not now retain any Norman surfaces.

Hinton Parva (Plate 11)

The church of St Kenelm, though entirely rebuilt in neo-Romanesque style in 1860, incorporates two Romanesque features: the chancel-arch and the small panel (tympanum) with three-sided head. This is set within the small south porch.

The small size of the piece raises the question of its function. Small, carved central panels in tympana are not unknown, and were surrounded by several blocks of stone to fill out a large semicircular area. Examples of this treatment can be found at Little Barrington and at Elkstone, Gloucs.⁵⁹ However, the Hinton panel is rather more upright than these, and may perhaps have been a dedication-stone set in behind an altar.

Stylistically, the piece is of low rustic quality and has few distinguishing features. The 'angel's' long 'rubberised' left arm associates the piece with several distinctive sculptures of the Herefordshire school, where arms are treated as jointless.⁶⁰ A fine Norman example of this 'rubberised' treatment appears on the figure of Christ in Majesty at Savigny (Basse-Normandie).⁶¹ This jointless treatment is

⁵⁵ The Maiden Newton doorway has a hood-mould of the usual chamfered section.

⁵⁶ Cherrington, Keyser, xxiii, xxxvi, fig. 52E.

⁵⁷ A fine example of all-over scaling is the north wall of the sanctuary in Devizes church, Wilts (Conway Lib. neg. no. 484/66 (2A)). Examples on tympana: Chichester Cathedral south-west tower, gallery level (Conway B46/1013). North transept tympanum at Peterborough Cathedral (Conway © Rev. Gethyn-Jones).

⁵⁸ Newton Purcell, Keyser, fig. 54.

⁵⁹ Little Barrington, Keyser, fig. 116. Elkstone, Keyser, fig. 117.

⁶⁰ Fownhope, Herefs, tympanum, Keyser, fig. 89. Stretton Sugwas, Herefs, tympanum, Keyser, fig. 84.

⁶¹ *Normandie Romane: Basse Normandie*, plate 131.



Plate 11. Hinton Parva St Kenelm, panel re-set over south doorway.

therefore not necessarily associated with sculpture of inferior quality; it could become a trick of style in its own right.

Though superficially looking like an angel, an understanding of the iconography modifies this estimate. The figure is not conventionally nimbed, but wears a thin circlet around the forehead. This is a simplified version of the martyr's crown, a common feature in early Christian art (e.g., mosaics, S. Appollinare Nuovo, Ravenna).⁶² The child-like face, tree, cross and book all help to pinpoint this obscure subject.

The subject is quite remarkable, and throws an art-historical sidelight on an obscure Old English saint. Of the nine churches in England anciently dedicated to St Kenelm, this is the only one outside the bounds of 9th century Mercia.⁶³ The historical Kenelm is a very shadowy figure; he may have been the son of Cenwulf, King of Mercia (796-821), and is reputed to have died before his father, possibly in battle against the Welsh. He was buried at Winchcombe Abbey, Gloucs.⁶⁴ However, it is from the Kenelm legend that the Hinton piece derives.

The legend appeared in the 11th century and the story can be found in 'Florence' of Worcester and in William of

Malmesbury.⁶⁵ According to these accounts, the King (Kenelm), who was only seven years old, had reigned for a few months as his father's successor, when he was put to death by his tutor, at the instigation of his envious sister, Quendrida. The young King was buried under a thorn tree. However, the deed did not go undiscovered, for miraculously a dove appeared at St Peter's, Rome, bearing a scroll with the couplet:

'In Clentho vaccae valli Kenelmus regius natus,
Jacet sub spino capite truncatus.'⁶⁶

Clent, the legendary site of the murder, is less than three miles from St Kenelm's Chapel, Romsley (Worcs), a church which retains a 12th century 'Kenelm-tympanum'.⁶⁷

The Hinton panel, with its thorn, and child-saint bearing a cross, thus reduces the hagiography to a few essential elements. The figure is winged, either the patron's or the carver's gaffe, or to give the impression that Kenelm is somehow transfigured in being raised to saintly status. This particular Kenelm iconography is possibly unique.

With its lack of context, the piece is hard to date. The first quarter of the 12th century is a likely period, considering its distant connection with work in Herefordshire, and its very simplified style.

⁶² The Ravennan mosaics display numerous martyrs' crowns, i.e. circlets of this type. At S. Apollinare, Nuovo, the male saints carry their circlets, while the Virgins wear theirs.

⁶³ F. Arnold-Foster, *Studies in Church Dedications*, III, p. 388. The others show a concentration in Mercia's heartland: viz. Romsley, Worcs; Upton Snodsbury, Worcs; Clifton-on-Terne, Worcs; and then, Alderley, and Sapperton, Gloucs; Minster Lovell and Enstone, Oxon; Rockfield, Monmouth.

⁶⁴ This account is based on D. H. Farmer, *Oxford Dictionary of Saints*, p. 231, where further bibliography will be found.

⁶⁵ William of Malmesbury has the legend in both his sacred and secular histories: *Gesta Regum*, I, pp. 94-5, pp. 262-3; *Gesta Pontificum*, pp. 294-5.

⁶⁶ English pilgrims were found in St Peter's to decipher the scroll, thereupon they returned to England with the news of the martyrdom, the body was discovered and translated to Winchcombe.

⁶⁷ The re-attribution of the Romsley tympanum subject by this writer is based upon (1) hand blessing through a ring (the martyr's circlet); (2) the crown of Kenelm's temporal power; (3) his enclosing mandorla and angel supporters represent his apotheosis.

Sixpenny Handley (Plates 12 and 13)

The large rectangular panel of 'Christ in Majesty' was inserted into the north aisle wall (interior) in the rebuilding of 1877.⁶⁸ Prior to that, its situation is not known, and there is no mention of the sculpture in the Shipp edition of Hutchins' County History (1861-70). Its designation as a 'Christ in Majesty' is based upon: the enclosing mandorla, the rainbow-seat of the figure, the cross-nimbus, book and blessing gesture. The height of the piece, 34 ins (86 cm) in relation to its width, and the mandorla, suggest that it was originally the central block of a tympanum. If this were so, the tympanum would have been rather larger than any of the other Dorset tympana, with a minimum width along the base of 70 ins (178 cm), allowing for some framing. Owing to its size, it is unlikely that the piece was originally intended for Handley church.⁶⁹

In terms of detail, there is less to see here than at Buckland Newton. The only survivals are the traces of a sash hanging down between Christ's legs, and beside this, on His left, some hints of 'nested-V' folding. It is therefore more helpful to concentrate on general characteristics: the stiffness of the posture with the feet nearly as wide apart as the knees; the feet pointing straight down on to the rim of the mandorla; the depth of relief and the consequent handling of the drapery. This posture, with the shins almost vertical, as opposed to leaning outwards at varying angles, is

⁶⁸ RCHM, *Dorset V*, p. 64.

⁶⁹ It may have come from Cranborne, after the Dissolution of that House.



Plate 12. *Sixpenny Handley St Mary, panel re-set in north aisle.*



Plate 13. *Shaftesbury Psalter, Christ enthroned, fol. 14v.* Copyright Conway Library, Courtauld Institute.

not easy to parallel among 'Christ in Majesty' sculptures in England. At Lullington, Somerset, the posture is stiff, but the knees splay, while the Lincoln cathedral fragment and the Rochester cathedral tympanum have respectively: very fluid draperies, and feet-on-the-level.⁷⁰

The tall, stiff posture appears in wall-paintings and more so in manuscripts, but the number of good comparisons is few. The Shaftesbury Psalter (B. L. Lansdowne MS 383) and the Bury Gospels (Pembroke Coll., Camb. MS 120) provide unusually stiff, hieratic examples. In the Psalter (Plate 13), Christ in Majesty is suitably straight and stiff with His feet pointing straight down, though His arms curve out more. Also, the bulk of the legs is emphasised in this miniature. At Sixpenny Handley, this is a noticeable

⁷⁰ Conway Library neg. nos: Lullington 115/52 (9A); Lincoln B62/802; Rochester B60/1279.

feature, where the drapery recedes in between the shins. Similar features are found in f.165 v (Virgin and Child enthroned), where a simplified form of 'nested-V' fold appears between the Virgin's ankles. The drapery looking like a sash is also present here. In Pembroke 120, f.6, God and Christ are seated between cherubim. In this example, the legs of the Father-Son are left free of drapery folds, which accounts for the way they appear to protrude in front of the torso, as they would naturally. This may have been the case at Handley, though it is now too worn to say for certain.

On account of these manuscript parallels to the posture, the Handley Christ probably dates from the 1130s or 1140s.

The Plain Tympana

There are six plain tympana in Dorset, which can be assigned to the Romanesque period owing to their architectural framework: Maiden Newton, Tolpuddle (north and south), Hampreston and Studland (north and south). The function of the plain tympanum (or indeed any tympanum) was two-fold: (1) to act as a solid relieving-arch to take the weight of the wall over the doorway down to the ground via the solid jambs, and (2) to provide a field for painting. The plain tympanum would probably have been plastered over and painted in fresco, though only so long as a sufficient hood or porch protected it. Thus some of the Dorset examples may never have been painted, unless we have lost a large number of porches. It is doubtful whether the Maiden Newton, Tolpuddle and Studland north tympana were ever painted. This particularly applies to the Studland example, where the field is unusually arranged as between vousoirs, small tympanum and massive lintel. The vousoirs clearly form a relieving arch in this instance, and are notched into either end of the lintel. At Hampreston and Studland (south), central blocks of keyed or wedged shape act as keystones.

Toller Fratrum (Plates 14 and 15)

Situation: The provocative fragment at Toller Fratrum poses a number of problems. The actual situation of the block is the first consideration. The chapel was completely rebuilt in the 19th century.⁷¹ The fragment, set in under the east window-sill, and the important 12th century font, bear no stylistic relationship to one another. According to Hutchins (1863 edition), the fragment 'was recently found embedded in the wall',⁷² though whether it was also in the earlier church is unknown. It may support the view that the piece was a recent arrival in the mid-19th century, for Toller was not a particularly important place in the 12th century. It became a Preceptory of the Knights Hospitallers at some later date.

The piece is part of a much larger monumental sculpture.⁷³ Interpreted as such, it is unlikely that it was originally carved for Toller Fratrum, and its small size means it could easily have arrived from somewhere else. In addition, it is hard to find comparable material near at hand, though the Buckland Newton 'Christ' provides a faint parallel. An analysis of the stone would help to locate the original provenance.

The stone has not yet been tested in a laboratory, and expert opinion differs at present between (?) Portland stone (Mr F. W. Anderson) and chalk (Mr P. C. Ensom).⁷⁴ It is

not Purbeck limestone (as opposed to Purbeck-Portland) for the stone is white, under the grime, and of very compact texture. Portland is less likely, owing to its hardness, and it was a little used stone in the 12th century.⁷⁵ Nor does it appear to be the same stone as the Chichester Reliefs, which are of Caen stone.⁷⁶ Since the reliefs are not of a Purbeck stone, the hypothetical common origin of the Chichester and Toller work in a Dorset workshop requires modification.⁷⁷

The fragment is stylistically both monumental and sombre. Monumental in that, if a sketch reconstruction of the figure of Christ is attempted, he cannot be less than about 30 ins (76 cm) high, (see reconstruction drawing figure 3). This reconstructed figure is virtually on the scale of the Chichester Reliefs. At Toller, the fragment's top edge is only about half-way up Christ's shin. The sombre, almost grotesque feeling is shown in the woman's face: the woman is Mary Magdalene.⁷⁸ The face is somewhat rubbed and scratched, but is nonetheless impressive for its sense of solemn humility. The mouth is drawn down, and the eyes are wide open, probably tearful considering the Biblical account of the scene, (Luke 7: 38). Christ's foot has been turned up at an uncomfortable angle, for didactic purposes.

Mary's grotesque face finds perhaps its closest parallel on the capital of the north respond of the chancel at Stanley St Leonard, Gloucs, where the long wig-like hair is also represented.⁷⁹ (The drapery features are not comparable.) At Chichester, Mary is depicted with long braided hair in both reliefs, being deliberately differentiated from her sister Martha. Her face is very expressive, though not strictly comparable with Toller. The long wig-like hair is the customary representation of Mary in this scene in Romanesque art.⁸⁰

As for the drapery, this falls in stiff parallel folds, and shows a double-incised line near the hem of each fold, while to the right the drapery is in lighter pleats. A close parallel can be found on the drapery fragment from Old Sarum (now in the Salisbury Museum), which shows both drapery forms, the former type on a descending hem. It is a well preserved piece of high quality.⁸¹ At Chichester, the 'plated' hem-folds can be seen to good effect on 'The Raising of Lazarus' relief, notably on the block above Christ's feet, while the reliefs have other examples too. In ivory, the lone Magus, now in the Dorset County Museum, is clearly comparable to Toller in drapery treatment.⁸² Since this Magus is very closely related to the illuminated Magi of the St Albans Psalter, the Toller piece is firmly located in an important artistic milieu. This 'Albani-style' of the 1120s and 1130s comprises an important group of manuscripts, metalwork and sculpture, which in part has its origins in Saxony in the later 11th and early 12th century.⁸³

When compared with representations of 'Christ at the House of Simon the Pharisee' in manuscripts, it becomes

⁷⁵ *Medieval Archaeology* 8 (1964), p. 101 ff.

⁷⁶ See above, footnote 74 (1), and footnote 75.

⁷⁷ For this view see G. Zarnecki, 'The Chichester Reliefs', in *Arch. Jnl.* CX (1953), p. 116 ff., an essential article.

⁷⁸ For a discussion of the subject matter, see below.

⁷⁹ Stanley St Leonard capital, Conway Lib. neg. no. 785/72 (9).

⁸⁰ See, for example: Perpignan, Bibl. Mun. MS 1 f. 103; St Albans Psalter, f. 36 (Hildesheim, St Godehard); Admont, Stiftsbibl. MS 289, f. 83; New York, Pierpoint Morgan MS 521v. Scene 4; Cambridge, Pembroke coll. MS 120, f. 1v., bottom register.

⁸¹ Old Sarum Drapery fragment: Conway Lib. neg. no. 496/59 (19a).

⁸² Exhibition Catalogue no. 45, *Ivory Carvings in Early Medieval England*, London, Victoria and Albert Museum, 1974.

⁸³ An interesting commercial document of the period is the 'Liber Ordinacionum', i.e. the Laws of the Merchants of Lower Lorraine, specifying import controls upon the Cologne merchants of Dowgate, London. Works in precious metal are specially singled out for attention: *English Historical Review*, 17 (1902), p. 496.

⁷¹ RCHM, *Dorset I*, p. 251. Hutchins, II, p. 707, 708.

⁷² See above, footnote 71, Hutchins reference.

⁷³ For the arguments about measurements and reconstruction, see below.

⁷⁴ (1) Personal correspondence with Mr Anderson (ex-Chief Palaeontologist, Geological Survey), June, 1980. (2) Personal correspondence with Mr Ensom (Dorset County Museum).

evident that the Toller stone is a fragment of this subject (Luke 7: 37-50) (Plate 15). The arrangement of the head close to and washing a bare foot makes this attribution clear. Since Gregory the Great's pontificate, the woman who anointed Christ's feet in this episode has always been associated with Mary of Magdala of St Luke's gospel (chap. 8: v.v. 1-2).⁸⁴ The angle of Christ's leg shows that he must be either sitting, or standing with legs apart; the latter is most improbable in this case. The same *subject* is represented at Stanley St Leonard (Gloucs).

Mary Magdalene became an important subject for the 12th century artist, partly owing to the rapid growth of her relic-cult at Vézelay, and the spread of a liturgical cult through much of France.⁸⁵ Mary fulfilled a vital role in the changing religious sentiment of the period, which was rediscovering the humanity of Christ, and the power of forgiving love. This is brought out in St Anselm's Prayer to Mary Magdalene: (translation)

'St Mary Magdalene,
you come with springing tears
to the spring of mercy, Christ;
from him your burning thirst was abundantly refreshed;
through him your sins were forgiven;
by him your bitter sorrow was consoled.'⁸⁶

⁸⁴ See above, footnote 79. It is the account in St Luke that is followed at Toller, and more commonly elsewhere, and not the accounts in Matthew and Mark. The Luke account was presumably more suitable for the contemporary penitential ideal of Mary Magdalene.

⁸⁵ V. Saxer: *Le Culte de Marie Madeleine*, pp. 65-73, 185-7, 230-4; J. Sumpton: *Pilgrimage*, p. 37.

⁸⁶ Prayer to St Mary Magdalene 11, 1-6, in *Prayers and Meditations of St Anselm*, p. 201. Anselm's prayers of affective piety, written before 1078, effected a revolution in personal devotional practices.

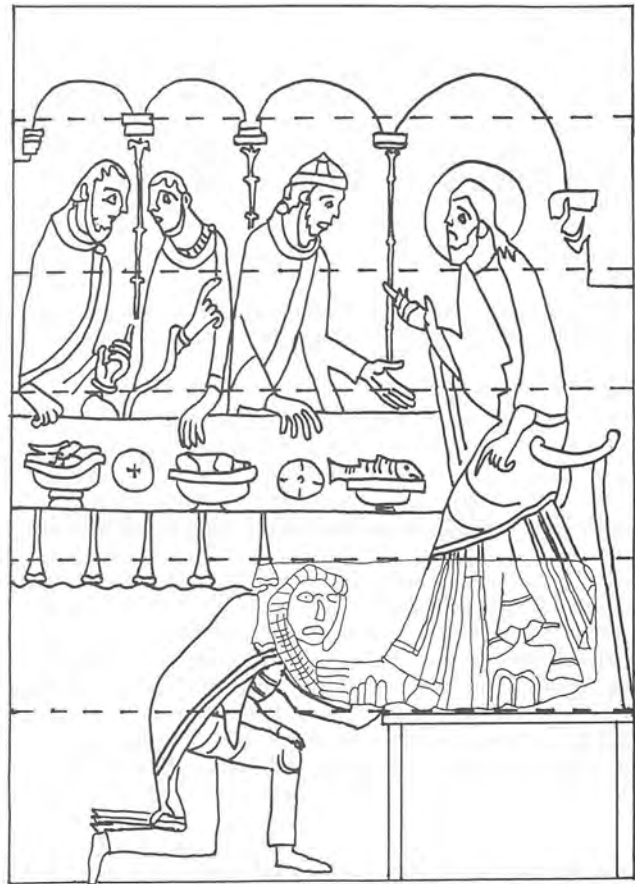


Figure 3. Reconstruction drawing of Toller Fratrums relief panel, based on St Albans Psalter, p. 36 (reversed). Scale 1:10.



Plate 14. Toller Fratrums St Basil, panel re-set under east window.

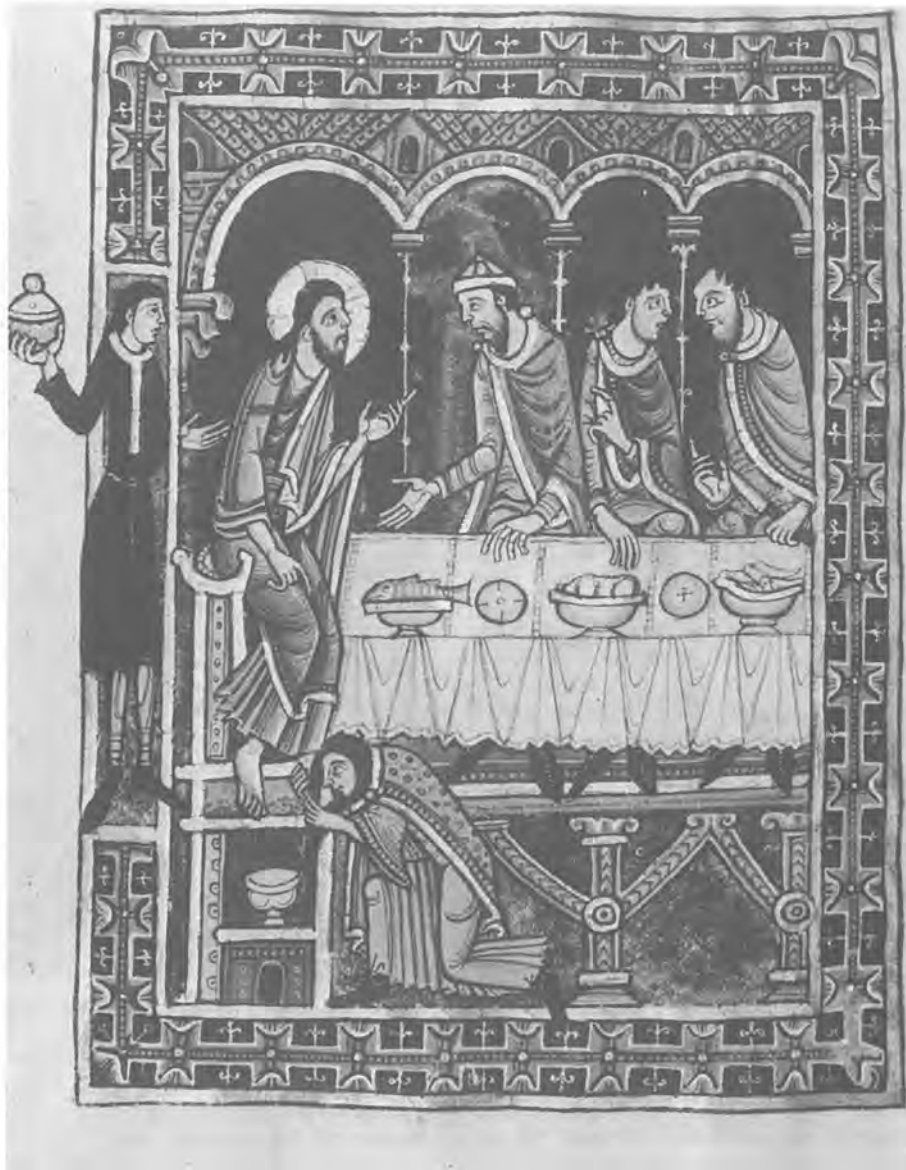


Plate 15. *St Albans Psalter, Christ at the house of Simon, p. 36. Copyright the Warburg Institute, University of London.*

In this prayer of compunction, the love, fear and tears of the sinner closely intermingle. The Magdalene faces which survive tend to convey the spiritual trauma of the 'divine penitent'.

The size of the Toller fragment, 7 ins by 17 ins (18 cm by 43 cm), (with an indeterminable depth into the wall), comes closely within the limits of the coursed blocks of carved stone which make up the Chichester Reliefs. The height of each course varies from between 5½ ins and 10 ins (14 cm and 25 cm) with an average height of nearly 7 ins (18 cm).⁸⁷ The Salisbury drapery fragment (measuring 8½ ins by 14½ ins by c. 10 ins (21 cm by 37 cm by 25 cm) presents a clean horizontal face at top and bottom. It must therefore be a piece of coursed stonework fitting in with other (now lost) pieces. Thus at Toller, Salisbury and Chichester the same genre of large-scale sculpture appears, carved on several courses of stone, a type of carving which does not appear in England before the 12th century.⁸⁸

Accepting that the Toller Christ was originally a seated figure, it is possible to make a rough estimate of the size of the whole figure. Considering the proportions of the standing Christ figures in the Chichester Reliefs, where Christ himself measures c. 42 ins (107 cm) high in 'The Arrival', and c. 45 ins (114 cm) high in 'The Raising of Lazarus', from the bottom edge of the Toller fragment to the top of Christ's halo could not conceivably be less than 28 ins (71 cm). The style of which Toller forms a part is noted for the lanky monumentality with which Christ is depicted. In the Albani Psalter miniature (Plate 15) of 'Christ in the house of Simon the Pharisee', Christ's legs and torso are remarkably long and thin, as he dominates the scene. In this example, Christ is perched on the edge of the stool and remarkably upright. The shins fall straight down. It is probable that the immediate model for Toller corresponded more to the seated type found in a Spanish Gospels of the 11th century.⁸⁹ Whichever the exact model, it was a pattern which showed Christ seated at the end of the table.

⁸⁷ G. Zarnecki in *Arch. Int.* CX (1953), p. 113 (Height of Blocks).

⁸⁸ See above, footnote 83.

⁸⁹ Perpignan, *Bibl. Mun.* MS 1, f. 103.

Apart from the height of Christ's figure, generally the tallest figure in the scene, the whole panel originally must have allowed room for Mary's kneeling body. This would have taken up at least one more course of masonry below the existing fragment's course, thus adding at least another 7 ins to the overall height of the composition.

In addition to this course at the bottom, a framing device, such as a foliate border, is probable at the head of the relief. This would add a few inches above the height of Christ's halo. If this were so, the whole would measure about 46 ins (117 cm) high: the height of the Chichester Reliefs.⁹⁰

Only when the Toller stone has been tested, and several samples of the Chichester stone(s) have been tested, will it be possible to suggest an original provenance for the Toller piece. At the moment, its artistic milieu is well established.

On account of close comparisons with sculpture and manuscript illumination of the 1120s and 1130s, the Toller fragment should be dated in the late 1120s or 1130s.

Stinsford (Plate 16)

This impressive panel is inserted ten foot up the west wall of the tower, and is recessed slightly into the wall. The sculpture has been in this unusual position since at least the 1860s.⁹¹ As it is of considerable height, it may originally have been intended as a dedication-panel, perhaps in a moulded recess, comparable in form to the 'Christ in Majesty' at Rous Lench, Worcs, or the indecipherable sculpture under arcing on the chancel wall at Barfreton, Kent.

The subject is designated 'St Michael overcoming the Serpent' (Revelation XII: 7-8) owing to the serpent's wing at the bottom, the diagonal thrust of the now missing spear, and the angel's nimbus; the church is also dedicated to the saint. St Michael in this subject is quite common in 11th and 12th century sculpture, where he is found in at least 12 places on tympana and lintels.⁹² The Barfreton panel mentioned above may have been a St Michael figure, and relates in a formal sense. This is more than can be said for the important fragment at Seaford, Sussex, which is stylistically on the fringes of the Chichester style.⁹³

Stylistically indeed, the Seaford fragment and the Mere (Wilts) St Michael provide a certain 'terminus ante quem' for the Stinsford piece, which, with its nervous fluttering vivacity, must belong to an early Saxo-Norman milieu, before England had received Byzantinising influences. The style and the posture at Stinsford must be considered together, for the stance of the angel is unorthodox, and apparently unstable. The direction the angel is moving in is not at all clear, though he would need to plunge the spear from near his right shoulder, i.e. near his right (north) wing.

The angels of early 11th century Anglo-Saxon manuscripts do not provide close parallels.⁹⁴ The depiction of wings, hem-lines and lower draperies, and the stances are all central to the issue, as the rest of the Stinsford figure is indecipherable. The St Michael in Avranches Bibl. Mun. MS 76, f. Av (c. 1040-50) provides the nearest pre-



Plate 16. Stinsford St Michael, panel re-set on west tower.

Conquest comparison, though it is essentially a hardened version of the Tiberius Psalter archangel. A much closer comparison is with the fused Saxo-Norman illumination of the late 11th century. In the Bible of William of St Calais at the Incipit of St Matthew's gospel, the winged man has widespread wing-feathers which are similarly banded.⁹⁵ The lower drapery lines are remarkably close to the Stinsford angel. This Bible provides several examples of figured initials, where the relationship of legs to body is equally 'unnatural'.⁹⁶ Canterbury and Jumièges manuscripts support the argument in favour of a late 11th century date.⁹⁷

The representation of the St Michael struggle in terms of movement appealed to the artists of the Saxo-Norman overlap period, and the spirit of this depiction can be seen in the tympanum at Moreton Valence, Gloucs, which dates from c. 1120.

As an archetype of the soldier-Christian, the cult of St Michael was popular in England from the seventh century. Thus church dedications to St Michael were numerous, and there are 16 in Dorset alone.⁹⁸ The focal point for the cult of St Michael within the Angevin empire was at Mont St Michel, where the abbey church was being rebuilt from the 1020s. The productive local school of illumination employed

⁹⁰ Table of possible dimensions of the original 'Toller' sculpture:

	CHRIST	BOTTOM COURSE	TOP FRIEZE	TOTAL
Low estimate	28 ins (71 cm)	7 ins (18 cm)		35 ins (89 cm)
Aver. estimate	35 ins (89 cm)	8 ins (20 cm)	3 ins (8 cm)	45 ins (117 cm)
High estimate	35 ins (89 cm)	10 ins (25 cm)	4 ins (10 cm)	49 ins (124 cm)
Height of Chichester Reliefs:	46/47 ins (118 cm).			

⁹¹ Hutchins II, p. 566.

⁹² Keyser: iconography index: St Michael, p. 75.

⁹³ Arthur Gardner: *English Medieval Sculpture*, fig. 66. I. Nairn and N. Pevsner: *Sussex*, p. 603.

⁹⁴ RCHM, *Dorset III*, pp. 252-3. The examples cited in the catalogue are important examples of Late Saxon angels. They neither show the same amplitude in the wing treatment, nor the same drapery style. The stance of the archangel in the Tiberius psalter is much clearer and more steady than the Stinsford stance.

⁹⁵ Durham Cathedral MS. A. II, 4, f. 87v.

⁹⁶ Examples of such initials can be found at: the Prophet Joel initial f. 11v, and an initial to an Epistle of St Paul, f. 152r.

⁹⁷ *Passionale*: BL Arundel 91, f. 26v, where in the initial M, St Michael is spearing the Dragon along a diagonal. BL Add. 17739 f. 17.

⁹⁸ *DNHAS* 90 (1960), p. 269 ff.

a relatively static St Michael iconography, showing St Michael in actual combat with the Dragon, as in the Tiberius Psalter model. At Stinsford however, St Michael has triumphed over the dragon, who is firmly beneath his feet. This type is found at Seaford and Mere, supporting the view that Stinsford is an Anglo-Norman piece.

Buckland Newton (Plate 17)

This damaged figure represents Christ in Majesty; this can be seen from the nimbus, the archetypal frontal blessing-gesture, and the fragment of a rainbow, on which he is sitting. It was 'recently' moved from the west tower to the south porch.⁹⁹ The piece has not been *in situ* for a long time, considering the church's architectural history, which makes its original function hard to determine. It may well have been an exterior image over a doorway or porch, though this is now a matter for conjecture. Its present height of 18 ins (46 cm) has to be increased, when trying to envisage the original sculpture, for the 'panel' terminates just below the knees. Another 8 to 10 ins (20 to 25 cm) would be necessary to complete the figure.

In spite of being in such a poor state, a close inspection of the piece does reveal some tell-tale details, which help to place it in a West Country artistic milieu. For example, the figure's left ear is still in reasonable condition, good enough to show that it was originally carefully carved. The long hair flows behind the ear, leaving it free. This careful and very naturalistic treatment of ears is characteristic of the Chichester Reliefs and associated works, where it is well displayed in 'The Raising of Lazarus' panel, and in the Head of Christ from Old Sarum (now in the Salisbury museum).¹⁰⁰

Another detail which is quite well preserved are the three separate plaits of hair on Christ's left shoulder (these can be seen in the photograph, unlike the ear). Again, this rendering of hair, though not uncommon in manuscript illumination, is restricted to a group of manuscripts derived from the Albani Psalter style. While this hair-form can be found in the Albani occasionally, it becomes much more common in the Shaftesbury Psalter.¹⁰¹ Pembroke MS 120 also possesses examples. This treatment of hair, laying it carefully on the shoulder in three or four plaits, is not found generally in mid-12th century English manuscripts.

There may also be a faint echo of the plated effect, which is produced by the Shaftesbury Psalter drapery highlights, at Buckland Newton. Down Christ's left arm slight traces of parallel drapery curves survive, which are a common drapery treatment in the Psalter, e.g. ff. 12 v., 14 v., 15 v.

The roundel with the Redeemer blessing, at the head of f. 15 v. bears a strong resemblance to the Buckland Christ, though the blessing hand has been drawn in front of the chest, for reasons of space. The wide face, hair details and drapery are all comparable. That the 'Shaftesbury Psalter style' affected sculptors' style locally can be appreciated from a comparison of the Lion of St Mark (f. 15 v.) with the two stone confronting lions on a gable-head from Old Sarum (now in Salisbury Museum).¹⁰²

In comparison with other Dorset sculpture, the Buckland Christ displays greater relief, 3 to 4 ins (8 to 10 cm). This is substantial for such a moderate-sized piece. The artistic



Plate 17. Buckland Newton Holy Rood, panel re-set over south doorway.

connections and slight extant detail show that the Buckland Christ is neither rustic, nor provincial in style.

Owing to the probable stylistic connections, a date for the figure in the 1130s or 1140s is most applicable.

Tarrant Rushton (Plate 18)

The remarkable cambered lintel at Tarrant Rushton is almost certainly not in its original position. At present, the 'Agnus Dei' subject faces into the church over the south doorway. The precise setting of the doorhead is difficult to ascertain, owing to the narrow door-passage it is in. The lintel may have been reset facing in, when the door-passage was narrowed in the 16th century.¹⁰³ Its original position is no longer certain, but that it was a doorhead can be shown both by inspection, and comparison with other pieces. At the left (east) bottom corner, the moulded lower edge of the lintel can be seen. This is soon interrupted by the cutting out of the bottom centre of the lintel. This was to make way for the straight-sided depressed-arch form of the doorway in the 16th century. There can be no doubt that the lintel therefore had an horizontal bottom edge.

This form of cambered lintel can be found intact at Penselwood and Langport (Somerset), both with 'Agnus Dei' subjects. At the former place, the lintel is *in situ* over the south doorway, while at the latter it has been reset over the Perpendicular south doorway.¹⁰⁴ At Penselwood, stones form a plain tympanum above the lintel, which may have been the original arrangement at Tarrant, considering the concentration of sculpture on the lintel. This type of lintel is already a feature of mid-11th century doorways in Normandy, as at Jumièges and the West front of St Etienne, Caen.

⁹⁹ RCHM, *Dorset III*, p. 48.

¹⁰⁰ The connection of the Buckland Christ with Chichester was first mentioned by Prof. G. Zarnecki in his article on the Chichester Reliefs: *Arch. Jnl.* CX (1953), p. 116, where Mr A. R. Dufty is acknowledged. Chichester Reliefs: Conway Library © Warburg Institute. Old Sarum 'Head of Christ' Conway neg. no. A76/209.

¹⁰¹ Albani Psalter: f. 9r (Eve's hair in 'The Temptation'); f. 35r (Christ on the road to Emmaus), Shaftesbury Psalter, e.g. f. 12v. (God sending forth the angel Gabriel); f. 14v. (Christ in Majesty); f. 15v (Psalm I. Beatus Initial).

¹⁰² Old Sarum gable-head: Conway Lib. neg. no. B36/3420 AV.

¹⁰³ The possible deliberate narrowing of the door-passage, or reconstruction of the jambs, is based upon a visit to Tarrant Rushton, and the evidence of the RCHM's plan, RCHM, *Dorset IV*, p. 112.

¹⁰⁴ Penselwood – Keyser: 2nd ed. xxii, lxii, fig. 100; Pevsner: *North Somerset and Bristol*, p. 242. Langport – Keyser: xxi, lxxiii, lxxix, fig. 108; Pevsner: *South and West Somerset*, p. 217.

The form is occasionally found in manuscripts as a framing device, for example in the New York and London Psalter-leaves.¹⁰⁵

Stylistically, however, the Tarrant lintel bears no apparent relationship to these Somerset examples, though at Penselwood the supporting animals have elongated bodies. The Tarrant piece is one of a number of provincial 'Agnus Dei' sculptures, which have no discernible connection with one another, and are widespread geographically. They are listed in the catalogue for general 'stylistic' interest.¹⁰⁶ In its flattened out front face, the lintel resembles the Fordington doorhead (Plate 1), and the Damerham tympanum (Plate 4).

The treatment of the 'Agnus Dei' subject at Tarrant is most unusual. Out of the Lamb's mouth issues a scroll, which terminates in the shape of a 'vesica piscis' on its side. The shape is quite deliberate, for a single incised line mark it out. It is not an actual fish, for it has no tail, fins or eye.¹⁰⁷ The Lamb is thus uttering His own name: $\iota\chi\theta\upsilon\varsigma$ (the fish).¹⁰⁸ This scroll form is a rarity in 'Agnus Dei' iconography. It apparently does not appear on any of the other 'Lamb of God' subjects on English tympana and lintels, of which there are at least 36 published examples.¹⁰⁹ At Alleaume (Manche) in an 'Agnus Dei' relief with Saints Peter and John, a dove is featured (cf. Tarrant) carrying a branch in its beak.¹¹⁰ The turned furniture also appears at Alleaume, and is much easier to parallel in England.

Finally, the manikins are of considerable interest.¹¹¹ On the right (west) the seated figure in a curule chair has a bird perched on his right fist. The bird is bending over as if

'speaking' to him. In his left hand, he holds a book inscribed 'GREGOR'.¹¹² Therefore, the figure either represents Pope Gregory the Great (died 604), or he is reading a book by Gregory. Taking the bird into account, the former is more likely. The scene thus depicts the common mediaeval subject of St Gregory inspired by the Dove (Holy Spirit) in his writings.¹¹³ As one of the four Latin Doctors, and especially as apostle of the Anglo-Saxons, Gregory ranked very high in the affections English churchmen. His writings were widely read in the English church, the *Dialogues* and *Pastoral Care* being standard works in mediaeval libraries.¹¹⁴ The seated figure to the left (east) of the Lamb may in this case represent Peter the Deacon, Gregory's constant companion, who appears in art as taking down Gregory's inspired words.¹¹⁵ If it is not intended to be Peter, then it may well represent, in this English context, St Augustine.

Whoever this figure is intended to be, the Tarrant lintel refers generally to the Conversion of England, and pays tribute to Gregory's place of prime importance in this mission.¹¹⁶ Gregory was also central to the liturgical codification of the Mass, to which his monumental Sacramentary bears witness, another link with the iconography of the Lamb.

As for the 'Gregor' inscription, it can only now be seen by shining a torch obliquely across the surface of the book; it then stands out as shadow-letters.

The lintel's date is very difficult to determine, as there is little to compare it with closely, and it is of low quality. *Circa* 1115-30 is the most likely period.

¹⁰⁵ New York, Pierpoint Morgan Library MS 724v. (the Nativity). London, British Library Add. MS 37472r (the Presentation in the Temple).

¹⁰⁶ See Catalogue, Tarrant Rushton.

¹⁰⁷ SA's notes made at Tarrant Rushton.

¹⁰⁸ *DNHAS* 18 (1897), p. 55.

¹⁰⁹ Keyser – iconography index: Christ (6) Agnus Dei, pp. 72-3.

¹¹⁰ *Normandie Romane: Basse Normandie*, plate 94.

¹¹¹ The following interpretations have been suggested: 'Three Persons of Trinity', *Hutchins III*, pp. 463, 464; Our Lord – Lamb: Dove, *DNHAS* 18, p. 55; Trinity with Lamb representing Christ, Keyser, 1881, *Paper to Society of Antiquaries*.

¹¹² This inscription was recorded by the RCHM (*Dorset IV*, p. 113).

¹¹³ For examples of this iconography: see Réau, *Iconographie de l'Art Chrétien*, III, p. 611. MS Douai, Bibl. Mun. 315, f. 1 shows later 12th century version of the scene.

¹¹⁴ D. H. Farmer: *Oxford Dictionary of Saints*, p. 117; *New Catholic Encyclopaedia*, VI, pp. 766-770.

¹¹⁵ While Eton College MS 124, f. 122r, an 11th century MS from the abbey of Farfa, shows Peter the Deacon reading the Testament of Pope Gregory to the People, *New Catholic Encyclopaedia*, XI, p. 216.

¹¹⁶ See above, footnote 11. Gregory's letters are the major source for his interest in the Augustinian mission, e.g. *English Historical Documents* (2nd ed.), I, pp. 790, 791.



Plate 18. Tarrant Rushton St Mary, lintel of south doorway (re-set).

FORDINGTON St George (Dorchester)

(Plates 1, 2 and 3)

Context: Present fabric of church reveals a complex architectural development. Mid 12th cent.: S. nave arcade. S. aisle wall west part, S. porch (part); 14th cent.: slight remains; 15th cent.: W. Tower, S. wall of porch. 19th cent.: N. aisle west part, and part of S. transept. 1905-7: Chancel, 'South Chapel', S. aisle wall east part, N. aisle wall east part, nave piers – three easternmost bays.

DOORHEAD: of South doorway into S. aisle. Six carved blocks of stone of irregular shapes, forming a three-sided doorhead.

Centre: mounted and nimbed warrior (St George) holding horse's reins in left hand and banner in right hand. This banner has the butt-end entering a soldier's mount on right. The military saint is wearing a helmet, clasped tunic, mail-skirts and prick-spur. The horse is saddled and wears a bit, bridle and collar with pendant crosses.

Right: three soldiers (Saracens) tumbling down. They wear mail-suits, helmets with nasals, carry embossed kite-shields and one broken lance.

Left: two kneeling soldiers (Crusaders) with hands raised in thanksgiving. They wear mail-suits and helmets with nasals, and face towards the action. Two kite-shields and two lances are propped up behind them (extreme left).

The Doorhead has a roll-moulding and a square-mould, which acts as the base for the sculpture.

Size: 37 ins × 84 ins (max. width) (94 cm × 213 cm). Detailed measurements can be taken from scale-drawing.

Relief: 0.75 in → 1.5 in. Average: 1 in (2.5 cm).

Material: Caen stone (RCHM).

Condition: Good, only small chips missing.

Date: 1098–c. 1110.

Comparisons: (Style) Bayeux Tapestry. (Iconography) Damerham, Hants, Tympanum; Hardham, Sussex, Wall-painting. (Form) St Albans Psalter, Shaftesbury Psalter.

Bibliography: W. Dugdale: *Monasticon* VI, 1295. Hutchins II, 798. Keyser, lxxxii. J. R. Allen, *Early Christian Symbolism*, 270. RCHM, *Dorset II*, 110. *DNHAS* 5 (1884), 94-8, H. J. Moule: 'Fordington St George'. *DNHAS* 12 (1891), 41-6, W. Barnes: 'Fordington St George'. *DNHAS* 30 (1909), 164-95, J. Feacey: 'The Sequence and Evolution of Architectural Styles in the Church of Fordington St George, Dorchester'. *Soc. Antiq. Scot.* 17, 332, M. Nepean: 'Notice of a sculptured representation of S. George at Fordington . . . and of a similar sculpture at Linton in Roxburghshire'. *Sussex Archaeological Collections*, XLIV (1901), 99, P. M. Johnston: 'Hardham church and its early paintings'. *Walpole Society* 31 (1942-3), 2, A. Baker: 'Lewes Priory and the early group of wall-paintings in Sussex'.

DAMERHAM (Hants) St George

(3 miles south-west of Fordingbridge) (Plate 4)

Context: The church is of many periods possessing: a Norman tower, a Norman three-bay N. arcade; a 13th cent. S. arcade; a Perp. chancel. It has wagon roofs in chancel, nave and S. porch.

TYMPANUM: reset above S. doorway, about 9 ft above ground. Carved, roughly semi-circular tympanum showing a mounted warrior charging down a recumbent figure in the bottom left corner. The mounted figure carries a kite-shield on his left arm and a (broken-off) sword in his right hand. Behind the horse's tail is a carved object of uncertain identity. Two blocks of stone: upper renewed.

Size: 21 ins × 35 ins (53 cm × 91.5 cm).

Relief: 1½ ins (4 cm).

Material: ?Caen stone (SA), covered in a yellowish preservative.

Date: c. 1120.

Comparisons: (Iconography) Fordington, Dorset: doorhead. (Part-iconography) Hardham Church, Sussex: wall-painting.

Bibliography: *VCH Hampshire*, Vol. IV, 590-591. Pevsner/Lloyd: *Hampshire*, 188.

WORTH MATRAVERS St Nicholas

(4 miles south of Corfe Castle)

(Plates 5, 6, 7, 8 and 9)

Context: This early 12th century church with west tower, nave and chancel, was modified in the later 12th cent. with the insertion of the South Doorway sculpture. The chancel has a 14th cent. E. wall and a 13th cent. plinth to the S. wall. There was a S. chapel E. of the present porch, until the 1770s. The S. porch is later 18th cent. Restored 1869-72.

TYMPANUM: Inserted over S. doorway along with jambs and roll-moulding in c. 1150. (Double pilaster-buttress cut away to accommodate this.) Of one block with a broken and still more defaced central section, so now in two main pieces. Represented are: Left (west) a woman crowned and orant. Right a man holding a book. In the corners are: (left) a kneeling figure holding a scroll and with remains of a wing. (Right) a standing figure holding a scroll and ? censuring. (Coronation of the Virgin with Angels.) See below. The whole is surrounded by confronting chevron on a roll-moulding. (Square and roll-moulded jambs to the doorway.)

Discussion of 'Coronation-subject': Of the four 'shadowy' figures, the two outer angel-figures are best preserved. Angels; and not Magi, owing to traces of wing. Left centre: attributed as 'the Virgin' owing to (1) large square-topped head which must be remains of a Crown. (2) slender proportions in relation to figure on the right. (3) submissive attitude to figure on right – note remains of praying hands, (4) vestiges of mantle. (5) slippers feet. Right centre: attributed as 'Christ Redeemer' owing to (1) bulk of the figure, so surely 'male'. (2) book supported on His left knee. Upper part of this figure is a problem. From what remains of the figure's left shoulder, it seems that the head would have to be both small and very high up, i.e. just under the roll. Figure's right side is extremely worn and no longer readable. It is not clear what the original gesture of the right arm was. Two central figures either seated on one bench, or on separate thrones. Distance between them at bench level: c. 14 ins. Immense lean of the Virgin figure, makes their heads quite close together. Important surviving detail: swirling drapery at Virgin's feet. Raised drapery beside Christ's foot. General composition of the scene: important survival in itself. **Size:** 31 ins × 62 ins (79 cm × 157.5 cm).

Relief: 1½ ins-2 ins (4-5 cm).

Material: ? Purbeck Limestone (SA).

Condition: Very poor.

Date: 1150-60.

Comparisons: See commentary, under Form and Style sections. Most important style: MSS. Winchester Psalter, Dover Bible, Avesnes Leaf. Sculpture: Wareham lead font (York Virgin). Metalwork – Altar-frontals: Lisbjerg, Denmark; Broddetorp, Sweden.

Bibliography: Hutchins I, 699-700. *DNHAS* XIV (1893), xxxiv, L. Lester: Swanage Meeting. *DNHAS* XXX (1909), lxxv, J. Edwardes: 'Worth Matravers church'. *Architectural and Topographical Record I* (1908), 1-16 (W. I. Travers). RCHM *Dorset II*, 410. (Iconography) *JWC I* 13, 1950, 1-12.

WYNFORD EAGLE St Lawrence

(8 miles north-west of Dorchester) (Plate 9)

Context: This small church, formerly a chapel of Toller Fratrum, was entirely rebuilt in 1840. It incorporates earlier features.

TYMPANUM: reset in W. wall, externally, on N. side of porch. About 7 ft above ground level. One block. Carved with two confronting wyverns in a recessed semi-circular panel. Around this a band of 12 scratched imitation voussoirs.

Size: 28 ins × 51 ins (71 cm × 129.5 cm).

Relief: Very shallow. Maximum 1 cm.

Inscriptions: (1) Lightly incised on 'voussoir-surround' MAHALD DE L'EGELE (see Figure 2). (2) Lightly incised on bottom left 'voussoir' ALVI ME FECI (see Figure 2). Originally an inscription along lower face of tympanum: now illegible.

Material: Ham Hill stone (RCHM), pale orange.

Date: Soon after 1096.

Comparisons: Sculpture – Ipstones, Staffs. Tympanum: slightly recessed panel. Alveston, Warwicks, Tympanum. Embroidery: Bayeux Tapestry margins.

Bibliography: Hutchins II, 701, 707 (Engraving). RCHM *Dorset I*, 269. *DNHAS* 23 (1902), lii, 'Wynford Eagle'.

GODMANSTONE Holy Trinity

(5 miles north of Dorchester) (Plate 10)

Context: The church is a great mixture of periods with a 12th cent. chancel-arch, a nave rebuilt in the ? 15th cent., and a W. Tower of 15th cent. The chancel, north and south chapels were (re)built in the 16th cent. The church was extensively restored in 19th cent., the N. chapel and chancel were largely rebuilt, the latter in 1848.

TYMPANUM: of S. doorway, rebuilt and renewed. The semi-circular tympanum of one block, is decorated with scale-ornament and below this two rows of small saltire crosses. The upper row of crosses are beaded in the interstices. The whole is surrounded by an order of simple chevron abutting a roll-moulding. The back face of

the tympanum is plain and white-washed. (The chevron-order, imposts, scallop-capitals, *detached* jamb-shafts, and bases, look entirely renewed, i.e. Victorian.)

Size: 25 ins × 55 ins (63.5 cm × 140 cm).

Relief: Max. ½ in (1.25 cm).

Material: Not ascertainable, because surface totally white-washed.

Condition: The surface decoration is absolutely sharp. It is either a Victorian re-cut, or more probably a Victorian 'copy' of the original. The scallop-caps and jamb-shafts are Victorian as can be seen from a comparison of them with the caps of the door itself.

Date: Originally early 12th cent. Victorian (1848 'restoration').

Comparisons: Fish-scale: Peterborough Cath.: N. transept tympanum. Chichester Cath.: S. W. Tower. Pauntley, Postslip and Cherrington, Gloucs: faces up and crosses below. Burghclere, Hants. Devizes, Wilts. Saltire-cross diaper: abundant.

Bibliography: Hutchins IV, 42. RCHM, *Dorset I*, 120.

HINTON PARVA (Stanbridge) St Kenelm (3 miles north of Wimborne Minster) (Plate 11)

Context: Church was taken down and rebuilt c. 1860 by Sir Richard Glyne. Parts of the Norman church are incorporated, i.e. the chancel-arch and the Image.

PANEL: reset over S. doorway exterior. Carved panel with three-sided head, showing a standing 'angel' with circlet around head. His left hand supports a cross standing on the base of the panel. In his right hand he clasps a book to his chest. On the angel's right is a small thorn tree. The child-like angel probably represents the child-martyr Kenelm.

Size: 14½ ins × 18 ins (37 cm × 46 cm).

Relief: Max. 1½ ins (3.7 cm).

Condition: Good; end of 'angel's' left wing broken off.

Material: ? Clunch: some dull creamy preservative on top (SA).

Date: First quarter of 12th century.

Comparisons: Subject (Kenelm): S. Kenelm's chapel, Romsley, Worcs. – crowned king in a mandorla. None of the seven other pre-Ref. dedications possess Norman figured sculpture. Angels: gt. majority of 'angels' – combatants usually S. Michael. Examples which are not – Halford, Warwick and Pennington, Lancs. Rubber-arms: cf. Savigny, Normandy; Herefordshire School Sculpture. Purpose: small central part of tympanum: cf. Little Barrington, Gloucs; Elkstone, Gloucs.

Bibliography: Hutchins III, 138. RCHM, *Dorset V*, 31. F. Arnold-Foster, I, 174-5, III, 388. *DNHAS* 90 (1968), 276. R. V. H. Burne: 'Church Dedications in Dorset'.

SIXPENNY HANDLEY St Mary (9 miles north-east of Blandford) (Plates 12 and 13)

Context: Chancel and S. porch: 14th cent. origin. Nave, aisles and W. Tower entirely rebuilt in 1877.

Panel: Reset in N. aisle on N. wall. One block. Rectangular stone panel showing seated figure of Christ in Majesty enclosed in a moulded mandorla. Remains of long flowing hair over his left shoulder. Feet resting on rim and pointing down. He has a cross-nimbus and is seated on a rainbow. A book is supported on his left knee. His right hand is broken off in act of blessing. Left arm is missing. Remains of nested-V folds and a sash hanging down between legs.

Size: 34 ins × 22 ins (20 ins at bottom) (86.5 cm × 56 cm).

Relief: Max. 3 ins (7.5 cm). Ave. 2 ins (5 cm).

Material: ? Portland, possibly Chalk (S.A.).

Condition: Very badly damaged, head indecipherable. Lower drapery and feet slightly better.

Date: 1130-50.

Comparisons: The poor condition makes comparison difficult. MSS: Shaftesbury Psalter; Bury Gospels (Pembroke 120).

Bibliography: Hutchins III, 543, 544 (no mention of the Image). RCHM, *Dorset V*, 64-5.

MAIDEN NEWTON St Mary

Context: The church, consisting of nave, central tower, chancel, S. aisle, S. transept and N. vestry, displays a complex growth of additions and rebuilds to the 12th cent. fabric. 12th cent. work survives in the nave W. and N. walls and parts of the central tower structure. Fine 12th cent. roundels are in the interior, and other fragments are built into the c. 1500 S. porch.

TYMPANUM: of the N. doorway, entirely *plain*, made up of six blocks of stone, and resting on chamfered imposts. Surrounded by a semi-circular roll-moulding with abutting chevron and a hood-

mould, carried down through scallop caps, shafts and bases.

Size: 35½ ins × 50 ins (90 cm × 127 cm).

Material: Hall Hill stone (tympanum) (SA).

Date: c. 1110-c. 1140.

Comparisons: Arch-order – Godmanstone.

Bibliography: Hutchins II, 687. RCHM, *Dorset I*, 150.

HAMPRESTON All Saints (3½ miles east of Wimborne Minster)

Context: The church's main features are as follows: W. Tower and chancel: early 14th century. Nave: retains 15th cent. work with a N. arcade of 1896. N. aisle and N. porch added in 1896.

TYMPANUM: The semi-circular plain tympanum consists of three blocks, the central block is a joggled keystone. The chamfered hood-mould is of carstones. It rests on chamfered imposts and square jambs. The whole has been re-used to form the N. doorway in the N. aisle wall.

Size: 21 ins × 44 ins (53 cm × 112 cm).

Material: The two outer blocks of tympanum – Carstone (SA). The keystone blocks of tympanum – Clunch (SA).

Date: Early 12th cent.

Bibliography: Hutchins III, 432 (Engraving of church). *DNHAS* 19 (1898), lx, H. G. Hopkins: 'All Saints. Hampreston . . .'. RCHM, *Dorset V*, 27.

STUDLAND St Nicholas (3 miles north of Swanage)

Context: The church, consisting of nave, chancel (with tower above) and sanctuary, is of mid-11th cent. date, with 12th cent. enrichments. A well-preserved Saxo-Norman edifice of national importance.

TYMPANA: (1) Over S. doorway and entirely plain, as is the square arch-order surrounding it. The tympanum is made up of 12 blocks of stone: the lower four, forming a chamfered lintel with a keystone – possibly cracked into two. Jambs: inner order are plain and square. Outer order have weathered scallop-caps, shafts and bases. This tympanum ensemble was inserted in early 12th cent. (2) over N. doorway and entirely plain. The massive lintel, tiny tympanum and voussoirs are flush with the wall-face. They are of ashlar, including the jambs, and are built into the rubble-masonry of the 11th cent. church. The arrangement of the voussoirs, tympanum and lintel is noteworthy. The jambs are plain, except for a vertical roll-moulding at the corner.

Size: South tympanum: 34 ins × 67 ins (86.5 cm × 170 cm), the face of this tympanum is recessed 2 ins back from front edge of impost. North 'tympanum' includes voussoirs and lintel: 24½ ins × 51 ins (62 cm × 129.5 cm).

Material: Purbeck Limestone (SA).

Date: First quarter of 12th cent. The church had a major restoration in 1881 – see *DNHAS* 12.

Bibliography: The tympana have received very little mention in the literature. The most useful articles on Studland are: *Architectural and Topographical Record I* (1908), 105-117, W. I. Travers: 'Studland Church', *JBAAS* NS XXIV (1918), 33 P. M. Johnston: 'Studland church and some remarks on Norman Corbel-Tables', *DNHAS* 12, 1891, 164-79, W. M. Hardy: 'A Study on the work of Preservation of the Church of St Nicholas, Studland, Dorset'. RCHM, *Dorset II*, 276.

TOLPUDDLE St John (6 miles east of Dorchester)

Context: The 12th cent. nave, of which the S. wall survives mainly intact, has the following surviving additions: 13th cent. tower and N. transept; 14th cent. N. aisle and chancel. Several 19th cent. buttresses and the wall blocking off an earlier S. transept.

TYMPANA: (1) S. doorway: plain semi-circular tympanum, *in situ*, with plain voussoir surround, and lintel-band. Tympanum is of three blocks and recessed by ½ in. No imposts or capitals. Jambs have a slight chamfer. (2) N. doorway, blocked: plain semi-circular tympanum of same format as (1), though tympanum – area of only one block. Re-used in the 14th cent. wall.

Size: (1) 24¾ ins × 47 ins (63 cm × 119.5 cm). (2) 16½ ins × 31 ins (42 cm × 79 cm).

Material: ? Clunch (SA).

Date: Early 12th cent. Church was restored throughout in 1855.

Bibliography: Hutchins II, 632. *DNHAS* 32 (1911), lvi, 'Tolpiddle'. RCHM, *Dorset III*, 288-9.

TOLLER FRATRUM St Basil

(9½ miles north-west of Dorchester) (Plates 14 and 15)

Context: This small church was entirely rebuilt in the 19th cent. on the site of a chapel, belonging to the Preceptory of Knights Hospitallers at Friary Mayne. The 12th cent. stone fragment and the font are the major features of interest.

FRAGMENT: reset in east wall of chancel interior, immediately below window sill. Carved stone with head and shoulders of St Mary Magdalene wiping foot of Christ with her hair. Drapery falling over Christ's leg in parallel pleats. Traces of red paint between Mary's head and Christ's leg.

Size: 7 ins × 17 ins (18 cm × 43 cm).

Depth of relief: 2-2½ ins (5-6.5 cm).

Depth of block: not ascertainable.

Material: ? Portland stone (F. W. Anderson).

Date: c. 1130.

Comparisons – Sculpture: Chichester Reliefs; St John at Barking, Essex; Stanley St Leonard capital, Gloucs; S. Cerney head, Gloucs. Old Sarum: fragment of drapery and Head of Christ, now in Salisbury Museum. Ivories: Magus found at Milborne St Andrew, now in Dorset County Museum. MSS: Albani Psalter, Hildesheim, St Godehard; Shaftesbury Psalter, B. M. Landsdowne 383; Winchester Psalter, B. M. Nero C. IV, f.19, 24.

Bibliography: Hutchins II, 707, 708. *VCH Dorset II*, 92. *RCHM Dorset I*, 251. *DNHAS* 53 (1931), lxxvi, R. H. White: 'Toller Fratrum church'. G. Zarnecki, *Arch. Jnl* CX (1953), 'The Chichester Reliefs', esp. 116-118.

Note: The 12th cent. font bears no stylistic relationship to the fragment at all.

STINSFORD St Michael

(2 miles east of Dorchester) (Plate 16)

Context: Chancel, N. and S. nave arcades – early 13th cent. S. aisle: mainly 15th cent. N. aisle: rebuilt in 1630. West Tower – 14th cent.

PANEL: inserted into W. wall of Tower, externally. One block. Carved figure of a standing Angel (St Michael) with banded wings and fluttering drapery. Nimbus. Head completely defaced. He is standing on vestiges of a dragon – wing visible at bottom of panel.

Size: 36 ins × 24 ins (91.5 cm × 61 cm).

Relief: c. 4 ins (10 cm).

Material: Ham Hill stone (RCHM).

Condition – very badly damaged: head, chest and arms of angel. The wings and lower drapery have survived best.

Date: c. 1080s-1090s.

Comparisons – Sculpture: None of the standing St Michaels are closely comparable, e.g. Barfreton, Kent or Mere Wilts, both of which are later. Ivory: St Michael trampling Satan, Museo Nazionale Florence, Cassand no. 71 (for iconography only). MSS: Oxford, Bodl. Junius 11 p. 61 (Angel); BL Cotton Tib. C VI f.16 (Angel); BL Stowe 944 f., 7 (Angel); Durham Cath. Lib. A.II.4 f. 87v. (St Matthew symbol); Cambridge, Pembroke MS. 120 f. 11 (St Matthew symbol).

Bibliography: Hutchins II, 556. *RCHM Dorset III*, 252-3.

BUCKLAND NEWTON Holy Rood

(3 miles north-east of Cerne Abbas) (Plate 17)

Context: The Chancel is good quality 13th cent. work. The nave, aisles and W. Tower and S. porch are all 15th cent. The church was extensively restored in 1878. (The manor and advowson anciently belonged to abbots of Glastonbury.)

FRAGMENT: reset over S. doorway, exterior. ? Seated on a rainbow: carved stone showing Christ in Majesty. His right hand raised in blessing, His left hand across His front, perhaps holding a book. Drapery – ? plate-like. Cross-nimbus in relief. Hair is falling in three plaits over His left shoulder. Left ear carefully carved.

Size: 18 ins × 13¾ ins (46 cm × 35 cm).

Relief: Head: 4 ins (10 cm). Body: 3 ins (7.6 cm).

Material: ? Portland stone (F. W. Anderson). 'Limestone' (RCHM).

Condition: very badly weathered or defaced. Bottom of figure missing.

Date: c. 1130.

Comparisons: the poor condition makes comparisons difficult: Chichester Relief-style; Damerham, Christ (S. porch); Little Barrington, Gloucs; Head of Christ (Salisbury Museum). MSS: Shaftesbury Psalter.

Bibliography: Hutchins III, 712, no mention of Images. *Somerset Arch. and Nat. Hist. Soc., Procs.* xlii, 18-19: 'Buckland Newton'. *RCHM, Dorset III*, 48-49. *VCH Dorset III*, 73 (DB reference).

TARRANT RUSHTON St Mary

(3 miles east of Blandford) (Plate 18)

Context: the nave and chancel-arch preserve form of a 12th cent. building. N. and S. transepts and chancel – 14th cent. W. end of nave: 12th cent. S. door jambs? 16th cent. S. porch 15th cent.

LINTEL: of S. doorway, probably reset facing inwards. Bottom part of this cambered lintel cut away to form a 'Tudor-arch'. The lintel is carved with an 'Agnus Dei' (centre) with a scroll emanating from His mouth, to the east a figure seated frontally with both hands raised – in His left hand holding an open book, His right hand in a blessing gesture. To the west a figure seated in profile in a curule chair. In His left hand he holds a book inscribed with the word 'GREGOR'. In His right hand perches a bird facing him.

Size: Present height at any point = 8 ins (20 cm); original height at apex = c. 12 ins; width (total) = 45 ins (114 cm); width of carved 'panel' = 38 ins (96.5 cm).

Relief: Max. ¾ in (2 cm).

Inscription: (sic) . . . G R E

G O R.

Material: ? Chalk (SA).

Condition: Quite good. Originally one block, now cracked near apex.

Date: Early 12th cent.

Comparisons – Sculpture: elongated Agnus Dei (examples): Thwing, Yorks; Egloskerry, Cornwall; Preston, Gloucs; Castle Morton, Worcs; Clebury Mortimer, Salop; Woolley, Yorks; Figuefleu, Basse Normandie; Alleaume, Manche. Form of lintel: Langport and Penselwood, Somerset; Downe St Mary, Devon; St Etienne, Caen; Jumiegès. In MSS (e.g.): Pierpont Morgan Leaf. MS 724v. BL Add. MS 37472r.

Bibliography: Hutchins III, 463, 464 (Engraving). *RCHM, Dorset IV*, 113. *DNHAS* XVIII (1897), 55, J. Penny: 'Tarrant Rushton Church'. *Archaeologia* XLVII (1884), 170, C. E. Keyser: 'On the sculptured tympanum of a former doorway in the church of South Ferriby, Lincolnshire'. Keyser, p. 56.

Conclusion

The sculpture discussed in this article illustrates certain recurrent problems in the study of Dorset Romanesque. Very little of the material under review remains in its original position. Only the Studland, Maiden Newton and Tolpuddle tympana are *in situ*. The Fordington doorhead has probably been in its present position since the later 12th century. The Worth tympanum has been *in situ* since the mid-12th century, and was made to be inserted at Worth. The rest of the material is now not in its original context, and, with the exceptions of Wynford Eagle, Godmanstone and Hinton Parva, is fragmentary or defaced. The original function and siting of a sculpture is rarely clear-cut, and in this connection the remarks concerning Buckland Newton, Hinton Parva and Stinsford are tentative.

However, the original form of the sculptures at Sixpenny Handley and Toller Fratrum is more readily ascertainable, and their attribution as: part of a tympanum, and part of a large relief-panel respectively, does conform to known types of sculpture. With the necessary reconstructions, the Dorset material becomes more than a mass of fragments, and takes on a wider significance.

A stylistic thread evolved, which is the relationship of material to the Albani-Shaftesbury-Chichester Relief style. The pieces at Buckland Newton, Toller and Handley show some affinity to the style, though the Handley piece has little diagnostic detail surviving. This style was part of a wider West Country phenomenon, of which most of the evidence has disappeared. The Hereford Troper (B. L. Cotton Caligula A. XIV), and the Hereford Gospels (Pembroke coll., MS 302) provide the earlier setting for this style, and the role of the Lotharingian Robert, Bishop of Hereford (died 1095) may be important in this context.

The iconographic rarity of the sculpture has illustrated both local cults and wider continental developments. St Kenelm features in the Shaftesbury Psalter Calendar (July 17th). As a royal martyr, albeit Mercian and not West Saxon, he clearly had a wider following than his obscure Mercian origins might suggest. Hinton Parva was also a

chapel of Wimborne Minster, a house with strong royal connections before the Conquest. The Fordington, Worth and Tarrant sculptures, on the other hand, underline the continental and Levantine connections of the Anglo-Norman Church.

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APPENDIX

Note on Types of Stone

It has been shown that it is notoriously difficult to identify the types of stone used in buildings, and for sculpture (e.g. *Medieval Archaeology* 8 (1964), pp. 91-118). An example relating to this Report is the extraordinary similarity between Purbeck Featherbed, and Isle of Wight (Quarr) Oligocene, which originally led to the view that the Chichester Reliefs stone was quarried in Dorset. Thus, stone attributions in the Catalogue are to be treated with caution. The source for the attribution, whether this writer's views (SA), or more expert opinion, has always been cited.

ABBREVIATIONS

Arch. Jnl.	<i>The Archaeological Journal</i> .
DB	Domesday Book.
DNHAS	<i>Proceedings of the Dorset Natural History and Archaeological Society</i> .
Hutchins	Hutchins 3rd ed. – see Bibliography.
JBAA	<i>Journal of the British Archaeological Association</i> .
Keyser	Keyser's 2nd ed. of <i>Norman Tympana and Lintels</i> – see Bibliography.
RCHM	Royal Commission on Historical Monuments, England.
RS	<i>Chronicles and Memorials of Gt Britain and Ireland during the Middle Ages</i> (Rolls Series, HMSO, 1858-1896).
VCH	<i>Victoria County History of England</i> – see Bibliography.

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Hall House, Newland

A 14th-century Timber-framed Hall in Sherborne

J. H. P. GIBB

INTRODUCTION

The Hall House, Newland, lies along the north side of the street a hundred yards up from its junction with Long Street. In 1735 the house was free-standing (Fig. 2), but in the 19th century terraced cottages were built adjoining it on both sides: those to the west were destroyed in 1940. The house is built in Sherborne stone (Inferior Oolite), the gable and north walls in rough rubble, but the south wall facing the street in smooth-faced, coursed rubble. The south wall has on its upper floor a three-mullioned window, and on the ground floor two similar windows and a doorway with moulded architrave, all under one long label with moulded stops, and built in Ham Hill stone. The roof is comparatively steep (48°) and covered in Welsh slates, except for four courses of stone slates at the eaves. There are two gable and one central chimney stacks. In external appearance the house is clearly 17th century in date (Fig. 1), and is listed as Monument (61) by the RCHM (Dorset I, 218).

In 1981 Mr and Mrs Anstice Brown bought the house and, in the course of extensive renovations by Mr Timothy MacBean, RIBA, roof trusses and timber-work were found which indicated a date much earlier than the 17th century. The original house was a partly timber-framed hall of three bays measuring 37 × 21 ft internally and 20 ft in height from

floor to the arch-braces of its two open trusses. These are raised, base-crucks rising from stone walls, but with the upper parts of the gable and side walls timber-framed. East of the hall, divided from it by a partition truss, was a fourth bay, now used as a passage with a loft above, and leading into the garden and stable. There is also evidence for another bay to the west of the hall, and that the wing running north-east from the west bay of the hall may have been original. The original function of what was a comparatively large medieval hall-house in Newland is discussed below.

OPEN TRUSSES (FIGS 5A AND 6)

These carry roof-plates and carpentry details and surviving timbers used elsewhere show that they once supported crown-posts with struts to a collar-purlin, collars, and rafters of the same scantling as the common rafters. The crucks originally rose from sills to tie-beam assemblies and are arch-braced; the arch-braces are chamfered and tenoned into the ties and cruck blades. Their bases are cut off some 2 ft above the inner curves of the crucks, where they butt on to projections of the cruck blades chamfered to simulate a downward extension of the braces. Between the cruck blades and the cambered tie-beams are irregular, pentagonal timbers which cradle the plates. These are very unusual, as the roof



Figure 1. Hall House, Newland, from the south-west after its renovation. Note north-west wing and double doors of passage with loft over.

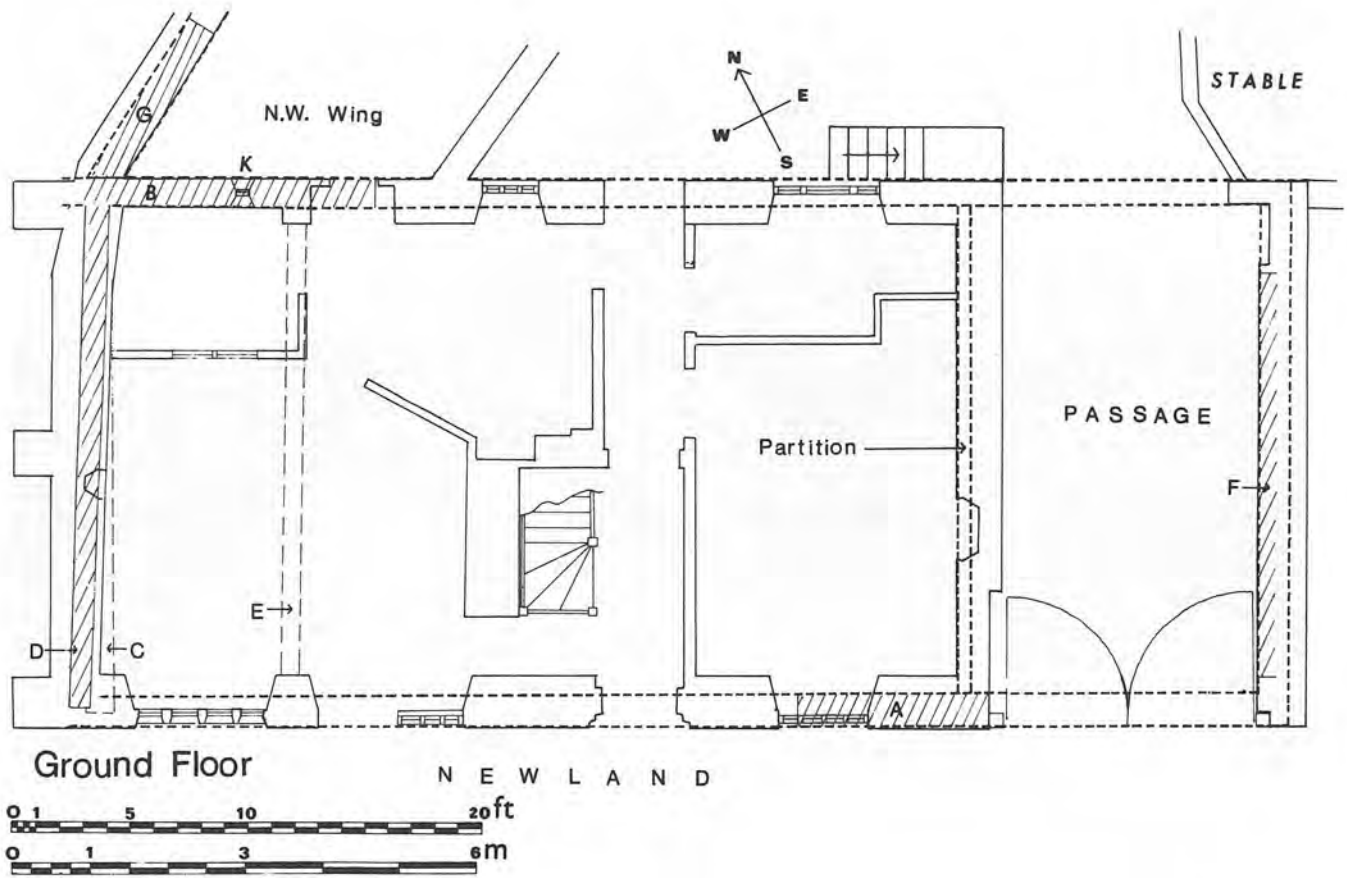
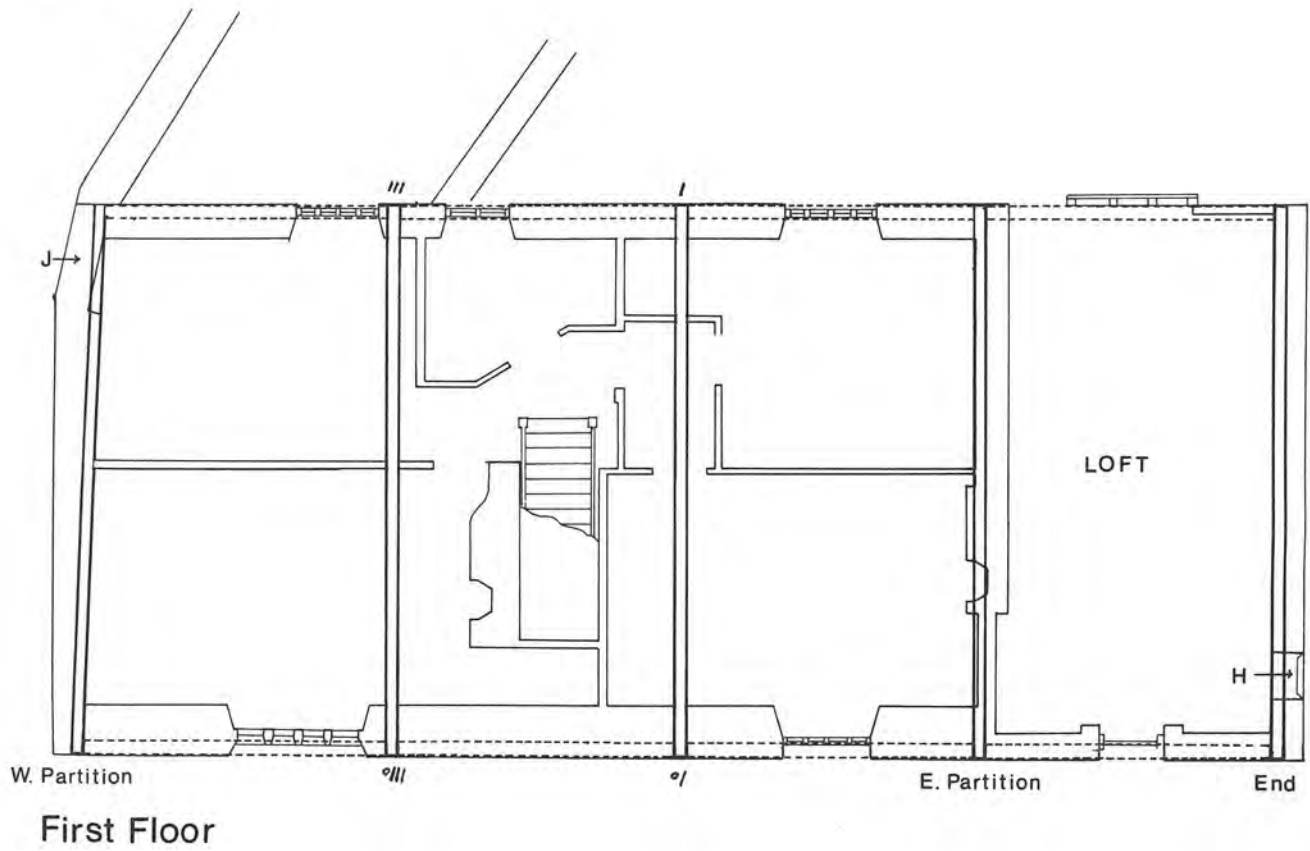


Figure 3. Hall House, Newland. Plan before recent renovation, showing, on ground-floor: position of original walls (heavy broken lines) and surviving sill beams (cross-hatched); on first floor: trusses and timber-framed walls (broken lines).

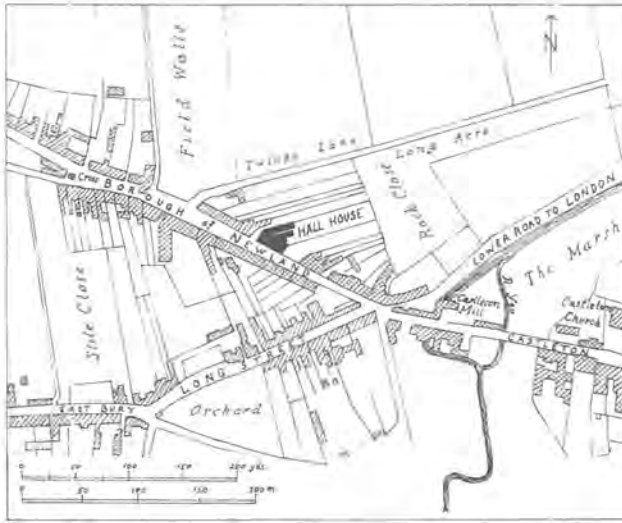


Figure 2. Detail from Ladd's Survey of 1735 showing Hall House as free-standing, with an additional central wing running north-east. Newland Cross stood 200 yds to its west.

plates in early base-crucks are normally supported between double tie-beams. Later base-cruck trusses exclude the lower tie altogether and supported the plates directly on top of the cruck blades. The Sherborne pentagons can therefore be regarded as an intermediate development – a sort of vestigial lower tie. The cruck blades are tenoned into the bases of the pentagons leaving projecting spurs outside them. The outer slopes of both the ends of the single ties and the pentagons continue the slope of the upper rafters, which are tenoned into the ends of the ties. There must also have been separate lower truss rafters spanning the space between the spurs

and the wall-plates, but there is no evidence of how they were attached to the spurs. Possibly they were nailed to them, or relied on friction and the weight of the roof covering. The pentagons are tenoned into the arch-braces and jointed to the ties by a single, loose tenon ($4\frac{1}{2} \times 1\frac{1}{2}$ ins) pegged into both members.

Above tie level no timbers survive *in situ*, but a number were found reused elsewhere. These included 4 ft of the north, upper rafter (5×4 ins) of truss /, which exactly fitted the mortise and peg of the tie, its position being confirmed by matching carpenters' marks. Three c. 8 ft lengths of other rafters survive with their ends sawn off, but retaining angled mortises to hold their collars. No collars, crown-posts or crown-post struts were found, but a 10 ft length of the collar-purlin ($4\frac{3}{4} \times 4$ ins) had been reused as a rafter. Its soffit, or underside, is finely chamfered and stopped where the mortises held crown-posts and struts. The purlin had been sawn-off close to the collar and only the angled strut mortise survives, but from its angle and those of the rafters, it is possible to reconstruct the positions and dimensions of the upper part of the truss with reasonable accuracy. The impression made by the base of the crown-post on the top face of the tie of truss / shows it to have been 7 ins square. Also the angle of the strut mortise in the purlin suggests that the strut was straight, measured c. $4\frac{3}{4} \times 6$ ins, and joined the crown-post close to its base. Both were no doubt chamfered to match the collar-purlin. No evidence survives for lateral struts between crown-posts and collars, nor for the rafter arrangements at the ridge or the wall-plate.

The 7 ft long cruck blades (10×8 ins) are angled at 55° and now disappear down into the side walls some 5 ft above first floor level. On the north side, where the later stone wall is 1 ft 10 ins thick, both crucks had been cut off at their elbows and sit on pads within the wall. During the recent renovation the whole south wall (2 ft 3 ins thick) was refaced, exposing enough of the remaining timbers to allow an accurate reconstruction. The south crucks descend 2 ft down from their elbows and sit on pads of decayed, reused timber. One of these, 4 ft long, slightly curved and chamfered, was obviously part of a reused wind-brace. Wind-brace mortises (20×2 ins) are cut into all eight faces of the crucks, and on the south crucks, stubs of all four wind-braces remain buried in the wall.

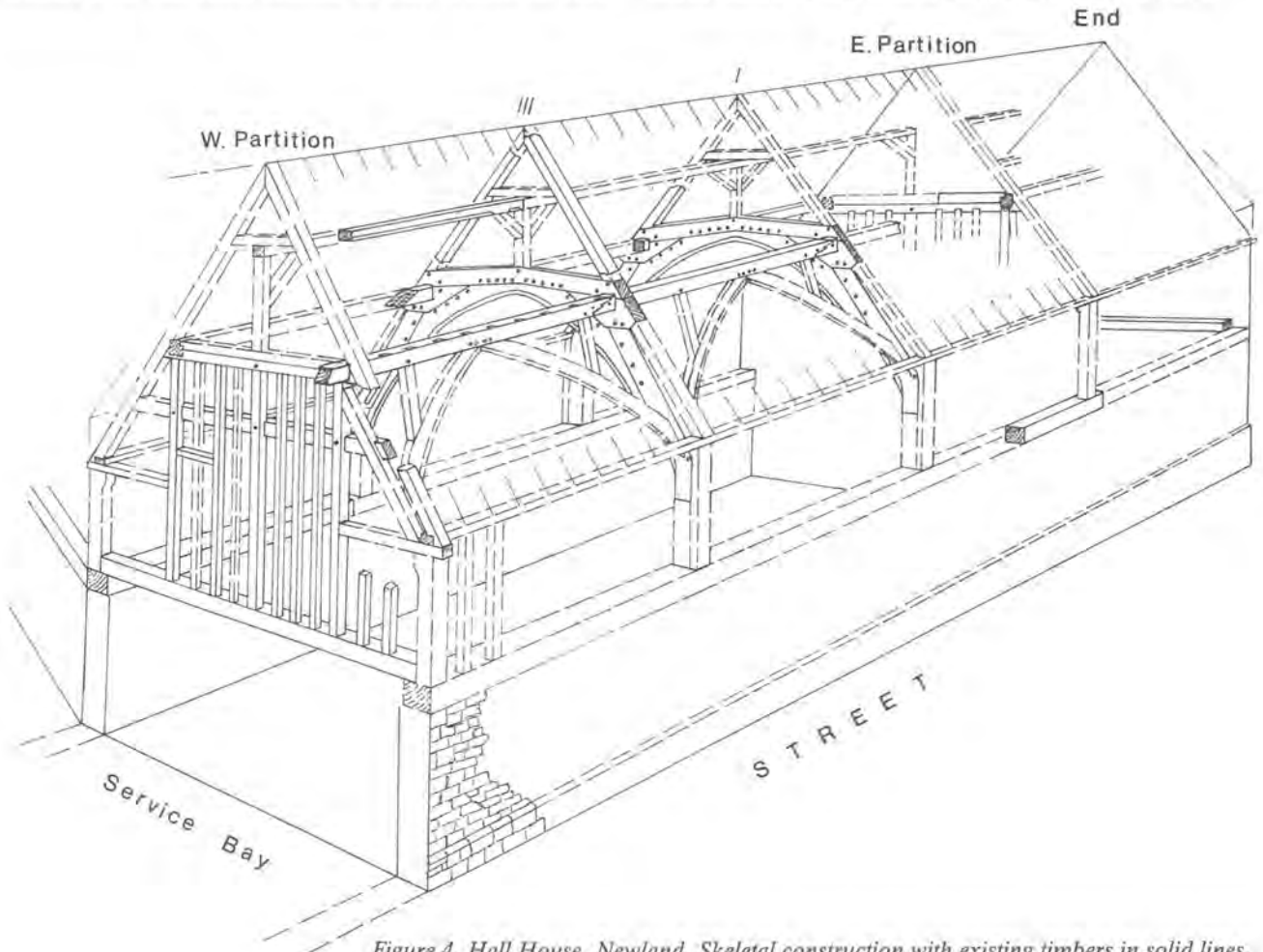


Figure 4. Hall House, Newland. Skeletal construction with existing timbers in solid lines.

The most significant find on each of the south crucks was a pegged mortise cut into its back exactly on the outer bend of the elbow. One inch above the mortise (below on the east cruck), a one inch square peg-hole had been driven down and angled into the mortise to tighten the joint (Fig. 8). These mortises could only have housed the tenons of cruck spurs or wall-posts carrying the wall-plates, and they confirm that at least the upper part of the side walls were timber-framed and not masonry, and that the cruck feet originally descended to sills and were not buried in the walls.

The east face of the eastern truss had been chamfered along all the inner edges of its timbers; so had the undersides of the plates over the east bay (Fig. 9). Such decorative features were often added to the face of the truss immediately facing the upper end of the hall, and suggest that the dais was placed at the east end with a partition truss behind it.

Both open trusses had been severely weakened and some of their joints splayed open by having parts of their arched-braces and tie-beams cut away to allow easier movement at garret level. As a

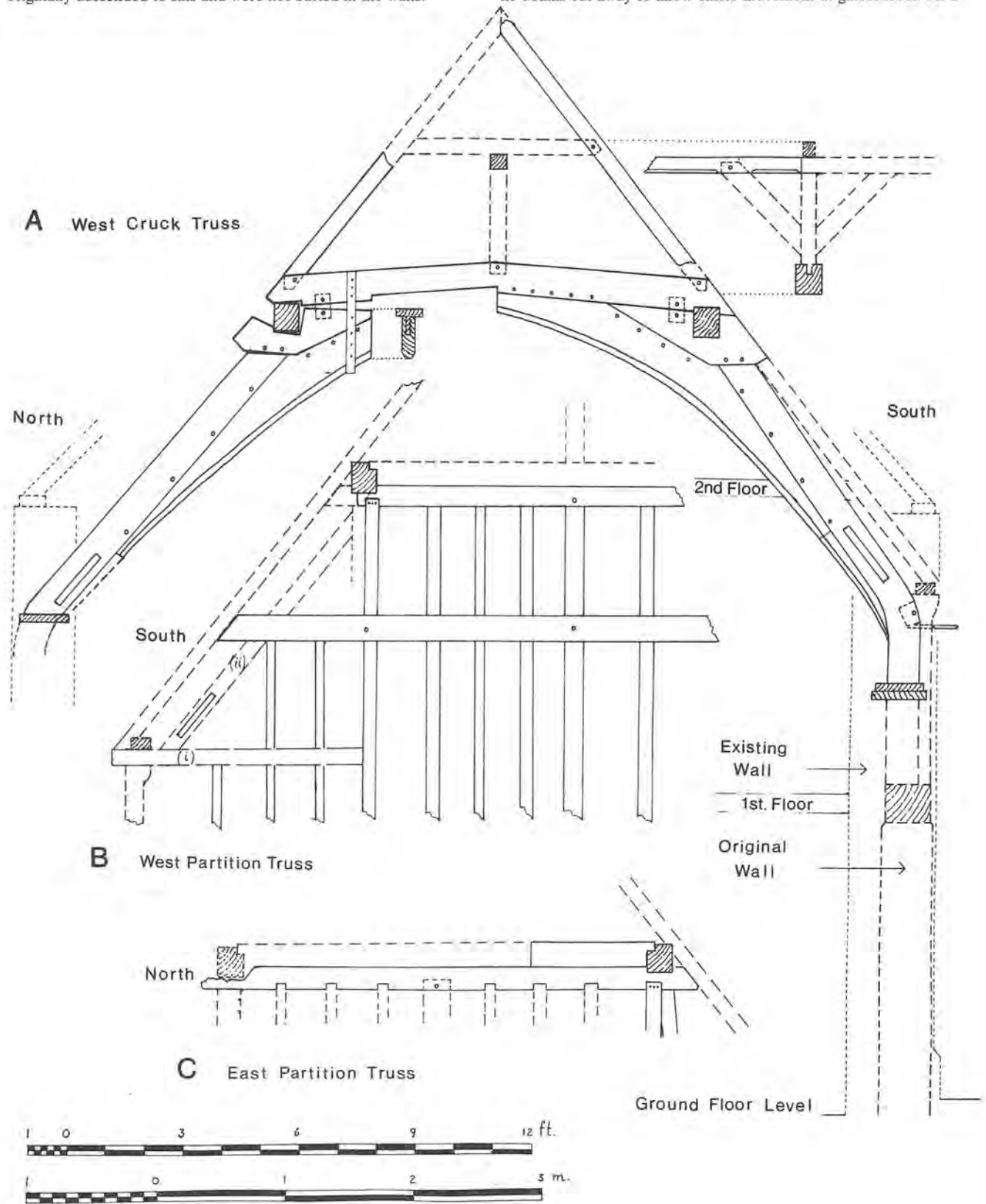


Figure 5. *Hall House, Newland. Details of trusses. Solid lines indicate existing timbers.*

result they had to be strapped. It is remarkable that the trusses were able to support the roof for so long, particularly after the adjoining cottages to the west had been destroyed by a German bomb in 1940. The south side of the west truss is complete and in fair condition (Fig. 6). Mr MacBean has now removed the straps and relieved the trusses of the weight of the new roof by inserting scissor trusses beside them.

All the roof timbers, but particularly the open trusses and plates, were thickly covered in soot, confirming that the hall was heated by an open hearth on the floor of the central bay. Its position is now occupied by a fireplace and chimney stack. Presumably there was once a smoke louvre between the open trusses with its own truss.

CARPENTER'S MARKS

The timbers of each truss were clearly marked for assembly, but not in sequence, the east cruck being marked / and the west truss ///. Maybe the louvre truss between was marked //. A circle had been scored in front of the number to distinguish timbers on the south side of the trusses (e.g., °///). No marks were found on the west or east trusses, but the former is almost completely covered in plaster, and few timbers of the latter remain.

SIDE WALLS (FIGS 3 AND 4)

The only surviving parts of the timber side walls are sections of horizontal timbers buried in the existing stone walls, though none remain directly under the open crucks. An 8-foot length remains on the south side of the east bay (Fig. 3A), and a 12-foot section along almost the whole length of the north side of the west bay (Fig. 3B). Both are positioned 7 ft 7 ins above ground floor level and 2 ft 4 ins below the level of the sawn-off cruck verticals. They are the most massive timbers found in the building, measuring 12 ins deep by 14 ins wide. As the cruck faces are only 10 ins wide, the width of these timbers equalled the combined width of the cruck feet and their attached wall-posts. They were too massive to have been wall-rails in timber-framed walls, and must therefore have been sill-beams placed on top of masonry walls into which the feet of the crucks and their attached wall-posts were tenoned. It was not possible to examine the tops of these sills for the mortises of intermediate wall-posts. However, the north wall of the west bay,

on which the 12 ft length of sill sat, is only 16 ins thick (2 ins thicker than the sill), and has a narrow slit window looking into the adjacent room of the north-west wing. The wall is of rubble made up of flatish stones and distinguishable from the other walls of the building. The window (Fig. 3K) has no separate stone surround; its jambs, lintel and sill being an integral part of the rubble wall. Both wall and window appear to be original, an inference supported by the fact that the stone wall later built on top of it at first floor level is 6 ins thicker! No timbers were found below sill level.

The building, then, had 7 ft 7 ins high rubble walls 16 ins thick, on which sat sill-beams of 14 × 12 ins, and above which a timber-framed wall rose some 5 ft to the wall-plate. The cruck verticals originally dropped some 4 ft from elbow to sill, and can be described as raised base crucks, sometimes called middle crucks.

ROOF-PLATES (FIG. 7)

These are 9 ins deep by 8 ins wide with scarf joints immediately west of the trusses, suggesting that the trusses had been erected from east to west. This is somewhat surprising as the street slopes down about 1 in 20 from west to east. Three plates survive (Fig. 4): the south-west plate is complete and *in situ* except for a slight twist at the scarf; the south, centre plate passes through the later central chimney and is badly twisted with its scarf parted. The third north-east plate has been sawn through at both ends and clumsily utilised as a purlin in the later roof. Plate stubs remain in the south side of the east truss and in both cruck trusses on the north side.

The scarf joints are elaborate. Following Mr C. A. Hewett's terminology, they can be described as stop-splayed and table scarfs, with square, under-squinted abutments laterally keyed, with both terminal tables tongued and edged pegged with one peg to each tongue (Fig. 7A). Hewett attributes the full development of such elaborate and expensive scarfs to the latter end of the 13th century (Hewett 1977, 287).

Each plate has four mortises cut into its soffit: the two central ones, each double-pegged, held the tops of the wind-braces. A puzzling feature is the angle at which these mortises are cut into the plate. As the wind-braces were angled at the same pitch as the rafters, and the soffits of the plates lie in the horizontal plane, one would have expected the mortises to have been cut into the plate at



Figure 6. Hall House, Newland. West face of truss °/// and plate scarf.

the same angle as the wind-braces. In fact, they are at right angles to the soffit of the plate and near their inner edge (Fig. 7C), as if they originally held braces between plates and posts, rather than plates and crucks. No other evidence, however, was found to suggest that the cruck trusses were later replacements in an original aisled hall. As they are cut, the top wind-brace tenons must have been laterally angled, which, by shortening their grain, would have weakened the joint. Doctor N. W. Alcock tells me that such angled tenons were standard practice in base cruck carpentry. In the south-west plate these mortises are 16 ins west of centre, so the western wind-braces were shorter than the rest.

The two other smaller mortises in the plate soffits are aligned with those of the wind-braces and, like them, are at right angles to the plate soffit. They were positioned some 2 ft from the trusses. They once held $4\frac{1}{2}$ in square timbers, whose outlines are clearly discernable on the plates where they had exerted considerable pressure. None survive, but they could only have been subsidiary braces dropping from the plate and tenoned into the backs of the wind-braces. As the latter were 9 ft long, they probably required bracing. Such square, straight braces are a feature of early roof design.

The top surfaces of the plates have shallow depressions (c. 5 ins sq.) cut into them 12 ins apart to fit bird-mouthed notches cut into the rafters they supported. One reused rafter had such a notch. Between trusses, therefore, the rafters were notched on to the plates and ran from ridge to wall-plate – nearly 19 ft (Fig. 4).

WEST PARTITION TRUSS (FIG. 5B)

Although the west gable of the house, as seen from outside, is built entirely in stone, some of the original truss and nearly all its timber-framed wall survive down to the level of the side wall sills. There is, moreover, evidence that this was not the original outside gable of the hall, but a partition dividing the hall from a further bay to the west.

The truss is aisled in construction and, with its frame, is mainly covered in laths and plaster on both sides. Of the original double ties only the lower survives (6 × 5 ins), but its ends have been cut off immediately outside the plates. The upper tie was probably rebated into the top of the plate, as it still is in the east partition truss (Fig. 5C). Three 11 ft long posts support the plates and the centre of the tie with close-studding between. The lateral 'arcade' posts are now roughly rebated to the lower tie with large-headed nails, and are certainly replacements. The centre post ($5\frac{1}{2} \times 4\frac{1}{2}$ ins) is original and is tenoned and pegged into the tie. Three 11 ft studs remain between each post c. 13 ins apart. In the triangular space between the north post and the north gable slope, one smoke-blackened timber has been later inserted as a stud; the other studs were removed in the 17th century when a stone mullioned window (since blocked) was inserted into this space at

first floor level. In the corresponding position to the south, all the studs survive up to attic level.

Another cross-beam (18 ft × 8 ins × 5 ins) spans the truss at attic floor level some 3 ft below the tie. Its north end has been sawn off 10 ins beyond the north arcade post. It is lapped and pegged round the original centre post and also round the arcade posts, but the greater width of its lap-joint recesses shows that the original arcade posts were of greater scantling than their replacements. The studs were not jointed to the beam, but passed behind it. The surviving south end of this cross-beam is sloped at the correct angle and position to support the truss rafter at a point about half-way between the ties and the wall-plate.

No tie-beam existed at eaves level, but horizontal braces across the 'aisles', tying the arcade-posts to the wall-posts, must once have existed (Fig. 5B (i)). Likewise, slanting braces between the arcade-posts and the horizontal braces would have been necessary to house the mortises and provide abutments for the end wind-braces (Fig. 5B (ii)).¹

The most difficult part of the west truss to interpret was at sill level. The ground-floor stone wall is 2 ft thick, but at first floor level the wall is reduced to only 12 ins in thickness and the truss frame is set hard against its inner face.² On the resulting inner off-set sits a heavy beam (c. 20 ft × 12 ins × 8 ins) which projects 7 ins into the ground floor room, but is placed too far out to support the timber truss-frame above (Fig. 3C). The exposure of its south end during refacing revealed another, smaller beam (9 × 8 ins) sitting partly on top of the heavier beam and in a position to support the posts and studs of the truss frame (Fig. 3D). It lay some 12 ins above the level of the side stone walls with its ends probably sitting on top of the sills of the side walls and tenoned into the partition wall-posts (Fig. 9). The lower beam was no doubt a later insertion to carry the first floor joists; another similar beam (Fig. 3E) spans the room some 8 ft in from the gable wall; both may have been reused sills from the side walls.

As stated above, the evidence suggests that the west wall of the present house was an internal partition dividing the hall from what must have been its service bay to the west. It was therefore very unlikely that its timber-framing was originally built on top of a stone wall: a complete timber-framed partition would have been more likely. The present stone gable wall of the house was probably built during the 17th-century remodelling, but with the upper part of the original timber wall retained and the lower framing, with its doors to the service rooms, removed and replaced in stone.

EVIDENCE FOR WESTERN EXTENSION

Two facts indicate that the building extended west of the existing west gable:

(1) The length of the hall bays, measured along the south plate, are: east bay: 12 ft 2 ins; centre bay: 11 ft 9 ins; and west bay: 13 ft 2 ins. The longer western bay is partly accounted for by a slight shifting of the west partition frame westward. The lower tie now lies 5 ins west of the notch on the top of the plate which carried the rafter of its truss. Such movement could well have taken place when the timber side walls were removed and the present stone gable wall was built.

The south-west plate, however, continues westward 7 ins beyond the face of the truss tie and 12 ins beyond the plate notch for its rafter. This is compelling evidence that a further bay once existed to the west.

(2) During the recent alterations part of the laths and plaster covering on the first floor was removed from the west frame revealing the north arcade-post and some of the studs. Immediately to the south, and up against the post, another timber had been inserted at a later date³ and the next stud to the southward removed. In the resulting space a cross-timber was inserted some 7 ft up to form a lintel for what appeared to be a door-frame, 30 ins wide (Fig. 4). Such a doorway could not have been part of the

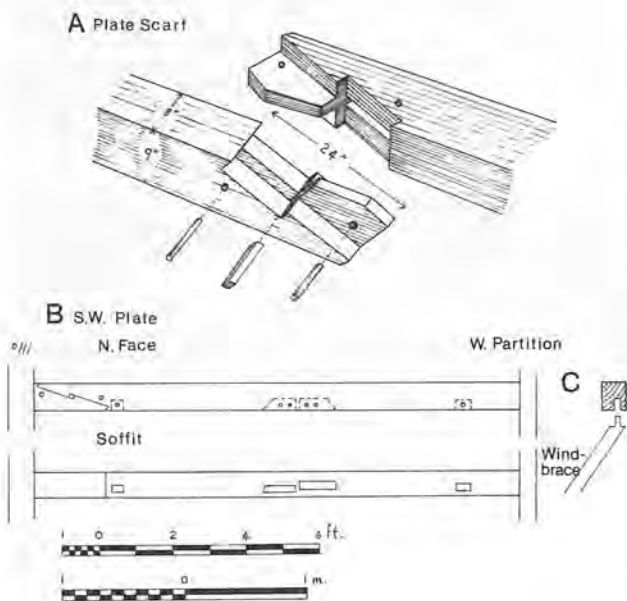


Figure 7. Hall House, Newland. South-west roof-plate and scarf-joint.

¹ c.f. the Pilgrims' Hall, Winchester, which however has no windbraces (Crook 1982, 85). Some early base-cruck halls, like the Old Deanery, Salisbury, have end wind-braces rising from the gable arcade-posts, but they are straight, square in section, and do not meet in the centre of the plate. The Sherborne end wind-braces would have looked very odd in this position.

² The stones of this upper wall have been pushed through the lath and plaster covering, leaving splintered laths and chunks of plaster within the frame.

³ This timber had oval holes drilled into one face, c. 12 ins apart, probably to hold wattles. It may originally have been an exterior wall-post or rail, which suggests that the outer walls of the hall were panelled in wattle and daub, and the interior partitions in lath and plaster.

original arrangement, as there was no upper floor in the hall, but it suggests that:

- (a) there was a further bay to the west of the hall, and
- (b) an upper floor had been inserted into the hall before the 17th century stone walls were built, and that this doorway connected the new upper room in the main hall with an upper chamber in the service bay. Such chambers above the service rooms were common.

Alternatively, the doorway could have led from a gallery over the screens passage, but the makeshift build of the doorway makes this improbable.

EASTERN BAY

The present house ends in a stone gable wall at the east end of the original hall, and beyond it lies the 11 ft wide passage with a loft above. The passage is open to the north and has large double doors to the street. The loft above has thin brick walls up to the eaves level of the house, but the ridge of its tile roof lies some 3 ft below that of the house. The stone wall forming the east gable of the passage has the same thickness (2 ft) as the west gable wall, and likewise becomes thinner above the ground floor.

The following features suggest that the existing stone gable wall of the house was originally a timber partition separating the hall from a further eastern bay, and that the east wall of the passage was the original gable wall:

(1) Part of a truss, and evidence for timber-framing below it, survive at the east end of the hall (see below)

(2) The surviving sill-beam along the south side of the east bay of the hall runs through the later gable wall. It has been sawn off flush with the east face of the wall and c. 1 ft. east of its truss, indicating that the sill once continued across the passage. Also surviving on top of the south wall of the house is a disused wall-plate which must have been placed there when the walls were heightened in the 17th century. The wall-plate has $\frac{3}{4}$ in round peg-holes drilled through it to which the shortened rafters were attached with round pegs. The east end of this wall-plate had been sawn off through one of its peg-holes, suggesting that it too continued across the passage. The 17th-century house, therefore, must also have included the passage within it. This was confirmed by the discovery of a small, blocked window high in the gable of the east wall of the passage and covered by the adjoining cottage (Fig. 3H). Its Ham Hill stone surround matched the 17th-century windows of the house.

(3) Part of the existing stone wall between the house and the passage is only 9 ins thick and its stone-work is crudely built. There is also at least one vertical timber buried within it.

(4) The east wall of the passage has a heavy, horizontal timber (Fig. 3F) set into it for almost its full length, at a slightly higher level than the side wall sills, but matching in height that of the west partition beam. Only its west face is visible, but it is the appropriate position to have been the sill-beam of the original east gable (Fig. 4). Other timbers were exposed higher up the wall, but unfortunately not recorded; they have now been plastered over.

A possible objection to the above hypothesis is the absence of a scarf-joint in the plates immediately to the west of the east partition truss. On the south side no evidence survives as the plate, except for its stubs at each end, is missing. On the north side the plate has been reused, but its length (12 ft 4 ins) confirms that it originally spanned the whole length of the east bay, leaving no room for a scarf. Either this section of the plate was long enough to span both eastern bays, or the scarf was placed east of the partition truss.

EAST PARTITION (FIG. 5C)

Little of this truss survives. The lower tie-beam is in position but is mutilated at its north end where its plate has disappeared. It sits on a rough internal ledge in the rubble wall, and all but one of its posts and studs are missing, although the size and spacing of their mortises along the base of the tie correspond to those of the west partition. One post supports the stub of the south plate and disappears down into the wall. It is rebated and nailed to the tie, as in the west truss. Another post immediately behind it and slightly out of vertical was probably inserted to support the plate during the building of the stone wall. Both are later insertions.

The truss is aisled in construction. Unlike the west truss tie whose ends had been sawn off close to the plates, this eastern lower tie retains almost its complete south end which projects 10 ins beyond the plate. Its end is cut at the same angle as the rafters and so

positioned that the rafter notch fitted over the plate and was supported by the sloping end of the tie (Fig. 5C). Only a 3 ft length of the upper tie ($7\frac{1}{2} \times 6$ ins) remains at the south end; its top face is level with that of the plate into which it is rebated.

A beam (12 ft 6 ins \times 10 ins \times 8 ins) has been reused as a lintel for the double doors of the passage. Its nine open and stepped mortises, 13 ins apart (corresponding to those of the ties), suggest that it may once have been the sill of the partition at floor level.

FLOOR LEVELS

The present, interior ground floor is level throughout, but owing to the slope of the ground, the west end is below outside ground level, and the east end above it. In the western room modern paving stones of Blue Lias sat only c. 4 ins above the natural Oolite, which would suggest that the mediæval floor level was only a few inches below the modern floor. The eastern room has a timber floor. A small area was excavated in its north-east corner, where, 12 ins below the floor-boards, lay a 3 in layer of small stones set in clay. Below this were two layers of worn paving-stones of local Oolite (c. 24 ins \times 18 ins \times 1 in) divided by a 1 in layer of clay. The lower paving stone sat on larger stones set in clay. On the assumption that the hall was level, except for its dais, these floor levels at the east end must have been lowered after the building had ceased to be used as a hall.

SOLAR AND SERVICE WINGS

Mediæval halls of the scale of Hall House did not stand alone: they were at the centre of a conglomeration of other wings and outhouses built to conform to the available space. In towns larger houses were often ranged round a central courtyard with the hall along the street or in a parallel range at the back. The arrangement can be seen at surviving mediæval inns. Others had L-shaped wings running at right angles from one or both ends of the hall. Where street frontages were narrow, the hall was placed at right angles to the street with a passage along one side. In Newland they were comparatively generous and in the 13th-century charter founding the borough, the tenements were all given street frontages of 4



Figure 8. Hall House, Newland. Exposed base of cruck ^o/ showing wall-post mortise with square hole below it.

⁴ An unusual feature at the junction of the former rafter feet and this 17th-century wall-plate is the insertion between them of 6 in square, oak 'washers', $\frac{3}{4}$ in thick, and with peg-holes drilled through them.

perches. Mediæval measurements often varied from place to place, but Ladd's survey of the town in 1735 is scaled in perches and chains, and it would appear that the Sherborne perch probably corresponded to the modern one (16½ ft). The external width of the street frontage of Hall House today is 54 ft, but Ladd shows it as 4 perches, or 66 ft. This suggests that the vanished service bay to the west was about 12 ft long and matched the bays of the hall and passage.⁵

The screens passage, which inevitably crossed the lower ends of mediæval halls, would have occupied the end of the west bay of the hall and been separated from it by short screens. There was no separate spere (or screens') truss.⁶ Side doors to the exterior would have existed at each end of the passage, and the west partition would have had two doors through it leading to the pantry and buttery. There would almost certainly have been an upper chamber above them. Figure 9 includes a conjectural illustration of these arrangements. The kitchen would have been to the north, and, like most mediæval kitchens, was probably free-standing to avoid fire risks. Other offices, such as the bakery, brewery and store rooms, would have occupied a wing running north from the west end of the hall range, probably at the same angle as the existing north-west wing of the house.⁷

The existing north-west wing may indeed have original remains. Its west wall is 17 ins thick and, inserted horizontally into it at the same level as the wall sills of the hall, is a c. 8 ft length of timber (c. 12 square) which butts against the north-west corner of the hall sill (Fig. 3G). The east wall of this wing is also the same thickness as the walls of the hall (16 ins). The wing may have contained a passage from the north door of the screen passage to the kitchen. This arrangement could explain the position and function of the slit window between the wing and the hall, as it would enable anyone in the passage to look directly up the hall without entering the screens passage.

In early mediæval houses the solar, or living quarters of the owner and his family, was often placed on the floor above the service wing, but by the 14th century it was placed behind the dais at the upper end of the hall. In Hall House the solar would have occupied the eastern passage and been divided into two floors: the parlour below and the solar above. Further rooms may have formed an eastern wing running north, probably with stairs in the angle between the wing and the hall and with access from the dais. In fact this arrangement, probably fortuitously, still exists in modified form at Hall House. The stone-walled stable of the old bakery runs north from the passage (though it is partly off-set eastwards), and a flight of stone steps leads up to the loft (Fig. 3).

To sum up: the evidence suggests a 66 ft range along the street front consisting of a central three-bay hall, 37 ft long separated by partitions from 12 ft bays at either end, and all under one roof. The west bay housed service rooms with a chamber over, and the east bay the parlour with the solar over. A 12 ft wide range ran northwards from the west bay of the hall, probably leading to a kitchen. There may have been further rooms running north from one or both ends of the hall range.

POSSIBLE EARLIER ALTERATIONS

Taking into account the limited number of surviving timbers, the reconstruction of the hall suggested above is probably as accurate as is reasonably possible, but it takes no account of any earlier alterations which may have been carried out and for which the evidence may have been overlooked or lost. For example, just as the walls of the 17th century house replaced the upper timber walls of the hall, so the lower mediæval stone walls (7 ft 7 ins) may have been a later alteration, replacing fully timbered walls with base crucks which descended to low stone plinths. The mixed construction of stone and timber for the walls of the hall is unusual. On the

other hand, Sherborne lies on good building stone, and a number of its surviving buildings, albeit of 15th- and 16th-century date, have stone-walled ground floors and box-framed upper stories, which suggests that this was a local tradition.

DATING

No specific documentary evidence has been found for the building or purpose of the hall, so, apart from dendrochronological analysis, it can be dated only approximately by stylistic and technical comparisons.

Recorded examples of datable base-cruck halls show that they lasted from the 13th, through the 14th and into the 15th centuries. Scissor and passing braces, with notched lap-joints, are early features not found in this building, but they were being superseded by crown-posts and collar purlins by the beginning of the 14th century. Another early feature is the use of straight braces of square rather than curved ones of rectangular section. Hall House has arched-braces in the open trusses and slightly curved wind-braces, but the subsidiary braces from the plates to the wind-braces were straight and square. The crown-post struts also appear to have been straight. If the little surviving evidence for the details of the crown-posts at Sherborne is compared with the three phases of crown-post development distinguished by Dr Fletcher (Fletcher and Spokes, 1964), the results are somewhat contradictory. The ties of the open trusses are cambered and rectangular in section (10 × 7½ ins), and the crown posts are short (c. 2 ft 6 ins) with their struts branching out close to their bases, all of which are characteristics dated between 1310 and 1360. On the other hand, the square crown-posts and their straight struts (both probably chamfered) are given a date before 1280. Dr Fletcher concentrated his study on crown-posts in north Berkshire and Ely, so regional differences may account for these contradictions. Even so, the Sherborne open trusses bear some resemblance in scale and design to the central truss of the hall in the Grange of Abingdon Abbey at Sutton Courtenay, Oxfordshire, which Fletcher dates at c. 1315. Double tie-beams and roof-plates are generally early, but a few persist late into the 14th century; as does aisled construction for partition and end trusses. (Alcock and Barley, 1972, from whom come much of the dating criteria used above.)

Scarf-joints reach their most sophisticated form in the late 13th century, but become less complicated through the 14th. The plate scarfs at Sherborne are almost as elaborate as those in Place House, Ware (built 1274-95) which Mr Hewett considers the apogee of such joints (Hewett 1977). At Sherborne they are shorter (24 ins instead of 28½ ins) and lack the four face pegs of those at Ware. Such scarfs were time-consuming and expensive to make, and those so far discovered were made for wealthy patrons.

Perhaps a unique feature of the Sherborne cruck trusses, as well as the most satisfying aesthetically, is the pentagonal timbers which take the place of the lower ties. Two extant mediæval halls have slightly similar arrangements. One is at Lime Tree House, Harwell, formerly a manor house of the bishops of Winchester (Fletcher 1979, 173). Its early 13th-century hall was altered in 1295, when a base cruck truss was inserted with, what appears to be, triangular lower timbers which trap the plates and are jointed to the upper tie by loose tenons, as at Sherborne. However, the parallel is only visual, as this timber is in fact a complete lower tie spanning the truss, whereas the Sherborne pieces are separate timbers nearly 6 ft apart.

The other parallel is the Old Irish Menswear Shop in Loughborough (Wennell 1977), a hall similar in scale to Hall House. It also has a pair of vestigial lower ties, parallelogramic in shape, which are notched over the plate (and not under it), and has the upper rafters tenoned into them. The plate is cradled into the tops of the cruck blades and the single tie-beam is placed some 2 ft above and supports

⁵ The bishop's charter clearly lays down three sizes of building plots, all of 66 ft frontage but varying in length, viz. 132, 110 and 22 yds. Their positions, though stated, cannot now be accurately identified. The Hall House plot, as shown in Ladd's map, exactly fits one of these plots (110 × 22 yds), but this is probably fortuitous as the garden boundaries to the north are not parallel to the street. See Fowler 1951, 148 *et seq.* for a transcription and translation of the charter.

⁶ Screens passages were sometimes placed in the service bay with the screens forming the base of the end truss of the hall (the 'spere' truss). This arrangement was unlikely at Sherborne, as little room would then be left for the pantry and buttery.

⁷ Ladd's map (Fig. 2) shows the still-existing acute angle of these properties to the street, caused probably by the acute angle at which Tinneys Lane (Twiney on the map) leaves Newland. Presumably the lane existed before Newland was laid out in 1227.

angled purlins. This hall has recently been tree-ring dated to c. 1348. Dr Alcock suggests that the Sherborne trusses are probably earlier and represent an intermediate development between earlier base crucks with double ties and the Loughborough design (Alcock pers. comm.).

From the somewhat inconclusive criteria cited above, the building of Hall House may be dated to the first half of the 14th century and probably nearer 1300 than 1350.

ORIGINS

Base crucks are considered to be a hybrid form developed from aisled and full cruck constructions, and they were first developed in the 13th century by wealthy magnates to provide open halls of wide span which avoided the clutter of aisled posts. Their open cruck trusses and elegant arched-braces also gave these halls a greater sense of spaciousness and dignity (Fig. 9). They were soon copied on a smaller

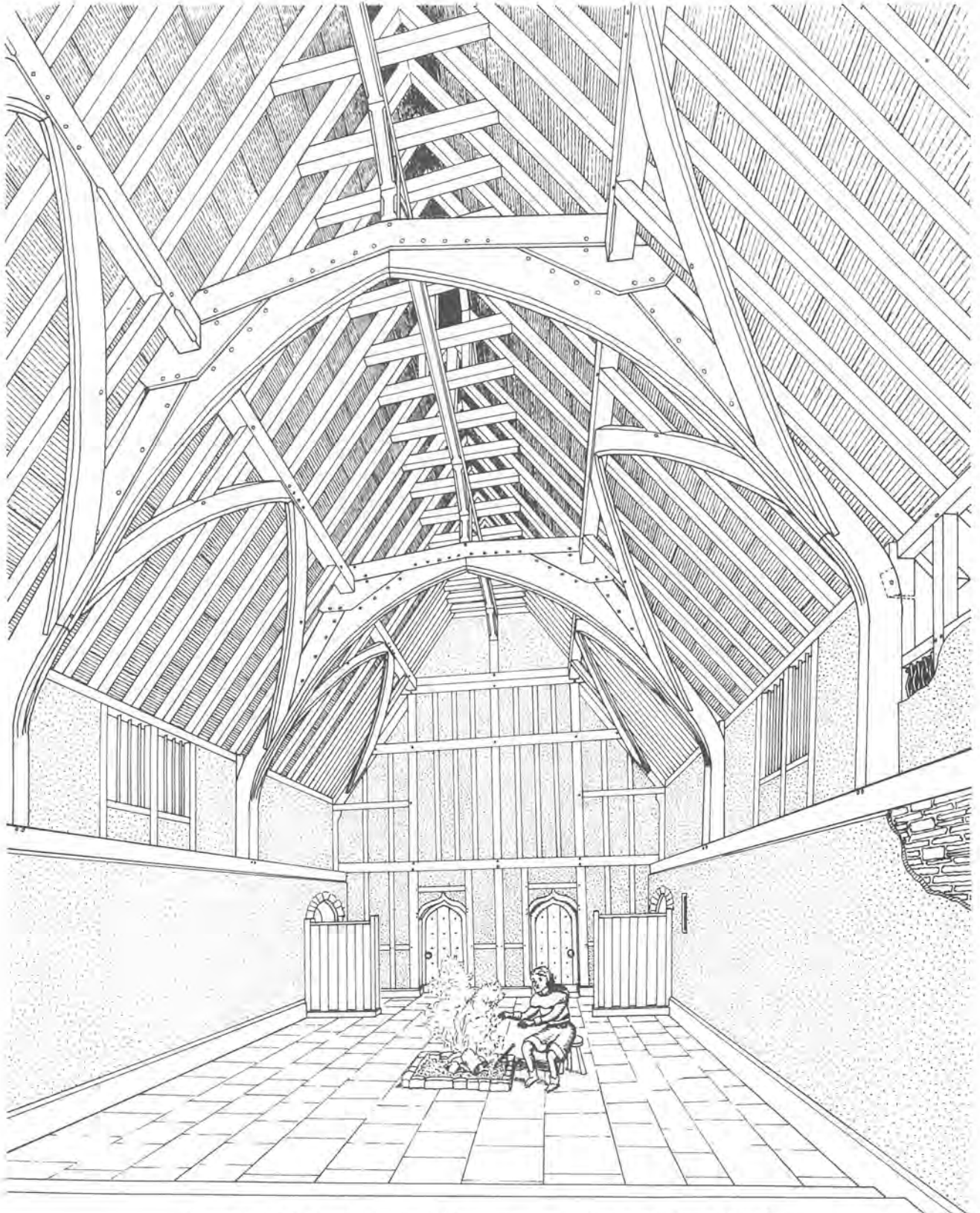


Figure 9. Hall House, Newland. Reconstruction looking west, drawn to scale.

scale by the gentry, heads of religious houses and richer burgesses, though few built by the latter survive in towns. Hall House in its scale and in the sophistication of its roof design is comparable to other base crucks halls built in manor houses and monastic granges in the 14th century. Why then was it built in Newland and by whom?

The bishops of Salisbury had for centuries owned the manor and hundred of Sherborne. Although one of the principal towns in Dorset, Sherborne was never granted borough status by the bishops, presumably because they wished to retain their feudal control of the town. Legally, Sherborne remained no more than a vill until the end of the 19th century. Instead, Bishop le Poore in 1227-28 created the new borough of Newland by making a new street north-east of the town centre. The new borough was granted its own court and other privileges, but these were limited. The charter is in the Public Record Office, but an *inspeximus*, or confirmation, issued by Bishop Mortival (1313-30) is among the Almshouse muniments.

For the building of the original hall we have no direct evidence, and can only resort to informed speculation. That a burgess of Newland could have afforded or required so large a residence is unlikely. The size of the hall suggests that it more likely fulfilled a more public function. In the Custumal, or abstract of the customs, of the manor and borough compiled for Bishop Ergham in January 1377 mention is made of a guildhall, the only known reference to what may have been a merchant guild in Newland, which had its own market. The entry (Neville 1913, 117 and Fowler 1951, 191) states that William Rympton held of the bishop a tenement, formerly held by Godfrey le Trippe, called 'La Yeldehalle', for which he paid a yearly rent of 6s. 8d. (or one noble). It is impossible to equate this sum with modern values, but a comparison with other house rents paid in the manor and borough is more informative. Yearly rents for 74 houses and their curtilages (i.e., land immediately attached to the house) averaged 1s. 10d., with some crofts as low as 4d. and some messuages as high as 5s. 11d. Only two houses paid the highest rent (6s. 8d.) and one of these was 'la Yeldenhalle'. This rent represents 1/30th of all the rents collected in Newland in 1376, which totalled £10 5s.

It is tempting to suggest that Hall House may have been the merchant guildhall of Newland, but a number of factors suggest that it was not:

(1) Most guilds had first-floor halls with shops or a market beneath them, and they were often placed centrally where the street was widest rather than in the narrowest part of the street where Hall House stands. The obvious place for a guildhall in Newland is at Newland Garden where the street widens.

(2) Nearly all the house rents listed in the Custumal include both the house and its curtilage. No mention is made of a curtilage with the guildhall, and Hall House clearly had both a courtyard and a garden.

(3) A guildhall would not have required the domestic arrangement of a solar wing for which there is evidence in Hall House.

It is also known that Hall House was not used as the normal meeting place of the borough court of Newland, which was always held at the stone cross half-way along the street at its widest point, where no doubt the market was also held.⁸

Another possibility is that the hall was built by the bishop as an administrative centre for the manor. The castle-palace built by Bishop Roger of Salisbury a few hundred yards to

the east of Newland was confiscated by King Stephen in 1139 soon after its completion. It remained in royal possession and use, under lay constables, as a royal administrative centre for the counties of Somerset and Dorset until 1355 when Bishop Wyville regained possession for a large sum of money. For over 200 years from 1139 the bishops, whose possessions included both the in-hundred and out-hundred of Sherborne, and the neighbourhood hundreds of Yetminster and Beamminster, as well as the boroughs of Newland and Castleton, had no *capitum* in Sherborne for which any historical record survives. Even if not used by the bishop personally, his steward required an administrative centre and residence to preside over the Law-Day Courts of the hundred and boroughs. Newland would have been a convenient site for such a hall. After 1355 the Law-Day courts and manorial and borough records would have returned to the castle, and the hall probably rented out.

THE DEEDS OF HALL HOUSE

The earliest document, dated 1757, is a confirmation of a gift of the property by three of the King's Justices at Westminster. By then the house had been divided, and in 1783 is described as 'that Eastern part or lower end of a certain large messuage or tenement long since divided from the western or upper end', and as 'distinct . . . dwelling house with . . . outhouses, ways, paths, passages, court-yards, backsides, gardens, water easements', etc. Ladd's map shows a central wing running north from the centre of the hall. Until the Anstice Browns restored it, one of the western mullioned windows had been replaced by a door and timber window, inserted no doubt when the house was divided. Its owners were yeomen and craftsmen who used the extensive outhouses for workshops and stores. They included a saddler, cordwainer, thatcher, and a plasterer and tiler. In 1818 Thomas Dodd bought the property and set up a bakery which survived until the last war. The house was in a very dilapidated state when bought by the Anstice Browns, but has now been attractively renovated with full consideration given to its historic remains.

Acknowledgements

Particular thanks are due to Mr and Mrs Anstice Brown for allowing the author to crawl all over the house both during and for many months after its renovation. Also to Paul Heath for his detailed measurements of the cruck trusses and plates, and for help from Timothy MacBean. I am very grateful to Laurence Keen for reading, correcting and commenting on the script, and finally to Dr N. W. Alcock who, from his great knowledge of mediæval carpentry, made a number of valuable suggestions.

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⁸ A witness in a law-suit at Westminster in 1383/4 between Bishop Ergham and the burgesses of Newland testified that: 'the Bishop (le Poore) ordained a court . . . which was held by his steward at the cross at the centre of Nyelonde to which the men of that place, holding burgages, came, and not elsewhere'. Newland Court is first mentioned in 1307 and was still being held at the cross in 1641 (Fowler 1951, 158).

Institution and Landscape in Early Medieval Wessex: Aldhelm of Malmesbury, Sherborne and *Selwoodshire*

KATHERINE BARKER

The most important questions about survival and continuity have to do with the transference of power (Campbell 1982, 41). In the current pursuit for continuity in the landscape perhaps more attention could be given to the activities of ruling institutions. Over large areas of the country there is evidenced an orderly, if complicated administrative system centring on royal villas to which were owed dues and services. The age of such an institution is difficult to determine, but with a recognisably similar system extending from Wales, through England and into Scotland suggests that at least for the northern part of Britain its origins are to be found in the pre-Saxon past. Little is known of how the Anglo-Saxon rulers would have organised themselves left to their own devices, but the system may not have been that dissimilar (Campbell *ibid*). This paper involves a discussion of one particular aspect of the early administrative landscape of the West Country. It is an area where the English settlement came late, and where a measure of continuity may be anticipated, but which has proved more difficult to demonstrate.

The area most concerned is that in which Aldhelm of Malmesbury (c. 640-709/10) spent the greater part of his life, and, according to the first translator of the *Anglo-Saxon Chronicle*, was commonly known as *Selwoodshire* (Stenton 1971, 65) (Fig. 1). While his name usefully imposes some geographical limits to the field of enquiry, it is treated here as being of sufficient interest to form a parallel theme – Aldhelm, as it were, representing those ‘ruling institutions’ to which reference has already been made. Recent important work on the origins of his very distinctive literary style (Winterbottom 1977, 39-76) has posed far-reaching questions about the nature and significance of a career which spans a formative period in the history of the English settlement. A seventh century landscape is an elusive commodity, and it would be premature to attempt to reappraise his background on such grounds alone. Yet it would surely be a mistake here not to afford space for reflection on the pattern of events in an area which was so early able to nourish – and certainly to sustain – a career of such notable scholarship a generation before Bede, the implications of which seem to be customarily omitted from any more purely archaeological consideration of the period (Rahtz 1982, 176-192).

If the English settlement is no longer seen as the result of a victorious movement westwards of warriors and colonists (Hoskins 1960, 3) there are more than some indications that it was not the vague, rather haphazard process that has subsequently found more favour. The English seem to have assumed control of the region area by area, quite possibly hundred by hundred, royal interest directed towards those lands best able to support the demands of a military aristocracy – an administrative patchwork complicated by dynastic rivalries (Kirby 1965, 10-29) and, if personal names are taken into account, by intermarriage with British families. The extent of Sherborne's early episcopal endowment and the wide variety of places involved, speaks of a ruling interest not confined to the purely ecclesiastical, but to the commercial, and even industrial – ports-of-call on Devon/Cornwall estuaries, land next to Priddy (possibly related to lead deposits),¹ at Wellow in Somerset (for pewter production?) and salt extraction at Lyme Regis; the hercology of the early Lyme estate affords a tantalising glimpse of the sharing of this important, lucrative resource

between early Crown and Church (Barker 1982, 88-9).

Closely connected with Crown and Church in early Wessex was Aldhelm, a prolific writer whose work is characterised by its obscurity. A scholar of European renown within his own lifetime, he was to remain principal author of the *English curriculum* until the Norman conquest. Very

¹ There are two early grants to Sherborne in this area, *iuxta Predie* by Ine, and *apud Menedip* by Cuthred (Dugdale, I, 337), a pair which supply an accurate – if brief – description of the Wells Hundred as it appears on an early county map (Morden c. 1695) and probably much as it was in 1086 (Thorn and Thorn 1980, map Somerset northern hundreds); that is to say, a block of land along the southern slope of the Mendips, and a long narrow tongue of land pushing up onto high ground via Priddy as far as Litton. An early association with Sherborne might add a little weight to the tradition that Aldhelm was the founder of the church at Wells.

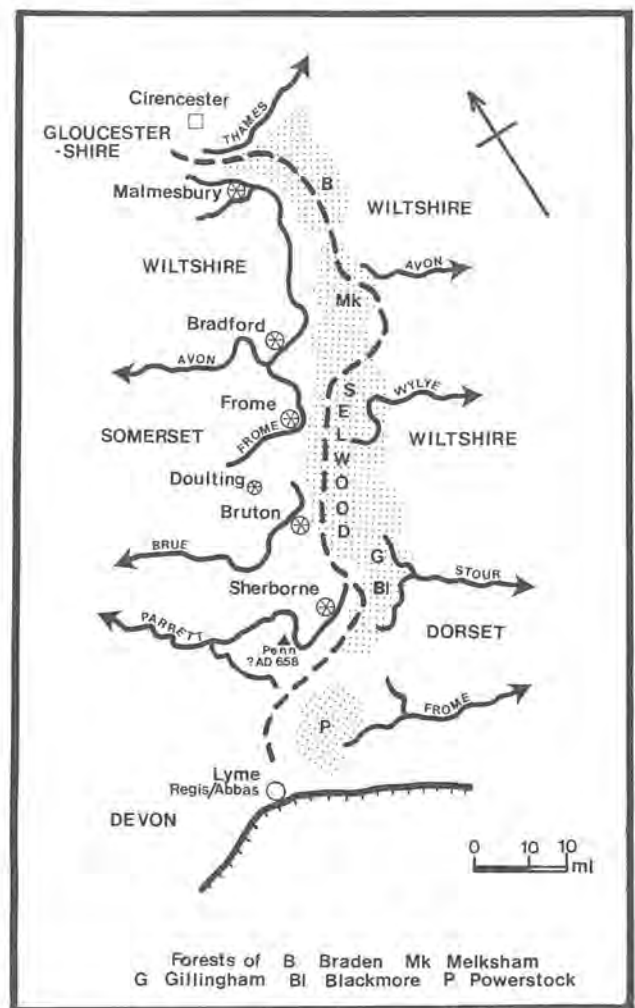


Figure 1. *Selwoodshire*. The *Anglo-Saxon Chronicle* described Aldhelm as ‘bishop to the west of the wood’ (ASC 1979, 40-1). The founding of the Sherborne see marked an important stage in the extension of English-speaking control into the Dumnonian peninsular. *Selwood* has probably been a borderland from remote antiquity for it lies along the major English watershed, here indicated by the broken line. Places linked with Aldhelm are marked; forest cover shown is very approximate.

little can now be known of his life (Lapidge and Herren 1979, 5-10), but it is of immediate interest to note that his seventh century horizons were not bounded by concerns either political or provincial. Furthermore, recent work has radically altered the view of a man which is otherwise little changed since the days of late Victorian scholarship. Not only is the long cherished legend about Aldhelm's early studies under an Irish hermit *Maelduib* (*Maildulfus*) seen to be without foundation (Lapidge and Herren *ibid.*, 6-7),² but the long held view that his Latin was inspired by Irish models is no longer tenable. His literary affinities are rather to be found in the continental world of the sixth and seventh centuries (Winterbottom *ibid.*), a world which was able to supply him with an extraordinary range of reading (Law 1982; 1983, 43-61). Indeed there are certain aspects of Aldhelm's career which may most easily be paralleled on the continent, particularly in Spain (Collins 1983, 59-87).³ Where he acquired his learning remains a puzzle. He tells us virtually nothing about himself, and as master of the art of Late Antique Rhetoric his personality will, alas, ever remain hidden behind the literary conventions he so successfully espoused.

Aldhelm was lettered, but not leisured. As abbot of Malmesbury and later first bishop of Sherborne he shouldered heavy administrative responsibilities. He describes himself as weighed down by such 'great tumultuous uproars in secular affairs' and he explains that 'the demanding responsibilities of ecclesiastical administration did not allow any space of undisturbed peace' (Lapidge and Herren *ibid.*, 9). As a man of means there were the resources for the construction of churches, and for equipping them – probably the most expensive part – and for specialist scholastic requirements. He mentions 'dwellings for students' and 'houses of prayer' in place of 'profane shrines' (Lapidge and Herren *ibid.*, 161);⁴ and his writings are full of references to the most costly things – purple garments, silk sleeves and ribbons, jewelled rings, gold and silver and *toracidae* (probably gilded-glass pictures) – articles mostly imported (Dodwell 1982, 36, 107, 145, 189).⁵ Just how Anglo-Saxon was Aldhelm's background must be open to some doubt: space here scarcely justifies discussion although further

² Lapidge and Herren (*ibid.*, 161) suggest that Maildub's existence may simply derive from an etymological interpretation of the Malmesbury place-name. To Bede Malmesbury was *Urbs Maildubi*, to Boniface, *Maldubia civitate* (EPNW 1939, 48).

³ There are interesting similarities between the style of death recorded for Aldhelm (d. 709/10) and that for Isidore of Seville (d. 636). Isidore, realising his end was near adopted a state of canonical penance and had himself carried into the Basilica of St Vincent to die. Collins notes (1983, 66) that this is the first account of the practice of formal renunciation of office and the adoption of the penitential state prior to death that became standard practice for kings in Spain; Isidore's name was to remain the most potent source of authority in matters of canon law and learning for many centuries. William of Malmesbury (c. 1120) describes how Aldhelm, realising that his end was near, had himself carried into the wooden church at Douling in Somerset 'where he might expire more easily'. (Transl. *Somerset Procs.* 10, 1884, 30-1).

⁴ Aldhelm says little about pagans, but there are two references of interest (Lapidge and Herren, *ibid.*, 85, 161). In the first he speaks of 'the sanctuaries of the ancient pagans which had been constructed of stones polished by the masons and covered with red roof tiles . . .' and in a letter 'where once the crude pillars of the same foul snake and stag were worshipped with coarse stupidity in profane shrines in their places dwellings for students not to mention holy houses of prayer, are constructed skillfully by the talents of the architect.' In the heart of *Selwoodshire* is the Romano-British temple at Lamyatt Beacon where finds of antlers suggested a cult linked with a horned deity. Beside the temple, but undated, was a small building tentatively identified as an oratory, and a number of burials, one of which yielded an 8th century date (Leech 1980, 329-352). At the bottom of the hill is Bruton church to which Ine presented a marble altar, which, according to William of Malmesbury, Aldhelm had brought back from Rome and which was still to be seen.

⁵ Bishop Daniel of Winchester, Aldhelm's younger contemporary and former pupil at Malmesbury, hints of important, but more perishable imported goods. In a letter to Boniface on how to deal with pagans he suggests, by way of conclusion, that it is necessary to put before them the might of the Christian world, and to ask them how it is the Christians possess those fertile lands rich in wine and oil, while the pagans have been left with the frozen lands of the north (Whitelock 1979, 795-797).

reference will be made by way of conclusion. Suffice to say, it is from him alone that we have intimations of the existence of an aristocratic Latin milieu in the West Country of the mid-seventh century, a period about which archaeology has very little to say. Aldhelm may have had wealth of his own, but it is clear that he owed much to the patronage of kings – he is said to have been related to Ine – a standard of living if not maintained by booty, then by the well-ordered management of the land itself.

Orderliness in governmental arrangements has a long history probably extending back into the prehistoric (Campbell *ibid.*, 61). If English and British systems were similar as seems likely, the collection of tribute by Crown or Church would have been much simplified, a matter of diverting revenue from one authority to another. What seems to be an inherently probable pattern of events in this area has received some support from a detailed landscape study. Following the lead provided by early charter material has indicated the existence of territories of a character and association that suggest overall institutional controls independent of purely local determinants; territories most easily understood as units of fiscal significance that played an important part in the development of the later medieval hundred. Some of these territories may be implied in the terms of early land grants – such as they are – but it is hercological criteria alone that furnish evidence for their existence – and clues as to their antiquity. For we find continuity here in form if not in function; links not only between Romano-British and early English, but between late prehistoric and Roman.

These territories are not distinguished either by a settlement or a boundary grouping – although these are of considerable complementary importance. Rather, they are distinguished by a pattern of place-names. These names are not arranged at random but related to one another within a 'structure of authority' vested in a principal place or *caput*. They are names which seem likely to be related to the fiscal or other status of the land on which the settlement stands, rather than describing the settlement itself which may have shifted its site. Mostly in English, these place-names are not those that tend to attract the most attention. Yet it can be argued that their interest to the landscape historian lies in their very Englishness. Seen less as names, and more as name types they can be treated as the product of translation, and thus the representatives of an earlier order – the symptoms of an administrative grouping which has come through a change of spoken language. It is salutary to recall how little is known of the processes of translation which, as far as committing names to the written record is concerned, can take place overnight (Friel 1981). For simple want of a better term these territories will be referred to a 'toponymic hundreds'.

THE TOPONYMIC HUNDRED

Reminiscent of some aspects of central place theory, the model of the toponymic hundred was not, however, based on a selected group of variable factors, but on empirical observation of a single hundred manor, Sherborne, in north-west Dorset, in an attempt to express the toponymy of the estate in its simplest terms. It was subsequently found that this basic pattern of names occurred again, and yet again, and each time in association with a composite estate which had other claims to 'hundredal' status. Of those instances cited below, all were shaped by very different physical environments, and presumably have a variety of origins. None is convincingly of English origin, one seems likely to pre-date the Foss Way, and one is likely to have been a Roman creation. Of some interest are their complementary relations with other estates, particularly with what appear to be hillfort *territoria* – a category which here includes both Shaftesbury and Malmesbury.

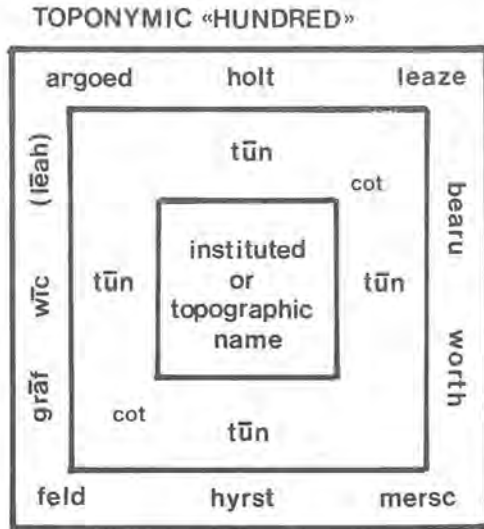


Figure 2a. A 'toponymic hundred' – a model grouping of name types such as to suggest a relation between place-names and their fiscal status within a structure of authority.

The Sherborne and Sixpenny Hundreds are here confined to diagrammatic form, fuller accounts can be found elsewhere (Barker 1982, 1984 and in preparation); but Dunley (Wilts) and Cirencester (Glos) are considered with greater reference to actuality. The paper will conclude with an attempted application of some of this material to the Cirencester/Malmesbury area, although the early growth of the latter, and some of the more historical implications relevant to the background of Aldhelm's life deserve fuller treatment (Barker, in preparation).

Fig. 2a is a model of the toponymic hundred, designed to show the relationship between place-name types as suggested by the medieval Sherborne hundred manor. In the centre is a topographic or 'instituted' name, then a girdle of names ending in *tūn*, and then an outer margin with quite a variety of names – the model includes several from other hundreds. Most of the words here are of English origin, and there may be no special significance attached to those that are not. Fig. 2b more accurately depicts the actual shape of the hundred manor – a pair of physically complementary estates probably in administrative existence by the tenth

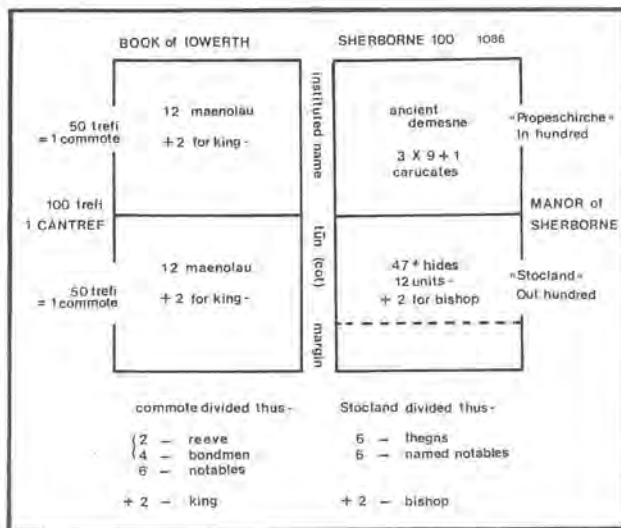


Figure 2b. An idealised form of tax assessment found in the Book of Iowerth as compared with that entered for Sherborne in 1086. Between the diagrams is the Sherborne place-name pattern.

century, and which emerge as the 'in' and 'out' hundred of the medieval period. A double unit is implied by the Domesday assessment which is reminiscent of the formal system based on the *cantref* found in Welsh Law – the main points for comparison are shown in the pair of diagrams. The *tūnas* are found in the out hundred, which, it has been argued, is the gelded portion of the estate and where in 1086 were recorded a number of *cottars* not found elsewhere. There are no *cot* names extant in Sherborne, but their existence in other hundreds suggests that they can be subsidiary to *tūn* names. The assessment for the out hundred is broadly consistent with that of a *commote*, and which need date no earlier than the Norman period, but the in hundred is a very different matter; it demonstrates an unusual number scheme seemingly based on a unit of 9, which may be related to the historic landscape and could possibly be of some antiquity – the estate was exempt from geld.

The latter may be identified with the original one hundred hide grant at *Lanprobi* to the Sherborne church by Cenwalh (d. 672/5) some 30 years in advance of the bishopric; a name like *Lanprobi* in this context may intimate a confiscation by the English of an already functioning British ecclesiastical estate. Concern expressed by the bishops of Canterbury and London at the turn of the century over the delay in founding the bishopric (Whitelock 1979, 792-3) may hint of legal considerations as much as political or pastoral worries. John (1964, 22) cites a law suit of the year 803 between the bishops of Worcester and Hereford in which was involved a 30-year term after which certain rights to land (in this case the bishop's *feorm*) could lapse, suggesting the 'reception into England of a widely diffused rule of Vulgar Roman law' ultimately deriving from Constantine. The institution of the Sherborne bishopric took place a century before. It may be that the legal significance of the 30-year span is thus evidenced in England rather earlier.

The model thus put forward derives from a territory largely defined by natural features, the landscape of which is arguably the product of close institutional constraints imposed – or respected – by what was, in effect, a single lordship over a period extending from, say, the 6th century to the 16th – nearly a thousand years. The physically complementary nature of the two estates suggests a territorial grouping older still, but there is at present no means of assessing its age.

THE SIXPENNY HUNDRED

The Sixpenny Hundred in Dorset is one of three hundreds associated with a reputed grant by Alfred to the house at Shaftesbury (Sawyer 1968, no. 357) (Fig. 3a). It lies south of Shaftesbury and covers ground that extends west from the chalk escarpment onto clays in the valley of the River Stour. The re-construction of an early hundred is aided by the fact that the bounds of most of the constituent parish/estates can be found in tenth century grants (Grundy 1935, 114-117; 1936, 103-111, 192-131, 131-134; 1937, 101-104, 105-107); its overall structure presents an interesting variation on the model of Fig. 2a. The hundred was divided into two distinct portions reflecting the basic geology, and indicated both by hercology and place-names. The eastern portion consists of a number of long, narrow land-units stretching up onto the chalk downland, the 'in' estate represented not by one, but by two topographic names – Fontmell (Magna) and Iwerne (Minster), and each flanked by *tūnas*, Compton (Abbas), Sutton (Waldron) and Preston – there is space here for a missing name. West across a watercourse called *Stirchel* or *Stirthel* in the tenth century, a small tributary of the Stour, are a number of irregularly shaped estates on the clay with names which belong to the margin – the lands of West and East Orchard (*W. argoad* wood), (Ekwall 1960, 350), Hartgrove (OE *grāf* grove, copse) (Smith 1956, I, 207), and Margaret Marsh. The focus of medieval history was not on

these places but on Fontmell and Iwerne both of which constituted *capellani* of the Shaftesbury house – land for the support of secular priests (Dugdale 1817, II, ii, 472). The names themselves are of interest; **funta* from Latin spring or fountain, it is one of a small group of names which Gelling (1978, 83-6) cites as evidence of direct contact between Latin and English speakers, a class of words which has a direct relationship with Romano-British institutions. The place stands near the source of the Fontmell Brook. Interestingly Iwerne may mean much the same thing – but in English; OE *aewielm* spring or source of a river, it is the element found in Ewen at the source of the Thames (Smith 1956, I, 7) and probably at the source of the Avon in *Newentone* (see Fig. 6). The *Iwern broc* of the tenth century rises near the present settlement. Both Fontmell and Iwerne held chapelries in the 'out' estate west of the *Stirchel* – Fontmell at Hartgrove, and Iwerne at Orchard – a toponymic mis-alliance, British with English, and English with British of doubtful significance.

Charter material gives some idea of the function of the out estate. There is a *shamelen* (slaughtering place) on the Shaftesbury-River Stour crossroads; and nearby, close to the site of the later Hartgrove chapel, a 'holy way' and a 'silver spring' – indicative of pagan practices perhaps. The hundred *caput* has been identified as Penn Hill (Fägersten 1933, 19) near the present Sixpenny Farm. On rising ground, focally placed within the territory, topography strongly suggests that the element 'Six' may be from **seax* stone or rock, (Smith 1956, II, 116) used here perhaps in the sense of 'marker stone' recording a place of assembly. Penn Hill is crossed by the remains of a north-south route that ran from the hill-top at Shaftesbury to the now deserted hill-top at Hambledon; nothing may be discerned as to the relations between **Seaxpen* and these settlements, but in attempting to delineate the early hundred (Fig. 3a), parts of their respective *territoria* seem to share the **Seaxpen* boundary.

It is the Fontmell area that is concerned with the earliest authentic West Saxon charter (Sawyer 1968, no. 1164)



Figure 3a. Suggested hercology of the pre-Conquest Sixpenny Hundred (north Dorset); boundaries, names and place-name elements are taken from charter material.

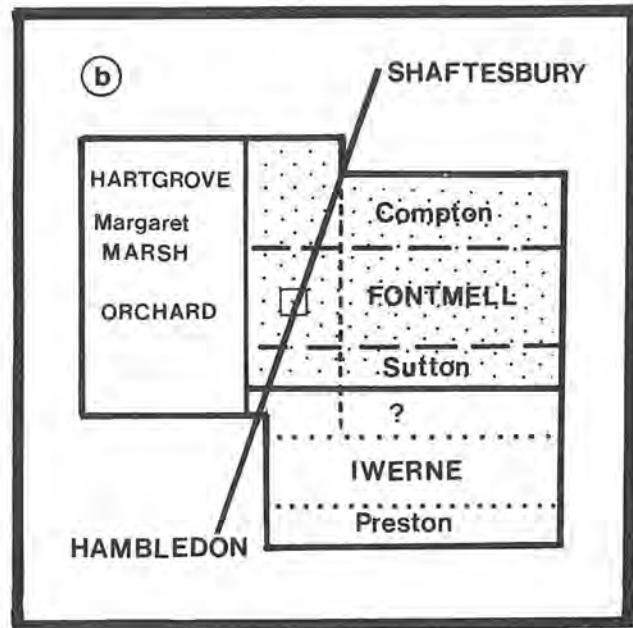


Figure 3b. The Sixpenny Hundred expressed as a model; the suggested extent of the Fontmell grant is shown stippled. An early route from Shaftesbury to Hambledon Hill is represented by a straight line.

which records a gift by Coinred, father of Ine, to Bectune *viro venerabilis abbatis* of 30 *manentes de aquilone rivus nomine Fontamel* bounded on the south side by the land of bishop Leutherius (Finberg 1964, no. 551). The witness list points to the years of his episcopate, that is between 670 and 676. Interestingly perhaps, the witness list occurs in the same sequence, with two additions, as that which accompanies the grant, traditionally dated 675, in which Leutherius conferred Malmesbury on Aldhelm (Levison 1946, 226-7). The terms of the *Bectune* grant are couched in the most general of terms, but set in the context of **Seaxpen* it may be possible to learn something of its whereabouts and extent. The reference to the stream *de aquilone* 'from the north' suggests that it is the northern tributary of the Fontmell that is meant, and which rises in Compton, flows south through Fontmell itself, and then Sutton, reaching the Iwerne boundary near Fontmell ford. It is thus plausible to suggest that the grant includes one of the two nodal settlements of the hundred, Fontmell, and its flanking *tūnas* (Fig. 3b). At least from the time of Finberg (*ibid*), Iwerne, the other nodal settlement, has been identified as Leutherius' land. The *Bectune* grant would thus imply some kind of ecclesiastical status for the greater part, if not all, of **Seaxpen*, a status which seems likely to have conferred some fiscal or legal advantages. After a lapse of some 30 years (a possible legal significance has already been noted) Bectune's land was claimed by the *familia* at Tisbury. The matter at issue seems to have been 'book right' or free disposal of land, and it seems he disposed of the land but kept the book (John *ibid*, 186). It may be that this constitutes an example of a practice which Bede considered a major abuse of his day, namely families seeking to retain free lands embarked on the legal fiction of turning themselves into a monastery (Mayr-Harting 1972, 253). The designation *abbas* at this early date would not necessarily imply that Bectune was a member of the priesthood, as it would have been an appropriate title for the head of a clerical *familia*, a position that might have depended upon kinship to some noble or royal family. As it was, Bectune's successor lost the case and paid a sum of money to Tisbury.

It was through the Fontmell grant that the later Shaftesbury house could lay claim to great antiquity. It survived in

the archive – a grant perhaps rather less concerned with the growth of the early Church *per se*, and more concerned with establishing ecclesiastical rights over the remaining portion – the other half – of an earlier administrative block. Taken in isolation the long narrow parishes of the Fontmell/Iwerne group might be assigned a prehistoric origin. Those on the clay might be deemed a more recent product. Within the context of *Seaxpen their relative ages seem less clear; it may be that the two groups should be seen as an integral pair.

THE DUNLEY HUNDRED

The age of hundredal units like Sherborne and *Seaxpen at present remain a matter for speculation, but the hundred of Dunley (Wilts) presents evidence to suggest that as a territorial unit it dates to some time before the construction of the Foss Way. Probably the subject of a grant by Ine to

the early Malmesbury house (see below) it finally disappeared during the medieval period, merged with the hundred of Chippenham. Its disappearance from history is by respect of loss of fiscal and judicial rights, but there are some cogent reasons for thinking that it has not disappeared from the landscape. It occupies an area some 5 miles south-west of Malmesbury which is traversed by the Foss Way bound for Cirencester. It is an estate with no clear-cut physical determinants as regards size or structure, but it presents a very distinctive hercology, and a pattern of names that reflects the grouping outlined in Fig. 2a.

In 1086 it appears as the hundred of *Dunelawe* assessed at 28 hides. At this date its constituent estates are not known with any certainty; probably Surrendell, Alderton, Littleton, Luckington, and possibly a detached portion of Easton Grey a little to the north (Jones 1865, 161). Sherston shown recently as lying in Dunley (Thorn and Thorn 1979 map,

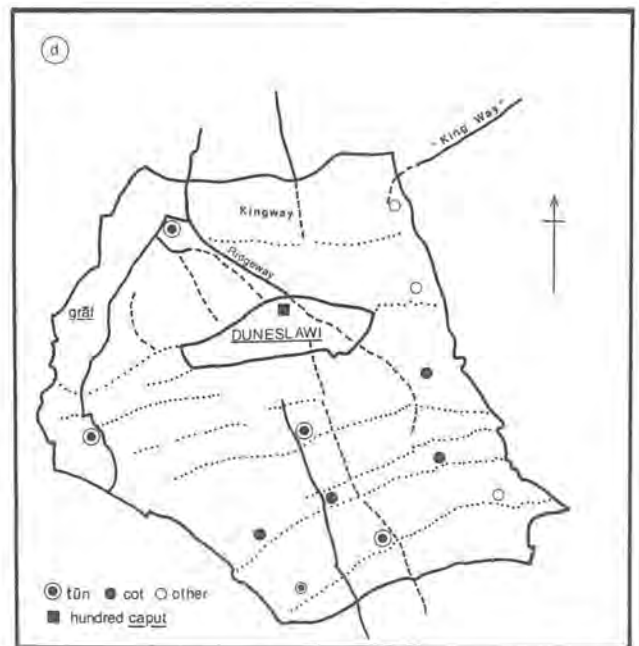
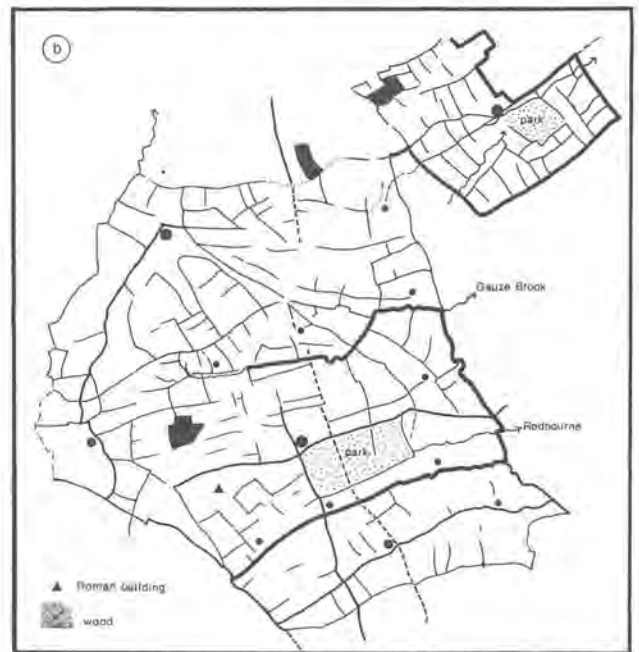
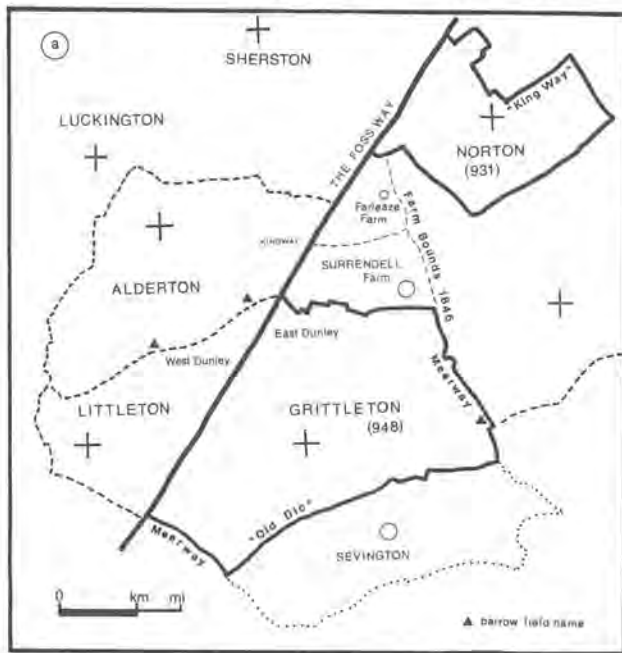


Figure 4. In search of the lost hundred of Dunley (north-west Wilts) showing (a) parishes and farms of the area with the bounds of Grittleton and Norton (b) the same area without the Foss Way and presenting a pattern of small estate defined

by paths and field boundaries (c) name types found in association with these estates and (d) name types found in association with these estates and (d) suggested hercology of an early 'hundred'.

Wilts, northern hundreds) was later absorbed by Chippenham and may once have formed its own unit. The name of Dunley survives in two farms either side of the Foss Way, respectively west and east, and it was near here on the Foss according to Aubrey and Jackson (1862, 104) there was once a chapel and the hundred meeting place, a field called Elm and Ash Ground. The second element of the name Dunley is from OE *hlāw*, mound (Smith 1956, I, 248-9), and quite possibly purpose built for purposes of assembly.

The parishes of the area take their boundary references from the Foss Way (Fig. 4a); there are the bounds for Grittleton (Grundy 1919, 251-3; Sawyer 1968, no. 472) and Norton (Grundy 1919, 221-5; Sawyer 1968, no. 416). Field names like 'broken barrow' along the bounds of the Alderton parish may suggest that the parish, in common with some others in Wiltshire, may be based on an earlier pre-Christian estate (Bonney 1976, 72-82). Looking more closely at this area however, it appears that the land is divided rather differently (Fig. 4b). Lying beneath the parishes is a pattern of long thin land units, made up of field hedges, paths and roads, that bears little relation with the parishes, and none whatever with Foss Way. Military frontier or no, the Foss here cuts across country on an entirely arbitrary course, almost such to suggest deliberate depopulation by the Roman survey. In the scheme of things there are spaces, particularly in the northern part of the area shown, where one might be tempted to look for signs of early settlement desertion, close to, or on either side of the roadway. There are surviving elements of a north-south routeway, the *kingway* (1846) which meets the *ridgeway* (1846) near the supposed site of the *hlāw*, thus not necessarily sited with any reference to the Roman road. Dunley takes on the appearance of a small estate focally placed within a distinctive territory, and bounded on the south side by the Gauze Brook which rises near West Dunley Farm. Ranged about the *caput* is a pattern of names reminiscent of the system outlined in Fig. 2a, not with reference to the parishes, but rather to the estates which surely have every likelihood of pre-dating the Foss Way (Fig. 4c).

Reducing Dunley to basics (Fig. 4d) we find a territory occupying a relatively featureless limestone plateau, and one which fulfills some of the most basic requirements of a toponymic hundred. It is held together by a boundary which appears to focus on a hundredal *caput*, which yet retained an identity into the medieval period while bisected by the Foss Way and re-designed by a parochial authority. The only physical feature capable of ready definition is the source of the Gauze Brook, and it is this which is mentioned in a grant dated 701 in which Ine conferred on Aldhelm for the monastery of Malmesbury 20 *manentes* of land *ubi rivulus qui Corsaburna oritur* (Sawyer 1968, no. 243; Finberg 1964, no. 187). These 20 *manentes* seem very likely to be associated with the Dunley territory; assessed at 28 hides in 1086, 24 paid to the crown. With evidence that points to the existence of this territory from sometime in the prehistoric, it is feasible to suggest that Dunley represents a royal vill of pre-Saxon origin.

Whence derives royal interest in Dunley – and in so much land south of Cirencester and around Malmesbury? It is a question that should be asked even if an answer is never forthcoming. Successor rulers to the Roman world inherited a complex of rights and powers over land; seventh century Visigothic kings received revenues from the royal fisc – that land which had formerly been in imperial possession (Collins 1983, 109); those very same 'public lands' which, to Goffart (1980, 123), played such a key part in the provision for the Germanic settlement in Gaul.

It is difficult to avoid the suggestion that the royal estates of the Malmesbury region may once have fallen within the orbit of Cirencester. The Roman presence is forcefully expressed in the course selected for the Foss Way. It was the

successor authorities who were to witness the deflection of Cirencester bound traffic, from Dunley, north-east along the *Kingway* (Sawyer 1968, no. 1585, undated bounds included by Grundy (1919, 221-3) with a charter dated AD 941 (Sawyer, no. 415), through Norton, Athelstan's *villincula* (Sawyer 1968, no. 454; Finberg 1964, no. 247), joining the route along the south side of the Avon at Bremilham, a deserted settlement with possible early royal connections (Hampton 1981, 316-21, and see below) and on into Malmesbury over the bridge, which, until the 19th century, occupied a small detached portion of the Bremilham parish (Fig. 6).

CIRENCESTER

For the last toponymic hundred to be considered here, it is necessary to follow the Malmesbury lead a little further, and look more closely at Cirencester itself. The most northerly of the Malmesbury estates was Kemble, which lay beyond what was, in 956, the *Kemeleshage* (Sawyer 1968, no. 629; Grundy 1919, 42-53) or the *Kemele Yete* ('gate') (*ibid.*, 119); now on the Wiltshire/Gloucester county boundary, it is sited at the source of the Thames and was once on the borders of Mercia. The acquisition of the Kemble estate traditionally dates from the seventh century.

There are two charters which between them account for a large area of land 'either side of a wood called Kemble' and 'between the streets' which later Finberg suggested were the Foss Way and Ermine Street (Sawyer 1968, nos 231, 234; Finberg 1964, 67-70). In the same area is an early grant of land at Somerford (Keynes) (Sawyer 1968, no. 1169) and the undated bounds of an estate at Ewen (Sawyer 1968, no. 1552) which seems to have included Kemble.

Whatever the historical pedigree of some of this very confused material, it is only when an attempt is made to map it that an important implication is made plain, namely, that at some earlier date Kemble, Somerford and Ewen were not territorially related to Malmesbury but to Cirencester (Fig. 5). For Cirencester presents the remains of a large sub-circular territory traceable in a later pattern of parish/estate boundaries – a veritable *territorium*. Interestingly enough, within this territory is found a very distinctive grouping of place-names – an almost copy-book toponymic hundred. Cirencester is focally placed and then there is a girdle of *tūnas* with a gap now occupied by Cirencester Park, and then a number of margin names of which Kemble, Somerford, Ewen and Driffield (Reece 1984, 11-19) are four. Kemble is a British name with possible pagan connections (Ekwall 1960, 271), but it may be cognate with W. *cyfyl* border, brink or edge (Jackson 1953, 487, 663; EPNW 1939, 60) which, on hercological grounds would be highly appropriate. Kemble, or more particularly, the Kemble *haga* (OE hedge, enclosure; Smith 1956, I, 221) would not only mark the edge of the Cirencester territory, but quite possibly represents the man-made border marking the Thames/Avon watershed.

If the material for the model in Fig. 2a is not attested until the medieval period, that for **Seaxpen* is found in the mid-Saxon, and that for Dunley could be descended from something prehistoric. The Cirencester arrangement however, is most easily seen as a Roman creation, a deliberate piece of territorial planning designed to accompany an important town – a *civitas*. The point here is not the absolute age of any of these 'hundreds' or of their precise fiscal or tenorial significance, but rather to show that a miscellaneous assemblage of early administrative groupings can be reflected in some of the most common of English place-name types. It was a few years ago that Gelling (1976, 208) suggested there was much scope for experimentation in finding methods for 'perceiving significant patterns in the general mass of place-name material'.

At Cirencester it is thus possible to suggest that the *tūn* names are not the result of Anglo-Saxon colonisation

around a dead Roman city, but that each represents settlement on land of dependent Roman status, and that names were changed – translated – at some time during the English-speaking take-over, and that it was the English names that were committed to the written record; that is to say, names related to land and not to individual settlements. Such an eventuality might be reflected in a literary source; it was Campbell (1979, 34-51), who, in discussing the treatment of *tūn* in the OE translation of Bede was led to suggest that its use could imply 'the transfer of not only places, but

also of organised areas of government from Britons to Saxons'. There arises the question as to what the Cirencester *tūn* could have replaced. In later material *tūn* can gloss *villa*, *vīcus*, *pagus*, or even *praedium* (Smith 1956, II, 188-9). *Tūn* remained a common name forming element over a long period of time; it is not common, however, in early sources in Britain, although its occurrence in Normandy and the Pas de Calais points to its use by Saxon settlers there probably in the sixth century (Smith *ibid.*, II, 191). It cannot be impossible that the *tūnas* under discussion relate

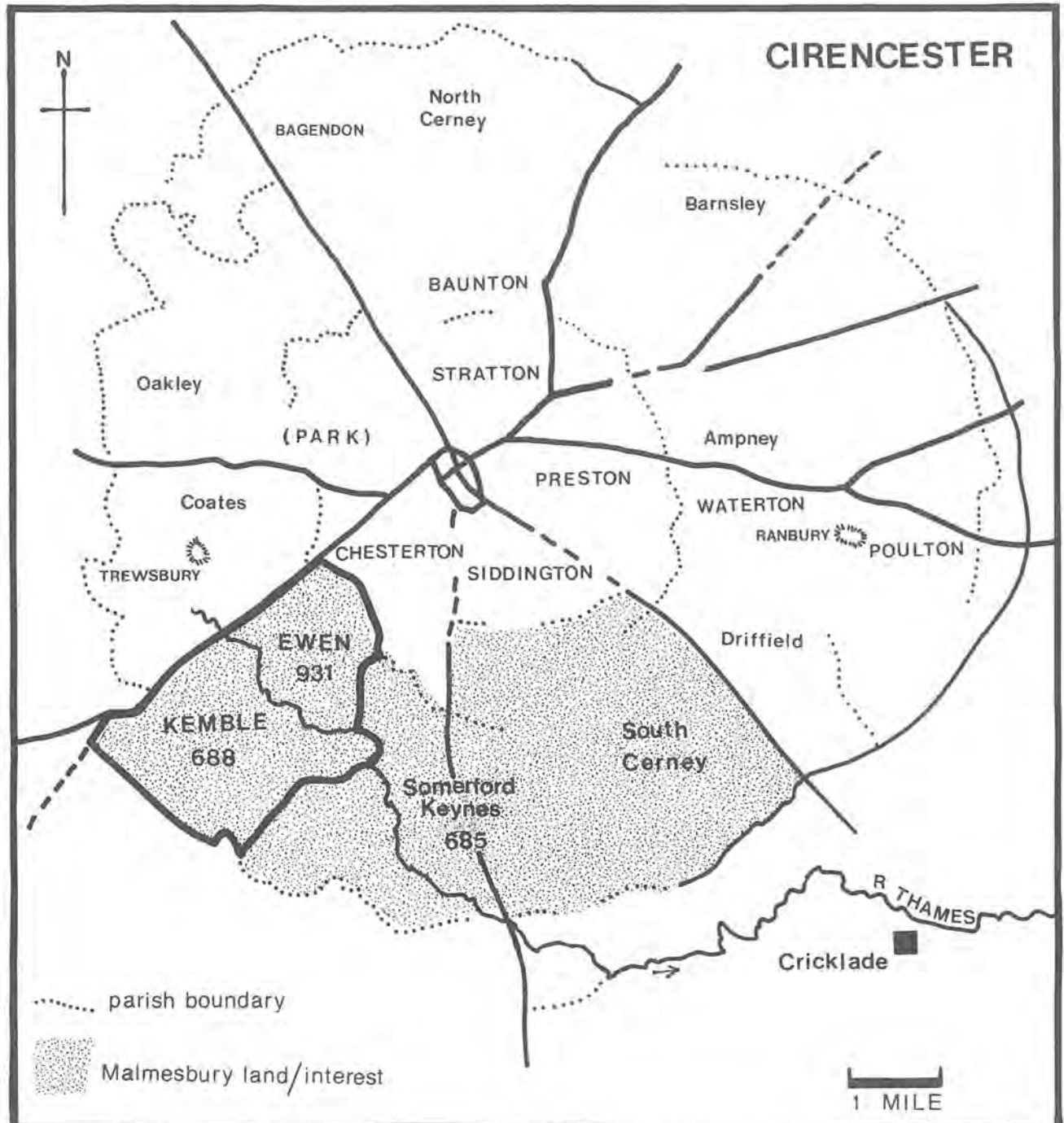


Figure 5. The Cirencester area showing suggested territorium and probable extent of land held by Malmesbury at various times before 1086; traditional charter dates are included, and the Kemble/Ewen estate as suggested by undated bounds.

to an early stage in the English colonisation of the Cirencester area. Cirencester would presumably have retained some functional capacity long enough into the English settlement to ensure the perpetuation of the names. It is of interest here to note a number of instances on the continent where there is evidenced at this time an administrative division based not so much on race, as between the civil and the military – that is, the former vested in those authorities descended from the old Roman world, the latter with the incoming aristocracy. The *Anglo-Saxon Chronicle*, perforce, supplies information almost wholly confined to the English and the military.

A CIRENCESTER/MALMESBURY AXIS

In the year 577 the British king of Cirencester (together with the kings of Bath and Gloucester) was defeated, and presumably divested of his powers (*ASC* 1954, 18, 19). In 628 Cirencester is again referred to, and this time as the scene of a battle between Penda of Mercia and two West Saxon kings (*ASC ibid.*, 24, 25). If the first conflict was related to the old civil world, then the second was more concerned with the making of a frontier. At best it may be concluded that Cirencester remained a place of some political significance into the seventh century. From Fig. 5 it appears that at some time Malmesbury interests had grown at the expense of those of Cirencester. At some stage the geographical cohesion imposed by the Roman world had been broken – and the later Malmesbury house would have posterity believe that such happened in the later seventh century, during Aldhelm's lifetime. At the source of the Thames Kemble would have been a place of considerable religious significance and with an earning potential. The possibility of continuing revenues from here being diverted from the Cirencester fisc ultimately finding their way into the Malmesbury purse is one that cannot be ignored.

Characteristic of an early religious foundation is Malmesbury's claim to a legendary past. Among those elements of the story of obviously fabulous origin are others that could contain a grain of truth. The fullest account survives in the *Eulogium Historiarum* compiled by a fourteenth century writer – probably a Malmesbury monk – and there is an alternative version to be found in Leland incorporating much the same information, but differently worded (*Reg Malms.* 1880, II, xxxi; Dugdale 1817, I, 253). Malmesbury had once been a city utterly destroyed by strangers, and when Maudulf arrived to found his hermitage he found the place not a 'great resort of men'. The royal habitation, however, of both Christians and pagans, was not at Malmesbury, but *Cairdurburgh*. A name composed of the elements OW. *caer* fortified place; Br **duro* walled town with gates; and OE. *burg*, *burh* fortified place (Smith 1956, I, 76, 140, 58; *EPNW* 54) is a name of almost generic quality. The only place of major urban character in the Malmesbury area is Cirencester, one of the *civitas* capitals of Roman Britain – a possible early candidate for *Cairdurburgh* (Fig. 6). In the division of royal and ecclesiastical 'habitation' however, *Cairdurburgh* is customarily linked with the village of Brokenborough (OE *brocen*, *uneven*, *broken ground*; OE *beorg* hill, low ridge, Smith 1956, I, 29, 52), which assumes importance as the traditional site of Athelstan's palace – although Aubrey was not sure in his own mind as to whether it was to be found there, or whether 'the ruins lay a little way off' (Aubrey and Jackson 1862, 211).

Another place in the area may have claim to royal associations. A mile or so to the south on the other branch of the Avon is the site at Cowage Farm, Bremilham, now in the parish of Foxley, where preliminary work has recently been undertaken following aerial survey (Hinchliffe, forthcoming) which suggests a group of substantial timber structures including a large timber 'hall', the dimensions of which have been compared with the royal Northumbrian

palace at Yeavinger, and similar structures at Atcham and Cowdery's Down (Hampton *ibid.*, 319-320). Brokenborough and Bremilham are located one on each branch of the Avon, and just outside what is arguably an early Malmesbury territorium (Barker, in preparation), a suitable candidate perhaps, for the estate purportedly granted to Aldhelm by Leutherius in 675 (Sawyer 1968, no. 1245). It provides an instance of the pattern noted by Alcock (1971, 326) of the association of early monastic establishments with pre-existing fortresses, presented to a monastic founder by royal bequest. Of further interest here is the apparent siting of what could be two *villae regalis* in relation not only to a 'fortress' but to its estate.

Another line may be followed from the traditional story, namely that Malmesbury was once a British city, *Caer Bladon*, which was destroyed by 'strangers' at some unspecified time before the arrival of Maudulf who had only to seek permission to settle from those left living there. A hill-top like Malmesbury of such readily defensible character might have suffered 'destruction' more than once in its history – early in the Roman occupation, for example, or in the changes of the post-Roman period with the establishment of a dominant British group – represented perhaps, by Maudulf. Such pre-Roman material as there is from Malmesbury suggests the present town may occupy the remains of a bi-vallate hill-fort (Haslem 1983, 111-112), and it is a site with a frontier significance that could long pre-date the kingdoms of Wessex and Mercia. Malmesbury is sited at the headwaters of the (Bristol) Avon, on the edge of the major English watershed. A little to the north, across the watershed, is Bagendon at the headwaters of the Thames. Both may have been rendered politically obsolete by the scale of imperial town plantation that took place between them – the hill complex at Bagendon was abandoned, and the continuing paucity of Roman material from Malmesbury remains striking. With changes in the post-Roman period Bagendon never revived, but Malmesbury was to enjoy a rise in fortune that first enters the written record in the mid-seventh century; a shift of political interest to a fortified site, and an interest which was to be heightened by the re-making of a frontier.

It was into this period that Aldhelm was born, and, so far as it can be ascertained, it was in this area that he received his early education. Born sometimes in the decade 630-640 (Lapidge and Herren *ibid.*, 6) anyone destined to teach him would have been living already, from 600, perhaps earlier, a time in which there can have been no patronage for west Saxon kings who were yet pagan. Whether the Augustinian mission of 597 played any part in the field of Latin education remains a matter for guesswork (Law 1983, 44). Aldhelm's thorough knowledge of Latin and his close affinities with the continental world of Late Antiquity prove something of a stumbling block to the more conventional view that learning of such depth could not have been readily obtained in England prior to the founding of the school of SS Peter Paul by Theodore and Hadrian, and the 'Canterbury renaissance' of the 670s. Aldhelm spent a relatively short time as pupil there in middle life, and informed opinion doubts as to whether it formed a very important part of his education (Law *ibid.*, 45). With the earlier emphasis on the Irish connection discredited, Aldhelm's *oeuvre* awaits re-appraisal (Law *ibid.*, 45). Such enquiry will be linguistic, literary, and almost European in scale. It has thus been of interest here to take a fresh look at some aspects of the early development of the area in which so much of his life was set.

Reference has already been made to early territorial links between Malmesbury and the Cirencester area. Whether any weight can be placed on evidence of such character must wait to be seen, but the proximity of these places is something often overlooked – Cirencester and Malmesbury are little more than ten miles apart. Taking into consideration the literary connections enjoyed by early Malmesbury,

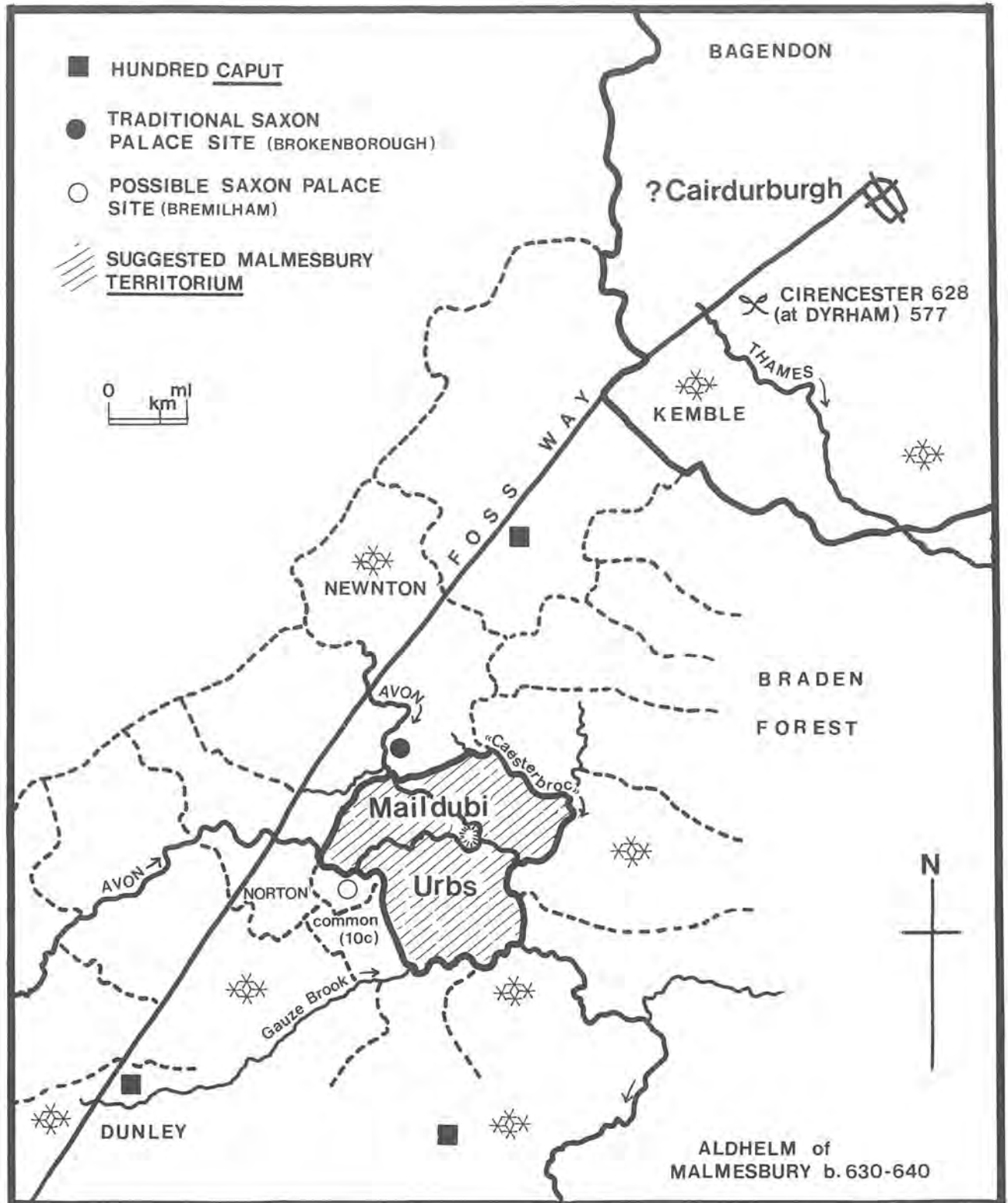


Figure 6. The Cirencester/Malmesbury axis; the Malmesbury territorium would be a candidate for the founding grant of land at Mealdumesburg to Aldhelm, traditionally dated 675 (Sawyer no. 1245). The caesterbroc is mentioned in the undated bounds of the neighbouring Charlton (Sawyer *ibid.*, no. 1578). Other bounds shown are those which could pre-date the Foss Way. Starred areas are those associated with what purport to be royal grants of land to Aldhelm in the Malmesbury area (Sawyer *ibid.*, nos 73, 231, 243, 260; 1169 and 1170 are grants by laity).

it is possible to suggest that Aldhelm was heir to a surviving locally based tradition of British Latin scholarship; furthermore that he himself was of non-English (non-‘Germanic’) extraction.⁶ The survival of British Latin might be the less surprising – indeed the more acceptable – if considered in the light of the view that the Latin of Roman Britain in its hey day was neither provincial nor archaic (Gratwick 1982, 1-79). Archaeologically speaking, the West Country is known to have maintained some kind of luxury trading contract with the Mediterranean world of the sixth and seventh centuries (Wilson 1976, 31). Aldhelm’s visits to Canterbury were doubtless of educational benefit – he says so himself – (Lapidge and Herren *ibid.*, 137-8, 152-3), but they can be imbued with a non-educational motive, that is, a successful attempt at assimilation within a rapidly changing English political order that was moving westwards with its own dynastic ambitions. So one-sided is the view of early Wessex it may well follow that the traditional conversion by St Birinus entered in the *Chronicle* under the year 639 (ASC 1972, 26-27) only involved the English. Aldhelm supplies a tantalising glimpse of another side, but as sole surviving literary representative of his generation there will remain the severest limitations on any purely historical assessment of his background. The geography of his life may have something rather more to offer.

⁶ Aldhelm says virtually nothing about his origins, and those comments he does make lack any context by which their meaning might be made clearer. Law (1983, 57) suggests that ‘Aldhelm was aware of his unique status as a Latin metrical of Germanic origin, is apparent in his epilogue to the *De Pedum Regulis*’: ‘no one born of the offspring of our race and nourished in the cradles of a Germanic people has toiled so mightily in pursuit of this sort before our humble self and has committed to the structure of letters the statements of earlier minds regarding the discipline of the metrical art especially one established in the midst of so many and such loud tumultuous uproars in secular affairs and weighed down by the ecclesiastical concerns of the pastoral care by which . . . the mind is constrained as though by the tightest sort of bolt and chains’ (transl. Lapidge and Herren *ibid.*, 45). It could be understood here, however, that Aldhelm was not of ‘Germanic’ origin, and that the circumstances of his birth and the ‘Germanic cradles’ are not one and the same thing – he owed to one race his origins, and to another the environment in which he pursued his studies. Any claim to uniqueness would be by virtue of the fact that he was the first to accommodate himself to such a background – and seemingly against the odds. An anonymous student writing to Aldhelm says: ‘I am not unaware that you are distinguished in native ability and for your Roman eloquence . . . because you were nourished by a certain holy man of our race.’ The race of the student cannot be ascertained with any certainty, and is open to more than one interpretation (Lapidge and Herren *ibid.*, 146-7, 164). The only comment that can be made here is that neither Aldhelm nor the student sound as if they are of ‘Germanic’ origin.

ACKNOWLEDGEMENT

I am grateful to Dr Margaret Faulf for her comments and criticisms on the draft of this paper.

*A word marked with an asterisk denotes a hypothetical linguistic form not actually occurring in any document: see Jackson, K., 1953. *Language and History in Early Britain* (Edinburgh), p. 7.

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ABBREVIATIONS

- ASC Garmonsway, G. N. (ed. and transl.), *The Anglo-Saxon Chronicle* (London 1972).
- EPNW Gover, J., Mawer, A., Stenton, F., *The Place-names of Wiltshire* (London 1939).
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The Belets: Notes on a Mediæval Dorsetshire Family from the 11th to the 14th Centuries

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SUMMARY

Surviving documents show that in mediæval Dorset the name Belet would have been well-known, and mostly respected. For those interested in this period the attraction of the Belets lies in the many facets of mediæval life amongst the middle ranks of society which they present; such as royal service, military careers, and criminal activity. This brief outline of their family history highlights some of its more notable characters and discusses their relevance to Dorset's history.

Research into the connections between land-holding and the socio-political geography of early mediæval Dorset revealed the name Belet to be prominent in the Domesday Book, the *Cartae Baronum*, the Red Book of the Exchequer, various feudal aids, and the Lay Subsidy Roll of 1332. Although many other families were clearly of importance in Dorset during this period, for instance the de Novo Burgos, the de Monte Acutos, the de Bello Campos, and the de Whitefields, it was only the Belets who could be traced back to Domesday Book and forwards beyond the Lay Subsidy. For the purposes of this paper other sources have been used to supplement the picture and expand the story. These include *Inquisitiones Post Mortem* (C.I.P.M.), Charter Rolls (C.Ch.R.), Close Rolls (C.Cl.R.), Patent Rolls (C.Pat.R.), Pipe Rolls (P.R.), Liberate Rolls (C.L.R.), Scutage Rolls, Feet of Fines and the *Testa de Nevill*. Nevertheless, even with this additional material, the biography of this family remains incomplete. Some elements of shire society are demonstrated, but there are many questions which cannot be answered.

Incomplete records have led to some gaps in the story and the family tree (Appendix II). It will be seen in Appendix II that some persons mentioned in the text cannot be firmly associated with other members of the Belet family. A process of elimination and careful deduction has produced the family tree in its present form. There are some relationships which unfortunately cannot even be speculated upon; hence its incomplete form.

For ease of identification numbers have been assigned to members of the family sharing the same name. It is almost true to say that every William had a son called Robert, and every Robert had a son called William! It is hoped that such an identification procedure will reduce confusion to a minimum.

William Belet I appears in Domesday Book as a tenant-in-chief in Hampshire holding one hide at Woodcot, which was held of him by his daughter (whose dowry it had been) and her husband Faderlin (*VCH Dorset*, iii, 53). In Dorset William was listed amongst the King's Sergeants holding a total of 11 hides and five virgates at Frome Billet, Winterborne Belet, France Farm Stourpaine, Woodsford, Lyme Regis and Stourpaine (*VCH Dorset*, iii, 113-4). He is also the only person to be listed as a sub-tenant on royal estates in Dorset. These were at Hame (two hides and one virgate) which he held of the Queen and seems to have relinquished to the King by 1086, and at Bingham Melcombe, an estate of 10 hides which had been held by Earl Harold before the conquest (*VCH Dorset*, iii, 68, 70). It may be that William held these lands as a royal bailiff or that he held them as reward for service to the king. The latter would seem more likely in the absence of any other named bailiffs. Besides all this land at farm William Belet I also had a salt-works and a mill at Lyme (*VCH Dorset*, iii, 114). His estates show William to be a prominent member of that social class just below the knights, who in later years are referred to as yeomen.

The social hierarchy of the middle ages is difficult to define and the social terminology is only sufficiently evolved in the 14th century for us to talk with any precision. Saul (1981, 13) describes a sergeant (*serviens*) as a lowly man-at-arms who attended a knight or served in the knight's place. This definition is probably as appropriate in the 11th century as it was in the 14th century. It would suggest that William came to England¹ as part of a knight's retinue and was well rewarded for his services with grants of land. So well rewarded that, with 11 hides and five virgates, he was a good deal better off than many knights. Harvey (1970, 15) notes that the average knight's fee in Domesday Book was one and a half hides. This comparative wealth, his associations with two royal estates in Dorset and his one fee as a tenant-in-chief in Hampshire suggest to me that he came over as part of the Conqueror's own retinue.² The family's subsequent history of service to the crown provides circumstantial evidence to support this conclusion.

The sole evidence for William I's son (he may have had more than one but there is no indication of this) comes in 1190 when his grandson, Robert Belet I, agrees to pay 80 marks to be reinstated to the lands and his inheritance at Sheen, Surrey, of which he had been voluntarily dispossessed by his father R. in 1167 (P.R. 1190-91, 155). This raises two questions: who was R. and why did he dispossess Robert, albeit with the latter's consent? There is no further light to be shed on the second question but it is possible to speculate that the father's name was Robert (although Ralph, or even Roger are possibilities to judge from names in subsequent generations), and that R. was the son of William Belet I. This has been assumed for the family tree, though firm evidence will probably always be lacking.

William Belet I had at least two grandsons, William Belet II and Robert Belet I; the former expanded the family's tenurial interests beyond Dorset whilst the latter improved the family's social and political position within the county. They are both found for the first time in the Pipe Rolls of 1160-61 (P.R. 1160-61, 43, 47).

William Belet II appears on the Dorset account roll paying a fine in respect of knight service. If we accept Saul's equation (1983, 13) that two *serviens* equate, in military terms, to one *milites* this increased military obligation can be taken to indicate an improved economic, and therefore social, status. In 1169-70 he incurs a forest fine in Berkshire, the first reference (other than his grandfather's holding in Hampshire) to interests outside Dorset (P.R. 1169-70, 72). This debt remained unpaid throughout William II's lifetime because the words *sed mortuus est* – but he is dead – are noted in the Pipe Roll of 22 Henry II, 1175-76. The debt, which passed to his wife Matilda and one of his sons, Ralph,

¹ The name Belet is not Saxon in origin. I think it safe to assume that William Belet I came to England as part of, or as a result of, the conquest of 1066.

² This suggestion could be tested by looking at the economic status of sergeants from other counties. William is the most well-off Dorset serjeant.

remained on the Rolls until 1194, a testament to the thoroughness (or the inertia) of the Exchequer clerks. Such thoroughness was achieved only with time and, as the date of the entry quoted below shows, it was in fact three years before the clerks established who exactly had inherited the debt. The records show the debt to be 20 marks of which his wife had to pay 10 in Berkshire, and his son Ralph 10 in Oxfordshire, and provide further evidence of the family's increasingly widespread interests.

— *Willemus Belet debet xx m. de misericordia pro foresta. Sed mortuus est. Sed de his debunt x m. requiri de uxore ejus in Berch'sr' et x m. de Radulfo filio ejus in Oxinerf'sr'. —*

Pipe Roll 26 Henry II, 1179-80, p. 39

William's wife, Matilda, disappears from the records in 1189-90; the debt once again reverting to William's name, an indication that Matilda probably died about this time.

Interest in the fourth generation of Belets lies with the sons of William Belet II; Ralph, Robert II and John I. Between 1176 and 1203, when he at last appears on the Dorset record, Ralph is mentioned as owing various fees in Oxfordshire, Surrey, Hampshire and Berkshire, some of which he had inherited from his father. In 1203 Ralph received 100 shillings for escorting Geoffrey de Pruilli to the king from Corfe — this was at a time when political prisoners were still held at Corfe and Sherborne (P.R. 1203, 139). The king levied a fifteenth amongst merchants in 1204 for his military expeditions '*ultra mare*' in Normandy (P.R. 1204, 219). On the list of Dorset merchants was Ralph Belet from whom £14 was levied. Ralph is the only member of the family for whom positive evidence exists that he was a merchant as well as a landowner. What his trade was is not clear but it is a strong possibility that, given the contemporary economic climate, he was a wool merchant.³ After an entry on the Praestitia Roll of Somerset in 1215 there is no further mention of a Ralph Belet until 1234, 1240 and 1241 (C.Cl.R. Henry III). If it is the same Ralph then he was probably in his seventies. There is no firm evidence to suggest that there was a second Ralph. These final references show Ralph raising the levy of one-fortieth imposed in 1234, serving on Grand Assize jury and being granted free warren, along with his heirs, at Woodsford (C.Cl.R. 25, Henry III, p. 256). The Close Roll for 1241 reveals that Ralph died that year. On the jury he is referred to as a knight but there is no reason why these should not refer to a son of the same name instead of the Ralph who escorted the king's prisoner 38 years previously. Unfortunately we do not know the names of his heirs, so at the moment the problem remains unsolved.

Of Robert II very little is known. His half-brother John I held one quarter of a knight's fee in Berkshire (occasionally recorded as one-fifth) but does not appear to have held any land in Dorset. He married Alicia, daughter of Fulc d'Oyri from Lincolnshire, but his main importance lies in the fact that through him alone can a positive link be established with that branch of the family, cousins once removed, who favoured Michael and Hervey as names almost as much as William and Robert were favoured by the Dorset branch. John Belet I inherited the lands of his childless 'kinswoman' Maud, who was the daughter of Michael Belet II (*Testa de Nevill*), son of Michael Belet I (Appendix I) (*VCH Surrey*, iii, 541). John left two sons and two daughters.

Robert Belet I, brother or possibly cousin of William

Belet II, also held land in Surrey besides those estates which he held in Dorset. Indeed, the first reference to him comes on the Surrey account for 1160-61, when he is quit of a fine connected with his lands in this county (P.R. 1160-61, 43). In 1165-66 he was fined by the king for an offence connected with fishing rights (*misericordia pro piscaria*) possibly fishing in waters along the Thames reserved for royal fishing since the fine was incurred at Kingston (P.R. 1165-66, 107). The amount due was £55 17s. 2d. and it took 17 years for Robert to pay. The bland statement on the account gives no hint at just what it was that Robert had done to incur such a large fine. After an initial payment of £16 he paid between £3 and £5 each year until 1173-74 when he made no payment, and thereafter £1 or £2 each year until he was quit (P.R. 1182-83, 85).

Proof of Robert's estates outside Surrey comes in the Pipe Roll for 22 Henry II 1175-76, and the Pipe Roll for the following year when his estates in Hampshire and Dorset respectively are recorded. The Pipe Rolls of the 1180s give us some hints of the activities he pursued as a member of the knightly class. In 1185 and 1187 (the Roll for 1186 is lost) Robert was hearing cases concerning forest pleas in Dorset and Cornwall, and imposing fines similar to that which William II never paid. On the *Rotulus Honorum* at the beginning of the 1187 Pipe Roll he is recorded as bailiff for William de Mustiers, along with his son William Belet III who appeared to be the heir to this office, and of whom we never hear again.

Robert acquired, for a price, the wardship of Roger de Novo Burgo (Newburgh), heir to the de Novo Burgo estates in Dorset and elsewhere (P.R. 1194, 190). This is an example of one leading local family acquiring temporary control over the lands of another leading local family, a practice in which abuse was frequent with consequent serious disadvantage to the heir. However, in this case, there is no subsequent litigation to suggest that Robert took unfair advantage of this wardship. He acquired the wardship in 1194, the same year in which he had to pay 20 shillings towards the ransom for King Richard (P.R. 1194, 192). He still owed £50 the following year for the wardship when he had to pay £450 for a fine in Dorset (£170 of which he paid immediately) plus scutages for three royal armies (P.R. 1195, 231, 232). As with the fine in Surrey there is no indication what the fine was for: it is, however, unusually large. It took Robert a few years to pay off these accumulated debts and he concentrated on the fine, but it does indicate that by this time the Belets were a wealthy family with not inconsiderable resources. It seems to have been a struggle but Robert paid these debts off. He was not pardoned for them. (For others in his position such debts were used as a means of political control by the king, and were never fully paid.)

1199 seems to have been Robert's busiest, and most important, year in which he was at the height of local political prominence. Working with a cousin, Michael Belet I (Appendix I), he was active in Cornwall, Devon, Somerset, Dorset and Sussex, raising a royal tallage (P.R. 1199, 185). He also imposed amercements amongst all the senior men in Dorset in conjunction with Hugh de Neville, acting on a royal order to raise money to pay off the debt of the royal forester, William de Wrotham (P.R. 1199, 231). From Michaelmas 1199, for one year, he was also Sheriff of Dorset and Somerset with Henry de Stokes as his under-sheriff, rendering account to the Exchequer for £120 from Dorset and for £340 from Somerset, along with other sundry fines and payments (P.R. 1200, 92). It was possibly due to his successful management of the shrieval *firma* that he was able to pay off some of his debts the following year.

The remaining references to Robert Belet I are all financial. He regularly paid scutage and fines in respect of his knight's fee, was amerced for £20 in 1206 and was pardoned £100 of a £150 fine in 1207, the same year that his

³ For a commentary on the general economic context see E. Miller 'England in the 12th and 13th centuries: an economic contrast', *Economic History Review*, xxiv (1971), pp. 1-14. For a discussion of the wool trade see E. Power, *The Wool Trade in English Medieval History* (London 1941) and also: E. M. Carus Wilson, 'The English cloth industry in the late 12th and early 13th centuries', *Economic History Review*, (i) xiv (1944).

'heirs' were paying fines through Philip de Oxeheia in Surrey (P.R. 1207, 65). In 1210 he is listed amongst the tenants-in-chief of Dorset in the Red Book of the Exchequer, and in 1215 he is referred to as a *visconte* in Dorset when in charge of collecting the scutage for that year to fund King John's Normandy adventures. As Ralph de Bray was sheriff for this year it may be that Robert held the office of under-sheriff. The *Liber Feodorum* of 1226 mentions Robert's wife Mabel as a major land-holder in Dorset but not Robert. His absence must be taken as an indication of his death by that date.

Whether or not William Belet IV was related to William III the records do not show. I can find no positive relationship between William IV and the sons of John I with whom, logic dictates, he is a contemporary. That William IV is somehow, nevertheless, connected (possibly as a son of Ralph or William III) is suggested however from his links with Dorset.

There has been recent debate concerning the status of the knightly classes in 13th century England. P. R. Coss followed Professors Postan and Hilton in postulating an economic crisis for the knightly families yet D. Carpenter, reviewing the evidence from Oxfordshire, came to the conclusion that it was possible for a knight to maintain or even increase his social and economic position through royal service.⁴ William Belet IV is an example to lay beside those of Carpenter's paper. In 1258 the Charter Rolls reveal that he was granted land at 'Brehull' (Brill, Bucks.) for his services as a king's yeoman. The estates he was granted were those of one Thomas, son of James, who had forfeited his lands on being declared a felon and an outlaw (C.Ch.R. 1257-1300, 8). Incurring royal displeasure was as much an instrument of disaster for knightly families as were their fixed rents in the face of rising prices. At the same time one man's misfortune was another's reward.

As with his ancestor William Belet I, it is difficult to ascertain the true status of William Belet IV. Saul (1981, 6) has argued for a hierarchy of lesser land-holders below the knights and suggests that when talking of knights and yeomen it would be useful to bear in mind the concept of a higher and lesser nobility. In this case the Belets would rank amongst the lesser nobility since William IV is referred to as a yeoman in 1256 (C.Lib.R. 40 Henry III, 275) and again in 1261 (C.Pat.R. 1258-66, 138). In 1269 he is referred to, along with Ralph de Bakepuz, as a steward and '*nobis in mensa servientibus*'; a sergeant of the king's table (C.Pat.R. 1266-72, 326). Thus he appears firmly in the ranks of the yeomanry. That the lesser nobility included the yeomanry is supported by William's role as a patron at the royal court. Between 1247 and 1258 there are two instances of William interceding on behalf of persons seeking a favourable judgement from the king. In one case William, described as a king's yeoman, obtained from the king exemption from assize, jury, shrieval, coroner, escheator, forester, verderer and bailiff duties on behalf of Walter, son of Gilbert of Thorp (C.Pat.R. 1248-52, 446). Between 1266 and 1272 there are a further 12 examples of William's patronage. These include pardons for John, son of Roger de Finchem, Nicholas de Ponte and Robert de Cayly for offences ranging from larceny to murder (C.Pat.R. 1266-72, 239, 252, 545) and trading privileges for Nicholas de Weston and Alexander Wastele (C.Pat.R. 1266-72, 256, 257). If a yeoman could have such influence at court he was surely of the lesser nobility and a loyal king's man.

In 1267 he is referred to as 'Sir William' (C.Pat.R. 1266-72, 132) and again in charters of 1267, 1269 and 1270 (C.Ch.R. 1257-1300, 354, 358, 321). The mid-13th century was a period of rising military costs. It was becoming increasingly difficult for knights to maintain their military roles. At a time when many of his class preferred to stay in the yeomanry as knights by distraint – a means of avoiding irksome and expensive military duty, William appears to have taken up the title and social status of a knight. Not only did he have the land to constitute a knight's fee but he was able, from an economic point of view, to sustain the status and meet the military obligations.

The key to William's success lay in his royal service. He served the king probably as an armed retainer and seems to have had a permanent place in the king's household. Like his forebear William Belet I, William IV served the king's person (in this case Henry III) rather than serve through office in the way that Robert Belet I had.

By 1263 William Belet IV had already gone on four military campaigns, serving in France and Wales in 1254, 1257, 1259 and 1262, and in respect of this and his domestic service the king saw fit to grant him £20 a year from the Exchequer until he could reward him 'more bountifully from wards and escheats' (C.Pat.R. 1258-66, 238). Two years later William was granted the London property of Thomas Viel, described as 'the king's enemy' following riots in the city (C.Pat.R. 1258-66, 464, 465). In 1267 William received the escheated lands of William de Bekeswell at Marham, Norfolk (William IV later stood as patron for de Bekeswell to obtain royal protection for him) (C.Pat.R. 1266-72, 32, 45). William does not appear to have received any wardships but the Close Rolls show that he was given the marriage rights of Joan, widow of the major Dorset knight William de Bello Campo; another instance of Belet control over their Dorset neighbours since William had the opportunity to marry her off to one of his relatives or clients at court (C.Pat.R. 1266-72, 399, see also 404). In 1270 William went on crusade, the last military campaign in which he participated (C.Pat.R. 1266-72, 411). But he only went for one fighting season because the following year he successfully sought a licence to crenellate his manor house at Marham, Norfolk. (Why it should have been Marham rather than a Dorset manor house will become apparent below.) (C.Pat.R. 1266-72, 540.) Such licences, so some consider, indicate social aspirations, position and prestige more than any need for defence against civil disorder (Coulson 1982). It is likely, however, that William Belet IV not only had a desire to demonstrate his social eminence through the medium of architecture, but also actually had a need to defend his increased wealth and possessions from raiders and criminals who proliferated even in the gentry classes as we shall see below. For William the crenellations were probably more functional than symbolic.

Rewards could also be in kind and cash as well as escheats. In 1266, as gifts from the king, William received 20 shillings to buy a horse, and 15 quarters of wheat. In 1267 he received £10 in respect of wage arrears whilst in the king's service and in 1270 he received 100 shillings to replace a horse lost whilst on the king's business (the difference in size between this gift for a horse and the last probably reflecting the relative quality of the horses, for instance a palfrey and a charger, rather than the rate of inflation) (C.Lib.R. 1260-67, 194, 217, 252, 279). That year the king also gave him 20,000 slates and 6,000 laths to help William repair his houses at Bustall, Berkshire (C.Lib.R. 1267-72, 179, 184).

A further sign of the king's trust in William Belet IV was his appointment as governor and castellan of Dorchester castle in 1270, an appointment which would have considerably enhanced the power and authority of the family within the county (Grosvenor-Bartelot, 1944, 66). His appointment as castellan was almost certainly because of his

⁴ This debate is encapsulated in Coss 1975, Postan 1972 and Hilton 1966 on the one side and Carpenter 1980 on the other. As with this paper they deal with localised studies and the examples must be balanced against each other. There was no general crisis, nor was this a period of flourishing gentry families in abundance.

family's influence in the county. His other interests must have kept him away from Dorset for much of the time so locally prominent relatives would have been useful to keep an eye on the shire's affairs. As will be seen, by this time William had actually reduced his holdings within the county.

A charter of 1272 reconfirms William's right to the escheated London property of Thomas Viel (C.Ch.R. 1257-1300, 180; see also C.Pat.R. 1258-66, 464, 465, 582 and C.Pat.R. 1266-72, 629). The charter 'renewed for greater security' William's tenure and can be seen as part of a general attempt to tighten up a loop-hole in the Kenilworth dictum of 1266 through which King Henry III tried to reassert his authority following de Montfort's rebellion. This is clear evidence that the Belets sided with the king and had prospered as a result.

More information about William IV's Dorset interests comes in 1272 with his *Inquisition Post Mortem* which shows that William had 'sold in parcels' all his lands in Dorset except for the manor of *Swere* with which he had enfeoffed Henry de Novo Burgo. William's wife Margery, whom by marrying he had acquired many East Anglian estates, outlived him by 35 years. It is not immediately obvious why William IV should have disposed of most of his Dorset possessions and kept only those with which he had enfeoffed another Dorset knight, possibly one of his clients. However, there are two possibly related factors which may help explain why he sold his interests in Dorset. In marrying Margery Bardolf William married into an East Anglian family. It was a profitable marriage for William and certainly shifted the focus of his demesne interests. This would also explain why he was granted East Anglian escheats. The children of this marriage had very few Dorset interests (again confined to *Swyre*) and this branch of the family effectively ceased to be a Dorset family. William's service for the king also took him away from Dorset. Other than his late appointment as castellan William IV had no political interests in the county. He does not appear in the records as taking part in county business. It begs the chicken-and-egg question to ask whether William had no political interests because he had virtually no lands or vice versa, but it is my opinion that, given the family's standing in the county, William IV must have made a conscious decision to serve in the king's household rather than indulge in shire politics and therefore had no real need of lands in Dorset once he had married into his East Anglian estates. He could rely on income from these estates and from royal rewards.

There are various references to a Roger Belet I and a William Belet V, brothers, both of whom held land at *Swyre*, Dorset, and who may have been amongst the unnamed heirs of William Belet IV (C.Ch.R. 1257-1300, 143, 180). William Belet V acted as a juror at Windsor, served the king overseas, witnessed charters at Westminster, is referred to as 'Sir William' several times and, but for the *Inquisitiones* reference, could be mistakenly identified as William IV because their royal service is so similar (C.Ch.R. 1257-1300, 309, 321, 354, 358).

Other than that he held lands in Dorset nothing is known of Roger Belet I. However, his namesake, Roger Belet II, who may have been his son, provides us with further evidence of royal service amongst the gentry. Roger served in the queen's household (C.Pat.R. 1330-34, 33). In the Patent Rolls of 1330 he is described as a 'pantler' (an office connected with the queen's pantry), also as a yeoman and this must give support to the theory that there was very little to distinguish a well-off yeoman from a knight at the lower end of their social class. Indeed the distinction would appear to be little more than titular and one of personal choice dependent upon individual economic circumstance. This first reference shows Roger being rewarded for his service with a life-long grant of lands at Latham, Middlesex, which became exempt from rent seven years later as a further

reward (C.Pat.R. 1334-38, 41). As well as this reward, in 1337 Roger also acquired new offices. He became licensed to make purchases for the queen's buttery and was granted the bailiwick of keeping her park at Havering-atte-Bouer, Essex (C.Pat.R. 1334-38, 498). After three years in this office he was granted the annual privilege of collecting loppings and fallen wood to the value of £7 from the park. In 1349 Roger and his wife Agnes were granted an annual pension of £10 by the queen in recognition of their loyal service to her (C.Pat.R. 1348-50, 441).

A vivid contrast to these records of service and good citizenship comes with John Belet III, ironically a priest. In January and March 1317 John laid a complaint before the justices of Oyer and Terminer that 10 named persons and 'many others' stole goods and chattels from his estates at 'Wyrdesford Belet', Dorset (C.Pat.R. 1313-17, 679, 684). Ten years later, however, it was John himself who was the subject of a complaint by William de Whitefield, because John had led a group of men who stole 100 oxen, 1,000 sheep, felled trees, and fished the ponds of the de Whitefield estates at 'Berdesford', 'Dodyngbere' and 'Mulburn', Dorset (C.Pat.R. 1327-30, 220).

In 1331 the Abbot of Byneden complained that John Belet [III], William de Whitefield, Robert de Novo Burgo, brother John de Monte Acuto (all members of leading Dorset families), Walter Prior of Holne, 'and many others' stole 100 oxen, 7,000 sheep from various monastic estates plus items from the abbey church including seals, documents, and deeds, and that the said raiders imprisoned three monks 'for a long time' in Dorchester (C.Pat.R. 1330-34, 131). That he was brought before the justices like this says little for John's success as a criminal but, as the Close Rolls for 1332 reveal, he had little to fear if he was caught. In a writ to the sheriff of Dorset dated 20th October of that year, the king ordered that the goods and chattels which John forfeited to the justices be restored to him because John had purged himself of an offence against the parson of Ore before the Bishop of Salisbury to whom he was 'delivered by the justices in accordance with the privilege of the clergy' (C.Cl.R. 1330-33, 500). It is not surprising therefore, that, because he risked no more than a token penance, John was before the justices again in 1335. Together with the Tonere family, he had once again raided the estates of the Abbot of Byneden, this time stealing 55 oxen and many turves from the monastic heathlands, imprisoning the Abbot's men and servants whilst they did so. Why it was John turned to crime is not clear. It is possible that he was a younger son for whom no substantial inheritance could be provided and that his clerical income was not enough to suit his tastes.

Hereafter references to the Belets become scattered and few. The tradition of royal service was pursued, albeit unsuccessfully, by one Walter Belet who was a Dorset land-holder in the mid-14th century and who, in January 1369, was relieved of his office of county coroner because he was 'insufficiently qualified' (C.Cl.R. 1369-74, 8).

The Belets also suffered the fate of many other knightly families, loss of land through marriage of daughters and widows, and the failure of the male issue, for instance, with William Belet VII who died on 14th August 1389 leaving a widow, Joan and two daughters, Joan and Christina aged one and a half year's and 10 months respectively. Very few families can be traced throughout the Middle Ages with continuity of male succession. The Belets, originally of Dorset with later branches from East Anglia, and another branch from the Midlands (Appendix I), survived longer than most, and distinguished themselves through political and military service in Dorset and elsewhere. The records suggest that within the shire of Dorset the Belets were a powerful and prominent force. They had amongst their ranks one sheriff, and one possible under-sheriff, and had enfeoffed, held wardships and the marriage-rights of, other prominent Dorset families. The height of their prominence

came during the second half of the 12th century and the first half of the 13th century, and during this period in particular their influence on shire affairs must have been considerable.

However prominent they were locally there is no indication that the main branch of the Belets ever approached the ranks of the baronage although their cousin Michael Belet II did pay the baronial relief of £100 for his inheritance from Michael Belet I (Appendix I). The Belets are invariably and alternatively referred to as knights and yeomen. They belonged to the lesser nobility and there is no indication anywhere to suggest that even William IV was anything more than a loyal knight who served in the king's household. Influence they may have had, but it was influence in local affairs not national concerns.

There is no real evidence as to the location of their manorial seat, or *caput*, within Dorset but there are two possible contenders, Winterborne Belet and Woodsford. The name Winterborne Belet no longer exists but the Lay Subsidy of 1332 lists a Belet estate at Winterborne Herrington and the *Victoria County History* and the English Place-Name Society both identify the exact site as being Cripton in the parish of Winterborne Came, equidistant to the south from Winterborne Came and Winterborne Herrington (EPNS 1977, 261-2). It is quite likely that for the purposes of fiscal records it would be adequate to include a manor under the nearest village, even though it was a Belet manor and the nearest village was then associated with the Harang family and had been since 1234 (EPNS 1977, 265).

Woodsford, a few miles to the north-east of Winterborne Herrington, is the second major possibility, and in my opinion the more likely of the two. Like Winterborne Belet/Cripton it had been in Belet hands since Domesday and it too changed hands but probably not until 1335 when the licence to crenellate Woodsford 'castle', a fortified manor house the remains of which can still be seen at SY 7582 9037, was granted to William de Whitefield. The archives of the National Monuments Record (NMR) kept at the Ordnance Survey Headquarters in Southampton suggest the transfer took place not long before the date of the licence. The Patent Rolls show that John Belet III was still living at Woodsford in 1335 (C.Pat.R. 1334-38, 71), so the manor could have been sold in this year. However, Walter, the unsuccessful coroner, was living in the village in 1389 because he is said to come from 'Werdesford Belet' (C.Cl.R. 1369-74, 8), so the family did not sever its connections with the village completely. Of the old village of Woodsford (SY 760905), now a deserted mediæval village, very little remains, the earthworks having been largely destroyed by ploughing and the fields now under cows as well as crops (NMR). Unlike Cripton, Woodsford has a church as well as a surviving village and a deserted settlement. There is no evidence in the valley where the present Cripton farmhouse is situated of either a deserted settlement or a former church. The church at Woodsford was largely rebuilt in 1863 but part of the tower and a window west of the porch are 13th century and so date to the time when the Belets were at Woodsford at the height of their prominence. Although there has been continuous occupation at both sites and although Cripton seems to have been a sizeable manor, I think it more likely that the Belets would have made their *caput* a manor associated with a village. The fact that another leading local family took over the site at Woodsford and rebuilt the manor house there also suggests that it was an important local site. The two are not mutually exclusive and may even have been sequential. There is no firm reason why the *caput* should not have been sited at a location where a settlement no longer exists. One lesser contender for the manorial seat under these circumstances would be Frome Belet, a deserted mediæval village just west of West Stafford at SY 721899, a mile or so down the road from Woodsford. However the village seems to

have been superseded by West Stafford and the incumbency of Frome Belet was amalgamated with that of West Stafford in the 15th century. Again subsequent agricultural activity has reduced the earthworks considerably; so much so in fact that when I visited the site I found part of it made over into a football pitch! Frome Belet did not survive the competition for market and other activities presented by West Stafford and it is unlikely that a major shire family would have let their *caput* 'die' in this way. Of these sites Woodsford is the more probable location for the Belet *caput*.

Where was the centre of Belet activity in Dorset after the sale of Woodsford? Based purely on the number of Belets who held land there and the number of times it appears in the documents I would tentatively suggest Galton, near Owermoigne. It is first mentioned in association with Thomas Belet I, Roger Belet I and William Belet IV in 1269 (Table 1). It was still held by William VII when he died in 1389. Today Galton is a farmhouse and a group of cottages east of Owermoigne. As with Cripton there is no evidence of a deserted mediæval village, though a field by the main road contains terracing reminiscent of lynchets. Table 1 shows the places held in Dorset by the Belets and when these associations are first documented.

TABLE 1
Dates at which locations are first linked with the Belets.

Date	Source	Belet	Estates
1086	Domesday Bk	William I	Frome Belet, Lyme, Stourpaine (2), W'borne Belet, Woodsford.
1194	Pipe Rolls	Robert I	Powerstock.
1201	Pipe Rolls	Robert I	Dunstore.
1202	Pipe Rolls	Robert I	Ham, Steepleton, Merestock.
1269	Charter Rs.	Thomas I Roger I William IV	Galton.
1272	Inq. P.M.	William IV	Swyre, Beraugh, Berewick.
1280	Charter Rs.	Thomas I	Bovington.
1280	Charter Rs.	John II	Lulworth.
1312	Charter Rs.	William V	Chalwedon Boys.
1332	Lady Subsidy	Robert IV	Wool, Tincleton.

The contribution of the Belets to national history is negligible if not non-existent; the nearest the family comes to being of national importance is with Michael Belet I and William IV. Their true significance lies at the level of the shire, in particular Dorset. Political, financial and judicial references suggest that they probably played a considerable part in the running of the shire, particularly when Robert I was sheriff and when William IV was Dorchester's castellan. It is clear that any ambitious family could not confine itself to one county and must look to spread its influence. Instruments of improvement as far as the Belets were concerned were royal service and, in William IV's case, an advantageous marriage which brought him a wealth of East Anglian estates. At the same time remarriage of a widow and lack of male heirs could undo generations of improvement.

This survey has, unfortunately, been limited by constraints of time and resources. It has not been possible, for instance, to examine the variables such as political relationships and social considerations that might have influenced the Belets in their choice of holdings and the way in which such variables determined estate management. Feudal society is reflected in its use of land. Detailed surveys of any given county will build up a feudal geography which will be an expression of the reflected social structure and political ties implicit in land-use. This paper has demonstrated what the Belets did, and when they did it. What is

lacking is an examination of the way they interacted with the de Bello Campos, the de Novo Burgos, the de Monte Acutos, the de Whitefields and the other major Dorset families. If, and when, similar work is done on any of these families then further light will be shed upon the full significance of the Belets and the estates they held in Dorset, and the way in which they ran these estates and tried to influence the running of other estates. A general context is needed. Then, and only then, will this work – at the moment merely a brief biography of a mediæval family – transcend into a truly productive insight into the society of a mediæval shire.

Appendix I: Michael Belet I

The only members of the Belet family included in the *Dictionary of National Biography* are Michael Belet I and his second son, Michael II. Michael Belet I first appears in the Pipe Roll for 1160-61 as a Northamptonshire landholder. He also held land in East Anglia and London but nowhere can I find evidence to suggest he ever held land in Dorset. Indeed, but for the fact that the lands of his grand-daughter Maud passed to John Belet I and that she is described as a 'kinswoman' of his (*Testa de Nevill*) there is no apparent link between this branch of the family and those members dealt with in the main text.

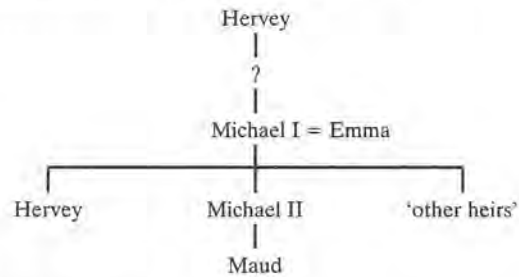
Michael Belet I was sheriff of Worcestershire from 1176 to 1186, when he became sheriff of Warwickshire and Leicestershire for two years (P.R. 1176, 64; P.R. 1186-87, 115). However, it is for his work as an itinerant Justice-in-Eyre that he is best remembered. From 1176 to 1179 he worked a circuit which included Derbyshire, Doncaster, Lancashire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire, Staffordshire, Warwickshire and Yorkshire (Pipe Rolls). In 1179 he switched to a circuit which encompassed East Anglia and what we would now call the 'home counties' (Pipe Roll 1179-80). In 1182 he moved to the southern circuit and worked with Ranulf Glanvill in Hampshire, Dorset, Somerset and Cornwall (Pipe Roll 1182-83). In 1184-85 he was working alongside Walter Map. Thus he can be seen as one of the great generation of legislators that existed under Henry II (P.R. 1184-85, 128). The 1190s saw him taking on fewer judicial duties and confining what he did to East Anglia and the Eastern Midlands, although he was involved in raising the 1199 tallage in the south and this brought him into professional contact with Robert Belet I (P.R. 1199, 185). But even this less strenuous workload was quite appreciable. For instance, between the 15th and the 27th October 1198 he heard 48 cases in Suffolk and between the 14th and the 29th January 1199 he heard 62 cases in Northamptonshire. In 1199 he retired from the judiciary and no more is heard of him until he collected a tallage in Colchester in 1204 (P.R. 1204, 46). He must have died by 1207 because in that year or 1208 his eldest son Hervey (named after Michael I's grandfather who must have been a contemporary of William Belet I, although I can find no trace of him in Domesday Book) died childless and the inheritance passed 'a second time' to his second son Michael II for the baronial relief of £100 (*Dict. Nat. Biog.*, iv, 145-6).

Michael II also served as a royal justice and as Butler in the royal household and thus unlike their cousins they can be considered part of the baronage. However, Michael II incurred the *malevolentia* (ill will) of the king and was temporarily deprived of the family manor at Sheen which he held upon tenure of serjeantry by butlery. On paying 500 marks in 1213 he was restored to the manor but not the office. It was only 16 years later that the manor passed from Maud to John I and so sometime during this period Michael II must have died (*VCH Surrey*, iii, 541).

His cousin, Michael Belet III, son of John I, went on to hold the office of Butler and is mentioned as such by

Matthew Paris when he described the marriage of the king to Eleanor of Provence.⁵

Michael Belet I was a contemporary of William Belet II and Robert I. His sons belonged to the generation that included Ralph, Robert II and John I.



Appendix II: The Family Tree

Although this is as full as possible there are several apparent members of the family who cannot be fitted into it. They are listed below with instances of their documentation to give some idea of where they might fit into the tree. Some have been mentioned in the text (e.g., John III) and some of these in the tree have been omitted from the text because they were not immediately relevant in Dorset (e.g., Ingeram who had no estates in the county), or because they appear merely as landholders owing knight service and no information of especial interest would be found about them (e.g., Thomas I).

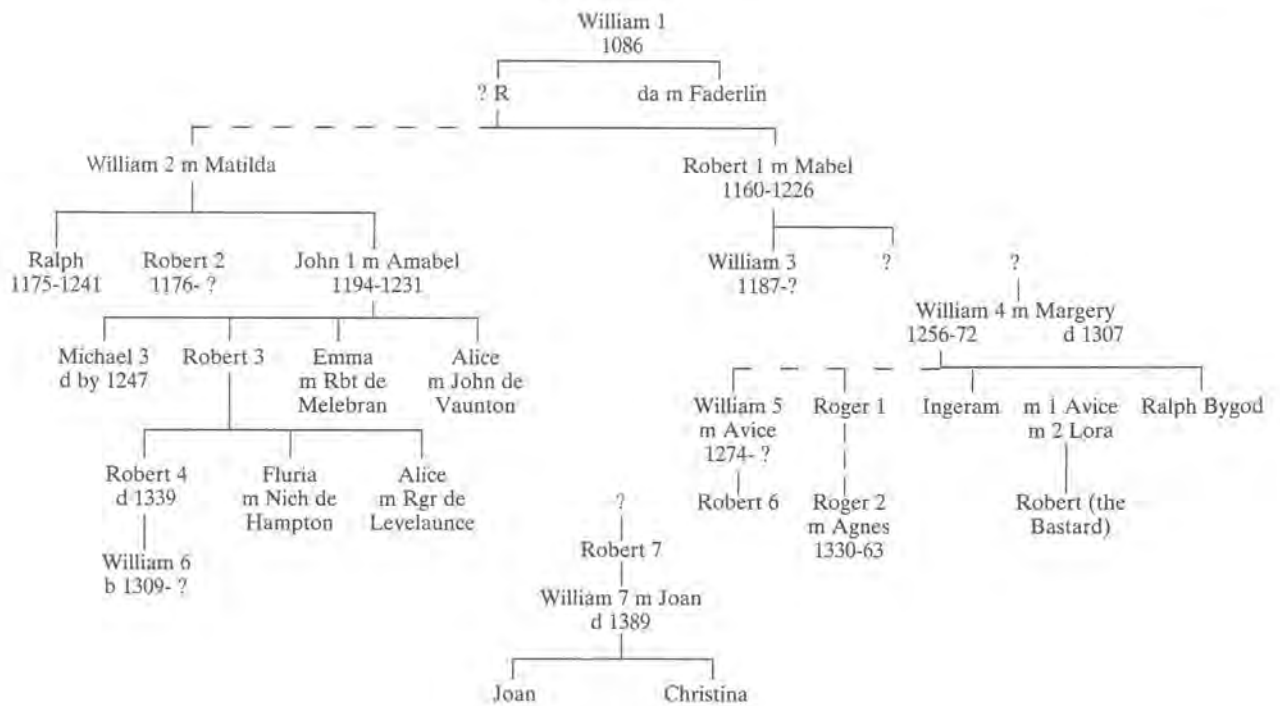
All dates on the tree are birth dates, the earliest documentary reference, the date of death, the latest documentary reference or the latest that a person could be alive. Thus an approximate chronology is presented rather than a firm chronology because not enough evidence exists to establish a firm chronology.

TABLE 2
Those Belets not on the family tree.

Belet	Reference	Comment
Alfred	Pipe Roll 1186	Berkshire estates.
Hugo	Pipe Roll 1209	Essex and Hampshire estates.
Gerard	Ch., Cl., and Lib. Rs. 1260s	Midland estates make him possibly a descendant of Michael I or Michael II.
Hervey	Charter Rs. 1260s	Possibly a descendant of Michael Belet II.
Thomas I	Charter Rs. 1269	Galton, Dorset.
John II	Close Rs. 1260s	Married to Emma, estates in Dorset
Henry	Patent Rs. 1305	Pardoned for crimes.
Simon	Patent Rs. 1309	Sheriff of London.
John III	Pat. and Cl. Rs. 1317-35	Clerk and criminal, lived in Dorset.
Thomas II	Close Rs. 1330s	Dorset estates.
Peter	Patent Rs. 1338	Retainer to the Archbishop of Canterbury.
Walter	Patent Rs. 1369	Unsuitable Dorset coroner.

⁵ *The Dictionary of National Biography* (p. 146) attributes this to Michael Belet II but as he had been removed from office as Butler, and was almost certainly dead when the marriage took place in 1236 (seven years after the Sheen manor had passed from Michael II's daughter to John Belet I), it is more likely that the Michael Belet recorded by Matthew Paris was in fact Michael Belet III, of whom the DNB biographer may have been unaware. See also *Matthew Paris*, ed. H. R. Luard, London, 1872-83, iii, 338.

THE BELETS



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The History of the Abbotsbury Duck Decoy 1655-1982

COL. E. D. V. PRENDERGAST

Duck decoys, as at Abbotsbury, originated in Holland and were introduced into Britain during the 17th century. The earliest method of capturing ducks in this country was by driving them into tunnel nets at a time of year when the young birds were not yet able to fly and the old ones were moulting. This practice, which was in use as early as the 13th century, was found to be so destructive that an Act of Parliament (*Wildfowl*, 25 Hen. VIII) was passed in 1534 prohibiting it. Another method of duck-catching was by means of a baited cage, either on a raft or on shore, fitted with a trap door which was closed when sufficient ducks had entered the cage. The ordinary wildfowl decoy, however, is worked neither by driving nor by trapping, but by enticing the ducks up a wide-mouthed 'pipe' – a tall tunnel covered with netting – either by means of a small dog trained for the purpose, which they follow out of curiosity, or by scattering food which drifts down the pipe, attracting the tame decoy ducks, which in turn attract the wild ones. Once within the pipe, their retreat is barred by the decoyman who, showing himself behind them, causes them to rush up the gradually narrowing pipe into the detachable bag net at the end, from which they are readily removed.

Over 180 of these decoys are known to have existed in England, the greatest numbers being in Essex (29), Lincolnshire (39), Norfolk (26), Somerset (14) and Yorkshire (14). By 1895 about 40 were still in use (Harting 1897), but these had decreased to 19 by 1918 (Whitaker 1919). Now only those at Abbotsbury, Slimbridge, which was completed in 1843 (Matthews 1969), and Borough Fen, of which the first record is in 1670 (Cook and Pilcher 1982), are still worked; all for the purpose of ringing, then releasing, the wildfowl caught.

In his classic *Book of Duck Decoys, their Construction, Management and History* (1886) Sir Ralph Payne-Gallwey said that, in his opinion, the first and most reliable description of a decoy in England for catching ducks by enticing them was that by John Evelyn, referring to the decoy which Charles II made in St James Park. Evelyn wrote in his *Memoirs*, 29th March 1665, 'His Majesty is now finishing the Decoy in the Park' (Bray 1818, 1819).

Two papers referring to the Abbotsbury Decoy have appeared in the *Proceedings of the Dorset Natural History and Archaeological Society*. On 15th September 1886, J. C. Mansel-Pleydell read a paper at Abbotsbury on 'Decoys and Swan Marks' (*Proceedings* 7 (1886), 1-8). The first six pages are about decoys in general, with only a few comments on that at Abbotsbury in particular, and are clearly based on Payne-Gallwey's book. Mansel-Pleydell followed Payne-Gallwey in speculating that the Abbotsbury decoy was of great antiquity and established long before the Reformation, at the time when the lands to which it is attached belonged to the abbots of the monastery. If this were correct, the Abbotsbury decoy would be the oldest in the country, as Roger Hardy, the last Abbot, surrendered the monastery and everything else to Henry VIII on 12th March 1539 (Hutchins 1863, vol. 2, 718-9).

In 1888, the 5th Earl of Ilchester, the owner and Lord of the Manor of Abbotsbury, successfully brought an action against some local fishermen to establish his right to the Swannery, the Fleet west of the Abbotsbury Stone and the Chesil Bank. To prepare for the case a large number of documents, starting with one in which King Canute granted lands at Abbotsbury to Orc in 1023, were collected and where necessary translated (Ilchester 1888). Some of these documents were used by the 7th Earl of Ilchester as the

basis for his address to the Society on 'The Abbotsbury Swannery' on 20th February 1934 (*Proceedings* 55 (1933), 154-164). The two short paragraphs of this address which referred to the history of the decoy demonstrated that it was established in 1655. Payne-Gallwey was thus mistaken in thinking that Charles II's decoy completed in 1665 was the oldest in the country. However there were several other decoys of which he was apparently unaware which were even older than Abbotsbury.

Sir William Brereton, the Parliamentary general, who was created a baronet in 1627 and died in 1661, owned a decoy with five pipes near Dodington in Cheshire, in which he took a great interest. In a MS account of his travels around Holland and Britain in 1634 and 1635 – which was printed by the Chetham Society in 1844 – are frequent entries concerning decoys. He refers to a decoy near Dort in Holland as having 'five pipes like mine', showing that the Dodington decoy was already in being in 1634. In 1635, he visited a decoy at Stoke Rodney in Somerset where there were also 'five pipes in this coy as in mine'. This decoy is mentioned briefly by Payne-Gallwey, but he was under the false impression that it had not been constructed until 1802.

It is thus apparent that at least two decoys were in existence in England in 1635, and that though that at Abbotsbury is older than the St James Park decoy, it was not the first to be established in the country. However it is the oldest still operating.

By an indenture dated 2nd February 1655 (Ilchester 1888: 47), Sir John Strangways and his son Giles leased land on the edge of the Fleet to John Hearne of Sherborne, on condition that he constructed a decoy there and erected a 'little house adjoyneigne the said decoy'. Each party was to bear half the expenses and share the profits. The lease was for 21 years at a rental of 'one penny of lawful money payable on 29th September yearly'. Amongst the other conditions was that 'one able, sufficient and honest man' was to be employed for looking after the decoy, and for taking 'all such fowle as shalbe had or taken in the said decoy pond'. The decoyman was to keep an accurate account of all the profits made, and was not to be 'removed turned ejected or putt out' except by mutual agreement.

It was naturally important that the decoy pond, its banks and the 'little house' should be kept in good repair; the cost of repairs being shared between the partners. If, however, one failed to pay his share, he was to forfeit the sum of £10 for each year in which he refused to pay – a large sum in those days. However the penalty for one selling or otherwise disposing of any of the decoy ducks or their eggs without the consent of the other was proportionately even more severe – 40 shillings for each duck and 12 pence for each egg.

Though it was agreed that everything to do with the decoy and the taking of the ducks was to be shared, Sir John Strangways retained the rights to all the fish in the pond, provided he did 'not draw the said decoy pond (to take away the said fish)' except between 20th February and the last day of April. Similarly he retained the grazing rights around the decoy, but could only turn in 'any cattle or horse or beast' between 25th March and 29th September, or at other times when it would not disturb the decoy. Sir John also had the right to take for his household's use any teal or wigeon he needed, paying half the market rate of eight pence per couple of wigeon and five pence per couple of teal – an interesting contrast with the penalty of 40 shillings for every decoy duck disposed of without mutual agreement.

On the termination of the lease, the whole decoy was to revert to the Strangways family, John Hearne or his executors being required to leave 'one hundred couple of decoy fowle (that is to say of ducks widgeon and teale) for the stock of the said Decoy' and also 'two very good and sufficient decoy dogges'. Whilst two decoy dogs is a reasonable number to make sure one is always available, 200 decoy ducks would appear to be an excessive requirement for a decoy of the size of Abbotsbury, though some larger Dutch decoys at this date did have similar numbers (Brereton 1844). Decoy dogs have not been used at Abbotsbury since some time early this century (pers. comm. F. Lexster) and there were certainly none in use in 1917 (Whitaker 1919). The present decoy fowl, usually about 40 to 60, consist of white ducks and various mallard crosses.

The lease was to John Hearne personally, and he was not allowed, without permission, to transfer it to anyone except John Pysinge who was his brother-in-law, or some other members of the latter's family. It would appear that John Hearne had difficulty in raising the money to set up the decoy, as on 15th March 1655 John Pysinge borrowed one hundred pounds from Sir John Strangways 'the better to enable him in the setting up and management of the said decoy pond', which he undertook to repay under penalty of £200, by 25th March 1657. At the same time he took over the lease from Hearne, so that the latter would not be liable to the penalty if the loan was not repaid.

By mid 1659, John Hearne was dead and none of the money had been repaid. Mrs Hearne and John Pysinge on 1st July surrendered their interest in the decoy, and Sir John Strangways generously did not press for the return of the loan (Ilchester 1888, 48). The decoy was probably in full operation by this time, but the first record traced of any ducks taken comes from documents in the Ilchester muniments held by the County Record Office. The documents, in medieval script in English and dated 1662, are in two parts, the first being a list of fowl supplied to the Strangways seat at Melbury 'A noate of duckes and teale sent to Melbury this yeare beginninge the 18th of September'. This showed that Melbury was supplied with 54 couple consisting of:

Duck (i.e., Mallard)	87
Teal	18
Wigeon	3

The other was an account of the wildfowl sold during the year. The price was apparently one shilling per couple of duck and six pence per couple of teal, though sometimes it varied slightly. Altogether 412 couple of mallard and 18½ couple of teal were sold, realising £21 1s. 11d. Monthly totals of wildfowl caught varied considerably as follows (birds, not couples):

	Sep.	Oct.	Nov.	Dec.	Jan.	Total
Duck	91	61	119	558	50	909
Teal	10	5	32	8	2	57

The three wigeon were caught in November. There are no entries after the end of January when decoying apparently ceased. The peak catches judging by the numbers sold, mainly to one Maynard, presumably a dealer, were:

25th November	74 duck and 24 teal
5th December	140 duck
11th December	256 duck

It is, of course, possible that not all the ducks sold on one day were caught on one day. After expenses of £57 7s. 0d., and adding the income of £7 from the sale of 120 couple of rabbits at 1s. 2d. a couple, a profit of £22 14s. 11d. was made.

A series of bills dated 1724 and 1725 showing money owed by the Strangways estate for expenses of the decoy is evidence that the latter was still operated by the estate in these years (DCRO, 124/158). The main items are for work

done at the decoy and for goods supplied. One interesting entry is:

'For raising the Fowl 13 times £0 6s. 6d.'

'Raising the fowl' or 'raising the pond' was normally a decoyman's term for a stratagem for attracting other duck when there were only a few on the pond but many others in the neighbourhood. The few that were present were flushed and, ideally, others would join them whilst they were flying around and land back with them on the pond. It is unlikely that this is what is meant in this instance, as the decoyman would normally raise the fowl himself. As a man was hired to do the work, it is much more probable that he was sent down the Fleet to disturb the birds there so that they would seek the peace and quiet of the decoy pond. Goods supplied included bushels of hempseed, twine and tar for the nets, candles, powder and shot, and dog food.

In 1713, Sir John Strangways' great-grand-daughter succeeded to the Melbury estate on the death of her father. She married Thomas Horner who assumed the name of Strangways. By 1742 she was a widow, and on 25th March that year leased the decoy to Robert Pitman of Abbotsbury and his son Corbet for one year (Ilchester 1888, 59). The lease included not only the decoy pool and house, but also 'all the speer reed growing in or near the same and accustomedly cut by the Decoyman there' and 'all that Dove or Pidgeon house standing and being near to the great or Abby barn' with the Flight and Stock of Pidgeons therein. In addition to paying a yearly rent of £3 3s. 0d., the Pitmans were to provide Mrs Horner with 25 dozens of pigeons, 25 couples of ducks and 10 of teal during the year – failing which she was to get 18 pence for every dozen of pigeons and couple of ducks, and 14 pence for every couple of teal, not supplied.

Mrs Horner evidently knew how to drive a hard bargain as this was only the start of the duties to which the Pitmans committed themselves. They agreed, furthermore, 'to look after and take care of the several farms and estates of the said Susannah Strangways Horner in and about Abbotsbury' and the workmen on them; 'take care of and preserve the Swannery and Flight of Swanns' and mark the 'Signets'; 'take care of and preserve the Game of all sorts'; 'take Oysters within the fleete' as required by Mrs Horner; 'All which said things are to be done and performed . . . without any other reward or sallary than as aforesaid'.

The requirement to look after the swannery is interesting, linking the operation of the decoy with the management of the swannery, an arrangement that continues to this day.

Susannah Horner's daughter, Elizabeth, married Stephen Fox, who changed his name to Fox-Strangways, and in 1741 was created Earl of Ilchester: he died in 1776.

Meanwhile Robert Pitman had died in 1746, and his son Corbet apparently continued to lease the decoy, as on 25th November 1777 he wrote an indignant letter to Mrs Field, who obviously had the ear of the Dowager Countess of Ilchester, about the disturbance of the decoy by huntsmen (DCRO, 124/158).

'These with my humble services to you, to desire you to acquaint My Lady of the usiage of Mr Gould's hounds, comeing to the Decoy to try for foxes, tareing the nette of ye pipes; now many times before it they bring a fox there it is quite another case, but comes on purpose to do all the harm he can, making all the Noise ye Huntsman can possible, Drove all the fowl out. I have an account to show for years back of the Injury done.

'This is ye man as I meet at Wykewood shooting, saying he would kill all the Pheasants he could, and surely he have done what he could for they are very much thinned, he had five or six guns beside himself which is plain he came for destruction, so now he is forbidd, I suppose, by a Letter My Lord sent him. He'll do what mishchief he can; I spoke to the huntsman ask him why he did not Draw Esq Draks Decoy

and see what he say – why he would prosecute him and make him pay all cost and charge; I am vexed her Ladyship is so imposed on and it is throwing dirt in our face; and I know that Old White brings him here, and if My Lady would have me kill all the foxes I can, I hope another year to cure his hunting on this manor. From Your Most Obedient Humble Servant Corbet Pittman.'

As a tailpiece he added 'There comes by ye bearer 2 couple and half of Teal'.

Corbet Pitman (the above is one of a few instances when the name was spelt with two 'ts') accepted hounds running through the decoy in pursuit of a fox found elsewhere, but objected strongly to the hunt drawing the area of the decoy to find one, with the consequent disturbance and damage. 'Esq Draks Decoy', to which he refers, was on Morden Heath near Wareham on the estate of the Drax family of Charborough. The only other decoy in Dorset, it was in full operation until 1856.

Corbet died in 1791 and was apparently succeeded by the younger of his two sons, Robert, who was born in 1748 and whose name appears twice in the documents collected for the 1888 law suit. On 27th April 1792 he was the recipient of a letter about the theft of some oysters from the Fleet at Wyke; and on 17th April 1800 a letter from Henry Thomas, 2nd Earl of Ilchester – who had succeeded to the title on the death of his father – instructed him, together with John Hunt and his brother, to destroy any trows and boats found on the Fleet after 12th May 1800. It is apparent that this Robert Pitman was in a position of authority and carrying out duties similar to those laid down in the lease of 1742. It is thus almost certain that the eight-page MS decoy accounts, from the Ilchester muniments, for the season August 1793 to September 1794 are Robert Pitman's (DCRO, 124/154).

The first four pages give an account of the wildfowl caught and how they were disposed of. About half went 'for my Lords use' and the remainder were sold. Altogether 118 mallard, 650 teal and 15 wigeon were caught; with 58 mallard, 267 teal and 3 wigeon being consumed locally, the balance realising a total of £19 5s. 4d. The charges for wildfowl supplied to Melbury, 1s. 6d. per couple of mallard and 1s. 2d. per couple of teal, are the same as in the lease of 1742. Those sold on the open market realised rather more, sometimes twice as much.

Wildfowl were an important item of food for the Ilchester family. At this period they owned another decoy, at Compton Dundon, five miles south of Glastonbury in Somerset, which had been constructed in 1695. In 1769 it was let to John Witch for seven years at a yearly rent of £30 with some strict covenants regarding its repair and the maintenance of about 60 decoy ducks. The lease also provided that the Earl of Ilchester was to be 'at all times during the said term accommodated with such fowl as he shall require for his own consumption at the price of one shilling a couple of small (Teal and Wigeon), and one shilling and fourpence for large fowl (Wild-Duck), or the usual price paid, whenever the same shall be sent for' (Payne-Gallwey 1886).

The decoy season at Abbotsbury apparently extended from 12th August to the end of February, with odd birds being caught in March.

Monthly totals (birds) were:

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Total
Duck	18	10	13	18	24	28	7	—	118
Teal	1	33	27	167	179	151	89	3	650
Wigeon	—	1	1	3	7	3	—	—	15
Totals	19	44	41	188	210	182	96	3	783

Compared with 1662, when teal made up 5 per cent of the bag, in 1793 they had increased to 83 per cent, and mallard had decreased from 909 to 118. There do not appear to have been any really large catches, 32 couple of teal on 10th

December being the most disposed of in one day.

The Pigeon House, near to the Abbey barn, referred to in the lease of 1742, was still in use and the accounts show that 141 pigeons – the young squabs – were supplied to the house between May and October, and 280 sold at 1s. 6d. per dozen – the same price as in 1742, making the sum of £1 15s. 0d. Some 'speer' or reed was sold, 123 bundles at 2 s. 0d. a bundle making £12 6s. 0d., whilst 89 bundles went to Melbury, 21 to New Barn (which is still thatched) and some were used for the decoy.

The account of the 'Disborstments on the Decoy and Speer' is reproduced at Table 1 below.

TABLE 1. Disborstments on the Decoy and Speer 1794.

			£	s.	d.
January	1	Paid Jane Boatswain making up Speer	0	7	1
March	6	Paid Jane Boatswain making up Speer	0	2	4½
April	10	For Speer Cutting	2	6	8
Dto		For Beer when Carried the Speer	0	2	0
	12	For Farmer Briant's for beer when carried home the Speer		1	0
Dto		To Ann Hanson for helping the Speer in house	0	0	6
	18	Paid Jane Boatswain for making up Speer	11	10	½
May	22	Paid Jane Boatswain for making up Speer and thread to binde	0	4	6
June	24	Paid Mr Ward for two Bushels and three quarters of a peck of Hemp seed	0	13	1½
July	8	Paid John Motan for Throwing Mud and cleansing the Water corse	0	3	6
	26	Bought at Bridport Two Bushels Hempseed	0	12	0
August	2	For Spars for thatching the Boat House	0	2	2
	23	For Hors Hier to Maidenuten with A. Turbett	0	2	0
	28	Paid Augustan White to help fix up the Netts	0	1	0
September	7	Paid John Motan about the Speer Fence	0	10	6
	25	Paid John Boatswain for Two Bushels Hempseed	0	12	0
		For the carriage of Wilde fowl at Deferent Times	0	5	0
Dto		Paid John Boatswain for 4 Netts for the pipes	0	6	6
			7	3	9½

Most of the items in Table 1 are self-explanatory. Hempseed was used as food for the ducks, and in particular for attracting teal, which are very fond of it – perhaps this is the reason why they formed such a large part of the bag. At this date, it was grown extensively in the Bridport area.

No details of the layout of the decoy pond appear in any of the early documents, the first information found being a plan dated 1804, giving the measurements of the pond and the pipes, the outline of which is at Figure 1. The next, also

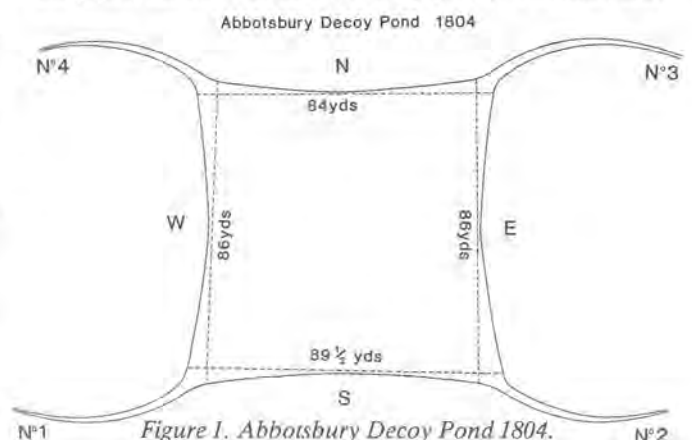


Figure 1. Abbotsbury Decoy Pond 1804.

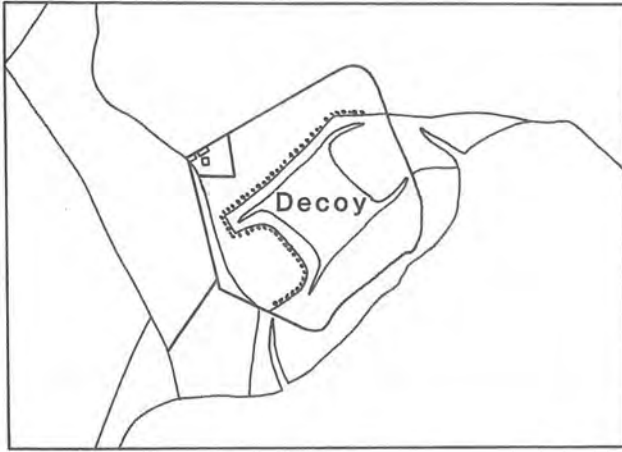


Figure 2. Decoy, as shown on Abbotsbury Enclosure Award Map 1814.

from the Ilchester muniments, is contained on a map attached to the Abbotsbury Enclosure Award dated April 1814, part of which is reproduced at Figure 2.

It is evident from both these sources that there were four pipes, one at each corner, in the decoy pond itself. This was a standard layout and was probably the original conformation. On the Enclosure Map can be seen, in addition, two pipe-shaped inlets from the Fleet. The eastern one is still in operation, and known as the 'Fleet pipe', and in 1917 was said to be the one in which most ducks were caught (Whitaker 1919). The western one is shown near the centre of the present swannery and not far from the swan-pens where the cygnets are reared. It is possible that this inlet was something to do with the swannery, but from its shape

could have been a second Fleet pipe. There is no reference to it in any of the literature examined, and indeed the next reference to the number of pipes in the decoy is contained in an article, which has been extracted from the magazine *Good Words* of 1st March 1867, and which is held by the County Museum. This describes a visit to Abbotsbury, and contains a curious illustration of a duck decoy derived more from imagination than knowledge, and the statement that 'the pipes (there are five of them) . . .'. From this one can assume that the four pond pipes and one Fleet pipe were then in use. However, the first edition of the Ordnance Survey 1/2500 map Sheet 46/14, for which the survey was carried out in 1886 – part of which is reproduced at Figure 3 – shows only three pond pipes and one Fleet pipe.



Figure 3. The Decoy Pond 1886 – based on OS 1/2500 map 46-14.



Plate 1. Gregory Gill, Fleet Swanherd and Decoyman (1847-1929).

This agrees with the statement in Payne-Gallwey (1886) that there were, at this date, four pipes – which was still the situation in 1917 when Whitaker visited the decoy, and also in 1921 when the Society held a meeting at Abbotsbury and it was subsequently reported that ‘the four duck decoys were next visited’ (*Proceedings* (1921), 41, 29). The pipe which had been abandoned between 1867 and 1886 was that in the south-west corner of the pond, No. 1 pipe, of which little trace remains today. The other pipe which has disappeared is No. 2 pipe in the south-east corner. It, and its screens, were accidentally burnt down in the 1950s, and not rebuilt. Its outline can clearly be seen on the recent aerial photo – plate 4.

A comparison between the 1804 plan of the decoy at Figure 1 and the modern aerial view at Plate 4 shows how little the overall shape of the pond has changed; though the area of water has decreased due to the encroachment of the reeds, in spite of the edges being cut back periodically. In 1804, the pool was about 85 yards square (1½ acres), but is now only about 60 yards square (¾ acre).

Information regarding the operation of the decoy during most of the 19th century is sparse, the visitors to Abbotsbury who recorded their experiences concentrating on the swannery. Smith in 1877 noted that the decoy was mainly used for shooting and that only some 200 duck were caught in a season. Payne-Gallwey 1886 and Salmon 1888 give similar numbers but neither Gurney 1878 nor Pearce 1872 mention any quantities. From Pearce, it is learnt that the keeper during his visit in 1870 or 1871 was Bartlett, who had been in the Earl’s service ‘as I understood him’ for 35 years, namely from about 1835. On 19th July 1877, the Rev. A. C. Smith, author of *The Birds of Wiltshire* (1887), visited

Abbotsbury and described Bartlett as ‘a fine gentleman type, but of the race such as Bewick’s vignettes depict – workmanlike in appearance, dress and manner, one who knew his business and did it. He had been in the service of the family of Lord Ilchester above 50 years’, namely from before 1827, rather longer than Pearce thought. Bartlett was succeeded in 1879 by Gregory Gill, whose portrait with some of the swans appears both in Mansel-Pleydell (1886) and Cornish (1895). When Whitaker visited the decoy in 1917 (Whitaker 1919), Gregory Gill told him that he had held the post for 38 years and been on the estate for over 50. ‘How I admire these old and faithful servants who take so much care and interest in their master’s things . . . A better situated decoy I have never seen and the decoyman, I am sure, is an adept at decoying’. Whitaker gives the annual catch as about 250, but in some of the war years it was less; Gill informing the Rev. F. L. Blathwayt on 24th January 1918 that he had not got many duck as he was not allowed grain to feed them. His catch so far that season had been about 100 teal and 30 mallard. His best haul, he told Blathwayt, during his 38 years decoying was in 1903 when he got 500 mallard in two days, including 76 in one haul, two of which however escaped – the decoy was ‘chock full of them’ (Blathwayt Diaries). Joe Gill, Gregory’s son, who had assisted his father for many years, finally took over from him in 1922, when another member of the family started work at the decoy. Fred Lexster, the son of Joe’s sister Alice, had been brought up by his grandfather, Gregory Gill, as his own father had died in Canada before he was born; and from an early age he had spent a lot of his time in the decoy learning all about it, the swannery and the wildlife of the Fleet. By the 1940s, though Uncle Joe was in



Plate 2. Gregory’s son, Joe (1877-1957), bundling speer. Note the men in the background cutting the reed with sickles. *Times Newspapers Ltd.*

nominal charge, Fred Lexster was playing an increasingly important part in the management of the swannery and decoy. A born raconteur who had an intimate knowledge of the Fleet and its inhabitants, after a successful debut on the radio programme 'In Town Tonight' in 1946, he subsequently made regular appearances both on radio, and later TV, wildlife programmes, through which Abbotsbury became known to a very wide audience. Uncle Joe retired in 1950, leaving him in sole charge.

Fortunately Lexster kept careful notes of the number of duck caught from when he started work until shortly before his retirement. For each season – September to March – from 1920 to 1975, he recorded the number of wildfowl, snipe, coot and 'various' obtained in the area of the decoy, and noted how many of each were shot and how many taken in the decoy. In fact all the coot and snipe, an average of eight duck and the two or three 'various' each season were shot, and the remainder of the duck decoyed. He also left, amongst his papers, a list dated 22nd February 1935 showing the wildfowl taken at the decoy for the seasons 1881 to 1933. There is no indication on this latter list of how many were shot and how many taken in the decoy, but by comparing this list with his records for the period 1920 to 1933, it can be seen that on average 17 duck were shot per season. It is thus reasonable to assume that the figures for the seasons prior to 1920 contain a similar number of ducks that were shot.

Figure 4, showing the quantity of wildfowl taken in the decoy in each season from 1881 to 1982, is based on these two lists. It should be noted that no adjustments have been made for the numbers of duck shot in each session prior to

1920, so totals for these years are probably overstated by about 15 to 20 birds per season. It should also be noted that until 1920 'duck' included pintail and shoveler, and perhaps gadwall, as well as mallard. The numbers on which Figure 4 is based are shown at Table 7 at Appendix A.

From Figure 4 the fluctuations from season to season in the numbers and species of wildfowl caught can clearly be seen. These are due to a variety of reasons, such as a poor wildfowl breeding summer, lack of birds due to weather conditions, abundance of food in the Fleet, or other causes, disturbance, pipes being out of order, availability of decoymen and priority being given to decoying. It is evident that the most successful seasons occurred at the beginning of the century, and in the mid-1920s when Joe Gill was decoyman, with 2,564 duck being taken in the three seasons from 1925 to 1927; the highest catches being 85 teal in one haul in 1925, and 88 teal and 11 mallard at once on 18th December 1927. It is also apparent that his father's memory had played him false when he informed the Rev. Blathway that he had got over 500 mallard in two days in 1903 – it must have been 1898, or possibly 1906 or 1908.

Compared with some other decoys, Abbotsbury has never been very productive, probably because, as Payne-Gallwey believed, of the large amount of open water nearby and disturbance by shooting. For the 102 seasons from 1881 to 1982, the total catch was 40,178 duck, an average of 394 birds per season.

Elsewhere in other decoys, catches of several thousand duck in a season were not uncommon, especially on the East Coast in the 18th and early 19th centuries; for instance



Plate 3. Gregory's grandson, Fred Lexster (1902-1982) outside the Middle Pipe, with assistants (right to left), A. Willsher, Cecil Lexster (Fred's son) and A. Dalley in 1965.

13,180 wildfowl were caught in a decoy in Lincolnshire in 1765. More recently, the Nacton Decoy in Suffolk averaged 3,903 wildfowl over 50 seasons from 1919 to 1968 (Matthews 1969), whilst the hundred odd commercial decoys still operating in Holland in the early 1960s were catching on average 2,390 each, including 2,105 mallard and 176 teal (Eygenraam and Doude van Troostwijk 1963). At the Borough Fen Decoy in Northamptonshire, 40,716 duck were ringed between 1947 and 1977, including 29,795 mallard and 10,516 teal, an average of 1,357 per season (Cook and Pilcher 1982).

Until just before the Second World War, all the wildfowl caught at Abbotsbury were killed and either consumed on the estate or, some times, sold. The prices they fetched naturally varied over the years and through the seasons, and are known only at intervals, from various sources. Prices are for couples, a couple of teal or wigeon being generally considered the equivalent of a single mallard.

Elsewhere, the price realised by a couple of mallard, or equivalent, in Essex in the years of 1714 to 1726 varied between 9d. and 1s. 6d. and by 1919 Whitaker was

TABLE 2. Summary of wildfowl caught in decoy in seasons 1881 to 1982.

Dates Seasons	1881-1919 39	1920-1982 63		Total 102	
Teal	6,603	Average 169	10,639	Average 169	17,242
Mallard	12,170	312	9,385	149	21,937
Pintail			332	5	
Shoveler			42	1	
Gadwall			8	1	
Wigeon	285	7	81	1	366
Pochard	319	8	39		358
Tufted Duck	252	6	23	1	275
Total	19,629	502	20,549	326	40,178

lamenting that the price was 10s. a couple in 1918 and 16s. a couple in February 1919 - 'What a price it is. Surely it will never be so much again'.

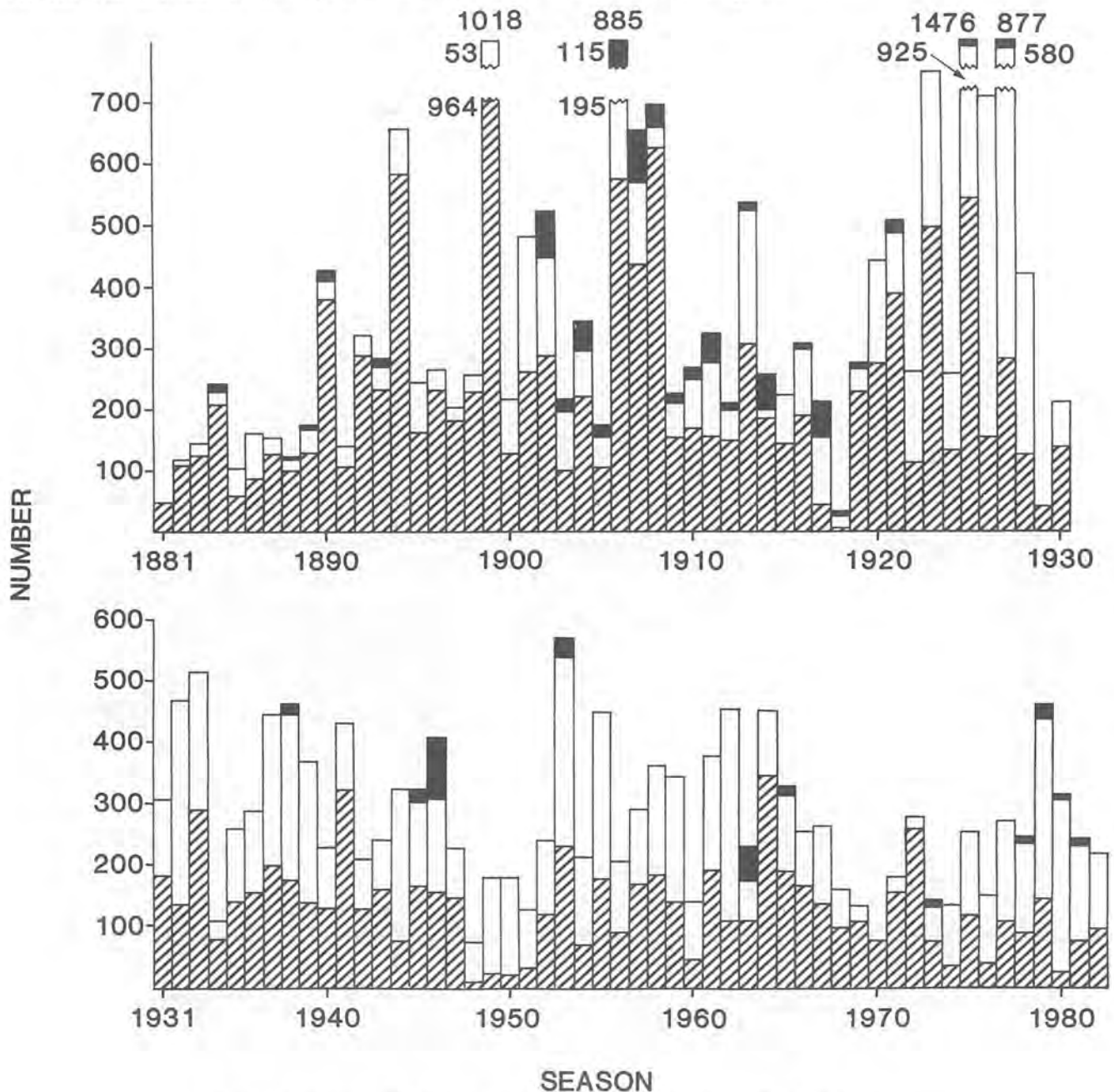


Figure 4. Wildfowl taken in the Decoy 1881-1982. ▨ Mallard; □ Teal; ■ Others.

TABLE 3. Prices realised by wildfowl caught in the decoy.

			<i>Source</i>
1655	Wigeon	8d.	Lease to John Hearne
	Teal	5d.	
1662	Mallard	1s.	Decoyman's accounts
	Teal	5d.	
1742	Mallard	1s. 6d.	Lease to R. Pitman
	Teal	1s. 2d.	
1793	Mallard	2s. to 3s.	Decoyman's accounts. Birds supplied to Melbury were still charged at the 1742 rate
	Teal	1s. 6d. to 2s.	
1926	Mallard	4s. 6d.	Blathwayt Diaries
	Teal	1s. 8d.	

In November 1912, a teal which had been ringed in Holland was caught at the decoy, but it was not until 1937 that ringing of wildfowl was started at Abbotsbury. On 4th January 1937 locally made rings were put on two mallard (numbered A000 and A001) and two teal (A002 and A003). Though 'Uncle Joe didn't approve of it' (pers. comm. Fred Lexster), regular operations on a proportion of the catch using British Museum rings started in the 1937/38 season with 97 teal, 29 mallard, 1 pintail and 1 wigeon, about a third of the total haul, being marked. During the following season, on 20th December 1938, 19 mallard, 54 teal, 2 pintail, 14 shoveler and 13 coot were ringed, a total of 102

TABLE 4. Duck ringed in decoy from 1937 to 1982.

Teal	2,579	Shoveler	35
Mallard	883	Gadwall	8
Pintail	301	Pochard	21
Wigeon	64	Tufted Duck	7
	Total	3898	

birds, still the highest day's total achieved. Since then, some of the ducks caught have been ringed and released in most seasons, noticeable gaps being from 1940 to 1944, when all caught were required for food.

As well as duck, some of the other birds which strayed into the pipes were caught and ringed; though the commonest, coots, were until 1982 usually released unmarked. However, in view of the increasing interest in the origins of the thousands that winter on the Fleet, ringing of coots was started that season, with 118 being caught. Other birds ringed have ranged from a single dabchick, snipe, bittern and green woodpecker to nearly 20 water rails; one of the latter being killed three months after ringing by a hen harrier in Zealand, Denmark, and another two being retrapped at Abbotsbury in subsequent years.

As duck are hunted during the appropriate local seasons throughout their range, it is not surprising that the majority of ringed birds that are recovered have been shot, killed or sometimes, usually in Holland, taken in a decoy. In the latter case, depending on which decoy they were caught in, they were sometimes 'controlled', that is released unharmed, sometimes with the ring replaced with a local one or an extra ring added. There are records of only five foreign-ringed duck, all teal, being caught at Abbotsbury and released after the ring details had been noted, though others ringed abroad have been shot on the Fleet. The only teal from Abbotsbury recovered from Italy was one which had been originally ringed near Utrecht in Holland as a juvenile in September 1950, re-ringed at Abbotsbury in February 1956 and killed in February the following year near Alessandria in north-west Italy. Another 'double recovery' was of a juvenile ringed in Denmark in August 1962, caught at Abbotsbury at the end of December and killed a fortnight later on 13th January 1963 in the shadow of the Pyrenees.



Plate 4. Aerial view of the Decoy – Crown copyright reserved.

According to Hickling 1983, reviewing the British Trust for Ornithology's statistics based on ringing from 1909 to 1980, the longest distance travelled by a ringed bird, the longest time between ringing and recovery, and the average recovery rates, for teal, mallard and pintail were as in Table 6; also shown are the Abbotsbury recovery rates for these species.

TABLE 6. National Records based on BTO Ringing Statistics.

	Teal	Mallard	Pintail
Longest distance (km)	4,588	7,012	5,512
Longest time (years)	14.08	20.90	16.61
Average recovery rate	18%	17%	15%
Abbotsbury recovery rate	14%	14%	18%

The only Abbotsbury recovery that approaches the long distance records is a teal ringed at Abbotsbury in November 1980, which was shot near Vorkuta within the Arctic Circle at the north end of the Ural Mountains in May 1982, a distance of 4,155 km. One of the few wigeon ringed, on 20th November 1979, was shot in May 1980 on the West Siberian Plain, some 2,000 km east of Moscow and 4,245 km from Abbotsbury; only about 600 km less than the species record.

As far as longevity is concerned, a pintail duck ringed in January 1940 was reported to have been recovered 'presumed killed' in September 1956 at Kurlovski, about 150 km east of Moscow, after 16 years 7 months 13 days, which equals the record, if indeed it is not the record holder. The difference between national and Abbotsbury recovery rates for teal and mallard can be attributed, at least partly, to the fact that at one time not all rings on birds shot locally were returned.

The fastest recorded movement for a teal after ringing is held by one that was found 893 km away the following day (Hickling 1983). One ringed at Abbotsbury was, according to Fred Lexster (pers. comm.), caught six hours later, at 1530 hrs in the afternoon, at Orierton decoy near Pembroke, Wales, some 200 km away – an average speed of 800 km, or 500 miles, per day. The large number of duck that have been shot locally, often within a few days of ringing, show this to have been an abnormal reaction.

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APPENDIX B

Abbotsbury Decoymen

- 1655-1742 Probably estate employees, but no records
- 1742-1746 Robert Pitman (died 1746)¹
- 1746-1791 Corbet Pitman (died 1791)
- 1791- ? Robert Pitman (1748-1820)
- ? -1879 Charles Bartlett (1807-1880)²
- 1879-1922 Gregory Gill (1847-1929)
- 1922-1950 Joseph Gill (1877-1957)
- 1950-1975 Frederick Lexster (1902-1982)
- 1975- John Fair

NOTES

¹ The Pitmans (sometimes spelt with two 't's', as was Corbet) were lessees of the decoy, whilst Bartlett and his successors were employees of the Ilchester estate.

² There is a gap in the records between the last reference to Robert Pitman, that has been traced, in 1800, and the first to Bartlett as a decoyman in 1870. The latter infers that Bartlett was in the Ilchester's service from 1835, but he would probably not have been head decoyman then when he was only aged 28. All that appears certain is that the Pitmans had given up the lease and the estate had taken over again, possibly on the death of Robert Pitman in 1820.

APPENDIX A

TABLE 7. Wildfowl taken in the decoy in 1881-1982 seasons.

A. 1881 to 1901 seasons																					
Season	1881	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	1900	01
Teal	1	8	16	20	42	73	24	15	36	29	30	27	36	65	78	31	20	24	53	86	220
Duck	49	108	125	209	60	87	129	101	130	380	109	288	232	583	162	232	182	230	964	129	261
Wigeon		2	5	12	2	1	2	8	9	16	2	5	15	5	4	1			1	2	
Total	50	118	146	241	104	161	155	124	175	425	141	320	283	653	244	264	202	254	1018	217	481
1902 to 1919 seasons																					
Season	1902	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19			
Teal	162	97	72	51	195	134	33	57	79	122	48	220	15	76	110	109	18	35			
Duck	286	100	221	104	575	436	626	153	168	153	149	304	184	143	187	44	7	229			
Wigeon	2	3	5	4	31	10	9	10	6	18	6	4	1	2	3	38	6	8			
Pochard	44	11	34	12	33	50	8		8	5	4	5	39	1	3	9		1			
Tufted Duck	27	6	12	4	51	24	18	8	7	24	3	4	16		2	12	1	2			
Total	521	217	344	175	885	654	694	228	268	322	210	537	255	222	305	212	32	275			
B. 1920 to 1982 seasons																					
Season	1920	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Teal	162	96	148	295	121	925	560	580	290		73	122	325	225	32	119	133	245	273	222	103
Mallard	273	388	111	447	131	540	151	282	125	41	137	183	136	290	78	142	156	199	174	138	130
Pintail	1	3				2		3	2				7	1				1	2	5	
Wigeon	2	4		3	4	1		1				1						1			
Shoveler		2		4									1							14	3
Pochard	2	8				8															
Tufted		4	1					11													
Total	440	505	260	749	256	1476	711	877	417	41	210	306	469	516	110	261	289	446	463	368	233
Season	1941	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
Teal	111	84	82	244	136	153	71	61	150	158	98	117	308	140	272	116	119	225	207	91	176
Mallard	322	128	159	77	166	156	144	9	23	21	32	120	232	72	179	89	169	136	138	46	191
Pintail				1	12	62	8	5				1	10			1		2			9
Wigeon					1	34			4				7								
Shoveler					6								10								
Pochard				(Gadwall1)																	1
Tufted						1							3								
Total	433	212	241	322	321	407	223	75	177	179	130	238	570	212	451	206	288	363	345	137	377
Season	1962	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82
Teal	336	64	97	127	86	126	61	27		10	16	55	101	108	103	152	145	296	283	157	121
Mallard	110	109	346	187	166	135	96	104	74	144	258	75	33	117	40	107	90	143	25	74	91
Pintail		55	6	15		2	1			25	3	8		30	7	12	2	18	5	3	3
Wigeon	4	2		2								2						4	4		
Gadwall												1					3	1		1	1
Pochard	3		1														7		1	5	3
Tufted																				2	1
Total	453	230	450	331	252	263	158	131	74	179	277	141	134	255	150	271	247	464	318	242	220

The Excavation of Three Round Barrows at Puncknowle, Dorset, 1959

E. GREENFIELD,
Pottery Report by DAVID TOMALIN

INTRODUCTION

This report is concerned with the excavation of three bowl barrows in the parish of Puncknowle in West Dorset: Grinsell's ('G') Puncknowle G1 (Grinsell 1959, 129) (SY 53318783), Puncknowle G2 (SY 53478791) and Puncknowle G6 (SY 54168710).¹ Excavation was undertaken, in response to a plough threat, in the autumn of 1959, under the direction of Mr E. Greenfield. The excavation was financed by the Ministry of Public Buildings and Works, now incorporated in the Department of the Environment.

Special thanks are due to the landowner, Mr L. J. King for his co-operation and Mrs D. McLaverty for her assistance during the excavation. The report text was prepared for publication by Miss Alison Cook of what was

then the Inspectorate of Ancient Monuments, London and by Jo Draper and Jeany Poulsen. The authors would like to thank the following people for their specialist contributions: Miss Justine Bayley, Mr Leo Biek, Dr David Tomalin, the late Mr J. B. Calkin and the late Dr F. W. Anderson. A pottery report by S. R. Smith can be found in archive.

Some of the excavated material is housed in the Dorset County Museum, Dorchester (Accession number 1962, 12), and this will be joined by the remainder, and the site archive.

Site location (Figure 1)

The three barrows belong to two distinct barrow groups overlooking Lyme Bay. Puncknowle G1 is immediately to the west of the Knoll, 0.9 km south of Puncknowle church, at an altitude of about 153 m. Puncknowle G2 is on the Knoll, about 190 m north east of G1 (altitude about 170 m). A third round barrow (Puncknowle G3 SY 53508779) completed the group. Puncknowle G6 is the second most

¹The Royal Commission on Historic Monuments, and the Ministry of Public Buildings and Works numbers for these barrows are as follows: Grinsell's Puncknowle 1: RCHM Puncknowle 10a; MOW 376 B. Grinsell's Puncknowle. 2: RCHM Puncknowle 10b; MOW 376 A. Grinsell's Puncknowle. 6: RCHM Puncknowle 11a; MOW 375.

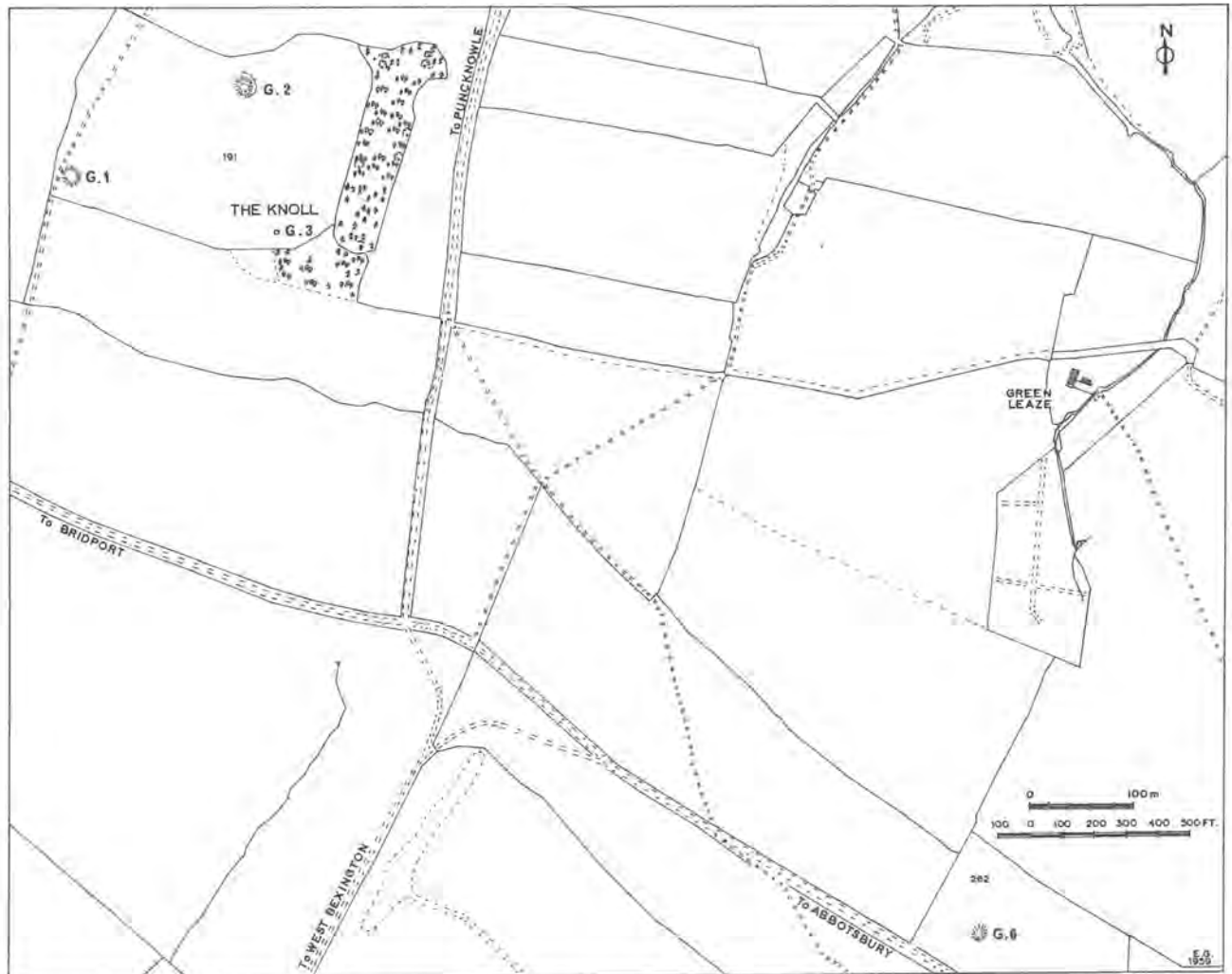


Figure 1. Location of Puncknowle G1, 2, 3 and 6.

westerly² of five otherwise unexcavated barrows arranged along the ridge of Limekiln Hill. It is 1.7 km south-west of the church, immediately north of the B3157, at an altitude of about 149 m.

THE GEOLOGY by the late Dr F. W. Anderson Puncknowle G1 and G2 lie on the north-west slope of the Knoll, a small hill capped by Upper Greensand. Below the Greensand is Gault, which rests on the Cornbrash. The hill stands on a platform of Forest Marble which is faulted to the north against Oxford clay and is underlain to the south by Fullers Earth. There are two small landslips on the north-west slope of the Knoll and there is some scree from the Upper Greensand and Cornbrash outcrops (Head). The other site G6, on Limekiln Hill, is on Forest Marble which to the east is capped by Gault and Upper Greensand.

Method of excavation

The barrows were examined by a transverse method on a north/south, east/west alignment. Their centres were

²The most westerly of the group, Puncknowle G5 (SY 53808733) is listed by Grinsell (1959, p. 129).

opened out, where necessary, to examine the primary burials.

THE STRUCTURE OF THE BARROWS

PUNCKNOWLE G1 (Figures 2, 3, and 4)

The primary burial (burial 1). The primary burial, situated in the north-west quadrant of the barrow, consisted of the cremated remains of an adult individual of unknown sex, probably under 30 years of age. The bone was contained in an upright urn, supported by stones (see Plate 1). The urn had been placed in a small oval-shaped pit, cut into the land surface layer (1), near the centre of a sub-rectangular burnt area. The excavator considers that this burnt area may have been the site of the funeral pyre. Charcoal remains associated with the feature have been identified as oak of *Quercus robur* type, with a diameter larger than 50 mm.³ Fragments of cremated bone (burial 2) were found in the cremation pit; Justine Bayley (AML) considers that they were probably overspill from the urn. The pit was sealed by a horizontal stone slab surrounded by a square-shaped emplacement of burnt stone, probably of Forest Marble.⁴

³Identification of charcoal remains by G. C. Morgan of the Ancient Monuments Laboratory, London.

⁴Identification of stone samples was undertaken by the Ancient Monuments Laboratory, London, the late Dr F. W. Anderson and P. Ensom of the Dorset County Museum.

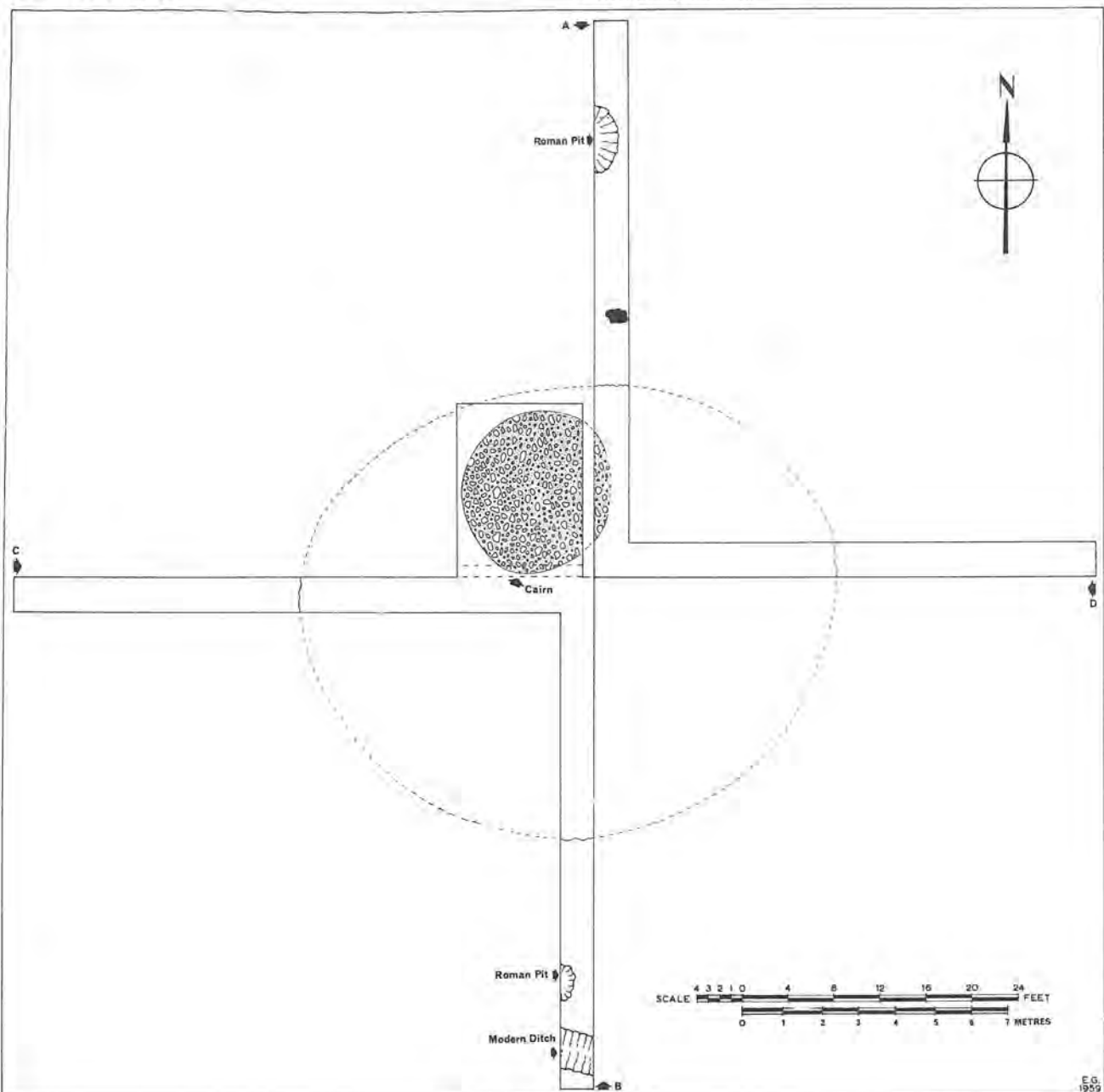


Figure 2. Puncknowle G1.

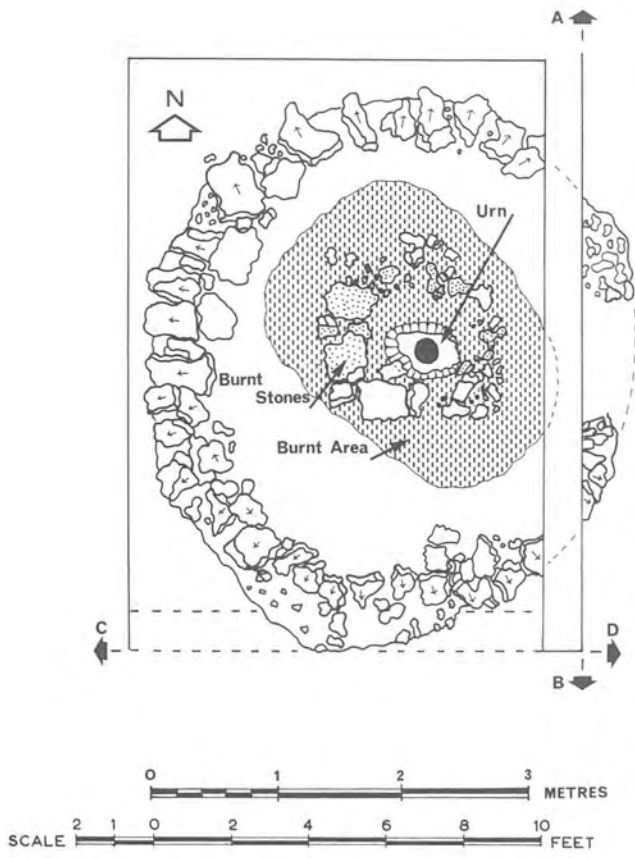


Figure 3. Puncknowle G1; cairn and primary burial.



Plate 1. Puncknowle G1; primary burial.



Plate 2. Puncknowle G1; cairn.

Figure 4. (opposite) Puncknowle G1, 2 and 6; sections through barrows. Key: 1. Topsoil; 2. Cairn; 3. Brown sand; 4. Green-brown sand; 5. Brown sandy deposits; 6. Grey-brown sandy; 7. Light brown sandy; 8. Soft brown sandy; 9. Soft buff brown sand; 10. Brown sandy material, with flints; 11. Old ground surface; 12. Brash; 13. Clay; 14. Clayey gravel; 15. Brown green clay; and 16. Brown clay.

The cairn. Above the burial and its superstructure was a cairn of loosely packed stones, layer (2). The upper part had been destroyed by ploughing, and the centre disturbed by the insertion of a sand-bagged trench during the early years of the last war; disturbance reached to within 25 mm of the top of the primary burial. The cairn was revetted by inward sloping slabs of Quarr stone from the Isle of Wight, and these may originally have covered the cairn (see Plate 2).

The mound. The mound was composed of brown sandy soil, layer (3). Within it, towards the outer slope, was a thin deposit of clay and gravel, layer (14), derived from the subsoil on the edge of the mound. Although a slight depression was found in three of the trenches, it cannot be interpreted as a surrounding ditch, even of token size.

Later features. On the outer slopes of the barrow in the north and south trenches, traces of Romano-British occupation were found.

Fragments of pottery representing at least thirteen vessels (Figure 8) occurred in association with two shallow pits.

PUNCKNOWLE G2 (Figures 4 and 5)

The primary burial. The centre of the barrow had been robbed in Medieval times, disturbing the primary burial (burial 1). Body sherds from a large Bronze Age urn and scattered cremated bone were found at the bottom of the robber pit and sherds of a coarse unglazed Medieval cooking vessel probably of the 13th or 14th century (Figure 8 no. 9) were found with the prehistoric material and in the pit fill. The burial would have been placed on the old ground surface, layer (11).

The cairn. A large cairn of stones covered the burial. The stones appeared to have been gathered from the ground surface and not deliberately quarried.

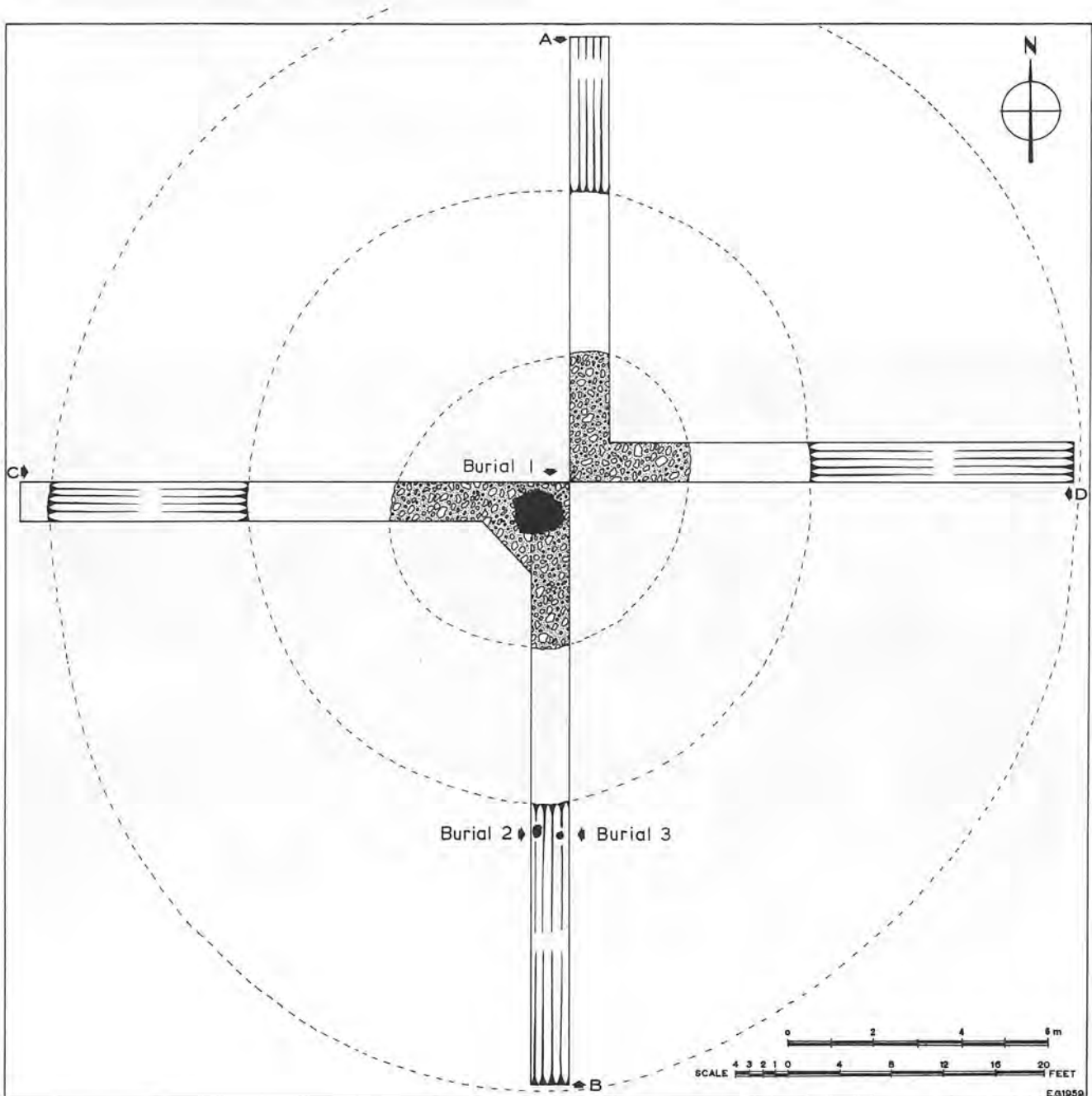
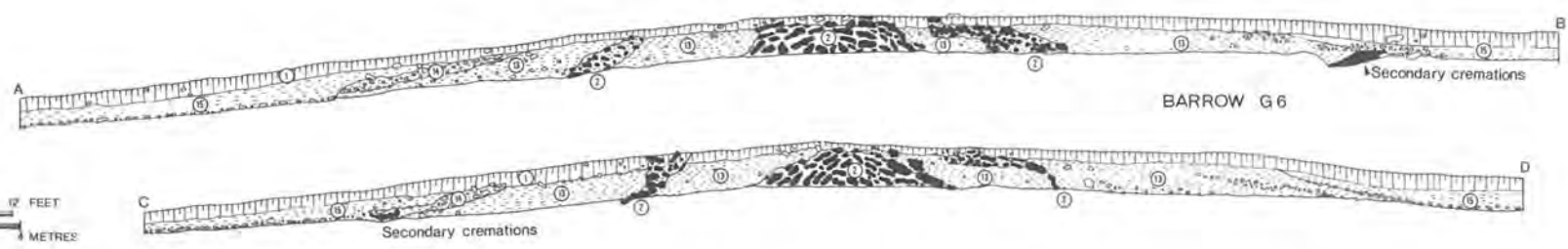
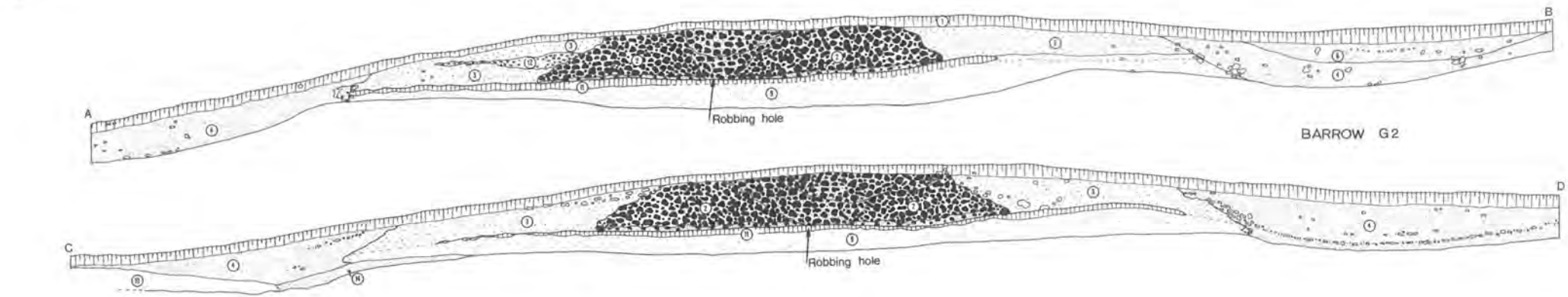
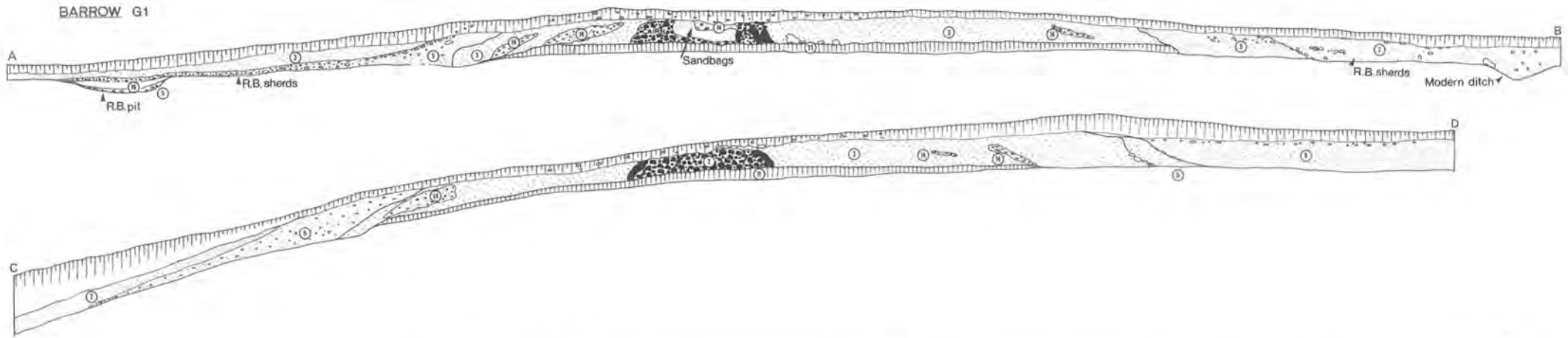


Figure 5. Puncknowle G2.



The mound and ditch. The mound was composed of brown sandy soil, layer (3), probably cast up from the wide shallow ditch. The ditch measured about 6 m across, and was filled with green-brown sand, layer (4); there was no berm. A secondary cremation burial (burial 2), consisting of a deposit of cremated bone and sooty soil accompanied by a crushed, fragmentary vessel, was found on the south side of the barrow. About 0.60 m away was another vessel, apparently a bucket urn (burial 3). There was no associated cremated bone.

PUNCKNOWLE G6 (Figures 4 and 6)
This was the smallest of the three barrows excavated.

The primary burial (burial 1). The primary burial consisted of the cremated remains of an adult individual of unknown sex. The bone was contained in a bucket urn, found in a very fragmentary condition, surrounded by three stone slabs (Plate 3). Charcoal remains from near the capstone have been identified as oak of

Quercus robur type, with a diameter of more than 50 mm. The burial was contained a small pit.

The cairn and mound. The burial pit was sealed by a mound of clay – layer (13) (Plate 4). This was revetted by an outer cairn of stones. The outer mound was made of clay. Six secondary burials (burials 2-7) were found on the edge of the barrow; burials 2, 3 and 5 were in the west trench and burials 4, 6 and 7 were in the south.

EARLIER DISCOVERIES

During the 1890s Mr Frederick Cheney and his father found an urn containing a fragment of human jaw on the south side of Puncknowle G3 (Plate 5). The urn had been exposed by rabbits burrowing under the foundations of a small building which surmounts the barrow; it is now in the Dorset County Museum, reference DCM 1914.1.5. (illus. fig. 8 G3). (Information from a letter to Mr John Bailey, dated 4.10.66, in the site archive.)

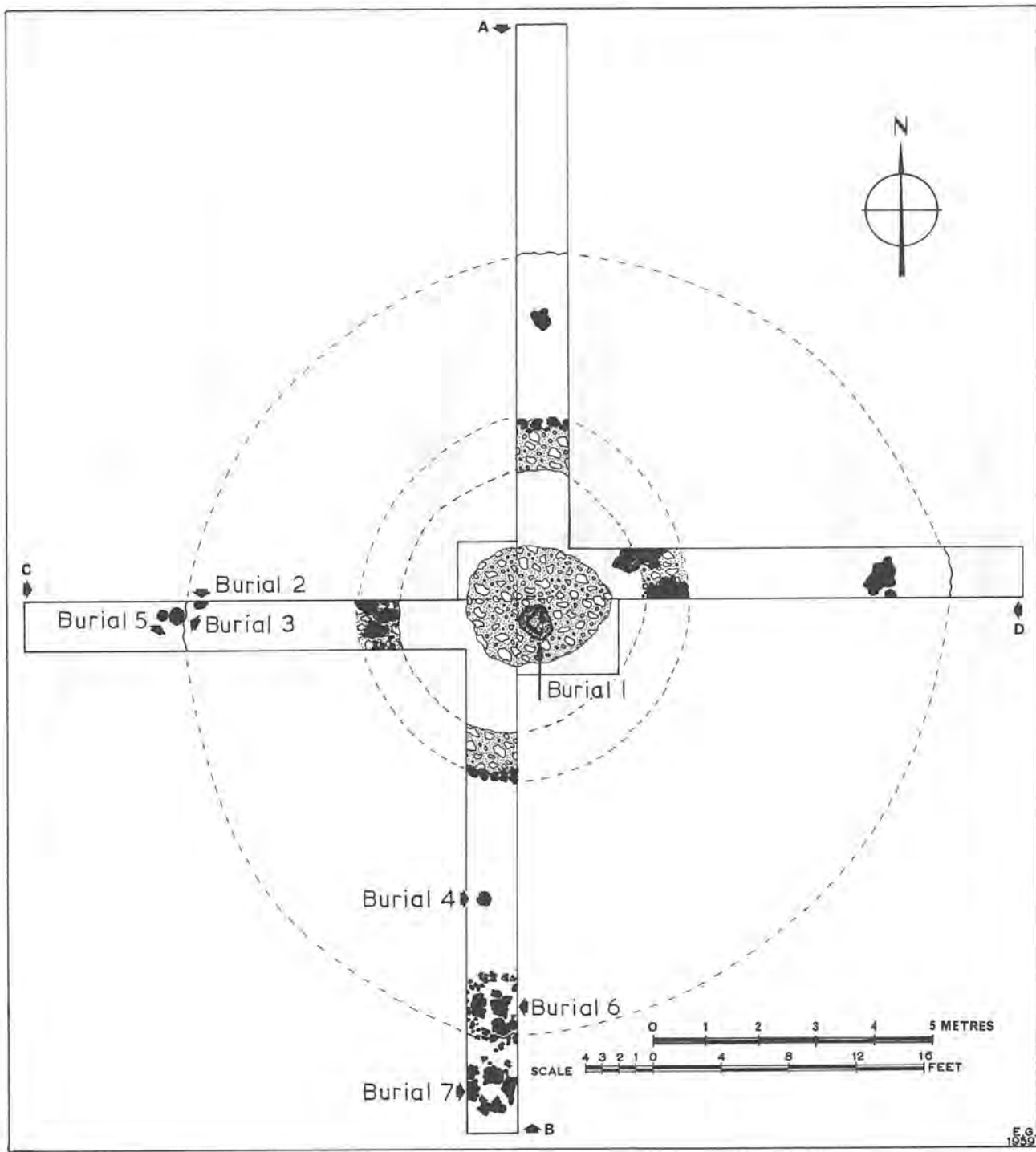


Figure 6. Puncknowle G6.

F.G.
1959

THE FLINT (Figure 7) by the late J. B. Calkin⁵

Puncknowle G1

Total 68, including two calcined (?unworked) flints. Among these may be mentioned:

1. A convex scraper with abrupt retouch on distal end and part of side. Found 0.23 m below the turf line, in the barrow mound, in the south trench.
2. A side scraper, found 0.28 m below the turf line in the barrow mound, in the west trench.
3. An end scraper on blade-like flake with obtuse angle at the platform. Found in the barrow mound.
4. Blade-like with flat invasive flaking on bulbar surface. Its ?distal end has suffered recent damage. Found in the barrow mound.

Apart from a pyramidal core with a trimmed striking platform and a few flakes with used or damage edges, the rest of the material was unretouched and featureless. Blue and brown chert was sometimes used.

Puncknowle G2

Total 7. These included a 'thumb-nail' scraper (Figure 7, No. 5) found in the east trench, two poor side scrapers and a flake with serrated edge; two more flakes showed signs of use.

It is probable that most of the flints from these two adjacent barrows were already present on the site before the erection of the barrows. Several had a distinctly lustrous patina.

Puncknowle G6

Total 8. A convex scraper with denticulated edge was found on the old land surface under the barrow (Figure 7, no. 6). Six flakes of blue or brown chert came from the same position or from the barrow make-up. The mint condition of all seven suggests that they may have been made on the occasion of one or other of the cremations.

⁵The report is published with a little revision. The flints cannot be found at present.



Plate 3. Puncknowle G6; primary burial.



Plate 4. Puncknowle G6; cairn.

SMALL FINDS by J. B. Calkin

Puncknowle G2

A stone fragment was found in the old land surface under barrow 2. It has two parallel flat faces with straight tapering sides (Figure 7, no. 7). One face has subsequently been pecked over, and ground obliquely at its narrow end.

THE HUMAN BONE by Justine Bayley
Ancient Monuments Laboratory, London

Nine cremations were examined. The bone was mostly well calcined and in fairly small pieces, averaging less than 1 cm². The two large cremations (Barrow G1, burial 1 and Barrow G6, burial 1) contained a number of bigger pieces up to 8 cm long. Fissuring and distortion was most noticeable on the long bone fragments although all the bone was affected to some degree.

Puncknowle G1

The primary burial (burial 1) was in an urn. The cremated remains were fairly complete with most parts of the body well represented. This was an adult individual, probably under 30, of unknown sex. Burial 2 consisted of bone fragments found around the urn in the pit and probably represented spill from the urn. There is no osteological reason why the bone from burials 1 and 2 could not belong to the same individual.

Puncknowle G2

The primary burial (burial 1) contained only a small amount of bone which included skull and long bone fragments. The secondary burial (burial 2) was also fairly small and consisted of mainly of long bone fragments.

Puncknowle G6

The primary cremation (burial 1) was fairly complete with most parts of the body represented. There was no duplication so probably only one individual was present. This was an adult, probably not very old, of unknown sex.

There were four secondary deposits of cremated bone in this barrow. Two burials, 2 and 7, consisted of a few very small bone fragments which were not necessarily human. The others (burials 4 and 6) contained recognisable long bone and other small miscellaneous fragments.

	Weights of the cremations (in grammes)	
Puncknowle G1	Burial 1	2334
	Burial 2	72
Puncknowle G2	Burial 1	65
	Burial 2	68
Puncknowle G6	Burial 1	1863
	Burial 2	2
	Burial 4	42
	Burial 6	426
	Burial 7	2

THE POTTERY: ITS CHARACTER AND IMPLICATIONS AND THE
EVIDENCE FOR SEA TRANSPORT

by David J. Tomalin

The description

In introducing the ceramics from this site an explanation is required concerning two aspects of the description.

In dealing with the textural characteristics of the pottery, a standard description of the tempering material, its quantity and its particle size mode has been used. This system has been described more fully in Tomalin 1983 and it is also summarised in Appendix 2. As a result of the textural analyses, summary temper diagrams have been presented with each of the illustrated pots (Figure 8). The diagrams are intended to provide a visual means by which the nuances of temper preparation may be readily assimilated in any detailed comparison between one Early Bronze Age pot and another.

The second aspect of explanation concerns formal classification. In the following description five new terms will be encountered. The first term is the *Food Urn Tradition*: a collective term encompassing the production of all food vessels and food vessel urns (Tomalin *ibid.*). The earlier stage of food urn production (c. 1700-1550/1450 bc) is marked by the use of stops, narrow grooves or close set ridges without stops and finally by wide-set ridges. These features are the definitive elements of forms 1, 2A and 2B food urns respectively. During the later stage of production (c. 1550/1450-1250 bc) there occurs a shouldered, and commonly plain, food urn which frequently shows distinct concessions towards the biconical urn style but is nevertheless distinguished by its light superficially oxidised firing and its soft grog temper (Form 3). In certain cases the replication by food urn potters of the biconical urn is so precise that the temper alone remains the sole definitive vestigial element of the indigenous food urn tradition. In cases such as this the term *form 3 biconical urn* has been applied (Tomalin *ibid.*). In this report the term has been employed in the classification of the primary urns from barrows G1 and G2. Urns prefixed D and DB refer to the respective Dorset entries for food urn and biconical urn ceramics in the corpus of Tomalin 1983. (For Dorset food urn corpus see Appendix 1).

The final innovation in this report concerns the classification of biconical urns. As a result of a reappraisal by Gerloff (1975) of Alpine Bronze Age ceramics, and by Blanchet (1976 and 1979), Briard (1981) and Gomez (1980 and 1982) of French ceramics, a consistent pattern of biconical urn production can now be recognised over much of the north west European plain.

The intrusion around 1500 bc of this Continental tradition into southern Britain is marked in Wessex by the *Inception Series* of biconical urns; all of which carry Continental traits (Tomalin *ibid.*). Urns of the Inception Series are hard fired and are normally tempered with copious quantities of flint, quartz or shell in the manner of their Continental counterparts. Further biconical urns which are similarly tempered yet lack the optional and vestigial decorative features of the Continental style have been termed the

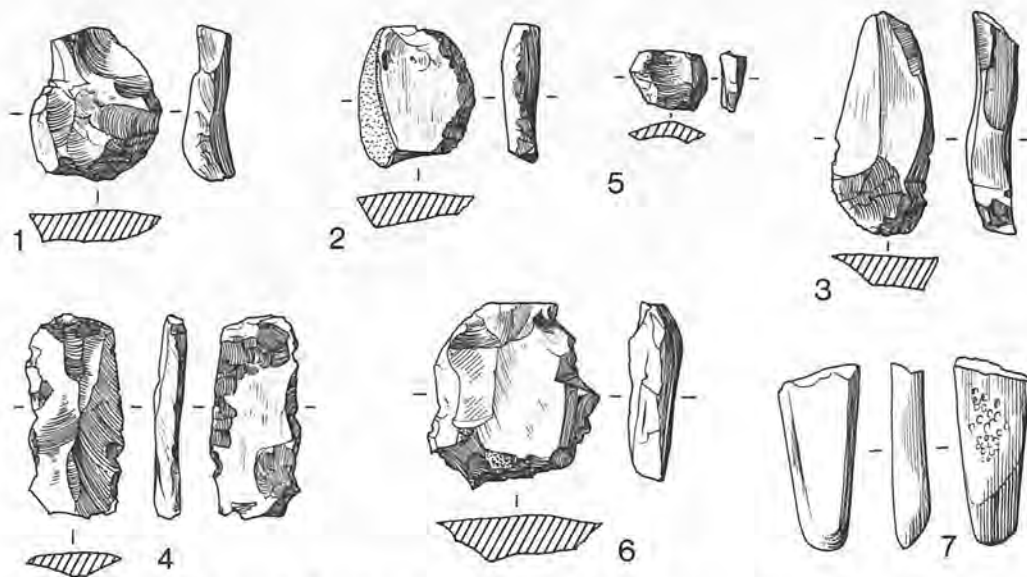


Figure 7. Puncknowle: the flint and other stone, at 1/2 life size.

Supplementary Series. In the writer's earlier analysis (Tomalin *ibid.*) these two closely related series have been described collectively as the 'Combined Series'.

A more appropriate term for the combination of these two taxonomic groups would seem to be the *Intrusive Biconical Urn Tradition*.

Puncknowle, Urn 1 Primary (DB20)

This is a sub-biconical shaped urn with a poorly defined rounded shoulder which approaches the profile of a bucket urn. A notable feature is the double line of right hand cord impressions which forms a horizontal band applied approximately at shoulder level. These cord lines and the space between them are reminiscent of the twin ridge decoration of many food vessel urns. The band of decoration is interrupted by four pairs of slightly pinched fingertip dimples which provide a suggestion of vestigial food vessel urn stops. The rim of the vessel is slightly rounded and the base is weakly concave. The fabric of the pot comprises a dark grey reduced ware containing some 4 per cent grog with a particle size mode of 2.5 mm. Some incidental flint particles also occur. The height of the vessel is 34 cm. The diameter of the rim and base is 21 cm and 12.5 cm respectively.

Others sherds from Puncknowle G1

Sherds from five other contexts in barrow G1 require comment. Sherds P51 and P53 are base fragments of a pot of the food urn tradition. These sherds were found respectively on the old ground surface and in a disturbed area. Both probably emanate from the same urn. From context F3 come two flint-tempered sherds (P60 and P67) of the biconical urn or Deverel-Rimbury ceramic traditions.

Puncknowle G2, Urn 1 Primary

This urn (P12) had been effectively destroyed by previous disturbance. The sherds belong almost entirely to the body and neck of the pot with only two small fragments of the rim represented. No shoulder or base fragments are present. Judging from the surviving pieces the urn appears to have been of substantial size with a convex body and showing a slight concavity at the neck. The body of pot is lightly oxidised on the external surface whilst much of the neck appears to have remained reduced. The fabric comprises 10 per cent grog with a particle size mode of 3 mm.



Figure 8. Puncknowle; food urn and biconical/bucket urn pottery. The Grinsell barrow number, followed by the burial number is given in each case. For the temper diagrams see pottery description and Appendix 2.

Puncknowle G2 Urn 2 Secondary

This vessel (P117) is best classified as a bucket urn although its grog temper betrays its biconical urn ancestry. The bevelled rim, the finger-tipped decoration and the three of four tongue lugs applied just above maximum girth are also attributes to the biconical urn tradition. The fabric of the vessel comprises 3 per cent grog with a particle size mode of 2 mm. Some 5 per cent vesicular cavities intimate a dissolved tempering ingredient; probably chalk.

Puncknowle G2 Urn 3 Secondary

The sherds (P119) obtained from this secondary burial comprise some 70 small eroded undistinguished fragments of a thin-walled grog-tempered urn. The fabric is moderately vesicular and might be appropriate for a biconical urn or bucket urn of the form 3 tradition (Tomalin 1983).

Other sherds from Puncknowle G2

A weathered grog-tempered sherd (P131) from layer 7 comprises a body fragment bearing a single weak fingertip impression. It is reminiscent of a FT decorated bucket urn of the form 3 tradition. From an unstratified context in the same barrow come four body sherds (P152) belonging to a thick-walled urn. The soft reduced grog tempered quality of this urn is consistent with the food urn or form 3 biconical urn tradition.

Puncknowle G3 Food Urn D39

In his manuscript notes of 1962, the late J. B. Calkin rightly proposed that the food vessel urn since published by Forde-Johnston (1965, fig. 16) should be included in this report. This urn, Calkin observed, was found beneath the foundations of a roofless building which may have served as a watchtower during the Napoleonic Wars (Calkin 1962). This structure stood on a small mound which was apparently a barrow. The site, today, is occupied by a coastguard look-out. The urn was found in a stone-lined cist comprising four uprights and a capstone (Calkin *ibid.*). It was found in the late Victorian era and was acquired by the Dorset County Museum in 1914 (Acc. No. DCM 1914.5.1.).

The food vessel urn is 32 cm in height and bears a flared rim 28 cm in diameter. The internal bevel of the rim carries a three-line herringbone arrangement of whipped cord 'maggot' impressions. A single line of 'maggot' impressions occurs on the external bevel facet whilst a more carelessly applied band of similar impressions appears on the shoulder. The surface characteristics of the urn show 27 per cent angular grog with a particle size mode of 3 mm.

Puncknowle G6 Urn 1 Primary

This urn (P192) with its tall proportions and sub-biconical profile epitomises the transition between the later biconical urn ceramic tradition and the bucket urns of the Deverel-Rimbury complex. The boss lugs on the shoulder cordon are more characteristic of the Deverel-Rimbury series and consequently it is to early bucket urn production that this pot seems most appropriately ascribed.

The urn appears to have been some 24 cm in height with a rim diameter of 17 cm and a base diameter of 12 cm. The textural characteristics show 4 per cent grog temper with a particle size of 2 mm. This indigenous recipe may be also reconciled with the 'form 3' mode of production for biconical urns and late food urns which have assumed a quasi-biconical form (Tomalin 1983).

Puncknowle G6 Secondary Urn 2

This urn (P177) comprises some 20 small body sherds. A small boss lug surviving on one of the sherds suggests that vessel was probably an early bucket urn fashioned in the form 3 grog-tempering tradition.

Puncknowle G6 Secondary Urn 3

The sherds of this destroyed urn (P179) include three small portions of rim and a diminutive tongue lug. The textural characteristics show 4 per cent grog with a particle size mode of 1.8 mm. These features are compatible with a transitional biconical/bucket urn fashioned in the form 3 tradition.

Puncknowle G6 Secondary Urn 4

The sherds (P181) from this cremation comprise 14 crumb-size pieces of a grog-tempered urn. So small is the total proportion of the former vessel that there seems good reason to suspect that no more than a single modest sherd was included in the grave.

Puncknowle G6 Secondary Urn 6

Like the preceding secondary urn from this barrow, this vessel

(P185) has been thoroughly crushed. The surviving small sherds number approximately one hundred and include a single small fragment of a simple rounded rim. The textural characteristics of this largely destroyed urn show 3 per cent grog with a particle size mode of 2 mm.

Puncknowle G6 Secondary Urn 7

This urn (P183) was apparently a large grog-tempered vessel of considerable diameter. The 70 sherds recovered from the grave are plain and featureless and would appear to represent less than one-tenth of the original vessel. The textural characteristics show 5 per cent grog temper with a particle size mode of 2 mm.

Other sherds from Puncknowle G6

Two sherds from the barrow mound require comment. P174 is a single body sherd showing textural characteristics similar to the preceding cremation urns. P165 comprises a single plain crumb-size fragment of beaker ware.

THE IMPLICATIONS OF THE POTTERY AND ITS CONTEXTS
The construction of barrows G1 and G2 at Puncknowle, shows a remarkable similarity, and it is perhaps not surprising to find that the users of these monuments demonstrated a similar degree of uniformity when selecting pots for funerary purposes.

In the primary contexts in each mound a single biconical urn seems to have been used as a cremation receptacle interred beneath a loosely packed cairn. In barrow G1 the urn was found upright whilst in barrow G2 the burial mode was rendered indiscernable by later disturbance. In barrows G3 and G6 the primary urns were contained in slab lined pits which appear to resemble the Pontavert/Eramécourt burial mode (Tomalin 1983).

The urn DB20 from barrow G1 is grog-tempered in the manner of the indigenous food urn tradition, yet its profile proclaims the potter's extensive conversion to the biconical urn style. This urn also carries two parallel cord impressions which appear to be a substitute for a shoulder groove. This implied knowledge of a shoulder groove is intimated by the pairs of slightly pinched finger dimples which interrupt the cord lines. These pinched finger dimples have been applied in a manner which suggests a moribund adherence to the groove and stop devices of the form 1 food urn style.

In barrow G2 the grog-tempered fabric of the destroyed primary urn again betrays the presence of the food urn tradition. Although the form of this urn is regrettably open to doubt the size of the body sherds and the profile of the neck and rim do suggest that a close formal comparison might perhaps be valid with the Supplementary Series biconical urn (WB34) from Winterbourne Monkton G16 near Avebury, Wilts. (Passmore 1923; Tomalin *ibid.*)

In barrow G3 the form 3 genre may again be recognised when dealing with the food urn D39. Unfortunately the primary or secondary status of this urn can no longer be determined but it is useful to observe that this form of food urn is certainly known in primary contexts in other Wessex barrows such as Winterbourne Stoke G28.

The sparse recovery of food urn pottery in southern Britain provides inadequate comparanda for discussing the detailed attributes of urn D39. It may however be observed that the everted rim with convex internal bevel conforms to the writer's general rim type B5 (Tomalin 1983). The same rim type, showing varying degrees of flaring or eversion, can be found in at least 64 other British food urns. This characteristically convex rim type is also well represented in Dorset where it can be found on urns Dewlish D1; Sheep Down D15 and 16; Kingston Russell D20; Melcombe Bingham D42 and Stratton (Grimstone) D52.

It seems that no clear chronological significance can be attached to the emergence of this particular rim type for along with rim type A1 it occurs in dominant proportions in all four major forms of food urn 1, 2A, 2B and 3). Consequently it would appear that this rim type could have been in general use throughout the collective time trajec-

tory of all four food urn forms. When the occurrence of this rim type in the four food urn forms is compared however within the total population of B5 examples it emerges that the dominant frequency occurs in the form 3 class (Figure 9). On this evidence it might be tentatively advocated that the B5 rim was principally associated with the emergence of the form 3 food urn and that its general use was also maintained for a while in the declining production of forms 1, 2A and 2B.

Regardless of the origins of the B5 rim, a relative chronological position may be independently advocated for the form 3 food urn. Full details of this argument have been pursued elsewhere (Tomalin 1983) and it must suffice here to observe that this particular form may be satisfactorily placed in the Camerton-Snowhill phase and Gerloff's 'overlap period' but not in that part of the Wessex I or Armorico-British phase preceding it.

Concessions in form 3 food urn production to the biconical urn style have already been discussed in the introduction to this pottery report and in the discussion of urn DB20. On urn D39 the use of whipped cord 'maggot' impressions in the shoulder position is reminiscent of the finger-tipped shoulders of many biconical urns. This decoration, it seems, may well owe its inspiration to such a source. A further acquire feature may be the excessive flaring or everted of the rim which is a feature not uncommon on rims of the A1 and B5 type. This practice may possibly be attributed to the potter's desire to provide sufficient margin to accommodate internal impressed decoration. Similar flaring occurs on the form 3 food urn D20 from Kingston Russell 6g (G3b) where the margin was used to accommodate cord impressions in Longworth's motif C (Bailey *et al.* 1980). This provision on urns of this type undoubtedly represents a concession towards that movement which was responsible for the widespread use of this feature in Primary Series collared urns.

At barrow G6 at Puncknowle the commitment to the form 3 version of the biconical urn tradition is consistent with the ceramic evidence from barrows G1 and G2. In this instance however the attributes of the urn represent that typological interface which lies between late biconical (or sub-biconical) urns and the bucket urns of the Deverel-Rimbury complex (Calkin 1964; Ellison 1975; Tomalin 1983). From the five secondary burials recovered from this barrow, urns 1, 2 and 3 may also be compared with the grog-tempered bucket urns which in Dorset represent the last vestigial element of the food urn tradition (Tomalin *ibid.*). Whilst the grog-tempered urns 4, 5 and 6 are too fragmentary to permit any formal classifications, it seems highly probable that these vessels were similar.

In summarising the ceramics from these four barrows it becomes clear that the transitional process from biconical urn to bucket urn is well represented at barrows G1, G2 and

G6. At barrow G3 the form 3 food urn stands as a reminder of the more restrained response of the indigenous community to the biconical urn style.

In the production of the Puncknowle pots the indigenous grog-temper recipe was scrupulously followed in almost every case. At barrow G1 however some flint-tempered sherds of intrusive biconical urn character were present in feature F3. In view of the limited area of excavation in all three barrows it seems possible that further flint-tempered urns could quite conceivably have been present.

Further comments must concern two important aspects concerning the funerary contexts of the urns.

In barrows G1, G2 and G6 the primary burials were all interred beneath modest cairns at the core of the mound. In all three of these barrows primary status can be attributed with reasonable confidence to pots of the biconical/bucket urn series. The use of urns of this type in primary contexts in barrows may be considered unusual although instances concerning biconical urns can be cited at Knackington and Wouldham, Kent; Radley ring 14 Berks; Harborough ring 6, Oxon. and Temple Guiting 8, Gloucs. (Tomalin 1983). At Puncknowle G6 the construction of a primary cairn for the specific housing of a bucket urn burial appears to be without clear precedence, although cairn material, perhaps of a similar nature, was observed by Charles Warne at the Deverel-Rimbury cemetery at Tarrant Launceston G19 (Warne 1866). At the Simons Ground cemetery a vestigial cairn-building practice seems to have survived in a desultory manner particularly at site B (White 1982, 21-2). At the Dummer urn cemetery in Hampshire, Dacre and Ellison (1982) have drawn attention to the presence of residual flint mounds which bear a resemblance to some of the minor mounds which were coalesced into the flint platform covering the Deverel-Rimbury burials at Kimpton.

In viewing this overlap between the barrow-building practice of the Early Bronze Age and the flat cemetery customs characteristic of much of the Later Bronze Age, we must be mindful of the general back-dating of the Deverel-Rimbury complex to a point generally contemporary with much of Wessex II (Barrett 1976; Burgess 1980). An attractive explanation of such parallel social and funerary traditions has been recently advanced by Bradley (1981) who has seen this phenomenon in terms of core and buffer societies. Under such conditions the cross-pollination of funerary ideas and ceramic traditions might perhaps be facilitated through the interaction of wife-givers and wife-takers in the manner proposed by Barrett (1980).

In dating these transitional ceramic forms present at Puncknowle we are afforded a few helpful absolute dates. Barrett (1976) has argued for emergence of Deverel-Rimbury ceramics during the 13th century bc. This would accommodate a reasonable overlay with the late radiocarbon dates from the Wessex graves at Hove, Earls Barton and Edmonsham (1239 ± 46 bc, BM-628; 1219 ± 51 bc and 1264 ± 64 bc BM-680 and 681; 1119 ± 45 bc, BM-708). At Enclosure 15 at Shaugh Moor, Dartmoor, the domestic assemblage of biconical urns showed evidence of the 'straightening' process towards bucket urn form around 1330 ± 80 bc, HAR-3358 (Tomalin 1982). At Gallibury Down, Isle of Wight (Tomalin forthcoming) the pots from cremation graves G and H demonstrate the contemporaneous use of food urns of forms 2A and 3 after 1430 ± 80 bc BM-2232). Pots IW4 and IW6 from these two burials bear a general resemblance, particularly in rim form, to our food urn D39 which may have been deposited in Puncknowle G3 around this time. The consensus of these dates would support the use of the Puncknowle G3 perhaps as early as the 15th century bc, followed by the construction and use of barrows G1, G2 and G6 perhaps in the 14th century bc but possibly as late as the early 13th century bc. This evidence disregards the notably earlier dates for Deverel-Rimbury ceramics from Bromfield (BIRM-64) and Kimpton (HAR-

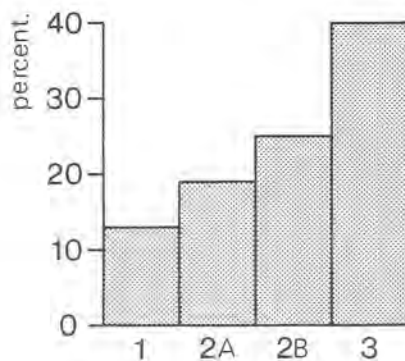


Figure 9. The incidence of forms in the total population of food urn pottery with B5 rims.

1316/4320) which at present require a greater body of corroborative absolute assays (Stanford 1982; Dacre and Ellison 1982).

The evidence for sea transport

Final comments must concern urn DB20 and the important implications of its association with the Quarr stone cairn-facing slabs at barrow G1. According to the excavation records these slabs must have averaged an estimated mass 12,000 cubic cm, and would have weighed on average about 6.3 kg each. Whilst no on-site measurements were made, an experiment since conducted with further Quarr stone samples suggests that the surviving slabs on the G1 cairn would have weighed around 254 kg. If this facing were restored to provide a complete cover for the damaged dome of the cairn, a total weight of half a tonne may be predicted.

Stone ballast slabs are a common accessory in primitive boats, particularly when stability is sought with a shallow draught (Rougé 1981). The Bronze Age log-boat from Brigg, which is dated at c. 650 bc could have carried a load ranging from 1 to 2 tonnes including a maximum crew of 28. McGrail (1977) has observed that such a boat would be difficult to manoeuvre in a confined space but would probably be manageable at sea when stabilised with a heavy load such as stone. The North Ferriby boat, depending on variations in its reconstruction, could have carried a crew and load ranging from 1½ to 4 tonnes (Coates 1977). Certainly either of these two Bronze Age boats could have transported all of the Quarr slabs with ease and it is worth reflecting that such a load may have served more as a standard accessory rather than a cargo. Such a load could only be effectively obtained from the coastal outcrop of Quarr stone lying between Ryde and Fishbourne on the north east coast of the Isle of Wight. With a supposed landfall on West Bexington beach the load would require manhandling for a distance of only 1.3 km to its resting place at the Knoll.

The implications of the Puncknowle slabs concerning Early Bronze Age boat design must be pursued elsewhere.

When considering the ceramic assemblage from this site these slabs are however a significant endorsement of that other evidence for contemporary British seafaring activities. Such evidence comprises the food urn ceramics found at Ploumudiern in Brittany, Haredot Plage in the Pas de Calais and Winterslow in Wiltshire (Briard 1981; ApSimon 1972; Tomalin 1983). The petrological evidence in these two latter cases has confirmed that such pottery could only have reached its current findspot through the aid of the type of boat transport which we have now come to recognise in the movement of the Puncknowle slabs.

APPENDIX 2: EXPLANATION OF THE TEMPER DIAGRAMS

In the temper diagrams shown in the pottery illustrations in this report two textural qualities have been quantified.

In the radial diagram the relative quantities of grog and other temper ingredients are shown. For ease of reference grog is always shown in solid shading on the left-hand side of the diagram. On the right side, temper ingredients other than grog are shown. The principal ingredients of this type are flint, quartz, stone, sand and shell. In this report no ingredients other than grog are indicated.

For the calculation of temper quantity Shvetsov charts have been employed whilst examining the sherds in polished section at X12 magnification. (For the Shvetsov method see Terry and Chillingar 1955.) Temper quality occurring at 20 per cent or more is indicated by shading extending to the median line.

For an indication of the particle size mode of grog and other inclusions the horizontal scale at the base of the diagram should be used. For ease of use the grog and non-grog inclusions are read from the outer ends inwards. The particle size mode represents the maximum common size of inclusions. For the purpose of illustration these mode sizes are rounded up to the nearest 0.25 mm and are expressed as quarter divisions within each 1 mm graduation on the scale. The scale accommodates a particle size mode up to 5 mm. In the rare event of a modal size exceeding the centre division, the size is still expressed as 5 mm. The true figures in this event will be given in the text.

These diagrams, devised in Tomalin 1983, are intended to provide a visual means by which nuances in temper preparation may be readily assimilated in any comparison between one pot and another.



Plate 5. Puncknowle the coastguard's lookout, or signal station on the Knoll, set on top of the barrow G3.

APPENDIX I

Food urn pottery of Forms 1, 2A, 2B and 3 in Dorset. (After corpus entries in Tomalin 1983: mature collared form omitted).

Ref.	Name of Site	Form	Reference
D 1	Dewlish G6	2A	Forde-Johnston, 1965, fig. 9
2	Dewlish G8?	2A	Forde-Johnston, 1965, fig. 10
3	Dewlish G6	1	Calkin, 1966, fig. 2.120
4	Dewlish G6	3	Calkin, 1966, fig. 2.123
5	Frampton G5 (crem. 1)	1	Forde-Johnston, 1958, fig. 6
6	Frampton G5 (burial 3)	3	Forde-Johnston, 1958, E
7	Frampton G5 (crem. 2)	3	Forde-Johnston, 1958, G
8	Frampton G5 (crem. 3?)	3?	Forde-Johnston, 1958, J (now modified)
9	Frampton G4 (pot 5)	3	Forde-Johnston, 1958, D
10	Bere Regis G4d	3?	DCM, 1965.1. Unpub.
11	Sydling St Nicholas (Hussey H)	3	DCM, 1932, 1932.10.1. Unpub.
12	Sydling St Nicholas (Hussey H)	3	DCM, 1932.10.3. Unpub.
13	Sydling St Nicholas (Hussey H)	3	DCM, 1932.10.2. Unpub.
14	Winterbourne Steepleton G19c	1	Atkinson <i>et al.</i> , 1951
15	Winterbourne Steepleton G19c	3	Atkinson <i>et al.</i> , 1951, fig. 4.10
16	Winterbourne Steepleton G19c	3	Atkinson <i>et al.</i> , 1951, fig. 4.1
17	Winterbourne Steepleton G19c	3/2A	Atkinson <i>et al.</i> , 1951, fig. 5.14
18	Sturminster Marshall	2A	BAP.II. 460
19	Tarrant Launceston G8	3	Piggott, 1944, fig. 4
20	Kingston Russell	3	Bailey <i>et al.</i> , 1980, p. 8
21	Dorchester G4	3 col.	DCM, Unpub.
22	Winterbourne St Martin G46	4	DCM, 1907.3.1. Unpub.?
23	Portesham G14 (Friar Waddon)	3/4	Calkin, 1966, fig. 4.109
24	Portesham (Friar Mayne/Waddon)	2A	Forde-Johnston 1965, fig. 7
25	Long Crichel	2B	DCM, 1962.8.7. Unpub.
26	Long Crichel	2A	DCM, 1962.8.4. Unpub.
27	Long Crichel	3	DCM, 1962.8.2b. Unpub.
28	Bincombe G60a	2B	BAP.I. 1
29	Bincombe G11 (no information)		Dorset Proc. 65, 48, pl. 9c
30	Bincombe G11	3	Dorset Proc. 65, 48, pl. 9d
31	Shapwick G6a (Badbury B)	3	Piggott, 1939, fig. 1.1
32	Shapwick G6a (Badbury B)	3	Piggott, 1939, fig. 1.2
33	Shapwick G6a (Badbury B)	?	Warne, pl. VII.3
34	Shapwick G6a (Badbury B)	3	Warne, pl. VII.4
35	Shapwick G6a (Badbury B)	4	Warne, pl. VII.2
36	Shapwick G6a (Badbury B)	3	Piggott, 1939, fig. 1.3
37	Winterbourne Came G8		Piggott, 1938, fig. 7
38	Long Crichel G7	3	Green, Lynch and White, 1982, fig. 7.4
39	Puncknowle G3	3	Forde-Johnston, 1958, fig. 16
40	Beaminster G1-2	2A	DCM, 1960.4.7. Unpub.
41	Hilton G2 (Melcombe-Bhm. 1)	2B	Forde-Johnston, 1965, fig. 13
42	Hilton G2 (Melcombe-Bhm. 2)	?	Forde-Johnston, 1965, fig. 14
43	Milborne St Andrew G16b/3	2A	Warne, pl. 4.12*
44	Arne G10 (Wareham)	2A	Forde-Johnston, 1965, fig. 6
45	Corfe Castle G22 (S. Afflington)	2A	Longworth, 1961, fig. 10
46	Weymouth G17a?	?	DCM, 1977.8.6. Unpub.
47	Winterbourne St Martin G5b	2B	Calkin, 1966, fig. 3.124
48	Hampreston G9 (Dudsbury)	2A	Forde-Johnston, 1965, fig. 2
49	Pamphill (Old Lawn)	2A	Cal. M19
50	Litton Cheney	2A	Catherall, 1976
51	Mount Pleasant, Domestic assemblage	2A and 2B	Longworth, 1979
52	Stratton (Grimstone 1)	2A	Forde-Johnston, 1958, fig. 10.1
53	Stratton (Grimstone 2)	?	Forde-Johnston, 1958, fig. 10.2
54	Stratton (Grimstone 3)	?	Forde-Johnston, 1958, fig. 10.3

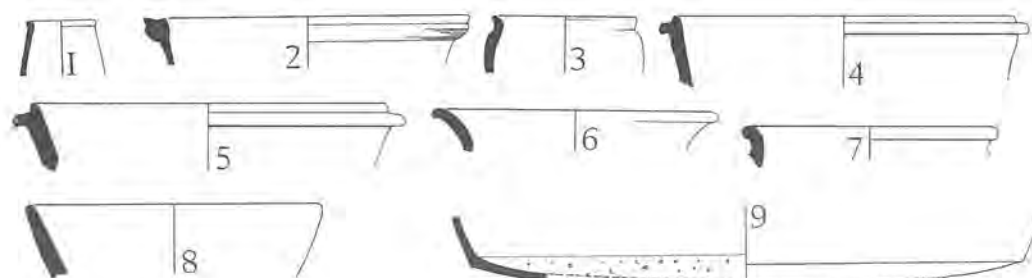


Figure 10. Puncknowle: the Roman pottery (nos 1-8) and the medieval vessel (no. 9), all at 1/4 life size.

THE ROMAN POTTERY (Figure 10) by Jo Draper

Sherds representing at least 13 vessels were recovered from the outer slopes of barrow G1. No. 1 is a New Forest colour coated beaker (another not illustrated, indented) c. 25 gm together. No. 2 a fine grey ware, possibly also from the New Forest, c. 15 gm. The rest (nos 3-8) are black burnished ware category 1: another not illustrated as nos 3, 4 and 5. No 8 is possibly a lid. Total weight BB1 300 gm. Not illustrated one tiny sherd of abraded samian (below).

Apart from the samian and possibly also the bead rim vessels as no. 3 which are probably 1st or 2nd century, the material dates from the 3rd or even the 4th century AD.

THE SAMIAN SHERD by Hedley Pengelly

Form 37, Central Gaulish. A small, badly eroded fragment with vestiges of moulded decoration. Antonine, to judge by the fabric.

THE MEDIEVAL VESSEL (Figure 10 No. 9) by Jo Draper

Sherds representing a small part of the base of a medieval cooking pot were recovered from the primary burial in barrow G2. Weighing c. 60 gm, the well-fired vessel has a brick red surface internally, with many inclusions showing on the surface; brown red and smoother externally with fire-blackening. The fabric varies from quite dark grey to buff, with many and varied inclusions up to 3 mm. It is not easy to fit the fabric into known types from Dorset, but the angle of the base suggests that it probably dates from the 13th or 14th centuries. Medieval disturbance of barrows in Dorset has been discussed by Grinsell (1959, 68-9).

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ABBREVIATIONS

- BAP = Abercromby 1912.
 DC = Annale and Simpson 1964 (Devizes Catalogue).
 DCM = Dorchester County Museum (accession).
 Cal. = Calkin 1964.

Wimborne Minster, Dorset – Excavations in the Town Centre 1983

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with contributions by Jennie Coy, June Johnstone, Laurence Keen, Jeany Poulsen and Elizabeth Watkins

SUMMARY

Small scale excavations were carried out on a redevelopment site in King Street, which lay to the south of the Minster, within the area of a suggested late Saxon ecclesiastical settlement. Though the material from the excavations indicated that the main period of occupation on the site began in the 12th century, a small amount of pottery dateable to the 10th or 11th century was found, as well as evidence for a substantial timber building predating the earliest demonstrably medieval layers. Activity and structures in the medieval period and later were concentrated on the northern part of the site, along the King Street frontage. The rest of the area explored was covered by a uniform layer of garden soil, with few features. Trenches dug close to the southern and western limits of the site showed no definite trace of medieval or earlier boundary ditches, which could have enclosed a Saxon or early medieval settlement.

INTRODUCTION

The area examined prior to the redevelopment in King Street is the sixth area in, or close to the town centre to be examined archaeologically since 1975. The site lies in the previously unexplored area to the south of the Minster, and its excavation completes a phase in the archaeological examination of Wimborne. Consequently, this report must be considered as an *addendum* to the earlier work, recently published as 'Wimborne Minster, Dorset – Excavations in the Town Centre 1975-80' (Woodward 1983). That report includes a full introduction to, and consideration of the town's origins and development from a documentary and historical point of view, as well as archaeological. Briefly to summarise however, a Saxon origin for the town is indicated by the documentary evidence for an ecclesiastical foundation earlier than AD 705, and a royal residence in AD 900. There is no conclusive evidence for the location of either feature, but it has been suggested that the focus of a Saxon settlement probably lay beneath, and to the south of the present Minster Church (Blair 1983). The suggested lines of a Saxon ecclesiastical precinct, and early medieval town both include a substantial area of land to the south of the Minster (Penn 1980). In addition the absence of either material or traces of occupation earlier than the 12th century in those parts of the town excavated between 1975 and 1980 increased the probability that if Saxon occupation was to be found in the town centre (and did not lie specifically beneath the Minster and its graveyard) it lay to the south of the Minster, possibly in the area at least partly occupied by the redevelopment site in King Street (Fig. 1). Archaeological examination of the site was therefore of considerable importance.

THE EXCAVATIONS

These took place in the three weeks up to November 5th 1983. The site covered an area of over 5,000 square metres, with a boundary along King Street to the north and Grammar School Lane to the east (Fig. 1). Both streets were probably medieval and Grammar School Lane may be the Chantry Lane to which the earliest reference is 1410 (Penn 1980). Documentary evidence shows that the site had until this century, been built up only along its street frontages; Hutchins' map of Wimborne (2nd edition 1774) shows gardens to the rear of houses along King Street and Grammar School Lane. It also shows the positions of the Priest's House and the School House, both at the south end of the Lane. The Free Grammar School dates back to 1562 (VCH, 2, 111-112) and the Priest's House may be earlier. The Ordnance Survey of 1887 shows little change, though clearly showing a yard and sheds along much of the King

Street frontage. In the 1920s Queen Elizabeth's Free Grammar School was rebuilt on the site, occupying most of the central area, which was found to be heavily disturbed by its foundations. The school and its playground occupied the site until their recent demolition.

With limited time and resources, it was impossible to investigate large areas of the site. Trench A was therefore opened up as the main area of excavation and extended southwards from the King Street frontage to the edge of the

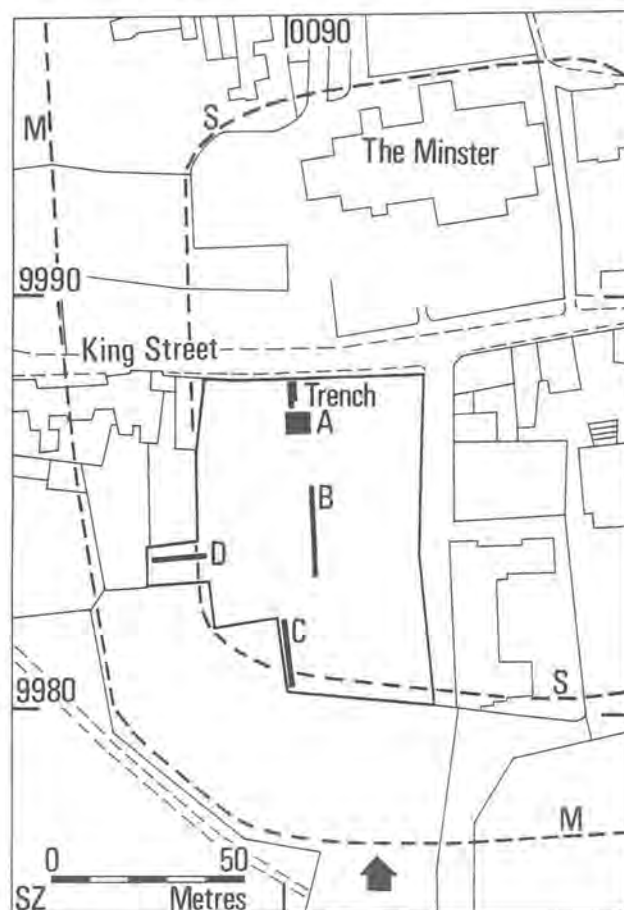


Figure 1. Wimborne (WKS 83) location plan. Showing excavation trenches A-D and the suggested early circuits; S, Saxon ecclesiastical circuit and M, early medieval town circuit (after Penn, 1980).

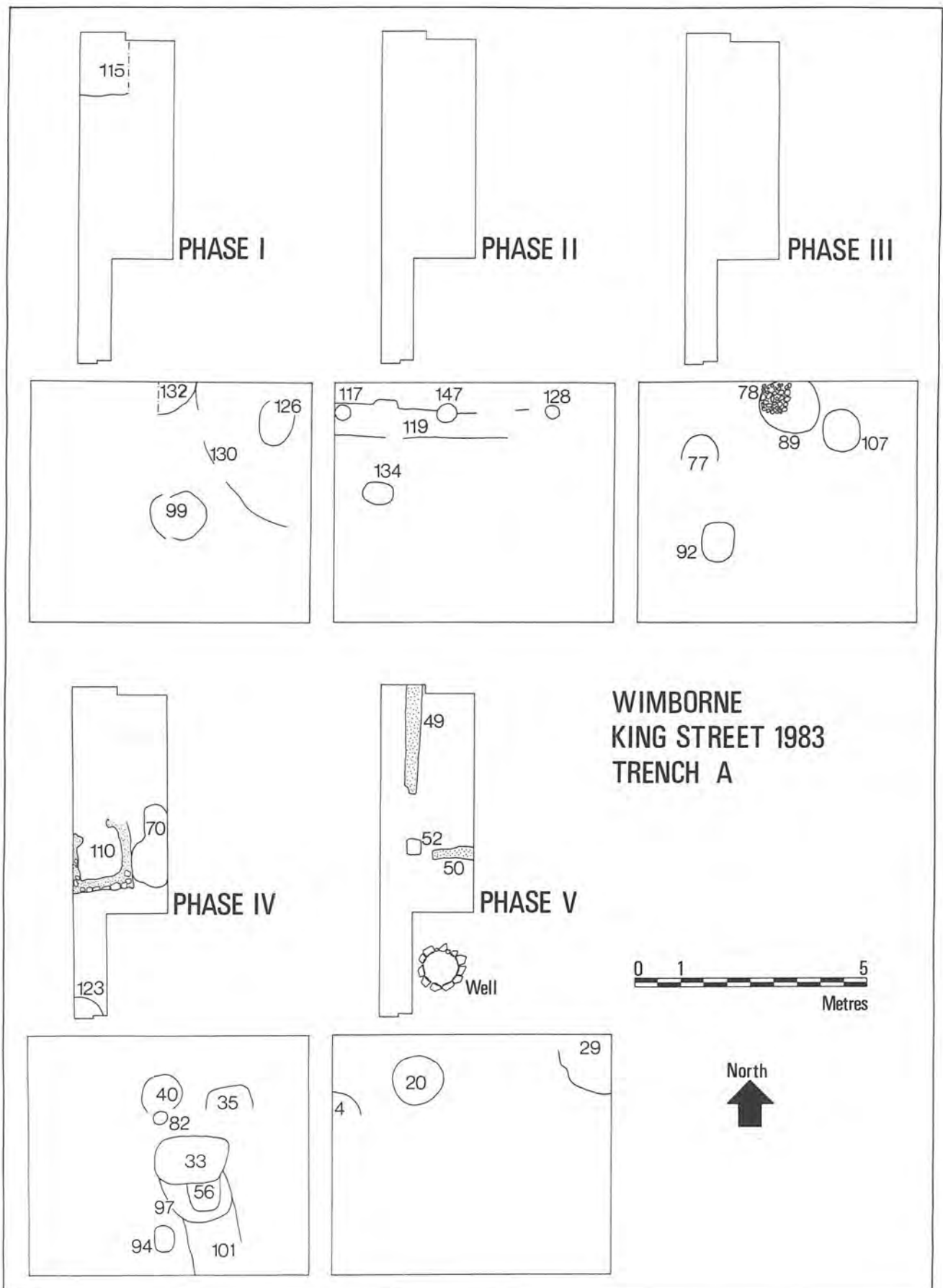


Figure 2. Wimborne (WKS 83). The sequence in Trench A.

area disturbed by the foundations of the school. Trenches B, C and D were trial strips excavated across the central part and up to the southern and western edges of the site, to establish the presence or absence of any medieval or earlier boundary features. The main sequence of occupation was found in Trench A, though nowhere was the stratification deeper than 0.50 m, and except in Trench A it comprised a fairly uniform layer of garden soil. The excavated sequence can be divided into six basic phases, shown in Fig. 2:

- (I) The old ground surface and early pits.
- (II) Early timber structures; ? pre-12th century.
- (III) Early medieval pits and post holes; 12th-14th century.
- (IV) Later medieval pits and layers; 15th-16th century.
- (V) The post-medieval building and pits; 17th-18th century.
- (VI) 19th century buildings and garden soils.

(i) The gravel terrace on which the site lay was generally level, with a slight fall towards the south-west between Trenches B and C. In Trench A, and the northern part of Trench B, it was capped with a thin band of yellow clay/loam. The earliest activity was found in the north of Trench A, where the clay/loam had been largely stripped off and a number of ill-defined, irregular pits dug, 132, 130, 115 and 126. Pit 132 had been entirely backfilled with the clay/loam whereas the others had a loose, weathered gravel infill. Pit 126, which cut into the fill of Pit 130, contained a large fragment of a Romano-British roof tile. A single deeper pit was found to the south of the others, Pit 99; this had a distinct, wedge-shaped base, and had been dug down to a layer of coarse flint nodules in the gravel. Four ox shoulder blades had been discarded into the base, and may have been used to dig the pit. The spines had been cut from them with a sharp metal blade. The upper part of this pit had been extensively disturbed by later pits.

Where undisturbed by pitting, there was a very blurred interface between the natural strata and the overlying soils. In Trench B this layer (layer 37) was sealed by the upcast gravel from one of the pits of Phase IV and contained medieval pottery, as well as pottery dateable to the 10th or 11th century.

(ii) The earliest structural feature was a deep, vertical sided slot, 119, c. 0.60 m deep (Plate 1). Almost certainly for a timber ground beam, it may indicate the presence of a substantial building. Four posts, 117, 147, 128 and 134 are later, three of them apparently forming a line replacing the beam slot. The only material found was charcoal, fragments of burnt clay/daub and animal bone. A small iron blade found in the fill of the slot, layer 118, is difficult to date conclusively (Fig. 7, no. 61).

These features, probably indicating two phases of timber structure, pre-date the first pits or layers containing medieval pottery. It is possible that the small group of pottery dateable to the 10th or 11th centuries (see below, *The Pottery*), which was found in the layers and features of Phases III and IV reflects the date of this early structure.

(iii) The dark loamy fills of two small rounded pits, 89 and 107, contained pottery dateable to the 12th or 13th century, and may have been earlier than the timber structure suggested by the post holes 77 and 92, and the stone base 78. These three features all made use of heathstone fragments which lined the bottoms of the post holes, and packed tightly together, formed the level, oval stone base 78. 78 included several fragments of white limestone. The surface showed no sign of burning and it was unlikely therefore to have been a hearth. The features of this phase were covered by layers of gravel and loam, raising the ground level in this part of the site by as much as 0.30 m; layers 63, 66, 62, 58, 57, 83 and 84. The pottery in these layers was 12th-14th century. This horizon seemed to divide the earlier medieval features from the later pits.

(iv) Most of the features of this phase contained pottery dateable to the 15th or 16th century. Two post holes were found, 82 and 94, both with a packing of flint nodules, and reflecting approximately the north-south line of the post holes of Phase III. A shallow gully 101, to the east, followed a similar alignment. The pits 97, 56, 33, 40, 35 and 123, varied in size and depth, but were filled with similar dark brown loams.

To the north of the pits lay an oven, 110 (Plate 2), cut down into the levelling layers of Phase III. This was three sided, open to the north, and its clay walls included at least one course of late medieval or early post-medieval roof tile fragments. The pottery from the infill of the oven, layer 61, and from the ashy fill 73, of the hollow 70, just to the north of it, was 16th century in date.

To the south, in Trenches B, and C, a number of features were

found which could fit into either Phase III or IV and were sealed only by the layers of dark soil which cover most of the site. In Trench B, pits 104, 105, 42 and 26 all contained medieval pottery. In Trench C, a large stone lined well, 136, was found, though it was not possible to excavate its fill. This had been constructed within a large conical pit 137, the backfilling of which, layers 135 and 44, contained 12th and 13th century pottery. In both trenches, the features were sealed by a dark, fine soil, layer 38, which in general contained medieval pottery though some later sherds were also found (Fig. 3, no. 30). This layer covered the whole of the site to a depth of c. 0.40 m except in Trench A, where a continuous sequence of pits seems to have prevented its development.

(v) The deep, square post hole 52, formed the south-east corner of a timber-framed building, probably fronting onto King Street. Remnants of clay wall bases, 49 and 50 were also found. Fragments of post-medieval pottery came from the levelling below the building, layer 60, as well as a piece of window glass, probably 18th century. To the south and perhaps contemporary with the building, were pits 29, 20 and 4. Pit 29 was a deep pit, not fully excavated, but its upper fill, layer 28, contained pottery, glass and clay pipes of the late 17th century. Pits 20 and 4 were shallow, circular and clay lined. Pit 4 seems to have replaced Pit 20 and both contained post-medieval pottery sherds. The fill of Pit 20, layer 19, and the overlying layer 18, contained a large number of cattle metapodials (see below *Animal Bones*). A stone-lined well was also found; c. 4 m deep it had been capped off and used as a drain in the 19th century, with a lead pipe leading into it. Though its upper part had been rebuilt in the post-medieval period incorporating brick, its lower part was built with large, rounded boulders of heath stone, and could be earlier.

(vi) Trench A was divided by a brick wall, which was probably the back wall of the yard along King Street shown on the 1887 OS map. North of it the area had been gravelled and partly surfaced with brick and flagstones; to the south was a thin band of black garden soil, sealing all earlier features. This black, 19th-century



Plate 1. Wimborne: beam slot 119, from the east. Scale 1 metre.

garden soil was found at the top of the sequence in all the trenches, and underlay the tarmac of the school playground.

DISCUSSION

The excavation produced no clear evidence of either the early Saxon monastic buildings of St Cuthburgh (c. 7th century), or the royal residence recorded at Wimborne in the 10th century. Nor was any trace found of the suggested town circuits of either Saxon or early medieval date (see Fig. 1), perhaps strengthening the case that unlike contemporary centres such as Christchurch and Wareham, Wimborne was without any defensive enclosure.

Nineteen sherds of pottery dateable to the 10th or 11th century were however found, being the first conclusive archaeological evidence of occupation in the town prior to the 12th century. Though the sherds were found in layers which also contained medieval pottery (12th-14th century), it is possible that they reflect the date of the two earliest periods of activity found in Trench A, which lay beneath the earliest layers containing medieval pottery. Phase I comprised pits, perhaps dug for gravel, and Phase II traces of a substantial timber building. Because only a limited area could be excavated, the overall plan and nature of this building is unknown and it cannot with any confidence be related to either of the documented features of the early settlement at Wimborne mentioned above. Indeed, it seems likely that it is only by large scale excavations in this part of Wimborne that the presence or absence of a pre-12th century settlement will be finally established. The potential scarcity of material remains from this period has however, been pointed out as a major problem in its archaeological identification, even in other important early towns such as Christchurch and Wareham (Woodward 1983, 65).

In general, the sequence excavated in Trench A is closely comparable with that from the Cornmarket excavation (CMT 78, Woodward 1983, 60), just to the north-west of the Minster. Though some evidence of early timber structures was found, the main period of occupation seems to have begun in the 12th century.

THE ARCHIVE

The archive for these excavations (WKS 83) has been combined with the archive for the earlier excavations, 1975-80, which now comprises a total of 11 files, deposited with all the finds, in Wimborne Museum. Micro-fiche copies of the excavation records and post-excavation archive have been deposited with the National Monuments Record; Dorset County Museum; and the Trust for Wessex Archaeology (Salisbury).

The archive consists of the following files:

- Files 1-8: Excavation and post-excavation archive for work 1975-80 (Woodward 1983, p. 59).
- File 9: Correspondence for all work between 1975 and 1983.
- File 10: The site record for WKS 83.
- File 11: The post-excavation archive for WKS 83. This includes a detailed stratigraphic analysis and matrix, and a detailed description of the finds, arranged by find's type and catalogued in context number order. The catalogue headings are arranged in the file as follows (the index numbers are continued from those used in Woodward 1983, p. 66).
- Index 25: Stratigraphic analysis and matrix.
- Index 26: Pottery catalogue and published report by J. Poulsen (figs 3 and 4).
- Index 27: Roof tile catalogue and notes; published note on medieval ridge tile by A. Graham (Fig. 5).
- Index 28: Floor tile catalogue; published note by L. J. Keen.
- Index 29: Glass catalogue and published note by J. Johnstone (Fig. 6).



Plate 2. Wimborne: late medieval oven 110, from the east. Scale 1 metre.

- Index 30: Metalwork catalogue; published note by A. Graham (Fig. 7).
 Index 31: Clay tobacco pipes catalogue and published note by E. Watkins (Fig. 8).
 Index 32: Worked bone object, catalogue and notes.
 Index 33: Building stone and clay/daub catalogue.
 Index 34: Animal bone catalogue. All identifications and specialist advice by Jennie Coy (except fish bones, which were identified by Dr Sarah Colley), the Faunal Remains Unit, Southampton. Published summary by A. Graham.

THE FINDS

THE POTTERY

Jeany Poulsen

There is no stratified Saxon pottery from this site but sherds of seven fabrics found in later levels (Fabrics A-G) are not comparable to medieval or post-medieval material from Wimborne or elsewhere in Dorset. One sherd (Fabric B) appears to be grass-tempered and the other fabrics and forms have general similarities to Saxon vessels from Hamwih (Hodges in Holdsworth 1980 40-57), Portchester (Cunliffe 1976, 128-9) and to the possibly 10th-11th century group from Shaftesbury (Keen 1977, 129-30). Fabrics A to G are represented by a few sherds: Fabric A is the most common.

The medieval and post-medieval pottery is generally consistent with that previously recorded from Wimborne (see Draper 1983, 66-69) and elsewhere in Dorset. Of particular interest is a c. 12th/13th century vessel with rouletted decoration (no. 29) which appears to be a local imitation of 11th century Winchester Ware (Biddle and Barclay 1975, 159, 162).

FABRIC DESCRIPTIONS

(i) **Possible Late Saxon.** (Vessels in Fabrics A-E have a somewhat uneven finish).

Fabric A. Fairly open, coarse, hard fabric, quite highly-fired. Frequent, well-sorted rounded and sub-angular quartz inclusions and vesicles giving a corky appearance. Occasional fine calcite and sparse, fine, grog inclusions. Grey core, margins brownish-grey to reddish-buff. External surface smoothed, giving a soapy feel, internal surface untouched with a fairly rough feel. (11 sherds, layers 22, 31, 37, 44, 66, 103, 105.) Fig. 3 – nos 1, 2 and 3.

Fabric B. Similar to Fabric A but much denser and with fewer inclusions *viz.* common, sub-angular, fairly well-sorted quartz inclusions; moderate well-sorted calcite inclusions; sparse sub-angular grog (dark red) inclusions; sparse, very fine, well-sorted mica flakes; moderate, well-sorted, elongated vesicles (length 2-3 mm), possibly the result of grass-tempering. Colour dark red-brown (1 sherd; Layer 88).

Fabric C. Hard, coarse fabric. Very abundant, very fine well-sorted, rounded quartz inclusions – so fine and numerous as to almost represent fabric rather than inclusion. Common, ill-assorted angular and sub-angular quartz (?) inclusions 1-2 mm long. Sparse, ill-assorted grog inclusions, size as former. Almost smooth feel. Colour pinkish-grey to black (3 sherds; Layers 38, 85, 88).

Fabric D. Thick, fairly hard, fairly dense fabric; very abundant, well-sorted, quite fine quartz inclusions, these mostly rounded, otherwise sub-angular. Feel fine-grainy. Colour dark grey (1 sherd; Layer 31).

Fabric E. As Fabric D but with sparse sub-angular grog inclusions and moderate, well-sorted, very fine calcite inclusions (1 sherd; Layer 63).

Fabric F. Fairly hard. Abundant, quite fine, well sorted, rounded and sub-angular quartz inclusions; sparse, ill-sorted fine calcite inclusions; sparse ill-assorted grog inclusions; sparse, well-sorted fine mica flakes. Feel: internal surface grainy, external surface feels smooth and slightly soapy due to crude burnishing. Colour dark grey to black. Appearance generally similar to the Roman BBI but the fabric is coarser and the form is not a Roman one. A similar fabric of Early to Middle Saxon date has been recorded at Portchester (Cunliffe 1976, 128-9, nos 8 and 12) (1 sherd; Layer 65).

Fabric G. Very similar to Fabric E but much coarser and with a higher percentage of inclusions. (Represented by 1 rim sherd; Layer 64.) Fig. 3 – no. 4.

(ii) Medieval Fabrics

Fabric H. Coarse, hard fabric; abundant rounded and sub-angular quartz inclusions; sparse, ill-sorted rounded and angular calcite inclusions. Rough feel due to pimply surfaces. Colour grey to dark

brown. One body sherd has an external, patchy khaki-green glaze. Due to the coarseness of this fabric it might appear to be restricted to an early medieval date. However, vessels in this fabric have been found in a well-dated group from Dorchester Prison (Draper and Chaplin 1982 46, Fig. 21, nos 120-126), demonstrating that these vessels remained in use possibly until c. 1300 (*ibid.* 49).

Fabric I. As Fabric H but less coarse; grey core, buff margins. Sometimes with crazed khaki-green glaze externally.

Fabric J. A hard coarseware but much finer than Fabric I. Abundant, well-sorted, sub-angular, quite fine quartz inclusions; common, well-sorted, very fine mica flakes. Feel: fine-grainy. Grey core with buff-grey margins.

Fabric K. Fairly hard fabric; abundant fine to coarse (2 mm wide) sub-angular and rounded calcite inclusions. Very fine abundant well-sorted, rounded quartz inclusions; very fine well-sorted mica flakes (1 sherd only; Layer 66).

Fabric L. Very fine hard fabric; inclusions: sparse rounded fine quartz; very abundant very fine mica flakes; frequent ill-assorted rounded dark grey inclusions (fine to 1 mm wide). Feel: smooth, slightly powdery. Colour: creamy buff. Probably an import (1 sherd only; Layer 60).

(iii) Later Medieval and Early Post-Medieval Fabrics

Fabric M. Hard fabric, relatively fine for a coarseware. Inclusions; abundant well-sorted fine rounded quartz; common well-sorted very fine mica flakes; sparse well-sorted very fine rounded calcite. Feel: fine-grainy, almost smooth. Colour: pinky-buff through to light grey. Similar to Fabric J but finer and more cleanly finished.

Fabric N. As Fabric M but slightly harder and finer. Colour: creamy-buff.

Fabric O. As Fabric M but much denser and harder, with finer inclusions. Feel: almost smooth. Colour: grey core with reddish-pink margins.

Fabric P. Very hard quite dense fabric. Inclusions: sparse ill-assorted angular and rounded calcite, some vesicles; sparse ill-assorted sub-angular quartz. Smooth feel. Colour: uniform dark grey, though surfaces are darker grey, possibly due to smoothing? Uncertain date (1 sherd only; Layer 36).

Fabric Q. 'Tudor Green': very fine, hard and dense. Colour: creamy-buff with distinctive rich green glaze internally, same externally but in patches (2 sherds only; Layer 38, Fig. 3, No. 30 and Layer 96).

(iv) Post-Medieval Fabrics

Fabric R. Fairly hard quite dense fabric. Occasional fine quartz inclusions; occasional sub-angular fairly coarse (1 mm wide) red, presumably grog inclusions. Smooth feel. Colour: fawny-pink.

Fabric S. As Fabric R but harder and denser; vessels well-fired and well-finished. Pink core with grey-buff margins.

Fabric T. Similar to Fabric S but much finer and including occasional very fine mica flakes.

CATALOGUE OF DIAGNOSTIC SHERDS

Late Saxon Pottery (Fig. 3, Nos 1-4), medieval pottery (Fig. 3, Nos 5-38), post-medieval pottery (Fig. 4, Nos 39-58).

Late Saxon pottery, found in later contexts.

1. Everted rim cookpot. Fabric A. A closely similar form has been recorded from Shaftesbury with a possible date of 10th-early 11th century (Keen 1977, 129, Fig. 34, No. 7). Layer 37.

2. Everted rim cookpot. Fabric A. For a similar form see Hodges 1980, (Fig. 10, No. 14.) Layer 105.

3. Everted rim cookpot. Fabric A. Layer 6.

4. Everted rim, very crude vessel. Fabric G. Layer 64.

Not illustrated: slightly angled sherds from two vessels suggesting gently sagging bases, Fabric A. Layers 31 and 66.

Phase I, Weathered clay-loam sub-soil.

5. Body sherd with fragment of a possibly tubular spout. Body decorated with very shallow vertical grooves. Fabric I. 12th/13th century (see Draper and Chaplin 1982 84, Fig. 35, No. 68). Layer 37.

Phase III 12th-13th Century

Pit 107

6. Dimpled, everted rim of cookpot. Fabric H. Layer 95.

7. Cookpot rim. Fabric I. 12th-13th century. Layer 102.

Pit 89

8. Hammer-headed bowl. Fabric I. 12th-13th century. See Draper in Woodward 1983 (Fig. 4, No. 19 for similar form). Layer 88.

Levelling Layers

9. Body sherd with incised linear decoration under a patchy,

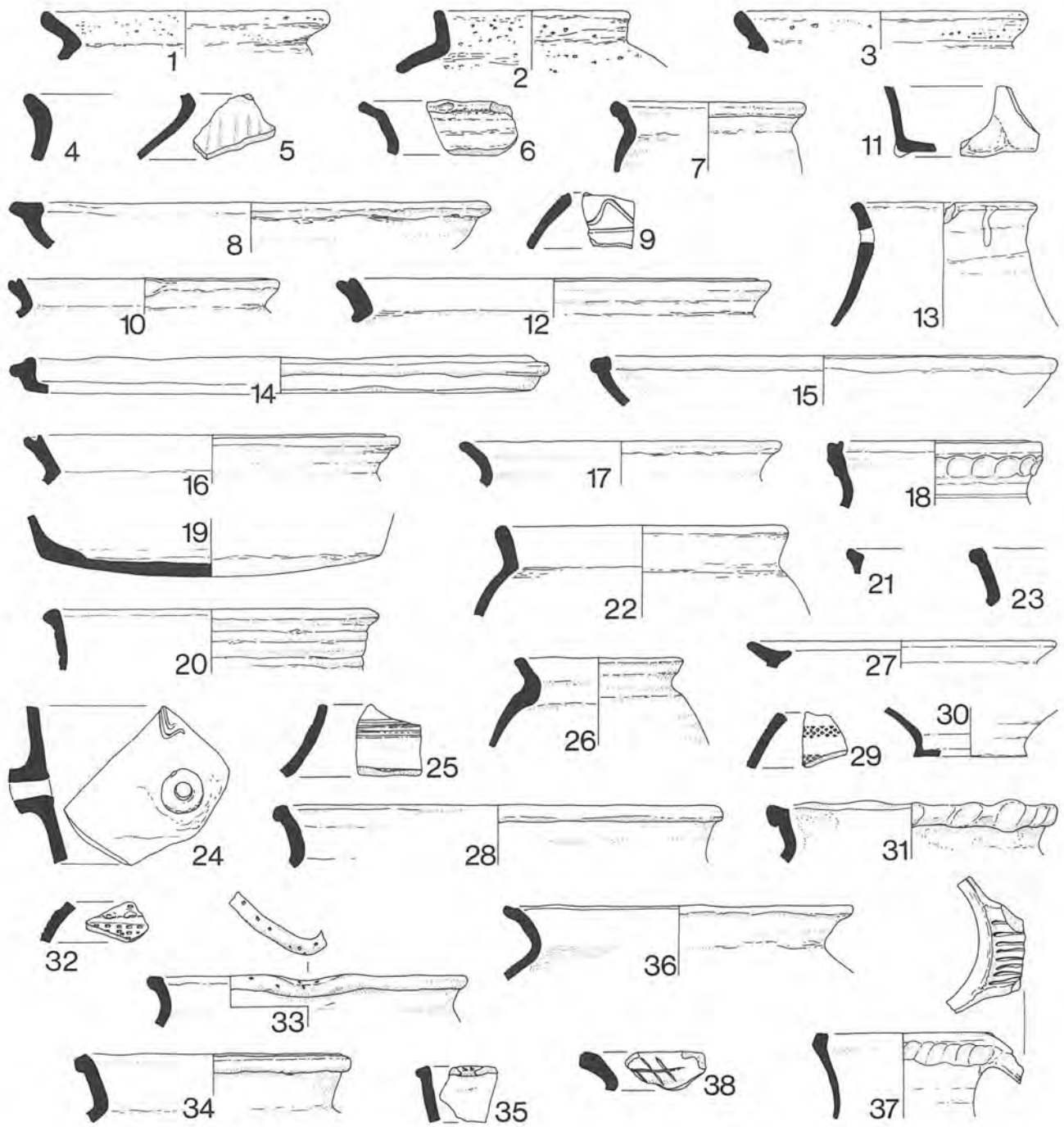


Figure 3. Medieval pottery (1-38). Scale 1/4.

- khaki-green glaze. Fabric M. Probably a jug, 13th-14th century. Layer 57.
10. Bifurcated rim of cookpot with the beginnings of a lip. Form as Draper in Woodward 1983, Fig. 4, No. 24. Fabric I. This vessel is difficult to date but the fabric suggests 12th-13th century. Layer 58.
11. Base with pinched foot, probably a jug but if so it is unusually coarse. Fabric I. Probably 12th-13th century. For a similar form see Cunliffe 1975, 163-4, No. 213. Layer 63.
12. Bifurcated rim of cookpot as No. 10 but with a patchy, thin, 'dry'-looking khaki-green glaze internally. Fabric H. 12th-13th century. Layer 66.
13. Jug rim with hole pierced in neck. Red-brown vertical stripes painted at irregular intervals on external surface from edge of rim. These are under patches of khaki-green glaze on external surface. Fabric I. 13th-13th century. Layer 66.
14. Rim of hammerhead bowl, similar to No. 8 but with patches of khaki-green glaze internally. Fabric I. 12th-13th century. Form similar to Draper in Woodward 1983 (Fig. 4, No. 20). Layer 66.
15. Rim of hammerhead bowl, similar to No. 8 but probably oval in plan. Fabric I. 12th-13th century. Layer 66.
16. Bifurcated rim of cookpot. Similar to Nos 10 and 12. Fabric J. 12th-13th century. Layer 66.
17. Cookpot rim. Fabric J. 13th century. Layer 83.

Phase IV 15th-16th Century

Pit 33

18. Jug rim with applied thumb-impressed strip. Cream painted horizontal stripes on neck under patches of khaki-green glaze with spots of brighter green due to copper additions. Fabric M. A closely similar vessel has been recorded at Christchurch in an early to mid-16th century group which includes continental imports (Jarvis 1983, 62, Fig. 22, No. 88) also at Dorchester (Draper and Chaplin 1982, 86, Fig. 36, No. 126). Probably c. 1500, possibly earlier. Layer 17.
19. Base with a rather flaky khaki-green glaze with spots of dark red-brown due to iron inclusions in the body and of bright green due to the addition of copper filings; splodges of same glaze on external surfaces. The thinness of the wall suggests a squat vessel, possibly a jar or cookpot such as one found at Dorchester Prison in 1970 (Draper and Chaplin 1982, 50, Fig. 23, 153). Fabric M. 15th-16th century. Layer 21.

Pit 40

20. Rim of bowl. Fabric N. 15th-16th century. Layer 39.

Pit 56

21. Rim of a small bowl. Fabric M. 15th-16th century. Layer 54.

Pit 97

22. Cookpot rim. Fabric J. 15th-16th century. Layer 64.
23. Jar rim. Fabric H. 12th-13th century. Layer 85.

Fill of Oven 110

24. Spout of bung-hole pitcher. Combed decoration on body under external thin khaki-green glaze with spots of brighter green due to the addition of copper filings. Fabric M. (For similar form see Fennelly 1969, 103, Fig. 37, No. 1.) 15th-16th century. Layer 61.
25. Body sherd with horizontal combed decoration under a patchy glaze as No. 24. Fabric M, perhaps a little fine for an early date or for a tripod pitcher, probably therefore a jug or bottle of 13th-14th century date. Layer 61.

Pit 104

26. Rim of small baggy-bottomed cookpot. Fabric I (See Draper and Chaplin 1982, 46, Fig. 21, No. 123). Layer 43.

Pit 42

27. Bowl rim with wide flange. Fabric P. Layer 36.

Garden soil, layer 38.

28. Rim of cookpot. Fabric H. 12th-13th century.
29. Body sherd with band of diamond-latticed rouletting. Fabric I. Such decoration has not been seen in this area, though examples from imported jugs in much finer fabrics have been recorded at Southampton (Platt and Coleman-Smith 1975, 124, 127, Fig. 176, No. 876). Exeter (Dunning and Fox 1951, 180-87, Plate 27b) and Pevensey (Dunning 1958, 211, Fig. 2.1). The Wimborne example is probably in imitation of the 11th century Winchester Ware (Biddle and Barclay 1975, 159, Fig. 5, Nos 22-23, 162, Fig. 8, Nos 56 and 57); however the style of vessel and fabric are different. Probably 12th-13th century. Sherds apparently from the same vessel occur in Layer 44 and Layer 135.
30. 'Tudor Green'? cup. Base, Fabric Q. rich green glaze internally, externally patches of same. For a similar form see Matthews and Green 1969, 15, Nos 37 and 38. Close dating is difficult: probably 15th-16th century.

Backfill of Well Construction Pit 137

31. 'Pie-crust' rim from cookpot, Fabric H. As No. 6. Layer 44.
32. Body sherd with a stabbed combed decoration under a thin and patchy khaki-green glaze externally. Fabric I. Probably a tripod pitcher. 12th-13th century. Layer 44.
33. Jug rim with stabbed decoration on top of rim. Fabric I. 12th-13th century. Layer 44.
34. Rim of large cookpot. Fabric I. 12th-13th century (See Draper and Chaplin 1982, 46, Fig. 21, No. 123 for similar form). Layer 44.
35. Cookpot rim with possibly accidental fingernail? impressions in top of rim. Fabric J. 13th-14th century. Layer 44.
36. Everted rim of cookpot. Fabric I. 12th-13th century. Layer 135.

Post hole 82

37. Jug, slashed handle. Fabric O. 16th century. Layer 81.

Phase V 17th-18th Century

Building 53

38. Pie-crust rim of cookpot with what is probably the potter's incised batch mark. Fabric H. As No. 6 above. 12th-13th century. Layer 71 (Residual in this context).

Pit 20

- Not illustrated. Handle of large jug, thick khaki-green glaze. Fabric O. 16th century. Layer 18.

Pit 29, Layer 28

39. Base of jug. Fabric R. Patchy, flaky khaki glaze on external surfaces, which are badly pitted.
40. Jug base. Fabric S. Khaki-green glaze internally and a few patches externally.
41. Rim of large bowl. Fabric S. External and internal khaki-green glaze.
42. Rim and wall of plain bowl. Fabric S. Internal yellow-brown glaze.
43. Rim of bowl. Fabric S. Internal yellow-brown glaze.
44. Rim of large jug. Fabric S. Khaki-green internal glaze.
45. Rim and handle of large jug. Fabric S. Unglazed.
46. Rim and handle of jug. Fabric S. Internal and external khaki-green glaze.
47. Lid-seated jar rim, very highly fired. Fabric S. Internal surface has a slightly glossy metallic appearance.
48. Rim of ?bowl. Fabric S. Thin internal glaze, very highly fired.
49. Lid-seated jar. Fabric S. Partial internal khaki-green glaze.
50. Lid. Fabric S. Surfaces have a slightly glossy almost metallic appearance.
51. Flask handle. Fabric S. External khaki-green glaze.
52. Base. Fabric S. A few spots of khaki-green glaze underneath.
53. Rim of small jar. Fabric S. Khaki-green glaze internally and externally.
54. Rim of bowl. Fabric S. Partial yellow-brown glaze on internal and external surfaces.
55. Rim of bowl. Fabric S. Internal yellow-brown glaze.
56. Rim of bowl. Fabric S. Internal yellow-brown glaze. External incised linear decoration.
57. Jug. Fabric T. Brown, slightly patchy iron glaze externally; internally on rim and neck only.
58. Mug base. Fabric T. Mottled brown iron glaze internally and externally.

Not illustrated: Rim of jar. Fabric S. Khaki-green glaze internally and externally. Body sherd from German stoneware Bellarmine jug. 17th century. Foot. Fabric R. internal surface has thick yellow-brown glaze. Jug base. Fabric S. A few spots of yellow-brown glaze externally. Base. Fabric S. Khaki-green glaze internally, a few spots externally. Fragment of colander. Fabric S. Internal yellow-brown glaze.

The coarsewares in this group are probably local; finewares are represented by the iron-glazed vessels and the German stoneware jug. There are no Staffordshire slipwares present which suggests a pre-1680 date for the group; this is corroborated by the clay pipes, which date from the mid to slightly later 17th century (Fig. 8, nos 62-66) and a single glass bottle (Fig. 6, no. 60), dated to c. 1670.

I thank Jo Draper for her help in the preparation of this report.

THE ROOF TILE

Two fragments of Romano-British roof tile were found in Trench A, in layers belonging to Phases I and II, pre-dating the earliest layers containing medieval pottery.

Layer 129, pit 126; large fragment of a *tegula*.

Layer 86; fragment of an *imbrex*, apparently cut into a tessera c. 25 mm by 18 mm.

Two other possible *imbrex* fragments were found in Layers 36 and 44, Phase IV.

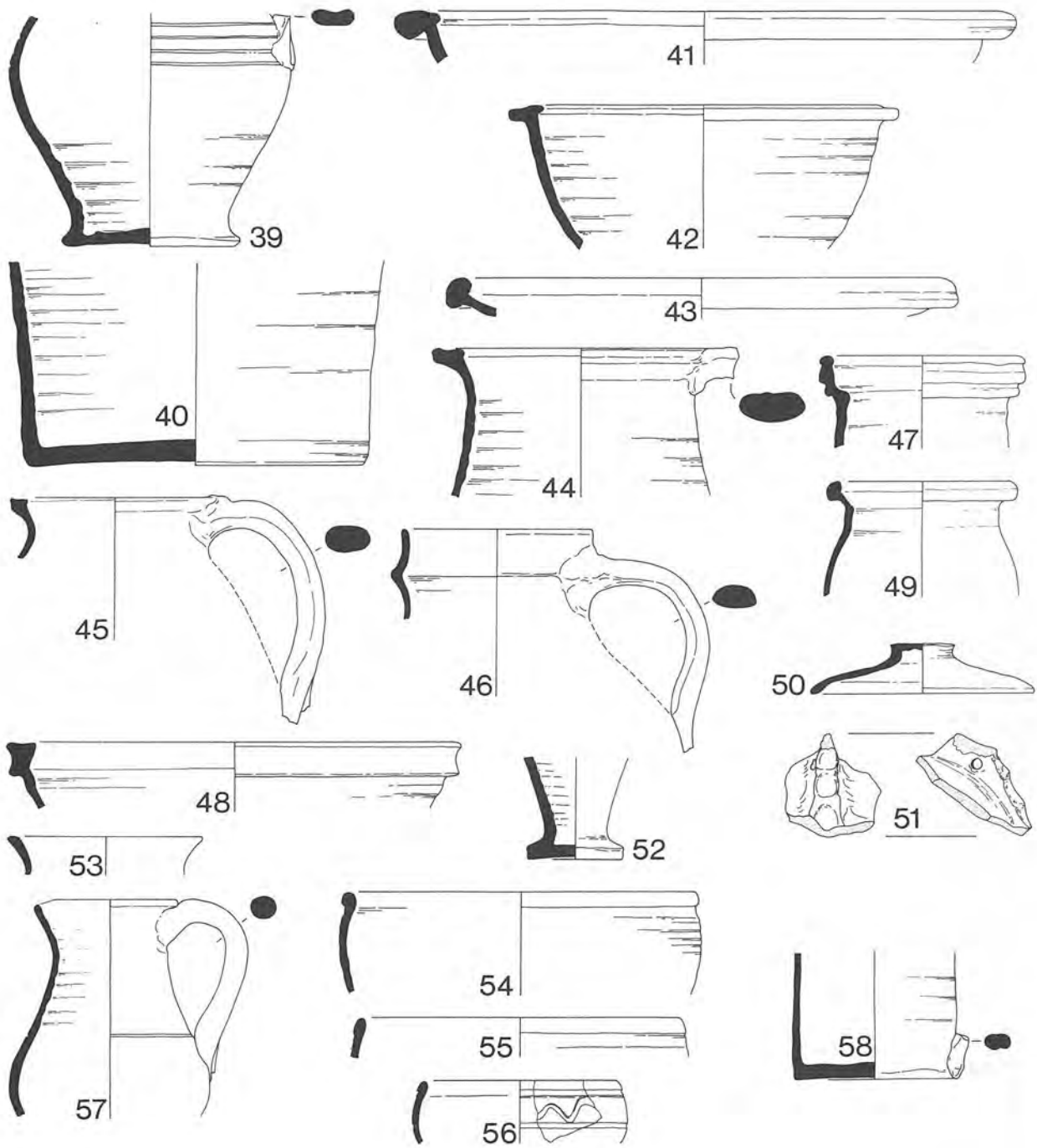


Figure 4. Post-medieval pottery (39-58). Scale 1/4.

Apart from pieces of a single medieval ridge tile, described below, only fragments of small peg tiles were found, the earliest being in the pits of Phase IV, dateable to the 15th or 16th century, and built into Oven 110. No. 59 (Fig. 5): The medieval ridge tile. Coarse gritted fabric with rounded quartz and quartzite grits up to 1 mm (comparable to Fabric A, in Woodward 1983, 69). Discontinuous brown glaze, with angular, knife-cut crests. Layer 38, Phase IV.

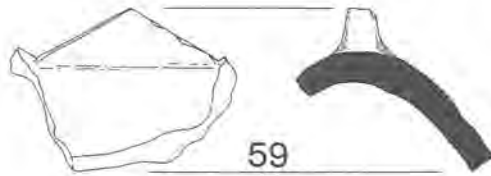


Figure 5. Medieval ridge tile (59). Scale 1/4.

THE FLOOR TILES

The note on the inlaid medieval floor tiles was provided by Laurence Keen. All the tiles came from layers in Phase IV.

Four fragments, all unfortunately too fragmentary to enable precise identification to be made. Three (from Layers 17, 67 and 69) have traces of scoops on the back surface which would be consistent with a late 13th or early 14th century date, but are without signs of decoration; in two cases the top surfaces are worn down into the body of the tile. One piece (from Layer 61) has part of one scoop on the back and the surface has part of an inlaid animal or bird, but the surface is too worn for the design to be paralleled. The arrangement of the legs, however, suggests that the animal or bird is facing right. If this is so, no other medieval tile in Dorset or in the immediate area has exactly the same design.

The extreme fragmentary state of this small group suggests that the tiles derive from another location and did not come from a building on the site of the excavation.

THE GLASS

June Johnstone

Many fragments of 19th century glass were found in the latest layers on the site, Phase VI. The following pieces come from the earlier layers, Phases IV and V.

Phase IV, Layer 83; thick greenish-blue flat fragment, with small pin-prick size air bubbles and some tiny inclusions. This could be from a flat sided bottle of the Roman period.

60. (Fig. 6): Phase V, Layer 28, Pit 29; Neck and lip of a bottle, with wide, flanged string rim; green glass c. 1670 (County Museum, Truro, 1974, p. 13, No. 2; Wills 1977, p. 17, bottom right).

Phase V, Layer 60; Medium to thick, greenish-blue, flat fragment with rounded and polished edge. This could be from a 'crown' glass window or clear pane. 18th century.



Figure 6. Glass bottle (60). Scale 1/2.

THE METALWORK

A complete catalogue of the metal objects from the excavation is to be found in the Archive, Index 30. Most of the iron objects were nails or fragments found in the layers of all phases from III to VI. A single iron object, probably a blade, was found in Phase II in the

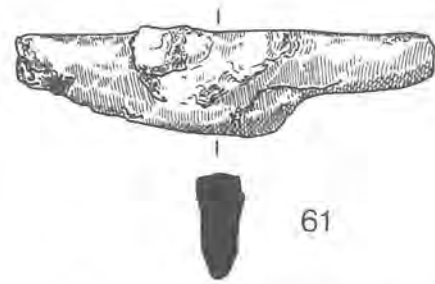


Figure 7. Iron blade (61). Scale 1/1.

infill of the beam slot 119; this is described below. Bronze objects were mainly dress-makers' pins, which were numerous in Phases V and VI.

61. (Fig. 7); Iron blade; small tanged blade, overall length c. 55 mm, with a triangular blade section. From its context, late Saxon or early medieval.

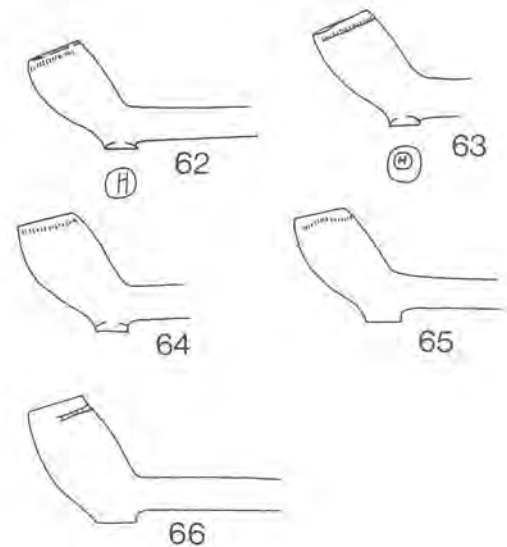


Figure 8. Clay tobacco pipes (62-66). Scale 1/2.

THE CLAY TOBACCO PIPES

Elizabeth Watkins

A group of clay pipes was found in the fill (Layer 28) of Pit 29, together with the group of pottery shown in Fig. 4, Nos 39-58. Both pottery and pipes belong to the mid to later 17th century, as does a single glass bottle (Fig. 6, No. 60) dated to c. 1670.

Five pipes of mid to late 17th century type and size (Fig. 8, Nos 62-66); all have large circular bases and a line of milling around the rims. The clay is smooth and greyish white, and except for 63, show signs of much use.

62. Pipe with a smallish bowl and a clear line of milling around the rim; the base has a possible mark, H, on it; the stem bore is 7/64 in., date c. 1640-60.

63. Pipe with smallish bowl, smooth and regular around the rim (might not have been smoked) and the base has a clear H in relief on it. The stem bore is 8/64 in., date c. 1650-60. Many pipes with a single H mark have been found in Poole and some in Blandford and Wimborne, although the maker's name is not known (Cooksey, 1980, p. 347).

64. Pipe with a larger bowl, unmarked, stem bore 8/64 in., date c. 1650-60.

65. Pipe with a more forward-leaning bowl, the milling less carefully applied around the rim, unmarked, stem bore 7/64 in., date c. 1660-80.

66. Pipe with a larger, more upright bowl, with a faint line of milling around the rim, unmarked, stem bore 7/64 in., date c. 1660-80.

THE ANIMAL BONE

Identifications and specialist advice by Jennie Coy of the Faunal Remains Unit, Southampton.

The animal bone from all contexts was generally consistent with food refuse, a proportion of the bone showing signs of chopping or other butchery. A full catalogue with notes and measurements (where possible) can be found in the Archive, Index 34.

Summary of species present, by phase.

Phase I. Cattle, four scapulae, from which the spines had been removed with a sharp blade. Sheep/goat.

Phase II. Cattle, red deer, *Cervus elaphus*; metacarpus, distal end unfused, deliberately split lengthways.

Phase III. Cattle, including a metacarpus with a splayed end, probably from a working animal (pers. comm. J. Coy). Sheep. Sheep/goat. Pig. Domestic fowl.

Phase IV. Cattle and calf. Sheep. Sheep/goat. Goat. Pig. Domestic fowl. Domestic goose. Cat. Two species of wildfowl were also present; Coot, *Fulica atra*. Teal, *Anas crecca*. Also Curlew, *Numenius arquata*. Pigeon. Fish bones found were; Spurdog *Squalus acanthias*; the dorsal spine of a large fish. Cod, *Gadus morhua*; the left articular of a fish c. 910 mm long. Garfish, *Belone belone*; the premaxilla of a fish c. 600 mm long (Identifications by Dr Sarah Colley).

Phase V. Cattle and calf. Sheep. Goat. Sheep/goat. Pig. Mallard, *Anas platyrhynchos*. Also from Phase V was a large group of cattle metapodials, all broken in half, perhaps for the extraction of the marrow.

Acknowledgements

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Drawings for publication are by the author, except the clay tobacco pipes by Elizabeth Watkins. Peter Cox of the Trust for Wessex Archaeology printed the photographic plates for publication.

The report was typed by Janet Wheal and Susan Graham.

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CORRIGENDA

'Wimborne Minster, Dorset – Excavations in the Town Centre 1975-85' Peter J. Woodward, *Dorset Proceedings*, Vol. 105, 1983, pp 57-74. The author regrets that on Figure 8, p. 72, the clay pipes, four numbers are wrong. No. 60 is no. 61 in the text, no. 61 is no. 62, no. 62 is no. 63 and no. 63 is no. 60.

An Annotated Section of the Purbeck Limestone Formation at Worbarrow Tout, Dorset

P. C. ENSOM

ABSTRACT

A section through the Purbeck Limestone Formation at Worbarrow Tout is presented. Comparison is made with the work of other researchers.

INTRODUCTION

Research into the footprint faunas in the Purbeck Limestone Formation led to a number of discoveries of both footprints and other features in the section on the west side of Worbarrow Tout (NGR SY 869 796), near West Lulworth, Dorset. Unlike Durlston Bay where Clements' (1969) section can be used when recording such occurrences, Worbarrow Tout lacks an up-to-date published section. Ensom (1984c) alluded to this problem and reported that a section of these strata was being prepared.

PREVIOUS WORK

The earliest section of the Purbeck Limestone Formation of Worbarrow Tout was that of Bristow (1857). This has proved impracticable to use for recording purposes. Woodward (1895) briefly refers to Worbarrow Bay. Strahan (1898, p. 99) described the sequence from the Unio Beds to the Wealden. West (1975) published a detailed section up to the Broken Beds in a paper dealing with evaporites in the basal Purbeck Formation and has an unpublished draft section of the whole sequence at Worbarrow Tout. El-Shahat (1977) in his PhD thesis describes and figures sections from the Marly Freshwater Member to the Chief Beef Member (his definitions). Ali (1981) in his PhD thesis presents a section through the Soft Cockle Member. Other researchers have recorded parts of the section to suit their own particular needs. However, without a published section to which published information may be tied, much of the value of the data is lost.

THIS SECTION

The section presented here is the result of field work carried out during 1983 and 1984. Exposure at this time was generally good, though the Upper 'Cypris' Clays and Shales Member was poorly exposed. In addition access to part of the Marly Freshwater Member was not possible and the section lacks detail at that point. The section has been drawn in a similar style to that of Clements (1969), showing an idealised weathered profile as seen on the cliff. The scale is the same as that used by Clements to enable comparisons to be made between the sections at Durlston Bay and Worbarrow Tout. The beds have been numbered in a sequence from WB 1-209. These bed numbers do not correspond with those of Clements' (1969) section of Durlston Bay or with those of West (1975) and El-Shahat (1977) for Worbarrow Tout. A correlation with these latter two sections is given in Table 1. Correlation of Bristow's (1857) section with the one produced here has proved impossible.

Following the lead of El-Shahat and West (1983) the traditional lithological subdivisions have been called members. The positioning of the boundaries between members has been far from simple. Reference to the strata in Durlston Bay is not especially helpful as the Purbeck Limestone Formation thins between these two localities, and while individual beds are laterally persistent (El-Shahat and West 1983) there is at other times considerable lateral

variation. I have not attempted to use Bristow's (1857) section to fix the members' positions for the reason given above. Inevitably discrepancies occur between Bristow's thicknesses given in Woodward (1895) and those in this section. For completeness these and the total thickness of the Purbeck Limestone Formation are given in Table 2.

The Members are based on distinctive aspects of the strata listed below. In several instances I have been unable to place a boundary and no division has been made, e.g., that between the Chief Beef and Broken Shell Limestone Members. In other cases the position is only tentative and indicated by a ?, e.g., that between the Broken Shell Limestone Member and Unio Member.

The members are defined as follows:

1. 'Caps, Broken Beds and Dirt Beds' (WB 1-12).

Base tentatively placed at the base of the lowest stromatolitic limestone. Above this are more stromatolitic limestones, oölites, calcitised evaporites with chert and minor shales. Much of this sequence has been brecciated. The top of this unit is taken as the upper limit of brecciation of the overlying 'Cypris' Freestone Member.

2. 'Cypris' Freestone and Hard Cockle Members (WB 13-40).

A sequence of massive and flaggy limestones. Often cross-bedded and ripple marked, with some shales. Sandy at times in upper part. No internal division is recognised. The top of the Hard Cockle Member is taken as the upper limit of the massive to flaggy and occasionally sandy limestones.

3. Soft Cockle Member (WB 41-85).

A sequence of thin limestones, micrites, argillaceous micrites, shales and clays. Replaced evaporites are common in the lower part where the main mass of gypsum is also present. I have drawn the upper boundary above the uppermost hard micrite with pseudomorphs after halite.

4. Marly Freshwater Member (WB 86-99).

A sequence of calcareous clays and shales with minor limestones and micrites. The top of this bed is taken as a thin brown clay/shale immediately below the first major development of chert above the Soft Cockle Member.

5. Cherty Freshwater Member (WB 100-118).

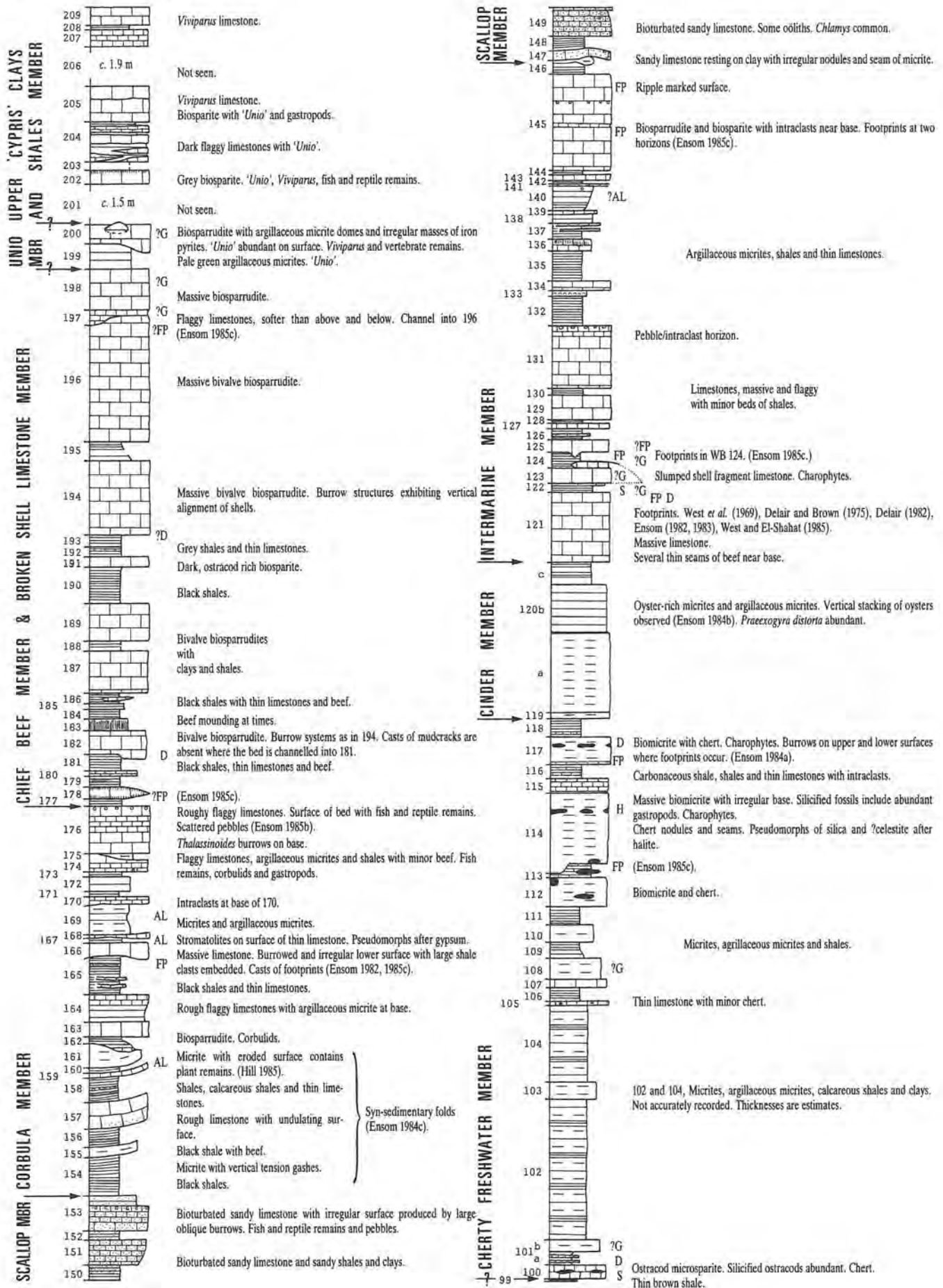
A sequence of thin limestones, micrites, argillaceous micrites, calcareous shales and clays. The appearance of Chert in WB 100 defines the base of this member. Chert becomes more common in upper third of member in massive micrites. The top of this member is drawn immediately below the oyster rich micrites of the Cinder Member.

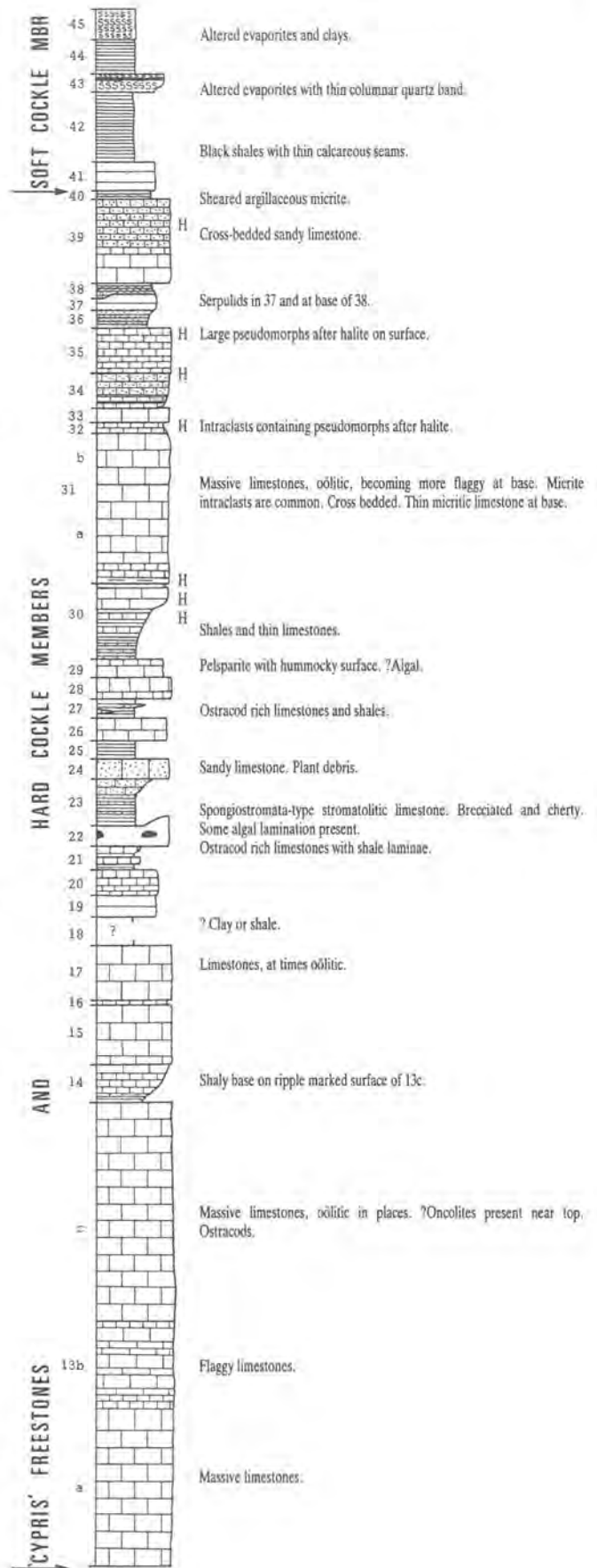
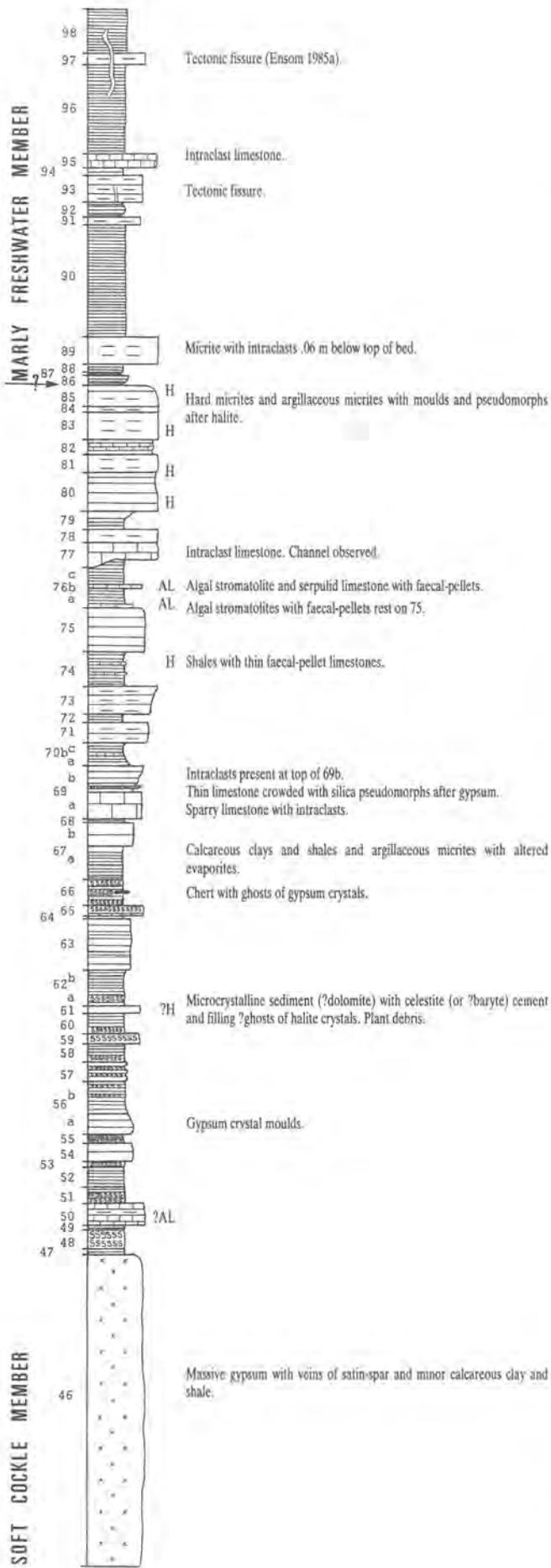
6. Cinder Member (WB 119-120).

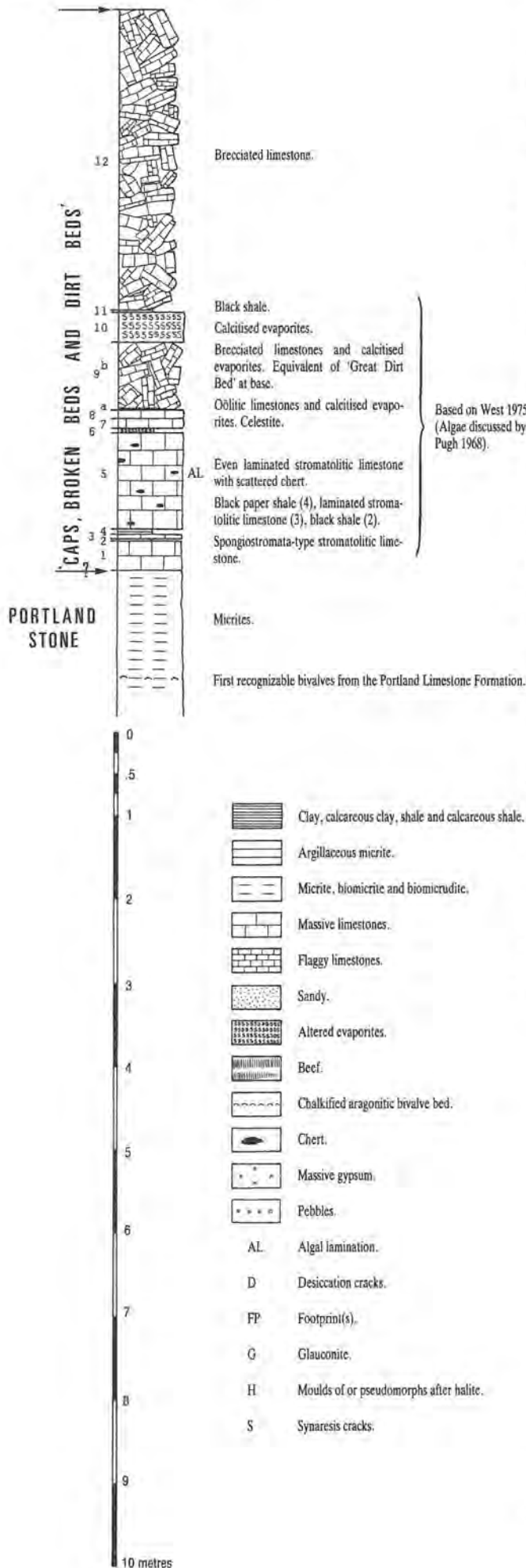
Micrites and argillaceous micrites usually packed with *Praeoxgyra distorta*, especially in upper part. Top of member drawn at base of overlying massive limestone.

7. Intermarine Member (WB 121-146).

A sequence of well-bedded, often massive, generally







light-coloured biosparrudites, biomicrudites, clays and shales. In the upper third argillaceous micrites are present. The top of this unit is a bed of clay with an irregularly developed micrite immediately below the first sandy limestone of the Scallop Member.

8. Scallop Member (WB 147-153).

A sequence of generally dark sandy limestones, shales and clays. The strata are often highly bioturbated and have a rough appearance. Scallops are common. The top of the member is taken at the upper limit of this facies.

9. Corbula Member (WB 154-176).

A series of limestones, often muddy and rough in appearance, micrites, argillaceous micrites and shales. Algal laminae occasionally present. Upper limit of this member defined as WB 176 above which beef becomes common in the sediments.

10. Chief Beef Member and Broken Shell Limestone Member (WB 177-198).

Division of these two members is considered unwise at present. Lateral variation between Durlston Bay and Worbarrow Tout is especially pronounced. They consist of a sequence of generally dark shales which contain much beef in the lower part of the section. Massive biosparrudites become the dominant lithology higher in the sequence. The top of the Broken Shell Limestone Member is taken as the irregular surface of WB 198 upon which rests a pale green argillaceous micrite.

11. Unio Member (WB 199-200).

Pale green argillaceous micrite with 'Unio' sp. overlain by a coarse shelly limestone in which 'Unio' and pyrite are common. The strata above this bed are obscured and I have tentatively placed the junction with the Upper 'Cypris' Clays and Shales Member at this horizon.

12. Upper 'Cypris' Clays and Shales Member (WB 201-209).

These strata are very poorly exposed. Dark flaggy limestones, clays and shales are present, and thicker beds of *Viviparus* limestone. The extent of these beds is not known.

TABLE 1. A correlation between some of the beds in this section and those of West (1975), for the basal Purbeck Formation, and El-Shahat (1977), for the Cherty Fresh-water Member to the Chief Beef Member.

	This section	El-Shahat 1977
	WB 182	75
	176	71 d
	166	66
	157	56 a & b
	153	51 & 52
	146	42
	131 a-d	35 & 36
	125	31
	121 a & b	27 a & b
	119 & 120	26
	117	24
	114 & 115	22 b
	113	22 a
	100	6
		West 1975
	WB 12	17 & 18
	11	16
	10	15
	9	12 a & b, 13 & 14
	6-8	8-11
	5	7
	4	6
	3	5
	2	4
	1	3
	—	1 & 2

TABLE 2. This table gives the metric values of the thicknesses of the strata recorded in Woodward 1895, pp. 243-244. These are based on the Vertical Section of Bristow (1857) for Worbarrow Bay. The divisions of Bristow and those used in this paper rarely correspond. In addition the uppermost part of the section appears to have been better exposed in the mid-nineteenth century than at present.

		Bristow	This section
(Upper and upper Middle Purbeck Beds)	Upper 'Cypris' Clays and Shales Member	10.9 m	5.3 m
	Unio Member	1.98	0.60
	Broken Shell Limestone Member	2.13	} 7.32
	Chief Beef Member	4.2	
	Corbula Member	12.26	5.3
	Scallop Member	0.84	1.9
	Intermarine Member	2.44	6.8
	Cinder Member	1.67	2.1
(lower Middle and Lower Purbeck Beds)	Cherty Freshwater Member	5.87	7.6
	Marly Freshwater Member	3.73	4.25
	Soft Cockle Member	19.05	15.0
	'Cypris' Freestones and Hard Cockle Members	15.54	14.7
	'Caps, Broken Beds and Dirt Beds'	8.0	6.6
		<hr/> 88.62 m	<hr/> 77.47 m

I believe that it is probable that distinctive mappable units which can be correlated with Durlston Bay above WB 176 are unlikely to be found, perhaps with the exception of the Unio Member. In these cases and those lower in the succession, future work may permit more positive assignments to be made.

Brief notes alongside the section add more detail and provide marker horizons.

ACKNOWLEDGEMENTS

The 1981 discovery of footprint fossils by Trev Haysom initiated this work, and I am grateful to him for drawing my attention to them. I wish to give special thanks to Dr Ian West for his generous help both in the field and in permitting the writer to refer to his unpublished draft section of Worbarrow Tout. He and Dr Roy Clements have critically read this account and their comments have been of great value. Through Dr West I have been able to examine Dr A. El-Shahat's and Dr Y. Ali's sections of parts of Worbarrow Tout. Mr Stuart Lake kindly let me refer to his m.s. section of Worbarrow Tout produced during an undergraduate mapping project. My work on *Ichnites* spp. from the Lower Cretaceous of Southern England, assisted by the Sylvester-Bradley award of the Palaeontological Association was the inspiration behind this section. The Commandant and staff of the RAC Gunnery School at Lulworth have been most considerate in permitting access to Worbarrow Tout. Finally grateful thanks to my wife, Meriel, who has not only patiently suffered my absence on innumerable occasions, but also typed the various drafts of this note.

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Changes in the Status of the Adonis Blue and Lulworth Skipper in Dorset

J. A. THOMAS

INTRODUCTION

In national terms, the most important butterflies that breed in Dorset are the Lulworth Skipper (*Thymelicus acteon* Rott.) and the Adonis Blue (*Lysandra bellargus* Rott). At present, about 97 per cent and 50 per cent respectively of the known colonies of these local species occur in the county. Surveys were made of both species in Dorset in 1978. The conditions of former and existing sites were also analysed, and studies were later made of the behaviour of both butterflies and of changes in numbers in successive generations at Ulwell, Swanage, in fields that have experienced variable management. The full results of both studies have been published separately (Thomas 1983, a, b). This paper gives further details of the status of these butterflies and describes their contrasting fortunes in Dorset.

Each butterfly is restricted to calcareous grassland by its larval food: Horseshoe Vetch (*Hippocrepis comosa* L.) in the case of the Adonis Blue; Tor Grass (*Brachypodium pinnatum* Beauv.) for the Lulworth Skipper. A few apparent exceptions were found of Lulworth Skipper colonies on other formations, but it transpired that these were breeding on chalk strips that had been laid as ballast for old railways across moors or clay. Both butterflies occur at their northern limits in Britain: the Adonis Blue breeds on the southern chalk up to the Chilterns; the Lulworth Skipper within 7 km of the south coasts of Dorset, Devon and Cornwall. Colonies of both species occur mainly on south-facing hillsides, presumably because these have the hottest local climates in Britain.

1978-1981

The two surveys revealed very different results (Table 1). The Adonis Blue has declined dramatically throughout Dorset (Fig. 1). About two-thirds of former colonies were found to be extinct, and most of the remaining populations consisted of fewer than 150 adults in 1978. Many of these increased spectacularly in size in the next three years, but this butterfly is prone to fluctuations in numbers, and relatively small colonies are apt to become extinct in poor years. Indeed, at least two colonies failed to recover after 1978. In contrast, the Lulworth Skipper was almost ubiquitous on unimproved calcareous grassland within its traditional range (Fig. 2). Many colonies were also extremely large in 1978; several sites supported over 100,000 adults. Most old accounts of this butterfly are imprecise, but there is much circumstantial evidence to suggest that it has increased considerably in the present century, especially in the past 30 years. Twice as many colonies of this butterfly were found in 1978 than had previously been known, but only one-third the recorded number of Adonis Blue colonies were found (Table 1). An analysis of existing and former sites showed that relatively few colonies of either butterfly had been destroyed through modern intensive farming, for it is generally uneconomic to 'improve' the steep hills where both butterflies have traditionally occurred. Three of the five known losses of colonies of the Lulworth Skipper occurred through urbanisation, and agricultural improvement accounted for nearly one-third of lost Adonis Blue sites. However, 60 per cent of sites that had lost this butterfly still contained Horseshoe Vetch in abundance.

The explanation for the different fortunes of these two butterflies seems to lie in the changing way in which

TABLE 1

The number of Adonis Blue and Lulworth Skipper sites found in Dorset in 1978, compared with the number of previously recorded localities for each species in the county.

	Number of sites recorded before 1978	Number of occupied sites found in 1978
Adonis Blue	106	32
Lulworth Skipper	41	83

farmland has been managed. There has been a strong shift in the present century away from the traditional close sheep-cropped swards that once predominated on Dorset's downland, to much more overgrown conditions. This trend has been occurring over several centuries: Dorset sheep-flocks gradually declined from about 1 million animals in the 16th century to 46,000 in 1949 (Tavener 1962) and many steep hillsides had been abandoned or were only sporadically grazed by the turn of this century (e.g., Wells 1976). However, a short sward was maintained by rabbits on many sites, until the 1950s when myxomatosis destroyed them as an effective grazing force.

Horseshoe Vetch is a low-growing perennial that is eventually shaded out of tall abandoned grassland. This has yet to occur on most former Adonis Blue sites. However, this butterfly is also particular in its choice of egg-laying positions, and nearly always chooses plants that are in sheltered pockets where turf is also cropped short. Larvae were almost entirely restricted to the minority of Vetch plants that grew in the shortest patches of Ulwell in 1981 (Fig. 3). This probably occurs because the ground where the larvae rest is much warmer beneath sparse short turf. In contrast, Lulworth Skippers lay mainly on mature Tor Grass plants, inserting the eggs into tall sheaths.

At Ulwell, larvae occurred at much higher densities on the tallest plants, and none was found on plants that were under 10 cm tall (Fig. 3). With the widespread decline of grazing, Tor Grass has been allowed to grow into exactly the tall clumps that are preferred by Lulworth Skippers. This coarse grass has also spread to dominate many hillsides (Wells 1976; Smith 1980). A few unimproved calcareous sites in south-east Dorset are lightly grazed and have patchy swards that support both butterflies, sometimes in large numbers. Adonis Blues breed in local short-cropped (often steep, thin-soiled) patches and Lulworth Skippers use clumps of tall *Brachypodium* grassland. There are fine examples of this at Ulwell and at Durlston Country Park. However, most unimproved sites are either completely or periodically abandoned, whilst a smaller number are still intensively grazed. In 1978, virtually all surviving Adonis Blue colonies in Dorset occurred on sites where the average height of the entire sward was less than 5 cm tall, whereas *T. acteon* was almost ubiquitous on sites in south-east Dorset where the turf was, on average, more than 10 cm tall (Fig. 4).

1982-1983

There has recently been a reversal of this trend in some localities. Rabbits have begun to return as significant grazers on a few sites, and EEC subsidies on sheep meat made it economic to stock certain stretches of unimproved

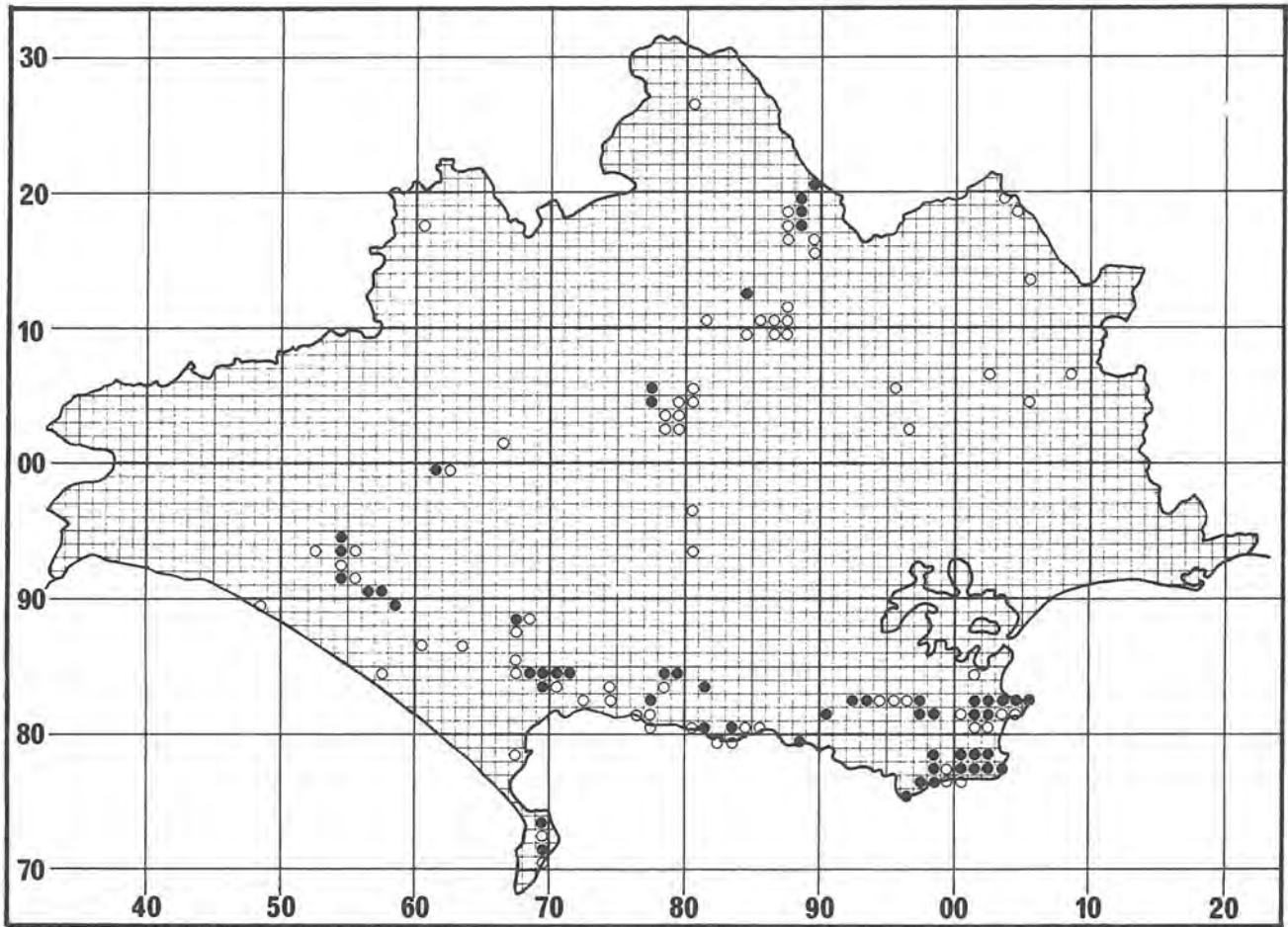


Figure 1. The recorded distribution of the Adonis Blue. ○ pre-1978, ● 1978 onwards.

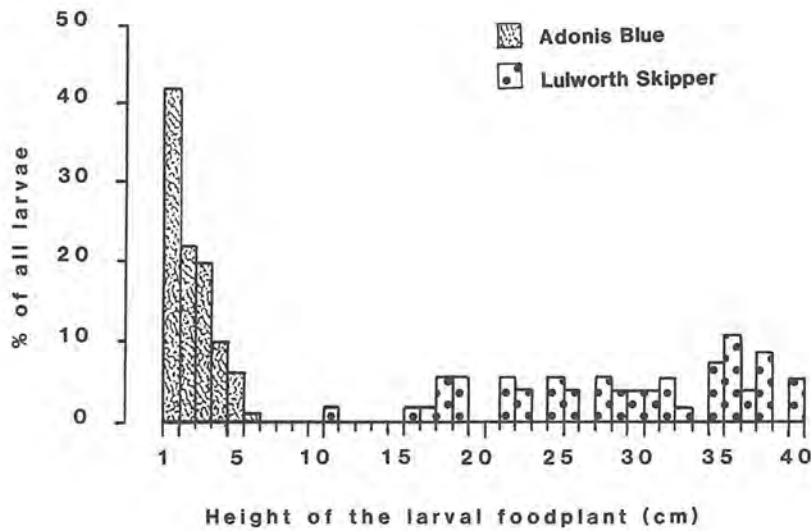


Figure 3. The percentage of Adonis Blue larvae and Lulworth Skipper larvae found on samples of their foodplant growing in turf of different height at Ulwell in 1981 and 1982 respectively. Adonis Blue: 80 plants were searched in each of the turf height categories 1 cm, 2 cm, 3 cm, 4 cm, >4 cm tall; 102 larvae found. Lulworth Skipper: 35 plants were searched in each of the height categories <10 cm, 10-20 cm, 20-30 cm, >30 cm tall; 54 larvae found.

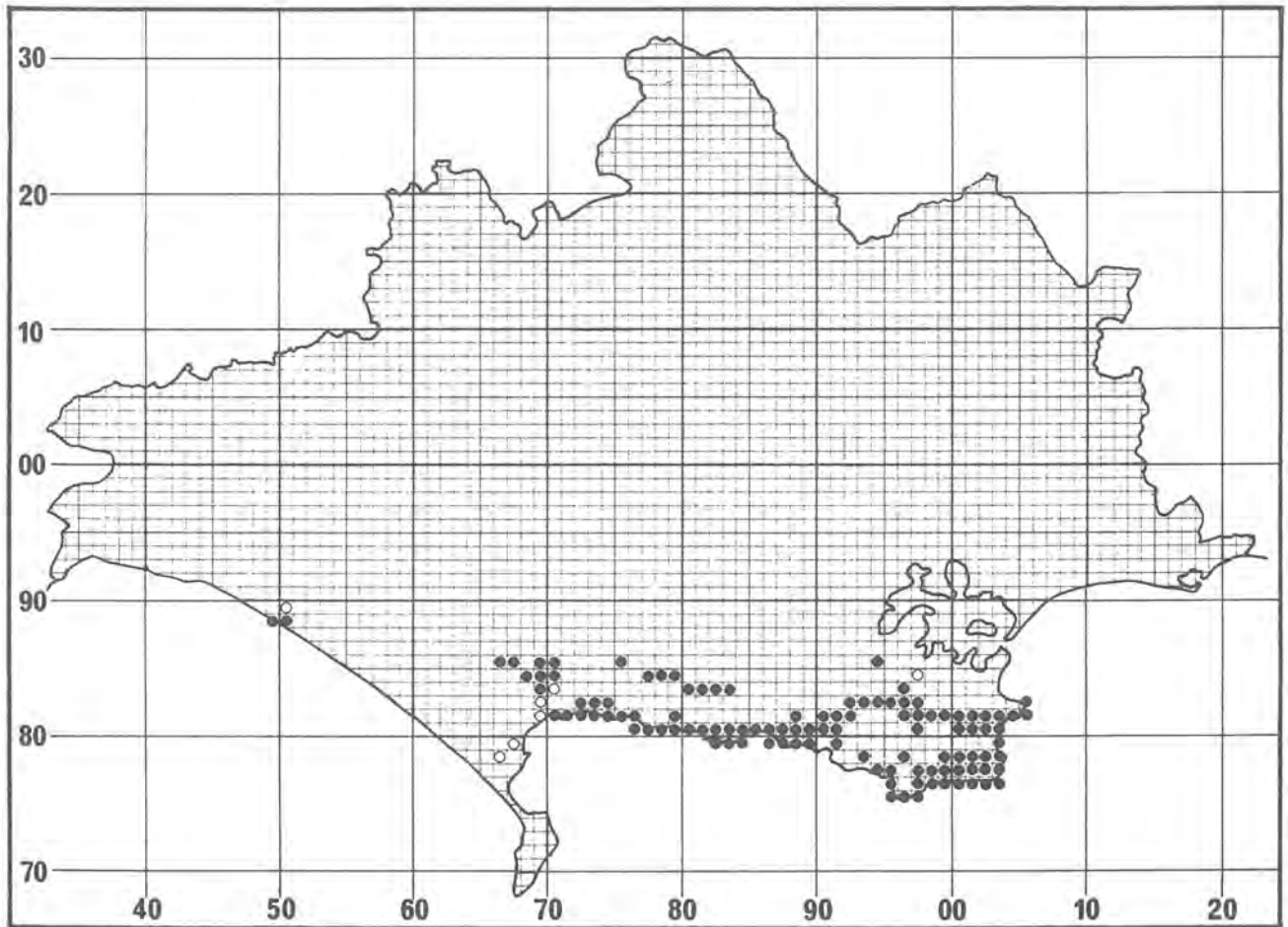


Figure 2. The recorded distribution of the Lulworth Skipper. ○ pre-1978, ● 1978 onwards.

downland in 1982-83, for the first time for many years. Some newly-grazed areas have been recolonised by the Adonis Blue, but only where the land adjoined an existing site. For example, for several kilometres west of Ulwell, the chalk scarp was very overgrown and supported no Adonis Blue in 1978, but this stretch was closely-cropped in 1982 and the butterfly soon spread at high densities for about 1 km west along the downs. In contrast, the Lulworth Skipper declined severely on one overgrown monitored site that was restocked in 1983, and presumably elsewhere.

DISCUSSION

The reversal in the fortunes of the Adonis Blue and Lulworth Skipper that occurred in 1982-83 was confined to a few localities and seems likely to be short-lived. Local outbreaks of myxomatosis still periodically deplete the rabbit colonies and it is unlikely that numbers will be permitted to reach the pest densities that occurred in the past. It is also unlikely that EEC agricultural subsidies will continue on the present scale. Thus the trends in the status of these two butterflies that occurred up to 1982 seem likely to continue in the long term. The Lulworth Skipper remains a very local species in Britain, but its future seems secure in Dorset on many of the hills owned by the National Trust and the Army. It is unlikely to decline significantly unless these are intensively cultivated. But the Adonis Blue is clearly threatened. Despite the recent respite on some downs, at least two colonies elsewhere have become extinct since 1978. The number of colonies in Britain has roughly halved every 12 years since the 1950s, and is now reduced to about 70-80 known examples, of which about half occur in Dorset. This butterfly may eventually be reduced to the few colonies that breed on nature reserves. Local conservation-

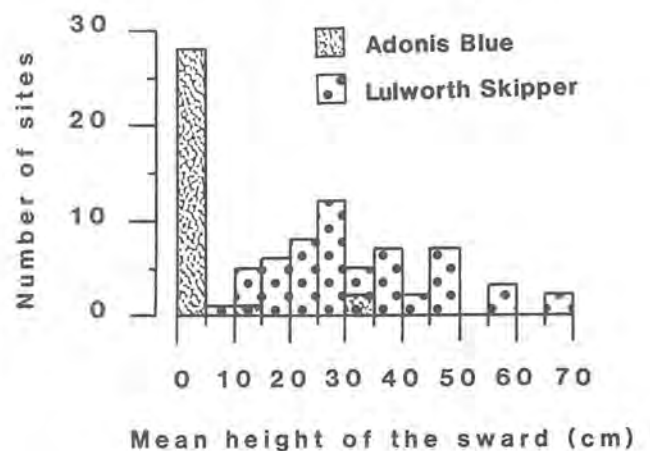


Figure 4. The mean height of the turf on sites that supported the Adonis Blue and Lulworth Skipper in 1978.

ists can make an important contribution to the national effort by ensuring that suitably close-cropped conditions are maintained on these sites, so that at least some populations of this traditional Dorset butterfly survive.

ACKNOWLEDGEMENTS

It is a pleasure to thank R. W. Smith, D. J. Simcox and C. D. Thomas for making the 1978 surveys, and the Manpower Services Commission and Nature Conservancy Council for funding them.

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Changes in the Habitats of the Dorset Flora since 1931

Part 5. West-Central Dorset, 1983-1984

A. HORSFALL

SUMMARY

The survey of Professor Good's botanical sites in Dorset has continued. Habitat changes since his work in the 1930s has been recorded along a broad transect from the Somerset border southwards to Portland Bill. The combined results of observations in 1983 and 1984 are outlined below.

INTRODUCTION

The survey was started in Purbeck in 1979 and has continued each summer. The purpose has been to find out the extent of change in the habitats of the Dorset flora after some 50 years and the reasons for change. Professor Good's precise records of over 7,500 sites and their flora has made this possible.

Each year a different part of the county has been selected and the original sites re-visited. Some have totally changed, with only relic plants if any to mark their former status. Others have partly changed where the area or plant community is reduced. Most important were the places so little changed that the original flora listed in the 1930s may still be found.

The areas covered in 1983 and 1984 include at least parts of those described in Good's *Geographical Handbook of the Dorset Flora* as Trans Yeo, Blackmore Vale West, Upper Frome Vales, Central Chalk, Southern Chalk, the Wey Vales and Portland. Thus the main soil types of the county were represented and the flora correspondingly varied. Within the selected areas were the land around Sherborne; the Blackmore villages from Yetminster to the Caundles; the wooded valleys of Melbury, Chelborough and Cattistock; the chalk scarp from Melbury Bubb and Batcombe to Buckland Newton; the chalk hills above Sydling, Cerne and Piddletrenthide; the Frome Valley at Dorchester and the western edge of the heathlands; the chalk hills around Bincombe; the maritime places at Weymouth and Portland.

The combined number of sites re-visited was 1,617. No less than 962 sites (59 per cent) were considered to be botanically unchanged; 220 sites (14 per cent) were partly changed and 435 sites (27 per cent) were found to be totally different. All the findings have been summarised in Tables 1 and 2 and the results compared with those of previous years in Table 3.

HABITATS

The most numerous sites, predictably, were hedgebanks (474), woodlands (339) and grasslands (327). The miscellaneous group of sites (136) included walls (81) and cultivated and ley fields (26) as well as minor habitats such as tracks, pits, banks, roadsides, urban waste and other interesting small places. Thickets (91) were on all soil types associated with grass, bracken, heath or woodland. Maritime sites (86) included cliffs, undercliffs, salt marsh, shingle and shores but not cliff top grassland.

The aquatic sites (80) ranged from lakes and ponds to rivers, streams and ditches. Marshes (58) included wet, marshy meadows and roadside marshes. Finally, heathland (26) which was scarcely represented in the present survey included the western edge of the Dorset heathland and the small hilly areas of Central Dorset where acid soil conditions occur.

DISCUSSION

In maritime sites the flora was generally as plentiful as in Professor Good's original survey despite coastal erosion and the pressures of holiday makers. Permanent change was

TABLE 1

Reasons for change in plant habitats since 1931: present status of changed sites in Central Dorset in 1983 and 1984.

435 sites totally changed		
Per cent	Reason for change	Present status
66	Agriculture	Arable and improved grassland.
18	Development	Urban and farm buildings, caravans, roads, fences, quarries.
13	Forestry	Conifer and mixed plantations.
3	Ecological	Trees, shrubs, rank vegetation, erosion.
220 sites partly changed		
Per cent	Reason for change	Present status
32	Development	Urban and farm buildings, caravans, roads, fences, quarries.
31	Agriculture	Arable and improved grassland.
20	Forestry	Conifer and mixed plantations.
17	Ecological	Trees, shrubs, rank vegetation, erosion.

TABLE 2

Central Dorset in 1983-1984: pattern of change since 1931

Good's main habitat group	Number of sites observed	Sites since 1931		
		Sites unchanged	Sites partly changed	Sites totally changed
		Per cent	Per cent	Per cent
Maritime	86	96	—	4
Aquatic	80	85	9	6
Hedgebank	474	81	14	5
Woodlands	339	65	17	18
Marsh and wet meadows	58	57	7	36
Miscellaneous habitats	136	46	14	40
Thickets	91	32	15	53
Grassland	327	24	14	62
Heath	26	16	19	65
All types of habitat	(1,617 sites)	59 (962 sites)	14 (220 sites)	27 (435 sites)

limited to one locality where landslips had obliterated the cliff slopes, and another which was a caravan park. Elsewhere changes were too small to be considered significant.

Change in aquatic sites was minimal in lakes and rivers, but streams appeared to be more vulnerable to waterside grazing and seasonal lower water levels. Less than half the ponds remained, the rest having been infilled to increase agricultural land, or else had been neglected and overgrown.

Hedgebank sites were recorded more than any other group. A high proportion, 81 per cent, remain unchanged.

The best of these were along parish and estate boundaries, or bordering trackways, old droves and former woodland. Even where the banks have been cut back along narrow roads the flora often was present. Hedgebank removal was usually for road improvements and urban and agricultural development, and the bank flora had been affected by the use of weed killers in a few places, by heavy shading or by the replacement of the hedges by wire.

Deciduous woodland was recorded throughout the area and many coppices, shelter belts, tall woods and others were found to have their characteristic flora. Relatively few woods had been cleared to provide pastures and arable land, and still fewer had lost their flora through neglect or grazing. Nearly all permanent change was the result of replacing old woodland with conifers. Wherever conifer monoculture had occurred the ground flora was eventually extinguished, in small coppices as well as in historical woods such as Middlemarsh, Clifton Wood or the Whitfield Woods.

Marshes and marshy meadows were more plentiful than in previous surveys. Most were in localities where a high water table has made drainage impractical. Where meadows had been drained, there were improved pastures or arable land except for a very few areas now urban or woodland scrub.

The miscellany of minor sites which do not fit into the main groups included walls, usually in old farms, villages and churchyards. Wall flora was on 63 per cent. The rest had been either cleaned, renewed, replaced with wire or smothered by ivy. Other minor sites such as quarries, pits, tracks and roadsides fared badly because of various urban developments, and only one of all the former arable and ley fields escaped the drastic improvements which excluded all weeds.

More thicket sites, usually with grass or bracken, were found unchanged than in previous years and on a few chalk hillsides thickets were encroaching on downland. Nearly two-thirds of cleared sites were now arable land; others were grassland apart from a few now grown into woodland and others occupied by agricultural buildings.

All possible types of grassland were included in this very large group. Change was extensive and in about two-thirds of all sites, now permanent pasture or arable land, the original flora has gone except for relic plants at field margins. In only a dozen sites permanent change was caused by development to establishment of conifers and growth of thickets. Most meadows were found to be in pastures or arable fields. Much of the bracken grassland had changed likewise though in several sites the bracken had been cleared resulting in rough grass with more flowers.

Nearly all unchanged and partly changed grassland was on hillsides too steep to plough. Many of the remaining chalk downland sites are on protected archaeological sites or in nature reserves. Elsewhere, the former flowers of the field were to be found along trackways and hedgebanks.

The few heathland sites visited during this year's survey were mostly dry heaths and not typical of Dorset heaths as a whole. Only four of the twenty-six remained unchanged. The rest were either arable land, improved pasture, conifer plantations, sites of buildings or else overtaken by rhododendrons or natural woodland.

CONCLUSION

The results of the survey have again shown considerable changes which have occurred in the Dorset countryside during the past 50 years. Whilst the economic reasons for these changes are generally understood, it may be hoped that the less productive but still vulnerable places in the countryside may be left for the natural vegetation, and not only in nature reserves and other protected places.

TABLE 3

Habitat change in central and eastern Dorset.

All habitats	Unchanged	Partly changed	Totally changed
	Per cent	Per cent	Per cent
South-east Dorset:			
Purbeck District in 1979 and 1980	62 (1,065 sites)	11 (195 sites)	27 (475 sites)
North-east Dorset:			
Wimborne District in 1981	52 (420 sites)	13 (109 sites)	35 (285 sites)
North Dorset:			
North District in 1982	55 (698 sites)	13 (167 sites)	32 (404 sites)
Central-west Dorset:			
West District to Portland in 1983 and 1984	59 (962 sites)	14 (220 sites)	27 (435 sites)

ACKNOWLEDGEMENTS

This is an opportunity to record sincere appreciation to all those who have given permission to visit private land during this and earlier surveys. Financial assistance for the project from the Nature Conservancy Council has also been greatly appreciated.

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Excavations on the Greyhound Yard Car Park, Dorchester, 1984

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The redevelopment of the block of land bounded by the Tudor Arcade, Charles Street, Acland Road and the backs of properties on Durngate Street, for a new shopping complex, allowed an unrivalled opportunity to examine a large area, *circa* 3,025 square metres, in the centre of urban Dorchester. The site lies to the south-east of the Old Methodist Chapel excavations of 1982 (Woodward 1982) and east of the excavations on the site of the Old Greyhound Inn, below the Tudor Arcade (RCHM II, 1970, 566). All are located on the Roman *insula* which lies on a shallow hillslope to the south of the putative *forum* and on the west side of the coombe in which the town baths (Batchelor 1977 *et seq.*) were built (Fig. 1). No previous archaeological records exist for the site itself, despite redevelopment during and since 1940. These redevelopments include the construction of a static water tank on the southern side of the site, the construction of the car park itself, and the redevelopment of the late 18th-century

warehouse and buildings on the eastern side of the site. However, detailed surveys of the site survive for 1772 (Hutchins), 1810 (DRO OE1), 1848 (DRO 40E/7), 1856 and 1888 (Ordnance Survey) and later. The buildings of this post-medieval period cluster around the edges of the site, with the back buildings of the Greyhound Inn and the property of George Elwes on the west (1772); the 18th-century warehouse (extended in the succeeding years) in the north-eastern area (1772, onwards) and the development of Acland Road and Charles Street on the eastern side in the 19th century (1810, onwards). Otherwise the site was used for garden plots and backyards. The surviving buildings on the site were recorded by photography prior to demolition.

The site was cleared down to ground level by the West Dorset District Council. Machine-stripping was then employed by the excavators to remove overburden down to recognisable archaeological levels. In the north-west area



Plate 1. Vertical air photo of excavations in September 1984. The excavations in the south-west corner have been completed and backfilled. North to the top of the photograph.

the site was stripped to the footings of the Greyhound Inn and the post-medieval garden soils removed. These had accumulated to a depth of a metre or so against the western side of the warehouse building. In the south-western area the demolition levels and footings of George Elwes' house, and overburden soils were removed to an earlier terrace and soil level, and on the eastern side of the site the floors and construction levels of the post-medieval period were removed; these buildings had clearly terraced out many of the medieval and Roman levels. These machined levels were recorded in the principal sections of the site.

The archaeological excavations on site proceeded from mid-April until the end of October 1984, with a team of fifty. The intricacies of site organisation, progressive site stripping, and levels of recording have been omitted from this short report. Also at the time of writing, although the ground-work for the development is now complete and archaeological recording on the site is at an end, the site record and matrix is still in the process of completion, and

only two-thirds of the finds from the site have undergone basic processing. This interim report can only be taken as a preliminary interpretation, and further detailed analysis will undoubtedly change certain elements within the sequence described here. However it is hoped that the broad period framework described in the following paragraphs will remain intact. The palimpsest of principal features excavated and the extent of the excavations is shown in Figure 2 (2,175 square metres were excavated, c. 70 per cent of the area available), and the archaeological sequence by period in Figure 3.

The earliest features on the site relate to the prehistoric period, (Figure 3F and Plate 1). The principal features consisted of an arc of post-pits and a curving ditch. The hillslope as a whole had been severely scarped by prehistoric farming and continued erosion had taken place throughout the periods of urban development. No intact prehistoric soil survived on the site, apart from the pre-urban soils sealed by the construction of the Roman road which was

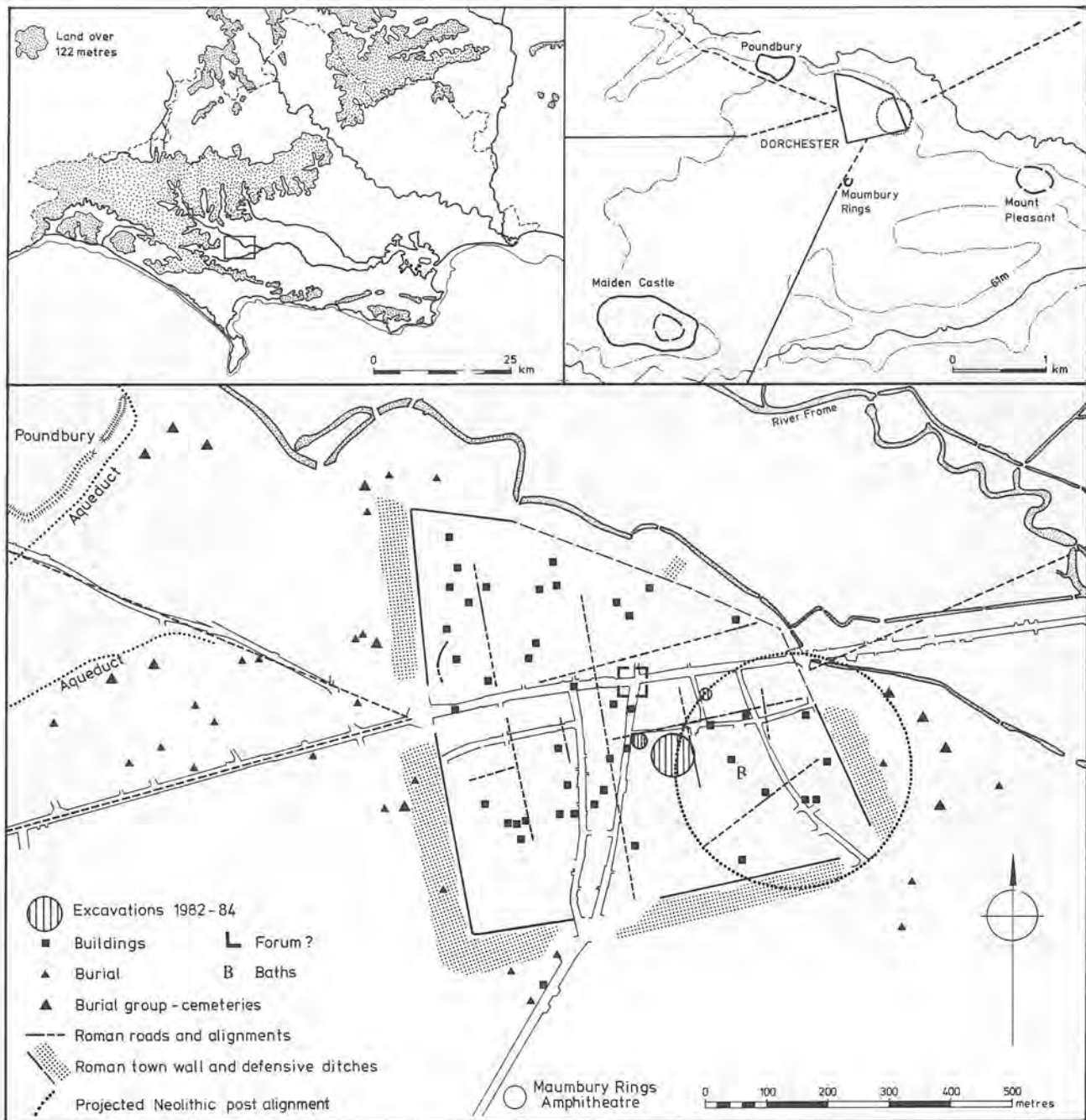


Figure 1. Excavations at Greyhound Yard; location plan showing relationship to Roman town, and the principal prehistoric monuments.

located on the eastern edge of the site (Figure 3, D and E). Many of the post-pits were severely truncated as a result of urban terracing. The post-pits were uniform in construction; a vertical eastern face and a sloping ramp to the west (Plate 2). The length of the ramp varied but had an average slope of 40-45 degrees and the base level of the pits was fairly constant, with a maximum depth below the scarped chalk ground level of c. 2.50 metres. In all sections a post-pipe was recorded, and this was consistent with a post of c. 0.9-1.2 metres diameter being inserted against the eastern, vertical side of the pit, with the quarried chalk being compacted back on the western side of the pit to hold the post. The posts would have been regularly spaced with perhaps a gap of up to 1.0 metre between the posts. The post-pipes were mostly filled with broken chalk, some flint within a loose matrix of loamy clays and charcoal festooned vertically down the fill; a cone of non-calcareous clay soils was washed into the upper level. There is no suggestion, from the pit or post-pipe fills, that any of the posts were removed when the ring-structure went out of use. Close examination of all the sections suggest that the posts rotted *in situ*, and the pipes filled with material derived from a chalk bank piled against the base of the posts. Festoons of charcoal (all of mature oak) suggest that above ground some of the posts may have been burnt. Little pottery was recovered from these features but a single piece of Grooved Ware (Cleal and Bradley pers. comm.) was recovered from one post-pipe, and Middle Bronze Age sherds were found in the upper cone of non-calcareous soils of the same post-pit. This suggests that the monument was abandoned in the Earlier Bronze Age and that the site was subsequently arabilised, with the field soils eventually washing into the top of the post-pipes. To the west of the post-alignment is a shallow ditch (0.5 metres

deep and 1.8 metres wide) which is not truly concentric with the post-alignment. These two features may therefore not be contemporary. The ditch was filled with a non-calcareous clay silt, and there was little weathering of the sides.

The arc of the post-alignment is extremely regular and can be taken to be that of a circle, in which case the calculated diameter from the chord plot is about 240-290 metres. However, similar features which were excavated on the east side of Church Street in 1982-3, can also be best considered to be part of the same alignment (Batchelor 1983, although these features are not described in this interim note the details noted here have been kindly provided by David Batchelor). In this excavation only two post-pipes (one in the south-west corner, and one in the north-east corner of the site) were recognised and excavated, and the charcoal which derived from the south-west pipe provided a date of 2110 bc (HAR-5508). Re-examination of the site, which was still open, in September 1984 showed that in all probability several more post-pits and pipes had not been identified, but were sealed below a non-calcareous clay-silt soil which covered the base level of the site. The clearing of the two sections through this silt soil suggests that this is indeed the case, and that the two features excavated are the two extremities of an alignment similar to that excavated at Greyhound Yard. It is hoped that more extensive excavation of these early features on Church Street can take place in 1985 (Batchelor pers. comm.). If these two sets of posts are taken to be of the same alignment, and these are part of a regular curve, perhaps the arc of a circle, then the projected circle would be larger than that calculated for the Greyhound Yard arc alone. The projected circle would now be of perhaps 380 metres diameter, this is plotted and depicted in Figure 1.

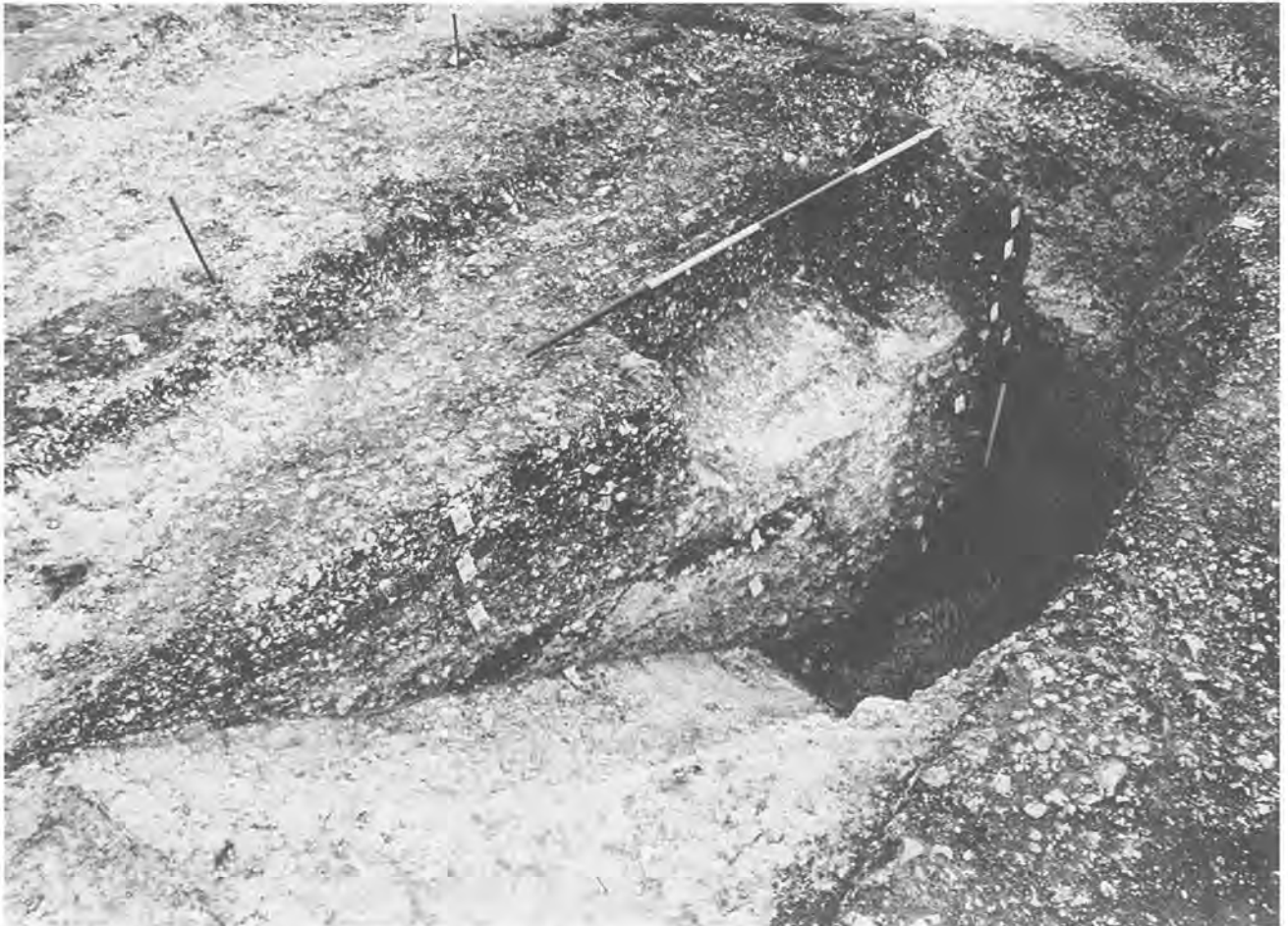


Plate 2. Section through Late Neolithic post-pit 4822 from south-west. Parts have been cut away by later footings and pits.

GREYHOUND YARD CAR PARK 1984

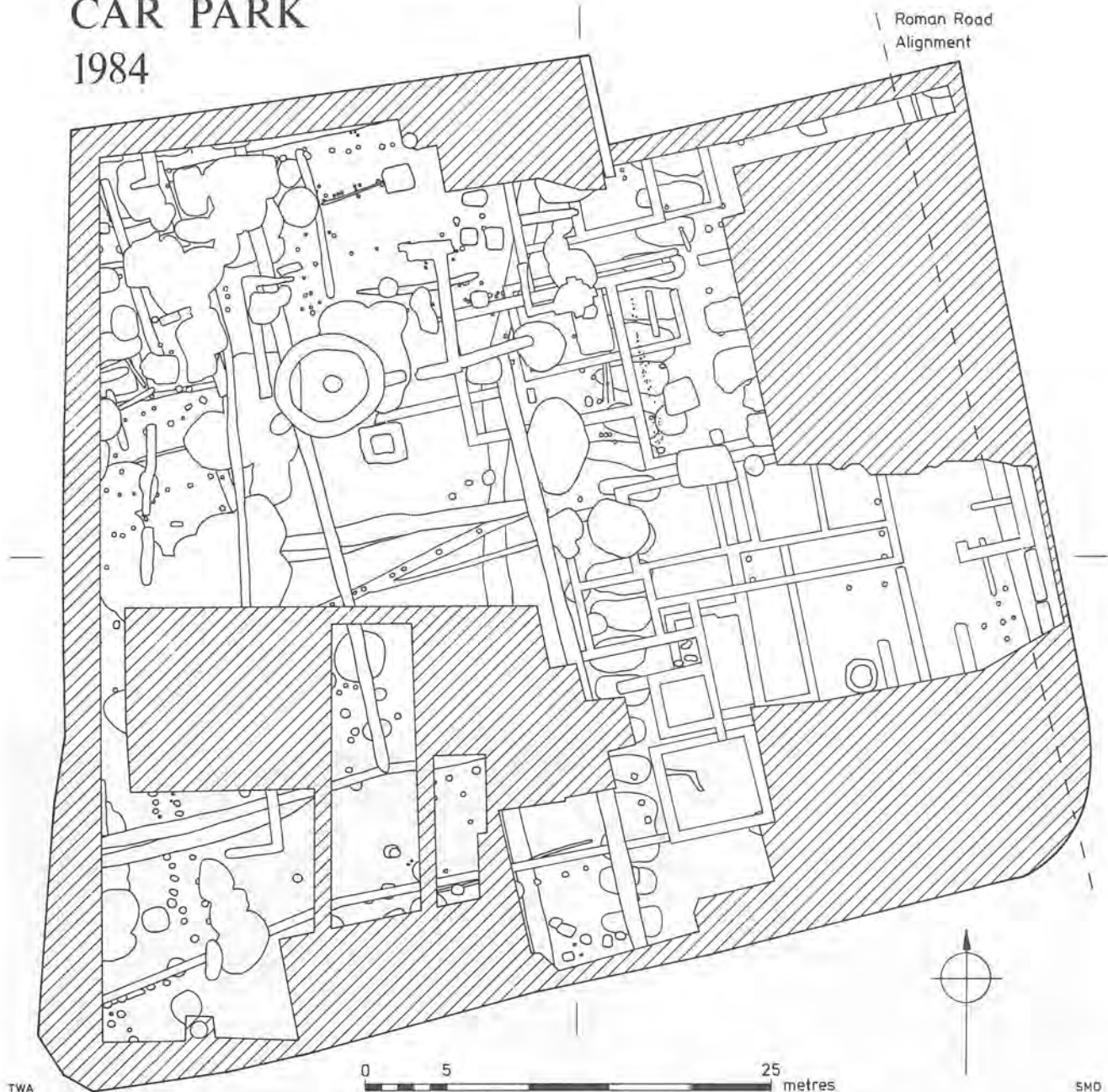


Figure 2. Excavations at Greyhound Yard; the extent of the excavations and all principal features.

This evidence together describes a structure of monumental proportions, which can be firmly placed in the Late Neolithic landscape with Maumbury Rings and Mount Pleasant (Figure 1). The relationship with Maumbury is discussed in this volume by Bradley and Thomas. The post-arc at Greyhound Yard bears some comparison with the site at Meldon Bridge, Peebleshire, although the location is somewhat different. At Meldon Bridge the post-arc is irregular with a connecting avenue and can be shown by aerial photography to enclose a promontory on a gravel terrace between two rivers. The post-holes are comparable in structure but much reduced by modern ploughing. The original post-hole depth would probably have been of the order of 1.6 metres and housed posts of 0.3-0.5 metres in diameter, with the posts being set 2-3 metres apart. The carbon dates for this palisade were c. 2330-1791 bc. The structures found within this perimeter

were both domestic and sepulchral-ritual in type, and the author suggests that the palisade was probably only upstanding for c. 100 years, and was not replaced (Burgess 1976).

However, perhaps the closest parallel to the Greyhound Yard structure and its associated monuments is that identified at Forteviot, Perthshire (St Joseph 1978). This monument is a cropmark beside a river, with post-pits 4-5 metres apart, of an almost complete ring, 265 metres by 220 metres. In addition, small circular enclosures which look like henge monuments, occur both inside and outside the main post-ring. Two of these henges have surrounding external post-circles. One of the larger henge features occurs inside the main enclosure, as at Mount Pleasant. Perhaps the Greyhound Yard monument too has its satellites at Maumbury and Mount Pleasant (Figure 1).

The demise of the monument at an early date is apparent

and that it was incorporated into an arable-mixed farming setting is likely, and it is therefore probable that the monumental earthwork was in part 'ploughed-out', as Mount Pleasant (Wainwright 1979). However the pre-urban soils beneath the construction of the Roman road had gone through a stabilisation phase, and were worm-sorted. A similar soil can be identified below the Roman road on the Methodist Chapel site and a quiescent phase of pasture can be deduced prior to Roman urban developments. From the site as a whole there is little late Iron Age material, and an apparent absence of beneath the road; a phenomenon mirrored at the Old Methodist Chapel site. Perhaps an extensive area in the vicinity was under rough-pasture prior to the conquest and the development of *Durnovaria*. The absence of 1st century Roman material or structures under the roads would also suggest that the roads were primary, and laid out on a 'clean' site. The road bounding the eastern side of the *insula* was excavated with its flanking ditch in two places, and was identical to that excavated on the northern side (Old Methodist Chapel site). As to whether any of these roads and associated timber structures have any military associations is not yet clear. These 1st-century features are depicted in Figure 3E, but because of later urban developments no single structure is complete. Contemporaneity has to some extent been assumed at this stage of site analysis. However it is worth making a few observations on this phase plan E (Figure 2).

The runs of timber posts can be seen to conform to the lines of the *insula* (Figure 1). These represent a series of structures, developed and changed over a period of time, but conforming to a stable pattern of property allotment. A pattern which can be recognised in later phases of the sites development. Some of the post-alignments may represent small buildings, but the majority are more likely to be parts of fences for penning and property division. A single long pallisade gully is off-line (centre of site), and may belong to



Plate 3. The eastern range of Roman buildings under excavation. August 1984, from the north.

an earlier or later period. Buildings can more certainly be identified where the post-holes occur in association with beam slots and floor levels; e.g. the buildings in the north-west corner (1), and those adjacent to the eastern roadway (2). The buildings (1) had chalk floors, which can be associated with those described on the Old Methodist Chapel site to the north-west and these building features may well be the backs of those buildings facing onto the principal east-west roadway. Some of the large pits in this north-east corner may well be chalk quarry pits for building construction within this property. These quarry holes were subsequently backfilled with night-soil and household rubbish, during the succeeding urban developments within the Roman period. A series of deep, square-plan shafts were also cut in the 1st-century; these can be interpreted as storage shafts, subsequently used for rubbish or as cess-pits. The building features (2), belong to the two phases, suggesting the partial demolition, and then extension westwards of the primary roadside buildings. The property layout, thus formed, seems to have been reflected in the later stone building (5) (Figure 3D). The backs of these buildings and associated floor and yard levels, have been severely scarped away to the west by the 3rd century AD buildings (Figure 3D). However a line of four circular shafts to the west of buildings (2) can be dated to the 1st century AD, and were sufficiently deep to survive this later Roman terracing. These contained unusually rich groups of late 1st-century AD finds; notably complete vessels (Durotrigian bowls, jars and flacons) and articulated skeletons of dog, sheep/goat, pig and birds.

The subsequent Roman developments have been condensed into a single plan, which does not do justice to the complexity and individual detail of the four building units on the eastern and north-eastern street frontage, which have been developed, expanded and adapted in the succeeding centuries (Fig. 3D, 3-6 and, Plate 3). No attempt will be made here to describe or discuss the sequence of building developments in any detail. Building (3) is the southern part of a town house eventually developed into a suite of three rooms with a mosaic pavement. To the south were a small room or courtyard and an earlier sunken garden feature, subsequently replaced by building (4), which consisted of a small rear courtyard on the western side and a large room (or rooms) which would have faced onto the roadway. Building (5), apart from minor later alterations, represents a single phase of construction and consisted of a series of rooms arranged along a connecting corridor (c), on the northern side of a walled courtyard with well (w). This building was terraced deeply into the hillside and almost totally destroyed an earlier stone building (b). The parts of building (5) identified were a water supply-shaft (i), stoke-hole/furnace area (ii), for a heated room (iii); rooms (v) and (vi) had concrete floors as did corridor (c). Similar floors may have been destroyed in rooms (iv) and (vii). Within the buildings (3), (4) and (5) were a number of infant burials (marked on Figure 3D), a notable group occurred in the east of room (ii), building (5). The remnant piece of building (6) was perhaps used as a service yard to the building (5) complex and connects to a walled boundary running east-west across the site. This has an interesting alignment and definitively separates the centre of the *insula* from whatever lies to the south. This walled boundary was constructed along previous post-sets, and ran across the top of one 1st-century well, and to the north of other shafts (Figure 3D/E).

By the 3rd century AD considerable modifications had occurred on the street frontage and a wall had been built within the flanking ditch of the north-south roadway. This compares with the developments on the street front of the Old Methodist Chapel site.

The walls and post-holes in the north-west corner of the site are near extensions to the buildings facing onto the

GREYHOUND YARD CAR PARK 1984

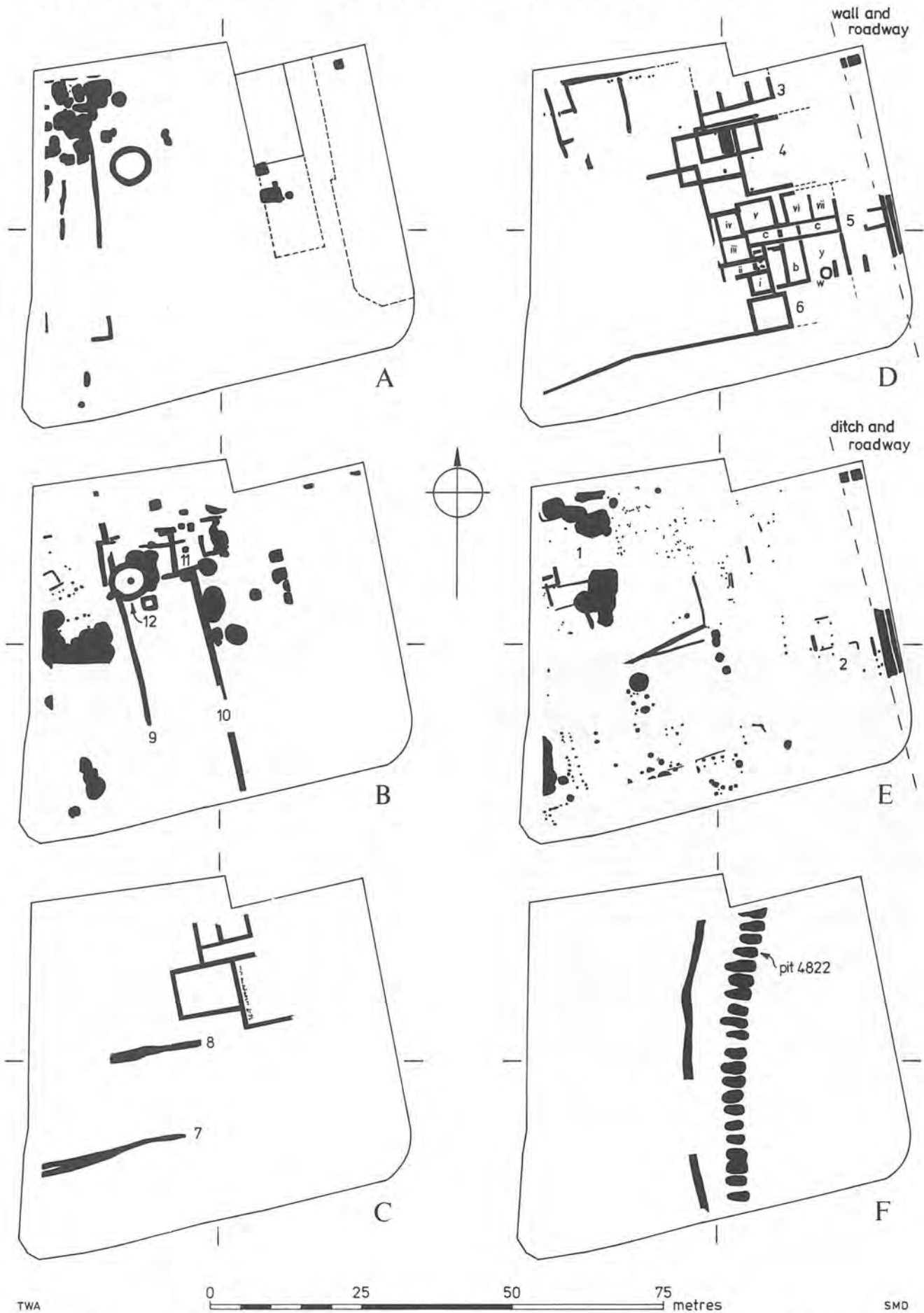


Figure 3. Excavations at Greyhound Yard; the development sequence by period. A. Post-Medieval; B. Medieval; C. Post-Roman, early Medieval; D. Later Roman; E. Early Roman (1st c. AD); F. Late Neolithic.

northern street frontage of the *insula*, as identified to the north-west on the Old Methodist Chapel. These walls were built over the phase E pits. The centre of the *insula*, as could be expected, was relatively devoid of structural detail, but many of the features described for the earlier phase may more appropriately belong to this plan; some of the quarry holes and storage shafts. Some of the fence boundaries in the south-west corner may have also continued in use (cf. those running north-south, Figure 3E).

The accumulation and survival of floor levels in certain parts of the site (areas (1) and (2) (Figure 3E), areas below the buildings in the north-west corner, and below the buildings (3) and (4) (Figure 3D)), is a direct result of the hillslope; a drop of some 3.6 metres from the north-west to the south-east.

The urban development is terraced into this slope, with each building cut in at a separate level, and stepped up the slope from the south-east corner. In the post-Roman period (Figure 3C) a deep accumulation of black soils infilled the terrace of buildings (5) and (6). This soil is probably derived from soils which had developed in the centre of the *insula*, during the Roman period, and which had subsequently been scraped away as a result of post-Roman field developments. These fields are defined by two ditched boundaries, Figure 3C (7) and (8). These levels and the succeeding medieval developments are picked out well in the aerial photograph (Plate 5). This development of urban field-plots may directly correspond to the field-developments outside the town suggested by Keen (1984). To the north continued use of two buildings can be suggested; a series of chalk floors

were laid across the mosaic floor, and a new door-cill constructed (building (3)); a series of stake-holes were cut into the surviving 3rd-century floor level of the large room of building (4). However material evidence for this post-Roman phase is, as yet, lacking.

The re-emphasis on and development of agriculture in the 5th-7th centuries would directly correspond to the failure of the monetary economy, and the demise of direct Roman administration in the 5th century. That Durnovaria-Dorchester continued to flourish but went through a series of fundamental changes in this period is now better understood (Keen 1984 and others), and these considerable changes are evidenced on this site (Figure 3C).

By the 11th/12th century the medieval road plan would have begun to develop, with the principal streets (of which Durngate was one) at a slight angle to the Roman street alignment (Figure 1). The developed burghage plots and associated features which belong to this later medieval period (11th-15th century AD) are depicted in Figure 3B, and also seen on the aerial photograph (Plate 5). The ditches (9) and (10) can be interpreted as the developed burghage boundaries, and associated with these and within the separate properties laid off Durngate, were a series of pits, and timber post structures. The rectangular structure (11), can be seen to have developed across one of the boundaries. This structure consisted of slight dry-stone footings of flint and/or chalk, with a more sophisticated footing with hearths and chimney piece at the east end. These may have originally been parts of two separate buildings, and the large western rectangular unit may have



Plate 4. Vertical air photo of excavations in July 1984. The excavation areas in the south-east corner have yet to be uncovered. Photograph by HMS Osprey Photographic Section. North to the top of the photograph.

been an uncovered pen or barn. Few floor levels survived, but associated pottery places this building range in the 12th-13th century. This structure lies over one of the concentrations of post-holes assigned at this stage to the earlier Roman period, Figure 3E. Cutting across both the rectangular building and the burghage boundaries was a substantial circular structure (12). This building was a dovehouse of considerable size and was constructed from Roman building materials. The nest boxes in the thickness of the wall were key-shaped with a square opening often framed with Roman roof tiles; large pieces of rough masonry were found in the deeper footings, including vaulting material; squared pieces of ashlar were carefully selected and laid for appropriate faces of the upper structure. The floor level of the building was c. 0.8 metres below outside ground level, but the structure had been demolished in the late 16th century to below door-cill level. Two courses of nesting-box survived in the thickness of the wall, the upper course was blocked. A large circular pit, 1.1 metres diameter and 2.8 metres deep, just off-centre was probably used for the collection of the dung (Harry Gordon Slade pers. comm.). Documentary research identified a dovehouse on the property of John Syward, in one of the properties behind Durgate Lane, in 1405 (Draper 1980). The building excavated is probably that one so described. However evidence from excavation also shows that adaptations took place during the building's life, which may indicate a change of use; the upper row of nest-boxes was carefully blocked, the dung-pit and the base of the dovehouse was filled with considerable quantities of rubble and mortar and a trampled level of mortar suggests a new internal floor level, just below the upper row of dove-holes.

The changes after the demolition of the dovehouse, at the end of the 16th or beginning of the 17th century, are to some extent documented, and some of the principal elements have been previously summarised. The archaeological evidence for this post-medieval period is shown in Figure 3A. The footings of the Greyhound Inn and those of George Elwes' house could be clearly defined on the western edge of the site. A concentration of late 18th- and early 19th-century pits was fully excavated in the north-west corner. To the south of the late 18th-century warehouse building and below the footings of the later extension was a very large 17th-century cess-pit which contained a rich group of material; including several chamber pots, imported delft bowls, sgraffito wares, some imported glass globets, and a group of clay pipes. In the north-east corner of the site a pit contained considerable numbers of lower leg-bones of cattle; a by-product of tanning. Air-bricks (19th century) found in the south-east corner of the site may have belonged to a malt house, and this was the only evidence for the considerable number of maltsters and brewers who once occupied the site (George Elwes (1763), Short (1775), White (1810), Eldridge (1848)).

These rescue excavations provide a wealth of material for all periods of the urban development and the pre-urban landscape. The research potential of the material and data from the site will be enormous. A series of specialist reports are currently being undertaken: the Roman Stamped Tile (for Inscriptions in Roman Britain, *Britannia*) – Mark Hassal; the land molluscs from the Late Neolithic Monument – Mike Allen with Martin Bell (University of Wales); the early soil types and profiles – Stephen Staines (Soil Survey of England and Wales); the urban soil development

– Orpah Farrington (in conjunction with Soil Survey of England and Wales); the carbon dates from the Late Neolithic monument (Red deer antler, and charcoal samples) – Harwell.

The authors would wish to thank these specialists, and others who visited the site and provided useful and various contributions to the current archaeological output, in particular David Batchelor, Richard Bradley, Jenny Coy, Jo Draper, Laurence Keen, Mark Maltby, Bill Putnam, Richard Reece and Harry Gordon Slade.

The excavations were undertaken with a large Manpower Services Community Programme, together with a voluntary team of workers. The authors would like to thank all the participants and in particular the individual supervisors; Peter Bellamy, Deirdre Brennan (Finds), Michael Heaton, Christopher Sparey Green, Keith Speller and Richard Thomas for their supervision on site and their extensive written contribution to the site archive.

The excavations were principally funded by the Historic Buildings and Monuments Commission for England (formerly Department of the Environment), the Manpower Services Commission, West Dorset District Council Appeal Fund, Taylor Woodrow (properties) and their development partners, Eldridge Pope, and the contributions of the many visitors to the site. The excavations were organised and directed by Peter J. Woodward and Susan M. Davies for the Trust for Wessex Archaeology with the able assistance of Alan H. Graham who provided much direction on site, and input to the site archive and its analysis.

The authors hope that this short report provides an even and comprehensive coverage for this extensive and deeply stratified site, but recognise that there are many gaps and omissions, especially when related to the material finds, specific data description and references. However, we hope that the report brings out the principal elements, and that the report is sufficient to indicate the research potential of the record. The authors also recognise that the acknowledgements are short, and any specific omission results from lack of space. The authors thank all participants and organisations.

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Dorset Archaeology in 1984

HENGISTBURY HEAD, DORSET: UPPER PALAEOLITHIC PROJECT

Introduction

The fourth season of excavations at the Upper Palaeolithic site took place from June 9 to July 1 and employed an average of 17 individuals per day. As in previous years the Project was organised by the Donald Baden-Powell Quarternary Research Centre, University of Oxford, and was carried out with the full permission of the landowners, Bournemouth Corporation, who also gave every practical assistance to the work.

The land excavation programme concentrated its efforts on two parts of the site: an area along the southern cliff-edge and exposed path sections and, a strip of ground north of the footpath, extending inland of the main site complex. In all, a further 22 square metres were added to the total of 74 examined since the Project began in 1981.

A detailed survey of the present coastal-edge was also undertaken by Jim Hooker of the City University's Department of Civil Engineering to assess erosion rates, particularly along the cliff and path margins where the archaeological deposits are most actively eroding.

The Excavations

Trial borehole work in 1983 demonstrated the Upper Palaeolithic occupation to be much more extensive than previously supposed, continuing well inland of the main coastal footpath. All the earlier excavations at the site were confined to the area between the footpath and the cliff-edge (Mace 1957; Campbell 1968-9; Barton and Bergman 1981-3), leaving the northern area virtually unexplored.

The purpose of the 1984 excavations was to examine two further areas of the site, each with specific aims in mind.

(1) *Northern Sector*. A new area about 4 metres north of the coastal footpath, where borehole evidence had already indicated the continuation of important occupation evidence. The main aims here were to explore the northern extent of the site and to recover flint artefacts for use-wear analyses. Tests last year had shown that the flints from this area were in fresh enough condition for such studies, whereas many of those from south of the footpath were too heavily patinated.

(2) *Southern Sector*. This comprises the main area, partly examined by earlier workers in 1957 and 1968-9, and by our own detailed fieldwork since 1981. The aims were to obtain stratified material adjacent to the artefact clusters located in previous seasons and to complete the scheduled programme of rescue work along the cliff-top and path sections.

An area of 13 square metres north of the footpath was stripped of topsoil before work proceeded by trowel in 2-4 cm horizontal spits down through approximately 0.75 m of implementiferous sands. At this depth the underlying pleistocene gravels were reached and the digging ceased. Most of the artefacts occurred in the upper two-thirds of the sands.

Excavation was similarly completed in the southern sector adjacent to last season's trenches. All artefacts 1 cm or greater in size were three-dimensionally recorded and individually bagged to provide the best possible specimens for use-wear analyses (fuller details of the recording system are provided in the 1981 interim report). Exactly the same screening procedures were used as last year, with 3 mm mesh-sieves employed to catch the finer flint debris. An addition this year, however, was the use of wet-sieving, particularly in the northern sector where highly organic sediments made normal dry-sieving difficult and time-consuming.

The Northern Sector

An especially dense spread of well-preserved occupation debris was uncovered in this area of the site. Besides the flaked flint, charred wood and ochre fragments previously encountered, a noteworthy feature here was the occurrence of several large blocks of quartzite in one small corner. Furthermore, most of the flint material seems to be in excellent condition for use-wear analysis.

Of more than 1,500 flint artefacts (one centimetre or greater) found in the northern sector, 92 are retouched tools or broken tool fragments. In this area alone, 39 burin spalls were recovered, some showing clear signs of subsequent retouch. Correspondingly fewer burins were found (9) but this disparity is hardly surprising given the high incidence of resharpening facets on the Hengistbury

burins. The finds suggest on-the-spot use, resharpening, and then abandonment of the burins. Striking confirmation of this fact is provided by the number of burin spalls which can be fitted back onto burins found nearby. Identification of the actual tool-use must await the edge-wear analysis to which the burins and the spalls will shortly be subjected.

The scatter of quartzite fragments from the new area is less extensive than first thought, since the pieces can be refitted into two discrete blocks, one weighing more than 2 kgs. Their occurrence is particularly interesting since material of such size and type is not native to Hengistbury: it must have been deliberately transported to the site by man. Despite the presence of a prominent flake scar on one fragment there are no tell-tale percussion marks or other signs of battering to indicate prolonged use as a hammer. Rather, the overall condition of the lumps suggests they were thermally fractured. This has now been confirmed by the work of Joan Huxtable (RLAHA, Oxford University) which shows that several of the blocks were exposed to heat of about 500 degrees Celsius.

The limited nature of the finds is, however, difficult to equate with their use as hearth material, especially since other suitable rock-types were more locally available. An alternative explanation is they were brought in for another purpose, perhaps for use as an anvil, and were burnt. Some support for this idea is provided by the presence of broken backed bladelet tips (including one typical 'Krukowski microburin') around the blocks. Similar breakages have been reproduced experimentally by the writer: they are common enough accidents of tool manufacture but are more frequent when a bladelet is retouched resting on a solid base or anvil stone. It is interesting that over 50 per cent of the tools from the northern area are backed bladelets and many of these are broken. The total does not include various other backed or retouched pieces, including two tanged points, found in this same sector.

Further evidence of human activity found in the northern sector includes considerable numbers of reddened ochre fragments. The rectangular shape and striated edges of one piece in particular strongly hint that it once served as a crayon (Fig. 1). Jill Cook of the Department of Ethnology and Prehistory at Oxford is currently studying these and other ochre stubs for possible cut-mark traces. An examination of the same ochre is also being undertaken by Chris Salter of Oxford University's Department of Metallurgy for mineralogical and source-typing purposes.

Isolated scatters of charred wood and burnt flint flakes have been widely observed throughout the occupation horizon in the northern area, suggesting the nearby presence of a hearth. But, as has been stated above, no convincing traces of one *in situ* have yet been found. Several of the fragments of charred wood have been submitted to Richard Gillespie and John Gowlett of the Radiocarbon Accelerator Unit in Oxford, for dating. The results are expected shortly.

The Southern Sector

As anticipated, work south of the footpath this season yielded further detailed information on the spatial distribution of retouched tools to add to the considerable body of data which already exists. The distribution of end-scrapers previously noted can now be seen to increase progressively in an easterly direction. Three of the scrapers from the cluster have been found to fit back to an opposed platform core located some 6 metres away. Whether this example represents the actual transfer of equipment from a primary flaking area (around the core) to a location of a specialised tool-use (indicated by the scrapers) should become clearer once the study of conjoins amongst the recently excavated artefacts is more fully advanced.

General Limitations

This year's work north of the footpath has clearly demonstrated that the Upper Palaeolithic occupation extends well beyond the previously expected limits, and is therefore of considerable size and complexity. The full total of well over 600 retouched tools so far recovered from the whole site constitutes the largest stratified collection of Upper Palaeolithic implements from anywhere in the British Isles. The sample is also now of sufficient size to make possible meaningful comparisons with open-air sites of similar type and date on the continental mainland. Of particular interest is the combination at Hengistbury of large tanged points and shouldered points (Fig. 1) which suggest the British site is of a somewhat unusual character.

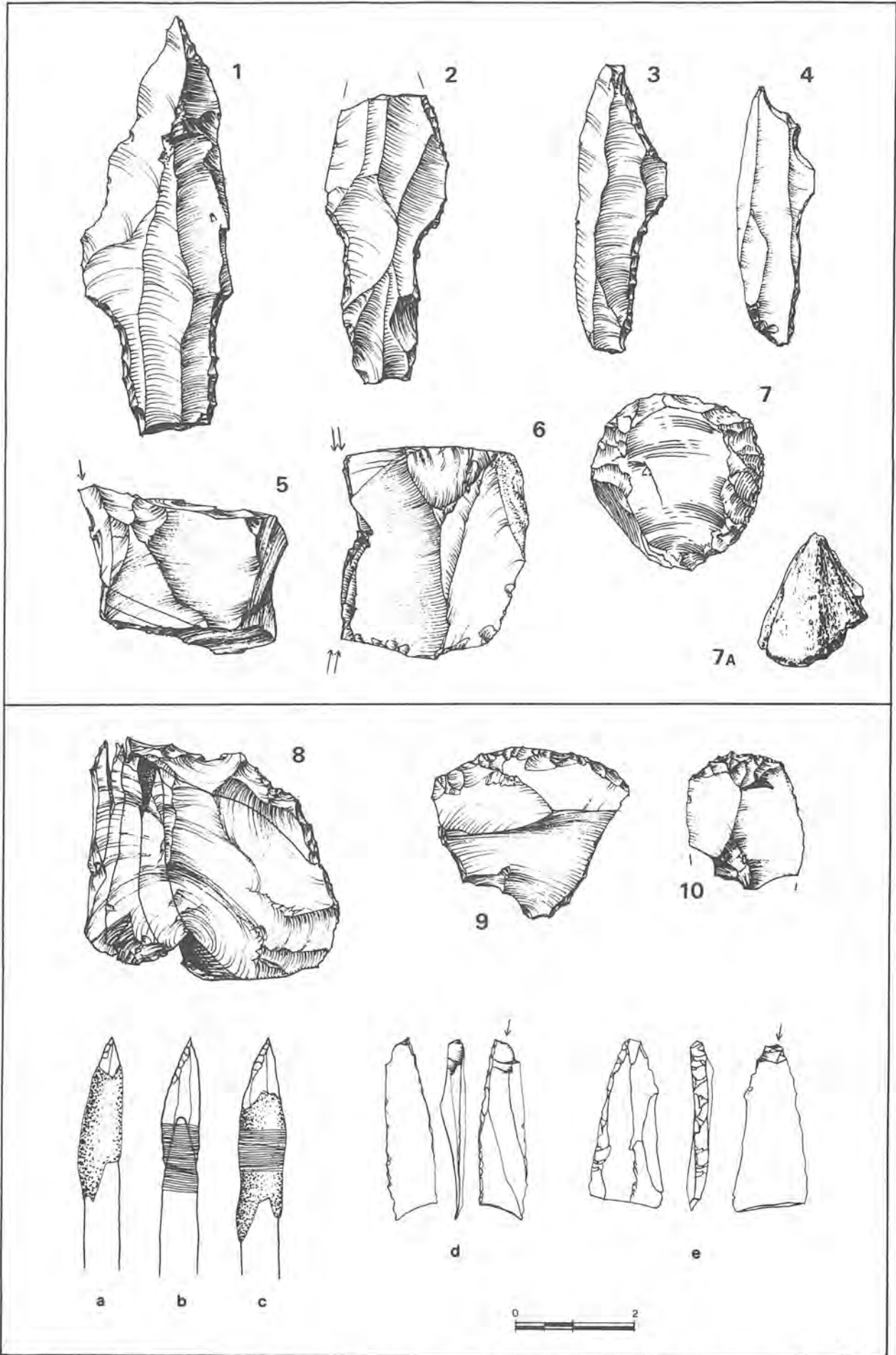


Figure 1. Hengistbury Head, Upper Palaeolithic site. 1, 2, Tanged points (1 – Druitt surface collection); 3, 4, Shouldered points (3 – Druitt surface collection); 5, 6, Burins on intentionally snapped flakes; 7, rounded scraper; 7a, ochre 'crayon'. Powell Mesolithic site. 8, Core on flake with refitted bladelets; 9, 10 end-scrapers; a-c, Experimental arrowshafts: methods of hafting using (a) resin only, (b) sinew only, (c) resin and sinew combined, (d) Microlith point from the excavations with flute-like break on dorsal surface, (e) experimentally fired point with flute-like 'impact fracture' on dorsal surface.

The recovery of new material fresh enough for microwear work will add very considerably to our knowledge of the application and use of stone tools in the Upper Palaeolithic. Similarly, the refitting of sharpening spalls to tools with allow a step-by-step examination of these implements from the earliest stages of use to their final discard. The combination of the microwear and refitting evidence should offer a remarkable insight into how the Hengistbury site operated.

The evidence from the burnt quartzite is interesting, especially since the temperature involved is well above that normally expected from a chance brush fire. Temperatures in the 500-degree range are much more commonly associated with the heat of an organised hearth or bonfire. However, definite evidence that the quartzite blocks were part of a formal hearth is lacking and for the moment all that can safely be said is that the findings are consistent with a man-made source of fire, but by no means confirm it.

The large spread of occupation debris uncovered in the southern zone has revealed significant differences in the distributions of various tool-groups. Detailed laboratory analyses are now well advanced and in particular further refitting will add significantly to our understanding of the spatial organisation at the site. The link between particular tools and different types of activity will become increasingly clear as the post-excavation work on refitting and use-wear progresses.

Future Programme

The 1984 excavation completes the planned programme of field-work, the aims of which have been accomplished. Most of the immediately threatened southern sector has been examined, leaving considerable areas inland available for future research. A sufficiently large sample of Upper Palaeolithic material has been collected and, for the time being, no further excavation is envisaged.

In 1985-6 major efforts will be directed towards the post-excavation programme, to finalise reports for contribution to the definitive publication. The results of excavations at this site and at the Hengistbury Mesolithic site will appear in the DNHAS Monograph Series.

NICK BARTON, Donald Baden-Powell Quaternary Research Centre

TWO RADIOCARBON DATES FOR WOR BARROW

It is ironic that the first long barrow to be dug by modern method should be one of the last to be dated. Wor Barrow was excavated by General Pitt-Rivers in 1893 and published by him five years later. For many years it was treated as a type site, but more recent work has emphasised its anomalous character. It now seems possible that it may belong to the end of the long barrow tradition (Bradley *et al.* 1984, 94).

It was in order to put this idea to the test that two antler samples from the original excavation were submitted for radiocarbon dating. I am most grateful to Peter Saunders, the Salisbury and South Wiltshire Museum, Ian Kinnes and Richard Burleigh for making this possible. One sample (BM 2284) is recorded as being found 'on the bottom of the barrow ditch' and gave a date of 2490 ± 70 bc. The second sample came from within the lower silts of the barrow ditch and has a date of 2400 ± 70 bc (BM 2283).

These dates are in broad agreement with those from other later long barrows and suggest that the distinctive 'Cranborne Chase type' may belong entirely to the early to mid third millennium bc. This is the line with dates from rather similar monuments in other parts of the country (*ibid.*, 94). It is hoped to check this suggestion by dating Thickthorn Down long barrow (Drew and Piggott 1936).

RICHARD BRADLEY

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HAND-IN-HAND FLINT CAIRN, TOLLARD FARNHAM

Introduction

The site, which was discovered by Martin Green in 1981 as a discrete scatter of burnt flint and large nodules in ploughsoil, lies at the end of a slight ridge running from north-west to south-east on the plateau behind the building that was once the Hand-in-Hand Inn (ST 948157). The natural is a deep deposit of clay with flints. A test pit revealed no trace of chalk 60 cm below the base of the

ploughsoil. The site has been under the plough for several years and was subsoiled to a depth of as much as 35 cm recently.

Many worked flints were recovered from this area by General Pitt-Rivers (e.g. 1888, 48) and the cairn lies at the eastern edge of an extensive and dense flint scatter (Martin Green, pers. comm.). An un-turned cremation was recently ploughed out only 100 m to the south-west of the cairn and the neighbouring field to the west contains an urnfield (Richard Bradley and Martin Green, pers. comm.). The ridge was considered to be a possible long barrow mound (Grinsell 1982).

The Site

Four trenches were opened on the burnt flint scatter (3) and to either side of it (1, 2 and 4). The trenches at the sides of the ridge revealed no trace of ditches and the ridge itself appears to be of natural origin.

A large quantity of worked and burnt flint was recovered from the ploughsoil in all trenches. The quantities of burnt flint are set out in Table 1.

Trenches 1, 2 and 4 revealed no archaeological subsoil features. Trench 3, however, contained *in situ* the remains of the cairn from which, presumably, all the burnt flint and large nodules in the topsoil were derived. The burnt area itself (layer 2) measured 3.2 by 2 metres and was surrounded by a scatter of large nodules. The layer of burnt material, which was only about 5 cm deep, contained some worked flint and a few sherds of prehistoric pottery. Only one of these, part of the base of a possibly earlier Bronze Age vessel, was at all diagnostic. Unfortunately this sherd was found in an area of disturbance created by the subsoiler, so its provenance cannot strictly be regarded as certain.

Below the burnt layer was a layer of pale brown silt (layer 3) which also contained a few struck flints. This extended over the whole trench and was on average 10 cm thick.

Interpretation of layer 2 is problematic. It represents the remains of a cairn consisting of both burnt and unburnt material. Though the dating is uncertain it is almost undoubtedly of prehistoric origin. The absence of burnt bone seems to rule out a funerary function. But if the material represents a burnt flint mound of domestic character the inclusion of large unburnt flint nodules is unexplained. The deliberate siting of the cairn at the end of a slight ridge and the inclusion of both burnt and unburnt material perhaps suggests that a ritual function is more likely.

The Flints

From the four trenches excavated a total of 659 flakes, 27 cores and 51 tools were recovered. 96 per cent of the flint was unpatinated, being grey/white to dark grey in colour. True blades made up only 0.5 per cent of the assemblages while the bulk of the flint fell within the length/breadth ratios of $<5:2$ and $>2:2$. The flakes rarely

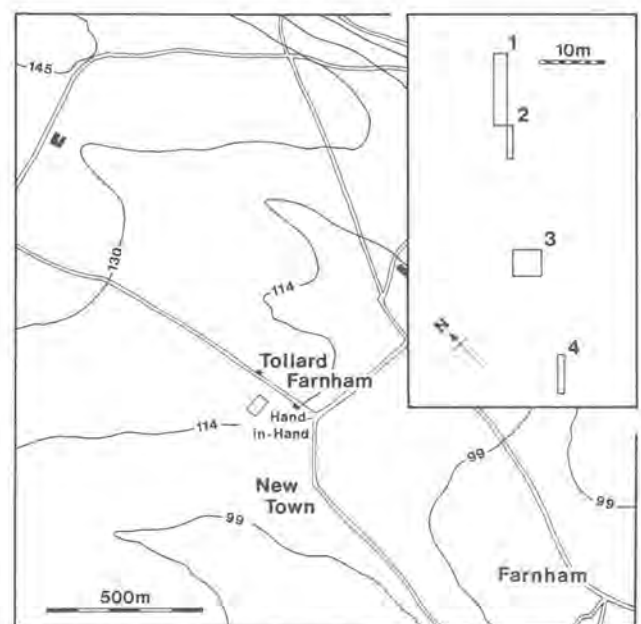


Figure 2. Hand-in-hand flint cairn, Tollard Farnham: location of trenches.

exhibited signs of mis-hitting and were rather characterised by their thinness, producing a number of naturally sharp edged flakes. One such displayed what appeared to be a "wear gloss", however this feature has been observed to occur naturally in the area (Martin Green, pers. comm.).

The tools were made up for the most part of simple retouched flakes and large, well made scrapers (35 per cent and 33 per cent respectively). Also present were notched flakes (10 per cent), borers (8 per cent) and three oblique arrowheads (6 per cent). Of note is one example of a broken knife of a non-local unpatinated black flint reminiscent of that found at Beer Head in south Devon. Fieldwalking in the area carried out by Martin Green has produced a broadly similar group of artefacts, though the part of the Pitt-Rivers Collection provenanced to the nearby farms contains, perhaps not surprisingly, a preponderance of axes and chisels.

Overall the excavated assemblage suggests a later Neolithic date. The distribution of flint between the four trenches showed a marked bias of the flakes towards trenches 1 and 2, 11.95 and 9.5 per square metre of topsoil, compared with 4.6 and 5.1 in trenches 3 and 4. Over 50 per cent of the cores, however, were recovered from amongst the nodules that made up what was left of the flint cairn. From their patination and flake scars it is possible to suggest that they are contemporary with the associated flakes and tools. Their use in the construction of the cairn points to its having late Neolithic or later origins.

Acknowledgements

We would like to record our thanks to Mr Michael Pitt-Rivers, the landowner and Messrs Stuart Walker and John Benjafield, the tenants, for permission to excavate. Thanks are also due to Martin Green for his help and encouragement and for defraying the costs of the excavation and to Richard Bradley for much advice. Finally we must thank Martin Lewin-Titt for his hard work in the field.

Table 1. Quantities of burnt flint in the ploughsoil.

Trench	Weight of burnt flint	Dimensions of trench	Depth of topsoil
Trench 1	3.5 kg	11 × 2 m (22 m ²)	35 cm
Trench 2	0.9 kg	5 × 1 m (5 m ²)	35 cm
Trench 3	94.5 kg	4.5 × 4 m (18 m ²)	25 cm
Trench 4	1.55 kg	6 × 1 m (6 m ²)	25 cm

MARTIN BOWDEN AND MARTIN TINGLE

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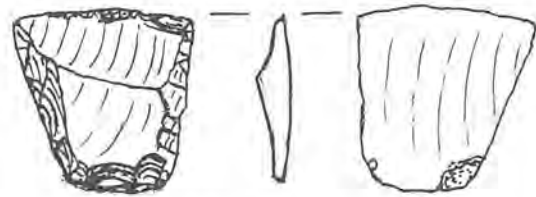


Figure 4. Arrow-head from Winterbourne Monkton, at life size.

WINTERBORNE MONKTON

A transverse arrow head in a heavily-patinated white flint (Figure 4) was picked up by John Walker in arable east of the Lanceborough barrow group (SY 670891). The findspot lies south of the major cropmark complex but two ringditches lies within 50 m. (Unpublished field survey by Alison Sheridan.)

CHRISTOPHER SPAREY GREEN

WYKE DOWN HENGE SECOND AND FINAL INTERIM REPORT
Further excavation in 1984 has practically completed work on the site, with only three pits remaining to be examined (leaving five on the east side unexcavated). The sequence uncovered in 1983 was unaltered by further excavation. The pits towards both terminals were substantially richer in finds and included much more grooved ware, flintwork, a stone axe and fragment of a human skull mostly from the recuts. The western terminal pit was much longer than the others previously excavated and had a sparse scatter of cremated bone within the recut. Another pit had a discrete deposit of ash with minute flecks of cremated bone within it and had the appearance of having been contained in a bag. Backfilling of the site will be deferred pending possible restoration of the site.

MARTIN GREEN

EVERLEY WATER MEADOW, IWERNE STEPLETON, DORSET

(ST 861115)

With the completion of the major series of excavations of the neolithic enclosure complex on Hambleton Hill, Dorset, many aspects of the social and economic life of the period and indeed during later phases had been clarified. The nature of the evidence upon the site, however, provided little evidence for the reconstruction of palaeoenvironmental detail against which to place the cultural sequence attained on the site. In consultation with Dr Martin Bell (University College, Lampeter) and Bob Smith (Inspectorate of Ancient Monuments, London) a research design was developed that suggested sampling of a series of valley bottom deposits around the hill where colluvial and alluvial accumulations might have led to the accrual and preservation of palaeoenvironmental sequences that would comprise an essential adjunct to the interpretation of the main site. In order to maximise the opportunities to be gained from the exercise a site was chosen in Everley Water Meadow where extensive field survey conducted during the Hambleton Hill project had indicated an extensive scatter of calcined flint suggestive of prehistoric occupation.

Excavation in 1982 and 1983 revealed traces of a Late Bronze Age occupation site set beside a series of extinct stream gulleys set at the very edge of the flood plain of the River Iwerne, which provided just the secluded circumstance where suitable diachronic deposits of palaeoenvironmental data might be preserved.

Excavations in 1984 on this site were supported by the Dorset Natural History and Archaeological Society and by the University of Edinburgh, Department of Archaeological Fieldwork and Research Fund. Most particularly, however, the writer would wish to acknowledge the sum of £900 subscribed by local villagers and farms, the first instance in Britain of which the writer is aware, of a local community subscribing substantially to allow an excavation to continue in its immediate locality. An account of the excavation is best set out in two quite separate sections - first the evidence for prehistoric occupation and secondly a preliminary account of the palaeoenvironmental exercise.

The settlement history of Everley Water Meadow is a complex one. Set firmly on the base of the natural combe deposits is a crescentically-shaped activity deposit of Late Bronze Age date. This deposit comprised a massive deposit of burning mingled with very large quantities of calcined flint - a remnant 'burnt mound', a feature that is now well attested in the south English Late Bronze Age.

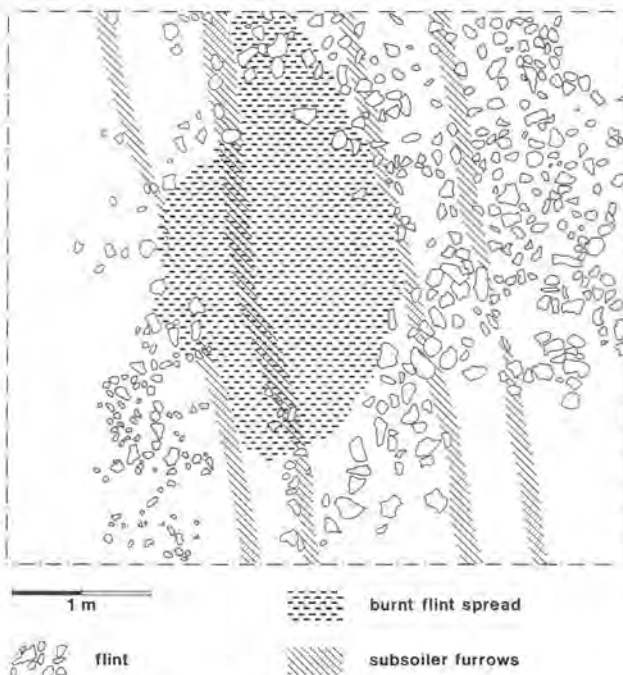


Figure 3. Hand-in-hand flint cairn: plan of trench 3.

Set at the centre of this deposit was the intact base of a bucket-shaped pot with a number of red deer antler fragments and a large piece of carved shale. The writer's reconstruction is of a riverside occupation site largely destroyed by later erosion – erosion which has fed into the nearby stream gully a number of artefacts which are likely to be related to this or similar occupation stances on the banks of the river. A mould for a South Welsh/Stogursey type axe executed upon the rock trachyte occurs within this gully as well as a probable plug for a socketed axe casting. Also a segment of a copper ingot was retrieved from nearby deposits.

Much execution had been done to these early deposits by later medieval field boundaries which had truncated an earlier sunken structure which may be part of the documented Saxon village of Iwerne Stepleton. These medieval boundaries are, in turn, truncated by the drainage gulleys of the 18th and 19th centuries water meadow with its landscape gardening connotations in connection with the laying out of the gardens of the present day Stepleton and Ranston estates.

None of these cultural influences had, however, significantly affected the presence within the deposits encountered of a near continuous succession of deposits reaching back into prehistory from the present day and which because of the fine preservation of land and fluvial mollusca provide a fine register of changing environmental circumstances. The writer believes that the best way of rapidly summarising these is in a numbered sequence reading, as it were, from the most recent.

The Environmental Sequence

- (1) The alluvial deposits associated with the use of the area as a water meadow.
- (2) Colluvial deposits from the direction of the east slope of Hambledon Hill which in their upper layers contain medieval material and in their lower deposits Roman material. These colluvial deposits equvalate to deep deposits excavated beneath a nearby plough lynchet which would appear to reach back into the Iron Age. Characteristic Durotrigian pottery and shale bracelet fragments were retrieved from the basal layers of this lynchet deposit.
- (3) An alluvial deposit which apparently seals the LBA deposits on the site.
- (4) An alluvial deposit which underlies the horizon of LBA activity on the site.
- (5) A river channel the filling of which, sealed beneath a later channel containing LBA material, contains an absolutely fresh, quite unabraded *petit tranchet derivative* arrow head – a type most generally linked with a Late Neolithic/Early Bronze Age date.
- (6) Sealed beneath channel (5) is a sequence of deposits which in their later stages indicate erosion from nearby chalk based slopes probably due to early agriculture. Beneath these deposits, apparently laid down in still water conditions, is a series of deposits, derived from the green-sand areas situated 1-2 km upstream, which, within their depth, exhibit lenses of charcoal staining suggesting widespread episodes of burning. It can only be suggested that these horizons represent the earliest farming activity in the area which, in its turn, was foundatory to the great earthwork complex established on Hambledon Hill and explored between 1974 and 1982.

ROGER MERCER

FIELD SURVEY OF THE ANCIENT FIELDS AND SETTLEMENT ENCLOSURES AT BLACK HILL, CERNE ABBAS, DORSET

The two enclosures and associated field earthworks at Black Hill (centred on ST 672005) were examined and assessed by excavation and survey in December and January 1981/82 (Bond 1982). Additional fieldwork was undertaken in the late autumn of 1983 when parts of the western hilltop were ploughed for the first time. For a plan of the site refer to Bond, figs 2 and 3.

All three fields on the hilltop were examined and recorded after ploughing. Systematic fieldwalking on the National Grid was the basis of the survey record; with detailed artefact distributions, soil-marks and earthworks plotted on a 50-metre grid. Soil samples at 10-metre intervals were collected in three traverses across the settlement zones defined by the earthworks; these were tested for phosphate.

This survey identified previously unrecorded elements of the field system, and further defined their structure. The artefact distributions have enabled some definition of functional zones. The data also allows for a settlement sequence to be described, although this needs to be tested by excavation.

The survey demonstrates that flint was extracted and worked on the hilltop from the early prehistoric period (Late Neolithic) onwards, and notably in the north-eastern area; pick fragments, hammerstones and core-waste. Tools, predominantly flint scrapers, concentrated in the southern and western areas, as does the early pottery (Middle Bronze Age to Early Iron Age). This early pottery has its densest concentration on the eastern edge of the site and is bounded by the concentration of core-waste and hammerstones to the north-west, the eastern earthwork enclosure to the west and a broad concentration of flint scrapers to the south. This Bronze Age 'settlement focus' occurs in an area undefined by soil-marks and earthworks but which probably lies in an area that was subjected to ploughing in the 18th/19th century (distribution of post-medieval pottery, manuring). The occurrence of Late Iron Age and Romano-British pottery and tile across the area indicates systematic use of the hilltop in this period, although the pattern of earthworks as such probably originates in the Bronze Age. However three distinct, separate and successive field arrangements can be recognised.

This basic site depiction gives a basis by which similar hilltop enclosures and associated field systems in the locality can be more adequately compared; such as Shearplace Hill (Rahtz 1962) and Hog Cliff Hill (Ellison and Rahtz, forthcoming). Many of these are now subjected to annual ploughing. This survey also provides graphic evidence of the progressive loss of archaeological data as a result of ploughing.

This survey was commissioned by the Historic Buildings and Monuments Commission to augment the results of the 1982/83 season of excavation (Bond 1983) and undertaken by the Trust for Wessex Archaeology. The survey was designed on a basis which would enable direct comparison to be made with similar surveys carried out on the South Dorset Ridgeway (Woodward 1983). The full record for Black Hill is currently stored at Salisbury (W48) and an implications report was submitted to Historic Buildings and Monuments Commission (England) (March 1984). A report synthesis for *Dorset Proceedings* is in preparation. The survey was directed and supervised by Peter W. Cox and Peter J. Woodward (TWA), the lithic analysis and distributions was undertaken by Peter Bellamy.

PETER J. WOODWARD AND PETER W. COX,
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ROUND BARROWS IN CAME WOOD, WINTERBORNE CAME
Students of the Dorset Institute of Higher Education found two flint flakes and one chert flake brought to the surface by burrowing animals in the round barrows at SY 69688545 (RCHM Group R11, no. 21) and 69578548 (R11, no. 20), in the Culliford Tree Group (RCHM 1970, 458). The flakes were examined by Peter Woodward; none of them was diagnostic. They are deposited in the County Museum.

ALAN HUNT

RCHM, 1970, *Dorset II*, Part 3.

HENGISTBURY HEAD, 1984

Introduction

The sixth season of excavations on the later prehistoric and Roman site took place between 7-28 July employing a labour force averaging 15 people per day drawn from the Universities of Oxford, Durham, Reading and Southampton. The work was carried out with the active co-operation of Bournemouth Corporation, from whom permission to excavate was readily obtained, and was organised by the Intitute of Archaeology, University of Oxford.

The principal activity centred on Site 1 where a trench 6 m wide (narrowing to 3 m at the extreme southern end) and 65 m long was dug. It was designed to explore the area to the south of the main area excavation of 1979-83, between the excavation and the foot of the Headland (here obscured by 19th century quarry waste) in the hope of tracing limits to some at least of the settlement nuclei previously defined.

In the Nursery Garden (Site 6) the desire of the local natural historians to create a pond, to encourage the breeding of dragon-flies, was converted into an archaeological opportunity by offering to provide professional archaeological supervision for the group of senior school children involved. This excavation was directed by Amanda Chadburn and Julie Gardiner.

In pursuance of the palaeo-environmental goals of the project a small trial trench was cut through the tail of the main rampart at its northern end where it descends from dry land and crosses the edge of Wick Hams marsh (Site 7). The National Maritime Museum also completed their exploratory trench on the west edge of Rushy Piece (Site 3).

The renewal of the water-main serving the chalets on Mudeford spit was scheduled to take place early in 1984 with the Institute of Archaeology providing a watching brief. A delay in the administration of Scheduled Monument consent forced the work to be postponed and in the event the Water Board presence coincided with the 1984 excavation. The trench, from Mudeford spit along the north shore of the Headland to the main entrance in the Double Dykes, provided a wealth of archaeological and environmental detail and has amply demonstrated the high potential of the marshland areas for further exploration.

The Excavation on Site 1

The trial trench on Site 1 fulfilled its purpose in demonstrating the extent of the different phases of Iron Age-Roman occupation. The natural 'bedrock' merged from gravel at the south end to sand at the north. It was overlaid by 0.6 m of plough-churned topsoil the considerable depth reflecting the continuous accumulation of blown sand. About 0.3 m was removed mechanically, the rest by hand. There was no superficial stratigraphy.

The earliest occupation, represented by artifacts redeposited in later contexts, dates to the Late Neolithic-Early Bronze Age. A number of flint flakes were recovered together with parts of four Grooved Ware vessels. This is the first time that Neolithic pottery has been found on the Headland though flints are comparatively common.

The earliest structural remains recorded belong to the 8th-6th century BC and consist of a number of post-holes and small pits together with a substantial part of the wall slot of a circular house (part of which was recorded but not recognised for what it was in 1981). The house was the westernmost of the extensive settlement identified in previous years. Post-holes and pits of Early Iron Age date extended southwards to the line of a palisade trench (itself containing only Early Iron Age sherds) which may well represent the southernmost boundary of this early settlement nucleus. The Early Iron Age pottery recovered from several small pits presents a full early assemblage including both coarse wares and haematite-decorated bowls.

The next phase of Iron Age occupation is represented by segments of two drainage ditches dug around circular houses, the structural details of which, except for the door-posts, do not survive. One of them was identified in 1980/81; the other was previously unknown. In the past some doubt has attached to the phasing of these structures but sufficient pottery has now been recovered to suggest a Late Iron Age 2 date (i.e. Durotrigian: 50 BC-AD 43).

The late dating of the penannular ditches raises a number of interesting questions, not least the relation of the settlement to its boundaries. It has been shown that, at this time, a complex (and several times reconstructed) palisade defined the south and west sides of the Late Iron Age 2 settlement. The western length was partially destroyed by a later (Roman ditch) cut along approximately the same line. The 1984 excavation located two lines of palisade of this period marking the southern side of the enclosure. The fenced enclosure, thus defined, neatly contains the penannular ditched houses together with all other Late Iron Age 2 features.

At a slightly later date (mid-1st century AD on the basis of a preliminary assessment of the pottery) a ditched enclosure was dug to the south of the palisaded enclosure following the line of the western boundary but overlapping the southern fence line. Insufficient of the interior lay within the excavation for any assessment of its function to be offered.

No evidence was discovered of Middle Iron Age occupation, adding further support to the idea of there being a hiatus between the 6th and 2nd centuries BC. Material of Late Iron Age 1 was limited to stray finds from disturbed contexts. Most notable were several fragments of crude purple glass and segments of two purple glass bracelets both decorated with a zig-zag trail of yellow glass. The rarity of glass bracelets in Britain and the technical similarity of these two Hengistbury examples strongly suggests that they were locally manufactured from imported purple glass metal.

The western boundary, determined by the palisades and the later ditch (all of Late Iron Age 2), was maintained throughout the Roman period as a frequently-redug shallow boundary ditch. Much of the line of this ditch complex was traced in 1981. Pottery suggests maintenance throughout the Roman period at least into the late 3rd century. The area to the west of the ditch was without significant features.

The trial trench attached to the main excavation on Site 1 has, therefore, amply fulfilled its purpose in allowing a number of western and southern settlement boundaries to be established. The

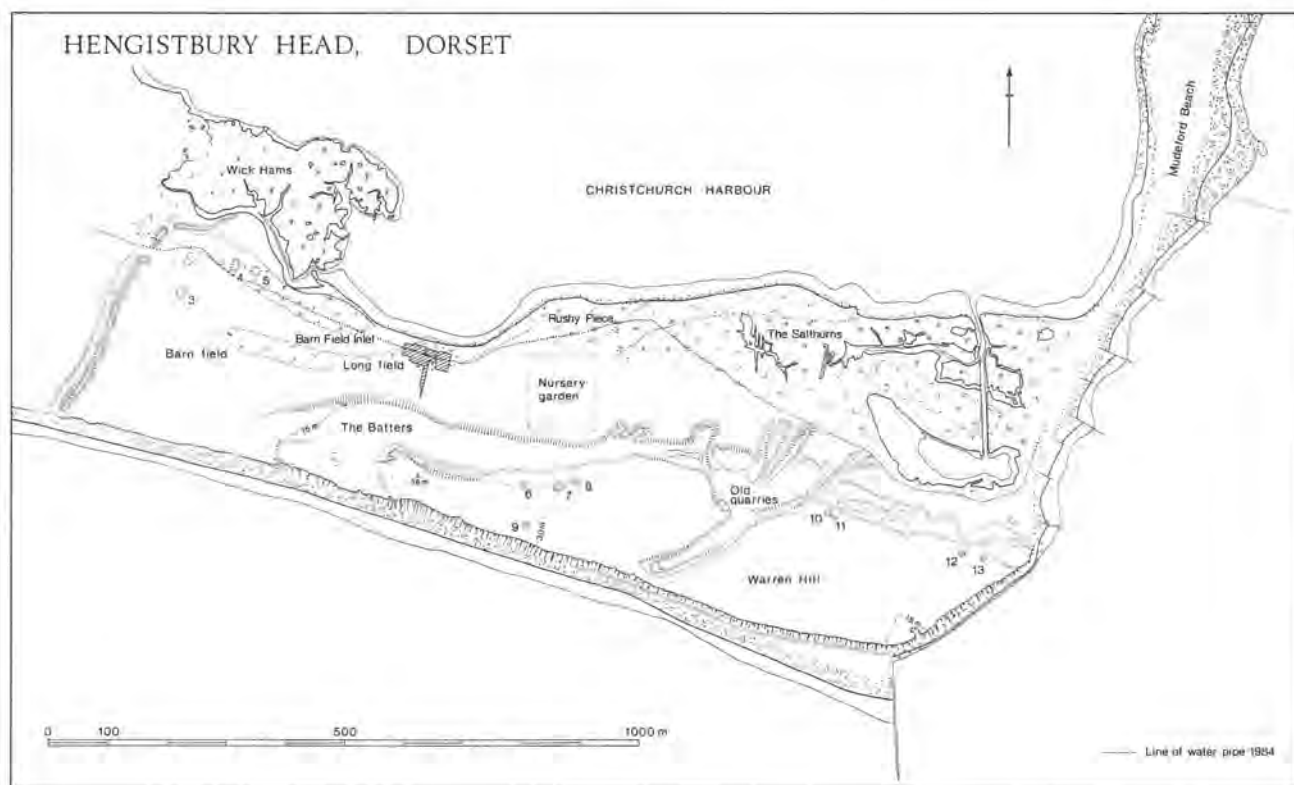


Figure 5. Plan of Hengistbury showing the locations of the sites mentioned.

discovery of the Neolithic assemblage, comparatively large collections of well stratified Early Iron Age and Late Iron Age 2 pottery, together with the glass bracelets, are an added, but welcome, bonus.

The Trial Trench through the Rampart Trail on Site 7

The recurring end of the main rampart of the Double Dykes is clearly discernible where it descends from the gravel terrace and runs into the marsh now known as Wick Hams. At the point sectioned the bank stands 1 m above present marsh level and is some 8-9 m wide at the base.

The trial trench cut in the eastern slope was designed to examine the general structure of the rampart and to explore its relationship with the marsh levels.

The rampart proved to be composed of discontinuous tips of gravel, sandy gravel and clayey gravel dumped upon the original surface of the marsh, now about 1 m below the present marsh surface (i.e. 2 m below the rampart crest). The original deposits predating the rampart consist of a slightly clayey sand up to 0.1 m thick merging down to a grey alluvial clay containing copious subangular flint pebbles. Thus it appears that the rampart was built when long-established estuarine conditions were changing to a shore line situation possibly as the result of a slight fall in sea-level. The original 'beach' sand here would be at approximately 0 m OD.

Over the rampart tail clayey peat developed. The layer was 0.4 m deep at the extreme eastern end of the trench but appeared to be deepening towards the east.

Sufficient has been established to underline the crucial interest of the earthwork in terms of the environmental history of the site. In principle it should be possible to correlate the sequence with the situations established in the other marshy areas along the northern fringe of the Headland.

The Dragon-fly Pond: Site 6

A small area excavation was undertaken in the area known as the Nursery Garden, approximately 210 m east of the main 1984 trench. The excavation was directed by Amanda Chadburn



Plate 1. Hengistbury Head 1984 excavations.

(University of Oxford) and Julie Gardiner (University of Reading). Excavation in this area was initiated by Mark Holloway, the warden of the Head and Peter Hawes of the Marine Training Centre (MTC) as part of an educational/ecological project. The ultimate aim was to create a pond to encourage certain rare species of dragon-fly to breed. The Nursery Garden is a protected bird sanctuary, and we are grateful to members of Christchurch Harbour Ornithological Group for their support and co-operation. Labour was provided by a team of 12-15 sixth form students and some local adult volunteers. Equipment was provided by Bournemouth Parks Department, the MTC, Oxford Archaeological Unit and Mark Holloway, to whom we are most grateful.

The trench (9 m by 5 m) was dug by hand, about 75 per cent of the soil being sieved through a 3 m mesh.

The site was sealed by a root and rabbit-disturbed upper plough soil some 0.3-0.5 m thick in the base of which it was possible to distinguish discontinuous single-direction plough furrows which are no earlier than the Roman period and may be quite recent. The plough furrows and several post-holes post-dated the filling of a small ditch which produced a few sherds of Late Iron Age or early Roman date.

The ditch appears to have been cut through a lower plough soil, 0.2-0.3 m thick, containing much more of the inter-mixed natural yellow sand. This was also rabbit-disturbed but when removed the surface of the natural sand below displayed regular rows of spade marks made by driving a U-shaped spade blade several centimetres into the surface of the natural. The spade marks were cut by the Late Iron Age-Romano-British ditch and could in turn, be shown to cut through the top of an earlier pit containing a variety of flints and sherds of an Early Bronze Age collared urn. The initial breaking of the soil, which the spade marks must represent, therefore dates to the later second or first millennium.

Flints of Neolithic and Bronze Age date were found extensively throughout the plough soils.

The Water-main Trench

The water-main trench c. 0.3 m wide and 1 m deep was dug for a distance of some 1.5 km in from the Mudeford sand pit to the Double Dykes along the northern fringe of the Headland, cutting through all the major areas of marshland. The entire length was archaeologically observed and recorded. As a result of this, and of some additional deeper sondages dug along the line, it is at last possible to outline an environmental history for this northern zone.

The area is divided by three gravel spits of fluvial origin dating to the period of the Christchurch Terrace (late glacial). The form of the spits is best appreciated from Fig. 1. Between them lay three inlets, the Salthurns, Rushy Piece and Barnfield inlet each floored with resorted gravels early in the period of post-glacial sea-level rise.

The situation in the Salthurns inlet is at present difficult to interpret in detail but it appears that the eastern end became blocked with blown sand leaving an isolated bog to develop at the western end. Sherds of amphorae of the 1st century BC were found here in organic black clays at a depth of some 0.8 m, providing a useful chronological indicator.

In Rushy Piece the situation was altogether more complex but in summary it was possible to define a consistent layer of estuarine sands and fine gravel lenses, representing the Roman marine transgression. Below this, in organic estuarine clays, occupation debris was recovered, including Dressel 1A amphorae and pottery imported from north-western France, dating to the early 1st century BC. Several deeper sondages demonstrated a depth of 1.0-1.5 m of estuarine silts interleaved with discontinuous peat lenses, before the gravel 'bottom' was reached.

The Barnfield inlet was much narrower and was partly examined in the excavation of 1983. The water-main trench west of the 1983 excavation showed a considerable build up of occupation layers interleaved with thick spreads of gravel make-up, all apparently of Late Iron Age date. It is clear that the inlet had been, at least partially, filled at this time possibly in relation to the creation of docking facilities nearer to the tidal zone.

Where the trench passed through the entrance gap close to the north side of the present tarmac road, masses of tumbled iron-stone blocks were recorded. It is likely that they derived from some form of early entrance revetment but no structure was found *in situ*.

Implications and Future Work

The area excavation on Site 1 can now be regarded as having been completed insofar as the original research aims of the project are concerned. The form, chronological range and to some extent the

spacial limits of the various phases of Iron Age and Roman settlement have now been defined. No further work is proposed here.

The excavation in the Nursery Garden (Site 6) had demonstrated the very considerable significance of the area in relation to the Neolithic and Bronze Age occupation of the Headland. The proposal to create a further Dragon-fly pond in 1985 will be preceded by a controlled archaeological excavation. This should provide a further sample of the early prehistoric settlement and will enable the considerable, but unstratified, Neolithic and Bronze Age collections from the site to be placed in a firmer context.

The water-pipe trench has focused attention firmly on the environmental potential of the Hengistbury landscape, the elucidation of which featured as an essential part of the original research design. What is now required are limited trial excavations in the three marshland areas to provide control sequences for detailed environmental analysis.

In Salthurns Marsh the principal question to be asked concerns the dating of the closure of the inlet to the sea. In addition, there are as yet unexplained disturbances, pre-dating the 19th century activity, including an artificial basin created against the northern slope of the Headland. The possibility that this may be of ancient origin is of some interest and deserves further exploration.

Rushy Piece is of the utmost interest. The long sequence of estuarine and marsh deposits interleaved with occupation levels of the Late Iron Age will enable the environmental history of the entire prehistoric to recent period to be studied, including evidence for Roman marine transgression and other sea-level changes. Moreover the fine preservation of the Iron Age levels should provide the organic component lacking elsewhere. The marsh lies a few metres away from the area of prehistoric spade cultivation found in the Nursery Garden. If a suitable pollen sequence can be established the effects of man on the environment should be readily distinguishable.

Barnfield inlet deserves limited investigation to examine the physical conditions here throughout the later prehistoric period before deliberate infilling began in the Late Iron Age. There are also some indications that a Roman marine transgression phase may be represented.

The environmental work outlined above is vital to the satisfactory completion of the project.

Acknowledgements

The success of the project owes a great deal to the ready support given by Mr E. Hunt of the Parks Department of Bournemouth Corporation and to the willing assistance of the Site Ranger, Mark Holloway. Negotiations over the water-main trench were handled by Mr M. F. Tyhurst of the Borough of Christchurch who ensured that every assistance was given for the watching brief to be undertaken. The cheerful forbearance of the water company engineers made our task both easy and enjoyable.

The project was organised and staffed by the Institute of Archaeology, University of Oxford with financial backing from the British Academy and the Society of Antiquaries. The team of volunteers was supervised on Site 1 by Lyn Sellwood, Lisa Brown, Cynthia Poole and Ian Brooks; Neil Lang looked after the trial work on Site 7, while the Dragon-fly pond excavation was directed by Amanda Chadburn and Julie Gardiner. Site photography was undertaken by Mark Dennison and finds recording was organised by Ann Foster.

BARRY CUNLIFFE, Institute of Archaeology Oxford

PUDDLETOWN AND BURLESTON

Drought conditions in September 1984 and cultivation since have revealed a variety of buried landscape features, all probably of prehistoric date, lying on either side of the valley separating the parishes of Puddletown and Burleston, 2 km south of Dewlish village.

On the west side of the valley, in Puddletown parish, two ring ditches, each perhaps 10-20 m in diameter were visible in a crop of rape (approximately SY 77229606 and 77259602). Other marks lower down the hillside include two linear features in the south-east corner of the field, heading north-east to the flood plain (SY 77319598).

On the east side of the valley, in Burleston, earthworks of a field system survive in pasture on the west edge of Burleston Down (SY 777960). Nearer the flood plain and south east of Fryers Bridge soil marks of other lynchets, perhaps part of the same system, were visible in arable (SY 775960).

North of the Blandford road another rape crop revealed several linear features, possibly forming one or two field enclosures on a spur overlooking the valley (SY 774964).

Tumuli in the area between and east of the last two sites are recorded in the RCHM III, *Central Dorset* (1971) 55. However another ring ditch, not previously recorded was visible in September 1984 as a soilmark and in February 1985 as a growth mark in a cereal crop, and lies close to this group, south of the Blandford Road (SY 78129628).

The above is only a preliminary note, the result of the examination of photographs without detailed plotting or fieldwork.

SUSAN HILL BROWN, CHRISTOPHER SPAREY GREEN AND
PETER J. WOODWARD

THE STOUR VALLEY GRAVELS PROJECT

Excavation in advance of gravel quarries at Moortown Aerodrome and Whites' Pit (near Bearwood, Poole) are providing an opportunity to sample the settlement pattern of the Stour Valley and investigate ancient landscapes, settlement morphology and economy. Gravel extraction is also anticipated at other sites in the future and these will provide a further sample. At present the extensive settlement in the Stour Valley is indicated by many casual finds along the valley (Calkin 1951, 1962, 1964, 1968).

Moortown Aerodrome (SZ 040970)

Excavations in advance of a 60-acre gravel quarry will continue for at least five years and form the main basis of the research programme. Air photographs were inconclusive on this site and a programme involving geophysical survey, trial trenching, and limited area excavation was implemented. So far, three settlement sites of the Neolithic, Bronze Age and Iron Age/Romano-British periods have been located.

The Neolithic Settlement Site

This site consists of 49 small pits, scoops and other features in an area of 55 m by 20 m. The site extends beyond the quarry area and it is intended to excavate the remainder in the future. The pottery consists of undecorated round-bottomed bowls with simple lugs of the early 'south western' type. A series of C14 dates will be obtained from charcoal and the wet sieving programme may provide environmental evidence although bone has not survived. The site is important as it is one of a small number of open Neolithic settlement sites known and it is becoming possible to demonstrate a string of such settlements along the valley.

The Bronze Age Settlement Site

Two small circular pits containing Deverel-Rimbury pottery seem to indicate the remains of a small Bronze Age settlement site.

The Iron Age/Romano British Settlement

A complex of at least three phases of ditches, representing a palimpsest of enclosures associated with rural settlements of c. 50 BC-300 AD, was investigated by area excavation and trial trenching following earlier trial excavation 1983. No building plans were recovered but structural features were indicated by a line of post-holes and other post-holes. A pit and a large V-shaped ditch located in a trial trench may indicate an area close to the nucleus of the Iron Age settlement and will be investigated further in 1985.

Whites' Pit (SZ 041 968)

Salvage excavations supervised by Mr D. Watkins revealed 18 ditches in an area stripped of topsoil for a quarry access road. At the north-east end an isolated group of three ditches contained burnt flint and Iron Age/Romano-British coarse pottery. Of the remaining 15 ditches, three were of similar date, four were post-medieval and eight are undated. Features within the quarry area were also located which suggest another Iron Age site which will be investigated later. The excavation was grant-aided by the Historic Buildings and Monuments Commission.

I. P. HORSEY/K. S. JARVIS, Poole Museums Service

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SHAPWICK

A single mole hill in the region of the eastern corner of the earthwork enclosure west of Badbury Rings hillfort produced five sherds of prehistoric and Roman pottery and a Roman coin (ST 961029). The prehistoric sherd is of a black sandy ware with reddish-brown exterior decorated with a row of four circular impressions 2.5 mm wide and 2 mm apart. The Roman sherds comprise three small scraps of Black Burnished Ware (BB1) and one in New Forest ware, probably the bead rim of a beaker. The coin is an antoninianus of Claudius II (268-270 AD), Consecration type, as RIC V, 266.

Other mole hills in the area had produced numerous water-worn pebbles of approximately 2.5 cm diameter.

CHRISTOPHER SPAREY GREEN

FINDS FROM THE IRON AGE AND ROMAN ENCLOSURE

NORTH OF MINCHINGTON FARM, SIXPENNY HANDLEY

Examination of the ploughed southern perimeter of this circular enclosure half a mile north-north-east of Farnham (ST 961159: RCHM *Dorset Vol. V East* (1975) p. 69, mon. 24) produced one body sherd in brownish-grey sandy fabric with frequent calcined flint filler, presumably Bronze Age or early Iron Age, and one rim sherd of a Black-burnished ware (BB1) flanged rim dish of the 2nd century AD.

CHRISTOPHER SPAREY GREEN

OBSERVATIONS ALONG THE WESSEX WATER AUTHORITY

EAGLE LODGE TO FORSTON TRUNK MAIN:

FEBRUARY-MARCH 1984

The construction of a mains water pipe from Eagle Lodge (Stinsford Hill, SY 70559114) to Forston pumping station (SY 66699496) provided the opportunity to make archaeological observations. The pipe construction necessitated the topsoil stripping of an easement area some 10 metres wide and the cutting of a pipe trench up to 3 metres deep. This allowed for the identification of archaeological sites during topsoil stripping and the examination of archaeological features and levels in section. However, continuous observation was not possible and intensive work was only undertaken where archaeological data was required for planning purposes, where specific archaeological questions needed to be answered, and where the construction passed close to or across known sites.

The routes, described in four sections (1)-(4), cut across the A35 to the north of Eagle Lodge to Slyer's Lane at SY 70379145 (1); from there it ran along-side the Stinsford to Charminster Lane, cutting it at three points (SY 70129155, SY 69339180 and SY 68889199) to 'Burton Coombe' at SY 68889199 (2). From there it ran to SY 67919411 on Woodhill, crossing the Upper Dorchester Sherborne Road at SY 68369301 (3). The pipeline then dropped down onto the water meadows at Herrison Road Corner, SY 67539419, and from there along the water meadows to Forston Pumping Station, crossing the Charminster-Cerne Road at SY 66699496 (4).

Section (1): Opportunity for observation only occurred on the north side of the main road, and topsoil stripping was not observed. No construction traces for the Roman road from Badbury to *Durnovaria* were seen; the Roman road in all probability lies under the present main road, although no roadside construction features were noted, nor any features which could be associated with the concentrations of medieval or Roman pottery collected in the area SY 703911 to SY 706912, during field-walking (Woodward 1983; this field was part of the field-walking collection in study area 1 (Trust for Wessex Archaeology W45), and lies to the south of the field walked in 1977 (Woodward 1977)). The pipe trench section showed that the hillslope soils had been severely scarped and eroded down to the chalk as a result of ploughing. However, in the upper north-west corner of the field the terrace gravels overlying the chalk survived to a considerable depth. These terraces survive intermittently alongside the river valley; 200 ft contour (Soil Survey of England and Wales, 1983; soil types 571 I and w). The considerable number of quarry hollows recorded in this area (refer Ordnance Survey 1:10,000 mapping, and some of which were observed along the pipe-line), and some recorded in the earlier survey (Woodward 1983) relate either to the recovery of chalk to lime the acid soils of the gravel terrace, or to the quarrying of the sands and gravels themselves. One quarry hollow on this section at SY 70419138 was to some extent filled with a 19th-20th century bottle dump.

Section (2): This section ran alongside the Stinsford-Charminster lane in three runs; on the southern, northern and southern sides. This stretch was intensively observed but little evidence was found for Roman road construction along the alignment described by the Royal Commission (RCHM II, 1970, 532 (fig.), 541) and no further burials were found (RCHM II, 1970, 257). The Agger, east of North Lodge, described by the Royal Commission (incorrect grid reference given) at SY 693918 is no longer visible but may have resulted from an accumulation of terrace gravels, but no evidence could be found for road construction as such in the pipe-line trenches. It is possible that the alignment, originally suggested by Margary, may well be that of a Roman route by-passing *Durnovaria*, but the construction of a specific road seems doubtful. However, that the sands and gravels from this terrace were exploited in the Roman period is undoubtedly the case. Gravels and sands of this type occur in the construction of roads within *Durnovaria*; such as the road excavated on the site of the old Methodist Chapel (Woodward 1982). One quarry hollow cut into the gravel terrace was identified during the pipe-line construction on the corner of Slyer's Lane at SY 70339146. This by-pass road may, therefore, be a connecting route relating to gravel exploitation rather than a by-pass road as such.

The gravel terrace described was to no extent intact and it had been severely eroded along the coombes running north from the river valley. Some of this erosion could be clearly related to arable farming. Strip terraces still survive in Coker's Coombe (SY 702917; RCHM II, 257) and observations along Burton Coombe (Section (3)) indicated the presence of ancient field terracing running at right angles to the coombe bottom (SY 68809212). Colluvial deposits, sometimes to a depth of 1.2 metres, were recorded in section along the pipe-trench:

SY 70009159-SY 69889161, colluvial soils over gravel terrace soils, fine silts up to 0.75 metres in depth;

SY 69709169-SY 69609172, colluvial soils over gravel terrace soils, fine silts up to 1.2 metres in depth;

SY 68889199-SY 68739238, extensive colluvial deposits in base of coombe, break in the colluvium indicated the presence of ancient terraces and a concentration of Neolithic/Early Bronze Age knapped flint waste was observed at SY 68789222 (Section).

Related to the colluvium and the strip terraces in Coker's Coombe were two large ditches which were observed and recorded in the pipe-line section. These two ditches could be seen to run roughly north-east to south-east with the contours and along either side of the coombe:

Ditch at SY 70059158: Large 'U' profile ditch c. 1 metre deep and 3 metres wide cut into chalk on eroded slope. Filled with fine clay silts and chalk wash at base partially sealed with chalk and soil deposits derived from either a chalk quarry immediately to the east, or from the strip terracing which still survives along this side of the coombe (refer previous).

Ditch at SY 69789163: At least 6 metres wide and at least 1.5 metres deep with shallow sloping sides (30°), the upper fill comprised chalk free clay silts and the lower clay silts contained chalk and flint. The ditch cut through a vertical-sided chalk-filled pit with a ledge at a depth of 0.75 metres, unknown depth. Both were cut into chalk on an eroded slope. These features lie along the south side of a quarry hollow (OS map). Thirty metres to the east of these ditches, the pipe-line cut through an 18th/19th century farm building sited on a flat chalk terrace (SY 69839163).

No dateable material was recovered from these ditches but on the basis of the upper silt soils and the absence of Roman and Medieval material, they can perhaps be placed in the prehistoric period and interpreted as enclosure or property boundaries.

Section (3): Observations along Burton Coombe between SY 68889199 and SY 68739238 have been previously described. No observations were undertaken between SY 68739238 and SY 68259326. Topsoil stripping was observed on Wood Hill between SY 68259326 and SY 67919411. The pipe-line strip was moved slightly to the west of the tumulus at SY 68049390 (RCHM III, 1970; Charminster (41)) which was considerably spread but which could be seen to be located in the corner of an ancient field terrace. No funerary material or structures were recorded in this area. Two ancient field terraces were noted running roughly east-west across the pipe-line at SY 93946800 and SY 94026796.

Section (4): Few useful observations were made along this stretch which cut into alluvial silts of the Cerne River, partly because of the high water table and the unpredictability of pipe-laying. Where the pipe-line ran close to the Roman building, SY 66729492 (RCHM III, 1970, 72) near Forston pumping station, topsoil stripping was not undertaken and the pipe-trench was located close inside the

field hedge on the west side of the road. No Roman material was recorded from this cutting.

The archive consists of field observation notes on the 1:2,500 pipe-line maps provided by the Wessex Water Authority, and a photographic record on colour slides. These are at present held by the Trust for Wessex Archaeology, Salisbury (W91 and PJW/84/64) but will be deposited in the County Sites and Monuments Record (Dorset County Council).

These observations were undertaken for the Department of the Environment to assess the archaeology along one of the possible routes of the Dorchester by-pass, and as part of the South Dorset Ridgeway Project (Woodward 1983). The observations were only possible with the co-operation of the Wessex Water Authority.

PETER J. WOODWARD, Trust for Wessex Archaeology

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EXCAVATIONS OF A ROMAN WELL AT FARNHAM, DORSET

During autumn ploughing in 1983 a void appeared at approximately ST 95441544. The findspot was within the recently discovered IA-RB enclosure noted in these proceedings in 1982. Aerial photography had revealed many storage pits within the enclosure and this was presumed to be one of them. This chance discovery appeared to be an ideal opportunity to obtain some stratified material to help in dating the site.

Excavation began in October and was completed in June 1984 at which time the depth of 28.2 metres had been reached showing the feature to be a well. The sides had been neatly cut into solid chalk with two lines of steps/niches opposite one another descending at intervals of about 30 cm. The average diameter was 1.15 metre except between the depths of 13.55 metres to 19.2 metres where natural undercutting had increased the width to over 2.5 metres.

Within the filling were a series of rubbish deposits between the depths of 4 m-20.5 m containing large amounts of mid-late 1st century pottery and animal bone. Amongst this material were small amounts of Samian ware and part of a rare lead-glazed vessel. Small finds were few and included a brooch, iron hook and three spindle whorls.

Below 20.5 m the filling consisted entirely of chalk rubble and no finds were made below this depth. Near the bottom tool marks were clearly visible and consisted of long diagonal grooves up to 15 cm in length.

The well is now backfilled and full publication will be forthcoming following specialist reports on the finds.

Acknowledgements

I am most grateful to Mr M. Pitt-Rivers for allowing the excavation to continue until completion and to Messrs Stuart Walker and John Benjafield for their patience in what turned out to be a much longer excavation than originally envisaged. I should also like to thank Mark Corney for a preliminary examination of the pottery and Mr and Mrs R. Lang-Hall for their work on processing the finds.

MARTIN GREEN

THE ROMAN ROAD FROM LAKE FARM, NEAR WIMBORNE, TO DORCHESTER

The title of this note omits the question mark of last year. Further discoveries during 1984 establish key sections of this early trunk route. The line through lower Corfe Mullen can now be claimed to include visible stretches totalling more than 200 m and has been checked by excavation in three places. Pre-medieval earthworks east of Candy's Farm have been surveyed and will be claimed as those of a signal station for Lake fortress. An alignment running south-west from the ford south of Turnerspuddle Church (SY 829933) has been substantiated by 200 m of causeway in Landshare Wood, south-west of Briantspuddle. At the ford itself there is strong evidence of chalk and flint abutments on each side of the river Piddle or Trent, which would have served a timber bridge. It is highly significant that this ford can be demonstrably linked with the lost tithing of *Stretford*, recorded in the Lay Subsidy Rolls for 1327 and 1332. 'All the Stratfords are on Roman roads' (*English Place-Names*, Ekwall). Part of the final alignment of the road into Dorchester is still excellently preserved south-east of the Old

Vicarage, Stinsford as some 200 m of causeway in the grounds of the Dorset College of Agriculture. A full report is under preparation.

N. H. FIELD

ROMAN BURIALS, CASTERBRIDGE ROAD, DORCHESTER

Work for the foundations of an extension to 3 Casterbridge Road (SY 70538990) revealed the remains of at least two inhumations. Two extended adult skeletons, aligned north-south, were discovered in shallow chalk-cut graves. There were no grave-goods but fragments of Durotrigian pottery was associated with them. These burials add to the five recorded since 1951 on the Came View Estate (RCHM, *Dorset*, II (1970), 578).

The excavations also revealed a section of a trench or fissure c. 2 m deep and c. 3 m wide, running east-west. A similar feature is recorded nearby at SY 70548987, 70578988, 70498986, and again at 70658984, where a worn sestertius of Antoninus Pius was said to have been found in it. Several small fragments of black burnished ware were recovered from the new section.

M. A. SIMONS

EXCAVATION AT BUCKNOWLE, 1984

In the 1984 season, the remaining parts of Buildings 5 and 6 were examined. A thickening of the east wall in Building 5 opposite a probable central passage may have underlain a door threshold which led to an external pathway 3 m wide. Farther west, Building 6 proved after all not to be an aisled barn, as the presumed internal post-base was simply the beginning of the back wall. This building was a narrow structure, divided into two and with most of its west side removed since antiquity. Part of another building (8) was located to the south-east alongside the flagged yard uncovered in 1983. To the north-west of Building 5, the paved area suspected as a building was curiously limited in size (7) and bounded by short walls on west and north only. It was associated on its south-east with the base of what appears to have been a tank (3 m x 1.5 m x ?) which had a clay floor 10 cm thick over a hardcore foundation.

This complex of farm buildings was skirted to the south-west and west by a boundary ditch which had its origins in the late pre-Roman Iron Age. Other earlier features below the buildings included part of a rectangular enclosure and further traces of a round hut.

Finds and dating evidence were less this year, but the construction of these buildings can be ascribed to the 2nd/3rd centuries AD.

In the next field, long unploughed and close to the Corfe river, it appears that peat has accumulated in a series of what are probably Iron Age ditches. Work in 1985 will include sampling and sectioning of these ditches in the hope of producing an environmental history of the local area since they were first dug.

J. COLLINS, N. H. FIELD AND A. LIGHT

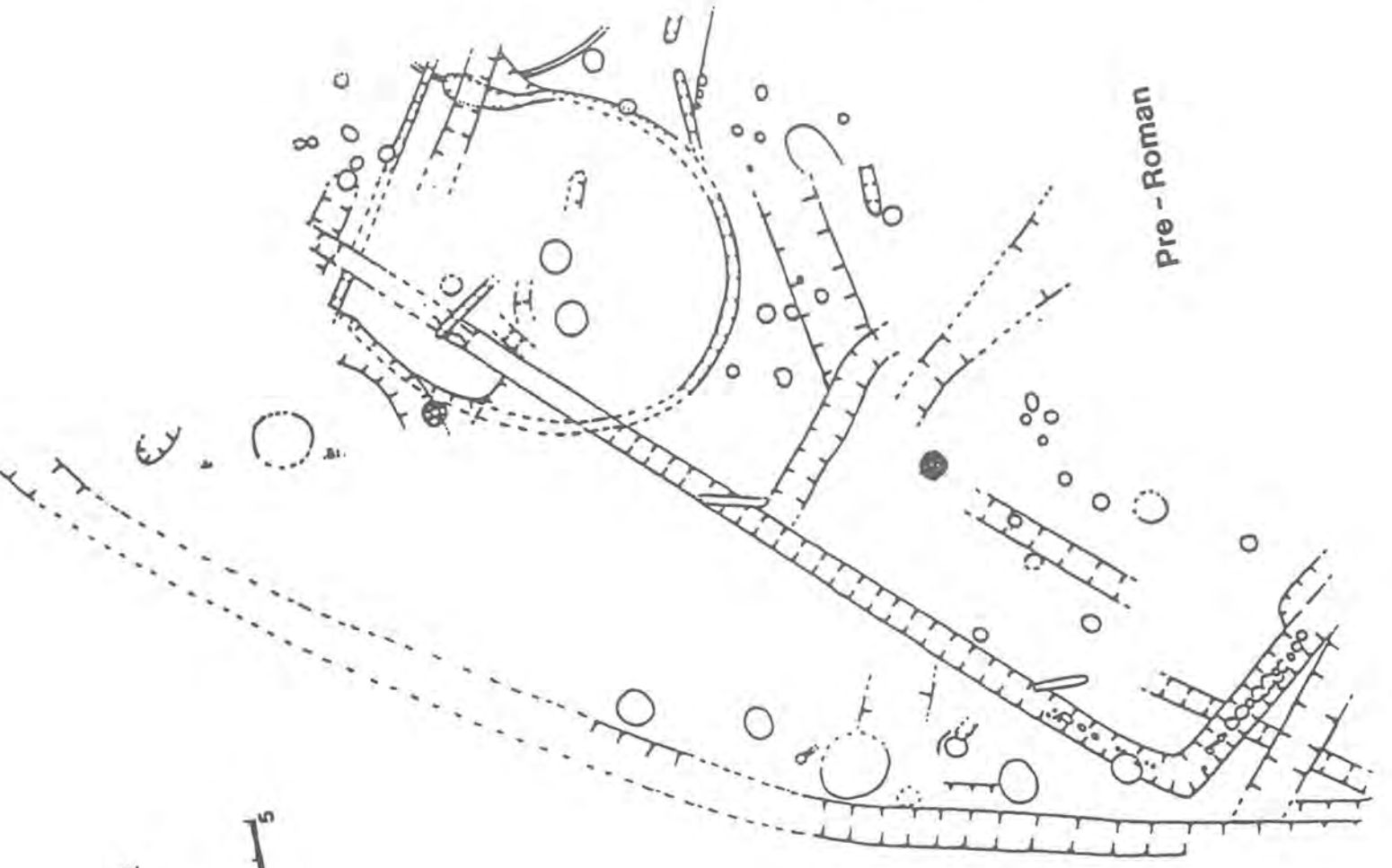
HALSTOCK ROMAN VILLA 1984

Near the north-west corner of the inner courtyard, east of the earlier of the two houses, a pond was located. The dimensions were east/west 14.10 m north/south 7.40 m and the depth 60 cm. The sides were vertical and lined with limestone slabs, some of which remained *in situ*. The bottom consisted of a natural stratum of nodules within the Fuller's Earth clay. An overflow from the north-eastern corner emptied into the large ditch which flows south to north across the site, and which, with a substantial wooden fence on its east side, forms the eastern boundary of the inner courtyard.

There were two water feeds into the pond, both from the tank near the east end of the south wing, this tank being filled by an adjacent spring, now dried up. The earlier watercourse, which emptied into the pond on the south side about 2.4 metres from the south-west corner, was in a good state of preservation for about 11 metres of its length, consisting of flagstone bottom, sides of flat stones laid at an angle and with flagstone capping.

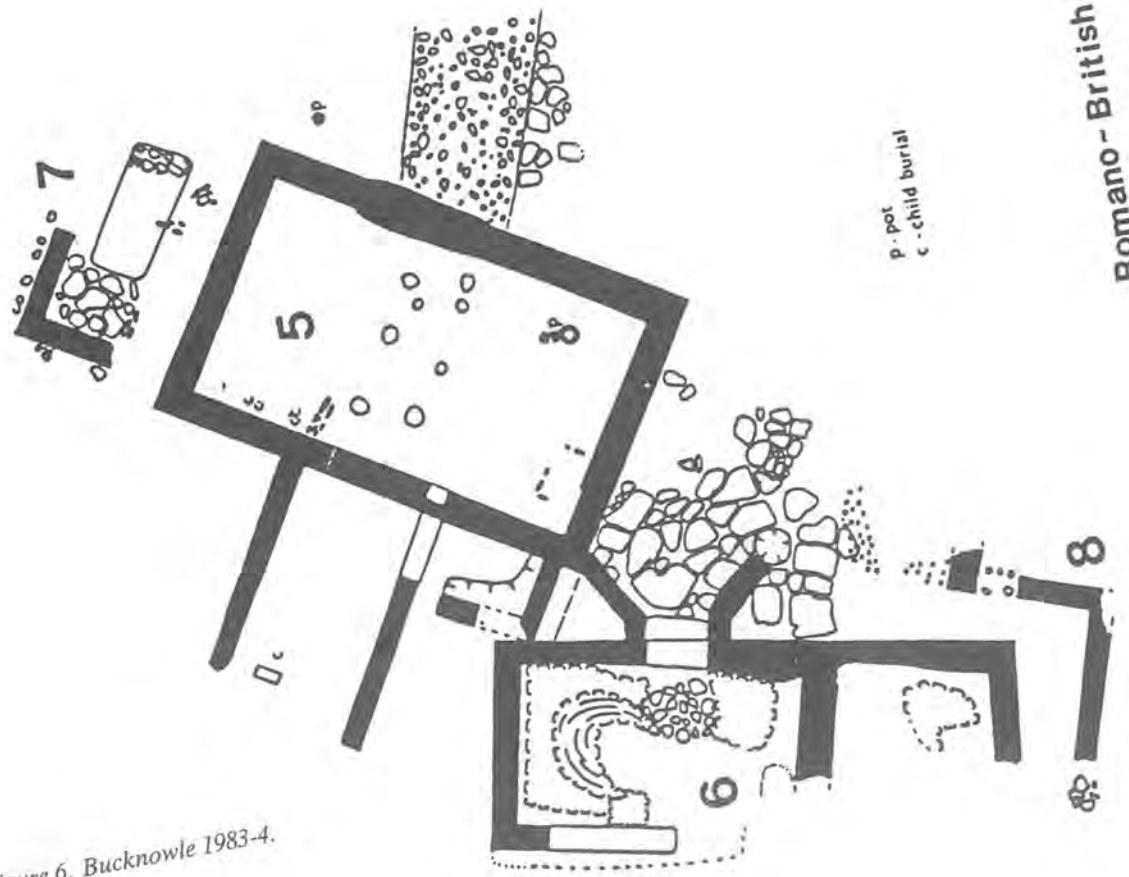
As has been explained in earlier reports, the supply tank was at some stage redesigned with the two outlets on opposite sides being blanked off and above the old water courses new ones built taking their supply from the top of the tank. The later channel from the north side of this tank flowed initially in a north-westerly direction for about 42 metres where it turned northwards and about 25 metres further on ran into a tank near the north-east corner of the earlier of the two houses. There was an overflow from the north-east corner of the tank.

Excavations in 1984 show that this overflow ran into the south-west corner of the pond via a third tank, though this latter may have been an ornamental water spout.



pre - Roman

BUCKNOWLE
1983-4



Romano - British

p. pot
c. child burial

Figure 6. Bucknowle 1983-4.

The pond had a continuous supply of fresh water from the spring and the question arises as to what was the purpose of the pond. Was it ornamental, was it for more utilitarian purposes such as fish keeping or was it a combination of the two? The latter is more likely. It should be noted however that approximately one ton of the fill, including a good proportion of silt from the bottom of the pond, was put through a 2 mm sieve but no fish bones were recovered.

On top of the fill of the pond there was a shallow stone-lined ditch from which was recovered half a dozen small sherds of grass-tempered Saxon pottery.

R. N. LUCAS, F.S.A.

THE ROMANO-BRITISH SITE AT BARTON FIELD, TARRANT HINTON, 1984

Work on the site was concentrated on the reopening of trench A6 (*Dorset Proceedings*, Vol. 105, 1983, p. 147, fig. 5) and an area around it in order to further study the series of parallel ditches which cross the site at this point. As suggested in previous reports, these ditches most probably carried rainwater away from Building II but study of aerial photographs, taken during the dry weather of 1984, indicates that at least one of them extends for a considerable distance in a westerly (uphill) direction away from the excavated area.

The excavation is now at an end.

A. G. GILES

ROMAN SITE AT LITTLE KINGTON FARM, WEST STOUR, ST 786240

Field-walking has established the presence of a Roman settlement 1.25 km from Little Kington Farm. The site lies on an east-facing slope at some 65 m OD overlooking, and some 270 m from, the River Stour, on the Corallian limestone. The field had been rotavated and resown.

The 1842 Tithe Map names the field of 3 ha as 'Chester's Well'.¹ A spring from the adjoining pasture to the north-west, previously a Withey Bed in an area now considerably disturbed, had been piped to form what is now a muddy pond in the boundary hedge between the two fields.

The topsoil was a light loam with some natural stone and a scatter of flint and Greensand Chert, a few pieces of which had been struck and worked. There was no other domestic debris of post-medieval date.

Below the Withey bed to the north-east of the site, clumps of nettles were seen and signs of some terracing in the field 'Inner Butts',² sloping down to the river. It is said that the river bed in this area was hard and formed of small oval stones with a depth of only a few inches, possibly a ford.³ A recently installed weir has now increased this. Air photographs (RAF VAP CPE/UK 1974 2158-9) show no sign of settlement, but on the ground some indistinct ridges can be seen, perhaps from previous cultivation. Within a relatively confined area some 135 m × 45 m inside the hedge boundary forming the north boundary of the field, the following artefacts were found, with the exception of about a dozen which were scattered randomly over the whole field. All sherds were very small and extremely abraded and, therefore, difficult to identify.

Samian sherds (6) Central Gaulish ware 2nd century ⁴	Wt. 10 g
Black-burnished ware (105) Flanged rim bowls 3rd-4th century	Wt. 430 g
Grey ware (18)	Wt. 240 g
New Forest ware (1)	Wt. 10 g
Miscellaneous (23) including non-Samian RB fabric	Wt. 60 g
Tesserae (6)	
Pieces of tile, bone and iron slag	
Shale sherds with polished surfaces (2) (found lower down in the field)	

The site is approximately 4.75 km from Nyland⁵ where field-walking has shown evidence of a small Roman settlement, 7 km and 8.5 km from the Somerset sites of Stoke Trister and Wincanton to the north-west, and some 3 km and 4 km respectively from the Romano-British site at Gillingham and Allard's Quarry, Todber.

(The permission of the landowner, Mr L. E. Simmons of Little Kington Farm for field-walking and publishing this information, is gratefully acknowledged.)

M. S. ROSS, Shaftesbury and District Archaeological Group

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BRITISH LEGION HOUSING DEVELOPMENT, LITTLE BRITAIN, FORDINGTON, DORCHESTER

Observation of builders' trenches in the area north of St. Georges road (centred at SY 70209038) revealed no obvious buried features. Examination of surface spoil produced one sherd of samian and one of black burnished ware and a possible tessera. Other sherds were medieval and included sherds of two vessels probably dating from the 13th or 14th centuries (Draper, pers. comm.). Much post-medieval and Victorian material was incorporated in this soil.

CHRISTOPHER SPAREY GREEN

SURVEY AND EXCAVATION AT NORDEN FARM, CORFE CASTLE: AN INTERIM NOTE

Trial excavation and survey was undertaken by the Trust for Wessex Archaeology in 1982 and 1984 at Norden Farm, Corfe Castle, Dorset, in advance of proposed clay extraction. The purpose of the work has been to establish the southern limit of the extensive Romano-British industrial complex at Norden, around SY 957827 (summarised RCHM 1970, 230).

The survey area covered more than 12 hectares to the south and west of the A351 Wareham to Corfe Castle road, around SY 954827. Extensive magnetometer survey, machine-excavated transects and hand-excavated trial pits were used to define an area of preserved archaeological deposits below Hill Coppices. These findings confirm results obtained from previous excavation immediately south of the point where the mineral railway crosses the A351 and establishes the presence of ditches, structural and occupational evidence southwards towards the contemporary settlement on West Hill (RCHM 1970, 232). A full report is in preparation.

PETER W. COX, Trust for Wessex Archaeology

EXCAVATION AT COMMON MEAD LANE, GILLINGHAM, JULY 1984 (ST 7995264)

Trial trenches excavated by mechanical means were undertaken by the Shaftesbury and District Archaeological Group, immediately to the north of the area of Romano-British settlement observed by the group during development of the area in the mid-1970s. An area of approximately 65 metres (east to west) and of 55 metres (north to south) was dissected by one metre wide trenches of approximately 50 cm in depth, running north to south.

All but one trench were devoid of archaeological features, though a small number of sherds of both pre-historic and Romano-British pottery were recovered from the sections.

The single feature, located at ST 79822635 was a circular layer of packed local stone (oolitic limestone) of approximately two metres in diameter, laid directly upon the Kimmeridge clay sub soil. This feature was completely excavated. Unfortunately no evidence of either function or chronology was recovered. (Drawn and photographic records are available.) No similar features were observed within the settlement immediately to the south.

The negative evidence revealed by this excavation, when combined with that observed by the group since the mid-70s suggests that the northern field boundary of field no. 1086 (25-inch 1902 County Map) corresponds with the most northerly limits of the settlement. Furthermore, negative evidence also suggests that the settlement was undefended.

SDAG are extremely grateful to the DAC for their financial aid and to the site developers-Lanapalm Ltd for their co-operation and their generosity in providing, free of charge a Ford H.45 'Slew', and an extremely competent driver.

MARGARET COX, Shaftesbury and District Archaeological Group

EXCAVATIONS AT COUNTY HALL, DORCHESTER, 1984. AN INTERIM NOTE

The construction of extensions to County Hall has provided an opportunity to further examine two areas of the Colliton Park Roman complex first investigated between 1937 and 1939 by Lt-Col. C. D. Drew and K. C. Collingwood Selby (*Dorset Proceedings*, 59 (1937), 1-14; 60 (1938), 51-65).

(a) Magistrates' Court site (SY 69039085)

This area originally included the southern part of Building V. Construction work in 1939 necessitated the excavation of some

1.5 m of chalk, resulting in the removal of all archaeological features.

(b) Fire Headquarters site, immediately south of the Roman Town-house (SY 68979090)

An area 35 m by 20 m was stripped by mechanical excavator. A broad area of interconnecting pits was revealed immediately north of the smithy located in 1938. The pits were in excess of 2 m deep and were backfilled in the Roman period. Where it was possible to examine deposits in these features a high proportion of ash with charcoal was observed.

Adjacent to, and immediately east of, the quarry pits a robbed-out wall-trench indicated the position of a three-sided building. This structure contained the remains of a stone floor and a replaced hearth base, similar in construction to the 1938 smithy. A quantity of iron waste was located in the vicinity of this feature. The building was initially constructed of a single bay approximately 4.5 m by 3 m. A second, southern bay of similar character was later added. Both bays were open-sided on the west. Post-holes located parallel to the east wall may have supported timbers of a fuel store.

Whilst the original purpose for the quarries may be related to the construction of the town defences, they would have provided a convenient means of disposal for large quantities of industrial waste. Pottery associated with the upper levels of the ashy deposits may date the latest use of the hearth to the 4th century AD.

PETER W. COX

COMPTON VALENCE

A roughly linear group of settlement earthworks lies between SY 578940 and 589139, near the western boundary of Compton Valence parish. The western part of this group, around SY 579940, is scheduled and preserved as permanent pasture. The eastern area has been ploughed, leaving incomplete earthworks as shown on OS 1:2,500 sheets SY 5793, 5794, 5893. RAF 1948 vertical aerial photographs (CPE/UK/2475/3033 and 2475/3036) show the earthworks in a more complete state of preservation.

When the eastern part of the site was ploughed in the autumn of 1984, students of DIHE planned soil marks and surviving earthworks and recovered a quantity of pottery, flint and chert artefacts. Neolithic chert debitage and late Iron Age pottery was present but Black Burnished Ware was by far the most frequently-encountered material. Samian and New Forest wares were found in small quantities, suggesting both early and later Romano-British occupation. A few roof tiles were noted.

A quantity of later Roman pottery was found during the making of a farm road in this area in the early 1970s (Bailey 1973). The road referred to is probably the concrete road to the east of the site as at present defined, and may suggest that Roman occupation extended further east. Other evidence suggests that it also extended further to the south. No artefacts were clearly associated with any of the recognisable earthworks. The area immediately to the south of these earthworks, though ploughed, shows slight surface unevenness, and it is possible that the settlement, or an associated field system, or both, extended further in this direction. A trial excavation by John Bailey in this area covered a considerable quantity of late Roman pottery and roof tiles (Bailey, *op. cit.*). The combined evidence suggests an extensive and perhaps substantial Romano-British settlement, with intensive occupation in the late Roman period, and a background of prehistoric settlement. Further study of aerial photographs and further field-walking if possible, are planned. An interim plan is deposited in the archaeological archive of the County Planning Office.

My thanks are due to W. N. Chick and Sons for permission to investigate the site, and to Mr Jeremy Powne, the farm manager, who gave much help and advice; and to John Bailey who discussed the site with me.

ALAN HUNT

Bailey, C. J., 1973. 'A Romano-British site at Compton Valence'. *Dorset Proceedings*, 94, 80.

A SAXON HOOKED-TAG FROM HANFORD (FIG. 7)

In the field east of Hod Hill several sceattas have been found (*Dorset Proceedings*, 101 (1979), 138; 103 (1981), 126; 105 (1983), 151). A thorough search for settlement evidence has so far been fruitless, suggesting that the coins may be casual losses by people using a track along the western bank of the river Iwerne. This object was found quite close to the river bank and, again, may be a loss rather than an indication of settlement. It was kindly brought to the writer's attention by the finder, Mr C. Gibbs, who made it available for study. This silver hooked-tag is made from thin sheet



Figure 7. Silver and niello hooked-tag from Hanford, at life size.

metal. The circular plate has two attachment holes; the back is plain. The front surface of the plate is decorated with shallow, narrow-incised lines in which much of the original niello survives. An outer, circular line contains four approximately equal-spaced lobes, the upper two each surrounding an attachment hole. The result of this arrangement is a cross of 'Anglian' type with four expanding arms; each arm has across its narrowest part a sub-field of two curving lines containing three small nicks. At the junction between the plate and the hook is a slight ridge.

The arrangement of the cross on the plate can be paralleled on a bronze mount in the British Museum (D. M. Wilson, *Anglo-Saxon Ornamental Metalwork* . . . (1964), no. 110), although the closest parallel is a small mount with two attachment holes and a similar cross, found at Portchester, Hampshire (D. A. Hinton in B. Cunliffe, *Portchester*, ii (1975), Fig. 139, 60, 217). A bronze hooked-tag, of the same type as this from Hanford, has been excavated at Glastonbury (P. Rahtz and S. Hurst, *Becker Chapel, Glastonbury* . . . (1974), Fig. 23, 14); it has an incised double cross.

This hooked-tag belongs to a rapidly increasing group of Anglo-Saxon ornamental metalwork which has been reviewed recently by James Graham-Campbell (*Med. Arch.*, 26 (1982), 144-51). There is much uncertainty as to the use of these objects, but this find, like so many others, is so slight that it can have been used as a fastener only on very light fabric. The published examples range in date from the 7th to 11th century. Although this find has no datable animal ornament, the fact that it is made of silver and has nielloed decoration may suggest that it belongs to the 9th or 10th century.

Metalwork of this date is extremely rare in Dorset and this find now joins a small group which consists of the Wareham sword (*Anglo-Saxon England*, 11 (1983), 100-1), a copper-alloy strap-end from Worgret (see below), a gold finger-ring from Dorchester (D. A. Hinton, *Catalogue of Anglo-Saxon Ornamental Metalwork* . . . (1974), no. 8), a nielloed silver strap-end from Halstock, now lost (*Journ. Brit. Arch. Assoc.* (1863), 215), and an enamelled copper-alloy strap-end from C. J. S. Green's excavations at Poundbury (Keen, forthcoming).

LAURENCE KEEN

A STRAP-END FROM WORGRET, ARNE (FIGURE 8)

This copper-alloy object was found by Mr C. Gibbs while metal-detecting in a field south-east of Worgret Manor Farm. It has a fully-modelled animal-head terminal with two dot-and-circle eyes. The snout is slightly upturned and accentuated by three narrow lines on either side of the nasal ridge. One nostril survives although damaged; it is indicated by a small circle. Behind the eyes narrow lines across the terminal separate the face from slightly angular ears which have depressed centres. Behind the head the object increases in width to form two wings either side of a central narrow void. The rounded ends of the wings are marked by curved lines, and shallow, thin lines along the axis of the wings represent feathers. There is one complete circular hole and part of another on each wing for



Figure 8. Copper-alloy strap-end from Worgret, at life size.

attachments. The underside is smooth and undecorated except for a slightly square thickening under the snout which is probably part of the shank of a small rivet cast in one piece with the mount.

The form of the object is unusual. The two pairs of circular holes were presumably intended for small rivets and it is most likely that the object is a strap-end. No parallel for this form has been found so far. The terminal is reminiscent of those on a bronze object from Pakenham, Suffolk (D. A. Hinton, *Catalogue of Anglo-Saxon Metalwork* . . . (1974), no. 29), although this has narrow lines behind the nostrils, whereas the Worgret find has them behind the eyes. The broken shank may be paralleled on an 11th-century openwork mount in the British Museum, although the animal-head terminal is very worn (D. M. Wilson, *Anglo-Saxon Ornamental Metalwork* . . . (1964), no. 141). The dot-and-circle eyes are similar to those on the animal heads on the Pershore censer-cover (Wilson, no. 56) which have a line behind the eyes. The heads are otherwise dissimilar as the Worgret piece has no mouth. On the evidence at present available it seems likely that this strap-end may be 10th or 11th century in date.

LAURENCE KEEN

THE DESERTED MEDIEVAL VILLAGE OF WEST BEXINGTON

The present West Bexington Ward of Puncknowle parish corresponds with the medieval manor of Bessintone of the Domesday Survey. It was then taxed for 9½ hides with a value of £6 compared with its neighbour's 5 hides and £5. Records for the following centuries are few but it was held generally by Bindon Abbey with the Abbot of Abbotsbury as patron of the church of St Giles.

The village lay on the slope between the coastal ridge and the sea with its nucleus centred on what is now the site of the Manor House Hotel some 450 m from the Chesil Beach.

The story of the sacking of Bexington by French raiders in 1440 is derived mainly from Hutchins¹ who in turn refers to Coker's² account of the raid in which the village and church were burnt and the inhabitants carried off for ransom. Some doubt has been expressed as to the accuracy of the record³ but there is still a strong

tradition in the area with which Hutchins, sometime Rector of nearby Swyre, must have been well acquainted. Even if the ransom story is rather unlikely there can be little doubt that the decline of the village was at least partly due to an enemy raid. This is clear from the Bishop of Salisbury's declaration¹ concerning the union of the churches of Puncknowle and Bexington on September 9th, 1451. One of the reasons given, 'on account of an enemy assault', is virtually unique in the Dorset lost village record. The other, generally used, reason was a Latin word which may equally imply poverty or depopulation. Whatever the cause of the decline what had once been a substantial village was very soon reduced to a single farm (according to Hutchins) but, may have even been completely abandoned for a considerable period.

Bexington's depopulation was somewhat earlier than that of Dorset's deserted medieval villages in general, no doubt precipitated by the French raid. The manor must have continued in ecclesiastical hands as at the Dissolution it was granted to John Caryl. Some 50 years later it passed to the Napiers who already held the manors of Puncknowle and Swyre. It has been suggested⁴ that it was used by them as a residence for younger sons or in times of trouble and that the house at Bexington was built or rebuilt by them in the mid-17th century.

The Royal Commission's inventory for West Dorset completely ignored West Bexington although the original part of the house, the farm buildings and a row of cottages, must certainly date from the time of the Napiers.

The estate was sold in 1743 but it continued as a single farm of over 1,000 acres, under various owners, for the next 180 years. The unit remained intact until 1920 when it was broken up and sold and the seeds of the modern residential development were sown.

The Medieval Village

The possible site of the settlement was noted (but not published) in the 1960s by the Commission as being represented by earthworks to the south and east of the Manor Farm nucleus. Attention was drawn to a site some 50 m south of the Hotel and 20 m east of the road to the beach when burials were noted in foundation trenches



Plate 2. The remaining fragment of St Giles medieval church, West Bexington, as exposed by building activity.

during building operations.⁵ A local resident, watching the writer working on one of the skeletons, observed that 'they' had been found by 'the Americans' during the war. Subsequent enquiry revealed that substantial earthmoving had indeed been carried out on that site by an American army unit stationed there in 1944. The possibility that the burials may well have been associated with the Church of St Giles was noted.⁵

During the next 20 years almost all the building sites on either side of Beach Road were taken up. One exception was the plot between the site of the burials and the Manor House boundary. As opportunity arose builders' trenches were observed, and from the distribution of 12th-15th century pottery it became apparent that the hollow way running to the east of and parallel to the modern road was perhaps the main street of the medieval village. Not until 1983 was it possible to investigate the likely site of the church in the still vacant plot.

The Church of St Giles

Records of the medieval church are few and the site lost although Hutchins, in his first edition, recorded that it 'stood near the sea

and only some small part of the wall remains'.³ He also gave a list of 10 rectors beginning with Robert de Bocklonde early in the 14th century and ending with Edward Ryde who was instituted in 1445. It should be noted that if Coker's 1440 is correct as the date of the raid the resulting destruction must have been far from complete. The rector at that time was Edward Davy and he continued in office for another five years and was succeeded by Ryde who held it until 1451. The church thus continued to be served for 11 years after the raid. It may well have been, however, that a number of minor incursions over that period made Bexington's situation increasingly untenable.

Of the form of the church itself the only clue is that it must have had a chancel distinct from the nave. The Bishop's declaration of 1451 ordered the Rector of Puncknowle to rebuild the chancel of St Giles' Church at Bexington and to celebrate in it once a week and on its patronal day. How long it was before the final abandonment is not known but St Mary's at Puncknowle has two features traditionally brought from Bexington – the bowl of a late 12th-century font which, upturned, is used as a base for St Mary's own Norman font and the so-called Bexington Chapel. This small

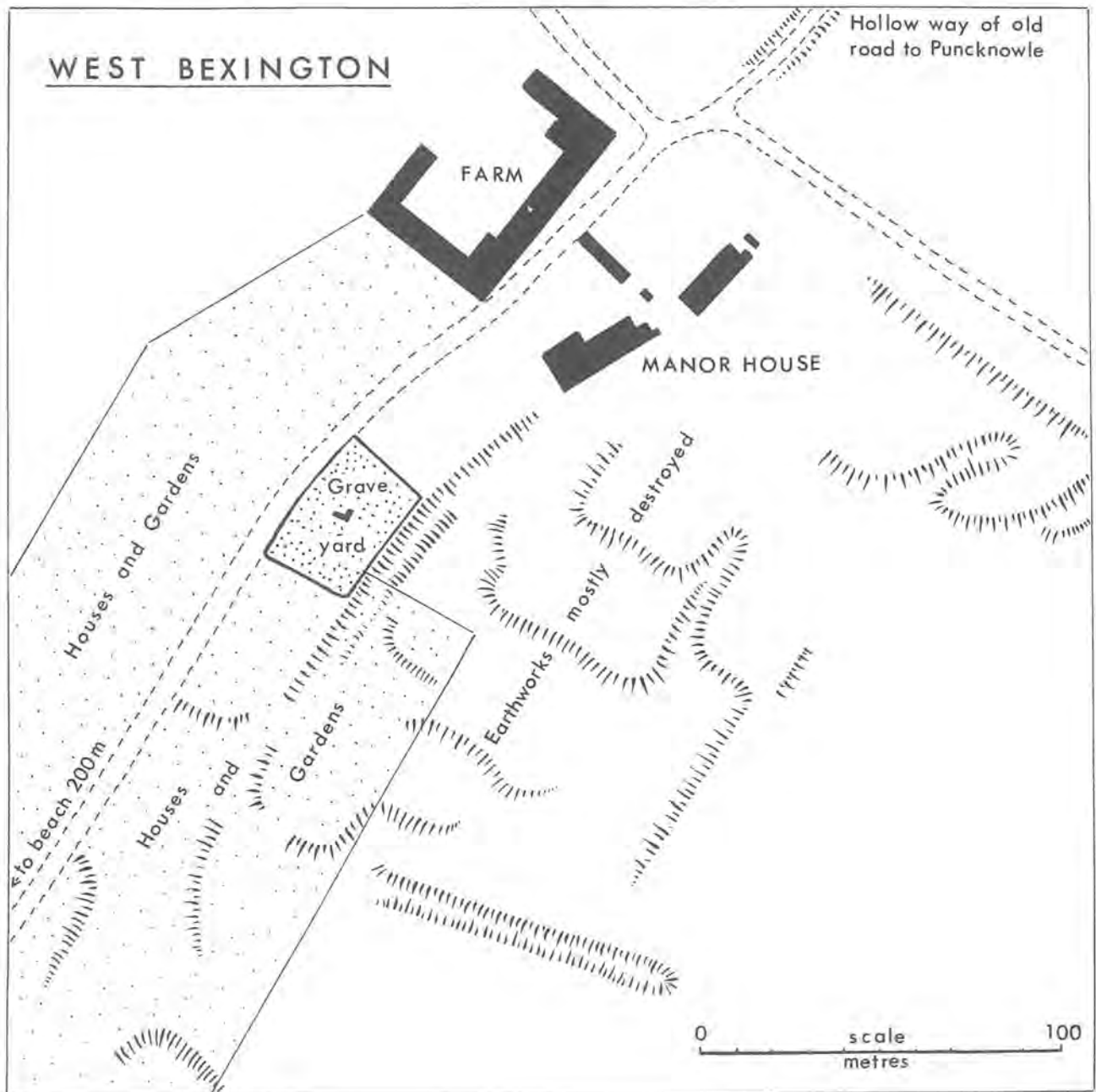


Figure 9. The site of the medieval church and graveyard at West Bexington in relation to the late 17th century manor farm, the earthworks of the deserted village as surveyed by RCHM, and the area of modern development. The remaining corner of the church is at SY 53298676.

south aisle (3.5 × 2.6 m) was, according to Hutchins 'built or rebuilt in the year 1660 by the owners of Bexington for the use of the inhabitants of that vill'. Local tradition insists that the chapel is in fact the rebuilt chancel of St Giles though it seems unlikely that the latter, derelict for some 200 years, was still standing in 1660. This date is important because it coincides with that of the expansion and rebuilding of the farm at Bexington by the Napiers. This fact, together with the Napier burials under its floor and the private door opening on to Puncknowle Manor seems to point to a private chapel for the use of the Napiers themselves.

The Site of St Giles' Church (Figure 9)

In 1983 preparatory clearing of the building plot removed over a metre of redeposited soil without reaching the natural. This soil contained many fragments of human bone consistent with the breaking up of a graveyard and subsequent reinstatement when the war was over. No more work was done on the site until March 1984 when it was machined down to natural and the soil removed used to fill up the hollow way to the east.

The whole operation was watched by the writer and again much broken bone was found as well as two intact east facing burials on the north side near the Manor House Hotel boundary. About 10 m south of these burials it was noticed that the machine had reached but not broken up the apparent corner of a substantial stone building. At this point further clearance of the site was halted and it was possible, with help of students from the Dorset Institute of Higher Education, to spend a day retrieving as much evidence as possible.

The Building

Excavation of the stones revealed the lowest course of the footings of the south-east corner of a building. Only 2.5 m of the east wall remained and 3 m of the south wall could be traced though this had been disturbed. A projection from the corner on the south side appeared to be the footing of a buttress against the end of the east wall. The stones were of local Forest Marble limestone and some

mortar had been used in the filling. In the immediate vicinity of the structure fragments of medieval roof tile were found as well as much shattered slate and stone showing signs of burning. The line of the walls was investigated in each direction but no further trace was found.

The Graveyard

The inhumations shown (Fig. 10) represent those actually recorded *in situ* either during the levelling of the site or during the cutting of the foundation trenches. Only one, that of an infant, was excavated by the students in the south-east corner at a depth of 0.75 m. No trenches were dug in the south-west corner which may still contain undisturbed burials. On the other hand this was the area in which the redeposited soil contained much broken bone and it is likely that it was stripped to below grave level in 1944. When the footings of the 1961 house were taken out it was noted that three burials had been disturbed so that the churchyard must have extended to the south of the boundary of the building plot. It is also known that human bone was found in service trenches under the modern road and its verges.

The only certain boundary of the graveyard is that on the east side against the hollow way of the medieval road. The small remaining fragment of the base of a wall (Fig. 10) marks the line of the eastern limits of burials. The lynchet on the north side was cut by a building trench which showed it to be a build up of redeposited soil associated with levelling in the 19th century. The lynchet on the south side was formed when the 1961 house site was prepared.

Conclusion

The evidence suggests that here was a medieval stone building with slate and tile roofing. That it was surrounded by a graveyard confirms the site as that of the former church of St Giles. It is likely that the footings of the south-east corner of the chancel are all that remains of the building after the bulldozing of the site in 1944.

The size of the church must be conjectural but a clue may be given by the Bexington Aisle of Puncknowle church. If the latter

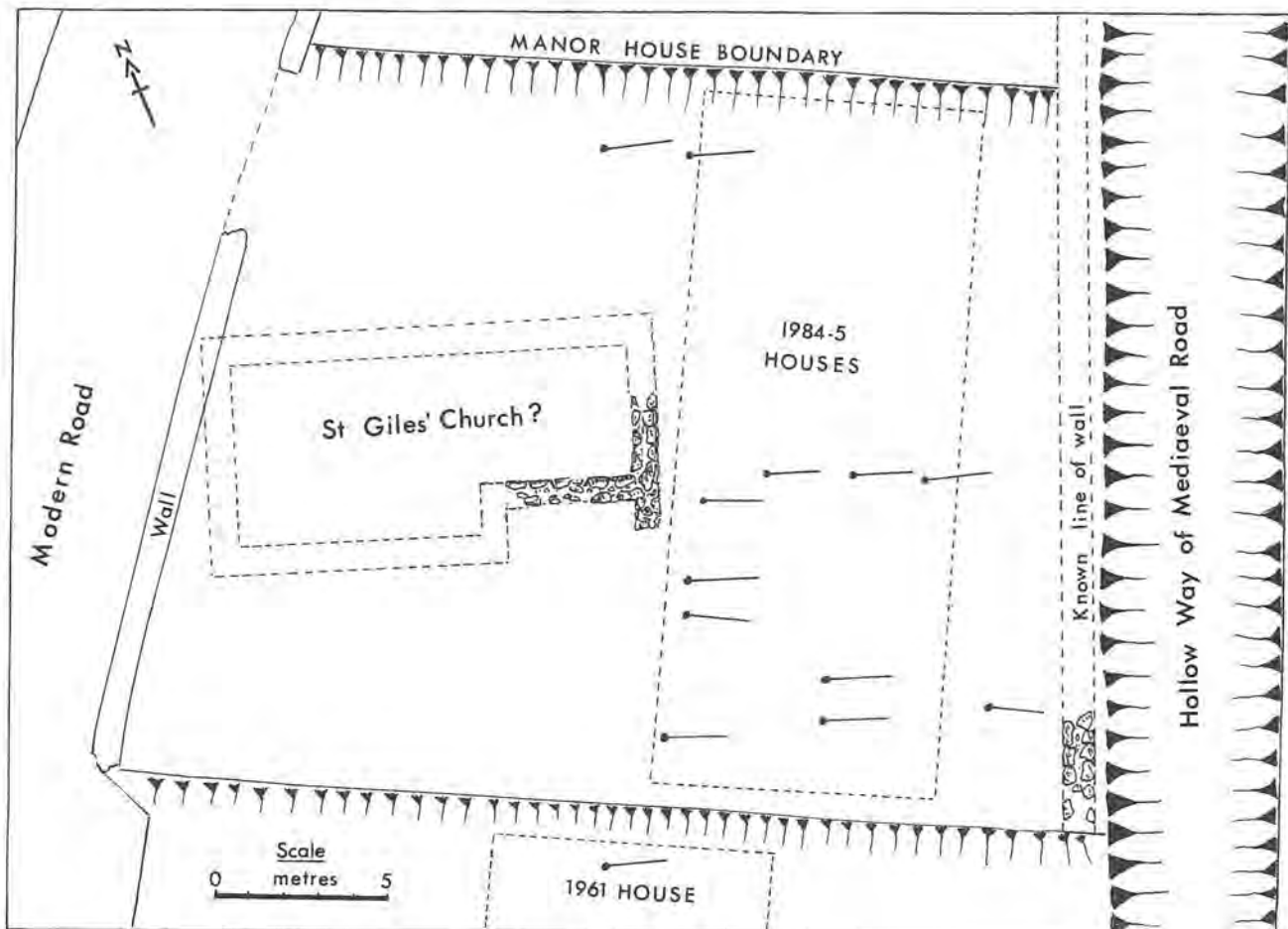


Figure 10. The site of the medieval church and graveyard at West Bexington. The position and likely size of the church are suggested by the plan of the comparable church at Chilcombe, which has been superimposed on the little archaeological evidence remaining.

was indeed originally the chancel of St Giles (as suggested by tradition and by Pevsner⁶) its size must have been comparable with that of the chancel of the church at Chilcombe. An outline of the plan of the later superimposed on the plan of the site of St Giles (Fig. 10) gives some idea how far west the nave might have extended and indeed the possibility that evidence of the west wall may remain under the road.

The nucleus of medieval Bexington was thus the Manor House with the adjacent church of St Giles on the south side. The church and grave yard lay on the line of the main street which ran down towards the sea to the east of the present road.

Acknowledgements

The writer is indebted to County Archaeologist Laurence Keen for his interest and help; to Arthur and Josephine Pearse of Manor Cottage who kept an eye on the site for many years; to Alan Hunt and his students for practical help, in particular to Alison Gledhill on whose plan Fig. 2 is based; and to M. Sparks the builder for allowing continued observance and excavation of the site.

A note on the unstratified medieval material from West Bexington is in preparation.

JOHN BAILEY

1. Hutchins, John, *History . . . of Dorset*, 3rd Edn., Vol II (1863), pp. 769-772.
2. Coker's *Survey of Dorsetshire . . .* (1732), p. 29. Actually by Thomas Gerard, c. 1625.
3. Good, K., *The Lost Village of Dorset* (1979), pp. 52-3, 80.
4. Moon, A. A., Notes on the History and Architecture of West Bexington (ms).
5. Dewar, H. S. L., *Dorset Proceedings*, Vol. 83, p. 82.
6. Newman, J. and Pevsner, N., *Buildings of Dorset*, 1972, p. 352.

OBSERVATIONS AT MILL LANE, WIMBORNE, SU 0100007

Building operations in November 1984 resulted in a deep trench being cut at right angles to, and on the north side of Mill Lane. In both the east and west side of this trench, and at a distance of about 5 metres from the building frontage, a ditch was observed in section and recorded. This ditch was 'U' shaped on the west section but had a flat bottom on the east, and was sealed below 0.5-0.8 m of topsoil. The ditch was cut into river terrace gravels, was 1.0-1.2 m deep and at least 2.0 m wide, but was cut away by modern disturbance on the north side. The ditch was filled with dark grey-brown clayey silts with a notable grey-ashy deposit at its base. The only recorded finds from the ditch were an oyster shell and some charcoal.

Although the ditch cannot be securely dated, the orientation, shape and dimension do bear some similarity with those recorded on the site of the Crown Hotel (Woodward 1983; ditches 93 and 21, Fig. 3, 62). It was suggested that these may have been medieval property boundaries, possibly for burgage plots. It is possible that this ditch on Mill Lane may belong to this group.

The detail records for this observation have been accessed into the Wimborne Archive (Woodward 1983; and Graham 1984, this volume; File 6, F). The observations were carried out for the East Dorset Antiquarian Society with the assistance of Peter J. Woodward (Trust for Wessex Archaeology).

TERESA HALL AND ANN SIMS

- Woodward, P. J., 1983, 'Wimborne Minster, Dorset - Excavations in the Town Centre 1975-80', *Dorset Proceedings* (105), 57-74.
Graham, A. H., 1984, 'Wimborne Minster, Dorset - Excavations in the Town Centre, 1983', *Dorset Proceedings* (106), this volume.

FISHPONDS AT KINGTON MAGNA

Earthwork remains of two fishponds, apparently superimposed on DMV earthworks, west of the parish church at Kington Magna (ST 767231) were surveyed by students of the Dorset Institute of Higher Education. A full account and a plan will appear in Ross, forthcoming. A plan has also been deposited in the archaeological archive of the County Planning Office.

M. S. ROSS AND ALAN HUNT

Ross, M. S., forthcoming, 'Kington Magna parish survey'.

MEDIEVAL SITE AT GUSSAGE ST ANDREW AND MINCHINGTON, SIXPENNY HANDLEY

Examination of pasture north-west of Chapel Farm, Gussage St Andrew has revealed earthworks covering an area of 2 hectares within two existing fields at the corner of the lanes north-west of Minchington and north-east to Woodcuts (ST 974144). This site is not recorded in RCHM *Dorset Vol. V East* (1975). It lies on the lower slope of a rounded spur overlooking the Gussage Brook, and separated by a dry combe from Chapel Farm and the church of Gussage St Andrew on the opposite spur to the south-east. The brook appears to rise at the junction of the combe and valley.

Slight lynchets and banks define two or three rectangular

enclosures which range in area from 0.5 to 0.25 ha lying downhill and south-west of a linear terrace 10 m wide, parallel with the lane to Minchington. To the south-east this possibly turns north-east and is lost amidst possible building platforms, partly obscured by an existing cottage.

Half a kilo of pottery was recovered from mole-hills in the field. Jo Draper has kindly examined the pottery and comments: '100 gm is post-medieval (Verwood type) and a small piece of clay-pipe stem was also recovered. Five heavily scratch-marked sherds and a hammer-head bowl rim probably date from the 12th/13th century. Three small sherds with many vesicles resemble the corky Ware J from Wimborne (Norman Field, 'Excavations at the Leaze, Wimborne . . .', *Dorset Proceedings*, vol. 94, 1972, 49-62; Ware J, p. 60). The rest of the material is body sherds and a flat base with an internal over-fired green glaze, all in a fairly coarse ware with much sand temper.

Cursory examination of the edge of the arable immediately south of the church produced two small abraded sherds of medieval pottery, one with traces of purplish-green glaze, and fragments of Roman tile, possibly tegula or box flue (ST 976141). There are local reports of a 'mosaic' from the site of the Cashmoor Inn to the south (ST 975136; information from Martin Green).

An area of strip lynchets has been identified in arable and pasture on the south side of the Gussage Valley, but further towards its head. These remains lie south and south-east of the deserted settlement of Minchington on the opposite side of the valley (ST 963148, RCHM, *Dorset Vol. V East* (1975), p. 68, mon. 17). Traces of two ploughed-out lynchets lie in arable to the west, parallel with, and to either side of, the foot-path on the OS 1:25,000 map (ST 963145). These may descend the hillside into woodland to the east. Further signs of two or three slight lynchets are visible in pasture south of the woodland, towards Lower Farm (ST 967145).

CHRISTOPHER SPAREY GREEN

NALLER'S FARM, ASKERSWELL

Naller's Farm (SY 543927) is an isolated farmstead settlement in a remote valley near the eastern boundary of Askerswell parish. The farmhouse (?17th century or earlier), and two undated farm buildings, one a barn, the other a byre, are arranged with the house and a linking wall around a farmyard in a rectilinear courtyard farm plan.

To the east of the house, outside the farmstead enclosure, an area was levelled for car parking in 1983-4. Traces of masonry were exposed and these were excavated. A well-constructed wall retained the valley slope; a similar surviving wall at the back of the farmhouse continues to do so. Close to the retaining wall was the lowest course of a stone wall, part of a building on the same alignment as the farmhouse. A possible return to this wall was visible on the south side, but the relationship was ambiguous. Between the retaining wall and the wall of the building was a narrow area of cobbling, over an earlier layer (?surface) of rammed chalk. Two substantial post-holes possibly pre-dated the stone building, but again the relationship was uncertain.

Substantial quantities of pottery were recovered in the levelling operation and in the subsequent excavation by Mr Brian Rice, a former owner of the farm. Apart from some Late Bronze Age/Early Iron Age material and a very few medieval sherds, the bulk of the material has been dated to the 18th and 19th centuries (Draper 1984 and pers. comm.). None of this material was directly associated with the excavated features, but it would seem that much (?all) of the pottery came from a deep hill-wash deposit sealing the excavated features, or from earlier layers/features which may have been disturbed during the excavation.

This archaeological evidence suggests in the first place that some Late Bronze Age or Early Iron Age activity took place in this valley, since the few sherds found were fairly fresh (Draper, pers. comm.) and so unlikely to have been transported any significant distance. The presence of medieval pottery suggests that the present farmstead was established in that period; certainly it was so by the early 16th century, since we have a documentary reference to *firma de Nallars* dated 1545 (Hutchins 1864, 175-176). The excavated structural evidence also suggests that either the settlement was once larger than at present, or that a single has been extensively re-planned, probably during or before the 18th century. Plans of the farmstead and of the excavated features and monochrome photographs by students of the Dorset Institute, are deposited in the archaeological archive of the County Planning Department. I am grateful to Mr Brian Rice and Mrs Diana Aubrey for permission to carry out the survey and for much information; to

Caroline Wells who drew attention to Naller's Farm; and to Jo Draper who discussed the finds with me.

ALAN HUNT

Draper, J., 1984, '18th century vessel from Naller's Farm, Askerswell', *Dorset Proceedings*, 105, 152.
Hutchins, J., 1864, *History . . . of Dorset*, 3rd edn, II.

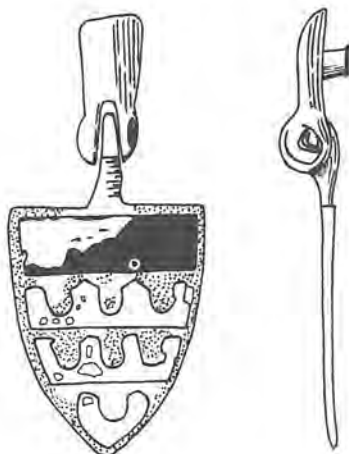


Figure 11: *Heraldic pendant from Stourpaine, at life size.*

MEDIEVAL ENAMELLED HERALDIC PENDANTS FROM STOURPAINE AND HANFORD

These two objects were found by Mr J. Adams who kindly brought them to the writer's attention and arranged for them to be conserved and studied in the Dorset County Museum. Both belong to a familiar class of object thought to have been attached to horse harness. The first (Fig. 11) was found at Lazerton Farm, Stourpaine (ST 86361041). It is made of copper-alloy. The shield, of Ward-Perkins' Type I (London Museum, *Medieval Catalogue* (1954), 118), is enamelled and substantial areas of red and green enamel survive. A small area of blue enamel is present and small traces of white enamel on the vair suggest that this was originally completely covered with white enamel. Although the iron pin is broken the attachment survives. On the back is a rivet cast in one piece with the attachment; the end of the rivet is slightly flattened. There are very small areas of gilding present. Mr G. Squibb has kindly identified the arms as those of Stoke, or Estoke, which was later adopted by some of the Clavells of Smedmore, and notes that there were several of them during the period when horse-trappings were in fashion (See Hutchins (3rd ed.) I, 412). The second pendant (Fig. 12) was found in Hanford (ST 84741135). Of the same type and metal as the first the shield has a lion rampant with a background of red enamel. Part of the iron attachment pin survives in the loop. Both pendants may be dated to the 14th century.

LAURENCE KEEN

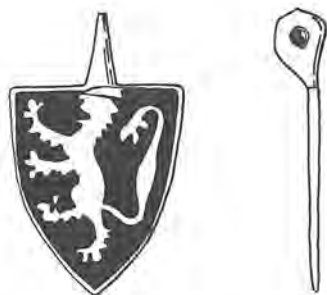


Figure 12. *Heraldic pendant from Hanford, at life size.*

THE STUDLAND BAY WRECK

AN INTERIM REPORT ON A MEDIEVAL VESSEL OF c. 1500 WITH A CARGO OF SPANISH POTTERY

In the spring of 1984 divers from the Hamworthy Sub Aqua Club investigated an obstruction which had snagged the nets of a local fisherman. This proved to be the wreck of a medieval vessel uncovered by sea-bed movement due to recent storms.

A small quantity of surface pottery was removed and brought to Poole Museums for identification. It is mainly fine Spanish tin-glazed pottery of c. 1500±25 with blue and purple decoration known as Isabela Polychrome, although unfortunately most of the pottery is discoloured black by the sea water. Similar high quality copper lustre wares are also present as well as Spanish coarsewares and one Saintonge jug from south-western France. This pottery, which probably form a small part of a larger cargo which has now perished, is undoubtedly one of the largest groups of Spanish pottery to be discovered in England and will be of considerable importance for Spanish pottery studies. The authors are indebted to Mr R. G. Thomson and Mr J. Hurst for their comments on this pottery.

The site has been designated a historic wreck by the Department of Trade and a licence to survey has been granted to the Hamworthy Sub Aqua Club team under the leadership of Mr Victor Unt. The authors are acting as archaeological advisers to the project and are working in close co-operation with the National Maritime Museum. Mr Martin Dean from the National Maritime Museum has examined the wreck and produced a detailed report. One of the conclusions of the report is that the vessel is lightly constructed and could be (speculatively) a caravel or a galley.

An initial survey has shown the extent of the timbers to be at least 23 metres long and 4 metres wide. A full survey will begin in 1985 and other non-destructive magnetometer and scanning surveys will be completed to provide more information on the extent of the wreck.

The interpretation of the wreck is difficult at present although the lightness of construction and the probable pottery cargo suggest a medieval merchant vessel of c. 1500 AD. The nationality of the vessel is, and may remain, uncertain as a vessel of almost any nationality could have carried a cargo of this type.

The vessel is also potentially of considerable national importance as the first example of a medieval merchant vessel of this date to be examined in Britain and could provide a wealth of information on a variety of maritime themes.

A Trust is being formed to fund the project with representatives from the Hamworthy Sub Aqua Club, Poole Maritime Trust and Poole Borough Council. If adequate finance is available and the survey is completed satisfactorily then the project will be in a position to consider applying to the Board of Trade for a licence to excavate the site.

I. P. HORSEY AND K. S. JARVIS, Poole Museums Service

EXCAVATIONS WITHIN NO. 8 GOLD HILL, SHAFTESBURY, JUNE 1984, INTERIM REPORT

Renovation of this property by the new owner, Mr R. Bayliss, provided an opportunity to examine the archaeological nature of a small area of Shaftesbury's well-known tourist attraction.

Two trenches, the first two metres by one metre, the second one metre square were excavated revealing evidence suggesting three distinct phases of occupation one of which pre-dated the present structure (c. early 17th century), and post dated the 12th century. Detailed analysis of function and chronology awaits specialist reports.

MARGARET COX, Shaftesbury and District Archaeological Group

HOLTWOOD (SU 02700625)

During September 1983 a sample of pottery was taken by Steve Wharton and Jenny and John Elliott following the discovery of several complete earthenware jars by John Elliott while digging a foundation trench for a path. The site lies some 100 metres to the south-east of Horseshoes Cross, near the boundaries of the parishes of Holt and Hinton Martel. It is immediately adjacent to the Elliotts' home. Indeed, the construction of the house (early 20th century) has disturbed the surrounding contexts.

A trench was dug adjacent to the initial discovery and subsequently extended to explore an area of approximately six square metres. Beneath about 25 centimetres of relatively sherd-free sandy soil there was located a layer of broken pottery and brick fragments some seven centimetres thick on the sandy subsoil. Approximately 125 kilos of sherds were removed from the excavation and yielded

some half-dozen forms, the most numerous being pancheons, other bowls, jugs, small jars and a costrel. Apparently some fifteen intact examples of the small unglazed jar had been found stacked on their side by Mr Elliott during the digging of his foundation trench.

As with the site discovered at nearby Horton in 1976, the vessels are of pinky-red to grey earthenware. The colour of the glaze varies with the depth of firing but is for the greater part green-yellow with dark flecks derived from the iron in the clay. Decoration is limited to a few incised circumferential lines and wavy lines on pancheon flanges. The pottery is of early 18th century date.

No structures were found although the presence of vitrified brick fragments coupled with the fact that much of the pottery shows little evidence of having been moved far would suggest that a kiln lies in the vicinity. The site has considerable potential for further work as aerial photography has revealed circular crop-marks adjacent to the trench, and the use of a rotavator some 80-90 metres to the west of the trench has brought brick to the surface, some of which shows signs of burning. The Kingston Lacy papers which could well contain documentary reference are at present being catalogued in the County Records Office.

The final report is being prepared and will be published in these *Proceedings*.

STEVE WHARTON

OBSERVATIONS IN ST PETER'S CHURCH, CHETNOLE

Renewal of suspended timber floors in the parish church of St Peter, Chetnole (ST 60200820), was observed during 1984. Two small areas at the west end of the nave were uncovered and the rough foundations, c. 0.70 m wide, of the tower were revealed. These were used together with the 19th century sleeper-walls to support the timber floor. The south wall of the nave has been thought to be late 13th century in date (RCHM, *Dorset*, i (1952), 91-2), but investigation suggested that to the west of the porch the wall was rebuilt when the sleeper-wall was constructed in the 19th century. This was confirmed by the construction of an air-vent passing through the sleeper-wall and of the same build as the main wall. There was no evidence that the vent had been inserted into an earlier wall.

M. A. SIMONS

ARCHAEOLOGICAL RECORDING IN CHURCHES

Structural surveys of the parish churches of St Andrew, Preston (SY 706829) and St Mary, Chickerell (SY 644807) were carried out by M. A. Neal of the Dorset Institute of Higher Education. Microfiche copies of this survey are deposited in the County Museum and at the Dorset Institute.

ALAN HUNT



Figure 13. Reconstruction drawing of an Isabela polychrome plate from the Studland Bay wreck, diameter 230 mm, here half life size. Drawn by Lesley Cartwright.

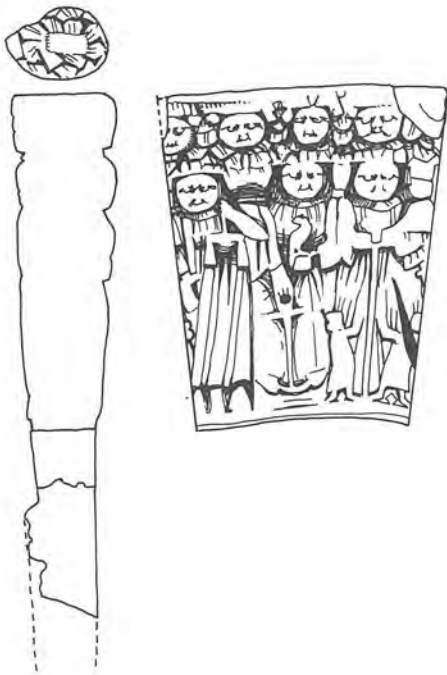


Figure 14. Ivory-handled knife from Milton Abbas, at half life size. Drawn by Daphne Roscoe.

A CARVED IVORY-HANDLED KNIFE FROM MILTON ABBAS
 The knife illustrated in figure 14 and plate 3 was found between the present village of Milton Abbas and the Abbey Church in 1983 by C. H. R. Fookes, with whom the object remains. Photographs were submitted to Anna Somers Cocks of the Victoria and Albert Museum, who commented that the Victorian and Albert has a knife and fork set whose handles are very similarly carved with figures of the Virtues (Inv. no. M. 97-1973). It is uncertain whether the Victorian and Albert examples and the Milton Abbas knife are Goanese and late 17th century, or Flemish and late 16th century.

The silver band below the ivory is unmarked.

HIGH ANGLE BATTERY, VERNE COMMON, PORTLAND
 A survey of the late 19th-century High Angle Battery (SY 694732) was carried out for HBMC by Martin Papworth in April-July 1984 in advance of conservation works. These works, carried out by Weymouth and Portland Borough Council, were necessary as the Battery was in a dilapidated state, vandalism having compounded the impact of erosion. The main proposals included clearance of loose debris, consolidation of gallery walls and reinstatement of buildings.

The survey archive is deposited at the Dorset County Museum.

ALAN HUNT AND MARTIN PAPWORTH

OSMINGTON
 Alison Nailer of the Dorset Institute of Higher Education carried out an archaeological survey of the parish of Osmington. Microfiche copies are deposited in the County Museum, the archaeological archive of the County Planning Department and at the Dorset Institute.

ALAN HUNT

CORRIGENDA
 The editor and author regret that wrong grid references were given in 'Dorset Archaeology in 1983': p. 150, Post Office, High West Street for 'SY 69090965' read 'SY 69009065'; and Church Street and High East Street for 'SY 6939974' read 'SY 6939074'. In the note 'Saxon, Carolingian and medieval coins' (p. 151) the silver denier of Pepin, found at Bere Regis for 'weight 0.99 g = 15.3 g' read 'weight 0.99 g = 15.3 gr'.



Plate 3. The ivory-handled knife from Milton Abbas, at life size.

Shorter Contributions on Archaeological Topics

THE HENGISTBURY HEAD FIGURINE FURTHER CONSIDERATIONS

SUSANN PALMER

A consideration of Mr Cook's reconsideration of the figurine from Hengistbury Head (Palmer 1977; Cook 1982) leads one to point out that he omits to discuss some crucial aspects about this problematical object.

In the first place, it must be said that Cook's drawings of the object are not nearly as accurate as one could wish for in such an important discussion. For instance, the marks on the base of the object include a very clear lozenge shape, not at all indicated on his drawings. The markings on the upper part also differ from those indicated on the drawings. The markings on the object are far more coherent and of greater consistency regarding depth, width and clarity than implied by the sketchiness of the drawings. The photographs, as reproduced on page 133 of my book, clearly show the inaccuracy of Cook's drawings. In support of these comments, a new set of photographs are published with this article – even though photography presents difficulties in showing the objects off to the best advantage at a favourable angle of light.

The most pertinent question is this: if these two pieces are merely parts of a whetstone, how can it be explained that there is not even one obviously random line, scratch, mark or groove on the two pieces outside the three areas which have been interpreted as being features of a human figurine, i.e. the head, face and pubic area? It

is quite inconceivable that marks on a whetstone would be so limited, particularly if, as Cook suggests, the object had actually been used as a whetstone for 'honing pointed and flat-bladed metal hand-tools'.

Cook's comment that 'the conjectural face need be no more than an inscrutable and fanciful embellishment to an otherwise purely functional design' is surely meaningless. It could tempt one to reply: 'when does a whetstone (or other object) with embellishments showing human features, become a figurine or when is a figurine merely a whetstone?' As the markings in this case do not appear to be purely fortuitous or accidental, one has to consider the answer carefully. It is not denied that the object may also have had a functional purpose – however obscure – but this need not invalidate the tag of 'figurine'. Is it not possible that all figurines may have had a function? Incidentally, I never once invested the

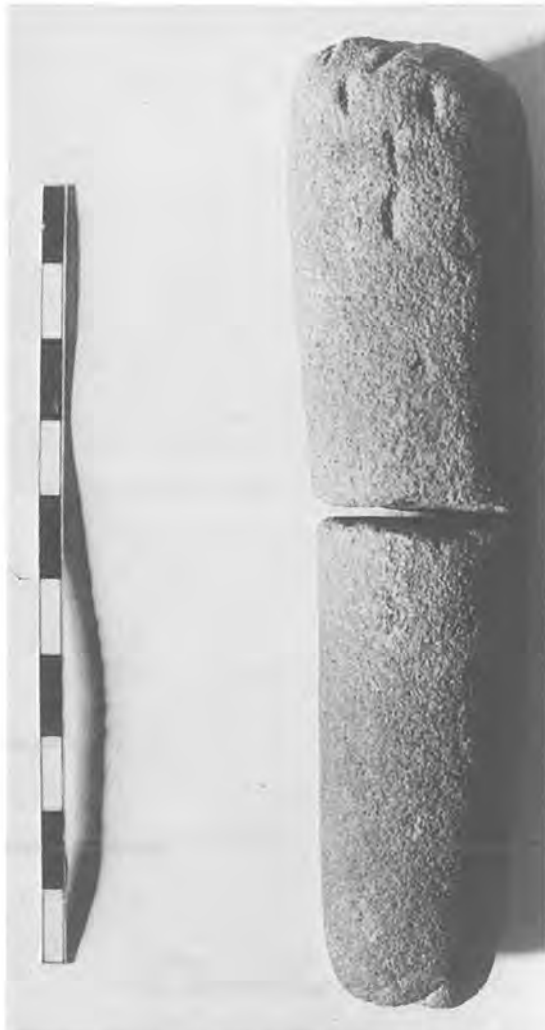


Plate 1. The Hengistbury Head figurine, at life size.



Plate 2. The Hengistbury Head figurine top and bottom, at 1½ times half size.

object with 'ritual connotations', as implied by Cook; this phrase used by him, unwittingly reveals that he could be the one with some preconceived ideas about figurines, thus leading to wrong perspectives of the whole subject.

The lines of smoothing, referred to by Cook, are not disputed. I did point out the fact that the object must have been artificially shaped by 'gentle abrasion' – a technique which is, obviously, also used for making a whetstone as well as many other objects. The fact that this technique was used in no way rules out an early archaeological date for the object (e.g., polished axes are known from the Mesolithic period). Neither does the abrasion technique prove that the object is a whetstone.

The sand grains over the whole object are very well and evenly weathered. The fact that the degree of weathering within the grooves and striations does not differ from that over the rest of the surface, is exactly what one would expect if the markings were not added at a date subsequent to the original making of the object as a whole.

To suggest that all ancient figurines must conform to usual styles in order to qualify for such a description, is blatant nonsense, as any good book on figurines will demonstrate. There are figurines of all prehistoric periods which do not show details, such as breasts or thighs; some are merely reduced to geometric elements (e.g., several from Mezine) and many are anthropomorphic with only a few incised lines (e.g., one from Le Placard). I did point out that although the Hengistbury Head figurine is unusual, 'no two figurines are identical'. Some figurines are barely recognisable as such.

It is, and has always been, admitted that the dating of the object is not certain, but a 'recent' dating as favoured by Cook can be even less substantiated than an ancient one. The object was found by an experienced archaeologist who knows the Head very well; it was eroded out of the cliff at a point where the deposits have produced only Late Palaeolithic and Mesolithic artefacts in large quantities, very near to the spot where archaeological excavations have recently been conducted.

I finally wish to point out that before I published the figurine, it was carefully examined by several eminent and highly critical archaeologists who are accepted as authorities on ancient art, e.g., Professor Le Roi-Gourhan. It was also examined under different microscopes by Dr Andree Rosenfeld at the British Museum. I am absolutely sure that these authorities would not have hesitated in saying the object was a whetstone if they thought so! If they had any doubts, I would not have bothered to publish the figurine, as I went to great lengths to obtain advice on the subject.

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SAMPLE EXCAVATION ON THE DORSET CURSUS, 1984 – PRELIMINARY REPORT

RICHARD BRADLEY, ROSAMUND CLEAL, JULIE GARDINER, ANTHONY LEGGE, FRANCES RAYMOND AND JULIAN THOMAS

Excavation took place at Down Farm, Woodcuts in September 1984 and completed a programme of fieldwork in Cranborne Chase which began in 1977. The main purpose of this excavation was to elucidate certain aspects of the Neolithic pattern of settlement highlighted during analysis of surface collections from the area.

The work had four specific objectives:

1. To obtain radiocarbon samples from the lower levels of the cursus, which at present is dated only by pottery (Bowden *et al.* 1983).
2. To investigate the character of Late Neolithic material found inside or close to the cursus (cf. Bradley *et al.* 1984, 94-8).
3. To obtain a stratified group of Late Neolithic flintwork, pottery and animal bone for comparison with recent surface finds and with poorly provenanced material in the Pitt Rivers Collection.
4. To investigate the chronological relationship between an artefact scatter apparently associated with Peterborough Ware, which seemed to overlie the cursus, and the Grooved Ware-associated henge movement at Wyke Down, the entrance of which appears to be aligned on this site (Green, this volume, p. 110).

The surface flint scatter, first recorded by Martin Green, overlapped the position of the cursus itself and was bounded on one side by a Pleistocene river cliff (SU 00601488, fig. 1). Fieldwork had produced a series of distinctive artefacts, including six transverse arrowheads, nearly 100 scrapers, four polished axe flakes, a plano-convex knife, a macehead, and a rim sherd of Fengate Ware. Trial excavation in 1982 suggested that this material was stratified in the secondary silts of the cursus ditch (Bowden *et al.* 1983).

Work in 1984 followed some of the methods devised by the Stonehenge Environs Project (Richards 1984) and was based on a transect 150 m long and 20 m wide crossing the full area of the flint scatter and incorporating both ditches of the cursus (Figure 1). Before excavation took place, the area was surveyed in detail and the complete distributions of worked and burnt flints were recorded. Phosphate, magnetic susceptibility and geophysical surveys were also undertaken (Figure 2). The results of this preliminary work suggested the existence of two major zones on the site and of several minor ones. The main distinction was between the artefact scatter on the highest part of the site, midway between the two cursus ditches, and an area with evidence of burning on slightly lower ground to the east. Excavation took place in 2 m × 2 m units based on transects cutting across the boundaries between all these zones. These transects incorporated both ditches of the cursus and sometimes were offset to cross the areas with geophysical anomalies. Longer trenches were excavated only to explore geophysical anomalies or subsoil features. By these means it was possible to detect considerable variation in the archaeological content of the ploughsoil and to relate this directly to sealed levels in the subsoil features.

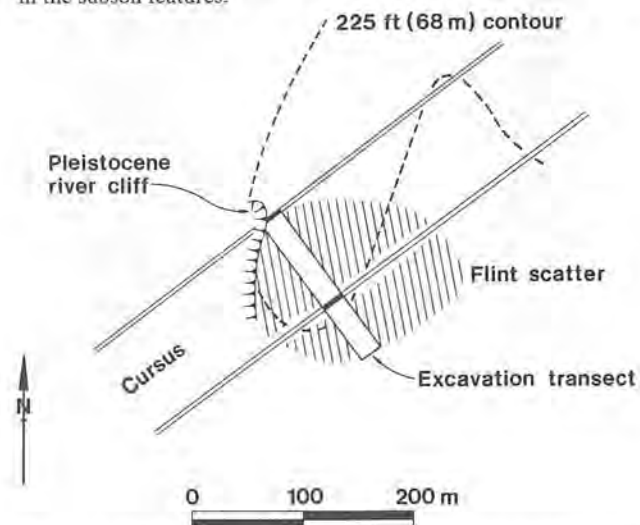
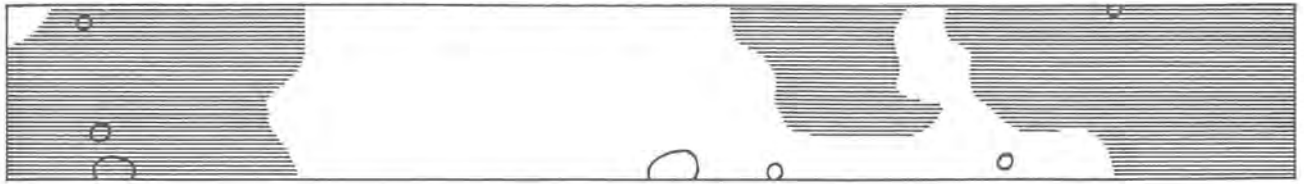
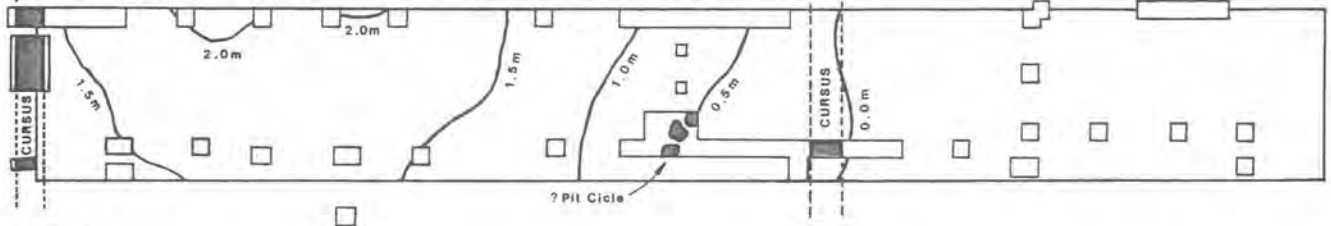


Figure 1. The location of the excavated transect in relation to the Dorset Cursus and the extent of the later flint scatter.

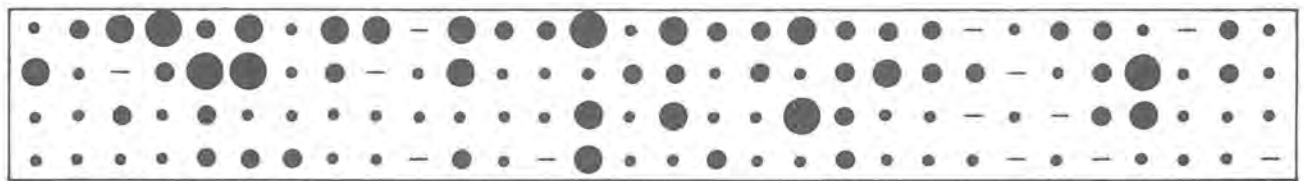
Geology and Geophysical Anomalies



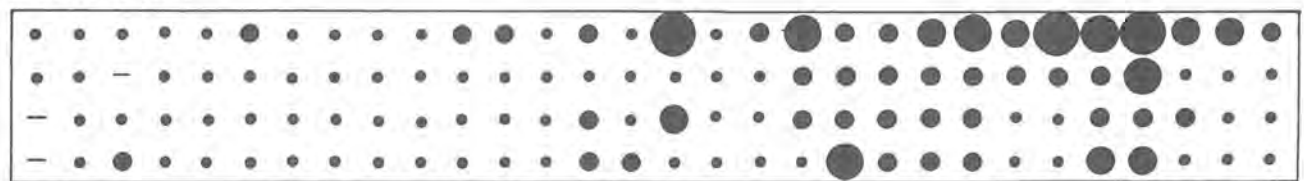
Trenches, Excavated Features and Contours



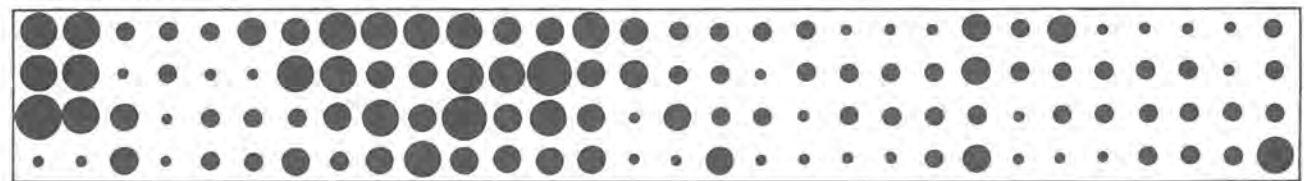
Flint



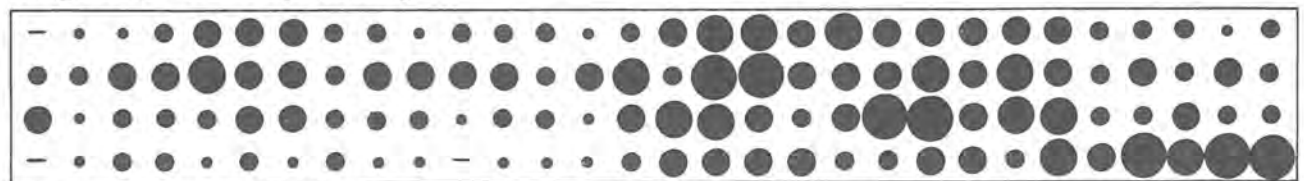
Burnt Flint



Phosphate



Magnetic Susceptibility



Key

- no value
- minus two SD
- minus one SD
- mean
- plus one SD
- plus two SD

- geophysical anomaly
- excavated feature
- clay with flints



Figure 2. Outline results of pre-excitation survey. The values for worked flint, burnt flint, phosphate and magnetic susceptibility are plotted as standard deviations around the mean.

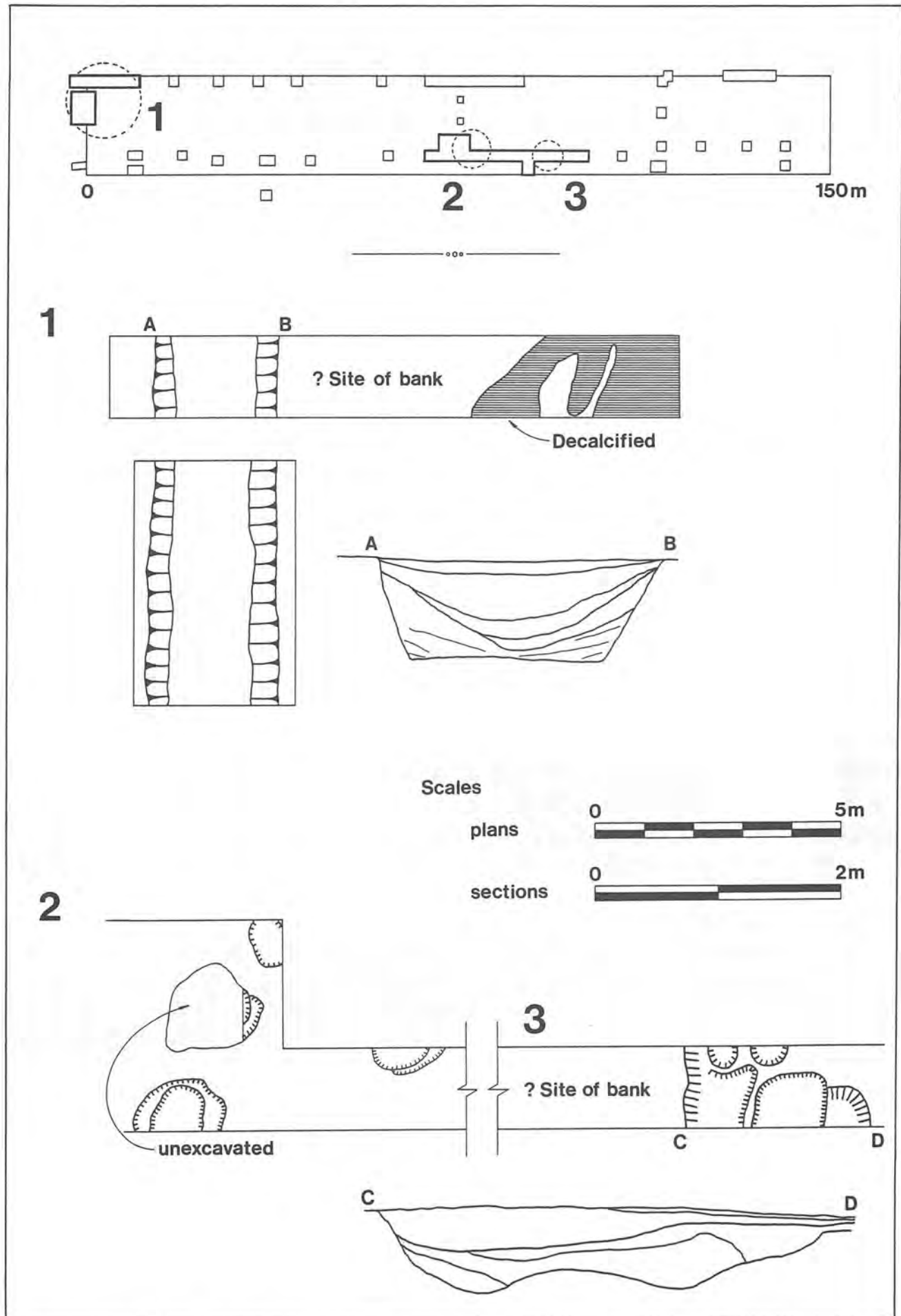


Figure 3. Outline plans of the main excavated features and profiles of the cursus ditches.

It was not the main object of this exercise to investigate the cursus itself. Rather, the main questions were concerned with the character of secondary activity during the Late Neolithic period. Even so, certain aspects of this project do shed light on its character and chronology. The most surprising result of this work was the striking contrast which appeared between the two ditches of the cursus (Figure 3). The western ditch was 2.5 m wide and 80 cm deep, with steep sides and a flat bottom. Its filling and profile were very similar to those in an earlier excavation 700 m to the south, where sherds of Neolithic plain ware had been found in its lower levels (Bowden *et al.* 1983, fig. 1). By contrast the eastern ditch was very irregular. Even making allowance for its reduction by Iron Age ploughing, it was shallower than its counterpart and showed evidence of three separate cuts, two of them ending at a causeway. Air photographs of the field to the south, taken by Martin Green in 1984, show a similar contrast between the ditches there. On excavation the western ditch contained a well-defined sequence of artefacts, with a flint industry in its lower filling very like that from the early levels of the Thickthorn Down long barrow (Drew and Piggott 1936, 88-91). An antler pick found on the surface of the primary silts has been submitted for radiocarbon dating.

Close to the eastern ditch of the cursus, excavation revealed an arc of pits, each of which had been recut (Figure 3). Despite considerable disturbance by burrowing animals, these contained a flint industry like that in the cursus itself. Fuller excavation was outside the brief of this project, but it does seem possible that these features were part of a Neolithic pit circle abutting the cursus bank. The nearby henge at Wyke Down is perhaps a much larger version of this type of monument.

Excavation of the ploughsoil did reveal considerable evidence of spatial patterning. Preliminary analysis suggests that the area investigated can be divided into four zones, their positions reflecting the layout of the earlier cursus (Figure 4). They can be described as follows, running from west to east:

Zone 1. The area over the western earthwork of the cursus

This produced a significant number of cores and unretouched waste flakes, nearly half of which were broken. A small series of implements also came from this area, including a few scrapers, two transverse arrowheads and a fabricator. The secondary silts of the cursus ditch contained more of this material, including an unfinished transverse arrowhead, further scrapers, a pick and a fine polished edge knife. The same layers contained a small number of animal bones and sherds of Mortlake and Fengate Ware. The majority of the identifiable pieces were in the latter style.

Zone 2. The interior of the cursus across the highest part of the site

Apart from a borer and a few simple retouched pieces, this zone produced virtually no cores or implements. There was a higher proportion of waste flakes than in Zone 1, 25 per cent of which were broken. The central part of this area provided enhanced magnetic readings, suggesting an area of burning.

Zone 3. The area over the pit circle and the eastern earthwork of the cursus

This zone contained a number of cores, including specialised discoidal and blade cores, as well as a large number of waste flakes, relatively few of which were broken. Seven of the nine implement types in the ploughsoil were found in this part of the site, including a bifacially retouched flake with ground edges. There were also a marked concentration of scrapers and borers. Excavation showed that this material was secondary to both the cursus and the pit circle. Zone 3 contained the main concentration of burnt flints on the site. These were associated with Neolithic artefacts in the east cursus ditch. This area of the site also produced Mortlake Ware.

Zone 4. The area east of the cursus

There were more cores in this area, and nearly half the waste flakes were broken. There was a high incidence of retouched pieces, but implements were relatively rare. Those that did occur included a few scrapers and a transverse arrowhead. Unlike the other zones, this area contained some residual material of Mesolithic character. Burnt flints again occurred in this part of the site, but had an uneven distribution compared with those in Zone 3.

Apart from the flint found in the subsoil features, which presumably was collected and used *in situ*, the lithic raw material was of poor quality and came from superficial deposits on the site. There were more broken flakes in areas with intensive flint knapping. The western bank of the cursus may have been used for

in situ flint working during the Late Neolithic, employing material originally brought to the surface when the earthwork had been built. There may be greater evidence of 'industrial' activity from the area to the east of the monument. This material contrasts with the pattern in Zones 2 and 3 which were located inside the cursus. The highest part of the site, in Zone 2, produced intact waste flakes but little else, whilst Zone 3, which was slightly more sheltered, contained a major concentration of implements and unbroken flakes. The same area produced the greatest density of burnt flints (Figure 4).

This evidence goes some way towards answering the questions listed at the beginning of this paper. Firstly, the chronology is better understood. The antler pick ought to provide a *terminus ante quem* for the construction and active maintenance of the cursus. Similarly, the stratigraphic context of the Late Neolithic artefacts is now clearly established. Secondly, examination of the flint industry shows that it is rather different from the Grooved Ware-associated material in this area and is likely to be of earlier date. In addition the pottery from this excavation is one of the few closely recorded groups from the vicinity of the cursus, where Pitt-Rivers recorded a significant quantity of Peterborough Ware, often as residual material in later deposits. At present the best comparison may be with the pottery from the second silts of Thickthorn Down long barrow (Drew and Piggott 1936, 83-6), which was re-examined by one of the writers during the excavation. Finally, the 1984 season provides one of the few unmixed samples of animal bone associated with Peterborough Ware. For this reason it is summarised in detail.

All bones came from the west ditch of the cursus. This small collection contained five species: wild cattle, domestic cattle, red deer, pig and man. Preservation of the bone was rather poor: the surfaces were channelled and eroded, and the bone was fragile. Tooth enamel was relatively well-preserved, but with the dentine eroded. The majority of the identified specimens came from two successive layers in the secondary filling of the ditch, the higher of which contained virtually all the pottery on the site. Some of the animal bones were identified by their dentition; in those cases where a number of teeth could have come from a single jaw, only one specimen was counted. The lower of the two layers contained six specimens belonging to domestic cattle and one of red deer, whilst the layer above contained three specimens probably of wild cattle, seven of domestic cattle and one each of pig and red deer. There were also two human bones. In addition single specimens of wild and domestic cattle occurred in the lower filling of the ditch,

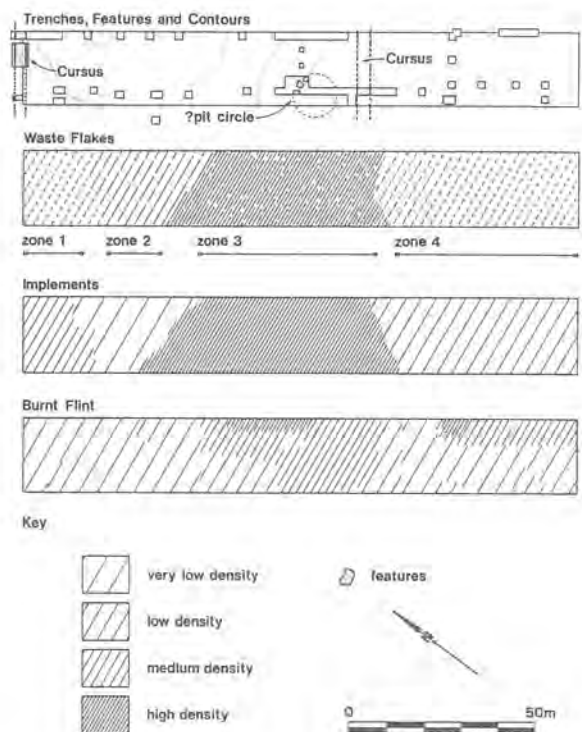


Figure 4. Interim interpretation of the character of the flint scatter. The extent of the broken shading indicates the proportion of broken flakes in different parts of the site.

and two specimens of domestic cattle and one of wild cattle in its highest layer.

Although this is a very small sample, certain interesting features stand out. Rather more than a quarter of the specimens come from what were probably wild animals, although the one specimen of pig was sub-adult and consequently its status cannot be determined. This seems to be relatively high proportion of wild animals. There was also some difference in the representation of bones between the two main groups in the ditch filling. The lower level contained six fragments of limb and vertebra accompanied by only a single cattle tooth, both the level above included parts of at least four tooth rows of cattle and one of pig, as well as six fragments of limb bone. This contrasts with the evidence from the causewayed enclosure of Hambledon Hill where skulls and jaws are relatively uncommon and make up a low proportion of the faunal remains (Legge 1981, 173-4). This cannot result from differential preservation since very friable pottery came from the same layer as the tooth rows. The different composition of the finds in these two deposits suggests that either focus of activity had altered or it had changed its nature.

The human bones from the site were a shaft fragment of a left tibia and another of a right humerus. Both came from the layer containing Peterborough Ware. They were poorly preserved, but as the tibia seems to be relatively larger and more robust than the rather gracile femur it seems possible that two individuals were represented.

At one time it looked as if the concentration of elaborate Late Neolithic artefacts around the Dorset Cursus might have resulted from intentional deposition, rather like the material found in some henge monuments (cf. Richards and Thomas 1984). This no longer seems to be the case and most of the evidence from this excavation seems to be consistent with the secondary use of part of the cursus as a domestic site. There are signs of intensive flint working, using poor quality material collected on the spot, and very little evidence for the introduction of artefacts from outside. Nodules were worked where they could be found, with the result that many of the cores and broken flakes come from parts of the site with a deposit of clay with flints (compare Figures 2 and 4). By contrast, the main distribution of implements, including the scrapers and borers so characteristic of ordinary settlements, come from the better drained part of the excavated area. This was also the more sheltered part of the site.

On the other hand, this excavation has done little to undermine the distinctive character of the material found close to the cursus: it has simply put it in perspective. Even this small excavation has found polished artefacts, whilst the bones from the cursus ditch emphasise the unusual character of some of the practices taking place in this area of the landscape. In particular, the presence of human bones reminds us that the Dorset Cursus had been, and still was, a very remarkable monument. Those who were able to use it, even by the Late Neolithic period, may have enjoyed a special position in society. The continued importance of the cursus seems even more obvious when we consider the distribution of implements in the 1984 excavation (Figure 4). Whatever the constraints imposed by drainage and raw materials, it seems likely that all the 'domestic' activity on the site took place *inside* this extraordinary monument, whilst 'industrial' activity seems to have been largely excluded.

ACKNOWLEDGEMENTS

We are very grateful to Martin Green for inviting us to carry out this work and for his hospitality and practical help. Basil Turton undertook the geophysical survey, Roy Entwistle carried out the phosphate survey and Martin Cook was responsible for the magnetic susceptibility survey. The preliminary processing of the flintwork has been carried out with the help of Ken Gordon, Richard Havis, Graham Hill, Helen Jeffrey and Malcolm Reid. The figure drawings are by Martin Cook. The excavation was funded by generous grants from the Dorset Archaeological Committee and the Prehistoric Society.

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SOME NEW INFORMATION ON THE HENGE MONUMENT AT MAUMBURY RINGS, DORCHESTER

RICHARD BRADLEY AND JULIAN THOMAS

Introduction

The henge monument at Maumbury Rings was discovered by accident during the excavation of the Roman amphitheatre between 1908 and 1913, but it was not published in detail for another 60 years (Bradley 1975). By that time it was necessary to compile the excavation report from the surviving finds and site records in Dorset County Museum. Since 1975 there have been three developments which allow us to provide some additional information on the character and chronology of the Neolithic monument. A small number of finds from the original excavation have come to light in Taunton Castle Museum and are noted here for the first time. It has also been possible to obtain two radiocarbon dates for antler picks from the Neolithic levels at Maumbury Rings. Lastly, the publication of the henge at Mount Pleasant (Wainwright 1979) and of new analysis of the finds from Durrington Walls (Richards and Thomas 1974) allows us to make broader comparisons between Maumbury Rings and other monuments in Wessex. We are grateful to Steven Minnet of Taunton Castle Museum for bringing the additional finds to our notice and for providing Plate 3; to the Dorset County Museum, Roger Peers, Ian Kinnes and Richard Burleigh for making possible the radiocarbon dating of the site; and to Jo Draper for obtaining photocopies of parts of Gray's field record.

The excavated material in Taunton Castle Museum

The excavator of Maumbury Rings, Harold St George Gray, was curator of Taunton Castle Museum for many years and the material considered here must have been separated from the bulk of the finds by the time they were transferred to Dorchester. Even now some of the Neolithic artefacts referred to in the site notebooks have not been traced. The newly-discovered material consists of pottery, worked flint, carved chalk objects and animal bones.

Pottery. The new material consists of six sherds and sixteen small crumbs of pottery from a single vessel with a grey buff surface, a grey black core and heavy flint inclusions. The vessel had a simple upright rim and was decorated by plain vertical cordons. There was no other decoration. It was found at a depth of 7.9 m in the filling of Shaft 6, together with part of another vessel which has already been published (Bradley 1975, 24). The Taunton material is entirely characteristic of the Grooved Ware repertoire and contrasts with the piece published previously, which is unusual in having horizontal cordons (*ibid.*, fig. 6, 1).

Worked flint. The material at Taunton includes a bag of flints from Shaft 1. Presumably these formed part of a scatter of worked flints found between 3.6 and 7.6 m below the contemporary ground surface (*ibid.*, 16). The finds include eight large, broad flakes, a hammerstone, ten chips and three retouched pieces. There are also two very large flakes from the lower filling of Shaft 9. In addition there is a long flint nodule with shatter marks, noted as having come from the face of Shaft 10. From Shaft 11 there are another 15 large flakes.

The finds from Shaft 11 are not mentioned in the site records. Otherwise the contexts of all these items were summarised in the 1975 paper (*ibid.*, 24-5). Their discovery only emphasises the concentration of worked flint on the west perimeter of the monument (*ibid.*, 21). Otherwise the newly-discovered material does not add any significant detail to the discussion already in print.

Carved chalk objects. Six chalk balls have been recognised among the finds at Taunton and are illustrated in Plate 3. Three have smoothed outer surfaces, while the remainder, two of which survive in fragments, still show signs of tool marks. Two of these objects carry Gray's original numbers and can be assigned to their contexts on the site. No. 315 was found in the upper filling of Shaft 11 on the west perimeter of the monument. Gray's notes reveal that it was accompanied by a second fragment, probably one of the unmarked pieces, and a small sherd which has not been traced. No. 296 came from a Roman layer in the same part of the site. The remaining chalk objects at Taunton are unprovenanced.

These six chalk balls are best paralleled at Mount Pleasant (Wainwright 1979, 167-71), and their detailed chronology on that site will be considered in the final section of this paper. They complement the series of carved chalk objects already published from Maumbury Rings (Bradley 1975, 25). Their distribution is confined to two areas of the henge monument. A phallus, three

chalk balls and a possible chalk drum seem to have been found over a limited extent of the west perimeter, whilst a perforated block, smaller decorated fragments and part of a possible phallus, now lost, are recorded from the east perimeter.

Human and animal bones. Most of the finds in Taunton Castle Museum were mentioned in the 1975 paper, which incorporated manuscript lists of identifications made at the time of excavation (*ibid.*, 19-20 and 28-9). A few bones were not mentioned in the site archive and are listed here for the first time. The depths quoted are taken from the surface of the Roman arena which was about 3 metres below the Neolithic ground surface. The following conventions are observed:

- (a) Details already noted in the 1975 paper;
- (b) Species only noted in the 1975 paper;
- (c) Not previously noted.

Shaft 9:

- Human: Femur shaft (from mouth of shaft) (a?)
- Cattle: Rib fragment (7.9 m) (c)
- Pig: 2nd phalange (6.6-7.2 m) (b)
- Epithysis of 1st phalange (6.6-7.2 m) (b)
- Left tibia (7.0 m) (b)
- Right femur (7.0 m) (b)
- 1st Phalange (7.2 m) (b)
- Right femur (7.9 m) (c)
- Thoracic vertebra (7.9 m) (c)
- Small mammal: Fragments of lumbar vertebra (6.6-7.2 m) (c)
- Two rib fragments (7.9 m) (c)

Roman make up over Shaft 10:

- Human: Jaw fragments – young individual (b)
(One of two fragments recorded from this context)

Shaft 11:

- Cattle: Right humerus (top of shaft) (c)
- Lumbar vertebra (top of shaft) (c)
- Right femur (top of shaft) (c)
- Left metacarpal (top of shaft) (c)
- Two pelvis fragments (top of shaft) (c)
- Pig: 2nd phalange (4.5 m) (b)
- Juvenile 1st phalange (4.5 m) (b)
- Right humerus (5.1 m) (b)
- Right femur (5.1 m) (b)
- Red deer: 1st and 2nd phalange (3.0 m) (b)

(The newly-published finds from Shaft 11 were originally associated with part of a red deer skull.)

These new identifications add little to the evidence already published from the site. The bones themselves provide hints of rapid burial, perhaps while they were still articulated, and show no sign of gnawing. They seem to emphasise the main meat-bearing parts of the animals – the trunk and the upper limbs. These new finds require one minor modification to the discussion published in 1975, since the red deer bones are no longer limited to skulls and antlers. On the other hand, the new finds continue to emphasise the west perimeter of the monument (cf. Bradley 1975, 21).

Radiocarbon dating

Two antler picks from Gray's excavation have now been dated. One sample (BM 2282) was taken from a pick discovered on the bottom of Shaft 1 on the west perimeter of the henge and provides a date of 1690 ± 70 bc. The second sample (BM 2281) came from another pick, this time from the highest Neolithic filling of Shaft 3 on the south perimeter. This provided a date of 1700 ± 70 bc. The two dates are statistically indistinguishable, despite the fact that they came from separate artefacts and different levels of the site.



Plate 3. Carved chalk balls from Maumbury Rings. Photograph: Taunton Castle Museum.

They provide support for the idea that the shafts had filled up rapidly.

Discussion

This new information sheds light on three important issues which could not be considered in sufficient detail in 1975: the date of the Maumbury Rings henge monument; its relationship to other sites in Wessex; and the evidence for formal deposition of bones and artefacts within the site.

The two radiocarbon dates are so consistent that there can be little doubt about the date of the site, even though a significantly earlier figure had been anticipated. They suggest that Maumbury Rings, far from occupying an intermediate chronological position between the later Neolithic of Maiden Castle and the Mount Pleasant henge, in fact belongs to the same period as the cove and palisade on the latter site (Wainwright 1979, 28-31 and 48-64). This unexpected result actually changes our perspective on other aspects of the Maumbury Rings henge monument. The portal stone which once existed in its entrance (Bradley 1975, 15) may belong to the same phase of stone-built monuments as the sarsen setting at Mount Pleasant. At the same time, the sheer scale of Maumbury Rings might make sense if it represented the final elaboration of a simpler and longer lived concept, just as Woodhenge is itself an elaboration of earlier timber circles, including the original settings in the neighbouring site of Durrington Walls (Wainwright 1979, 224-30). The newly-discovered finds at Taunton may also support a relatively late date for Maumbury Rings, for the great majority of the carved chalk objects in the nearby site at Mount Pleasant come from the palisade trench which has produced dates very much like those presented here (*ibid.* 184-9). In particular, there are 30 chalk balls from the palisade trench at Mount Pleasant, but only two from earlier features on the site (*ibid.* 167-71). Similarly, there are carved chalk objects from Woodhenge (Cunnington 1929, 77; Thomas 1957, 454-6) but not from the earlier site at Durrington Walls (Wainwright and Longworth 1971). In the same way, the only chalk ball at Avebury comes from a burial in the upper filling of the henge ditch at about the same level as a sherd of Beaker pottery (Gray 1935, 147).

The revised dating for the Maumbury Rings henge monument also allows us to reconsider its relationship to other sites. Recent work in Dorchester itself raises the possibility that it was actually a satellite of the impressive Late Neolithic enclosure at Greyhound Yard (this volume p. 100). If so, the two sites may have had a similar relationship to that between Woodhenge and Durrington Walls.

Farther afield, the 1975 paper compared the Maumbury Rings henge with some of the Neolithic monuments at Dorchester-on-Thames (Atkinson, Piggott and Sandars 1951). Re-examination of the evidence from that site suggests that it had seen a lengthy sequence and that the pit circles could belong to a late stage in its development (Bradley and Holgate 1984, fig. 8.7 and 122-6). The same idea may be supported by Martin Green's work at Wyke Down in Cranborne Chase (this volume p. 110) where another pit circle henge has produced internally-decorated Groove Ware which seems to show the influence of Middle Beaker pottery (Ros Cleal pers. comm.). It will be possible to check this idea by radiocarbon dating, but already it seems possible that work at Maumbury Rings may necessitate some revision of henge chronology.

The last point can be made very briefly. When the 1975 paper stressed the distinctive patterning in the deposits of artefacts and bones at Maumbury Rings, it was hard to compare it with the evidence from other henge monuments. The grouping of certain classes of material in particular levels of the shafts at Maumbury Rings seemed especially anomalous (Bradley 1975, 18-22 and 34-6). More recent investigation of intra-site patterning at Durrington Walls and Mount Pleasant has revealed similar patterns of association and exclusion and has stressed how far formal deposition may be characteristic of specifically 'ritual' monuments (Richards and Thomas 1984). The additional finds from Maumbury Rings do not conflict with the patterns suggested in 1975, and in one respect they extend them. Given the large area excavated between 1908 and 1913, the two groups of carved chalk fragments seem increasingly significant, particularly in view of the specialised character of the finds from the west perimeter. Similar concentrations of chalk balls are recorded from two small areas of the Mount Pleasant palisade trench (Wainwright 1979, 167).

It is a mistake to write off well-recorded excavations just because they took place a long time ago. In many cases their full publication may still be justified. The henge monument at Maumbury Rings still lacks any close parallel and one may never be found. For this

reason we must try to rescue whatever information is available.

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FIELDWORK IN THE UPPER VALLEY OF THE SOUTH WINTERBOURNE

C. J. BAILEY

The cursus on Martin's Down, Long Bredy

Reference to a cursus adjacent to the bank barrow on Martin's Down, Long Bredy,¹ calls for some explanation of its discovery as well as of its subsequent history.

The photograph accompanying the paper was from a coloured slide taken by R. N. R. Peers in 1971 when the grass downland around the barrow had just been broken up by the plough probably for the first time in hundreds of years. The hairpin-shaped feature was noted and by courtesy of the land owner R. J. Maltby measurements were made before the field was sown down. A brief account was published² but in anticipation of excavation the word cursus was deliberately avoided, but mention was made of the potential significance of the discovery in its relation to the bank barrow. The photograph was first published in 1982³ and the feature referred to as a cursus.

Subsequent ploughing no longer revealed the sharp outlines of the ditches seen in 1971. Under grass there is now no trace of the ditches and the position of the inner bank on the north side can only be vaguely identified. Spread of material brought in to fill in the pit has also masked the evidence.

Cultivation has thus greatly changed the aspect of the whole area in the vicinity of the bank barrow. The scheduled barrows are secure but the minor, mainly linear features have been obliterated. The plan accompanying this note (Figure 5) is based on the pre-cultivation evidence and should be compared with the 1971 photograph. Intensity of cultivation is shown by relative densities of shading making it clear that the truncation of the cursus was the result of the combined effect of 18th century ploughing and deeper modern cultivation.

A possible second cursus on Martin's Down, Long Bredy

In March 1984 fresh ploughing enabled the further investigation of a possible cursus east of the Long Bredy Bank Barrow.⁴

At SY 57979118 (Figure 6 X) it was noticed that two greensand blocks, each about 0.5 m square, had been disturbed by the plough. In collaboration with L. Keen and P. J. Woodward these were removed and an area 2 m by 1.5 m excavated to reveal a roughly rectangular pit. Beneath 0.3 m of dark brown earth a layer of 0.4 m of chalk rubble covered a sarsen stone 1.5 m long and 0.85 m across with a thickness of 0.35 m. The stone, which lay flat on the bottom of the pit, was removed by machine with no indication of disturbance in the natural chalk beneath it (Plate 5). The stones were removed to the side of the field where they remain. Nearby, on the fence line, another piece of greensand was recorded, presumably moved to the side of the field at an earlier date.

While the most likely explanation is the burial of stones which interfered with cultivation its possible significance in relation to an area with intense prehistoric activity must not be ruled out. While the sarsen may well be in or near its natural position the nearest source of the greensand is an outcrop 1.5 km to the west-south-west.

The slightly deeper ploughing also again showed the cursus-like feature noted in the 1971 photograph but with two converging alignments (Figure 6 and Plate 4). A machine-cut section at Y showed 0.4 m of dark earth overlying natural chalk with no trace of a ditch. It has since been discovered that this feature is on the line of the pre-turnpike road as shown on 1765 estate maps⁵ (Figure 6). This would seem to rule out prehistoric significance but the cursus-like terminal at Z has yet to be explained.

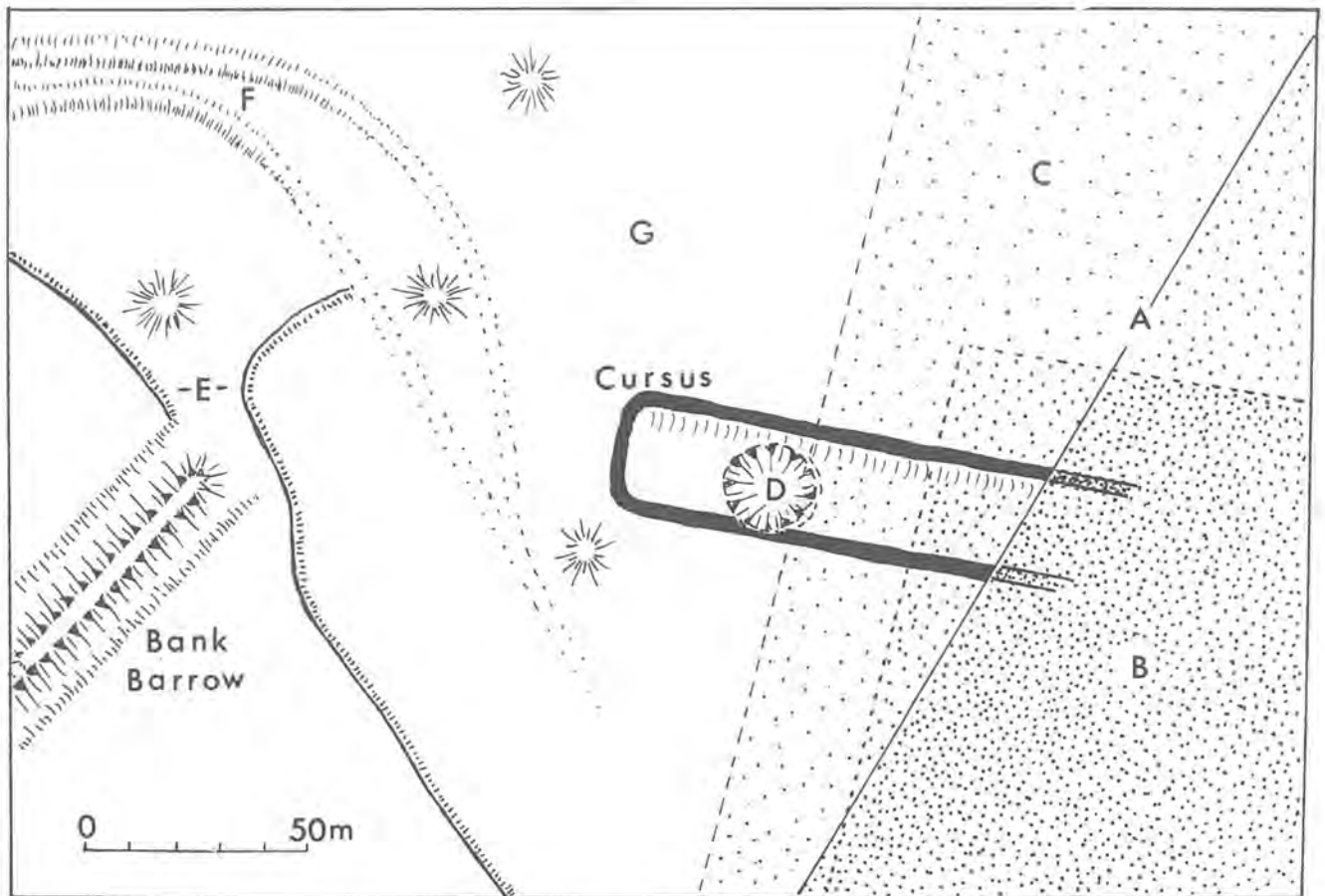


Figure 5. The bank barrow and cursus of Martin's Down in relation to features now obliterated by cultivation. A Fence line, 1971. B Part of 16 ha enclosure of open downland early 18th century. Hedge banks and ditches survived into the 1950s. C Extension of the enclosure. Probably in 1920s. D Marl pit now filled in with chalk excavated during the construction of nearby farm buildings. E Linear low banks and shallow ditches not recorded by RCHM of indeterminate purpose and age. Comparable with similar features excavated 1 km to the east-south-east. F Hollow ways of the ancient ridgeway track climbing the steep northern slope of Martin's Down. An important medieval route which continued in use till the enclosure of the 19th century. Marked on 18th century estate maps as 'The road to Weymouth'. One of the hollow ways now carries a concrete road to a recently constructed reservoir and the other is filled in. G Unshaded area taken into cultivation in 1971.

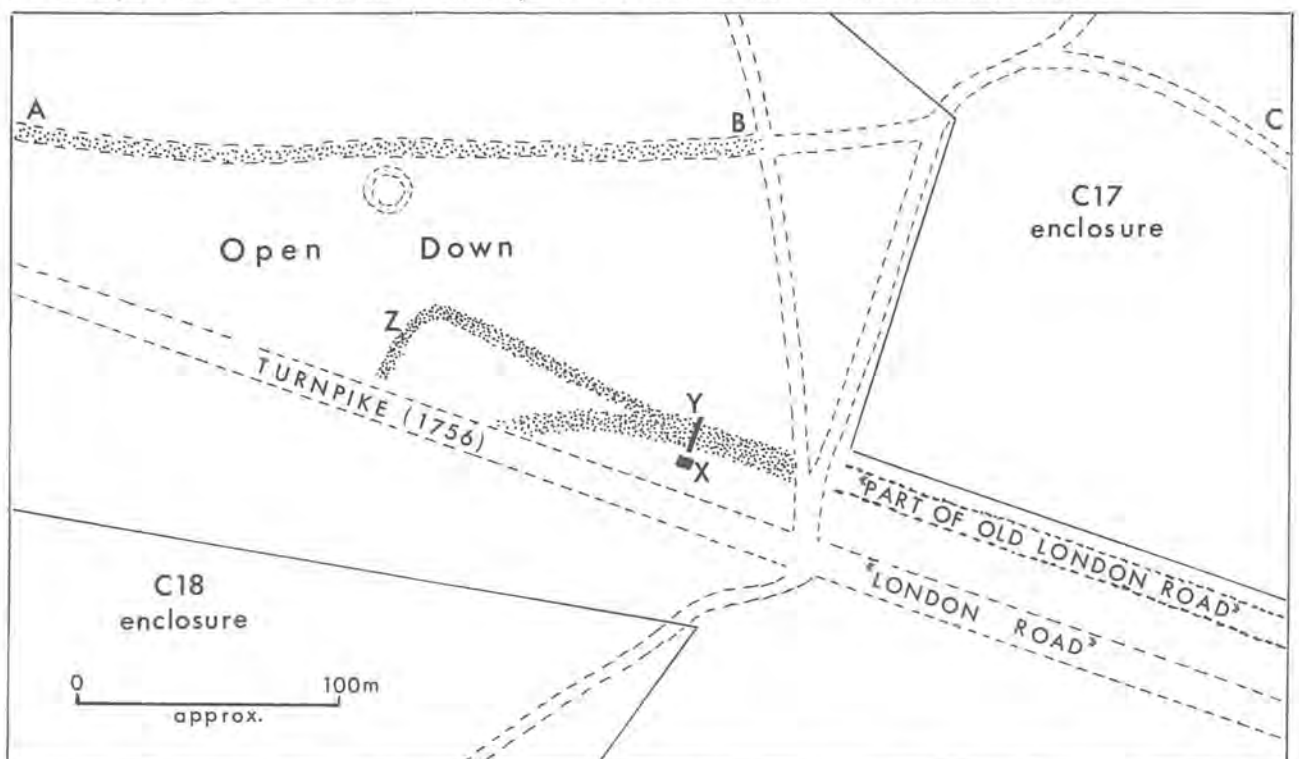


Figure 6. The cursus-like feature revealed by ploughing on Martin's Down shown in relation to an 18th century estate map.



Plate 4. The possible second cursus at Kingston Russell, curving away centre. The surveying rod (centre) marks the shallow pit with sarsen in. Photograph: C. J. Bailey.

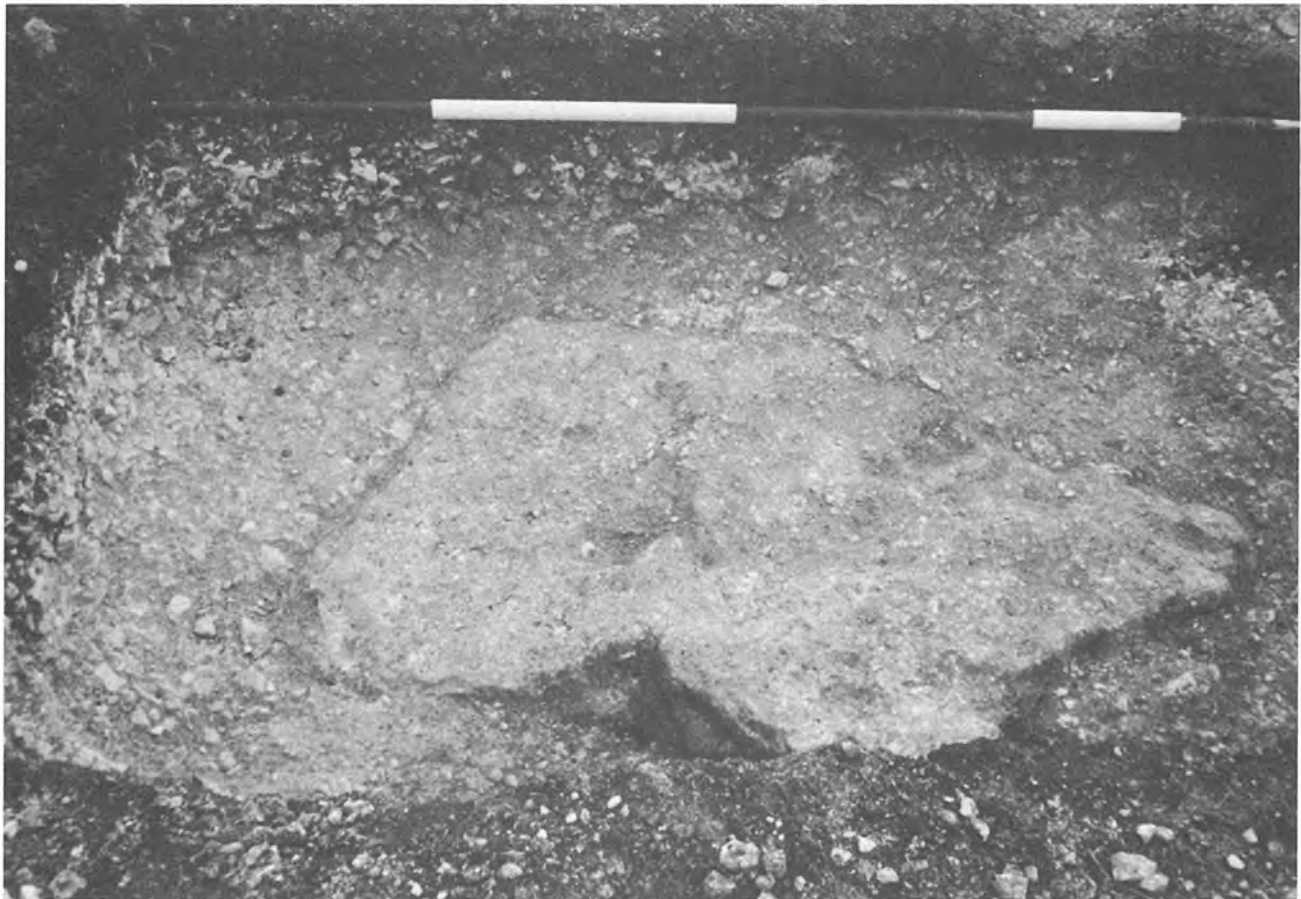


Plate 5. Kingston Russell, the sarsen at the bottom of the shallow pit. Photograph: C. J. Bailey.

An old road line on Martin's Down, Long Bredy

Deeper ploughing in 1984 also revealed a former road line (Figure 6 A-B) which was not evident on the 1972 photograph. This road is shown on the 1811 OS map running from a point 0.5 m east of Long Bredy Hut to Kingston Russell Farm. It has been suggested⁶ that it was part of a road once linking what is now the A35 with the Roman road to the north, thus bypassing the Winterbourne valley. Alternatively it could have been an early variation of the highway with an easier climb out of the valley from C to A. Any consideration of roads in this area should take into account the fact that the Kingston Russell Farms north of the A35 did not come into existence until the enclosure of open downland late in the 17th century.

Megalithic sites in the upper valley of the South Winterbourne

In the course of the Sarsen Survey made during 1974-75⁷ an unsuccessful search was made for the site, now lost, of a group of standing stones recorded by both Aubrey and Hutchins as being west of the Nine Stones at Winterbourne Abbas. The discovery of the buried sarsen noted above (Figure 6, X) prompted the writer to renew the search.

Hutchins,⁸ having described the Nine Stones, added 'Half a mile west from the temple (i.e., the Nine Stones) is a large flat stone (the Broad Stone) in the road'. He then continued, 'Half a mile further on are two large, erect stones, four feet high, and five or six paces from them two more, one foot two feet high, the other broken off close to the ground'. Hutchins would thus seem to make it clear that the group of stones, according to his reckoning, was a mile to the west of the Nine Stones. On the other hand he identifies this group of standing stones as that described by Aubrey in his *Monumenta Britannica* although the latter records them as being 'in the road half a mile further westward', i.e., from the Nine Stones. It has been suggested therefore⁹ that the site of the group must have been coincident with that of the Broad Stone in accordance with the 'half mile' given by Aubrey. The earlier antiquarian, however, omits the Broad stone and Hutchins is in no doubt that the two sites are separate.

Figure 7 shows how misleading are the distances as estimated by both Aubrey and Hutchins. The Broad Stone is, in fact, almost a mile from the Nine Stones. Assuming Hutchins to have been correct in placing standing stones west of the Broad Stone and that his 'half a mile' was nearer a mile then their site must have been west of the Poor Lot Barrow Group and some 600 m from the Compton Valence turning.

The writer's attention being thus turned to this area it was discovered that a 1765 Estate Map¹⁰ showed a group of three stones called 'Hangman's Rocks' at SY 58389109 (Figure 4, 5) roughly the same distance west of the Broad Stone as the latter is from the Nine Stones. The map also showed how the 'Old London Road' ran some 50 m north of the turnpike and its line is still shown by the hedge which runs parallel to the A35. The stones were shown as being just inside the field on the north side of the hedge. Assuming that field clearance might have moved the stones to the side of the field a thorough search was made of the adjacent hedge and a sarsen some 3 m long and 1 m wide was found lying almost buried along the hedge bank. There can be little doubt that this is one of the stones shown on the 1765 map, albeit moved a few metres to the south.

It seems very likely, therefore, that this is the site of the 'lost' group of stones. The position of Hangman's Rocks is in accord with Hutchins's 'on the right hand side of the road' west of the Broad Stone. Both historians refer to standing stones and the 18th century name may well imply the uprights of a stone gallows - cf. Stonehenge (OE *hengen*) with its trilithons of two uprights and a hangman's lintel. It must be pointed out that Hangman's Rocks were in the parish of Kingston Russell while the 'lost' group was recorded by Hutchins under Winterborne Abbas. The parish boundary runs through the Poor Lot Barrow Group 765 yards from the Broad Stone so that even if Hutchins half mile beyond that stone was accurate the lost stones would still have been in Kingston Russell, west of the Poor Lot.

Whether or not this is the site of the lost stone circle Figure 7 emphasises the early prehistoric significance of the upper valley of the South Winterbourne in its relation to the Ridgeway to the south.

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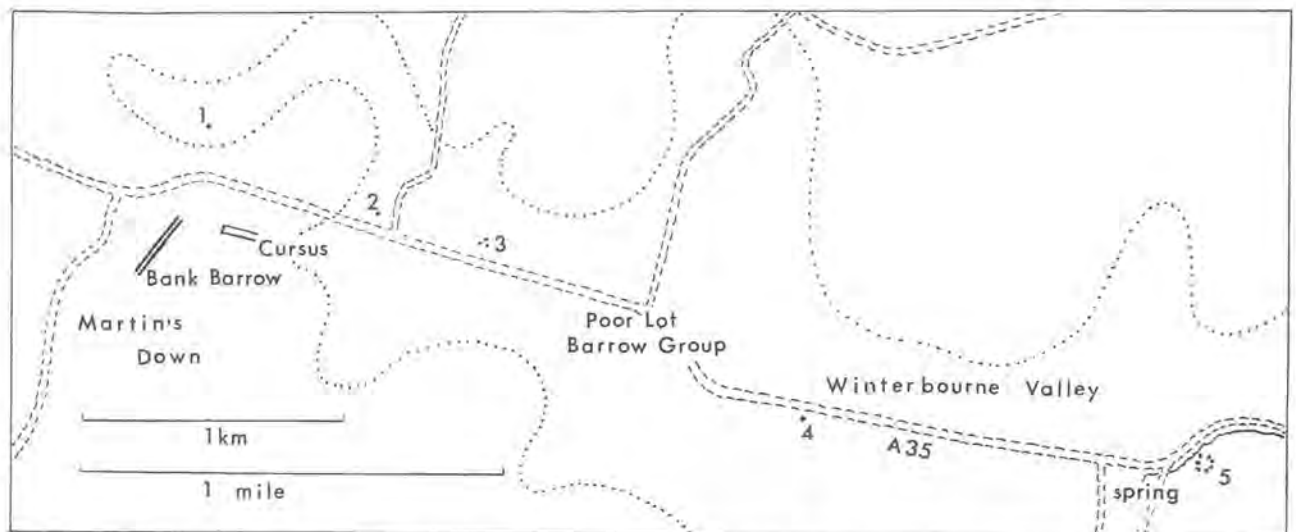


Figure 7. Megalithic sites in the upper valley of the South Winterbourne. 1. The Hell Stone. Erect isolated sarsen, ht 2 m. 2. Buried greensand blocks and sarsen length 1.85 m. 3. Single recumbent sarsen, length 2.5 m. Site of Hangman's Rocks. 4. The Broad Stone. Recumbent sarsen in road verge, length 2.5 m. 5. The Nine Stones. Standing stone circle, diam. 7.5 m.

A LATE IRON AGE SITE WITH A CURRENCY-BAR HOARD AT BEARWOOD, POOLE, DORSET

KEITH S. JARVIS with a report on the iron currency-bar hoard by J. PRICE, I. STEAD AND J. WATSON

Introduction

In July 1972 Mr A. W. Marsh discovered Iron Age pottery during building work several metres to the south of 29 Knights Road (SZ 0509 9642 approximately). This find was reported through Mr N. H. Field to Poole Museums, and the Curator of the museum at that time conducted a salvage excavation that summer. The excavation revealed a substantial hill-slope enclosure dated to c. 150-50 BC. This report was prepared subsequently by the author based on the site archive from the work, although problems arising from the archive have required the report to be somewhat shorter than usual. The author was not responsible for the excavation.

The site is on the edge of what was formerly heathland (OS 1811) near the 30-metre contour on the east side of a small dry valley which runs northwards towards the River Stour 900 metres away. There is a gentle slope above the site, which is on Pleistocene plateau gravels near a junction with the Bagshot beds composed of sand, clay and brickearth. These beds extend to the alluvium and gravels of the Stour valley. Before the excavations the land-use had been enclosed arable. An air photograph by Hunting Survey Ltd taken shortly before the site was discovered failed to show any evidence of the site. It is believed that a substantial section of the enclosure ditch survives in an open space on the housing development and is available for further excavation.

The excavation (Figure 8, plate 6)

The topsoil from an area 13 metres by 15 metres was removed by machine and the features cut into the natural gravel were excavated. All the dateable features were late Iron Age and consisted of ditches, post-holes and pits which are shown on a sketch plan (Figure 8). The largest feature was a V-shaped ditch (34) averaging 2.8 metres wide and 2.0 m deep containing much pottery. An exceptional find at the bottom of the ditch was a hoard of four iron currency bars and another iron object corroded together. A fragment of a wide iron blade, possibly a sword blade, was also found. On the same alignment as the ditch was a shallow feature 35 which could be either a palisade trench or a small gully.

There were five small pits and several contained burnt debris; some of the shallowest pits may have been hearths but this is uncertain. There was also an area of daub (F39), and 28 post-holes although some of these are doubtful. These post-holes did not resolve into any definable structures. The area north of ditch 34 was not investigated in detail although the quantity of pottery recovered from general clearance outside the ditch was similar to that from inside. It is likely that the ditch had a bank on its south side and the presence of features in the area of the supposed bank suggests that not all features are contemporary. Some possible features identified from photographs were cut into ditch 34 and suggest occupation continued after the ditch went out of use. These features are not shown on plan.



Plate 6. Bearwood Coppice – the enclosure ditch during excavation.

Discussion

The excavation suggests a hill-slope settlement sited on the edge of the Stour valley gravels and the heathland during the period c. 150-50 BC. At one stage during this period the settlement was enclosed by a substantial bank and ditch of defensive proportions. The main distinctive features of the site are the defensive ditch and the currency bar hoard. However, these features could occur in a range of settlement types from that of a single family unit such as Tollard Royal (Wainwright 1968) to perhaps a larger settlement such as Gussage All Saints (Wainwright 1979). A Stour valley gravels project including excavations at Moortown and White's pit gravel quarries (p. 114) will investigate prehistoric settlement on the Stour valley gravels further and produce a clearer understanding of settlement morphology and economy of sites in the Stour valley.

There is no evidence to indicate the economy of the site although similar hill-slope enclosures are known to have had a mixed economy based on cattle, sheep and cereal production.

The finds provide hardly any definite evidence of either economic or industrial activity. Several fragments of vitrified clay were probably produced accidentally in domestic ovens where ash was present. There were no spindle-whorls, loom weights or quern fragments recovered, although these items are relatively rare on similar sites so this is unlikely to be significant. A fragment of iron-slag could indicate iron-smelting, but its context is uncertain. The evidence for shale working is similarly inconclusive and consisted of a fragment of unworked shale and a fragment of a shale bracelet. The shale fragment was probably brought to the site from Kimmeridge which is 23 km to the south west. However no shale waste products or flint lathe working tools were recovered so shale working must have been a very minor aspect of the economy. The currency bar hoard may have been brought to the site for further exchange or for working into implements and therefore its significance is unclear. Since currency bars are often hoarded they are considered to have been valuable, and the occurrence of the currency bars and possible sword blade at Bearwood could suggest that the settlement was of some stature. Unfortunately, there is no stratigraphic information to assess the circumstances under which the hoard were buried. The possibility that more metalwork may occur in the ditch might justify further excavation.

The Bearwood site is one of several iron-age settlement sites on the gravels of the lower part of the Stour valley. Little can be said about the settlement hierarchy of the Stour valley as the majority of sites are indicated only by casual finds (Calkin 1965; Cunliffe 1978, 28). The largest sites are the hill forts by Dudsbury (RCHM 1970, 76) Spetisbury, Badbury (RCHM 1970, 61-3) and Hengistbury. The majority of these have not been excavated on any scale and it is difficult to comment in detail although social and economic models suggested for Wessex (Cunliffe 1984) may be applicable.

The iron-age promontory fort of Hengistbury Head has been extensively excavated and occupation shown to concentrate in the early and late iron-age. The late iron-age occupation was probably at its peak in the period from the late 2nd century BC to the mid 1st century BC when Hengistbury acted as a continental port. Cunliffe (1982) has suggested that a Wessex contact zone existed with lead, copper, silver and iron perhaps being exported, and wine being imported whilst shale and salt were also re-distributed. The role of Hengistbury should be reflected in the settlement pattern of the Stour valley and it is notable that the date range of the site corresponds broadly with the period of prosperity of Hengistbury.

The currency bar hoard is also the type of evidence that might be expected from sites in the Wessex contact zone with distribution links to Hengistbury. However, it should be noted that the pottery does not include any imported types. Further work in the Stour valley and perhaps further work on what survives of the site may clarify this matter.

Note on a group of currency bars from Bearwood, Dorset

by J. Price, I. M. Stead and J. Watson

AM Lab. No. 820673

There are at least four iron currency bars tightly packed one on top of the other and corroded into a solid mass which is now broken into three more or less equal lengths. The outlines of four 'handles' can be distinguished at one end where they have splayed slightly so that there are two above and two below. Slightly lower is another iron tube, at least 70 mm long but only 9 mm wide, which is too narrow to have been from a normal currency bar. But all the sockets are quite narrow and long, and completely circular in section. All are broken at the top, but two have sockets still 65 mm

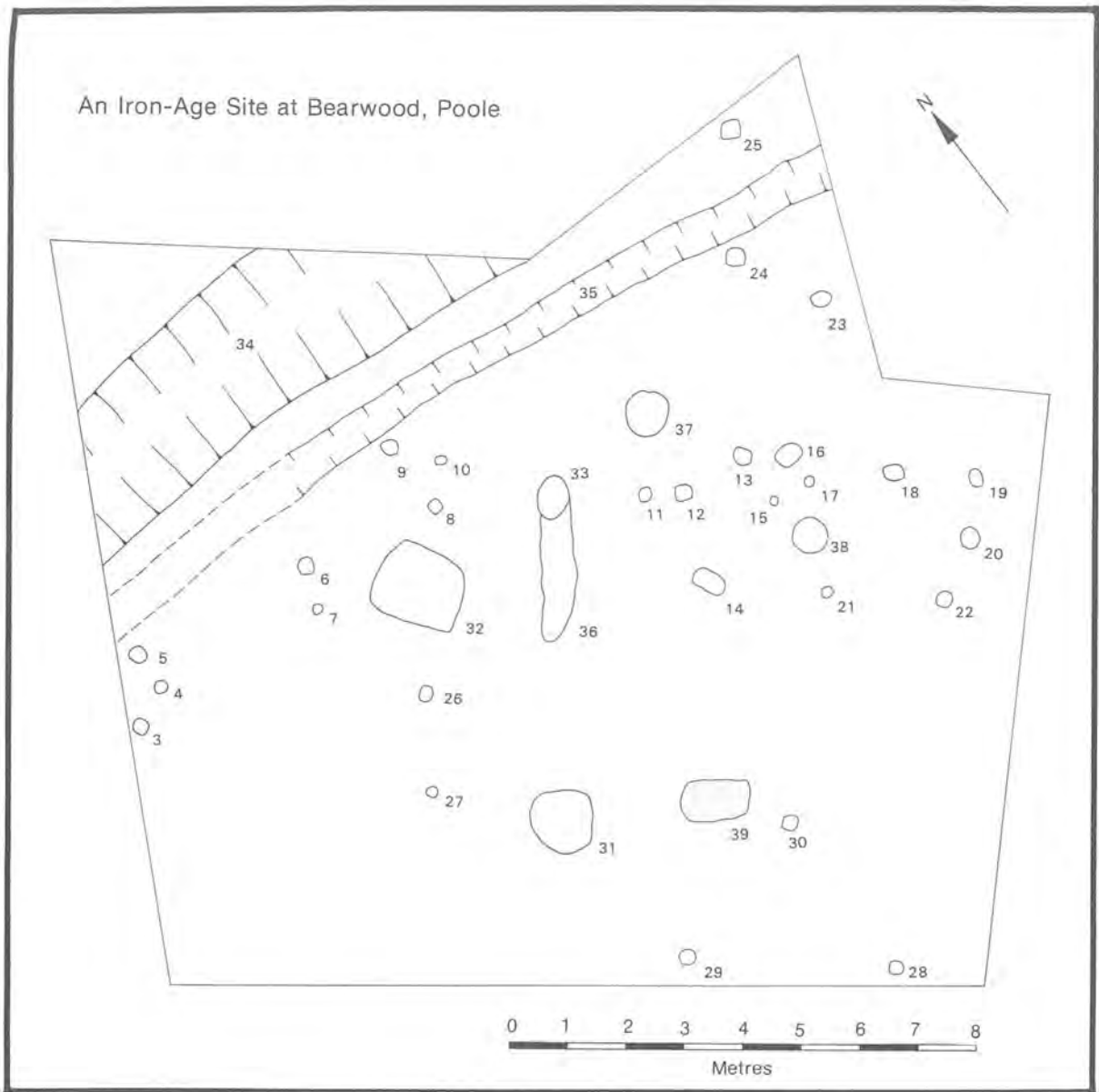


Figure 8. Bearwood. Plan of the excavation.

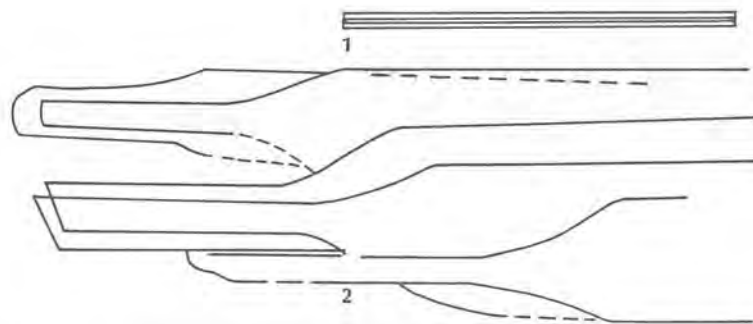


Figure 9. Bearwood. (1) Diagram showing possible construction of the currency bar. (2) Diagram to show the positions of the currency bar handles based on the interpretation of an X-Radiograph.

long and another may be as long as 80 mm; the three socket diameters that can be measured are 17, 15 and 14 mm externally. At least two of the currency bars had wooden 'handles' in the sockets – one projecting some 26 mm below the socket. The wood of one has been identified as possibly willow or poplar and the other as probably alder. The long narrow tube also has a wooden core. One of the currency bars seems to have measured 35 to 75 mm wide at the top of the 'blade', and another seems to be as wide as 42 mm but it is difficult to get accurate measurements in their present corroded and conglomerated state. The maximum total length is now about 855 mm; the lower end is broken but is rather thinner than the upper and central part so it may be that at least one of the bars stopped short of the present length.

Separate from the currency bars is a 98 mm length of wide flat blade, possibly a sword-blade. It is about 54 mm wide, thickened in the centre, and broken at both ends.

Radiographic and surface examination

The corroded mass of iron bars was received in a partially cleaned state. After a microscopic and X-radiographic examination, together with some further cleaning of selected areas, it was concluded that very little metallic iron had survived. The flat iron bars, once completely corroded, appeared to have cracked during burial as a thin white layer of redeposited material was visible on the fractured surfaces.

Two such areas were cleaned, using airbrasive methods, and this allowed some improvement in the appearance of the cross-sections of the bars. It was clear that the blades were of varying thicknesses. An interpretation of the X-radiographs suggests that each 'blade' appeared to be made up of two longitudinal flat strips welded together (Figures 10 (2), 10 (3) and 9 (1)). The examination also suggested that the lower-most iron 'tube' (see above) may be joined on to a flat blade of similar construction to the other four in the group. Although the handles of the top two bars sit squarely on the bottom two (Figure 9 (2)) the blades at the other end appear sandwiched together. This could indicate that the group had been bound together but a careful search for traces of any wrapping failed to locate any. It is of course quite possible that the hard corrosion products and soil matrix have obscured any surviving evidence. X-radiography also suggests the presence of a small hole (c. 2.5 mm) inserted in the side of one handle.

Wood identification

It was possible to take samples for wood identification from four sockets. Two were possibly *Salix* sp. (willow) or *Populus* sp. (poplar) and the other two (including the narrow tube) probably *Alnus* sp. (Alder).

Deposits on the surface of the objects were of a random nature, possibly twigs and straw. Some areas on the surface of the mass were originally thought to be traces of leather but turned out to be mineral preserved leaves.

Further extensive cleaning could perhaps be undertaken but the evidence obtained may not warrant the cost. Some metallurgical work on the blade cross sections may be possible but little, if any, metal remains.

The pottery (Figure 11)

The excavation produced a small (75 kg) assemblage of pottery which has been regarded as unstratified due to recording problems although the majority of the pottery is a consistent assemblage datable to c. 150-50 BC.¹ The ceramic traditions represented include saucepan pots, Maiden Castle-Marnhull types and pottery anticipating Durotrigian forms.

The saucepan-pot tradition of southern England (Cunliffe 1974, 42-3) is indicated by Nos 1-7 of which one (No. 6) is a typical saucepan-pot profile. Other forms include bowls (Nos 8, 9) with bead rims and jars with pronounced shoulders (Nos 10, 11, 14). The assemblage is undecorated with the exception of a jar or bowl (No. 13) of Maiden Castle-Marnhull type (Cunliffe 1974, 334) and a bowl with a stabbed rim (No. 17).

Most of the pottery (Nos 1-17) is in fabric 1 which accounts for 92.9 per cent of the assemblage by weight. This fabric is typically grey with small quantities of quartz sub-angular inclusions up to 1 mm in diameter. At least five sub-divisions of this fabric can be recognised; some (Nos 12, 13) are in a more sandy fabric whilst others (Nos 8, 16) contain few inclusions and are of finer texture. All the vessels are hand-made with buff to dark grey surfaces which are sometimes buff-pink when oxidised. The surfaces are usually untreated although two (Nos 4 and 15) have been smoothed and one (No. 13) has been lightly burnished externally.

Three vessels (Nos 16-18) are in fabric 2 which accounts for 7 per cent of the assemblage by weight. The fabric is fine and porous with organic tempering and occasional rounded quartz inclusions less



Figure 10. Bearwood. (1) The currency bar hoard viewed from the top. (2) X-Radiograph of side (left) end. (3) X-Radiograph of side at handle (right) end. Scale of (2) and (3), 1:2.

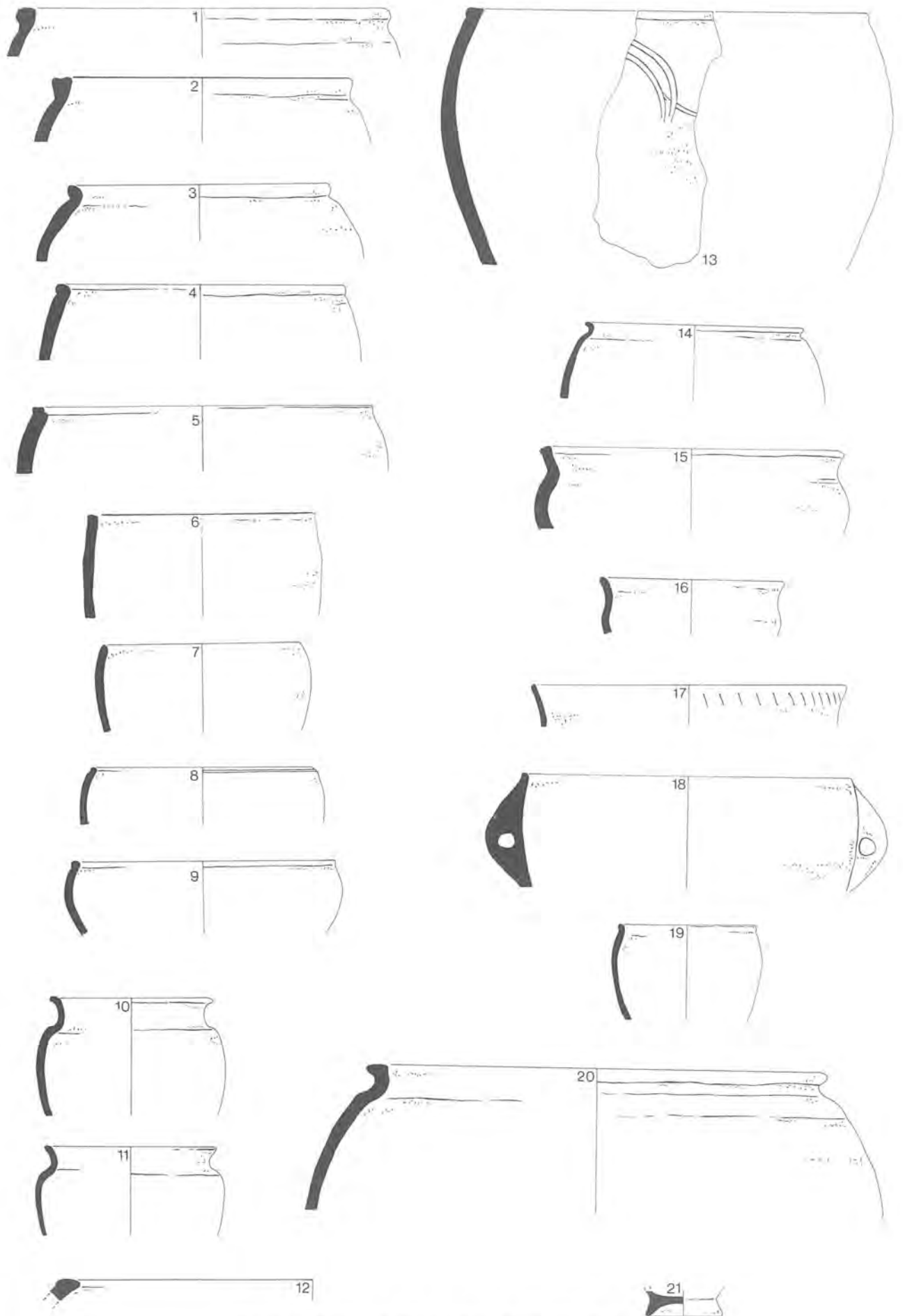


Figure 11. Bearwood. The late Iron Age pottery. Scale: $\frac{1}{4}$.

than 1 mm in diameter. The core is grey with grey/buff surfaces whilst the forms include large storage jars, some of which have lugs (No. 18) and small jars.

Two sherds (Nos 16, 17) with early forms and three sherds with a red slip suggest the possibility that the assemblage has a small residual early Iron-Age component. This is uncertain, however, because the fabric of the sherds is within the range of fabric 1.

A further 36 rims are not illustrated. The forms reflect the published examples and include four saucepan pot forms, seven bead rims and five everted rims whilst 20 are too fragmentary for classification. A minimum of 12 bases were represented; eleven were flat bases with angular sides and three had perforations. One atypical base (No. 12) is in a sand-tempered grey fabric 3 with rounded quartz inclusions less than 1 mm in diameter. The surfaces are smoothed and oxidised to a buff colour.

The three fabrics have been compared visually with a sample of black burnished ware (BB1) and are distinctly different from BB1 which is sand tempered. It has been shown by petrological studies of the pottery that the middle and late Iron Age pottery at Gussage All Saints was being supplied by pottery from the Poole Harbour area some 20 km away (Gale 1979, 53). It is therefore of interest that the Bearwood site, which is only 10 km from Poole Harbour, was apparently not receiving its pottery from the Poole Harbour area whilst Gussage All Saints was. This underlines the need for further petrological studies of late Iron-Age pottery in Dorset and the current excavations at Hengistbury by Professor Cunliffe may clarify the position.

Other finds

Worked flint	Two mesolithic points and 25 flakes of Late Neolithic/Early Bronze Age type.
Burnt flint	0.5 kg
Daub	1.5 kg (including pierced clay cooking floor fragments (Wheeler 1943, 321)).
Shale	Fragment of Kimmeridge shale 100 mm long, 70 mm wide, 10 mm thick. Fragment of shale bracelet.
Pebbles	Two almost spherical pebbles 35 mm diameter, Two oval flat pebbles 70 mm long.
Tessera	Two possible tesserae of Roman tile.

ACKNOWLEDGEMENTS

The author would like to thank Mr and Mrs A. W. Marsh and the volunteers, contractors and others involved in the excavation. The assistance of Dr F. W. Anderson, Professor B. W. Cunliffe, Dr P. J. Ovenden and the Ancient Monuments Laboratory is also appreciated.

The finds are deposited in Poole Museums, archive PM 1.

FOOTNOTE

¹ The author is indebted to Prof. B. W. Cunliffe for commenting on the pottery.

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A BRONZE BACCHIC RING-BEZEL FROM COLLITON PARK

MARTIN HENIG

In the last volume of the *Proceedings*, in a discussion of the marble statuette of Bacchus from Maiden Castle, and again in the present volume through a reassessment of one of the Frampton pavements, I have had occasion to emphasise the importance of Bacchus to the Romanised pagan aristocracy of the Dorchester region (as also elsewhere) in Late Antiquity.¹ Further corroborative evidence of this may be seen in a small bronze object which likewise relates to that god found, moreover, in the same building (Building III) at Colliton Park, though in a different room, as the well-known Rhenish engraved glass bowl with its frieze of dancing satyrs and maenads around a bust of Pan or even Bacchus himself.²

The bronze (Plate 7) is a diminutive plate of openwork (*opus interrasile*), 14 mm in width and 11.5 mm in height. It depicts two lithe felines ('panthers') seated or perhaps rather rearing up on their hind legs, one on each side of a crater, a bowl for mixing wine and water. This vessel is ornamented with fluting on its neck and on the lower part of its body. The foot of the crater has broken off. The back of the bronze is plain, but concave at the points of highest relief in the front, suggesting that it was manufactured by beating the metal into a form or mould.

Several similar plaques, generally in the precious metals and for the most part in *opus interrasile*, are attached to the hoops of finger-rings and the Colliton example was probably also a projecting bezel of this type. The only point of junction would seem to have been the crater foot, which explains how easily the bezel might have snapped away at this point of weakness. Few of these rings come from well-dated levels, but one from Watercreek was found in a layer dated by the excavator to the late 2nd and early 3rd centuries and a plaque of the type – presumably from a ring – found at Castell Collen is from a context 'no earlier than about the 3rd century'.³ Building III at Colliton was constructed in the 260s or 270s but continued in use during the 4th century.⁴

The panther is Bacchus' especial animal familiar and he is frequently portrayed in art pouring out wine to it. On the Colliton bezel, and others like it, the crater itself alludes to the god as provider of the life-giving wine. A gold ring of the type under discussion found near Springirsbach in the region of Trier is inscribed 'Vivas mi pia Optata'; the word 'Vivas' doubtless has a deliberately ambiguous connotation, alluding to conviviality, certainly, but also at a deeper level to salvation.⁵ It may be noted that other rings of the same form depict dolphins or, in one instance, water birds flanking a bivalve shells, allusions to the marine *thiasos*, the watery equivalent of the circle of Bacchus and his companions, and to the journey of the soul after death to felicity in the Blessed Isles.⁶

In the later Roman period, Bacchic conviviality and cult are represented on the now well-known Orpheus Mosaic at Littlecote in Wiltshire, almost certainly a product of the Durnovarian school of mosaicists, by a vine-bearing crater with a panther standing on each side of it.⁷ In this large-scale rendering of the theme portrayed on our bezel there was clearly a message for the pagan devotee who could understand it. It has a Christian equivalent in a 5th century mosaic laid in the baptistry at Salona where two stags drinking from a crater or a cantharus (wine cup) are accompanied by the opening verse of Psalm 42, adapted from the Vulgate: 'Sicut cervus



Plate 7. Bacchic bronze ring-bezel from Colliton Park, at twice life size.

desiderat ad fontes asvarum ita desiderat anima mea ad te Deus'.⁸

Complex and intellectual the Bacchic-Orphic cult at Littlecote may have been, but some of its components were already common currency in South-West Britain perhaps a century earlier.

The Colliton glass vessel has been treated in the past as an example of genre art, although similar vessels from the Rhineland are Christian in content and if one of these had been found it would have been hailed as important evidence for Christianity. Now the recognition of a Bacchic ring in the vicinity must at the very least make us wonder whether some of those who worked in, or otherwise used, Building III were not imbued with enthusiasm for the great saviour of the pagan world, Bacchus, who presides over the wine-bowl which contains the very essence of life.⁹

ACKNOWLEDGEMENT

I would like to thank Rodney Alcock for elucidating the context of the ring and Jo Draper for subsequent help. The photo is by Dorchester Studios.

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- ¹ *Dorset Proceedings*, 105, 1983, pp. 160-2; and this volume below.
- ² Cf. C. D. Drew and K. C. Collingwood Selby in *Proc. Dorset N. H. and Arch. Soc.*, ix, 1938, pp. 51-65 especially 53-6 (the bowl is described on pp. 56-6 and illustrated on pl. 3). The bowl came from a pit at the south end of the corridor linking the three rooms of the building; the ring came from a pit in the middle room (Room 2). For the bowl see in addition J. M. C. Toynbee, *Art in Roman Britain* (London 1962), p. 185, no. 141, pl. 159 and F. Fremersdorf, *Die Denkmäler des Römischen Köln. VIII. Die römischen Gläser mit Schliß, Bemalung und Goldauflagen aus Köln* (Cologne 1967), p. 177, pls 242-3, identifying the central bust, shown with a *pedum*, as Pan. The bowl may, perhaps, be most closely compared with one in the British Museum from Amiens. D. B. Harden, K. S. Painter, R. H. Pinder-Wilson and H. Tait, *Masterpieces of Glass* (London 1968), p. 75, no. 97 also with satyrs and maenads dancing around a bust, said to be female but holding a thyrsus. I believe that in both instances the engraver may have intended to portray Bacchus.
- ³ T. W. Potter, *Romans in North-West England* (Kendal 1979), p. 205 no. 1; G. C. Boon, 'Finds from Castell Collen Roman Fort 1911-13', *Trans. Radnorshire Society*, XLIII, 1973, p. 18, no. 2. Also note the fine undated example from Great Chesterford, F. H. Marshall, *Catalogue of the Finger Rings, Greek, Etruscan and Roman in the Departments of Antiquities, British Museum* (London 1907), p. 187, no. 1184. For openwork on rings see M. Henig, 'Continuity and change in the design of Roman jewellery' in A. King and M. Henig (eds), *The Roman West in the Third Century* (BAR Int. Ser. 109, 1981), pp. 127-43 especially p. 129.
- ⁴ Cf. note 2 above. The most recent summary of the site is in *RCHM Dorset South East* (1970) pp. 558-60, site no. 184.
- ⁵ F. Henkel, *Die römischen fingerlinge der Rheinlande* (Berlin 1913), p. 15, no. 93 = exhibition catalogue, *Trier, Kaiserresidenz und Bischofsitz* (Mainz 1984), pp. 116-7, no. 33g.
- ⁶ Henkel, *op. cit.*, p. 50, no. 361, found in the Rhine between Cologne and Neuss, is a silver ring depicting dolphins flanking Neptune's trident; also see *Ant. J.*, LXV, 1985 (ballot exhibit), a silver ring from London on which two dolphins are depicted above a scene of four cupids around a crater. Henkel, p. 15, no. 92, is a gold ring from Augst on the expanded bezel of which water birds flank a betel surmounted by a shell.
- ⁷ B. Walters, 'The "Orpheus" mosaic in Littlecote Park, England' in R. Farioli Campanati (ed.), *Atti del III Colloquio Internazionale sul mosaico antico* (Ravenna 1984), pp. 433-42, esp. pp. 434-5.
- ⁸ F. van der Meer, *Early Christian Art* (London 1967), p. 136, pl. 25. The Vulgate reading is 'Quemadmodum desiderat cervus ad fontes aquarum ita desiderat anima mea ad te Deus'.
- ⁹ M. Henig, 'Death and the Maiden: Funerary Symbolism in Daily Life' in J. Munby and M. Henig (eds), *Roman Life and Art in Britain* (BAR British ser. 41, 1977), pp. 347-66 especially pp. 354-5. The completeness of the bowl, a high status object, implies that the building may not always have had an industrial use.

JAMES ENGLEHEART'S DRAWING OF A MOSAIC AT FRAMPTON, 1794

MARTIN HENIG

Samuel Lysons' *Figures of Mosaic Pavements discovered near Frampton in Dorsetshire* was published in 1808, and forms part of the first volume of *Reliquiae Britannico-Romanae*. It consists of an account of all the known pavements in the Roman building on the Nunnery Meadow site, most of them revealed as the result of excavations initiated by him after his arrival at Frampton in September 1796, and is of course illustrated with superb coloured engravings.

The initial discovery of the site, and the revelation of one of the more intriguing mosaics took place earlier in April 1794. This floor was the subject of a water-coloured drawing made by Mr James Engleheart for Mr Francis Browne of Frampton. It was exhibited to the Society on Antiquaries of London in February 1795. Lysons gives the date as 26th of that month but examination of the Society's minute book (vol. xxv, p. 503) reveals that this event actually took place on Thursday 12th. The mistake arose because the bottom of page 502 of the minute book gives notice of a ballot for the election of a certain Lieut.-Col. Brydger Hanniker on Thursday Feb' with the date 'Feb' 26th' carried over onto page 503.

The item relevant to us follows and reads:

'Mr James Engleheart exhibited to the Society a Drawing of a

Roman Tessellated Pavement discovered in the month of April last in a field called Nunnery Mead near Frampton in the County of Dorset.

'One of the compartments of the floor seems to represent Hercules killing the serpent, and gaining the golden fruit in the gardens of the Hesperides, which is represented in the corresponding compartment.'

By the time that Lysons came to see the floor, over two years from the time of its discovery, some parts had been lost and Lysons tells us that he was able to make use of Engleheart's work to restore the missing portions in outline. Here, in Lysons' plate iv, his restorations are of a different order from that on plate v where he restores the central roundel as a huntsman attacking a lioness rather than Bellerophon seated on Pegasus, slaying the Chimaera as David Neal – almost certainly rightly – portrays it (Smith 1977, 110 and pl. 6, xiv). Lysons' huntsman is guesswork; his Bacchus in the central roundel of our floor is not.

The Engleheart drawing is now in the County Museum, given in 1982 by Mrs Phyllis Rendall, lately of Nunnery Mead Cottage, Maiden Newton, and occasion is here taken to publish a photograph of it alongside the better known Lysons work so that their respective qualities can be compared. While the drawing is rather freer and does not attempt to show individual tesserae, it is substantially accurate though there are many minor mistakes in the rendering of borders and geometric detail (where we may assume Lysons was right). In the case of the figures, those which survived until Lysons saw them agree very closely so we can probably trust the portrayal of the two figures, where we are reliant on Engleheart.

The floor consisted of two parts. The lower, southern, portion depicted sea-beasts arranged around two interlocked squares. In the centre was a roundel, already largely destroyed when Engleheart saw it but containing what seems to have been a female bust with an ivy leaf beside it. Of the bust only the right side of the head remained with tresses of hair and a diadem. The composition brings the Venus mosaic from Kingscote, Gloucestershire to mind (Neal 1981, 89, no. 63) where the goddess is similarly diademed and set within two interlaced squares. The marine theme is very appropriate for a goddess born from the spume of the sea as the Hemsworth pavement in the British Museum shows (Smith 1977, 134-5, no. 104). David Smith associates at least the marine panel at Kingscote with the Durnovarian school (Smith 1984, 370).

The figural ornament on the upper panel was more complex. Along the left edge from the top down to what was presumably an entrance threshold two hounds are shown, each chasing a deer, a stag in one case and a hind in the other. Not only does this occur on another floor at Frampton, but it is also a feature of the Hinton St Mary mosaic where it brought to mind the passion of Christ and the pains of the Christian life (Eriksen 1980). The remainder of the pavement consisted of nine squares. Those in the corners contained roundels in which there were busts, clean-shaven and evidently male. They had wings in their hair and Lysons thought they were busts of Mercury but each had a conch-shell appropriate to his calling as a wind (Smith 1977, 136, no. 110). Winds with conches also occurred in the Neptune room at Frampton (*ibid.*, no. 111). The central panel also contained a roundel inside which was a standing figure of Bacchus, nude apart from a chlamys, holding his thyrsus in his left and a bunch of grapes over his head in his right hand. It may be noted that another Frampton floor depicted Bacchus reclining on the back of a leopard (Smith 1977, 108, no. 6).

Lysons' explanation of the other scenes was more or less accepted until 1977. In a footnote on the first page of his description he wrote:

'Mars Pacifer is represented, as on the coins of the lower empire, in the dress of a Roman emperor, but instead of a helmet he has the Phrygian bonnet on his head; Apollo appears in the act of killing the serpent Python; Neptune as striking a sea monster with his trident. Only a fragment of the figure of Jupiter remained, when Mr Engleheart made his drawing. It may be observed that these are the figures of what were termed the *Dii majorum gentium*, except that Bacchus appears instead of Vulcan.'

His rejection of the myth of Hercules and the Gardens of the Hesperides for the two scenes depicting a figure with a tree was logical for Hercules' weapon was a club and he plucked golden apples, not a branch.

In 1977, Anthony Barrett pointed out in a note in *Antiquaries Journal* that the Mars Pacifer figure was in fact Aeneas plucking the branch from a sacred oak at the behest of the Cumaean Sibyl in order to enter the underworld and meet the spirit of his father, Anchises. Barrett rightly emphasises the eschatological significance



*This Drawing, of a Sepulchral Pavement,
near Frampton, in Dorsetshire,
is the Property of
F. J. BROWN, Esq.*

Plate 8. Frampton: watercolour drawing of pavement by James Engleheart 1794.

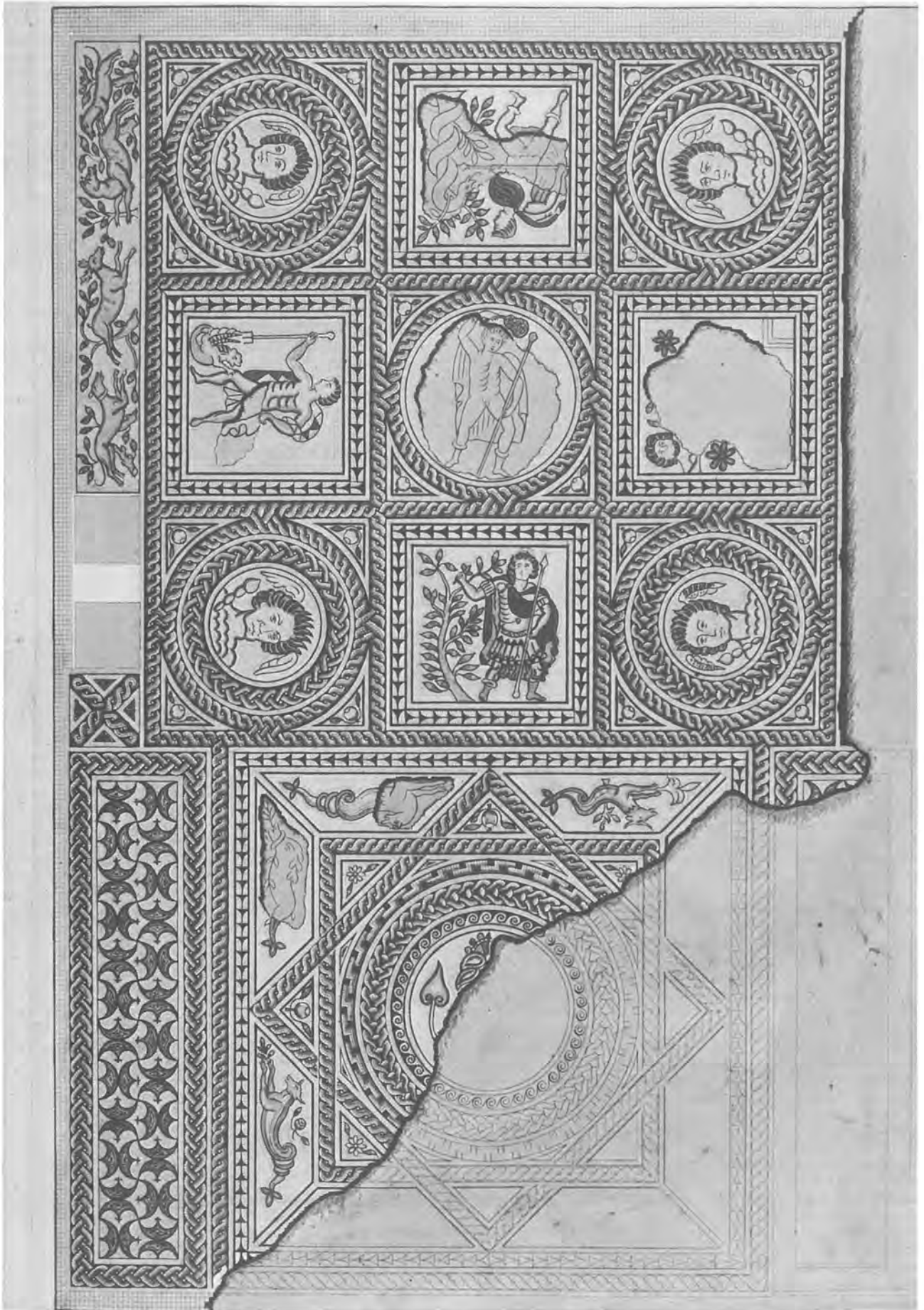


Plate 9. Frampton: engraving of pavement by Samuel Lysons from *Reliquiae Britannico-Romanae* (1808), pl. iv.

of the scene and writes that 'the mosaic lends great support to those who see in these pavements a deep spiritual significance' (Barrett 1977, 313). He naturally cites the episode as it appears in Vergil (*Aeneid* vi, 210-11), but that is not the only place in Latin literature where it occurs. The 'Golden Bough' episode is also found in a memorable passage in Ovid's *Metamorphoses*:

dixit et auro
fulgentem ramum silva Iunonis Avernae
monstravit iussitque suo divellere trunco
(*Met.* xiv, 113-5)

Barrett has written elsewhere that 'Ovid was undoubtedly the most popular of the Roman poets throughout the empire' (1978, 312) and he has demonstrated, beyond reasonable doubt, that the Latin couplet on the Lullingstone mosaic was written by someone with a knowledge of Ovid's style (*ibid.* 311-12). Nevertheless, he rightly warns that individual scenes of myth which happen to be mentioned in Ovid such as that of Cyparissus and the stag at Leicester 'prove nothing in themselves' and it seems to the present writer that only if all four of the panels showing mythological episodes can be related to illustrations drawn from that wonderful compendium the *Metamorphoses* of Ovid, are there grounds for taking this literary connection seriously at Frampton.

There is indeed, in book i reference to Apollo killing Python but he performs the deed with arrows and there is no mention of a tree. Here, Engleheart's drawing makes it absolutely clear that a youthful god or hero is using a spear to transfix a great serpent against a tree. The scene seems, however, to illustrate an episode in book iii where Cadmus slays the serpent of Mars, which he despatches when he has pinned it down against an oak:

donec Agenorides coniectum in guttura ferrum
usque sequens pressit, dum retro quercus eunti
obstitit et fixa est pariter cum robore cervix
(*Met.* iii, 90-2)

It may be noted that an earlier episode, in which perhaps one of Cadmus' companions rather than Cadmus himself, is surprised while collecting water from the spring guarded by the serpent, provides the subject for another mosaic of the Durnovarian school at Pitney, Somerset (Smith 1977, 151-2, no. 145, see Ling 1981, 292).

That the other more or less complete scene depicted Neptune striking a sea monster seems plausible because the weapon, which remained for Lysons to record it, is interpreted as a trident by both artists. However Neptune is generally shown as bearded and 'middle-aged'; here, again, we have the type of a youthful hero. Fortunately a mosaic from a sumptuous villa outside the walls of the Roman city at Conimbriga in Portugal seems to provide a solution (Schauenberg 1960, 69, pl. 28, 1; Bairrão Oleiro 1965, 260, fig. 4). This portrays Perseus in the act of rescuing Andromeda from the sea-monster (though Andromeda herself is not shown). The *ketos* on the Conimbriga mosaic has a longer and more fish-like tail, though it rears up against the hero's legs in similar fashion. Perseus holds the head of Medusa in his right hand: is it possible that the cupped left hand of our figure, curiously empty, actually held a Medusa-head which Engleheart ignored? The Conimbriga mosaic represents Perseus holding his distinctive weapon, the *harpe* in his left hand: it is shown there as a full-length spear with a small sickle-like blade protruding near the head, not impossible for an artist miscopying from his model, either in antiquity or the 18th century to confuse it with a trident. Although the Conimbriga mosaic, which probably dates to the early 3rd century, is not identical to ours the likeness is close enough to convince me that the youth on the Frampton panel must be Perseus too. The event is graphically told by Ovid in the fourth book of the *Metamorphoses* (II, 706-36).

The fourth panel was so defective even when Engleheart drew it that it will never be possible to pronounce on it with certainty. Both Engleheart and Lysons show two flowers but while the former simply depicts a face in the top left corner, the latter shows a bearded bust. It is very possible that the scene depicts Tages who emerged from the earth and taught the Etruscans the art of prophecy (*Met.* xv, 553-9). The prodigy of the appearance of a head from the ground is shown in other media for instance on intaglios (Richter 1971, 15, no. 13). Richter notes that such scenes may derive from the legend of Orpheus' head which gave out oracles and an alternative explanation here is that the panel illustrates the dismemberment of the singer prior to his happy reunion with Eurydice in the underworld described early in book xi of the *Metamorphoses*.

It is tempting to try to interpret these scenes. The Romans certainly had a liking for 'pendants' such as we can see in the arrangement of mural panels in the rooms in Pompeian houses (Brilliant 1984, 53-89). It is easy to pair Cadmus and Perseus as monster slayers; and Aeneas and Tages (or Orpheus) as concerned with the other-world and with prophecy. If the damaged panel shows Tages, then he and Aeneas would stand for the Italian world and the two heroes killing monsters for the Greek. That the tree in the grove of Mars and the one from which Aeneas plucked the Golden Bough were both oaks might have struck the careful observer as a nice connection. Bacchus clearly dominates this part of the pavement. As the son of Semele Cadmus was his grandfather; in Ovid he avenges Orpheus' death at the hands of the Thracian women but is Orpheus shown here? His links with Tages, or for that matter Aeneas and Perseus are less obvious, though for a Roman of the Lower Empire he has above all a saviour from death as well as the epitome of country-based conviviality.

Despite the well-known *Chi-Rho* on another Frampton mosaic, which I shall argue elsewhere was probably simply an attempt to introduce the god of the Christians into the pantheon (i.e. to 'paganise' Christ), the Frampton mosaics are best regarded as reflecting the deeply religious concerns of the late Romano-British pagan aristocracy in general and of one particular landowner in particular. If we were to describe Frampton as a kind of private temple we would not be far wrong. Here if anywhere we imbibe the hot-house atmosphere of the religious revival initiated by Julian – the emperor for whom the Greek and Latin classics were sacred books – and of Macrobius' urbane *Saturnalia*. Pagans took their religion every bit as seriously in Late Antiquity as did contemporary Christians. The hunting scenes here would have evoked the travails of the good pagan just as similar scenes did for the Christian at Hinton St Mary. However 'Engleheart's floor' was interpreted in detail in the last resort its message is the dependence of mankind on divine good-will.

For the wealthy landowners of the Dorchester region, it is not unlikely that the possession of books sometimes implied the ownership of illuminated manuscripts of great magnificence. We may think of the two early Vergil manuscripts in the Vatican, the *Vergilius Vaticanus* which, it has recently been argued, was made in Rome before the end of the 4th century (Stevenson 1983) and the *Vergilius Romanus*, a provincial manuscript often dated around AD 500 but which I still believe is a Western work of the 4th century (Henig 1979) and considering the delightful linearity of its drawing, more than plausibly Romano-British or at least derived from an insular manuscript. Unfortunately we are unlikely to find much by way of comparanda so we will never be able to study British book-illustration as we can British mosaics, thanks mainly to the labours of Dr David Smith. It now seems that the Durnovarian school of mosaicists was responsible for at least two floors of literary interest: the Low Ham mosaic (Smith 1984, 370) taken, we may suppose, from the villa owner's de luxe *Aeneid* and the Frampton mosaic under discussion which now seems to me to imply the existence of an illustrated copy of the *Metamorphoses* of Ovid as a source – possibly itself a product of Roman Britain to judge from the marked similarity of the mosaic's style to that of the *Romanus Vergil*.

Acknowledgement

I would like to thank Roger Peers very much for inviting me to publish the drawing and for his subsequent help.

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FIGURINES FROM DUNCLIFFE HILL,
MOTCOMBE, DORSET

MARTIN HENIG AND LAURENCE KEEN¹

Duncliffe Hill is a conspicuous local landmark covered by ancient woodland. From its high vantage-point of 690 ft OD it affords fine views across the valley of the River Lodden, to Gillingham, and beyond to Whitesheet Hill, Mere, and Cleeve Hill, West Knoyle, on the southern escarpment of Salisbury Plain. These finds were made in an area of pasture on the small north-east spur of the hill, above 600 ft OD. The top of the spur has an area of level ground. No other archaeological material was found during a visit to the site, nor is any other material recorded from it. The location appears to have all the attributes of a temple site, and significantly there is a spring lower down the hill to the west.

The two bronzes present a striking contrast.

The first, which is in the form of a boar (or perhaps a pig, as there is no crest running down the back) is very small, about 39 mm in length and 20 mm in height.² It has a long snout with the mouth indicated as a slit. The eyes are deep circular holes (diam. 2.5 mm) which may once have contained settings of enamel or glass; between the ears are four tufts of hair and around the creature's neck is a rilled collar or torc. A protuberance at the base of its spine must represent its tail, and below this a ring and dot motif can only be taken as a stylised anus.

In its simplified and stylised appearance, the Duncliffe Hill figurine resembles other Iron Age boar figurines, conveniently listed and discussed by Jennifer Foster.³ Of these it is closest in size to an example from East Sussex but, as stated above, unlike this and the other figurines it is crestless, and it is also considerably plumper in build. Although one of the Hounslow boars has small circular eyes and the head of a boar-like creature, probably a mounting from a ritual staff or sceptre, has a neck-collar these features are best matched on the figurine from the Henley Wood temple, Yatton, probably the representation of a fertility goddess. As far as the deep eye-sockets are concerned, we should also note the goddess from Aust by Severn which retains a glass eye in one of its sockets.

While there is no external evidence for date here, it is reasonable to ascribe the bronze to the end of the Iron Age, representing as it

does a creature which, in the words of Anne Ross, 'contained all the passions of the Celtic peoples – hunting, feasting, fighting and procreation'. The torc, a symbol of power and perhaps here a sign of divinity brings to mind divine animals such as *Twrch Trwyth* in Wales and further reminds us that 'it was an animal form appropriate to the gods'.⁵

The second bronze has very different associations. It is a standing female figure wearing a long tunic with a mantle. On her head she wears a diadem and in her left hand she holds a large *cornucopia* full of fruit. Her right arm is broken away at the wrist. The figurine is 90 mm in height and was originally mounted on a stand as a rectangular socket measuring 10 mm by 6 mm on its base indicates. The bronze feels heavy and was presumably heavily leaded like so many Roman bronzes. The metal has suffered badly from corrosion although much of the surface still retains an attractive green patina. The loss of the attribute which the goddess held in her right hand deprives us of complete certainty in identifying her. As Dean Jeremiah Milles wisely wrote in the case of a similar but slightly larger figurine from Exeter, 'there is hardly a virtue represented on



Plate 11. Duncliffe Hill: the pig, at 1½ times life size (after cleaning).



Plate 10. Duncliffe Hill: the goddess, at life size (after cleaning).

the Roman medals in the character of a Goddess which does not bear the cornucopia, to represent the plenty which is the attendant or effect of that particular virtue'.⁶ The Exeter bronze is a 'mirror-image' of that from Duncliffe Hill (i.e. the goddess holds the cornucopia in her right hand) and is in other respects the closest parallel from Britain. We may also note the upper part of a bronze from Verulamium, especially for the diadem, and a small figurine from Colchester who holds a pair of cornucopiae and the rudder which serves to identify her with Fortuna.⁷ Although the brimming cornucopia is very properly an attribute of Abundantia, that goddess or personification is generally associated with the modius of the Annona as well. It is most likely that the Duncliffe Hill figurine was regarded as showing Fortuna by its original owner.

Amongst bronzes from the continent depicting Fortuna, are examples from s'Gravenvoeren in Belgium, Wels in Austria and Trier in Germany all close in appearance to the Duncliffe Hill bronze.⁸ It is not possible to say where such highly classicising works were made or to date them very closely. The rather fussy draperies of our bronze and the baroque appearance of the cornucopia favour manufacture in the Antonine period.

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- ¹ The authors wish to thank Miss C. Conybeare, Salisbury and South Wilts Museum, for bringing the finds to their attention, Mr Huxter, the finder for kindly visiting the site with LK and R. N. R. Peers, the landowner, Mr Garrett and Nick Griffiths, Museum of London, for drawing the objects. The finds have kindly been deposited in the Dorset County Museum.
- ² The piece is suffering from corrosion and as the feet are missing and the ear-tips worn-down the height is not accurate.
- ³ J. Foster, *Bronze Boar Figurines in Iron Age and Roman Britain* (BAR British ser. 39, 1977) especially pp. 6-16; examples from Meare, Hounslow, Woodingdean, East Sussex and the Gower Peninsular are to be noted in particular.
- ⁴ *Ibid.*, pp. 19-21, fig. 10 for the Willingham Fen sceptre-mount. The Henley Wood figurine is illustrated in *Britannia* I, 1970, pl. D. The Aust figurine has often been published. The original account is F. Ellis, 'An ancient bronze figure from Aust Cliffe, Gloucestershire', *TBGAS*, XXIII, 1900, pp. 322-5.
- ⁵ A. Ross, *Pagan Celtic Britain* (London, 1967), pp. 308-21 (p. 321 cited).
- ⁶ J. Milles, 'Account of some Roman antiquities discovered at Exeter', *Archaeologia*, VI, 1782, 1-5 especially p. 2 and pl. 1.
- ⁷ R. E. M. Wheeler and T. V. Wheeler, *Verulamium: A Belgic and two Roman cities*, Rep. Res. Comm. Soc. Antiq., London, 11 (1936), p. 212 and fig. 46, no. 54; N. Crummy, *Colchester Archaeological Report 2: The Roman small finds from excavations in Colchester 1971-9* (Colchester, 1983), pp. 141-2 and fig. 168, no. 4264.
- ⁸ G. Faider-Feytmans, *Les Bronzes Romains de Belgique* (Mainz 1979), p. 87, no. 87, pl. 53; R. Fleischer, *Die Römischen Bronzen aus Osterreich* (Mainz 1967), pp. 90-1, no. 108, pl. 58; H. Menzel, *Die Römischen Bronzen aus Deutschland. II Trier* (Mainz 1966), p. 31, no. 64, pl. 30 (Fortuna stands on a pedestal). In all these cases the object held in the right hand is missing depriving us of absolute certainty as to whether *Fortuna* or a closely-related personification was intended.

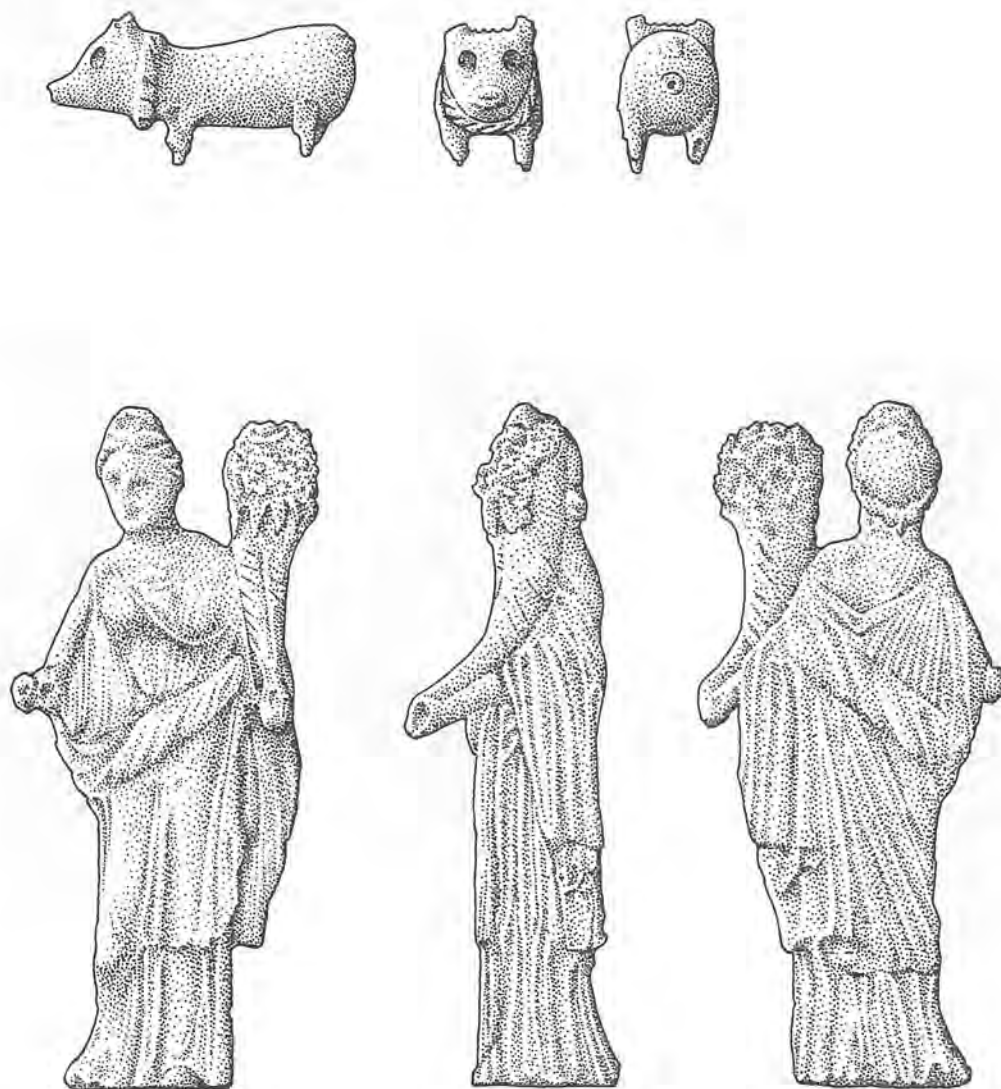


Figure 12. The Duncliffe Hill figurines at life size, drawn by Nick Griffiths.

EARLY ANGLO-SAXON BURIALS AT THE
'TRUMPET MAJOR' PUBLIC HOUSE,
ALINGTON AVENUE, DORCHESTER

CHRISTOPHER SPAREY GREEN

The expansion of urban development around Dorchester and the early core of Fordington in the late 19th century and early 20th century buried or destroyed most of the suburbs of the Roman town, and at the same time much of the prehistoric landscape between the old centres of Poundbury, Maiden Castle and Mount Pleasant. At the latter, the least known of the three foci, the henge is the only element thoroughly investigated but the finds in the neighbourhood show that a complex of sites lie on the ridge west of the known earthworks including early prehistoric occupation and burials, an Iron Age settlement and major earthwork and, thereafter, Roman occupation and cemeteries. In addition and previously confused amongst the latter are a group of early Saxon burials, the subject of this paper.

As at Poundbury, the first discoveries in 1846 were made in railway works, in this case the cutting for the southern line to Dorchester. Widening of the cutting in 1884 and thereafter housing work along Alington Avenue nearby has produced the bulk of the information summarised in the RCHM (Vol. II, *South East Dorset*, 1970, 575-578, Mon. 218). The earliest well-recorded finds are the crouched burials of early Roman date found at Max Gate and so clearly and objectively described by Thomas Hardy, with his perceptive comments on the present state of archaeology and his vision of its future aims (Hardy 1890, 78-81). Within a decade construction of another Victorian villa, then called Wareham House and now the Trumpet Major after its conversion to a public house in 1968, revealed prehistoric settlement features, more of the substantial earthworks previously observed in the railway cutting to the north and most particularly a group of burials of a distinctive type (Banks 1893, 105-107; Pope 1900, 105-110). These burials, first thought to be Roman, can now from the associated finds be shown to be Saxon; the purpose here is to describe these objects and to provide some background and dating for them in the context of other such finds in Dorset. I am indebted to Roger Peers, Curator of the Dorset County Museum, for access to the material and to Patricia Galloway for reporting on the bone comb.

From the original report of their discovery there appear to have been two groups of burials, both found during gardening operations in the autumn of 1892. The first group of at least five burials were revealed in an area 12 m by 3 m cleared to the chalk in building a cucumber frame, the second consisted of three isolated graves each found in planting apple trees. The exact findspot are unknown but a glazed outbuilding of the right size to be the cucumber frame is shown at the rear of the house on the 1:2500 map, 1902 edition (SY 70289006). Immediately south the same plan shows small trees, perhaps the site of the other finds which are likely to have lain nearby in the kitchen garden at the rear of the house (SY 70289005). Unfortunately, no observations were made during the 1968 conversion which involved the clearance of the main southern garden for a car park. Little disturbance occurred near the suggested findspot and the levelling seems unlikely to have cut into bedrock and thus disturbed any further remains. It will be proposed below that this area was already seriously disturbed by the original landscaping of the site.

For a description of the burials the reader is referred to the original report but it appears that one group consisted of five complete burials and other fragmentary graves. All five were extended and 'faced north east'. Two lay on their sides while the rest were supine, their arms by their sides except in one case where the left arm was bent across the body. Assuming that as in similar local graves, the head was facing down the length of the body the graves should have been aligned with the head at the south west end, the feet to the north east. Three lay 'in line' presumably side by side, a fourth 'lying apart'; the position of the fifth and the fragmentary burials is unknown. The dimensions of the 'coffin-shaped' graves is unknown save that they were set just deep enough in the chalk to contain the skeleton, perhaps 12 in. below the natural chalk surface. The fragmentary graves are likely to have been particularly shallow examples half ploughed away.

Of the skeletons one was said to have been a female aged about 26, another a male of 60. The only grave goods seems to be an iron knife, (No. 1, below) and a single nail, both from the fourth, isolated burial, the knife lying by the lower left arm of this 'remarkably well-preserved' adult. In other burials of this type the knives are often recorded as lying on the left side near the pelvis or

lower arm.

The other inhumations were isolated finds each from a pit dug for an apple tree. One was of a juvenile female accompanied by a comb (No. 10 below) and a second was furnished with three silver rings and four glass beads, one of which was recorded as being threaded on a silver ring (Nos 3-9, below). All these objects were described as lying 'on the skeleton' which would be consistent with their positioning on the upper abdomen as in other finds of this type. A third inhumation was unique in 'facing south' and presumably was aligned with the head north and extended south. A further grave seems to have contained a skeleton the bones of which were 'burnt' brown. From observations of similar shallow graves on the chalk, as at Bradford Peverell, this is not uncommon and may result from soil discoloration. (Personal observations; Keen 1980, 120). The finds described above survive and, in addition, a further knife similar to the first but un-provenanced. The nail has not been located.

CATALOGUE

Knives

1. Iron knife, originally labelled as 'No. 1, found between the two bones of an arm'. Length 117 mm, maximum width 16 mm. The tip of the blade and the tang are missing. The blade has a bowed back with a straight cutting edge and V-section. The tang is rectangular in section, slightly tapered and with traces of wood fibres from the handle surviving.
2. Iron knife, unlabelled. 108 mm long, maximum width 16 mm. The tip of the blade and most of the tang are missing. The blade is less bowed than 1, the cutting edge being very slightly convex but again of V-section. The stub of the tang is of rectangular section and bears traces of wood fibres on either side.

Silver rings

3. Almost the complete hoop of a silver wire hoop, lacking the original terminals. A kink in one broken end suggests originally it may have had a knotted link. The hoop is slightly oval in plan, the cross section tapering to the terminals. Maximum diameter 22 mm, diameter of wire 1.0-1.5 mm. Museum catalogue number 1888.1.6.
4. Part of the hoop and the tightly twisted terminals survives. The cross section shows no taper in the surviving portion. Diameter of wire 0.7 mm.
5. Almost complete ring save for one broken terminal. The surviving terminal implies a simple hooked link. The wire is not tapered.
Maximum diameter 15 mm. Diameter of wire 1.0 mm.

Glass Beads

6. Dark translucent blue glass, slightly barrel shaped. Maximum external diameter 10 mm. Diameter of aperture 5.5 mm. Labelled as 1888.1.2.
7. Similar to 6 above. Maximum diameter 11 mm. Diameter of aperture 5 mm. Labelled as 1888.1.3.
8. Opaque pale green glass, cylinder shaped. Diameter 9 mm. Diameter of aperture 4.5 mm. Labelled as 1888.1.4.
9. Opaque yellow glass, rounded cylinder shaped. Diameter 8 mm. Diameter of aperture 3.5 mm. Labelled as 1888.1.5.

The bone comb

Description by Patricia Galloway.

10. Composite double-sided bone comb with six iron rivets, fragments adequate for reconstruction of nearly complete comb. Original measurements probably 17.7 by 5.8 mm. Distinctive features include straight short sides and plano-convex connecting plates with decoration on both ends. The incised decoration, where the plate is intact enough to see it, consists of a zone of irregular diagonal double-lattice bordered at both sides by a band of closely-spaced vertical lines.

The knives

The two examples fall into Böhner's type C with straight cutting edge and curving back, dated on the continent to the late 6th or 7th centuries AD (Böhner 1958). Locally a similar knife is reported as deriving from the foundation of a much disturbed late 4th century tessellated pavement in Dorchester while several came from the Poundbury settlement of the 5th-7th century (Draper and Chaplin 1982, 109, fig. 50.5; Sparey Green, forthcoming A). From Saxon contexts examples of this type can be cited from Hardown Hill and Christchurch, Dorset or, further afield, at Winnall, Hants (Evison 1969, 238, fig. 2a; Jarvis 1983, 128; Meaney and Hawkes 1970, 16-17, fig. 13.11). Small knives of a generally similar type and date have been recovered locally at Mount Pleasant, Bradford Peverell

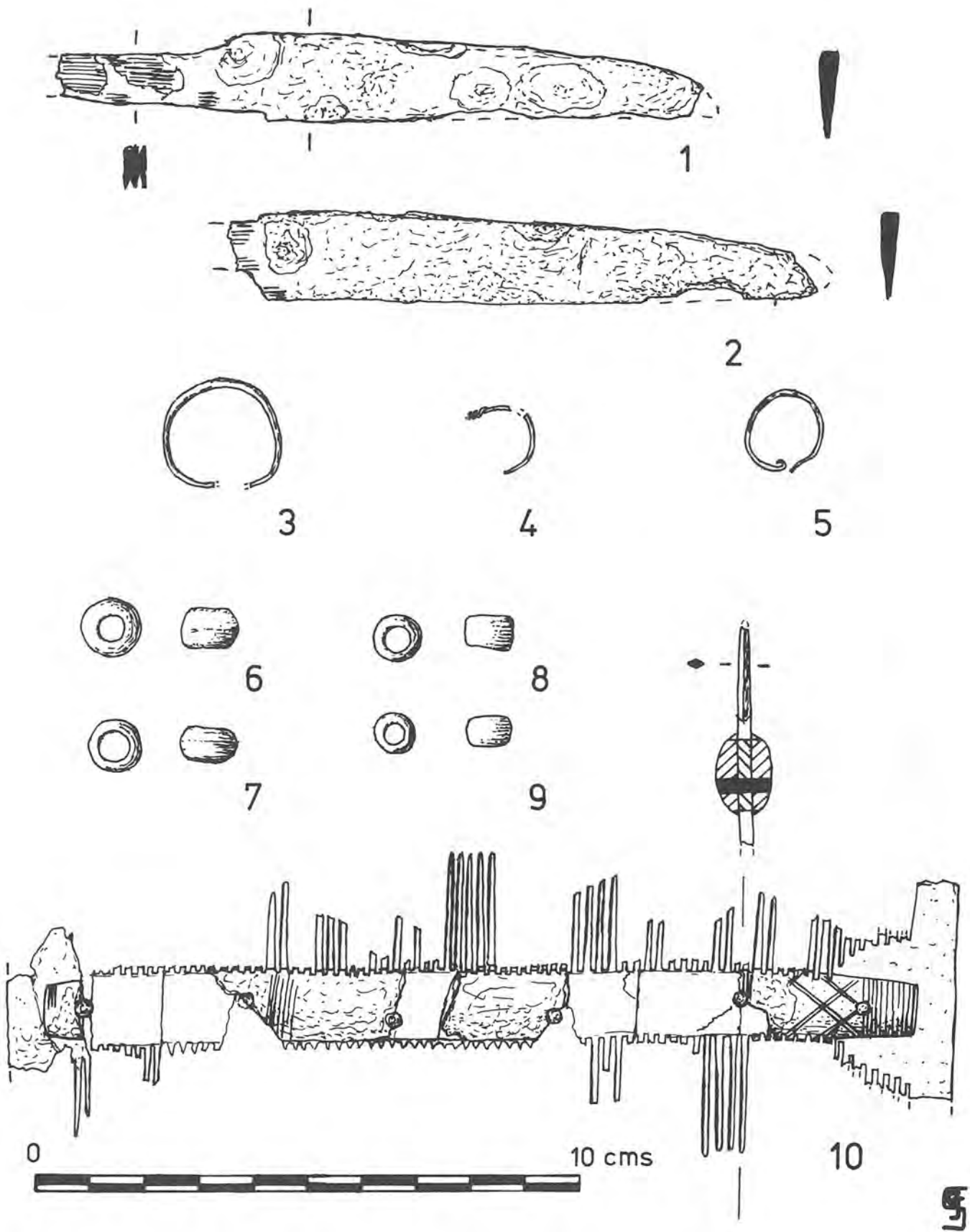


Figure 13. Objects from burials at the Trumpet Major, Dorchester, at life size.

and, accompanying a scramasax, at Maiden Castle (Schwieso 1979; Keen 1980, 120; Wheeler 1943, 78-79).

The Dorchester find is problematic and raises the possibility of either an earlier, Romano-British origin for such tools or of the contamination of the Roman levels by later finds. It is still a find of some interest for the early post-Roman occupation of Dorchester. The finds from Poundbury and Hardown fall into a date bracket in the 5th to 7th century but the majority of the other finds are centred in the 7th century.

Whether such simple and utilitarian objects are capable of dating or assignment to a particular cultural context on their typology is unlikely. The form of the edge, for instance, whether concave or straight, has no significance but simply shows whether or not they had seen long use and repeated sharpening. Similar tools occur on Saxon and British sites as is locally demonstrated by the above finds and by those elsewhere in the British Isles (Alcock 1973, 355-357, fig. 31). Metallographic study of these knives has shown that their apparent simplicity sometimes belies a remarkable technology involving the welding of different steels, careful tempering and pattern welding to a quality not attained by Romano-British craftsmen (Tylecate in Sparey Green, forthcoming A). It is perhaps this aspect which should be further studied in the local material and which might allow a typology to be developed which is more useful and relevant to such finds and their context.

The silver rings

The silver rings with knotted links are a common find in Saxon graves of the 7th century, usually occurring in the region of the head and shoulders of female burials, sometimes in pairs or occasionally in considerable numbers, the rings sometimes having beads threaded on them. When in pairs they may have served as ear rings but when more numerous they were probably strung as a necklace or attached as dress ornaments. Alternatively the occurrence of low numbers as here may simply reflect the 'token' nature of the gravegoods or the poverty of the deceased and relatives.

The only comparable finds in Dorset appear to be from a grave on Cranborne Chase. Two rings, one of 'tin' (? silver) and one of bronze are recorded with a bead necklace in a female burial at Oakley Down, Wimborne St Giles (Hoare 1812, 236-237; Cunnington 1896, 53-54, 59). Nearby at Pentridge a female was furnished with two beads of blue glass, one of jet and a gold enamelled ornament, one of the former beads being threaded on a gold chain, the other on a gold wire loop (Hoare 1812, 235; Warne 1866, pt II, 23-24). At Winnall, Hants, a pair of knotted silver rings from grave 10 are comparable in form but lacked strung beads (Meaney and Hawkes 1970, 11-12, fig. 9, 2 and 3). In Winchester itself a particularly rich burial in a small group pre-dating the Saxon Church of St Mary in Tanner Street produced a set of 27 silver rings, one with a threaded bead besides numerous loose beads and gold or silver pendants (Biddle 1975, 303-305, fig. 13). The rings were there seen as forming a collar, the beads and pendants a separate necklace. For a fuller account of the occurrence and dating of these objects the reader is referred to the discussion of the Winnall finds (*op. cit.*, 37-38).

Beads

The beads are all standard types for this period, those in opaque green and yellow glass being particularly distinctive, their colour derived from a special lead/tin pigmentation technique known in the pre-Roman Iron Age but only re-discovered in the post-Roman period (Biek 1983, 308-310).

The comb - discussion by Patricia Galloway

The comb belongs to the widespread form class 'double-sided composite', but its shape, proportions, and decoration serve to place it in a type category within this class which is rather more specific as to date and cultural context. This type is the most widely distributed if not the most numerous in all Saxon contexts in Britain. Parallels for shape and proportions may be cited from Sutton Courtenay (Leeds 1923, plate XXVII), Burwell (Lethbridge 1931, fig. 30), Lackford (Lethbridge 1951, fig. 10), West Stow (West 1969, fig. 10), Spong Hill (Hills 1977, fig. 134), Abingdon (Leeds and Harden 1936, plate XV) and Little Wilbraham (Neville 1852, plate 23); for the west of Britain, a few examples have been recognised from Bantham (Fox 1955, Fig. 3), Bradford Peverell (Keen 1980, 120), Poundbury post-Roman settlement (Sparey Green, forthcoming A) and perhaps Dinas Powys (Alcock 1963, fig. 34; rather cavalierly reconstructed in Alcock 1973, fig. 31). Of this list, the plano-convex connecting plate is certainly found at Burwell, West Stow, Poundbury, Bradford Peverell, and possibly

Dinas Powys; the decoration is paralled on a connecting plate from Poundbury and a pair of combs from West Stow.

It should be pointed out that the apparent Anglian dominance of the list of parallels is due to the fact that the type is present even on sites where combs from entirely different form-classes predominate (e.g. Spong Hill, Lackford). In several cases the type appears associated with later pottery (Lackford, West Stow). In addition, most of the combs by actual count are found on settlement sites (West Stow, Sutton Courtenay) and with inhumations (Abingdon, Burwell). Where the type appears with cremations, it is usually characterised by a flat connecting plate with horizontal-line ornament (Spong Hill, Lackford), which West, on the basis of the sequence at West Stow, thinks is earlier than the subtype with a plano-convex plate (*pers. comm.*). This hypothesis, together with the presence of a rather crude example with plano-convex plate at Burwell, leads to the inference that the flat plate with simple decoration is characteristic of late pagan Saxon combs of this type, while the plano-convex plate, with or without decoration, is probably to be identified with the Christian period and is thus datable to the late 6th or early 7th century.

DISCUSSION

Description of the other finds, only cursorily recorded, will be undertaken here prior to the more extensive work planned for neighbouring sites, but it is clear that pits of the early prehistoric, Iron Age and early Roman period were encountered in the vicinity of the burials besides the large possibly Iron Age ditch. The records of the latter perhaps give us some clue as to the extent of the cemetery on the south and west, while records from road works in Friars Close to the east may also be relevant. The large ditch was noted in 1846 and 1884 as crossing the railway cutting close to and east of Allington Avenue bridge and was later observed in gardening operations for Wareham House where it ran 'right across the ground slanting slightly westward so as to strike the high road from Dorchester to Wareham' (Pope 1900, 108). The scale of the landscaping of the site was such that the 'notch or dyke' was here emptied and its soil employed in improving the garden; similar works have been observed from the sites of other Victorian houses in Dorchester.

This description places the ditch in the southern half of the site, probably heading south east to converge on Allington Avenue. It also implies that in these extensive operations no burials of Saxon type were encountered or at least recorded. In the adjacent Friars Close to the east no records exist of finds in house building but service trenches in 1960 revealed one extended burial aligned east west of Roman or later date and one early Roman burial. Reports of seven 'saucer-shaped' depressions are particularly tantalising; they were most likely Iron Age working hollows but they may just have been sunken floored huts of the early post-Roman period (RCHM(E) 1970, 575-577, Mon. 218c). To the north the records from the original 1846 cutting imply the only burials were Durotrigian or Roman, also again in 1884, but there is equally the possibility that poorly furnished graves such as these might have gone un-recorded in such large scale operations (*ibid.*, Mon. 218a).

The cemetery thus seems to have been small, covering between 500 and 2000 m² at the most, confined to the far north-east corner of the Wareham House land, but conceivably extending beyond it to the east and north. Even so, at the density of burial recorded in the cucumber frame, at least five burials in an area of approximately 35 m², a minimum of 75 graves could have existed.

The regular alignment of most of the recorded graves is noteworthy and a recurrent feature of such cemeteries which often adhere to a more or less east-west alignment. Here the almost consistent south-west to north-east alignment could show that some other factor has influenced the orientation, perhaps the putative road to Purbeck which is suspected to have passed nearby heading south-east and attracting both Roman settlement and burial groups and perhaps also these later graves. Although burials and loose finds of late 4th century date are known from Came View Estate there is no evidence for any sub-Roman activity prior to this cemetery. On this hypothesis the Saxon graves would have been set at right angles to the road's postulated alignment. Alternatively the more certainly identified earthwork following a similar alignment could have been the influence.

Another factor affecting the location of the cemetery is the likely occurrence of other barrows on the ridge between the Two Barrows to the west and Mount Pleasant (Sparey Green, forthcoming B). The discovery of an early Bronze Age incense cup from this site makes the presence of some burials monument very likely as in the case of the other Dorset burial sites of this date (Moule 1906, 48,

fig. 2; Piggott 1938, 76, fig. 15.1; Jarvis 1983, 132).

In relation to its contemporary landscape no settlement remains are known but, of course, the later Saxon village of Fordington lies on the hill to the north-west. Perhaps its precursor lies nearer this site on the lower ground in between.

Dorset has in the past appeared remarkably lacking in cemeteries of the early post-Roman period but this is only one of several such sites recently recognised, chiefly in north-east Dorset and the Dorchester area. In the immediate vicinity two isolated graves are known as Mount Pleasant to the east (Schwieso 1979). The reports of a sword from the latter site and of other such finds associated with burials north-west of Fordington Church could suggest the presence of other early Saxon graves but they are more likely pre-Roman since the Iron Age warrior grave at nearby Whitcombe contained a sword and a high status burial of similar date is known from Fordington church (RCHM(E) 1970, 504, 572, Mon. 216a and 216b). The Maiden Castle burial, although apparently isolated, may yet have been one of a group inserted into the bank barrow and adjoining a late Roman cemetery and trackway (Wheeler 1943, 77-79, pl. III and IV).

The major cemetery of this period in the Dorchester area is the newly discovered one at Bradford Peverell (Keen 1980; Hawthorne 1982, 12b). Although on the whole slightly richer, the date of the grave goods, and the shallow regularly oriented graves placed in neat groups are very similar. No adjacent barrow is known, although the hilltop is a likely location, but a Roman road certainly adjoins and the Domesday village lies immediately adjacent on lower ground.

A full discussion of the growing number of early post-Roman cemeteries in Dorset must be postponed, but several areas of enquiry can be suggested. Considerable variety of burial type and cemetery location are evident but two major categories can be proposed, those burial groups in which a proportion of Saxon cultural material accompanies the dead and those in which there is marked absence of any grave goods. Amongst the former groups the majority fall into a category of the early Christian period in the late 7th century; earlier cemeteries were usually on separate sites and differed in character (Meaney and Hawkes 1970, 54 ff). In this area the earlier sites are unlikely to occur, Christchurch being the only example from an area of the periphery of early Saxon Hampshire. Hardown Hill in West Dorset is exceptional both in position and the range of finds; they are either the contents of a mass grave, the result of an isolated military excursion way beyond the Saxon territory, or are perhaps a hoard of weaponry buried under circumstances not now explicable and in an earthwork of an exceptional and not necessarily funerary nature (Bowen in addendum to Evison 1969, 240).

The second group is exemplified by sites such as Ulwell where of 55 oriented inhumations only one contained any grave goods, a simple iron knife of the very general type discussed above (Bellamy, Brookes, Cox and Woodward 1983). At least seven such sites are known in the county; indeed, the latest burial phase at Poundbury falls into this category, the Late Roman cemetery at this site providing perhaps the archetype for these probably sub-Roman graveyards (Rahtz 1977; Sparey Green 1982). While these cemeteries may be a key to the invisible settlements of the native population in the 5th to 7th centuries finds such as that at the Trumpet Major perhaps identify the newcomers and provide some

of the first tangible evidence for the origins of these early villages along the Frome Valley, prior to the establishment of the earliest Saxon churches which are otherwise the earliest fixed points in their history. Finally one must regret that these burials were not recognised at the time of their discovery for what they were; Mr Banks' literary neighbour would no doubt have been fascinated by this relic from the origins of Wessex.

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A MEDIEVAL SITE AT LONG GROUND, OAKLEY DOWN, WIMBORNE ST GILES

JEANY POULSEN

INTRODUCTION

In the early 1950s Mr Montagu-Puckle located a medieval site in a field known as Long Ground, on Oakley Down (SU 01221862). Trial trenches revealed flint and sandstone wall foundations and a small yard. Pottery, probably of the 13th century and some fragments of glazed tile were found. A nearby pit contained Romano-British material in its early phase(s) and 13th century pottery in its later fill; a post-hole some 30 m. north-west of the pit gave a similar sequence. An enclosure wall of loose flints (undated) was also recorded (Farrar 1950, 92-3 and 1951, 104).

In 1970 Christopher Taylor wrote that this site was 'undoubtedly a shepherd's hut' (1970, 90). However, recent fieldwalking by Martin Green and Paul Kitching (SU 01181863) has produced some finds which suggest that the site was possibly of a higher status and greater size than was originally supposed. These finds consist of mainly 12th-13th century pottery, a late 12th century coin, a buckle-plate probably of the 13th century and a jetton dated around 1300; these are described in detail below.

THE POTTERY

Fabrics

Fabric A: A hard, dark grey coarse fabric; high percentage of sub-angular and rounded quartzite inclusions, occasional very fine calcite inclusions. One sherd only, No. 1.

Fabric B: Very coarse, with a high percentage of coarse angular and sub-angular quartzite inclusions, usually with buff surfaces and a grey core; hard, with a very rough feel. Vessels generally rather crude. Nos 2-4.

Fabric C: As Fabric B, but less coarse; vessels generally better-made. Nos 5-7.

Fabric D: Similar to Fabric B, but surfaces slightly smoother and scratch-marked with random, roughly horizontal lines. Grey core, dary grey internal surface, orangey-buff exterior. I (neck) sherd only, probably a cookpot or store-jar, not illustrated.

Fabric E: A hard coarseware, but much finer than Fabrics A-D. Very high percentage of fine quartzite inclusions, slightly rough feel. Surfaces usually orangey-pink, sometimes with a light-grey core. This fabric closely resembles the 13th/14th century coarseware fabrics common in the Dorchester area. Nos 8-16.

Fabric F (post-medieval): Very hard, dense, grey, fabric with common coarse sub-angular vesicles. Thick, but rather patchy, pale khaki-green glaze. Not illustrated.

Illustrated vessels (see Figure 14)

1. Jar rim, rather crudely finished, Fabric A. One sherd only.
2. Rim of large heavy vessel, possibly of the type having a sharp angle between wall and base, the base itself being flat. Fabric B. This angular type, often pierced, is well-known in the West Country and c. 12th century examples have been recorded at Holwarth (Rahtz 1958, 142, fig. 9: 15) and Grt Somerford in Wilts (Thompson 1970, 168, fig. 1: 1).
3. Rim of jar/cookpot. Fabric B.
4. Handle/rim sherd from a large heavy bowl. Small, sparse blobs of thin, pale khaki-green glaze externally and just inside rim. Triple-grooved decoration on upper surface of handle. Fabric B.
5. Rim of jar/cookpot. Fabric C.
6. Rim of large jar/cookpot. Fabric C. The form resembles a late 13th century cookpot from a kiln site at Lacock in Wilts (McCarthy 1976, 112, fig. 9: 35), although the fabric is much coarser than the Lacock example.
7. ?Jug rim. Fabric C.
8. Stumpy rim sherd from a jar/cookpot. Fabric E. The form is similar to a vessel dated c. 1100 from the Leaze in Wimborne (Field, 58, fig. 13: 34) but is more closely paralleled by the rim of a sagging-based cookpot (14th cent. context) from Sherborne, Harrison and Williams (1979, 99, fig. 45: 3). However, the fabric is finer than either of these, and suggests a 13th century date.
9. Rim of jar/cookpot. Fabric E.
10. and 11. As No. 9.
12. Rim of large bowl, rather crudely made with a very thin ?applied strip of finger-impressed decoration externally, just below the rim. Fabric E, but slightly coarser than the other examples.
13. Rim of hammer-head bowl. Similar to a probably 12th century

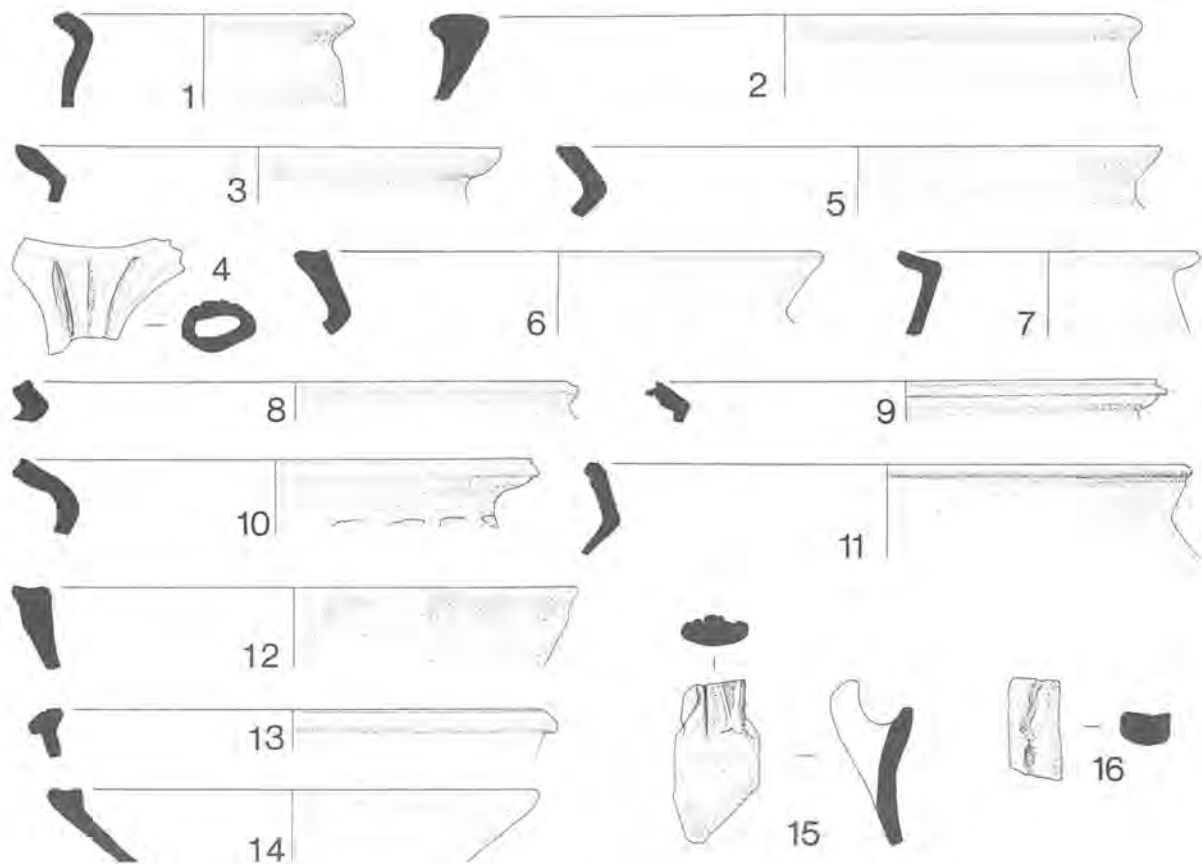


Figure 14. Wimborne St Giles: the medieval pottery at 1/4 life size.

- example from Wimborne (Draper 1983, 67, fig. 4: 19). Fabric E.
 14. Rim of an open bowl with spots of pale khaki-green glaze internally. Fabric E.
 15. Jug handle with slashed decoration and spots of pale khaki-green glaze externally. Fabric E.
 16. Jug handle with shallow grooved decoration. Fabric E.

Not illustrated

- Fabric B: Large, very coarse strap handle, possibly from a fire-cover. Rim sherd as No. 2.
 Fabric C: Simple foot, probably from a tripod pitcher. Two rims as No. 1. Rim as No. 5.
 Fabric D: Neck sherd from jar/cookpot, scratch-marked.
 Fabric E: Rim as No. 3. Rim as No. 8. Rim as No. 14.
 Fabric F: One rim? and two body sherds from an unidentified post-medieval vessel; crudely made with thick, though rather patchy khaki-green glaze on both surfaces.
 Plus a fragment of medieval ridge roof-tile, and a fragment of pierced roof-tile, date unknown.

DISCUSSION

Since there is nothing to suggest that the fabrics are not local, a date for the pottery must depend largely upon form. Little medieval pottery has been published from this area, but the range of vessels present (mainly store-jars/cookpots, bowls, jugs and a tripod pitcher), and individual forms show general affinities with groups both to the east and west; for example, groups from Wimborne (Draper 1983, 66-69 and Field 1973, 49-62) and the kiln group from Lacock in Wiltshire (McCarthy 1976, 97-160). In the case of the hammerhead bowl (No. 13) similar examples have been recorded at Holworth (Rahtz 1959, 142, fig. 9: 20) as well as at Wimborne in late 12th-13th century contexts (Draper 1983, 67, fig. 4: 19 and Field 1973, 58, fig. 12: 26).

It is suggested that the pottery from Long Ground probably starts in the late 12th century and spreads through the 13th – a range that correlates to the dating of the coin, buckle-plate and jetton described below. The correlation in date between the pottery and the metal finds makes it all the more unfortunate that these are only unstratified surface finds, especially in view of the possible connection between the jetton and Gilbert de Clare.

THE COIN

Miss Marian Archibald of the British Museum has examined the coin and has kindly provided the following identification and comment:

'Henry II. Short-cross penny, Class 1b, mid-1180s. Mint: London Moneyer: Pieres M. Obverse: hENICVS.R(EX). Reverse: (PIE)RES.M.ON(L--). Wt: 1.25 g, 19.3 gr (uncleaned, bent double and damaged). Ref: North 963. Although struck in the mid 1180's this coin could potentially have remained in circulation until the type was superseded after the introduction of the Long Cross type in 1247. This coin however is unworn and unclipped which suggests it is most likely to have been lost before c. 1205 when earlier clipped coins were withdrawn from circulation and the proportion of such coins surviving into the later period were greatly reduced. This coin is therefore most likely to have been deposited sometime during the period c. 1182-1205 with a later survival a possibility. Numismatically speaking, this is quite a common coin.'

THE JETTON

Mr David Algar has kindly examined the jetton and provided the following identification and comment:

'About 1300, of a type associated with Edward I. Obverse: Round-bottomed shield with three chevrons, inverted crescent (or moon) in dexter chief, five-pointed star in sinister chief, the shield flanked by single stars of the same type, all within a border of stars and strokes (possibly saltires). Reverse: Long cross of three strands recercellee, the central strand fleurdelisee, cantoned by two five-pointed stars (or suns) and crescents (or moons). Set alternately, cutting a small double inner circle, two pellets within the end of

each cross and strokes or saltires between the crosses. Central perforation. Diameter: 25 mm. Not in Barnard, but very similar to plate 2, 48 (Barnard 1981). See also Berry 1974. Plates 2, 6 and 8. The arms are basically those of the de Clares, or three chevrons gules. The crescent and star was a badge of the Plantagenets. As Earls of Gloucester, part of their Estates included Cranborne Chase. The last male heir was killed at Bannockburn in 1314.'

It is tempting to suggest that this jetton is one of a series prepared for Gilbert de Clare and used within his 'household'. (For outline history see Hawkins 1980, 30 *et seq.*)

THE BUCKLE-PLATE (SEE FIGURE 15)

The object is made from a single sheet of pierced copper alloy which has been folded and pierced again through both thicknesses (and originally through the enclosed belt or strap), by three rivets. The heads of these rivets stand proud from the front of the piece, which is decorated with lightly-incised bands of hatching. Fragments of ?gilt adhere to the decoration.

The closest parallel for this object appears to be a late 13th-14th century example from the deserted medieval village of Seacourt in Berkshire (Biddle 1963, 167, fig. 28: 6). Large-headed rivets standing proud at the front are a regular feature of 13th century buckle-plates (Brian Spencer, pers. comm.); the Long Ground example would therefore appear to date from the 13th or very early 14th century.

ACKNOWLEDGEMENTS

Thanks are due to David Algar, Marian Archibald and David Spencer for their comments on the jetton, coin and buckle-plate respectively; to Christopher Chaplin for his drawing of the buckle-plate and to Jo Draper and Martin Henig for their helpful suggestions and comments.

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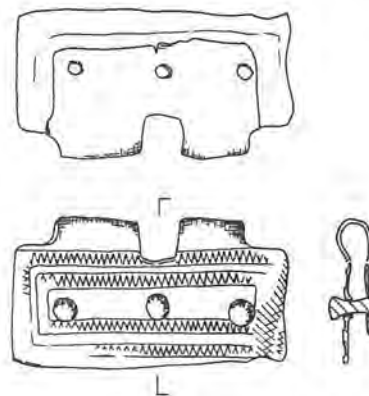


Figure 15. Wimborne St Giles: the buckle plate, at life size.

WOOLCOOMBE FARM

ALAN HUNT

Field survey, excavation and post-excavation work was carried out at Woolcombe Farm, in the southern part of Toller Porcorum parish, in 1984 by the Dorset Institute of Higher Education. This interim report summarises earlier work, outlines the 1984 excavations, gives an initial archaeological survey and appraisal of the Woolcombe estate and draws together a bibliography.

Earlier work. The archaeological potential of the area around Woolcombe Farm was appreciated some years ago by Mrs Dinah Austin, the landowner, who noted earthworks, collected artefacts and collated historical evidence. She also carried out excavations, with Mr Simon Austin, in the 1960s and 1970s. In 1966, 1967 and 1968 the late Mr G. V. D. Rybot carried out two further excavations, and other small scale investigations followed in the 1970s. Mr Rybot's excavation records and finds were recently examined by Miss Jeany Poulsen, who has published a site description and an account of the excavations and the finds, together with an outline of documentary sources (Poulsen 1984).

In the light of this earlier work and of the growing significance accorded to the study of smaller settlements (hamlets and farmsteads) on the national scene, further investigations were carried out in 1984. The objectives and results of this work are outlined below.

Figure 16 is a plan of earthworks and excavations at Woolcombe. Table 1 summarises all excavation work to date, giving new designations where this is helpful for convenience and clarity. Field names throughout are as in the 1840 Tithe Map of Toller Porcorum parish, where the fields are named in that survey. Where they are not (e.g. Old Orchard) a modern name is given.

Current post-excavation work is directed towards the production of an archive and substantive report. Into this report, by kind permission of Mrs Dinah Austin, we plan to integrate the results and assessments of earlier work, together with a more extensive study of documentary evidence than has so far been possible.

Excavations in 1984. Excavations were carried out by students of the Dorset Institute of Higher Education in July and August 1984. These excavations were designed as a series of samples, of varying extent. Together with earlier excavations they were intended to contribute to an assessment of the nature, extent, dating and preservation of archaeological deposits in different areas or sub-sites of the Woolcombe settlement. The results are summarised very briefly in Table 1, and a short account of each trench follows.

Trench I was designed as a substantial sample of a scarped platform on the south-east side of the valley in the Lower Bottom,

opposite a similar (though smaller) platform sampled by Rybot (R1). In chronological order a group of intersecting features (probably pits and a ditch or gully) were found to be cut into the natural clay with flints. Due to pressure of time these features were not excavated. Above these features was a dense layer of soil and flints, the distribution and proportion of flints varying both in the horizontal and vertical sections. Some areas proved notably slow to dry out. Two or more horizons within this soil build-up could be identified; it was not clear whether these had been 'surfaces', much modified by post-burial worn action. Pottery of types and dates (i.e. 13th-14th centuries) broadly comparable to that recovered by Rybot was present throughout but was more frequent in lower layers.

The latest features in this trench were a small (2.4 m diameter) rammed chalk floor and an associated earth and flint surface, dated around the middle of the 19th century. This was interpreted as a rick-base. A flint surface exposed in Trench II (see below) may well be a contemporary feature. It is therefore reasonable to suggest a temporary re-occupation of this scarped platform area, probably as a rickyard, in the mid-19th century. By the end of the 19th century this area was an orchard and is marked as such on the 1902 1:2,500 Ordnance Survey map. During the present century it has reverted, with the rest of the field, to permanent pasture.

Trench II, a little to the south west of I and within the same large platform area, was cut a narrow trench across a hedge bank. This was an opportunist exercise, taking advantage of an eroded break in the bank, a break which was cleared up and slightly extended in length. The discontinuous bank, which lay across the settlement earthworks, was of turf and soil construction. Pre-dating it was a well-compacted flint surface, probably contemporary with the rick base found in I. There was no secure dating evidence for these features in II.

Trench IV, the third trench opened in Lower Bottom, was cut in a low-lying and very wet area of the valley floor, and across the line of a wall or bank indicated by a parch mark observed in the dry conditions of July. This area seemed, on topographical grounds, the most likely location for a fishpond mentioned in an *Extent* of 1303 (summarised in Poulsen *op. cit.* 81). A substantial clay and flint bank, with a return at about 90 degrees to it, was confirmed. Comparison with the local and slight earthwork evidence suggests that this bank could have enclosed an elongated area, appropriate in size and shape for a fishpond, which could have been fed with water from an adjacent spring. Demolition or erosion of the bank had filled up the ?fishpond, and two successive stake structures, probably fences, were erected during this infilling process. Water-logged stakes were recovered. Earlier than the bank was a narrow cambered path with a metallised surface of crushed greensand,

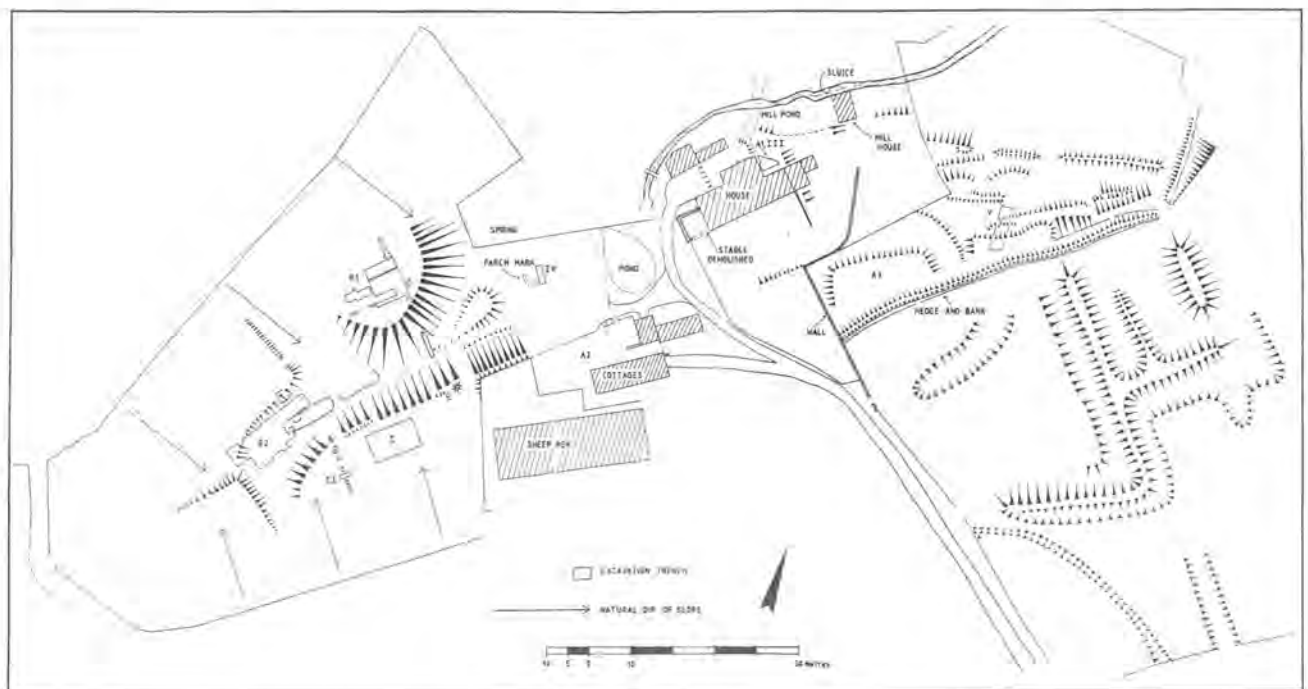


Figure 16. Woolcombe Farm: plan of buildings, earthworks and excavations (designations as in Table 1).

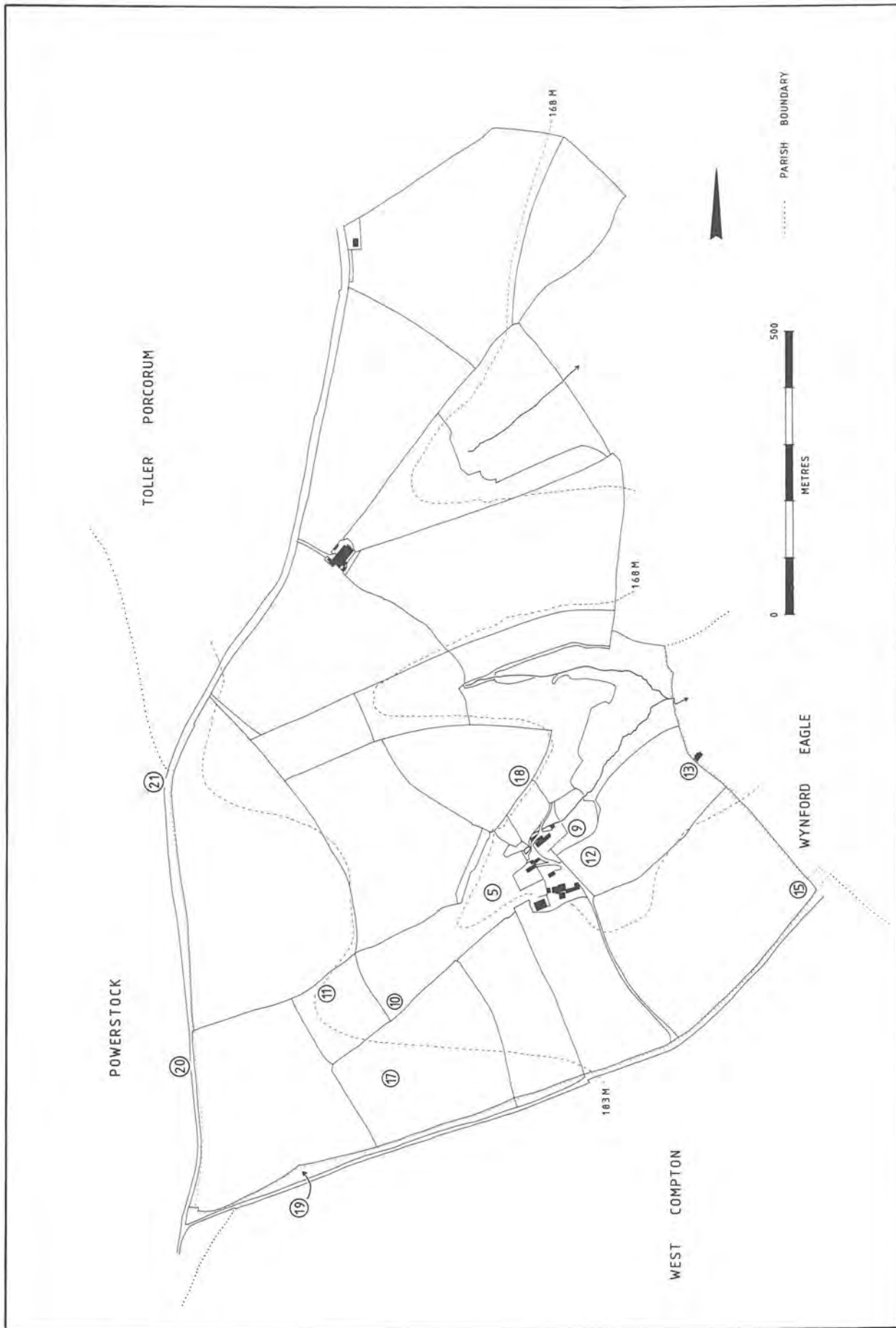


Figure 17. Woolcombe Farm: plan of estate, showing archaeological sites and finds (numbers refer to Table 2).

flanked to the north by a small drainage ditch. Below the metalled path was a dense black waterlogged layer which held out promise of useful environmental data. Rather sparse quantities of medieval pottery were found, more frequently in later deposits. Excavation was curtailed for want of time and a water-pump, but the incompletely explored stratigraphical sequence here calls for further examination.

Trench III was designed to resolve questions of structural sequence raised by the earlier excavation A1. The former trench was re-excavated and slightly extended. Two parallel walls identified in A1 were exposed, with evidence of a deliberately-constructed platform below the earlier phase, and a the raising of an additional platform below the north-west range of the farmhouse. The second phase was wider than the first, with roughly-dressed stones marking a doorway. Both phases were earlier than the earliest part of the present house, the north-west range, which may be dated (by architectural features) to the 17th century or earlier.

Trench V cut a section across the end of the platform and a parallel bank and ditch in the Old Orchard. On the platform was flint wall debris (or possibly the disturbed remains of foundations). Time did not allow completion of this section. Pottery included abraded medieval sherds and 17th-19th century material including parts of a Nottingham stoneware bowl (the only fine ware) of late 18th or early 19th-century date, much of which was almost certainly deposited after the structures were abandoned.

Other structural evidence in this area includes roof tiles found in A3, on another platform some 30 m to the south, and chalk walls and post-medieval pottery observed in the nearby kitchen garden. It is evident that structures – perhaps substantial – stood in this area, but their function and their spatial or chronological relationships to other parts of the settlement have yet to be determined.

The excavations confirmed the survival of well-preserved stratification in all the areas examined. There was no evidence of ploughing in any of the sites; the worst post-burial interference with I and V seemed to have been spade cultivation, and there was no certainty even of this. Trench IV and its surrounding area show significant potential for the recovery of environmental data. Marked differences between I and V were noted, in the topography of earthworks, stratigraphical development and artefactual evidence, and these apparently significant differences call out for further investigation. Occupation in the Lower Bottom still seems concentrated in the 13th-14th centuries. The house sequence exposed by Rybot in R2 is incompletely understood and records are limited; this sub-site requires further elucidation by re-examination. Our understanding of the origins and development of the Lower Bottom earthworks might be advanced by also re-excavating Rybot's trench (part of the R1 complex) across the hollow way. Re-excavation and minor extension of earlier trenches has much to recommend it from the standpoints of maximising returns of evidence and minimising disturbance of otherwise well-preserved earthworks.

Archaeological survey and appraisal. Figures 17 and 18, together with Table 2, summarise known archaeological sites and monuments on and peripheral to the Woolcombe estate, and record archaeological observations and surface collections. This list seems impressive for an estate of about 300 acres but to put it into perspective one should add that few of the fields have been systematically walked after ploughing, and therefore the potential for surface collection is yet unquantified. To this survey of archaeological potential should also be added the field boundaries of the estate, each a component of the historic landscape. Archaeological and botanical recording of these boundaries is under way, and it is hoped that an initial examination of every boundary on the estate will be completed in the summer of 1985. First results indicate considerable variations in the numbers of species present, the oldest hedges being the estate boundaries of the ridges to the north-west and south.

Historical summary. The present state of knowledge derived from historical and archaeological data may be conveniently summarised chronologically.

Prehistory. Flint artefacts have been found in the stream near the farmhouse in the farmhouse garden and in all 1984 excavation trenches. The ?bronze age leaf-shaped arrowhead, although an isolated recovery, hints at hunting activity; and indeed the damp valley bottom, with its potential for fowl and game, would be likely to attract hunters. Apart from the possible 'celtic' fields (site 17), no positively identified prehistoric earthworks have been found, and no prehistoric features excavated. Flint and occasional chert flakes were recovered in excavations I and V but these were mainly

rolled. Presumably they were originally deposited on the chalk and clay with flints above the valley and have been transported by soil movement to the valley bottom. The Woolcombe estate lies at the western extremity of the Dorset (and therefore Wessex) chalklands, and substantial prehistoric settlement activity has been recorded to the south and east, notably 'celtic' fields in West Compton parish (around SY 550948) close to site 17. Round barrows cluster around a disc barrow to the south at SY 547946, and are irregularly placed along the ridges to the north west and south. Eggardon hill-fort lies to the south (SY 541947). Further evidence for prehistoric settlement and activity on the Woolcombe estate may therefore be expected, and is perhaps most likely to be detected by surface collection of artefacts.

Roman. The nail cleaner found in the cottage garden (Farrar 1974), while an attractive and well-preserved artefact, is probably a curio found elsewhere and subsequently lost here. No other evidence of Roman occupation or activity has been found.

Early medieval (pre-Conquest). The Domesday account indicates that a small settlement was established in the valley by the 11th century. Two small estate holdings are recorded in 1086, one of these including four border tenements. Mixed farming was practised, with an emphasis on pastoralism. This 11th century settlement has not yet been identified archaeologically.

Later medieval (post-Conquest). Poulsen (*op. cit.*, 80-81) has outlined the later medieval history of Woolcombe farm documentary evidence. Evidence from excavations to date suggests that the Lower Bottom were occupied in the 13th and 14th centuries, and that this area was deserted during the 14th century. The plan of the earthworks, and excavations R1, R2 and I, suggest that houses were constructed along the valley bottom, flanking the hollow way, and that the scraped platform areas on the slopes above them may have been (?associated) farmyards. A fishpond mentioned in the *Extent* of 1303 (*ibid.*, 81) is likely to be the embanked feature recorded in excavation trench IV, and partly surviving, much modified, as the pond (site 4). The site of the present farmhouse (site 1) since the 17th century was previously occupied in succession by two substantially-built structures, probably but not conclusively houses. The dating of this structural sequence may well extend backwards into the later medieval period; pottery found in excavations A and III confirms occupation of some kind in this period.

Post-medieval (16th-17th centuries). In the 17th century the north-west range of the farmhouse was built or rebuilt. Other evidence archaeological or historical, for this period is very limited

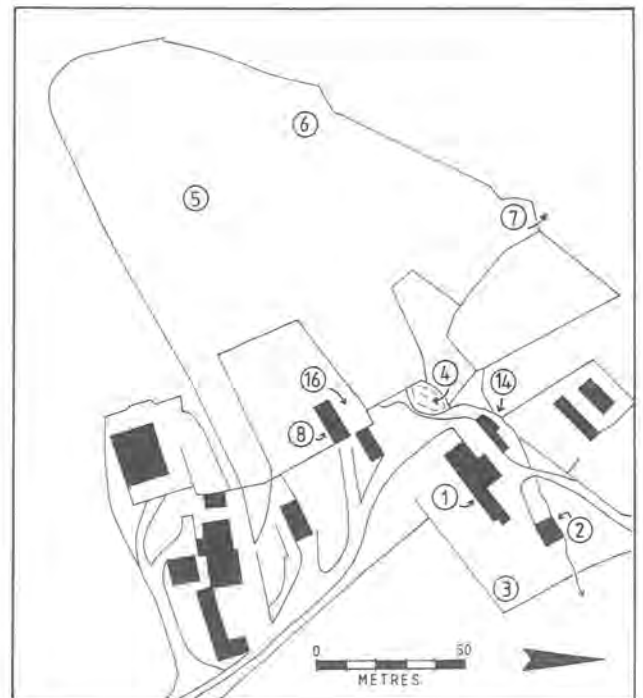


Figure 18. Woolcombe Farm: as Figure 17, showing area around settlement nucleus to larger scale (numbers refer to Table 2).

indeed at present, but the topography and botanical structure of some field boundaries may suggest that some enclosure took place around this time. This uncomfortable hiatus in the history of the settlement and estate is the subject of further work.

Modern (18th century onwards). The south-east range of the farmhouse was built or rebuilt in the 18th century. In the 19th century part of the Lower Bottom was re-used as a rick yard, containing at least a compacted flint surface and a small chalk rick base. Late in the 19th century this corner of the field had become an orchard. Other evidence for cider-making in this period is the building (or rebuilding) of the mill and its use as a cider mill. At a late stage (possibly in the present century) the end of the north west range was demolished. Certainly in the 20th century the area to the south east of the farmhouse was converted from a farmyard to the present garden. The stable at the south-west end of farmhouse was demolished and the area used as a herb garden (D. M. Austin, pers. comm.).

This summary of settlement and estate history (and prehistory) does not take into account undated and unexplored sites. It emphasises by omission our minimal understanding of several areas; in particular, the development of medieval and post-medieval field systems. The present field pattern was substantially present in the early 19th century, and is shown on the Tithe Maps, but it seems likely that it came into existence earlier, perhaps as early as the later medieval period. Work in progress is intended to shed light on this aspect of estate development. Other aspects, such as the origin and early development of the settlement and estate, and its external relationships, also await further study. In all these areas further work should lead us to re-write the history of Woolcombe, probably quite drastically, and probably more than once. A summary of this kind is thus of transient significance, but it serves some salutary and necessary functions. It draws together some of the diverse threads of research, and in attempting to discuss pattern of development it poses problems, exposes gaps in the record and thus influences the strategy of further research. Not least, this summary goes some way to demonstrate, though not to explain, the archaeological and historical complexity and potential of a smaller medieval settlement and its territory.

ACKNOWLEDGEMENTS

My thanks go in particular to Dinah Austin and Simon Austin, not only for permission to excavate but for very much practical help and discussion of the site and its problems. The frequency with which Mrs Austin is cited as a reference indicates the range and extent of her contribution. I am grateful to John Hurst and Michael Aston for discussing the project in its planning stages; to all the students of the DIHE, and others, who took part in the excavations and surveys; to Helen Dewey, Linda Garratt and Alison Gledhill who drew the figures accompanying this report; to my colleagues Bill Putnam and John Beavis for much practical help; and to Jeany Poulsen, Jo Draper and Peter Woodward for discussion of the site and its artefacts.

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TABLE 1. Archaeological excavations at Woolcombe Farm, to 1984.

Site Designation	Date	NGR	Location	Excavator	Summary of results	Publication	Remarks
A1	1960s	SY 55399543	Yard in angle of farmhouse.	D. M. Austin; S. F. Austin.	Two stone structures pre-dating farmhouse; 13th- and 14th-century and post-medieval pottery.	Poulsen 1984, In preparation.	Poulsen, Site 3. Partly re-excavated 1984; see III, below. Poulsen publishes pottery and outline of structural evidence.
A2	1972	SY 55369537	Cottage garden.	D. M. Austin.	Slight evidence of structures; medieval pottery.	In preparation.	
A3	1970s	SY 55429540	Site of former goose-house, in Old Orchard.	D. M. Austin.	Stone roof tiles.	In preparation.	Trial sondage.
R1	1966-1967	SY 55329537	Lower Bottom.	G. V. D. Rybot.	?Drainage/boundary ditch and wall; ?post settings for substantial timber building; 13th- and 14th-century pottery.	Rybot 1967; Wilson and Hurst 1967, 1968; Poulsen 1984.	Poulsen, Site 1. Group of one large and several smaller trenches. Rybot 1967 is very brief note of results.
R2	1967-68	SY 55299534	Lower Bottom.	G. V. D. Rybot.	Succession of ?3 stone houses; 13th- and 14th-century pottery.	Rybot 1969; Wilson and Hurst 1969; Poulsen 1984.	Poulsen, Site 1. Rybot 1969 is brief note of results. Poulsen publishes pottery and excludes structural and stratigraphical data.
I	1984	SY 55329534	Lower Bottom.	A. M. Hunt.	19th-century rick base and yard surface; ?earlier surfaces; intersecting pits and ditch/gulley; medieval and post-medieval pottery.	In preparation.	
II	1984	SY 44319533	Lower Bottom.	A. M. Hunt.	Boundary bank and earlier flint surface. Stone structures in A1 re-excavated; sequence established.	In preparation.	Partly re-excavated and extended A1 trench.
III	1984	SY 55399543	Yard in north angle of farmhouse.	A. M. Hunt.	?Fishpond bank; earlier drainage gulley and metalled road, sealing waterlogged layers; medieval pottery.	In preparation.	
IV	1984	SY 55349538	Lower Bottom.	A. M. Hunt.	Platform and remains of flint-walled structure; boundary bank and slight ditch; medieval and post-medieval pottery.	In preparation.	
V	1984	SY 55469543	Old Orchard.	A. M. Hunt.			

TABLE 2. The Woolcombe estate: an initial archaeological survey.

<i>Site/Location No.</i>	<i>NGR</i>	<i>Description</i>	<i>Remarks</i>
1	SY 55389543	Woolcombe farmhouse, 2 ranges, T-plan, 17th and 18th centuries; north-east on one extension 20th century; stable at south-west end demolished 20th century, now herb garden. Part of north-west demolished ?20th century.	Structural history of house is complex and has yet to be investigated in detail. Cf. RCHM 1953.
2	SY 55419545	Mill house (?19th century); mill pond (partly re-dug in 20th century; dam and sluice.	Latest use as cider mill (D. M. Austin, pers. comm.).
3	SY 55429543	Chalk walls noted below surface during deep digging of kitchen garden. Medieval and post-medieval pottery recovered.	D. M. Austin, pers. comm.
4	SY 55369540	Pond, silted up but cleared 1984. ?North-east end of sub-rectangular medieval fishpond.	Cf. excavation trench W.
5	SY 55319536	Earthworks in Lower Bottom; hollow way/flash-flood channel with 3/4 house platforms/enclosures on valley slopes; post-desertion, discontinuous hedge bank across field.	Cf. excavations R1, R2, I, II, IV.
6	SY 55279535	Masonry observed in pipe trench.	D. M. Austin, pers. comm.
7	SY 55309544	Ruins of lime kiln.	On OS 1:2500, 1902 edn.
8	SY 55379537	Two cottages, ?19th century and garden.	
9	SY 55459543	Earthworks in Old Orchard: hollow way leading east; house platforms set along road on south side, linking with banks/platforms in Barns Mead to south (site 12) and walls observed in kitchen garden to north-west (site 3).	Cf. excavation trench V. Former cider orchard (D. M. Austin, pers. comm.).
10	SY 55129512	Earthwork, ?enclosure; cut by terrace way.	
11	SY 55019517	Slight bank, disturbed by small quarry.	
12	SY 55469539	Earthworks in Barns Mead: platform(s), banked and scarped enclosures running north into Old Orchard (site 9); slight traces of strip lynchets to east; ?terrace ways to south-east.	Cf. excavation trench V.
13	SY 55659555	Slight earthworks (?platform) immediately west of Brooms Farm and divided from it by parish boundary (Toller Porcorum/Wynford Eagle).	
14	cSY 55369542	Flints found in and around stream bed, including leaf-shaped arrowhead.	D. M. Austin, pers. comm.
15	SY 55889532	Masonry foundations in narrow and heavily overgrown roadside enclosure.	S. F. Austin, pers. comm. On parish and estate boundary.
16	SY 55369537	Roman bronze nail-cleaner found in cottage garden.	Farrar 1974.
17	cSY 551550	Very slight traces of ?'celtic' fields observed in optimum light conditions.	D. M. Austin, pers. comm.
18	SY 55409548	Scatter of medieval pottery found.	D. M. Austin, pers. comm.
19	SY 54969485	Bowl barrow, rather eroded.	Adjacent to parish and estate boundary; in West Compton parish.
20	SY 54779503	Two bowl barrows.	Adjacent to parish and estate boundary; in Powerstock parish.
21	SY 54739553	Bowl barrow	Adjacent to parish and estate boundary; in Powerstock parish.

**A 12TH-CENTURY WOODEN BOWL FROM THE
'SUBMERGED FOREST' AT CHARMOUTH**

In 1925 Dr W. D. Lang recorded the exposure of a submerged forest at the mouth of the River Char: earlier exposures had been noted by De la Beche in the 1830s. Just below high water level on the foreshore Lang found several patches of preserved organic material in clay, up to 2 m long by 1.3 m wide and 0.3-0.6 m high, lying on the Lias clay and covered by the shingle beach. The lower parts of the deposits were bluish-grey clay with river-worn flint and chert pebbles. The upper parts were clay with quantities of twigs, bark and branches, mostly birch with some ash, and holed hazel nuts. Red deer bones were found in this upper layer (Lang 1926).

On 30th May 1979 the River Char flooded and the scour of this exceptionally virulent flood exposed a deposit of preserved wood in clay on the western side of the mouth of the river. Up to 1 m of clay deposits with wood, in some places interleaved with layers of water-worn chert were found, and from approximately three-quarter of the way down this an almost complete wooden bowl was found (SY 3655302) by Miss J. B. Lang, who kindly presented it to

the Dorset County Museum. Since the bowl was difficult to date and since it could date the organic deposit, a sample from the bowl was submitted in 1982 to Harwell for radio-carbon dating. The result was received in March 1985, and the bowl proves to be medieval, since the date is AD 1130 ± 70 years (HAR-4988). The wood is alder, kindly identified by Richard Thomas. The exact profile of the bowl cannot be paralleled but it is broadly similar to others known from early post-Conquest medieval deposits, for example a late 13th century bowl from Southampton (Platt and Coleman-Smith 1975, 1620).

It seems likely that the deposits recorded in 1925 and 1979 are part of the same thing, but it is not clear whether they are truly a 'submerged forest', that is the remains of trees *in situ*, or whether they are river deposits, with drifted plant material.

Lang, W. D., 1926, 'The submerged forest at the mouth of the River Char and the history of that river', *Proc. Geol. Assoc.*, Vol. 37, pp. 197-210.
Platt, Colin and Coleman-Smith, R., 1975, *Excavations in Medieval Southampton*, Vol. 2, The Finds.

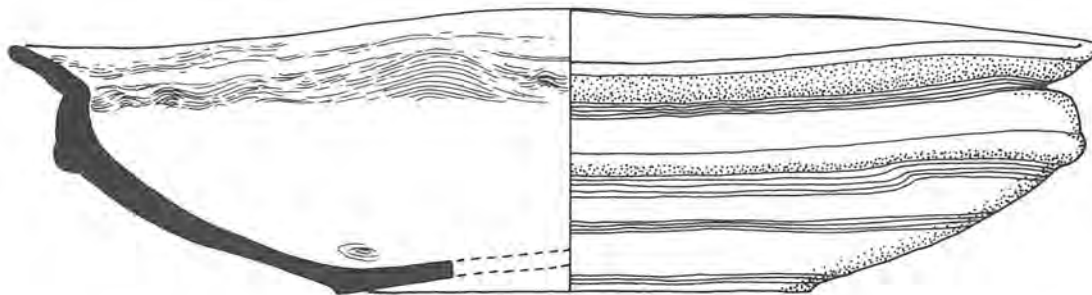


Figure 19. The wooden bowl from Charmouth at 1/2 life size. Drawing by Daphne Roscoe.

Natural History Reports

RAINFALL 1984

D. J. PAXMAN, MA

Statistics

The general rainfall of 1984 in Dorset was 34.45 inches, 5 per cent less than the 1941-1970 average.

MONTHLY SUMMARY:

	Rainfall (inches)	Average 1941-1970	Per cent of average	Number of days with thunder
January	6.4	3.8	168	3
February	1.9	2.6	73	0
March	2.4	2.5	96	0
April	0.2	2.1	10	0
May	2.7	2.6	104	2
June	1.1	2.0	55	1
July	0.9	2.3	39	4
August	1.6	3.1	52	5
September	3.1	3.4	91	4
October	3.8	3.6	106	3
November	5.9	4.2	140	2
December	4.3	4.0	107	1

Mapperton was the wettest station with 45.36 inches and Portland (RNAS) was the driest with 23.64 inches.

General Report

1984 was notable for the dryness of the months from April to August, during which Dorset experienced three periods of absolute drought (15 or more consecutive days with no measurable rainfall). These were:

- 20 to 25 days in April;
- 31 days in June/July;
- 15 days in August.

The first two periods were general. The third reached 15 days only in parts of the county, though most stations had 13 dry days.

By August, and with memories of 1976, there was widespread anxiety over water supplies. However, one must be careful not to exaggerate the shortfall of rain. The dry periods occurred in months which expect only moderate or low rainfall. January, usually a wet month, had an excess of 2.6 inches of rain. April had only 10 per cent of its average rainfall, but this represents a deficit of only 1.9 inches. Because the year started wet, it was not until June that there was a net shortfall of rain. This shortfall reached its maximum in August but it amounted in Dorset to only 18 per cent. At the same point in 1976, after a rainfall of only 7.42 inches in the first eight months of the year, the shortfall was 65 per cent!

Although by any yardstick the summer of 1976 emerges as much drier than that of 1984, it is worthy of note that in 1984 the five months from April to August were the fourth driest such period in the Dorset records back to 1856. 6.55 inches of rain fell in these months. The drier years were 1921 (6.39 inches); 1896 (5.96 inches) and 1976 (2.84 inches). April 1984, with .17 inch of rain was also the fourth driest April, the drier ones being 1893 and 1912 (.11 inch), and 1938 (.06 inch).

The threat to water supplies soon receded in face of a wet autumn, and the year ended with only 5 per cent less than average rainfall.

The year saw no significant snowfall.

Heavy falls of rain

August 3rd

On July 29th a depression of 1014 millibars over Newfoundland moved on to the Atlantic. The associated fronts crossed England from the south-west during August 1st and 2nd. They gave some rain in Dorset, but nothing untoward. In the east midlands, however, there were thunderstorms on 2nd. A tornado caused much damage at Gotham, near Nottingham, while at nearby Gedling 2¾ inches of rain fell during a thunderstorm. At midday on August 3rd the depression centre (now of 1006 mbs) began to move slowly into south-west England. Its approach caused some very heavy rain in parts of central and west Dorset 1.73 inches at Cattistock, 1.62 at Higher Wraxall). The chart from the recording rain gauge at Cattistock shows that the bulk of the rain fell between 1800 hrs and midnight, with the most intense rain in the final hour.

This event seems to have been relatively local because, south-east of a line from Portland to Blandford there was less than half an inch of rain and near Poole there was at least one area which remained dry. There were no reports of thunder on 3rd. Dorset did have thunder on 4th, by which time the depression centre had drifted slowly away to the north-east.

October 24th

A shallow depression of 1010 millibars which was in mid-Atlantic on October 22nd deepened as it approached the British Isles. At midday on 24th the centre (now 987 mbs) was off south-west Ireland and deepened further to 983 mbs as it moved north-west across Ireland and Scotland. In Dorset there was some heavy rain from the associated fronts. Over the county as a whole this was the wettest day of the year. Almost everywhere (Portland excepted) there was at least ¾ inch of rain, and the hilly areas of west and central Dorset had over an inch. The heaviest falls were along the line of the highest ground (Minterne 2.16 inches; Cattistock 1.93 inches; Shillingstone 1.74 inches).

Rainfall Stations

New stations:

Bere Regis (Chamberlaynes) SY 846927 Gauge at 92 feet ASL.
Frome St Quintin ST 599027 Gauge at 550 feet ASL.
Two stations have closed following the deaths of the observers: Bridport (North Chideock) and Dorchester (Queen's Avenue).

Note to the table of rainfall

The November measurement of rainfall at Portland (RNAS) is shown in brackets. The readings on some days were suspect because of rain-gauge malfunction.

Geology Report

Annually, valuable information is lost through failure by researchers to publish. The reasons for the failure are numerous but certainly include the movement of academics or researchers into new fields of study, administrative posts or through premature death.

There is no doubt that part of the problem is the inevitable difficulty of publishing scraps of information. Field work may provide significant new facts but which have no bearing on the research project in hand. The chances are that no published record will appear.

The geology report provides a vehicle for the release of geological information which could otherwise lie dormant. The report contains not only notes on current research, but reports of discoveries, events and other topical items written by individuals involved in Dorset Geology.

N.B. Specimens prefixed DORCM are part of the Dorset County Museum's Geological Collections.

Evidence of predation on, and post-mortem damage to, ammonites from the Eype Nodule Bed, Middle Lias, Dorset

P. C. ENSOM

The Eype Clays, beds 15-19 of Howarth (1957) are present in the cliff sections between St Gabriel's Mouth, east of Charmouth and Watton Cliff, near Bridport in West Dorset. These clays are especially well exposed at shore level between Seatown and Eype. At the latter locality (NGR SY 448 910) collections have been made from the Eype Nodule Bed, bed 18 of Howarth (1957). Howarth (1957), Wilson *et al.* (1958) and Cope and Hallam (1969) all record the fauna from this bed. The ammonite fauna collected includes *Amaltheus* spp., *Leptaleoceras pseudoradians*, *Metacymbites* sp., *Liparoceras* sp. and *Tragophylloceras loscombi*. This latter species and *Amaltheus* spp. are by far the most abundant.

Rainfall in Dorset 1984

STATION	OBSERVER OR AUTHORITY	Greatest Fall in 24 hours		Days with .01 in. or more	Days with 1 in. or more	DEPTH OF RAINFALL IN INCHES												Total for Year
		Depth	Date			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Abbotsbury (Rodden Row)	Miss A. M. Hutchins	1.15	3/8	143	1	5.26	1.42	2.45	0.11	2.47	1.21	1.25	2.22	2.54	3.64	5.73	4.23	32.53
Beaminstor (East Street)	W. A. Stiby	1.20	24/10	153	1	8.11	2.04	2.40	0.08	3.04	1.15	0.91	1.78	3.57	5.00	6.35	4.14	38.57
Bere Regis (Chamberlaynes)	G. Drew	—	—	—	—	5.86	1.82	1.80	0.71	1.99	1.03	0.62	0.99	2.54	2.81	4.95	3.92	29.04
Blandford (Bryanston)	Miss A. M. Jaques	1.15	24/10	161	2	6.53	1.92	2.69	0.13	2.40	1.04	0.98	1.99	3.60	3.74	5.72	4.44	35.18
Blandford (Tarrant Rawston)	J. H. Cossins	1.12	23/3	175	1	6.98	2.18	2.77	0.16	2.77	1.07	0.95	1.29	3.17	3.51	5.95	4.08	34.88
Bournemouth (Alderney Reservoir)	B'mouth & Dist. Water Co.	0.93	23/3	163	0	6.20	1.36	2.70	0.06	2.98	1.00	0.66	0.71	2.44	3.61	5.41	4.25	31.39
Bournemouth (Hurn Airport)	Met. Office	0.95	23/3	165	0	6.06	1.44	2.89	0.04	3.13	1.06	0.54	0.59	2.19	3.59	5.79	3.93	31.24
Branksome (Bourne Valley)	Southern Gas	1.03	23/3	—	—	5.46	1.20	3.07	0.09	3.46	1.00	0.59	0.69	2.55	4.11	5.84	4.43	32.49
Bridport (Bradpole)	G. R. Smith	0.97	22/11	153	0	7.07	1.64	2.03	0.13	2.27	1.25	0.98	2.27	3.41	3.48	6.98	4.54	36.05
Buckland Newton (Brockhampton Gate)	Major A. M. Hall	—	—	—	—	6.68	1.90	3.11	0.23	3.63	1.44	0.91	1.82	3.02	2.48	4.89	3.19	33.30
Cattistock (Lankham House)	J. F. Willows	1.93	24/10	181	4	7.12	2.14	2.44	0.14	2.98	1.85	0.93	3.69	4.72	4.71	7.20	5.15	43.05
Charminster (Hill View)	Mrs. Eveleigh	—	—	—	—	6.89	2.61	2.43	0.15	2.23	1.02	0.93	2.26	3.75	4.16	6.54	5.51	38.46
Charmouth (Sewage Works)	Wessex Water	1.06	26/1	159	1	7.08	1.55	1.69	0.26	1.81	0.47	1.00	1.87	3.30	4.26	6.45	2.82	32.56
Dewlish (Parsonage Farm)	M. Britton	1.01	24/10	142	1	5.93	1.70	1.86	0.10	2.30	1.19	0.57	1.66	2.90	2.85	5.72	3.34	30.12
Dorchester (Waterworks)	Wessex Water	—	—	—	—	6.75	2.44	1.43	0.78	2.11	1.06	1.05	2.25	3.47	4.66	6.40	5.75	38.13
Dorchester (Weatherbury Way)	J. R. Oliver	1.04	24/10	172	2	6.64	2.29	2.42	0.15	2.28	0.96	0.88	1.98	3.14	4.54	6.21	5.43	36.92
Evershot (Melbury House)	S. Rayner	1.52	3/8	180	3	7.98	2.07	2.85	0.11	3.41	1.64	1.38	2.27	4.98	5.30	7.37	5.09	44.45
Forde Abbey	G. D. Roper	1.40	26/1	157	3	8.51	2.18	2.40	0.24	2.73	0.77	1.15	2.75	2.98	3.77	6.64	3.74	37.87
Frome St Quintin	D. Pearman	1.43	3/8	165	3	6.72	1.83	2.50	0.15	3.45	1.25	0.48	1.97	3.82	3.85	6.75	5.08	37.85
Leigh (Denbury House)	Lt.-Col. B. H. T. Barlow-Poole	1.20	3/8	140	4	5.88	1.89	2.74	0.10	3.28	1.36	1.34	1.64	3.09	3.87	5.93	3.33	34.45
Litton Cheney (Pumping Station)	Wessex Water	—	—	—	—	6.63	1.54	2.39	0.07	1.89	1.33	0.65	2.39	2.39	4.52	5.97	4.00	33.76
Lyme Regis (Pinhay), Devon	Mrs. Allhusen	1.29	26/1	149	3	7.33	1.89	1.88	0.21	2.09	0.57	1.09	1.64	3.09	4.13	7.31	3.30	34.52
Maiden Newton (Wraxall, Manor Farm)	Lt.-Col. J. T. A. Wilson	1.61	3/8	165	4	7.19	2.43	2.49	0.09	3.40	1.39	1.29	2.61	4.55	4.64	7.45	5.36	42.86
Mapperton	V. Montagu	2.28	27/5	166	7	6.94	1.85	2.17	0.13	6.57	1.52	1.19	2.19	3.78	4.95	8.76	5.32	45.36
Marnhull (Crown Road)	Mrs. E. M. Payne	0.88	25/1	198	0	6.09	2.32	2.47	0.22	2.78	1.44	0.71	1.44	3.67	3.37	5.47	4.17	34.15
Milborne St. Andrew	Wessex Water	—	—	—	—	7.35	2.11	1.98	0.76	2.61	1.02	0.65	1.46	3.67	4.07	6.25	5.10	37.01
Minterne	The Lord Digby	2.16	24/10	166	5	7.70	2.48	2.57	0.20	3.61	1.40	1.13	2.19	4.45	5.63	7.70	5.23	44.29
Netherbury (Virginia Cottage)	J. K. Newsom Davies	1.06	24/10	172	1	7.56	1.82	2.16	0.11	2.73	1.27	1.37	1.84	3.70	4.97	6.78	4.12	38.41
Parkstone (Lilliput)	R. J. O. Crew	0.93	23/3	181	0	5.15	1.43	2.63	0.07	2.38	0.83	1.04	0.69	2.32	3.50	5.36	3.50	28.90
Portland (Royal Naval Air Station)	Met. Office	—	—	—	0	3.93	1.43	2.02	0.11	2.00	1.03	0.68	1.09	2.23	2.34	(3.33)	3.46	23.64
Portland Bill	HM Coastguard	0.86	3/6	155	0	4.17	1.50	2.63	0.08	1.81	1.28	1.19	1.28	2.32	2.18	5.00	3.91	27.35
Puddletown (Bardolf Manor)	H. G. Wood Homer	1.34	24/10	190	3	7.99	2.58	2.98	0.19	2.56	0.94	0.80	1.75	3.70	4.62	7.01	5.63	40.75
Shaftesbury (Coombe Hill), Wilts.	P. S. Cooper	1.49	23/3	179	3	6.04	2.02	3.17	0.24	3.47	1.49	0.64	2.32	3.26	3.15	4.74	4.99	35.51
Shillingstone (Green Hills)	E. Nimmo	1.74	24/10	167	2	6.12	1.90	2.77	0.12	2.67	1.11	0.72	1.33	3.09	3.94	5.63	4.29	33.69
Swanage	K. Moore	1.00	22/11	168	1	6.61	1.78	2.77	0.09	2.87	0.82	0.96	0.38	3.15	4.15	5.38	3.97	32.93
Upwey (Friar Waddon)	Wessex Water	—	—	—	—	6.26	2.17	2.41	0.10	2.15	1.23	0.94	1.36	2.12	4.53	5.03	4.53	32.83
Wareham (East Stoke, River Laboratory)	J. Morgan	0.94	25/1	177	0	7.24	1.81	2.66	0.13	2.38	1.08	0.93	1.17	2.83	3.67	6.20	4.73	34.81
Wareham (Trigon)	G. P. Sturdy	1.06	26/12	137	1	6.04	1.68	2.56	0.06	2.41	0.86	0.92	1.10	2.62	3.06	5.12	3.23	29.63
West Knighton (Empool Pumping Station)	Wessex Water	—	—	—	—	5.57	1.63	2.35	0.14	2.51	0.89	0.20	1.57	2.12	4.37	5.01	4.09	30.44
Weymouth (Cranford Avenue)	H. F. Middleton	0.75	24/10	168	0	4.85	1.74	2.22	0.06	2.15	1.06	0.76	0.98	2.37	2.77	5.35	3.88	28.17
Weymouth (Westham)	C. W. Jarrams	0.75	22/1	163	0	4.80	1.65	2.06	0.06	2.28	1.08	0.61	1.28	2.52	2.37	5.75	4.05	28.51
Wimborne (Corfe Mullen, Central Avenue)	A. H. Dunn	0.88	22/11	183	0	6.74	1.51	2.51	0.12	2.23	1.11	1.07	0.89	3.04	3.58	5.17	4.84	32.81
Wimborne (Stanbridge Mill Pumping Station)	B'mouth & Dist. Water Co.	—	—	—	—	6.15	1.74	2.32	0.06	2.77	1.43	0.73	0.97	2.33	3.01	4.61	3.54	29.67
Wimborne (Walsford Bridge Pumping Station)	B'mouth & Dist. Water Co.	—	—	—	—	5.44	1.50	2.44	0.07	3.14	1.00	0.77	0.71	2.60	3.65	5.26	4.17	30.74
Winfrith (Atomic Energy Establishment)	D. C. Fraser	0.96	25/5	163	0	6.75	1.81	2.43	0.09	2.61	0.93	0.69	1.01	2.54	3.52	5.88	4.68	32.95
Yetminster (The Mill House)	R. M. Clarkson	1.31	3/8	162	2	5.97	1.48	2.31	0.10	3.13	1.10	1.39	1.84	3.05	3.64	5.59	2.84	32.44
AVERAGE FOR THE COUNTY				165	2	6.44	1.86	2.44	0.17	2.74	1.13	0.90	1.61	3.10	3.83	5.95	4.29	34.45

Ammonite specimens collected normally consist of sediment filled body chambers (an exception is illustrated in Pl. 1.2) from which the shell has been largely removed. Epifauna is present on these calcareous mudstone casts (see item 2 of this Report). Many of the specimens, especially the tragophylloceratids are damaged; this can be divided into four types: 1, 2, 3a and 3b.

1. A series of irregular grooves and depressions which are generally concentrated on one lateral surface. In specimens orientated on collection, this has been the upper surface. They are especially obvious on specimens of *Tragophylloceras* (Pl. 1, 1b, 2, 3). They may be borings and as such bear comparison with *Rodocanalus reticulatus* Schloz which was described on the outer surface of pelecypod shells in the Lower Jurassic. The cast of the body chamber is often exposed by these grooves, and the undulations produced by the faint ribbing can still be seen on the lowered sediment fill, a clear indication that the body chamber filled with sediment and that some, at least peripheral lithification had occurred before the boring took place. There are areas where the generally narrow (<0.0005 m) grooves become wider (<0.0025) and occasionally become areas of pitting. In these examples the grooves are deeper, and cut into the sediment fill. Groove sizes attained are greater than those noted for this species in Häntzschel (1975).

2. Peripheral damage to the body chamber is common especially in *Tragophylloceras*. The posterior margin is often the suture line separating the body and air chambers (Pl. 1.1, 3 and 4). In others this is not so (Pl. 1.5, 6, 7, 9) and the posterior margin is truncated. In two specimens (Pl. 1.5 and 6) the truncation joins the suture close to the dorsal margin of the whorl. Pl. 1.6 and 9 show specimens where these posterior margins are quite concave; in one (Pl. 1.6) two small notches are present like those seen in larger lateral perforations (see below). In most cases there is shell debris present across the break, apparently broken down onto the sediment fill. The truncation of DORCM G9043 is best described as 'pinched' with shell drawn together from both lateral surfaces. One body chamber (DORCM G9038) has been almost entirely destroyed both from the anterior and posterior. Two specimens have pieces taken from their ventral margins (Pl. 1.1a, 1b, 4a and 4b) close to the suture. These may represent an early stage in the truncation of the posterior part of the body chamber. In DORCM G9039 this 'bite' is c. 0.02 m across and c. 0.005 m deep and in DORCM G9035 c. 0.03 m across and c. 0.007 m deep. In both cases, but especially the former, shell debris is distorted down across the fill of the body chamber. In two specimens (DORCM G7937 and 9034) portions of damaged margins are preserved on which apparently repaired shell is present. Though rough in appearance, the broken sections show solid calcite shell, contiguous with small areas on the lateral surfaces. In many cases the apertures

are damaged. Often the small notches or grooves noted above are present, developing rapidly into larger damaged areas (Pl. 1.6 and 9). In other cases one side of the shell near to the aperture has been broken down resting on softer clay fill rather than the hard calcite mudstone fills of the body chamber (Pl. 1.1, 5 and 7b). This collapse may be due to sediment removal while the ammonite was uncovered with subsequent compaction on reburial.

3. Perforations in the lateral surfaces are also present. They fall into two types:

a. Irregular holes. Of the five seen (Pl. 1.1, 3, 7a, 7b and 8) three have grooves running from (or toward) the aperture of the ammonite producing small nicks in the anterior margin of the hole with a circular outline posteriorly (Pl. 1.3, 7b and 8). The fourth has a circular depression (Pl. 1.1b). The fifth, on the opposite lateral surface of that figured in 7b (Pl. 1.7a), lies between the two. Their sizes vary from 0.012-0.025 m long and 0.01-0.017 m wide. The sediment filling these depressions is softer than that filling the main body chambers.

b. Two specimens (DORCM G9036 and 9039) have small circular perforations (Pl. 1.1b). In both cases they lie close to the suture. They measure 0.002 m and 0.004 m in diameter. In both cases the shell appears to have been bent down.

Of the last two groups (3a and b) perforations are confined to the upper surfaces of specimens which were orientated at the time of collection.

Kennedy and Cobban (1976) briefly review predation on ammonites. Hudson and Palframan (1969) describe damage to ammonites, of mainly clay mould preservation, from the Oxford Clay of Buckinghamshire which they suggest is 'almost certainly related to post-mortem but pre-burial breakage'. They point to scavengers such as crabs and even ammonites as possible, but unlikely (in view of the size of damaged ammonite) candidates. Roll (1935) figures haploceratid and oppelid ammonites which he suggests have suffered predation from decapod crustaceans. Of particular interest are the bites taken from the venter of the shells which are very similar to those seen on the specimens from the Eype Nodule Bed. Similarities are seen with other peripheral damage including the small nick points in the 'bites', like those mentioned in conjunction with the lateral perforations (see 3a above). Where lateral perforations have been observed, the sediment fill of the body chamber appears to have been gouged out, especially in the example in Pl. 1.7b, which shows a marked curving with possible evidence of synchronous shell fracturing close to the dorsal margin. The presence of shell fragments stretched down across the 'bite' surfaces, and the apparent excavation of sediment from the lateral holes seems to point to the attack being carried out on a body chamber already filled with sediment. While the majority of the specimens appear to have been damaged *post-mortem*, the

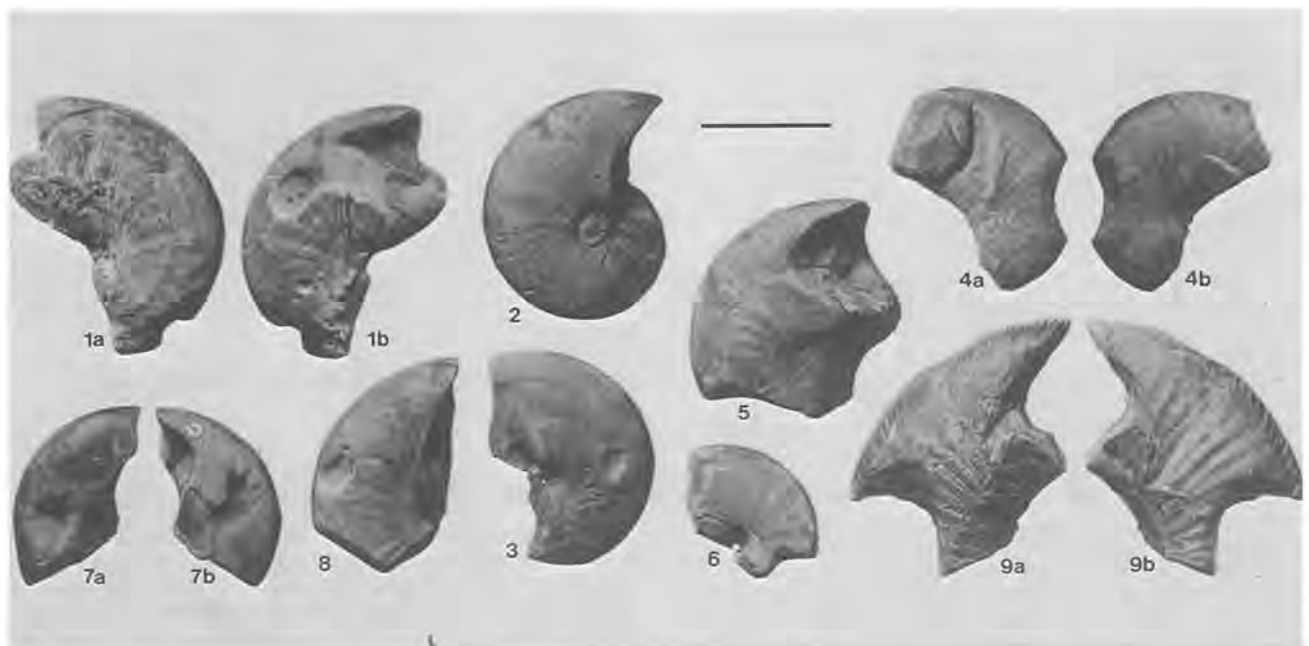


Plate 1. 1-8: *Tragophylloceras loscombi* (J. Sowerby). 1. DORCM G.9039; 2. G9033; 3. G9030; 4. G9035; 5. G9032; 6. G9040; 7. G7892; 8. G7893; 9. *Amaltheus* sp. G9037. Scale bar = 0.05 m.

specimens with the 'repaired venters', previously mentioned, may possibly represent the making-good of damage sustained when alive. The circular holes (see 3b above) are of uncertain origin. No decapod crustacean debris has been found associated with the ammonite fauna.

The following sequence of events is a possible interpretation.

1. Death of ammonite.
2. Partial or complete burial.
3. Fill of body chamber partially lithified; at least a first generation of rim cement.
4. Exhumation of ammonite with some sediment loss at aperture.
5. ?Boring of shell with some dissolution of calcite mudstone fill and ?colonisation by encrusting and pedically/bysally attached fauna.
6. Damage to body chamber and remaining shell by ?decapod crustaceans with some excavation of fill by same.
7. ?Initiation or continuation of boring of shell with colonisation by encrusting and pedically/bysally attached fauna.
8. Reburial and minor crushing of thin unsupported remnant of shell at the aperture. ?Dissolution of shell initiated or continued.

However, examination of the nodules in which many of the ammonites occur, especially the smaller ones, provides evidence of at least two phases of nodule formation, a point made by Cope and Hallam (1969, p. A13). I believe that the above sequence may prove to be an over-simplification. In the meantime it draws attention to the extraordinary events which dead ammonites were subjected to before final burial.

Hiatus concretions with a cemented, pedically and bysally attached fauna from the Eype Nodule Bed, Middle Lias, Dorset

P. C. ENSOM

The surfaces of ammonites, and nodules with pyritised cortexes, collected from the Eype Nodule bed (Bed 18 of Howarth 1957) exposed close to Eype Mouth (NGR SY 448 910) occasionally carry a fauna apparently unrecorded at this horizon. Specimens have been recorded on *Amaltheus* sp. and *Tragophylloceras loscombi*, but more commonly on the pyritised nodules referred to by Howarth (1957, p. 194). These pyritised nodules are confined to the top of the bed, lying below a more sandy clay. They are sometimes cemented together by a calcareous silt, a facies which may be a condensed equivalent of an impersistent calcareous sandstone with the highest nodule band at its base. Wilson *et al* (1958, p. 38) note that the sandstone is at times separated from the Nodule Bed by 0.45 m of marl, a feature which would seem to support the above comment.

The surfaces of the ammonites collected from lower in the bed and several nodules from the top have been carefully examined for attached fauna and the following have been recorded:

			Ammonites	Nodules
Foraminifera	<i>Nubeculinella</i> sp.	cemented	×	×
Serpulidae	<i>Serpula</i> sp.	cemented	×	×
Bivalvia	<i>Oxytoma</i> sp.	bysally attached	?×	
	<i>Plicatula</i> ? spp.	cemented	×	×
	<i>Placunopsis</i> sp.	cemented	×	
Bryozoa	' <i>Berenecia</i> ' sp.	cemented		×
Brachiopoda	<i>Discinisca</i> sp.	pedically attached	×	

The cemented foraminiferids, bivalves and serpulids apparently rest on no more than a thin veneer of shell. In some cases they appear to be attached to the internal cast of the body chamber. One specimen of *Plicatula* partially covers an exposed suture line (DORCM G9028) and the specimen of *Placunopsis* covers some of the borings tentatively ascribed to *Rodocanalis* (see above). At another point the remains of a serpulid are seen to cross from the cast with a thin veneer of shell to an area of thicker shell. This evidence seems to suggest that the shell had been partially or completely removed when colonisation took place. An alternative explanation is that the aragonitic ammonite shell suffered dissolution after encrustation and burial, with the attached, calcite shelled, fauna remaining and being gradually brought closer to, or into contact with the internal cast of the body chamber. Hudson and Palframan (1969) record *Placunopsis* and foraminifera attached to clay moulds of formerly aragonite shelled ammonites from the Oxford Clay at Woodham in Buckinghamshire.

Epizoic oysters on Kimmeridge ammonites were discussed by Cope (1968a) who suggested that their distribution was consistent

with attachment of the larvae after the ammonite died. They showed an apparent preference for the underside of the ammonite as it lay on the sea floor. Palmer and Fursich (1974) and Fursich (1979) record species of the pectinacean *Plicatula* with specific preferences for the upper and lower surfaces of a hardground. Unfortunately the orientation of the amaltheids was not recorded when they were collected, though the crushing of part of the shell and distribution of *Nubeculinella*, 'always on the upper surface' (Palmer and Fursich 1974, and Fursich 1979) support the view that all but one of the plicatulids were present on the lower surfaces. Some of the plicatulids lie between the ribs or on those parts of the undersurfaces which would not have been in direct contact with the sea floor which is entirely consistent with Cope's (1968a) thesis. DORCM G9042 with *Plicatula* on its ?lower surface has the remains of one larger specimen of *Plicatula* on its supposed upper surface. This may be another species with preference for upper surfaces. An orientated specimen of *Tragophylloceras loscombi* has two very small juvenile *Plicatula* attached on the lower lateral surface. Damage of types 1 and 3 (see above) is present on the upper surface.

The bivalve *Placunopsis* which encrusts a bored lateral surface of *Tragophylloceras* (DORCM G9041) is thought to have colonised an upper surface. Supporting this hypothesis is its position on the lateral surface (the bivalve would have been pressed into the sea-floor had the ammonite been resting the other way up) and the crushing of the shell and distribution of the borings which have been predominantly associated with upper surfaces. Fursich (1979) records *Placunopsis* sp. from both upper and 'cavity' (lower) surfaces. A left valve of *Oxytoma* sp. found resting on a small amaltheid (DORCM G7926) may have been bysally attached, or possibly represents no more than a *post-mortem* association.

Serpulids seem to have been present on both upper and lower surfaces.

The partially pyritised nodules (DORCM G7940, 7944 and 9029) carry a more abundant encrusting fauna with large specimens of *Plicatula*, possibly another species. In one case a plicatulid valve has been encrusted by *Nubeculinella*, in others the valves have been broken away from their attachments. *Discinisca*, though not recorded on a nodule, has been found 'attached' to '*Rhynchonella*' sp. from the nodule bed at the base of the calcareous sandstone.

Palmer and Fursich (1974) comment that *Plicatula* is an early coloniser of crevice roofs in the Middle Jurassic hardground they describe. The presence of immature plicatulids on certain specimens does suggest that for a short time the sediment filled ammonites were swept clear of clay, their exposed surfaces providing an ideal attachment for the opportunistic *Plicatula*. Supporting this view is the rarity of *Nubeculinella* which is abundant on the surfaces of the partially-pyritised nodules. At this stage other post-mortem damage to the ammonites (types 2, 3a and 3b) occurred as outlined above. The preservation of the pedically attached brachiopod on DORCM G9028 points to the rapid burial (Fursich 1979, p. 3). Observed damage to specimens of *Plicatula* on the nodules points to less rapid burial at this slightly higher horizon.

Both the less commonly colonised ammonites and the pyritised nodule horizon above are interpreted as examples of hiatus concretions, briefly reviewed by Fursich (1979).

Pyritisation of the cortexes of the nodules at the top of the bed is likely to have followed reburial (Fursich 1979, p. 17).

I am most grateful to A. Brokenshire who collected and presented DORCM G9041 and 9042.

A cursory examination of similarly preserved ammonites from the Red Nodule Beds (Upper Oxford Clay, *cordatum* zone) in the Weymouth area also reveals an encrusting fauna on some specimens.

Shelly accumulations in the Starfish Bed, Middle Lias, near Thorncombe Beacon, Dorset

P. C. ENSOM

Two pockets of unconsolidated shell-rich silt were collected from fallen blocks of Starfish Bed (bed 22, Howarth 1957) between Eype Mouth and Thorncombe Beacon (NGR SY 4425 9120), one from the same level as the ?trace fossil horizon described in last year's Report (Ensom 1984a) and the other and richer sample from approximately 0.27 m below this horizon. The sieved residues from these samples were picked revealing a varied fauna which include the following species.

Scaphopoda	indet.
Gastropoda	<i>Procerithium</i> sp.
	<i>Promathildia</i> sp.

- Zygopleura or Katosira (2 forms)
- Actaeonina (2 forms)
- ?Pseudomelania sp. or Gymnocerithium sp. (determination based on sketch of specimen)
- Ammonoidea *Amaltheus* ?sp.
- Coleoidea indet belemnite
- Bivalvia *Nuculoma unguella* (Tate 1870)
- Dacryomya gaveyi* Cox 1960
- Grammatodon intermedius* (Simpson 1855)
- Modiolus scalprum* J. Sowerby 1818
- Oxyoma inequivalvis* (J. Sowerby 1819)
- Chlamys textoria* (Schlotheim 1820)
- Pseudolimea pectinoides* (J. Sowerby 1815)
- ?Lucinacean sp. nov.
- Mesomiltha plana* (Zieten 1833)
- Tutcheria submulticostata* (d'Orbigny 1850)
- Astarte* sp.
- Protocardia truncata* (J. de C. Sowerby 1827)
- Crinoidea ?*Balanocrinus* sp.
- Asterozoa indet fragments

Mr C. P. Palmer of the British Museum (Natural History) who kindly examined and identified the bivalves and gastropods suggested that the predominantly small size of the specimens, apparently representing a juvenile growth stage, may be a 'sterile expatriate' fauna. This is the term applied to a group of organisms which colonise a niche but never attain sexual maturity. The concentration of such deposits probably stems from current activity. These may be responsible for the concentration of a particular size of specimen, thus producing a bias in interpretation. The presence of these invertebrate rich silts within a hard cortex is reminiscent of some of the 'Crackers' nodules in the Lower Greensand of the Isle of Wight.

Reports on the Purbeck Limestone Formation in Dorset

The notes below make reference to sections through the Purbeck Limestone Formation at Durlston and Worbarrow Bays. Beds from the former are prefixed DB and are based on Clements 1969. The latter section is denoted by WB and is based on the section of Ensom in this volume. To save space, reference to these sections will not be made each time a bed number is given.

Specimens prefixed PCE.G. are part of the writers research collection for the Purbeck Limestone Formation. This material will, at a future date, be deposited in the Dorset County Museum, Dorchester.

Tectonic Fissures in the Marly Freshwater Member, Purbeck Limestone Formation, Worbarrow Tout, Dorset

P. C. ENSOM

Examination of the Marly Freshwater Member at Worbarrow Tout (NGR SY 869 796) during 1984 revealed several thin fissures none of which was seen to exceed 0.0084 m in width. They have been observed in WB 93, 96, 97 and 98, a series of micrites, pelmicrites and marls. They are seen particularly clearly in WB 97 (Fig. 1.1-3), a bioturbated micrite and pelmicrite.

The vertical extent of these fissures is difficult to ascertain. The upper fissures in WB 96, 97 and 98 are clearly connected and have a vertical extent of 0.8 m; that of WB 93, occurs approximately 1 m below the lowest observed extent of the upper fissures, but in the same vertical alignment, and is seen for 0.16 m. In both upper and lower fissures, a downward displacement of 0.01 m on the SE side has been observed. The fissure seen in WB 93 cuts through laminated micrites possibly representing playa lake sediments. The width of the fissure does not exceed 0.0065 m; at one point the fissure closes though displacement is still present. The fill is of pellets and small mudclasts, the latter probably derived from the wall of the fracture, in a micrite matrix. The fissure remains straight throughout. The strike and dip of the fissure were recorded. The beds were returned to horizontal using a stereo net. The fissure before folding had a strike of N 054°E (true) and a dip of 89°NW.

The upper fissures seen in WB 96-98 are seen to be from 0.03-0.07 m apart on a corrected strike of N 065°E (true) dipping at 84°NW. They show considerable variation in thickness (not greater than 0.0084 m) both vertically and horizontally (Figs 1.1, 2 and 3). Figure 1.1, a 'plan' view of one of these fissures, shows a series of slight sinistral displacements of sections of the fissure. Other samples show the same feature indicating at least some element of strike-slip in the movement.

The fill of these fissures is an ostracod microsparite with occasional pelmicrite. A rare geopetal present in an ostracod gives the opposite sense to the attitude of the ostracods in the host sediment. The ostracods sometimes show a marked drag effect

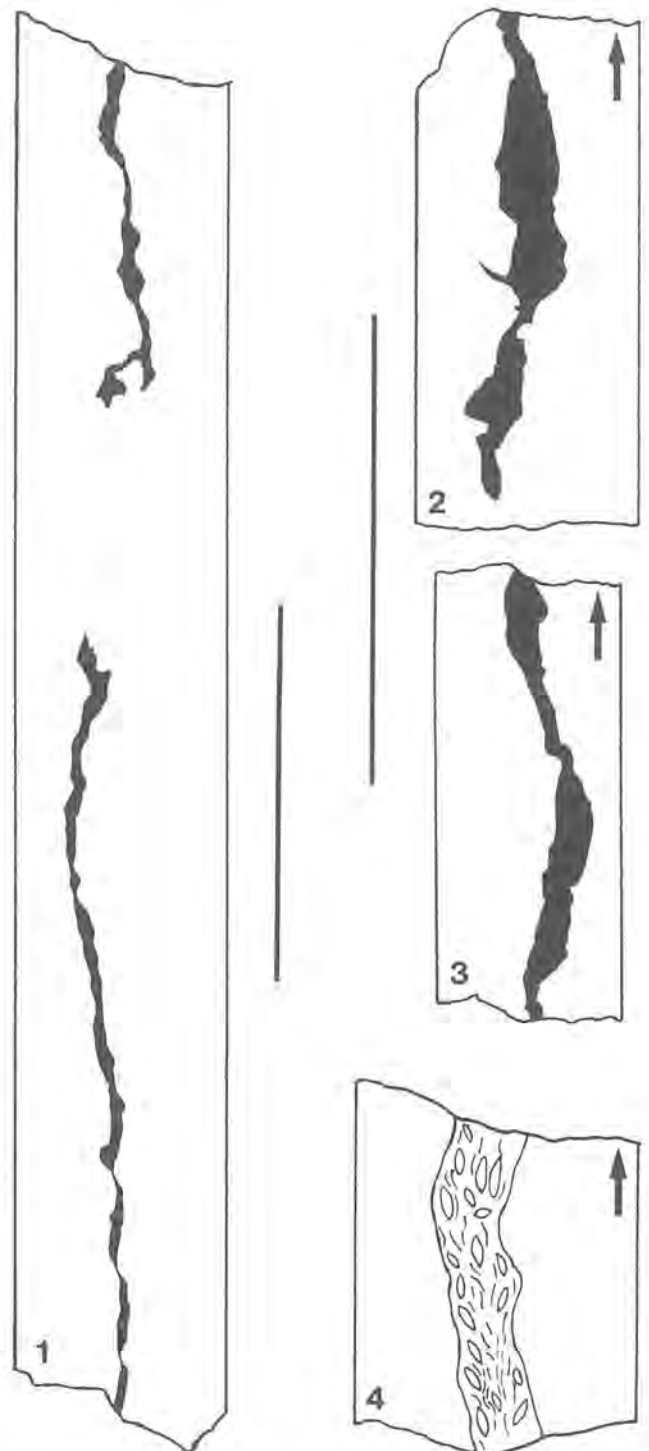


Figure 1. 1. Trace of the surface trace of a fissure over a polished surface of WB 97 (cut at 20° to normal of fissure). Gap represents area of poorly defined fissure margin; fill and host sediment very similar. PCE G72. Scale bar = 0.05 m. 1. 2 and 3. Vertical sections (taken 0.018 m apart) through WB 97 showing irregular side walls and thickness variation. PCE G71.i,ii. Scale bar = 0.05 m. Upper surface arrowed. 1. 4. Diagrammatical vertical section through fissure to show orientation of ostracods and shell fragments. Not drawn to scale. Upper surface arrowed.

along the margins of the fissures (Fig. 1.4) suggesting a sudden emplacement from above. A sinuosity of the fissure as it passes through the argillaceous sediments may be explained by later compaction of this more plastic host rock.

These interesting features may be small tectonic fissures produced when sediment is drawn into a fissure produced by tensional forces in the host sediment. Complex tectonic fissures on a larger scale have been described by Jenkyns and Senior (1977) for a Liassic palaeofault in West Dorset and C. J. T. Copp (pers. comm.) for fissures representing tensional fault related events over many millions of years in the Mendips. Other possible explanations are mudcracks, or neptunian dykes filling eroded cracks. The former can be discounted as there is no evidence of polygonal cracking, or an array of fissures in other directions, and the latter seems unlikely in view of the irregular nature of the fissure, the lack of smooth side walls and the apparently 'active' nature of the fill. On the other hand, the tectonic origin has in its favour, the sediment displacement, albeit small, the irregular nature of the fissures pointing to a sudden pulling apart of 'leathery' sediment, and the orientation of the ostracods and their rare geopetals suggesting a rapid drawing in of sediment which had been resting in a different attitude. A source for this sediment fill may no longer be represented in the strata, though bed WB 100, 0.27 m above the highest level of the fissure is an ostracod microparite. No link has been observed between the fissures and this bed. So far no other examples of this fissuring have been noted at this horizon on Worbarrow Tout.

The close proximity of the fissures in WB 93 and 96-98, their similar dips, strikes and displacement suggests that they are related. The apparent absence of a connection between the fissures may simply be due to the ability of the sediment between them to absorb the stress/movement without fracturing, a connection may exist but is unexposed at present.

I (Ensom 1984a) noted syn-sedimentary slumps higher in the Purbeck Limestone Formation on Worbarrow Tout and suggested minor earth tremors as a trigger mechanism. These small fissures may result from no more than localised stretching of sediment caused by slumping, though evidence of the latter is not seen in this part of the section. The alignment of these fissures with the axis of the Purbeck fold immediately to the north is interesting. Local movement along this line may have produced these features. West (1975) and Stoneley (1982) both allude to the likely presence of an active fault close to Mupe Bay, only 2.5 km west of Worbarrow Tout, during the deposition of the lower Wealden.

Derived fossils in the Purbeck Limestone Formation, Worbarrow Tout, Dorset

P. C. ENSOM

Silicified and phosphatised fossils are well known in ancient deposits, reworked from earlier strata. In the Purbeck Limestone Formation's Unio Member, West and Hooper (1969) described phosphatic fossils, derived from the Kimmeridge Clay and silicified rocks with fossils, from the Portland Limestone.

Some small samples of WB 153 (Scallop Member) from Worbarrow Tout (NGR SY 869 796) were treated with both dilute hydrochloric and acetic acids. From this sandy residue, silicified ostracods were isolated. Dr D. Baker kindly examined these for me and reports that 'there are specimens of *Mantelliana purbeckensis* (Forbes) and possibly a specimen or two of *Macrodentina* sp.' (pers. comm.). Anderson and Bazeley (1971) give the Cinder Member as the highest level in which *M. purbeckensis* s.s. is found, a view shared by Dr Baker (pers. comm.), though Clements (1973) records this species above the Cinder Member in the Intermarine Member (DB 132 and 138), Chief Beef Member (DB 208) and Upper 'Cypris' Clays and Shales Member (DB 240), though, perhaps significantly, not from the Scallop Member.

The residues from which the samples came, though rich in siliceous material, have not yielded silicified fossils other than ostracods. No authigenic quartz crystals have been observed and there is no other evidence of silicification within this horizon. Baker (pers. comm.) suggests that the Cherty Freshwater Member would seem a likely source for these specimens. Balanced against this is the apparent absence of other silicified invertebrates one might expect from the Cherty Freshwater Member, and the lack of records for *Macrodentina* sp. from that horizon (Clements 1973, Anderson and Bazeley 1971). Clements (1973) does record *Macrodentina* from the Intermarine Member up to the Chief Beef Member including the Scallop Member. Anderson and Bazeley

record *Macrodentina* spp. from the Portland Beds and probably basal Purbeck, and again in the Middle Purbeck.

While there is still uncertainty about the origin of the ostracods, other pebbles collected from the Purbeck Limestone Formation at Worbarrow Tout do help shed light on the erosion of earlier sediments. A number of pebbles collected by the writer have been examined by Mr Ross Garden of Southampton University whose research involves the examination of pebbles from Mesozoic strata in southern England with a view to determining their sources. Of relevance in this note are the clasts (fragments/pebbles) of algal micrite with pseudomorphs after celestite, pelsparite, and a serpulid and algal micrite. This latter clast was taken from bed WB 140, of the Intermarine Member and both Dr I. West and R. Garden have commented that a Lower Purbeck origin is a possibility (pers. comms.). The other clasts could represent pencontemporaneously derived sediments from different environments to those in which they were found. However the presence of pseudomorphs after celestite in some of them (R. Garden pers. comm.) certainly indicates an evaporitic origin and the Lower Purbeck Beds are a possible source.

The erosion of lower Middle and of Lower Purbeck horizons becomes more credible when the collection of a phosphatised internal cast of a perisphinctid ammonite (PCE G73) is recorded from WB 176. The specimen collected from the upper bedding plane of this bed, is identified as *Pavlovia* sp. (determination confirmed by C. van der Vyver and Dr W. A. Wimbledon pers. comms.) from the Upper Kimmeridge Clay. WB 176 lies at the top of the Corbula Member, and is considerably lower in the sequence than the derived Kimmeridgian phosphatic debris recorded by West and Hooper (1969) from the Unio Member at Friar Waddon.

I (Ensom 1984b) noted various proposals for the sources of the clasts in the Unio Member at Friar Waddon. The evidence of the few clasts mentioned in this note may support the hypothesis put forward by Stoneley (1982) that in the area to the north of the Purbeck disturbance there was uplift in the early Cretaceous. Stoneley (1982, p. 547) posed the question 'was the Wealden deposited to its full thickness, if at all, to the north [of the Purbeck disturbance]?' In the light of the above evidence it may be appropriate to ask, was the Purbeck Limestone Formation (especially that above the Cinder Bed) deposited to its full thickness, if at all, to the north of the Purbeck disturbance?.

A correction and additions to the distribution of *Ichnites* spp. in the Purbeck Limestone Formation of Worbarrow Tout and Durlston Bay, Dorset.

P. C. ENSOM

In 1982 I described the discovery of a fallen block of bivalve biosparadite with two natural casts of tridactyl footprints on Worbarrow Tout (NGR SY 869 796), Ensom 1982, DORCM G866. I suggested that the source of the block was from a limestone approximately 5.96 m above the 'Cinder Bed'. As a result of the production of the section of the strata on the Tout (Ensom, this volume) has been the realisation that this is incorrect. There is no doubt that the block was derived from WB 166 (Corbula Member). The 'clean separation' I noted is the product of a limestone resting on a black shale (WB 165) in which the footprints were made.

Close examination of the strata exposed on the Tout has led to the discovery of four additional and two probable horizons in which tridactyl footprints occur. These are briefly summarised below.

WB 113/114 (Cherty Freshwater Member). Two casts have been observed on the base of a massive biomicrite (WB 114) high up on the side of the Tout. The overhang on which they are preserved is impossible to get at. A fallen block on the shore was observed with what is believed to be a single cast preserved on its surface. Further examination of this specimen is thought desirable before making a formal record of it.

WB 124/5 (Intermarine Member). A loose block (PCE G76) of biosparite with two natural casts has been correlated with WB 125. The casts are well preserved and, remarkably superimposed in opposite directions. The one impressed furthest into the sediment of WB 124 (standing most prominently on the block) is thought to have been the first made. The second cast, though not so deeply impressed is apparently of similar size, and it is presumed that the surface upon which they were walking had hardened between the production of the first and second moulds. The dimensions of the casts are: 1. length (tip of central digit to extremity of heel) c. 0.35 m, breadth (between tips of lateral digits) 0.29 m, depth

impressed 0.09 m, 2. length obscured by cast of 1, breadth 0.37 m, depth impressed 0.055 m.

At Worbarrow Tout, two footprint bearing horizons have been recognised in WB 145 (Intermarine Member). El-Shahat (1977) has correlated this bed with a limestone in Durlston Bay, DB 144, which was identified as the Laning Vein by Austen (1852), Bristow in Damon (1884) and El-Shahat and West (1983). If correct this is of interest, as the excavations at Townsend Road, Swanage, in 1981 (Ensom 1982) are believed to have been in strata immediately below the Laning Vein. The first is between 0.66 and 0.7 m below the top of the bed. At this level there is a thin, often iron-stained, marly horizon. At one point a mass of superimposed moulds were observed. The complexity of this mass of prints made distinguishing any one print difficult, however the following measurements were taken from one more readily identifiable mould: length 0.27 m, breadth 0.25 m. At another point on the section, a single cast on the base of the limestone overlying this marly parting was observed: length 0.24 m, breadth 0.23 m, (n.b. this specimen was very weathered). The axis of this one cast, after correction for the dip of the strata had a true bearing of N 229°E.

Another bedding plane 0.11 m below the top of WB 145 also has tridactyl footprints present on the surface (?natural moulds). These were recognised by Mr S. Lake and the writer. The very weathered surface on which they occur makes recognition difficult and no trackways were discerned. One mould was measured: length c. 0.23 m, breadth c. 0.3 m. The axis of this print, after correction for the dip of the strata has a true bearing of N 191°E. Another print apparently not related to the one noted above, was too badly weathered to be measured, but appeared smaller. The bearing of the axis of this print after correcting for dip was true N 183°E.

WB 165/166 (Corbula Member). See first paragraph of this note.

WB 177/178 (Chief Beef Member). Possible casts have been observed on the underside of a biosparite resting on shale.

WB 196 (Chief Beef Member or Broken Shell Limestone Member). 0.06 m below the top of this bed, two distortions of the same bedding planes were noted. They were seen in section only. Despite the poor exposure, I believe that they may be footprints. One exhibited disturbance of strata to a depth of 0.09 m and was 0.25 m wide. The disturbance had taken place along a white marly layer within a shelly limestone. Within the disturbance, shells were not horizontal as they were in the surrounding limestone, and sediment had been displaced below the marly layer.

Further observations need to be made on the occurrences in WB 178 and WB 196.

In Durlston Bay (NGR SZ 0360 7835) new tridactyl footprint horizons have been located in the Intermarine Member, DB 116b, 117/118, 121 and possibly in DB 116a. Several natural moulds of tridactyl footprints were examined on fallen blocks and on an *in situ* slab of DB 116b. These generally shallow indentations appear to have been produced by a dinosaur walking over a well consolidated/firm ostracod rich mud with occasional thin black shale intercalations present close to the surface. The shales which rest on this surface were nowhere observed to have had their bedding disturbed, even where resting on one of the digits' impressions. The following dimensions were obtained: 1. length c. 0.2 m, breadth 0.33 m, 2. length 0.21 m, breadth 0.25 m, 3. length 0.19 m, breadth 0.28 m. The axis of 1 had a true bearing of N 299°E. Those in DB 117/118 appear as casts on the underside of DB 118. Examination of a fallen block from this bed which also contained casts showed no distortion of the bedding supporting their identification as natural casts. The *in situ* prints were not well preserved, but one provided the following measurements: length 0.26 m, breadth 0.19 m on a true bearing of N 229°E. A large fallen block from the same bed was discovered later. Two natural casts were present, both made by the same animal. As is so often the case measurements are subject to some inaccuracy because of damage to the block and erosion of the casts: 1. length c. 0.38 m, breadth >0.3 m, 2. length c. 0.3 m, breadth >0.3 m. The pace, measured from toe to toe, was 1.09 m and from heel to heel 1.14 m. As both toe and heel on different prints were imperfect, this can be taken as a slightly lower estimate of the actual pace.

DB 121. A partially exposed overhang 1 m above the top of DB 118 was found to have a tridactyl cast present. El-Shahat and West (1983) tentatively equate this limestone with the Freestone. Footprints have been recorded from inland exposures of this horizon (Delair and Lander 1973). The specimen, like those in DB 118 is not deeply impressed, especially the lateral digits. The shape and size also correspond closely to those mentioned above: length 0.21 m, breadth 0.28 m, true bearing N 279°E. This print was present at a thin flaggy horizon.

A tentative record can also be made for DB 116a. The upper surface of a limestone of a variable thickness was seen to have been distorted downwards. The sediment on the exposed edge was seen to have moved from under the depression to cause slight bulging of the surface. A thin bedding plane was observed to thin rapidly into the depression as if it had been squeezed out. Although only part of this feature was preserved, the impression obtained by the writer was that its origin could well have been the foot of a dinosaur.

Pyriporopsis portlandensis Pohowsky 193, a bryozoan from the Scallop Member, Purbeck Limestone Formation, of Worbarrow Tout, Dorset

P. C. ENSOM

A fallen block of limestone from the Scallop Member (WB 147-153), probably WB 149, of Worbarrow Tout (NGR SY 869 796) has yielded a specimen of the cheilostome bryozoan *Pyriporopsis portlandensis* Pohowsky 1973; I am grateful to Dr P. D. Taylor who identified the specimen and who supplied some of the information given in this brief account.

The specimen (PCE G74) was found attached to a valve of *Chlamys* sp. No other specimens similarly encrusted were found at the time of discovery and despite vigorous scrutiny of the Scallop Member no further material has yet been recovered. Gregory (1896) and Woodward (1895) do not record any bryozoans from the Purbeck Beds, and the former goes further by specifying that bryozoans have not been found in these strata in either Britain or abroad. This particular species has been recorded only from the Portland Limestone Formation (range Portlandian *okusensis-anguiformis* zones) of southern England (Buckinghamshire, Wiltshire and Dorset) (Taylor 1981). Using the suggested correlation of Kelly (1983) between the Mintlyn Beds and the Durlston Beds (Lower Cretaceous, Purbeck Limestone Formation) the upper limit of this species range can be now be placed in the Ryazanian *kochi* zone. Morter (1984) disagrees and follows Casey *et al* (1977) correlating the 'Scallop event' with the basal late Ryazanian transgression at the base of the *icenii* zone.

With any new species from the Purbeck Limestone Formation one is interested to see what may be revealed in terms of habitat and possible source of the marine pulses. As far as the latter goes, *Pyriporopsis portlandensis* is the earliest recorded cheilostome bryozoan and Dr Taylor states that any connection with either Boreal or Tethyan realms is not clear. He points out that 'some recent cheilostomes live in brackish environments and there is no reason why *Pyriporopsis portlandensis* did not do likewise'.

New bivalve records from the Purbeck Limestone Formation, Dorset

P. C. ENSOM

A single specimen of a bivalve tentatively identified as *Pleuromya* sp. (PCE G75) by C. P. Palmer, was collected from the base of the Cinder Member (DB 111a) in Durlston Bay, NGR SZ 0360 7835.

At Worbarrow Tout (NGR SY 869 796) two specimens of a lucinid have been observed on loose blocks from the Scallop Member. One was collected (PCE G37) and the identification confirmed by C. P. Palmer. The specimen collected was thought to have come from WB 149; the second specimen, poorly exposed and not collected, was identified as coming from WB 147.

The bivalve faunas of the Purbeck Limestone Formation are reviewed by Arkell (1947) and Kelly (1983), though neither mention lucinids or pleuromyids. Morter (1984) records '*Pleuromya*' sp. as one element of his 'Marine Association' in the Purbeck-Wealden Beds of the 'Weald and adjacent areas'.

A barnacle from the Cinder Member, Purbeck Limestone Formation, Worbarrow Tout, Dorset

P. C. ENSOM

The Cinder Member is the lowest of the three horizons in the Cretaceous, Purbeck Limestone Formation where bivalve faunas indicate a marine influence (Kelly 1983).

I (Ensom 1984a) figured and discussed a slab of vertically stacked valves of *Praeexogyra distorta* from this horizon (WB 120) at Worbarrow Tout (NGR SY 869 796). On the surface of the specimen a reasonably well preserved but isolated right tergum of a barnacle (DORCM G7260) was found. Dr M. Whyte kindly

examined a plaster of paris replica. He states that it is from a juvenile cirripede and tentatively suggests that a comparison may be made with *Archaeolepas suprajurensis* (de Loriol) (pers. comm.). Barnacles are regarded as fully marine organisms but their ability to tightly close their valves does enable them to withstand fluctuations in salinity (Green 1968).

This discovery adds a new species to the varied fauna of this deposit. Withers (1928) gives a distribution of this species in the Upper Kimmeridge Clay of Northern France. If the identification is confirmed, this discovery extends the range of this species to the basal Ryazanian *runctoni* zone (Cope *et al* 1980).

There may be some value in investigating the distribution of barnacles in the Lower Cretaceous to see if there is any indication as to the position of the marine basin whose increased influence was responsible for the Cinder Member.

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A new exposure of the Corallian Beds in north Dorset

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Considering the demise through infilling of so many quarries in the Corallian rocks of Dorset, it is pleasing to record a major new exposure in an excavation opened during 1984 by Mr R. D. Harris near Silton in north Dorset. At its maximum extent, the quarry revealed a 5 m section in the Osmington Oolite and Trigonía clavellata Formations. No other exposure through this interesting sequence of strata has been seen in modern times in this part of

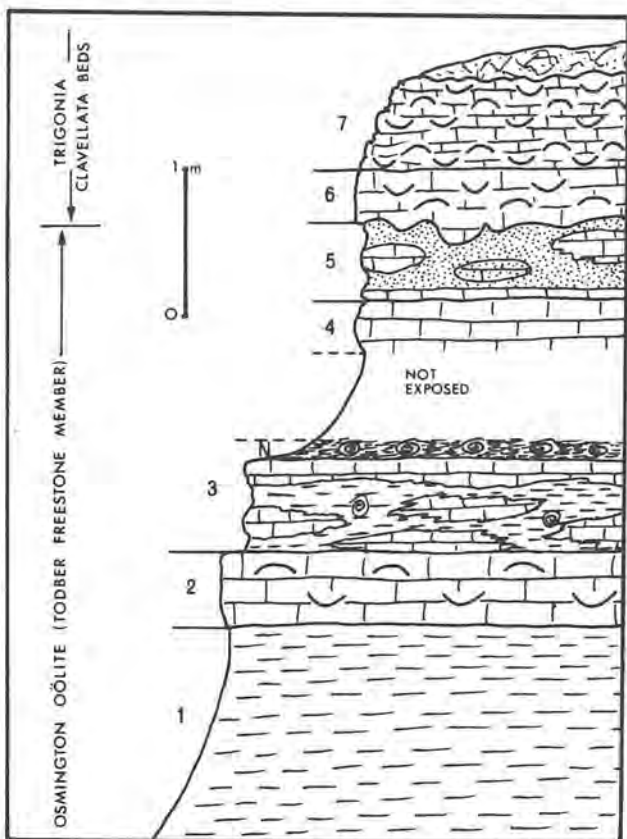


Figure 2. Section of the strata exposed in Whistley Farm New Quarry, Silton, North Dorset, in June 1984.

north Dorset. The quarry was close to an infilled section known as Whistley Farm Quarry, and the present exposure may be termed Whistley Farm New Quarry, NGR ST 779 284.

Like many new exposures in only partially understood areas, this one revealed new and unexpected features, and only relates partially to other exposures in north Dorset. Elsewhere, the Trigonía clavellata Beds rest on a clear erosion surface cut in Osmington Oolite and it is easy to draw a line between the two formations. At the New Quarry, there are several horizons at which the line could be drawn. The problem can be demonstrated by means of a brief description of each bed as set out in Figure 2.

The base of the section was in the white, micritic limestone (1) mapped previously over this area as the Todber Freestone Member of the Osmington Oolite Formation by myself (Wright 1981). No. 2 comprised a fine-grained bed of shelly, sparry oolite with frequent *Myophorella* ('Trigonía') sp. This is our first candidate for the lowest Trigonía clavellata Beds. However, beds containing *Myophorella* are common throughout the English Corallian, and specific identification is necessary to determine the exact horizon. The *Myophorella* from Bed 2 are too poorly preserved for this. The beds grouped under (3) are typically Osmington Oolite in facies, and I feel that in (2) we are dealing with an Osmington Oolite shell bed.

No. 3 comprised a series of sandy, bioclastic marls alternating with irregular beds of fine micritic oolite. Gastropods were common, including *Pseudomelania heddingtonensis* (J. Sowerby), *Bourguetia striata* (J. Sowerby) and *Natica* sp. 'N' marks a thin bed of grey clay containing innumerable internal moulds of *Natica* sp. and occasional *Nucleolites scutatus* (Lamarck) and fragments of reptile bone. No. 4 consisted of very fine micritic oolite similar to No. 2, but not so fossiliferous. The predominant constituent in Bed 5 was very fine, argillaceous quartz sand, in which were set lenses and irregular beds of fine sparry oolite. The basal Trigonía clavellata Beds on the Dorset coast contain much fine quartz sand, and so in (5) we have the second candidate for the basal Trigonía clavellata Beds.

Nos 6 and 7 consisted of very typical Trigonía clavellata Beds – irregularly bedded, sandy, shelly, sparry oolite full of the moulds of *Myophorella clavellata* (Parkinson). The extremely irregular base to (6) might be considered to represent the irregular, erosive base to the Trigonía clavellata Beds. Thus, there are three possible places to draw the base – below Beds 2, 5 and 6. That it does indeed lie below Bed 6 can be demonstrated by an examination of the insoluble residues left when specimens of the limestones are dissolved in acid. All limestones here contain quartz sand ranging from 1.5 per cent to 6 per cent of the rock. In Beds 1 to 5, the quartz sand is predominantly very fine grained, with the fraction greater than 177 microns in size rarely exceeding 1 per cent of the total sand. In contrast, in Beds 6 and 7, very fine grained sand is only a minor proportion and sand greater than 177 microns comprises 30 per cent of the total sand. There can be no doubt that there is a marked change in the nature of the terrigenous sediment being brought into the area at the base of Bed 6, and that this is the junction between the Osmington Oolite and Trigonía clavellata Beds.

A special mention must be made of the very varied fauna present in the Trigonía clavellata Beds. In addition to *M. clavellata*, I was able to collect: *Gervillia aviculoides* (J. Sowerby), *Nanogyra nana* (J. Sowerby), *Chlamys superfibrosa* Arkell, *Camptonectes lens* (J. Sowerby), *Pholadomya aequalis* (J. de C. Sowerby), *Pleuromya uniformis* (J. Sowerby), *Modiolus bipartitus* (J. Sowerby) and *Ceratomya* sp. Many ammonites occurred, including *Perisphinctes* spp. and *Amoeboceras glosense* (Bigot and Brasil). Gastropods were again common as internal or external moulds, including *Natica* sp., *Pleurotomaria* sp. and *Cerithium* sp.

J. Streatfield of the Dorset Environmental Records Centre examined a core from a borehole sunk by Mr Harris into Osmington Oolite beds below the Todber Freestone and noted that the micrite (1) rests on 1.46 m of buff, sandy marl, and this on 3 m plus of grey clay. Such clay at this horizon occurs near Sturminster, but this is the first record of it so far north. The author's cross section (Wright 1981, fig. 5) needs amending accordingly.

An ammonite fauna preserved in rock fragments dredged from Lyme Bay

C. VAN DER VYVER

A collection of fossiliferous rock fragments, donated to the Dorset County Museum by Mr E. Taylor in 1981, has been found to

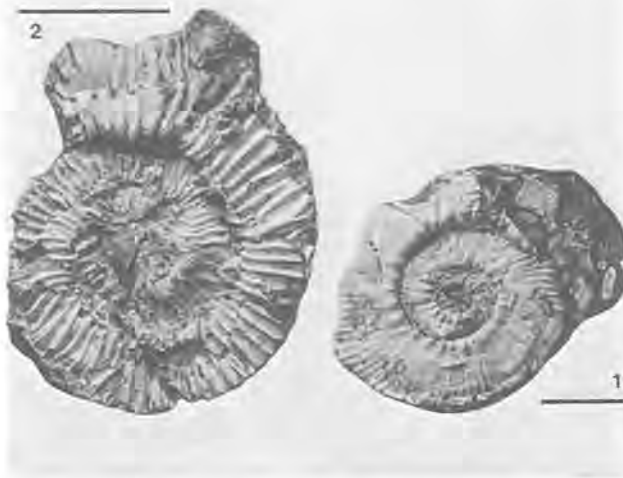


Plate 2. 1. *Aulacostephanus autissiodorensis* (Cotteau) DORCM G8599; 2. *Propectinatites* sp. DORCM G8593. Scale bars = 0.05 m.

contain an extremely interesting ammonite fauna of Lower Kimmeridgian (Jurassic) age. The fragments were dredged up by a fishing vessel in Lyme Bay, west of Portland Bill (Grid Ref: SY 650-675/725-730). These calcite-cemented oil shale fragments have been water-worn, to resemble discus-like lenses or nodules. They are not, however, related to the more characteristic Kimmeridgian 'septarian' nodules, so common on the shores and slopes at Black Head, Wyke Regis and the Fleet. The individual fragments have also suffered a considerable amount of modern bio-erosion, principally from boring bivalves, and encrusting serpulids and bryozoans. Interestingly, the preserved ammonites themselves were similarly encrusted by an ancient serpulid and oyster epifauna, before their burial beneath highly organic sea-floor muds. At times it is difficult to distinguish between modern and ancient growths.

The ammonites are crushed flat, as is so often the case with Kimmeridge Clay specimens, and are preserved in pearly-white aragonite. Three specimens (DORCM G8599-8601) are recognisable as *Aulacostephanus autissiodorensis* (Cotteau) (Pl. 2.1), the index species of the uppermost zone of the Lower Kimmeridgian in Britain. The remaining specimens (DORCM G887-890, G8591-8598 and G8602-8610) are readily accommodated in the pectinatitid genus *Propectinatites* Cope (Pl. 2.2). They all show the diagnostic coarse, 'untidy', mainly bifurcate ribbing of the holotype *P. websteri* Cope, from, most probably, the same horizon. The specimens, however, do show a wide variation in rib density, anticipating the group's later development to forms named *Eosphinctoceras* Mesezhnikov, *Pectinatites* Buckman, *Sphinctoceras* Neaverson, and *Virgatixioceras* Arkell. All the specimens, though incomplete, appear to be macroconchs. This is a function of sea-floor survival and dredge potentials, rather than a reflection of the original population. The variation seen in these pectinatitids and the aulacostephanids, together with the lithology, allows precise correlation to bed KB 54(f) of the type section in Kimmeridge Bay (Van der Vyver, M. S.). This bed yields the same fauna, in great numbers, in Kimmeridge Bay and Brandy Bay to the west. Complete specimens are difficult to collect, however, as they suffer a great deal more at the hands of subaerial weathering. The macroconchs vary from between 150 mm and 350 mm, a range which includes all the dredged specimens.

Unfortunately Lower Kimmeridgian early pectinatitid taxonomy remains in some doubt. *Propectinatites* was originally proposed for this group of ammonites from Kimmeridge Bay (Cope 1968b), having been previously, incorrectly, attributed to *Lithacoceras* (Arkell 1947, pp. 66, 73) and *Subplanites* (Ziegler 1962, p. 13). *Propectinatites* is also clearly related to the conservative genus *Subdichotomoceras* Spath, from the *autissiodorensis* Zone of Speeton Bay, Yorkshire (Birkelund *et al* 1983, p. 302), and may, in due course, prove to be a junior subjective synonym of it. Nevertheless, the style of ribbing, based on type specimens is somewhat different. Likewise, the range of variation between

specimens found in the two areas does not appear to overlap very much. So the future of the name *Propectinatites* will remain in doubt until the coastal sections are described and understood more completely. To this end, these specimens are to be discussed more fully in a subsequent, more detailed, publication on the *autissiodorensis* Zone of Dorset.

A preliminary note on the flora of the Corbula Member (Purbeck Limestone Formation) of Worbarrow Tout, Dorset

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[The grey micrite, WB 161 (Ensom, this journal), which lies at the top of the folded sediments in the Corbula Member of Worbarrow Tout (NGR SY 869 796) was seen to contain rare insects and plant debris. Acid preparation yielded a rich sample which Dr C. R. Hill (British Museum (Natural History)) has examined. He hopes to carry out further work on these and additional samples. Dr Hill has supplied the following preliminary note. P.C.E.]

'The hydrochloric acid disaggregated sample was concentrated by sieving, followed by treatment with 48 per cent hydrofluoric acid for several days, then washed and again concentrated by further sieving. The assemblage obtained is dominated, well over 90 per cent numerically, by detached leaves and leafy shoots of the extinct conifer *Cupressinocladus valdensis* (Seward) Seward. This is described as the dominant conifer of the Purbeck Formation by J. E. Francis (1983). As with Francis' material from elsewhere in the Purbeck Beds, male cone material (*Classostrobus* sp. A of Francis) is associated with the leafy shoots at Worbarrow Tout and may be attributed to the same plant.

'Other plant remains which are comparatively rare within the sample include the following: megaspore (as yet undetermined but well preserved); fusainised pinnules of a fern (?*Gleichenites*); conifer with bifacial needle leaves similar to those of *Bilsdalea*. There are also coniferous leaves which are notably hairy, with an apparently female cone-scale of cheirolepidiaceus form having the same kind of long hairs. These may represent extreme variants of *C. valdensis* (of which the female cone is unknown) or may represent a distinct species. Further work is needed.'

Dinosaur footprints and early cementation of Purbeck bivalve beds

IAN WEST AND ADAM EL-SHAHAT

Most of the Purbeck dinosaur footprints have been preserved because of early cementation of the shelly limestone. A recent paper by Adam El-Shahat and Ian West (1983) on the origin of these Middle Purbeck shell limestones includes a Durlston Bay section with dinosaur footprint beds shown. The paper states that dinosaur 'footprint horizons are from Delair and Lander (1973), the prints having mainly been found in inland quarries'. Delair and Lander indicated in their fig. 2 of their very useful paper that footprints have been found in beds 69 and 70 of Bristow's Durlston Bay section (in Damon 1884). It is only these two beds, however, which are labelled as 'Corbula Beds' in the list of Delair and Lander whereas, in fact, Bristow listed this unit (or member) as comprising beds 59-70. The original report of the footprints is probably that of Mansel-Pleydell (1896) who simply referred them to the Corbula Beds without being more specific. Adam El-Shahat and Ian West regret having erroneously indicated a specific horizon (and in any case a bed lower than intended). In fact the position of the footprint horizon within the Corbula Member is at present not known. The El-Shahat and West paper does suggest that beds 161 and 178 (bed numbers of Clements 1969) have undergone diagenesis appropriate for preservation of footprints. Obviously further information on footprint horizons in the Corbula Member is needed.

A report of a supposedly new discovery of footprints at Worbarrow Bay (Delair and Brown 1975) which were tentatively referred to the Lower Purbeck Beds has recently been corrected regarding the horizon (Ensom 1982 and 1983). These footprints have, in fact, long been known and were mentioned in an earlier publication (West, Shearman and Pugh 1969, p. 338) as belonging to the Intermarine Beds of the Middle Purbeck Beds. They are on the top surface of bivalve biosparrodite 27b of El-Shahat (1977, p. 27 and Fig. 13) (WB 121b, Ensom, this journal) which may correlate with Clements' Durlston Bay bed 113 ('Rotten Grey Bed' of Fisher 1856 or 'Upper Tombstone Bed' of Bristow in Damon

1884) and notable for pterodactyl, crocodile and other vertebrate remains.

The writers wish to thank Paul Ensom for drawing their attention to the error regarding the Corbula Member.

Research into the behaviour of sediments, the geomorphology and structural geology of the Isle of Purbeck

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The rock and soil mechanics testing programme for the materials forming the Purbeck coastline and the Purbeck fold is continuing. The data sets already published (Jones, Allison and Gilligan 1984, Jones, Bedford and Clayton 1984) are thus being augmented. This forms part of an expanding research interest in the structural geology and geomorphology of the Isle of Purbeck area being undertaken in the Geology Depts. at King's College and University College London and the Geography Dept. at King's College London. Major research currently falls into three areas: experimental and theoretical studies of material behaviour, broad-based geomorphological investigations and examination of the structural geology. Identifying links between the structural geology and geomorphology is a major facet of this research.

The experimental and theoretical studies of material behaviour currently being undertaken as parts of specific research programmes are as follows:

(1) Studies of the Portland Limestone using triaxial and sonic testing apparatus and theoretical studies of the stability and mechanisms of failure of Portland Limestone cliffs (R.J.A. and M.E.J.).

(2) Studies of the mechanical behaviour of clays in the Wealden Beds using Soil Mechanics testing techniques and analysis of slope failures in the Wealden Beds. Detailed site monitoring of slope movements and of the variables governing slope stability complements the laboratory and computer analysis (R.J.A.).

(3) Studies of the mechanical behaviour, diagenesis and geological structure of the Purbeck Chalk using triaxial testing, field studies, electron microscopy and theoretical methods. The unique strain gradients in the Purbeck Chalk are being used as a model for chalk deformation and burial generally (M.E.J.).

(4) Experimental studies of the dolostones, hard shales and calcite cemented mudstones from the Kimmeridge Clay of Dorset. These studies are directed at understanding the mechanical behaviour of the Kimmeridge Clay during burial and diagenesis, and particularly to improve our understanding of the formation of the expansional mega-polygons in the dolostones (Bellamy 1977). The apparatus being used for this study is a high temperature/high pressure triaxial cell which has a gas pressure system. This research programme will provide data similar to that for the Chalk (cited above) which will be generally applicable to studies of sediment deformation. The first results of this work were presented at the Deformation Mechanisms in Sediments and Sedimentary Rocks Conference, held in London in April and will be submitted for publication in this journal for 1986 (R.M.F.P.).

The continuing study and quantification of the geomorphological evolution of the Purbeck Coastline is using these growing data sets of rock properties. The general model presented in this journal last year (Jones, Allison and Gilligan 1984) has not been substantially altered by this more recent research although our understanding of the specific processes involved has advanced substantially (R.J.A. and M.E.J.).

The structural geology studies, considering both the small and large scale structures in the Isle of Wight-Purbeck-Weymouth Anticlinal axis are continuing, with particular interest in the timing of deformation and the syn-tectonic modification of the geometry of the structure by surface geomorphological processes. In addition to these considerations, the mechanisms of deformation in the Chalk, the Wealden and the Purbeck Beds are being examined, especially the roles of pore fluid pressures, consolidation and pressure solution. Fracturing and the tectonic significance of the Broken Beds are also being studied (M.E.J.).

We wish to point out that figure 20 in our paper (Jones, Allison and Gilligan 1984) was published incorrectly. The inclined irregular line represents sea level and should be orientated to the horizontal.

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Brachiopods from the Jurassic Abbotsbury Ironstone, Abbotsbury

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ABSTRACT

Elements of the Lower Kimmeridgian Abbotsbury Ironstone brachiopod fauna are revised as a result of obtaining transverse serial sections of their internal structures. 'Aulacothyris' dorsetensis (Davidson) is now referred to the genus Rugitela, and a lectotype is selected. Aspects of brachiopod evolution and palaeoecology are considered.

This note records the initial results of a revision of two terebratulid species, *Ornithella lampas* (J. Sowerby) and *Rugitela dorsetensis* (Davidson) from the Lower Kimmeridgian of Abbotsbury, carried out at Queen Mary College, Department of Geography and Earth Science, London and the Department of Palaeontology, British Museum (Natural History), London.

The Abbotsbury Ironstone of *cymodoce* Zone, Upper Jurassic age, from the environs of Abbotsbury is essentially a fine-grained quartz sandstone with varying amounts of limonitic oolite (Brookfield 1973). From the Abbotsbury Ironstone Brookfield records the following brachiopods: the rhynchonellid *Septaliphoria huddlestoni* (Rollier); the terebratulid *Terebratula subsella* Leymerie; the terebratulid *Ornithella lampas* (J. Sowerby) and *Aulacothyris dorsetensis* (Davidson); and the inarticulate brachiopod *Lingula* sp. This is a rich and varied brachiopod fauna from the British Kimmeridgian. The investigation of the internal structures of brachiopods is important in their classification and this has been done by taking transverse serial sections of specimens and taking an acetate peel of each ground surface to provide a permanent record. I intend to publish the results obtained by serial sectioning (Sandy 1984) at a later date.

From internal and external examination *Ornithella lampas* appears to be close to the main *Ornithella* stock. One adult specimen has been sectioned (specimen number BB 86864, British Museum (Natural History), length 32.6 mm, width 21.0 mm, thickness 19.9 mm) and shows the typical secondary callus thickening of this genus, the 'posterior weighting' that presumably acted as anchorage when the pedicle atrophied. Strong dental lamellae and a broad flat septalium with a weak median ridge are present internally. Owing to poor preservation of the internal structures it

was not possible to trace the loop anteriorly. The serial sections of *Russiella truncata* (Gerass.) and *Russiella clemenci* (Lehm.) in Makridin (1964, Figs 117 and 114) from the Volgian of the Russian Platform tend to confirm that they are closely related to *Ornithella* s.s., and are referred to *Ornithella* ? *truncata* and *O.* ? *clemenci*. The ornithellid stock is believed to continue into the Cretaceous (Owen 1965, p. 51) and the Aptian occurrence of *Vectella* Owen marks the return of this group to the British Isles.

Muir-Wood intended revising the genus *Aulacothyris* (1936, p. 106) but unfortunately this work did not appear and the genus is still in need of such. *Aulacothyris* has become something of a 'bucket' genus for sulcate terebratulids, and so too with *Aulacothyris dorsetensis* (Davidson). I have sectioned a specimen of this species and refer it to the genus *Rugitela* Muir-Wood. Internally the specimen (BB 86861, length 17.0+, width 17.1, thickness 10.4) shows a concave septalium, anteriorly developing a median ridge, which with the inner socket ridges, hinge plates and septalial plates gives a 'W' shape in transverse section. Lateral spines are present on the descending branches of the loop. Delance (1974, p. 355) referred the sulcate Upper Oxfordian terebratulid *Terebratula impressa* Von Buch to *Aulacothyris*. My research shows that this species belongs to the genus *Rugitela*, which as with *R. dorsetensis* possesses a well-developed median ridge in the septalium. The Lower Cretaceous Claxby Ironstone from Lincolnshire is a comparable lithofacies to the Abbotsbury Ironstone. *Rugitela hippopus* (Roemer) and *R. rugosa* Owen are recorded from the Claxby Ironstone (Owen 1965). *R. hippopus* and *R. dorsetensis* are both sulcate, and the former species may be derived from the latter, although no stratigraphically intermediate sulcate *Rugitela*-like terebratulids were described from the Russian Platform by Makridin (1964). However, sulcation is believed to be largely environmentally induced in brachiopods and may not necessarily reflect common ancestry. The degree to which sulcate Upper Jurassic species of *Rugitela* represent palaeoecological niche replacement of Liassic species of *Aulacothyris*, for example, *A. resupinata* (Sowerby), has yet to be established.

The two terebratulids *Ornithella lampas* and *Rugitela dorsetensis* from the Abbotsbury Ironstone can be distinguished externally by the carinate pedicle valve, elongate-oval anteriorly tapering outline and the ligate anterior commissure of *O. lampas*. Elongate specimens of *R. dorsetensis* possess an incipient sulcation which helps to distinguish them from juvenile specimens of *O. lampas*. From the series of specimens of *Rugitela dorsetensis* illustrated by Davidson (1882, pl. XXIV, Figs 6-8) the specimen represented by Figure 6 is selected as lectotype for the species. This specimen (B 27321, Walker Collection, BM(NH)) is decorticated when compared with Davidson's original illustration, Plate XXIV, Figure 7 is believed to be a juvenile of *Ornithella lampas*.

The terebratulid *Terebratula subsella* Leymerie from the Abbotsbury Ironstone is believed to belong to the genus *Kutchithyris*, in agreement with Middlemiss (1980) who sectioned material of this species from the Kimmeridgian of Le Havre, France. *Kutchithyris subsella* is certainly a variable species, and stratigraphic and ecological varieties may well be present within it. Investigation of topotypic material from the 'Calcaire rocailleux', Upper Oxfordian of Aube, Paris Basin is required in a revision of this species, and may lead to an emendation of this discussion. Cooper (1983, p. 167, pl. 31, Figs 7-16, pl. 73, Figs 17, 18) places the forms from the north coast of France in the new genus and species *Xestosina arguta*. He refers Leymerie's '*T.*' *subsella* (1846, Pl. 10, Fig. 5) to *Habrobrochus*, a new genus. A specimen from the Kimmeridgian of Linden, near Hanover, West Germany was excavated by him. Cooper erected *Dolichobrochus* for '*T.*' *excavata* Deslongchamps from the Callovian of France, a 'brachiopod hitherto . . . identified as *Terebratula subsella*' (1983, p. 74).

In a discussion of the brachiopods from the Abbotsbury Ironstone Brookfield states (1973, p. 269) 'Perhaps it should be noted here that *Ornithella lampas* and *Terebratula subsella* could be simply different growth stages of the same species, as the characteristic commissure of '*T.*' *subsella* does not develop until about 2 cm in size, and below this their range of variation is very similar to *O. lampas*.' Such dimorphism of these two adult forms would indeed be very striking within one morphological species, but knowledge of their internal structures shows that these two species belong to different suborders within the Terebratulida.

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On the identity of the Upper Jurassic, Portland Beds bivalve 'Arca' foetida Cox, 1929

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ABSTRACT

Hitherto, specimens of Jurassic *Hiatella* have been commonly misidentified. The generic allocation of 'Arca' foetida Cox was in doubt until 1980, when the present author placed it in *Hiatella*. Further studies indicate that the species name should also be revised to *H. arcadiformis* (Keeping), the types of which were originally referred to *Modiola*. Records of Upper Jurassic *Hiatella* have not generally been well documented, but occurrences in USA, Europe and the Russian Platform are briefly reviewed.

L. R. Cox (1929, p. 140) in his classic but now dated 'Synopsis of the Lamellibranchiata of the Portland Beds of England' described 'Arca' foetida from the Portland Sand ('Stinkstone') of Hounstout, Dorset and from the Hartwell Clay of Buckinghamshire. The bivalve had the general appearance of an elongate arcid, having a distinct posterior carina and a slight indentation of the ventral margin under the umbo.

Arkell (1935, p. 310), rather rashly, referred the specimens to *Parallelodon* (*Beshausenina*) foetidum (Cox), even though the hinge had still not been seen. However, he accurately noted the level at which the specimens occurred at St Albans Head, in bed 11 of the Emmit Hill Marls and bed 13, the White Cementstone, both in the Emmit Hill Beds of the Black Nore Member of the Portland Sand Formation (Townson 1975, p. 620) and which were placed within the *Progalbanites albanii* and *Glaucolithites glaucolithus* Zones respectively by Wimbledon and Cope (1978, p. 186). The Hartwell

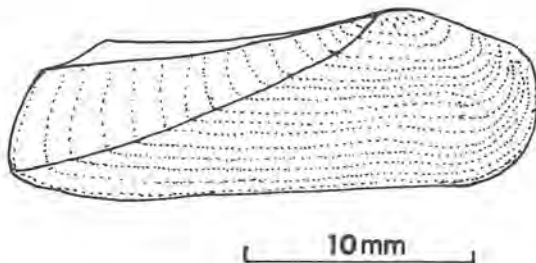


Figure 1. Sketch of *Hiatella* (*Pseudosaxicava*) *arcadiformis* (Keeping), based on SMC X1176-1179, loose block from the White Cementstone (Arkell 1935, bed 13), Emmit Hill Beds, Black Nore Member, Portland Sand Formation; foot of cliffs, south-east side of St Albans Head, Dorset. SY 965754.

Clay has been dated as the slightly earlier *Pavlovia pallasioides* Zone (Casey 1967, p. 130). These zones, assigned to the Portlandian and Upper Kimmeridgian stages, may be correlated, as shown by Casey (1967) with the Middle Volgian stage of the late Jurassic.

Further Middle Volgian specimens were described by Kelly (1980) from the highly condensed Basal Spilsby Nodule Bed in Lincolnshire. He identified them as *Hiatella* (*Pseudosaxicava*) foetida (Cox). The specimens showed a straight hinge-line without taxodont dentition and having sometimes only a single tooth in each valve, located immediately under the beak. The posterior area was bounded at the escutcheon by a second posterior carina. Two ecological morphotypes were recognised: the first having a restricted shape, reduced projecting ornament and crowded growth lines, consistent with their having grown within the restricted area of flask-shaped borings; the second having a larger size and unrestricted growth from having been epibyssate nestlers. The specimens from the Hounstout and St Albans Head area, including further specimens collected by the author (Sedgwick Museum Cambridge X1176-1179) tend to be slightly larger than those from the Hartwell Clay and have lengths around 30 mm. They are preserved as composite moulds, the original shell having been aragonitic. The species is illustrated in Figure 1. None of the Isle of Purbeck specimens are preserved in association with borings. However Kelly (1980, p. 771) has found a single specimen (SMC X1175) from a dumped block in Broadcroft Quarry, Isle of Portland. The original level of the specimen was probably from within the Winspit Member of the Portland Limestone Formation, of *Titanites anguiformis* Zone age. The block may have come from a different quarry, but is almost certainly from the Isle of Portland. The specimen is associated with a flask-shaped boring of the ichnofossil genus *Gastrochaenolites*, which is likely to have been made by *Lithophaga portlandica* (Morris and Lycett), the only true boring bivalve known from the Portland Beds. The substrate appears to be a calcareous alga, but is not the distinctive *Solenopora* which is common in these beds.

All the Portland Beds and Spilsby Sandstone hiatellids are closely related in time, all being Middle Volgian in age, and are therefore very likely to have represented the same species. Because of the ecologically controlled range of morphology, it is very difficult to define the limits of variation of this species. Specimens of *Hiatella* from the Upware Limestone, Oxfordian of eastern England (Kelly MS) are indistinguishable from Middle Volgian specimens. Upper Jurassic *Hiatella* are now recorded from Poland (A. Pisera, pers. comm.), France (Chavan 1952), Wyoming, USA (K. Andersson, pers. comm.), Russian Platform (Hölder 1972) and southern and eastern England (Kelly MS).

While preparing a monograph of the bivalves of the Spilsby Sandstone and Sandringham Sands (Kelly MS) the author has re-examined specimens of late Jurassic, almost certainly Middle Volgian, age which occur reworked in to the base of the Lower Greensand, Aptian, from Upware, Cambridgeshire, and Brickhill and Potton, Bedfordshire. Much of this material was originally described by Keeping (1883). It is now clear that specimens named as *Modiola arcadiformis* Keeping have been assigned to the wrong genus and fall within the range of specimens that had been named hitherto *Hiatella* (*P.*) foetida (Cox). Keeping's name has priority of that of Cox for the Portland Beds specimens by 46 years and now becomes *Hiatella* (*Pseudosaxicava*) *arcadiformis* (Keeping 1883).

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BOTANY

A. HÖRSFALL

The botany reports since 1981 have included important lists of fungi, liverworts, mosses and lichens. This report is concerned only with flowering plants. Most of the records have been compiled from information gathered in recent years by the Dorset Environmental Records Centre. The contributors are now too many to be named individually but their efforts have made this report possible and their contributions are much appreciated.

Records of entirely new localities for native plants are very infrequent. However, all records of uncommon or rare plants which still survive in known localities are of interest. There is an increasing number of records of alien species. Some unusual or well-established adventives have been listed below. Finally, a small number of plants, always rare in Dorset, have apparently not been recorded in recent years. Information about them could help to avoid their extinction from the Dorset list, if they have not already disappeared.

This report consists of four groups: uncommon plants, rare plants, adventives and records wanted. The plant names, without citation of authorities, are taken from 'The Concise Flora of Dorset', Ronald Good, 1984, and should agree with any changes made in *Flora Europea*.

1. Uncommon plants

heathland

<i>Anagallis minima</i>	Chaffweed
Slepe Heath	
<i>Cicendia filiformis</i>	Yellow Centaury
Arne, Bushey and several heathland paths	
<i>Crassula tillaea</i>	Mossy stonecrop
Winfrith Heath, Hengistbury, Stanpits	
<i>Genista anglica</i>	Petty Whin
Winfrith Heath, Cranborne Common, Verwood	
<i>Gentiana pneumonanthe</i>	Marsh Gentian
A good number of boggy places in the southeast	
<i>Hammarbya paludosa</i>	Bog Orchid
Winfrith and several new sites in Purbeck	
<i>Pinguicula lusitanica</i>	Pale Butterwort
a few bogs in Purbeck	
<i>Radiola linoides</i>	Allseed
Slepe Heath	
<i>Rhynchospora fusca</i>	Brown Beaksedge
Morden, Stoborough and several Purbeck heaths	
<i>Viola lactea</i>	Pale Dog-violet
Moreton (not confirmed)	

wet places

<i>Althaea officinalis</i>	Marsh Mallow
the Fleet	
<i>Butomus umbellatus</i>	Flowering Rush
Wareham meadows, the Stour valley	
<i>Geum rivale</i>	Water Avens
Tadnoll, Warmwell, Forde Abbey	
<i>Myriophyllum spicatum</i>	Spiked Water-milfoil
Hamoon	
<i>Oenanthe pimpinelloides</i>	Corky-fruited Water-dropwort
scattered throughout	
<i>Ophioglossum vulgatum</i>	Adderstongue fern
locally abundant in widely scattered localities	
<i>Parentucellia viscosa</i>	Yellow Bartsia
Ridge, Arne; Possibly more plentiful	
<i>Stellaria neglecta</i>	Greater Chickweed
locally abundant in north Dorset	
<i>Valeriana dioica</i>	Marsh Valerian
Tadnoll	
<i>Viola palustris</i>	Marsh Violet
Cranborne Common	

woodland

<i>Carex strigosa</i>	Thin-spiked Wood-sedge
Middlemarsh	
<i>Epipactis helleborine</i>	Broad-leaved Helleborine
near Winterborne Whitechurch	
<i>Gagea lutea</i>	Yellow Star-of-Bethlehem
a few records roughly north of Ansty	
<i>Lathraea squamaria</i>	Toothwort
several dozen hazel coppices throughout	

<i>Neottia nidus-avis</i>	Bird's-nest Orchid
Cranborne Chase	
<i>Ophrys insectifera</i>	Fly Orchid
north-east Dorset	
<i>Pulmonaria longifolia</i>	Narrow-leaved Lungwort
twelve main sites in Purbeck District and in Woodlands	
<i>Sorbus torminalis</i>	Wild Service-tree
four woods in the Blackmoor Vale	
<i>Tilia cordata</i>	Small-leaved Lime
Woodlands; Duncliffe Wood	

coastal and other grassland

<i>Calamintha ascendens</i>	Common Calamint
Corfe Castle	
<i>Gentianella anglica</i>	Early Gentian
Portland, Purbeck, Fontmell Down	
<i>Hyoscyamus niger</i>	Henbane
a dozen records along the coast and at Badbury	
<i>Hypericum montanum</i>	Pale St John's Wort
Corfe Castle and near Sherborne	
<i>Lathyrus apaca</i>	Yellow vetchling
Weymouth and several other coastal localities	
<i>Ophrys sphegodes</i>	Early Spider Orchid
South Purbeck	
<i>Ranunculus parviflorus</i>	Small-flowered Buttercup
Portland, Durdle Door, near Corfe Castle	
<i>Silene nutans</i>	Nottingham catchfly
Ringstead	
<i>Vicia bithynica</i>	Bithynican Vetch
Weymouth	
<i>Vicia lutea</i>	Yellow Vetch
Weymouth	
<i>Vicia tenuissima</i>	Slender Tare
Houndstout	

waysides and fields

<i>Chenopodium polyspermum</i>	Many-seeded Goosefoot
Leigh, Marley, Hurn, Hamoon, Holwell	
<i>Chrysanthemum segetum</i>	Corn Marigold
many records from cultivated sandy soils	
<i>Geranium purpuratum</i>	Little Robin
Weymouth	
<i>Inula helenium</i>	Elecampane
six records from roadsides in the Blackmoor Vale	
<i>Kicksia elatine</i>	Sharp-leaved Fluellen
Swanage, Sherborne	
<i>Kicksia spuria</i>	Round-leaved Fluellen
Swanage, the Fleet, Portland, Sherborne, Gussages	

2. Rare plants

Most of these have been recorded from a single locality

heathland

<i>Deschampsia setacea</i>	Bog Hair-grass
<i>Illecebrum verticillatum</i>	Coral Necklace

wet places

<i>Mentha pulegium</i>	Pennyroyal
<i>Polygonum mite</i>	Tasteless Water-pepper

woodland

<i>Epipactis leptochila</i>	Narrow-lipped Helleborine
<i>Epipactis phyllanthus</i>	Green-flowered Helleborine
<i>Epipactis purpurata</i>	Violet Helleborine

chalk grassland

<i>Orchis usturlata</i>	Burnt Orchid
<i>Senecio integrifolius</i>	Field Fleawort

arable land

<i>Lithospermum arvense</i>	Field Gromwell
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coastal

<i>Euphorbia paralias</i>	Sea spurge
<i>Orobancha maritima</i>	Carrot broomrape
<i>Polycarpon tetraphyllum</i>	Four-leaved Allseed
<i>Rumex rupestris</i>	Shore Dock

3. Adventives

damp places

<i>Heracleum mantagazzianum</i>	Giant Hogweed
Up Cerne, Stoborough	
<i>Impatiens glandulifera</i>	Indian Balsam
many new localities	
<i>Crassula helmsii</i>	sedum
Upwey, Corfe Castle, near Corscombe	

coastal grassland

<i>Gastridium ventricosum</i>	Nit Grass
Durlston	
<i>Silybum marianum</i>	Milk Thistle
near Osmington Mills	

waste tips

<i>Cannabis sativa</i>	Hemp
Holton Heath tip	
<i>Gnaphalium luteoalbum</i>	Jersey Cudweed
Holton Heath	

waysides

<i>Allium triquetrum</i>	Three-cornered Leek
several new widely-spread localities	
<i>Datura stramonium</i>	Thorn-apple
Wareham and elsewhere	
<i>Descraineria sophia</i>	Flixweed
Blandford Forum	
<i>Erica rendlei</i>	Heath
Parley	
<i>Gaultheria shallon</i>	Shallon
Hengistbury and elsewhere	
<i>Nectaroscordum siculum</i>	Leek
syn. <i>Allium siculum</i> Beaminster	
<i>Phacelia tanacetifolia</i>	Scorpien weed
Pilsdon Pen	
<i>Sedum telephium sspfabaria</i>	Orpine
Middlebere	
<i>Symphytum ibericum</i>	Comfrey
Benville Lane	
<i>Sisymbrium irio</i>	London-rocket
Weymouth	

4. Records wanted

There is very little up-to-date information about a small number of the Dorset Flora, some of which are listed below. Any recent records sent in confidence to the Records Centre may help to ensure that the plant does not die out.

<i>Carex depauperata</i>	Starved Wood-sedge
dry woods on chalk; one unconfirmed record	
<i>Carex digitata</i>	Fingered Sedge
near Wool; 1912	
<i>Gentianella campestris</i>	Field Gentian
near Winfrith: c. 1960	
<i>Marrubium vulgare</i>	White Horehound
near Wareham; 1900	
<i>Monotropa hypopitys</i>	Yellow Bird's-nest
Bride valley beech woods; 1936/37	
<i>Orobancha rapum-genista</i>	Greater Broomrape
only two recent records on coastal heaths	
<i>Phyteuma tenerum</i>	Round-headed Rampion
two records near Shillingstone	
<i>Ranunculus arvensis</i>	Corn Buttercup
recorded only from Sherborne School	
<i>Wahlengbergia hederacea</i>	Ivy-leaved Bellflower
Holt Heath and Mannington; 1934/35	

MARINE INVERTEBRATES

J. B. HAWTHORNE

Mr Ensom's note in these reports for 1983 gave an illustrated account of fossil brittle stars from the Starfish Bed of the Middle Lias near Eype Mouth. Present day brittle stars of the species *Ophiothrix fragilis* are not uncommon under stones at extreme low water at a number of Dorset sites, although typically, they live in large aggregations offshore.

Ophiothrix fragilis with an arm span of 8 to 10 cm occurs in patches in the English Channel with densities recorded in places

over 2,000/m². In relatively slack water they raise their arms to collect food particles on the under-sides, but in currents they form a tangled mass which acts as a communal feeding net. The former behaviour may be observed with small shore brittle stars when specimens in a marine aquarium detect the presence of food. It is thought that the dense patches in the English Channel are maintained by the planktonic larvae settling on the adults and even sharing the adults' food while the young become established.

Dr Ken Collins, who participated in the first Dorset Underwater Survey of 1976/77 has recently reported a typical dense *Ophiothrix fragilis* bed off Broad Bench in the Purbeck Marine Wildlife Reserve. The colony is at 12 to 15 m depth on flat rock in currents up to about 1 knot. The animals are a little smaller than Dr Collins has seen further west, having disc diameters of less than 1 cm. The colony is some 50 to 100 m across and is a fine sight for divers when water conditions are clear.

Sea cucumbers are related to brittle stars and Dr Collins has been pleased to record and photograph a population of the burrowing cucumber *Neopentadactyla mixta* at a depth of about 12 m near Worbarrow Tout. The tentacles of the animals may have been in summer months protruding from ridges of loose shell gravel. Each fan of tentacles is some 10 to 15 cm across. This is a new and interesting record for Dorset's marine reserve - it is apparently the most easterly recorded population in the English Channel.

ARTHROPODS

N. R. WEBB

I have compiled this report for 1984 from records sent to me by observers, from records deposited at the Dorset Environmental Records Centre at the County Museum, and by abstracting the entomological journals.

Insecta

Orthoptera

Ectobius pallidus (Oliver). Studland and Holton Heath (J. R. Cox)

Ectobius panzeri Stephens. Studland (J. R. Cox).

Decticus verrucivorus (L.). Wart-biter. A number of sightings from the well established colony in Purbeck (R. McGibbon, J. White, N. R. Webb).

Metrioptera brachypyra (L.) Bog Bush Cricket. A specimen of the long-winged form *f. marginata* Thunberg at Holton Heath (J. R. Cox).

Conocephalus discolor Thunberg Long-winged Conehead. The expansion of the range of this species reported in *Proceedings Vol 105* continues.

Reports have been received from Godlingston Heath, Rempstone Forest, Bere Regis, Lodmoor, Wareham, Worth Matravers, Stoborough, West Holme, Bindon, Bourne Bottom, Rossmore, Slepe, Purewell, Meadows, Chafeys Lake, Arne, Stanpit and Town Common (J. R. Cox, G. Dutton, A. J. Wise, J. White, R. McGibbon). See also E. C. M. Haes (1984), an expansion of the known ranges of *Conocephalus discolor* into the New Forest and heathlands of east Dorset. *Entomologists' Gazette*, 35, 64-65.

Nemobius sylvestris (Bosc.) Wood Cricket. St. Leonards (R. McGibbon).

Mogoplistes squamiger Fischer. Scaly Cricket. This species was reported on three occasions in 1984 from its only known British location near Weymouth.

Stethophyma grossum (L.) Large Marsh Grasshopper. Six males Godlingston Heath (J. R. Cox); East Holme and Arne Moors (R. McGibbon).

Stenobothrus lineatus (Panzer) Stripe-winged Grasshopper. Fontmell Down (N. R. Webb).

Omocestus rufipes (Zetterstedt). Woodland Grasshopper. Small numbers reported from woodland clearings on Studland Heath (J. R. Cox).

Chorthippus vagans (Eversmann). Heath Grasshopper. Canford Heath, Talbot Heath, West Holme, Grange Heath (R. McGibbon).

Chorthippus albomarginatus (Degeer). Lesser Marsh Grasshopper. Ridge, Arne, Lychett Bay, West Creech, Sandford Bridge, Stoborough, Buddens pit (R. McGibbon); Oakers Wood, Bere Regis (A. J. Wise); Furzey Island (N. R. Webb).

Mecconema thalassinum (Degeer) Oak Bush Cricket. Twelve acre Wood Studland (J. R. Cox); Hermitage (A. A. Moon); Affpuddle (J. E. Brown); Bere Wood (A. J. Wise).

Tettigonia viridissima L. Great Green Bush Cricket. Bovington, Purbeck, Bindon Hill, Worth Matravers (R. McGibbon); Weymouth (A. A. Moon).

Odonata

J. R. Cox has supplied the following results from his seventh year of transect sampling on Studland Heath National Nature Reserve; he has added comments on the apparent changes in numbers of the various species. Results from transects made in previous years are reported in *Proceedings* Vol 104 and 105.

Ceragrion tenellum (De Villiers) Small Red Damselfly. A slight drop in numbers after the high counts last season, but numbers remaining slightly above the average for the last seven years.

Coenagrion puella (L.) Common Coenagrion. A fifty percent drop from last years numbers, the lowest count recorded during the seven years of census.

Enallagma cyathigerum (Charpentier) Common Blue Damselfly. Another decrease to the lowest level so far recorded. Only about a quarter of the numbers for 1979. Last date 30th Sept.

Pyrrhosoma nymphula (Sulzer) Large Red Damselfly. Again the lowest numbers since counting began in 1978. First date, 20th April, last date 21st July.

Ischnura elegans (Van der Linden) Common Ischnura. The numbers recorded were the lowest since 1979.

Lestes sponsa (Hansemann) Emerald Damselfly. A slight drop on last years numbers to about the average for the seven years of counts. First date 27th June, last date 18th Sept.

Brachytron pratense (Müller) Hairy Dragonfly. A slight decrease in numbers from last year, but still above the average for the seven years.

Aeshna cyanea (L.) Southern Aeshna. A big drop to nearly a quarter of the records for last year. Last date 10th October.

Aeshna juncea (L.) Common Aeshna. Very few records at all this year, never as plentiful as *A. cyanea* at Studland.

Aeshna mixta Latreille Scarce Aeshna. A slight increase, the numbers were the highest so far recorded, due possibly to immigrant individuals.

Anax imperator Leach Emperor Dragonfly. Not always recorded on the census but rather more sightings this season compared with last year.

Cordulegaster boltonii (Donovan) Gold-ringed Dragonfly. Rarely recorded on the census.

Cordulia aenea (L.) Downy Emerald. Double the sightings for last year, but still below average for that recorded over the last seven seasons. First date 9th May, last date 26th June.

Orthetrum cancellatum (L.) Black-lined Orthetrum. A three-fold increase this year after four rather lean years. First date 29th June, last date 13th August.

Orthetrum coerulescens (Fabricius) Keeled Orthetrum. A slight decrease on the numbers recorded last year, but still above the average for the seven years. First date 15th June.

Libellula depressa L. Broad-bodied Libellula. Not a numerous species on Studland heath, not seen on the census dates.

Libellula quadrimaculata L. Four-spotted Libellula. A slight drop from last year to slightly below the seven year average. First date 1st May, last date 1st August. One of the form *Praenubila* egg laying on 28th June.

Sympetrum sanguineum (Müller) Ruddy Sympetrum. Quite a drop from last year, but still above the seven year average. First date 20th June, last date 22nd September.

Sympetrum scoticum (Donovan) Black Sympetrum. A drop to the lowest count since 1979. First date 8th July, last date 25th September.

Sympetrum striolatum (Charpentier) Common Sympetrum. A big drop to the lowest figure in seven years. First date 27th June, last date 24th November.

The DERC has received a large number of records of dragonflies during the year, partly in response to requests for more records. Reports have been received from Col. E. D. V. Prendergast, E. Coetzee, A. J. Wise, J. R. Cox, K. Newson Davis, M. T. Robbins. *Ceragrion tenellum* Small Red Damselfly. Bovington, Creech, Blue Pool, Bowleaze Cove, Gore Heath.

Coenagrion puella Common Coenagrion. Seatown, Sturminster Newton, Blue Pool, Sherborne, Bowleaze Cove, Ringmoor Down, Bagber, Holwell, River Stour, Bovington, River Piddle, Lulworth Lake, Kingston Magna, Bere Regis, Middle Marsh, Minterne Abbey, River Craven, River, Lyddon, Burton Bradstock, East Stoke, Tincleton, Furzebrook, Stoborough, Newton Gully, Creech, East Burton, Scotland, Sandford, Sherford Bridge, Wareham Forest, Cowards Marsh, Christchurch.

Enallagma cyathigerum Common Blue Damselfly. Holwell, Lulworth Lake, Bere Regis, Minterne, River Craven, Burton Bradstock, Bovington, Halstock, Priors Down, Bagber, River Bride, River Stour.

Ischnura pumilio Scarce Ischnura. A good colony reported from Rempstone Forest; several *aurantiaca* females; first date 11th June, last date 25th August. Also reported from cress beds at Tincleton and at Worgret (J. R. Cox).

Lestes sponsa Green Lestes. Sutton Bingham, Bovington and Ridge.

Agrion splendens Banded Agrion. Bagber, River Stour, River Piddle, River Frome, Sherford Bridge, River Yeo, Trigon and Wareham.

Brachytron pratense Hairy Dragonfly. Bovington

Aeshna cyanea Southern Aeshna. Bagber, Bovington and Kings Mill.

Aeshna grandis Brown Aeshna. Bagber and River Lyddon.

Aeshna juncea Common Aeshna. Kingston Magna, Bagber, River Stour and Bere Regis.

Aeshna mixta Scarce Aeshna. Bagber, Rodden Hive, Oakers Bog, and Bere Regis.

Anax imperator Emperor Dragonfly. Rivers Lyddon and Bride, Holwell, Bovington and Priors Down.

Cordulegaster boltonii Gold-ringed Dragonfly. Wootton Hill.

Codulia aenea Downy Emerald. Bovington.

Libellula fulva Scarce Libellula. Seven recorded very close to Stoborough.

Sympetrum sanguineum Ruddy Sympetrum. Sutton Bingham, Priors Down, Stalbridge, Kings Mill.

Sympetrum danae Black Sympetrum. Oakers Wood, Blue Pool, Netherbury.

Platycnemis pennipes White-legged Damselfly. Rivers Stour, Lydden and Cale Bow Brook and Bagber.

Erythromma najas Red-eyed Damselfly. Creech.

Agrion virgo Demoiselle Agrion. Netherbury and Uploders.

Coleoptera

Graptodytes bilineatus (Sturm) (Dytiscidae) recorded in 1981 from Cogden Pool Beach at Burton Bradstock; possibly the first record for the County. Other species from the same location included.

Agabus conspersus (Marsh.), *Dytiscus circumflexus* Fab. and *Berosus signaticollis* (Charpent.). See A. P. Forster, *Entomologists's Monthly Magazine*, 120, 54 (1984).

See also Foster, A. P. (1984) Some aquatic Coleoptera from the Winfrith and Tadnoll area of Dorset. *Entomologist's Monthly Magazine* 120, 178. Includes records of ten species from the families Halplidae, Dytiscidae, Gyridae and Hydrophilidae from Tadnoll, Winfrith Heath, Whitcombe Vale and Studland Heath.

Hymenoptera

Vespa crabro L. Hornet. Records from Stockwood and Chetnole (A. A. Moon). Two nests located at Furzebrook, one nest in a Beech tree at Furzebrook Research Station was active all the summer; on occasions Hornets were caught in the mercury vapour moth trap (N. R. Webb).

Diptera

A comprehensive list of Syrphidae has been compiled by E. T. and D. A. Levy; their more interesting records are,

Pachysphyria ambiguus 1 male on Blackthorn Littlemoor Wood, Weymouth.

Platycyberus fulviventris Cheddington Wood 14.7.84, Studland 12.8.84, Lodmoor 7.9.84.

Xanthandrus comptus Cheddington Wood 23.4.84.

Pandasyopthalmus haemorrhous Studland 12.8.84.

Chrysotoxum elegans Corfe Castle 24.6.84.

Chrysotoxum festivum Cheddington Wood 13.7.84.

Chrysotoxum cautum Rempstone Heath 24.6.84, Wod Str. Wool 1.7.84.

Dasyrphus lunulatus Rempstone Heath 24.6.84, Yellowham Wood 12.5.84.

Dasyrphus tricinctus Cheddington Wood 30.4.84. Came Wood 29.5.84, Melbury Park 29.5.84, Milborne Port 28.8.84.

Epistrophe glossularia Came Wood 27.6.84, Milborne Port 23.9.84.

Megasyrphus annulipes Yellowham Wood 5.5.84, Cheddington Wood 20.5.84.

Melangyna lasiophthalma Cheddington Wood 19.4.84, Came Wood 24.2.84.

Meligramma cincta Yellowham Wood 5.5.84, Stock Wood 5.5.84, Cheddington Wood 30.4.84.

Meliscaeva auricollis Earliest species seen Yellowham Wood 3.3.84.

Parasyrphus annulatus Cheddington Wood 13.7.84.

Parasyrphus lineola Cheddington Wood 23.4.84 & 20.7.84.

Parasyrphus malinellus Cheddington Wood 20.4.84, Yellowham Wood 12.5.84.
Sphaerophoria taeniata Cheddington Wood 5.8.84.
Sphaerophoria batava Studland 12.8.84.
Cheilosia albipila Grimstone 12.4.84, Came Wood 12.4.84, Stock Wood 14.4.84, Cheddington Wood 19.4.84.
Cheilosia grossa Chaffey's Lake Weymouth 12.4.84.
Cheilosia antiqua Stock Wood 5.5.84.
Cheilosia carbonaria Cheddington Wood 1.6.84.
Cheilosia carbonaria Cheddington Wood 1.6.84.
Cheilosia vulpina Oakers Wood 1.7.84.
Portevinia maculata Stock Wood 29.5.84, Melbury Pk. 29.5.84, Cheddington Wood 30.5.84.
Neoscia aenea Lodmoor 29.5.84.
Orthonevra nobilis Cheddington Wood 30.5.84, 27.6.84.
Anasimyia lineata Cheddington Wood 20.7.84.
Anasimyia contracta Cheddington Wood 6.6.84.
Eristalisus aeneus Lodmoor 29.5.84, Abbotsbury 29.8.84.
Parhelophilus fruteorum Cheddington Wood 26.6.84.
Emerus ornatus Yellowham Wood 1.7.84, Stock Wood 29.4.84.
Cnemodon vitripennis Cheddington Wood 1.6.84.
Pipiza austriaca Cheddington Wood 6.6.84, Stock Wood 9.6.84.
Pipizella virens Cheddington Wood 14.7.84.
Pipizella varipes Chaffey's Lake 29.8.84.
Parapenium flavitarsis Cheddington Wood 1.6.84.
Arctophila fulva Cheddington Wood 20.7.84.
Sericomyia lappona Stock Wood 9.6.84.
Volucella inflata Stock Wood 23.6.84, Cheddington Wood 20.7.84.
Brachypalpoidea lentis Cheddington Wood 20.7.84.
Criorhina floccosa Stock Wood 9.6.84, Yellowham Wood 1.7.84.
Criorhina ranunculi Cheddington Wood 19.4.84, Stock Wood 5.5.84, Yellowham Wood 5.5.84.
Xylota florum Cheddington Wood 17.7.84.
Xylota xanthacnema Cheddington Wood 14.7.84, Stock Wood 23.6.84.

Myriapoda

Records of thirteen species of centipedes (Chilopoda) and nine species of millipedes (Diplopoda) from a wide range of localities throughout the County have been published by A. D. Barber (1984) 'Some records of Myriapods (Chilopoda & Diplopoda) from Dorset,' *Entomologists's Monthly Magazine* 120, 45-46. Six of the centipedes are new County records.

Arachnida

Araneae

Dolomedes fimbriatus (Clerck). Oakers Bog (A. J. Wise).
Argiope bruennichi (Scopoli). Reported widely this year, records from Worbarrow Bay, Studland and White Nothe. A colony of some twenty individuals was seen on Three Barrows on Sleppe Heath. (N. R. Webb).

LEPIDOPTERA

ALAN T. BROMBY

The following field workers submitted records, some of which appear below:

Dr. A. A. Allen, D. M. Arnold, A. T. Bromby, J. Rees Cox, A. H. Dunn, Milton Abbey School Natural History Society, and Dr. N. R. Webb.

In addition a number of records have been kindly supplied by the staff of the Dorset Environmental Records Centre, and by the Dorset Naturalists' Trust.

Papilio machaon L. Common Swallowtail. Radipole 12.7. (D.E.R.C.) Stoborough, dead in greenhouse (per N.R.W.)

Colias croceus Fourc. Common Clouded Yellow. Furzebrook 30.4. (N.R.W.) Studland 2 on 8.7. (J.R.C.) 14 other records in Sept. and early October.

Vanessa atalanta L. Red Admiral. Swanage 4.12. and Studland 9.12. (J.R.C.)

Vanessa cardui L. Painted Lady. Scarce this year with 37 records for the County.

Callophrys rubi L. Green Hairstreak. Corfe Mullen 24 recorded in June (A.H.D.) Studland, a good year for this species (J.R.C.)

Celastrina argiolus L. Holly Blue. Studland Heath and Corfe Mullen - a good year (J.R.C. and A.H.D.)

Mimas tiliae L. Lime Hawk. Furzebrook 3.5. (N.R.W.)

Acherontia atropos L. Death's-head Hawk. 5 larvae Church Knowle (N.R.W.), 3 moths Cheselbourne area (Dr T. Norman).

Macroglossum stellatarum L. Humming-bird Hawk. Milton

Abbey 14.7. and 28.7. (M.A.S.N.H.S.) Hinton Martell 4.7. and 20.7. Milborne Port 7.8. (D.E.R.C.) Brownsea 3 in July (A.T.B.) Furzebrook 2 on 6.9. (N.R.W.)

Hemaris fuciformis L. Broad-bordered Bee Hawk. Studland heath 9 between 19.5. and 10.6. (J.R.C.) Brownsea 22.5. and 28.5. (A.T.B.)

Clostera curtula L. Large Chocolate-tip. Furzebrook 18.5. (N.R.W.)

Saturnia pavonia L. Empress. Studland Heath, adults in May and larvae in July. (J.R.C.) Furzebrook 2.5. (N.R.W.)

Panaxia dominula L. Scarlet Tiger. Piddlehinton 22.7., Gallows Hill 6.7., Portesham in July (D.E.R.C.) Larvae Wareham (N.R.W.)

Aegeria formicaeformis Esp. Red-tipped Clearwing. Studland Heath 27.6. (J.R.C.)

Agrotis denticulatus Haw. Light Feathered Rustic. Furzebrook 18.5. (N.R.W.)

Agrotis ripae Hubn. Sand Dart. Brownsea 28.6. (A.T.B.)

Anarta myrtilis L. Beautiful Yellow Underwing. High Stoy, 10.6. (D.E.R.C.)

Orthosia miniosa Schiff. Blossom Underwing. Brownsea 9.4. (A.T.B.)

Leucania l-album L. White L. Wainscot. Furzebrook 11.10 (N.R.W.)

Gortyna petasitis Double. Butterbur Ear. Monkton up Wimborne, no date given (D.E.R.C.)

Cucullia verbasci L. Mullein Shark. Larvae at Yetminster and Portesham (D.E.R.C.)

Lithophane leautieri Boisd. Blair's Pinion. Furzebrook 13 between 11.10 and 5.11. (N.R.W.) Brownsea 2 on 16.10., 19.10. (A.T.B.)

Dasyampa rubiginea Schiff. Dotted Chestnut. Brownsea 3.4. (A.T.B.) Furzebrook 25.4. and 26.4. (N.R.W.)

Colocasia coryli L. Nut-tree Tuffet. Powerstock 26.7. (D.N.T.)

Lygephila pastinum Treits. Plain Blackneck. Charminster 22.7. (D.E.R.C.) Powerstock 26.7. (D.N.T.)

FISH

M. LADLE

Many large roach *Rutilus rutilus* were again reported from the River Frome in the vicinity of Wareham and from the lower reaches of the R. Piddle. This species is believed to be essentially rather sedentary, with only a small part of the population liable to extensive migrations within a river. Presumably the large fish mentioned spend the entire year in the downstream sections of the above rivers. The reports (by anglers) of large shoals in winter and early spring may be related to some form of pre-spawning aggregation.

The numbers of salmon (*Salmo salar*) reported from local rivers seem to have been rather less than average but such fluctuations are to be expected. The actual catches of these fish are influenced, not only by the size of the returning population of fish, but also by the prevailing fishing conditions at each time of the season.

MARINE FISHES

Conger conger (L.) As in most years numerous conger were reported from stations between Poole and Portland.

Anguilla anguilla (L.). Eel. Kimmeridge, February 1984.

Pholis gunnellus (L.). Butterfish. Reported from stomach of conger caught at Durdle Door, January 1984.

Many bass, mullet and wrasse (ballan and corkwing) were reported during the year.

FRESHWATER FISHES

Species reported in 1984 included roach, dace, grayling, pike, perch, eels, salmon and sea trout from the River Frome. No unusual fish species were recorded.

AMPHIBIANS

ROBERT V. SKINNER

Smooth Newt *Triturus vulgaris* L. Twelve reports received by the Dorset Environmental Records Centre (DERC) indicate that the species is very common in the County. One report, dated 2nd April, stated that a mass of 99 sub-adults and 6 adults were found under a log at Prior Down during cold weather. (Col E. D. V. Prendergast).

Palmate Newt *Triturus helveticus* Razoumowsky. During 1984 a few only seen in a garden pond in Parkstone. (A. H. Dunn) Reports from DERC show that the species is well distributed throughout south-eastern areas of the County.

Crested Newt *Triturus cristatus* Laurenti. The DERC received several reports during the year of sightings of this species. The earliest was on 26th March and the latest on 10th November. All reports were confined to the central southern area of the County.

Common Frog *Rana temporaria* L. Four adults and a patch of spawn were present in a garden pool in Corfe Mullen on 2nd March. By 7th March there were eight adults and four patches of spawn and on 30th March there were eleven clumps of spawn. A good colony of adults was present in a garden pond in Winterborne Stickland on 23rd March. (A. H. Dunn) The DERC received 14 reports during the year, the earliest being of a large female in a pond at Kingsbere in mid-January. The species appears to be fairly abundant especially in the Dorchester area.

Common Toad *Bufo bufo* L. The earliest record was of an adult calling in a garden in Parkstone on 3rd February. The first report of a sighting was on 16th February when a specimen was seen in a garden pond in Corfe Mullen. More were seen during the next few days, but no spawn. A neighbouring garden pond had a good colony as did another garden pond in Parkstone on 26th April. (A. H. Dunn) Heard calling on Studland Heath on 12th April. One seen on 30th December 1984 on Studland Heath – the weather was unusually mild. (J. R. Cox). Four reports from the DERC included one from Sandford stating that many small toads about 38 mm long were seen on a road at night during September and October.

REPTILES

ROBERT V. SKINNER

Slow-worm *Anguis fragilis* L. One seen at Arne on 16th September (A. H. Dunn) First seen on Studland Heath NNR on 7th March and the last sighting was on 9th October. Although probably under-recorded, 15 individuals were observed during the year which was about the same number as last year. (J. R. Cox). The DERC received 12 reports of the species which is widely distributed throughout the County.

Viviparous Lizard *Lacerta vivipara* Jacquin. Not seen until 16th June on Studland Heath NNR and the last sighting on the Reserve was on 27th October. The species is well scattered over the heaths,

dune heaths and woodland clearings. (J. R. Cox). Nine reports were received by the DERC showing that the species is common in Dorchester and the South West of the County. One report stated that the species was scarce in the Sandford area this year, possibly because it was being preyed upon by adders.

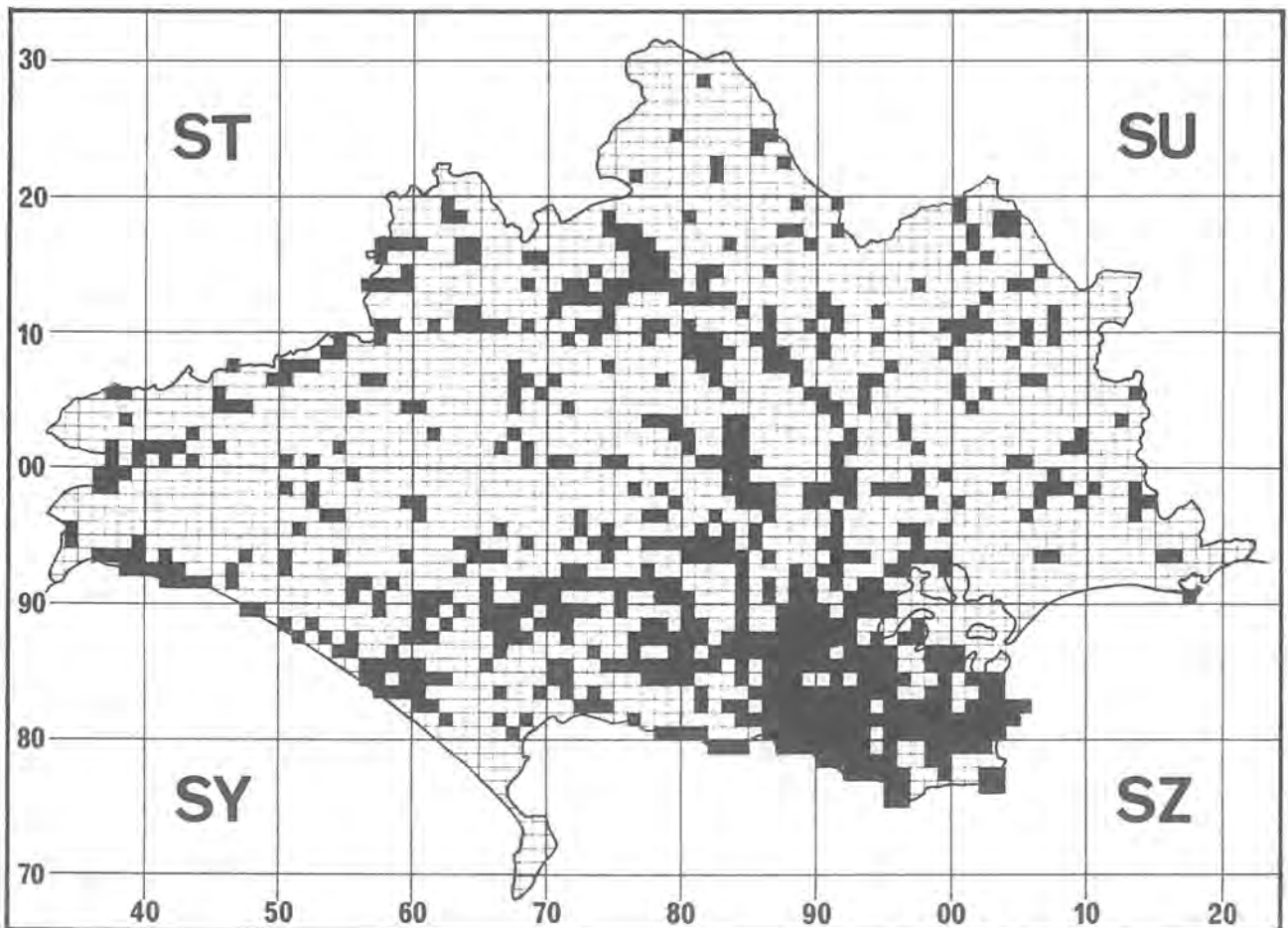
Sand Lizard *Lacerta agilis* L. The earliest record from Studland Heath NNR was on 14th March and the 1st date was 15th September. Two males were seen fighting by the side of a sandy path on 10th June. (L. T. Howells). The species was very poorly recorded again this year on Studland Heath. (J. R. Cox). Quite common on an area of Gore Heath, Sandford. Three males appeared whilst an allotment was being watered on a hot day on May 29th. They were licking the water from the leaves of plants and chasing each other. (P. Rumbol).

Grass snake *Natrix natrix* Lacepede. The first record for Studland Heath NNR was the 3rd March. (S. M. Guy). There were 22 records for the Reserve compared with 25 in 1983. The last sighting was on 21 October. (J. R. Cox). The DERC received only two reports for the species during the year, both from South Dorset.

Adder *Vipera berus* L. Recorded on 21st June at Stubbampton Bottom. (A. H. Dunn). The first sighting on Studland Heath NNR was in the Plateau Enclosure on 18th February. (P. L. Darley). Regrettably, one was found killed at the same place on 29th February, possibly by human agency. There were a total of 53 records from the Reserve during the year, the last being 3rd November. (J. R. Cox). The DERC received 17 reports of the species in 1984.

Smooth Snake *Coronella austriaca* Laurenti. The earliest record for Studland Heath NNR was on 18th April (S. J. Morrison). One seen on 18th September on Godlingston Heath NNR. (R. Burt). A late record was also for Godlingston on 20th October. (S. J. Morrison). Two 6" long juveniles were found on heathland, north of Wareham on 13th April. (J. R. Cox). Only one report received by the DERC which was for a two-foot long specimen at Sandford, Wareham. (P. Rumbol).

North American Garter Snake. The DERC received one report of a specimen of this species seen at Weymouth on 2nd October. (Mr. Daimon).



Mole Talpa europaea ◻ pre 1960 records ◼ post 1960 records. 1 small grid square = 1 kilometre square.

Red-eared Terrapin *Chrysemys scripta elegans* In September 1983 a specimen of a similar species to this was found on Studland heath NNR. It was rescued after several days, but died later. On 30th May 1984 another terrapin of similar appearance was found in a pool on the Reserve. It was not seen again, so may have been removed by someone. (J. R. Cox). The two North American species above had been imported into this Country. They had either been abandoned by their owners or, in the case of the Garter Snake, it may have been a pet that had escaped.

MAMMALS

E. M. KEATS

Mammal records have been submitted to the Dorset Environmental Records Centre and to me by a number of contributors and these records are much appreciated. All reports are filed in the D.E.R.C. and only a selection are printed here. Maps showing the reported records of the Mole and the Long-tailed Field Mouse or Wood Mouse are printed here and show the results of continued observations on two small mammals or as in the case of the Mole observations more often of molehills than moles. Many more 1 kilometre squares could I am sure be filled for both these species. I am grateful to Miss Myra Scott, Keeper of Records at the D.E.R.C. for providing the updated distribution maps.

2. **Mole** *Talpa europaea* Col. E. D. V. Prendergast recorded almost 330 molehill sightings which has increased the number of squares with records and Mr. W. G. Teagle has likewise recorded molehills in a number of squares which were previously blank.

62. **Wood-mouse or Long-tailed Field Mouse** *Apodemus sylvaticus*. This species is not as easy to record as the mole but dead mice are seen in the countryside, and mice are often caught by cats so it should be possible to increase the distribution cover if further records are sent in. J. Rees Cox reports from Studland Heath National Nature Reserve that on 16th December 1984 one newly dead mouse was found and another two within a few feet of the first apparently in a state of shock. They did not move and were tightly hunched up, he left them for five minutes and the two had gone

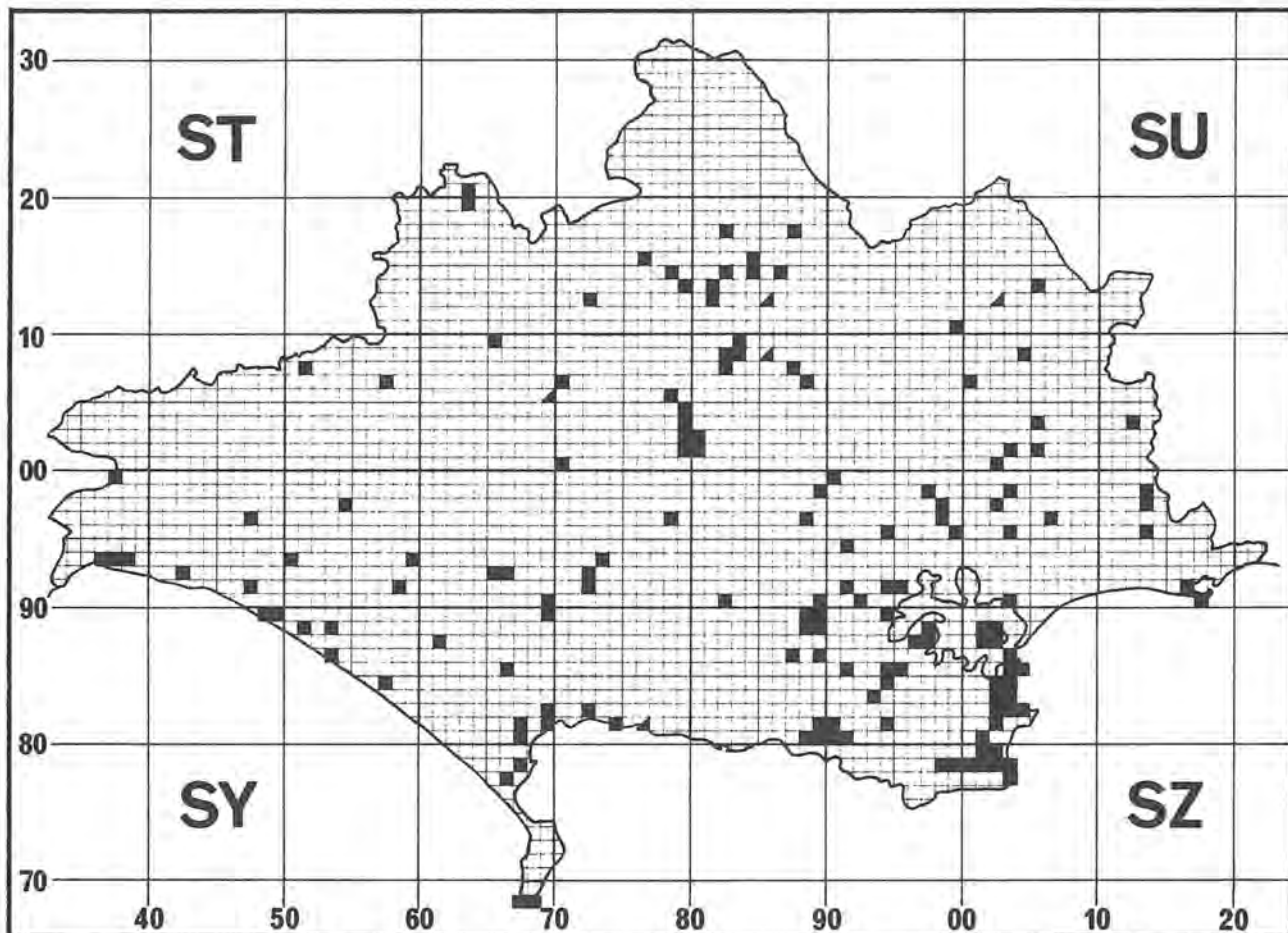
when he returned to the spot. I wonder if this was a case of hypothermia, P. A. Morris in the *J. Zool. Lond.* 155 writes on 'Apparent hypothermia in the Wood Mouse.'

The check list numbers and scientific names are as listed in *The Identification of British Mammals* by G. B. Corbet, British Museum (Natural History) 1969.

In addition to the species mentioned elsewhere in the report the following species were reported in 1984: 1. **Hedgehog** *Erinaceus europaeus*; 3. **Common Shrew** *Sorex araneus*; 4. **Pygmy Shrew** *Sorex minutus*; 5. **Water Shrew** *Neomys fodiens*; 28. **Weasel** *Mustela nivalis*; 30. **American Mink** *Mustela vison*; 43. **Sika Deer** *Cervus nippon*; 44. **Fallow Deer** *Dama dama*; 45. **Roe-deer** *Capreolus capreolus*; 53. **Brown Hare** *Lepus capensis*; 55. **Rabbit** *Oryctolagus cuniculus* 57. **Grey Squirrel** *Sciurus carolinensis*; 59. **Dormouse** *Muscardinus avellanarius*; 61. **Harvest mouse** *Micromys minutus*; 63. **Yellow-necked Mouse** *Apodemus flavicollis*; 64. **House Mouse** *Mus musculus*; 67. **Bank Vole** *Clethrionomys glareolus*; 68. **Water Vole** *Arvicola terrestris*; 69. **Short-tailed Field Vole** *Microtus agrestis*;

The Dorset Bat Group had another busy year dealing with many enquiries, unfortunately arrangements had to be made for exclusion of bats in nine cases, however other house owners were persuaded to allow their bats to remain. I would emphasise that bats are harmless in this country and do not damage property and most species only require a very small access hole to the roof space, under weather boarding, behind hanging tiles or any other nook or cranny which they choose as a roost. The Greater Horseshoe Bat does however need a bigger entrance hole as they fly into the roost rather than landing on the wall and crawling in like other bats. A space at least two feet wide and six inches deep is needed for the Greater Horseshoe Bat entrance. One Pipistrelle bat found injured had to have a wing amputated, it was nursed back to health but has to live in captivity as it cannot fly. Species of bats recorded in 1984 were Greater Horseshoe, Whiskered, Daubenton's, Serotine, Pipistrelle and Common Long-eared.

24. **Fox** *Vulpes vulpes*. J. R. Cox and A. H. Dunn reported several records of this species and W. G. Teagle two records. Mr. Dunn



Wood Mouse *Apodemus sylvaticus* □ pre 1960 records ■ post 1960 records. 1 small grid square = 1 kilometre square.

reported a female, possibly pregnant, eating bird droppings in a field at Corfe Mullen on 19th February.

27. **Stoat** *Mustela erminea*. J. D. Powne reported a stoat which had been hit by a car near Penfield's Corner, Winterbourne Steepleton on 16th September with a dead rabbit a few inches in front of it presumably hit by the same car.

31. **Badger** *Meles meles*. Col. Prendergast reported badger droppings full of undigested barley in a pit in his garden, the barley had almost certainly been taken from a low bird table. Mr Dunn reported a badger killing a hedgehog in a neighbour's garden at Corfe Mullen.

32. **Otter** *Lutra lutra*. Only one record submitted this year, an otter seen carrying an eel at Little Sea, Studland and reported by Mr. and Mrs. Teagle. The Warden Mr. J. R. Cox says this is the first definite record on the Studland Nature Reserve for about ten years. Are Otter numbers still diminishing?

35. **Common Seal** *Phoca vitulina*. One was seen in Poole Harbour in March and one just offshore, Studland in December.

56. **Red Squirrel** *Sciurus vulgaris*. Mrs K. B. Parkyn with her usual very full records of sightings of Red Squirrels on Brownsea Island comments on the effect human enthusiasm for looking for squirrels can have on the records. One couple who had stayed for a week in the previous three years saw 112 squirrels in six holiday days in September 1984 and 22 on two early morning walks. Large numbers of sightings were reported throughout the summer and autumn by many other wardens and these suggest a thriving population of Red Squirrels on the Island. The total sightings reported for 1984 were 541. Several groups of squirrels were seen, fifteen groups of 4, four groups of 5, four groups of 6, two groups of 7, one group of 8, 10, and 11.

95. **Risso's Dolphin** *Grampus griseus*. A specimen identified as this species spent four days in Portland Harbour before heading out to sea in late September, at first it was thought to be a young Pilot Whale but was later identified as a Risso's Dolphin.

ORNITHOLOGICAL ASPECTS OF 1984

Dr G. P. GREEN

As usual it is only possible to mention briefly some of the more interesting ornithological events of 1984. Certainly the year will be remembered for the exceptional number of rarities, including no less than 9 new species for the county.

Perhaps the most unusual breeding report involved a pair of Little Ringed Plovers, the 2nd county record. Amongst the scarcer breeding species, there were positive reports for Great Crested Grebe, Teal, Shoveler, Roseate Tern, Razorbill, Puffin, Woodlark, Yellow Wagtail, Redstart, Wood Warbler, Bearded Tit, Raven, Tree Sparrow, Siskin and Crossbill. Unfortunately no records were received for Stone Curlew, although it seems likely that 1 or 2 pairs were present in their usual area. On the debit side there were negative reports for Gadwall, Pochard, Long-eared Owl, Whinchat, Wheatear, Savi's and Marsh Warblers and Hawfinch. Cetti's Warblers continued to slowly expand their range, particularly in the east of the county. Both Hobbies and Little Terns had a successful season. However, the results of the R.S.P.B.'s Dartford Warbler survey were rather disturbing. A total of 127 pairs were located, compared to 286 pairs in 1974. This decline was attributed mainly to the loss of important heathland and forestry habitat.

The early winter period was generally mild. Despite the lack of cold weather movements, a number of interesting birds were seen, the Avon valley being particularly productive. A Red-breasted Goose feeding with the Avon flock of White-fronted Geese was seen to fly over the county boundary into Dorset on several occasions. The attention this bird attracted was responsible for the discovery of an American Wigeon amongst the Avon Wigeon flock.

This bird was also seen in Dorset. Both rarities are county 'firsts'. Other birds of note involved a Rose-coloured Starling in a Parkstone garden and the usual crop of Ring-billed Gulls, with at least 5 in the Weymouth area and 1 in Poole Park. Dorset also received its share of a large influx of Iceland Gulls into Britain, with at least 8 individuals in February and several records of passage birds during March to May. Unseasonal birds involved a Hobby on the exceptional date of 11th February, single Ring Ouzels in January and February, and an overwintering Wood Sandpiper.

The spring produced its usual selection of surprises and rarities. The peak passage of many of our commoner summer visitors was reported to be a fortnight later than usual at several coastal stations. Despite this, the numbers of most species were higher than average. There were some exceptions to this, notably Sand Martins, whose numbers were very much reduced, a fact also reflected by a marked decline at the breeding colonies. The only early migrants of note were single Cuckoos on 26th and 27th March. There was a marked influx of Serins in late March and early April, followed by one of Golden Orioles during the latter half of April. Generally the spring was disappointing for rarities, a White Stork, a Crane and an Alpine Swift in April, followed by 2 Little Egrets, a Ring-billed Gull, a White-winged Black Tern and a Bonelli's Warbler in May. Seabird movements were about average, except for a huge passage of Bar-tailed Godwits during late April and early May. Perhaps the most remarkable seabird record concerned a Long-tailed Skua flying over Radipole in early May, whilst 5 more were seen flying east off Portland Bill in mid-month. A pair of Black Guillemots at Portland Bill in early May were also noteworthy.

The summer certainly made up for lack of rarities in the spring. The undoubted highlight of the year appeared in mid-June when an Egyptian Nightjar was found at Portland Bill – the first county and second British record. Other June rarities involved a Little Shearwater, another Little Egret, a Red-footed Falcon, Dorset's first spring Red-breasted Flycatchers (2), and a Woodchat Shrike. Another exceptional rarity occurred in July, in the form of a Bridled Tern at Lodmoor – first for the county, whilst Dorset's first Wilson's Phalarope and a Caspian Tern were also recorded during the month.

The autumn started quietly with little of note in August. Early September produced yet another county 'first' when an Arctic Warbler was trapped at Portland Bill. Apart from the usual scatter of southern and south-eastern sub-rarities including several Tawny Pipits, the only other birds of note were a Buff-breasted Sandpiper and a Woodchat Shrike. October started with a Purple Heron, followed by a Dorset 'first' with a Solitary Sandpiper at Sutton Bingham. An impressive variety of eastern sub-rarities and rarities appeared from mid-month through to early November. These involved a Dusky Warbler – first county record, a Booted Warbler – second county record, 3 Pallas's Warblers – a remarkable number considering this species was particularly scarce nationally this autumn, a Little Bunting, a Richard's Pipit, a Shorelark, 5 Yellow-browed Warblers and 5 Red-breasted Flycatchers. The final highlights of the year occurred in early November with 2 Pallid Swifts at Portland – yet another Dorset 'first', and a White-rumped Sandpiper. Another feature of the autumn was a series of late reports of common summer migrants, including late November records of Redstart, Wheatear and Sedge Warbler, whilst Sandwich Tern, Swift and Whinchat were seen in early December. Seabird passage was unremarkable except for small influxes of Grey Phalaropes during early October and Little Auks during November, whilst a Long-tailed Skua was the most unusual species recorded.

Little of note was seen during the late winter, except for 4 more Ring-billed Gulls.

Obituary

Walter Stuart Best, DL, JP, MA

Walter Stuart Best was born in 1908 at Ilford, Essex, the elder son of Dr and Mrs William Best. His father's family were Cornish tradespeople, his mother's aristocracy; an unusual marriage in those days.

In 1911 his parents moved to Bournemouth. Early memories of afternoon carriage drives came vividly back to him nearly 70 years later when the Dorset Naturalists' Trust, of which he was then Chairman, was involved in plans for a nature reserve near St Catherine's Hill, Christchurch, the turning point for one of those drives.

In the 1914-18 war his parents took the lead in organising a home for Belgian refugees and wounded Belgian soldiers near to their home in Southern Road, West Southbourne. An intriguing memory from those days was of being taken to visit and present flowers to an old lady on her 98th birthday, in 1915. She could remember sitting on the knee of an uncle who, as a very young ensign, served under Wolfe at the Siege of Quebec in 1759. Walter Best's mother, dying in 1962 at the age of 96, had a striking link with a remote past. She could remember a great-aunt who was the daughter of the British Ambassador at Brussels in 1815, and who, though too young to take part in the famous ball on the eve of Waterloo, was allowed to watch, from the head of the stairs, the arrival of the guests. This same great-aunt could remember visiting the Ladies of Llangollen.

Although over-age, Mr Best's father joined the Royal Army Medical Corps in 1915. The same year his mother took his brother and himself to stay with friends at Puckington rectory in Somerset. This was his first experience of the country, and made a vivid impression. Whilst at Puckington his host, the Rector, took him to a children's service and gave a little talk about God's personal love for each one of us which made an indelible impression on him.

When his father was posted to a Command Depot at Sutton Coldfield his parents took three different furnished houses in the next 2½ years 'all pleasant with good gardens for children'. His brother and he went to school for the first time at Michaelmas 1918, at a school typically affected by war. Three classes sat in one large room and were taught by the headmaster, his wife and a young assistant master of 17.

In 1919 his parents moved to 5 Stourwood Road, Southbourne. In due course he inherited this house and preserved its garden to the end of his life. 1919 was also the year of his introduction to another of his first and last loves – County Cricket – when his father took him and his brother to the Cricket Week at Dean Park.

In 1919 Walter Best attended a prep-school in Boscombe, Gorsecliffe, as a day boy. His school career was marred by ill-health. He was taken from his prep-school in 1921 for individual tuition for common entrance. One of his tutors was Mr Reginald Cardew whose grandfather was offered the living of St Peter's, Bournemouth, in the very centre of the town, in about 1850, but he refused it because it was too lonely.

In 1921 he got into Sherborne. He also started bronchitis which led to chronic sinusitis, the bane of his life for 60 years. Whilst at Sherborne he fagged for Cecil Day Lewis. After a year, his parents took him away from Sherborne in 1922, for coaching by a tutor in Boscombe, Hamlet Kinsey, a formative influence in his life, an excellent tutor, kind and persevering, and a fine cricketer who had played for the Gentlemen of Shropshire in the 1870s.

Early holidays were centred on Scotland, and Cornwall where his father had been born, at St Ives, as was his grandfather. His great-grandfather, Peter Best, was a saddler who had moved there from Helston in the 1820s. His Cornish heritage was an essential part of Walter Best's being, and he continued to maintain a flat at St Ives after his parents died.

In 1926 he went up to Trinity College, Cambridge, to read medicine 'with romantic anticipations, and though no-one could have had a more humdrum and undistinguished career, was not disappointed'. Chronic sinusitis forced him to give up the idea of medicine so he switched to an Ordinary Degree in English Literature and English History, getting a 1st which his tutor, Dennis Winstanley, encouragingly reckoned the equivalent of a 2nd in the Honours course.

His keen interest in motor cars dated back to his early childhood. In those days he took a dislike to one distinctive make of car – the Edwardian Lanchester with its engine under the driving seat and virtually no bonnet; but by the time he went up to Cambridge he was a Lanchester addict and before going down from Cambridge in



Walter Best and his Lanchester at Godmanstone in 1982, with Lindy and Jessica Best.

1929, he had bought his first Lanchester, a 1924 tourer, for £250. Two years later he acquired an unused, but shop-soiled Straight E8 Windowed Sedan. This most imposing car gave impeccable service until it was laid up at the outbreak of war; in 1940 there was an urgent appeal for large cars and, characteristically, he gave the car to the Ministry of Aircraft Production. In 1941 he bought another Straight E8, this time with Lanchester coachwork, for £65, laid it up for the duration, put it on the road in 1946, and kept it ever after. In later years he took part in road rallies, notably the Veteran Car Club and Vintage Car Club International Rally from Brighton in 1963, and again in Eire in 1966. The Lanchester addiction loomed large in his life.

He took his BA in 1930 and MA in 1933. Almost immediately after leaving Cambridge 'a curious event emerged, arising from events which took place long before I was born'. Walter Best's mother's father, James Frederick Dudley Crichton-Stuart, was a nephew and, until early manhood, the heir of the second Marquis of Bute, and a favourite of Lady Llanover, an heiress in her own right. She directed in her will that the Llanover estates, failing issue from herself, should go to the issue of Walter Best's grandfather in the female line. By this means Walter Best became the heir. He was approached to cut the entail, and after consideration and consultation in the family, decided to do so. The sum agreed in compensation gave Walter Best the chance to choose a life suitable to his health, in farming. In 1931 he became a pupil of a prominent Dorset farmer, Robert Tory, a natural genius as a cattle breeder (and in fact as a breeder of any livestock), who lived in Bournemouth but had a farm at Winterborne Anderson. After two years as a pupil Walter Best started collecting a Guernsey herd, and a flock of Ryeland sheep, keeping them at Anderson.

At the Michaelmas of 1934 he became the tenant-occupier of Godmanston Manor Farm where he remained to the end of his life. At first he was the paying guest of the owner, Miss Spicer; she died after a few months and from then until 1937 he rented the house as well as the farm. In 1937 Godmanston Manor was sold and Walter Best bought Manor Farm. It was then 150 acres, with a house, two double cottages and farm buildings and it cost £4,400. In 1934 Manor Farm was all grass, except for two acres of kale or mangolds. The motive power was two cart-horses, a Shire and a Clydesdale. A dairyman and his wife, a carter and his son, who was the third (hand) milker and worked on the farm between milkings, comprised the farm staff. Walter Best increased the arable to four acres, two of mangolds and two of kale and the following summer got a motor hay-sweep, which his neighbour George Crabb's son Tim attached to an old model T Ford and drove for him. The hay for the rickyard, close to the dairy and bounded by the churchyard wall, had to be hauled there in a waggon.

In 1935 he was approached about forming a Cricket Club. Finding a pitch in such hilly country was not easy. In the end the only feasible place was about the middle of the northern half of the church field where a wooden hut was erected, and there were four happy seasons from 1936 to the outbreak of war. Later still the pitch was moved to a field in the village, by the stream, between the Rectory Orchard and Manor Cottage Orchard. The Club played local villages in the Piddle and Frome valleys, at Broadmayne to the south and Wynford Eagle, and Holwell to the north. 'My role was usually to try to keep an end up while others hit up a few runs at the other end. Very occasionally I made a few runs, of course, and two of these occasions were rather late in my playing days'.

Through John Pope (Vicar of Askerswell and brother of the Rector of Godmanston) Walter Best met his future wife Frances Mary Chignell of Askerswell. They married in April 1941.

In 1940 Walter Best joined the Home Guard and was section sergeant of the Godmanston section, Cerne Abbas platoon, Piddletrenthide company. At the beginning of the war he had bought, for £20, a 1930 Morris 8. In this minute and gallant car he used to take three heavy, six-footer, Home Guards and their rifles to the top of Black Hill, Cerne Abbas, on a rota, to spend the night looking for German parachutists.

In the war his wife, Frances, was County Cadet Officer for the St John's Ambulance Brigade and also worked on a NAAFI van or mobile canteen, visiting anti-aircraft batteries.

On the farm, for the latter part of the war, an Irish girl of the Women's Land Army was an admirable calf rearer, Italian prisoners of war did a bit of casual work, and a German, a jeweller's assistant by trade, was a splendid worker. After the spring of 1942 petrol coupons were only available for specific purposes and, typically, he made it a point of honour not to take advantage of the generous rations that were available for farmers, or to use any part of them for pleasure.

'During the war I was introduced to arable farming and reached a maximum of 54 acres of corn. This was done with an old binder, the sheaves were stooked by hand and ricked. Later the corn was threshed with a neighbour's tackle, by a responsible man, and a scratch team, which included Mrs Moxom, Mrs David and sometimes Mrs Best. There were two feeding the sheaves to the platform, and two on the platform, two or three building the straw-stack, one on the sacks and another on the dust. It was during the war that I started making a little autumn silage, in a sectional wooden tower. It was compacted by treading, an unpopular job which I did myself. Palatability was encouraged by the addition of treacle from a watering-can. It was most uneconomical.' He also grew a few acres of potatoes regularly on the farm during the war, the ladies already mentioned and a few others, helping to plant and lift them. Also in the war Ralph Wightman, the Assistant Agricultural Officer for the county (and broadcaster), advised him on the yearly cropping programme and on seed corn and grass seed mixtures. Although he was a radio star he continued to advise Walter Best, without any fee, because he enjoyed walking round the farm once or twice a year. Wightman was a humorous and well-informed man, and remarkably unspoilt by his great popularity in the media.

In 1940 Walter Best acquired his first tractor, a Fordson, which gave yeoman service for many years, and at first supplemented the horses purchased from Messrs Candy who always did him well. Later a little 'Fergy' was added. When more power was needed he turned to David Browns which were made by a British-owned company and continued to use them to the end of his farming days.

After 1945 he resumed showing in the Guernsey classes at the local shows, with some modest success, though he never won the cup he presented for the best Guernsey at Dorchester Show. He had one cow which had 17 calves and lived on to the age of 23, Brookland's Delight 1931-1954. She was a great character who let his three children sit on her, and regularly opened gates - she would unhasp a gate latch with her horns. Sometimes when she was being followed by other cows she would close the gate behind her. Two great events on the farm at this time were the change from hand to mechanical milking; and then later on to the milking parlour. Modern trends to intensification did not appeal to him, and his interest in farming waned so that he was happy to retire in 1970.

In 1930 Walter Best started hunting with the South Dorset Hunt, hiring from the late H. R. Jesty, then of Roke Farm, an oldish grey which had show-jumped in 13 counties, very slow but a first rate and most willing jumper, ideal for beginners. After hunting from his parents' home for three seasons with the South Dorset Hunt, on settling in Godmanston he subscribed to that Hunt and to the Cattistock, in whose country, but less than a mile from the South

Dorset boundary he lived. For the three seasons 1936 to 1938 he averaged between 30 and 40 days in the regular season, and enjoyed every minute of it, owing most of his pleasure to a grey gelding *Safety First*, a slow, but magnificent and keen jumper of timber, and there were also two small bays who did him well. The other hunting debt he owed was to his groom-gardener, later his farm-foreman, the late Fred Moxom, who looked after the horses so well and became a life-long friend.

Fox-hunting was maintained right through the war by the Cattistock and South Dorset Hunts, but Mr Best's participation up to 1942 was small and, after 1942, minimal. From 1945 he had nine seasons on an admirable hunter, *Brenny*, for most of which he was able to be well up. 'Fox-hunting gives one a very close acquaintance with the countryside over a wide area and enables one to see private land to which one would have had no access otherwise; and is a social activity which brings many friendships and a wide acquaintanceship.' He gave up hunting in his early sixties after one or two potentially dangerous falls, but continued to ride regularly until his illness in 1983.

Immediately after the war the shortages, especially of coal, and rationing, added to the hardships of the freeze-up in the winter of 1947. It was possible to keep the horses exercised in the snow, but the horses at Minterne House were unable to get out of the stables for the whole duration of that cold spell because of ice which surrounded the stables.

Walter Best's father had been a strong supporter of the National Trust and had introduced him to conservation at an early age. They both attended the first CPRE annual conference in 1930. Walter Best joined the Dorset CPRE in 1935, when Colonel John Belgrave was its Hon Secretary and mainspring, and acted as a local representative in the parish. The Dorset branch fell into eclipse after Colonel Belgrave's death. When it was proposed to construct the Atomic Energy Authority's Establishment at Winfrith Heath in 1956 Walter Best chaired the *ad hoc* body formed to oppose the plan, later he became Chairman, and then a hard-working President of the branch, giving evidence at planning enquiries.

In 1937 he had been elected to represent Godmanston and Nether Cerne on the Dorchester Rural District Council and continued to do so until 1976. After local government reorganisation he also represented Stratton and Bradford Peverell in an enlarged constituency and his chief preoccupations were always with housing and planning. From 1958 to 1962 he was Chairman of the Council.

During his farm-pupilage Walter Best had taken a part in Diocesan Youth activities in the Winchester Diocese, to which Bournemouth belongs, and for a time was a helper at a Boys' Club in Pokesdown, and served on the Parochial Church Council of All Saints', West Southbourne.

In 1941 he was licensed as a Lay Reader and in the succeeding years took services in at least 30 churches from Askerswell to Bere Regis and from Abbotsbury to Glanvilles Wootton, combining this with his duties as churchwarden at Godmanston. He was the first Honorary Secretary of the Dorchester Readers Centre, for 10 years covering the area of the old Dorchester Rural District plus Weymouth and Portland.

In his early days at Godmanston his neighbour at the Manor, Mrs Duke, had been associated with the founding of the Home of St Francis at Hilfield. It was she who introduced Walter Best to the Home at the summer festival there in 1936. At the time the Anglican Franciscan, Father Algy, was in the process of linking up with Brother Douglas, the founder of the Home, to form the Society of St Francis of Assisi in the Church of England. A year or two after this first visit Father Algy asked Mr Best to join a small Lay Committee of Management which used to meet regularly at the Friary. Very soon he became the Honorary Treasurer of the Home continuing the job, in a modified form, till his death. He greatly appreciated this close link with the Friars, to be able to join them in worship, to attend Retreats and Quiet Days, to visit the Brother Secretary regularly, and to bring friends to visit from time to time. Above all, perhaps, to know personally so many splendid people, so many 'Brown Brothers'. His strong Christian faith helped him to weather the shock of the tragic death of his wife in 1968, but it was a loss he continued to feel for the rest of his life.

One of many tastes - like Jane Austen and fox-hunting - which his wife and he had in common was bird-watching and it became an increasing part of his life over the years. He carried out a Common Bird Survey for the Trust for British Ornithology for 20 years, counting the number of 'singing males' in each visit to his territory, the farm, in the four months from April to July. For many years he

was a contributor to the Bird Report of the Proceeding of the Society.

In 1947 he was commissioned to the Peace for the county of Dorset and sat in the Dorchester Petty Sessional Court for the next 30 years serving on the Juvenile Panel, on the Prison Committee and the County Police Committee, at Petty Sessions, Quarter Sessions and, at the end of his time as an active Magistrate, at the New Crown Court. This was the favourite of his public duties, and the one he minded most retiring from.

In 1960 Mrs Bonham Christie, the owner of Brownsea Island, died and her heir offered the island for sale. An appeal was issued for funds to buy Brownsea for the National Trust. Several members of the DNHAS with a few others, realised that this was an opportunity to form a county Naturalists' Trust which could apply to the National Trust to lease part of the island for a nature reserve. Mr Best presided over a number of meetings of the Society's Council and of a special sub-committee which laid plans for this project. Among the most active organisers were Dr Rooke, Mr Francis Dalton, Mr Arthur Bull of Bryanston School, Dr Lisney and Professor Ronald Good. Mainly owing to the exertions of Miss Helen Brotherton the money for purchasing Brownsea by the National Trust was raised and the island bought. The Dorset Naturalists' Trust was formed, with Mr Gooch as its first Chairman. Walter Best became a Founding Council Member of the Dorset Naturalists' Trust and its Chairman from 1973 to 1984, an appointment he found most rewarding and stimulating. 'Like the DNHAS the DNT's outstanding characteristic is the number of people who are glad to work hard and effectively for the objects of the Trust'.

Walter Best joined the Dorset Natural History and Archaeological Society in 1935. Colonel Drew persuaded him to join the Society's Council in 1951, and later to succeed him as one of the Dorset representatives on the Editorial Committee of Somerset and Dorset Notes and Queries. It was during the war that Walter Best decided the Stuart period was so over-documented that he would turn instead to the Dark Ages, and especially to the early church.

In 1956, on the death of Dr Dru Drury, he became a very active Chairman of the Society, a post he held until he was appointed President from 1968 to 1971. He was a Trustee of the Society from 1971. His Chairmanship included the appointment of R. Peers as Curator and the crucial years of the Society's public appeals, from 1963 onwards, which led to the building of the Museum extension at the back of Williams House during his Presidency. He was also a great supporter of the Museum's Music Society, indeed of all the activities of the Society in the Museum and in the field. For a decade from 1966 he was a joint organiser of five tours by the

Society to Cornwall, York, Pembrokeshire, Shropshire and the Cotswolds. He was a generous supporter of the Museum's fund-raising appeals and, most recently, of the new archaeological gallery, which delighted him.

Frances and Walter Best had four children, a daughter and three sons. They chose most fittingly to read at the Memorial Service in St Mary's Church, Cerne Abbas, on Saturday 13th October 1984, 1 Corinthians 13, Thomas Hardy's poem 'Afterwards', and Wordsworth's 'Ode on Intimations of Immortality'.

This obituary has been compiled by R. N. R. Peers from a manuscript, 'Some Memories', written by W. S. Best in the summer of 1983.

Publications in Proceedings of the Dorset Natural History and Archaeological Society:

- 'Some notes on the early British church', Vol. 70, 65.
- 'Relations between Wessex and Cornwall in early days', Vol. 78, 110-114.
- 'Arthur of Britain', Vol. 83, 117-123.
- 'The early British church', Vol. 85, 124-129.
- 'The Chi-Rho symbol in early British church', Vol. 87, 208-212.
- 'Lives of the early British saints', Vol. 89, 224-226.
- 'Four famous names in the early British church', Vol. 90, 264-268.
- 'A. D. Pass Esq., OBE, DL, MA', (Obituary), Vol. 92, 31.
- 'Origins and early development of the Christian church in Britain', Vol. 92, 214-217.
- 'Notes on cricket history', Vol. 93, 247-251, Presidential Address.
- 'The local society under fire', Vol. 94, 16-17, Presidential Address.
- 'The early church in Dorset', Vol. 96, 45-47.
- 'Church and state in Dumnonia', Vol. 97, 19-21.
- 'E. C. Chancellor, FSA' (Obituary), Vol. 99, 153, with WSS.
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