THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.
A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.
This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.
The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.
When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

SETTLEMENTS & ECONOMY IN BRITAIN DURING THE FIRST MILLENNIUM B.C.

ANNA RITCHIE

EDINBURGH
UNIVERSITY
LIBRARY

Ph. D., 1970.

Theses Section 1.

UNIVERSITY OF EDINBURGH

Postgraduate Regulation 2.4.9.

DECLARATION ON ACCESS TO A THESIS

[The following Declaration is designed to protect the Candidate while expediting the availability of his work to other scholars. Candidates should note that (i) the thesis may be consulted by registered users in Edinburgh University Library or in the libraries of other educational establishments but may not be issued for loan outside any library to individuals except academic staff of the University of Edinburgh; (ii) the Abstract of the thesis is the copyright of the University of Edinburgh. All applicants for consultation, loan or photocopy of the thesis have to sign an appropriate declaration.]

Full Names of Candidate (surname first) RITCHIE - ANNA

Candidate for degree of PhD 1969 Faculty ARTS

Title of Thesis Settlements and Economy in Britain during the first millennium BC

Please DELETE two paragraphs of 1–3 below, leave one of them undeleted, and sign the form. Save in exceptional circumstances, PARAGRAPH 1 is recommended.

1. I hereby give my permission to Edinburgh University Library to photocopy this thesis in whole or in part for use by individuals, on condition that each person for whom a copy is made signs the following declaration (which will be preserved in Edinburgh University Library and available there for inspection by me);

   'I undertake fully to observe the author's copyright in this thesis, not to publish the whole or any part of it without the author's written permission, and not to allow any other person to use the copy made for me'.

OR

2. I wish all applicants for photocopies of the whole or any part of this thesis to be referred to me individually; but I recognise that if Edinburgh University Library cannot by reasonable enquiry discover my address the University Librarian will decide, after consulting my Head of Department, whether or not to make a photocopy on obtaining from the applicant a declaration as in 1 above.
   Please delete the following sentence if desired: The bibliography/list of works consulted may be photocopied providing the applicant completes a declaration as in 1 above.

OR

3. If this paragraph is left undeleted, please ask your Head of Department to complete paragraph 4.
   I request exceptionally that no access of any kind be permitted to this thesis, commencing when and if restriction is approved. I understand (i) that 'no access' means that not even I, my supervisor, nor my Head of Department will have access to the thesis; (ii) that at the end of the year the thesis will be made available to library users unless I make a request for the restriction to be extended for a further year. This request is supported in paragraph 4 below by the Head of my Department.

Signature of Candidate Anna Ritchie *Date* 25-3-76

4. Certificate by University of Edinburgh Head of Department (if appropriate: see 3, above):
   I have read the full text of paragraph 3, above. I support the request for restriction of access for the following reason(s):–

Signature of Head of Department ..... *Date* .....

SETTLEMENTS & ECONOMY in Britain during the first millennium B.C.

by Anna Ritchie

Thesis presented for
the Degree of Doctor of Philosophy
of the University of Edinburgh
in the Faculty of Arts

1969

'Men are barbarians in the degree to which they are dominated by their non-human natural surroundings, and are civilised in the degree to which they succeed in dominating these.'

MacNeill 1935

To my husband and my parents for
their help and encouragement.

Contents

List of Plates

XXIX, XXX Cross-ridge dyke, Woden Law, Roxburgh., R.D.59

XXXI Cross-ridge dyke, Horn Ridge, Yorks., Y.D.14

With the exception of pls. VIII and XII, all photographs have been taken by the author.

List of Line Illustrations

22. Kemp's Castle I and II, Roxburgh., earthwork enclosed settlements (after RCAHMS, 1956, fig. 502).

23. Distribution of banjo and spectacle enclosures and complex ditch settlements.

24. Church End Ring and Hanging Langford Camp, Wilts. (after Crawford and Keiller, 1928, pl. XVII).

25. Gussage Cowdown, Dorset (after Hoare, 1821, opp. 30).

26. South Tarrant Hinton Down, Dorset (after Sumner, 1913, pl. XX).

27. Worthy Down, Hants., complex ditch settlement (after Hooley, 1929, fig. 1).

28. Distribution of open settlements.

29. West Harling Site II, house-plans (after Clark and Fell, 1953, fig. 3).

30. Swallowcliffe, Wilts. (after Clay, 1925, pl. I).

31. Diagram of house-types.

32. Distribution of timber granaries.

33. Distribution of drying-racks.

34. Multiple-frame drying-racks, Park Brow and Meon Hill (after Wolseley et al., 1927, fig. P; and Liddell, 1937, fig. 3).

35. Distribution of grain found on settlements of the later first millennium B.C.

36. Profiles of plateau and contour dykes.

37. Profiles of cross-ridge and cross-spur dykes.

38. Cross-dykes on Cold Kitchen Hill, Wilts.

39. Cross-dykes on Whitesheet Hill, Wilts.

40. Cross-ridge dyke at Harehope Rings, Peebles. (after RCAHMS, 1967, fig. 102).

Line illustrations taken from published plans are simplified and, in some cases, interpretative versions of those plans. The symbols used in drawing earthworks are a thick black line representing the bank and a fine black line indicating the outer lip of the ditch.

Introduction

'..... Celtic Britain retained an archaism of tradition in that fundamental element of human culture, the home, ...' (Piggott, 1965, 236). In writing those words, Piggott was referring to one specific artefact, the house-type, but it is one of the aims of this study to show that those same words are true for other aspects of the Celtic home, not only those immediately surrounding the hearth but also those concerned with the economy of arable and pasture. For this reason, it is considered necessary to examine in Part I that archaic background in order to demonstrate the degree of continuity of tradition between the second and first millennia B.C. in Britain, particularly since such an examination is at present lacking in the published archaeological record.

Statements are frequently made in the literature on the British Early Iron Age about typical forms of settlement; it is hoped that, by detailed examination and classification of settlements of recognisable form, the present study will provide a firm basis from which general and specific conclusions may safely be drawn. The material evidence used has been derived primarily from excavation reports published before June 1969, since these can provide the only source of detailed information; field surveys, particularly those produced by the work of the several Royal Commissions on Ancient and Historical Monuments, have also been used to a considerable extent. Personal fieldwork has been carried out in many areas, with the purpose of answering specific problems.

In Part II each type of settlement will be examined

separately, followed in Part III by sections on individual features such as pits and on related earthworks such as field-systems and linear ditches. Enclosed settlement types will be accompanied by an examination of superficially similar sites at which occupation has yet to be proved or disproved by excavation. The geographical area involved comprises Britain as far north as a line drawn between the Forth and Clyde estuaries; it is believed that, north of this approximate boundary, settlement in general takes on a rather different character and cannot helpfully be related to settlement forms in the rest of the country.‡ Settlements are treated as unified classes of site within the entire area, ignoring the local cultural regions indicated primarily by pottery studies. It is hoped that this treatment will be justified by the evidence from the settlements themselves, for the various types do seem to indicate some degree of basic unity of tradition. The present writer believes that local variations in pottery or metal-working traditions should not be permitted to obscure the underlying unity of habit and change in the domestic life of the prehistoric communities of Britain. A catalogue will be provided at the end to accompany the discussion of each type of site and each type of internal feature, and, as far as possible, an attempt has been made to make these catalogues comprehensive. It will be appreciated that the success of this attempt has been limited by the amount of information available from published excavations and field-surveys. An exception has been made in the case of earthwork enclosures in which occupation is uncertain, partly because of the vast number of such enclosures and partly because they are of little value to a discussion of

separately, followed in Part III by sections on individual features such as pits and on related earthworks such as field-systems and linear ditches. Enclosed settlement types will be accompanied by an examination of superficially similar sites at which occupation has yet to be proved or disproved by excavation. The geographical area involved comprises Britain as far north as a line drawn between the Forth and Clyde estuaries; it is believed that, north of this approximate boundary, settlement in general takes on a rather different character and cannot helpfully be related to

‡ The geographical area studied has also, and for the same reason, been confined in S.W. England to the region east of a line drawn approximately between Weston-super-Mare and Lyme Regis.

justified by the evidence from the settlements themselves, for the various types do seem to indicate some degree of basic unity of tradition. The present writer believes that local variations in pottery or metal-working traditions should not be permitted to obscure the underlying unity of habit and change in the domestic life of the prehistoric communities of Britain. A catalogue will be provided at the end to accompany the discussion of each type of site and each type of internal feature, and, as far as possible, an attempt has been made to make these catalogues comprehensive. It will be appreciated that the success of this attempt has been limited by the amount of information available from published excavations and field-surveys. An exception has been made in the case of earthwork enclosures in which occupation is uncertain, partly because of the vast number of such enclosures and partly because they are of little value to a discussion of

settlement forms. Similarly, no attempt has been made to list those occupation sites about which very little is known; many such sites have been found in the course of quarrying and road-making and are consequently very partially recorded. Above all, it must be emphasized that this study is not concerned with hill-forts, either earthen or stone-built, because these represent a specialised defensive form of settlement. The present study is devoted to settlements and homesteads which are essentially non-defensive in the military sense of the term. A C.B.A. conference held in 1965 was concerned with rural settlement in Roman Britain (Thomas, ed., 1966) but, apart from a certain amount of information about the Iron Age background presented then, nothing comparable has been achieved for the pre-Roman period.

It has long been obvious to archaeologists that the technological model of the past is inadequate, if not misleading, as a chronological framework. In the present context, it has been recognised that there can be no distinct dividing line between Bronze Age and Iron Age, and it would be futile to attempt to place many of the settlements of the early first millennium B.C. into either category. Among possible alternative models might be one based on economic factors, such as the development of agricultural methods, but these are governed too closely by local soil conditions, so that the resultant model could be useful only in a very broad sense, and would therefore be no more useful than the old technological scheme. The present writer follows, therefore, the lead taken already by some archaeologists by giving sites absolute date brackets in terms of centuries B.C., based on available radio-carbon dates and typological

comparison of associated artefacts, the approximate absolute dating of which relies upon accepted links with continental European chronology of ultimately historical origin. This is not the place, nor is the author competent, to discuss the merits and defects of Hawkes' ABC system of chronology for the British Early Iron Age; the primary difficulty in using this system in the present context will be obvious from the inherent implication in the ABC chronology of a division between Bronze and Iron Ages.

Detailed knowledge about prehistoric settlements is a comparatively recent addition to the archaeological record. Until the late nineteenth century, excavation was almost entirely confined to sepulchral sites; the explanation must lie in the immediate visibility of barrows, the fact that a barrow could be opened in a day, or even a single sunny afternoon, and in the almost sure reward for such labours in the form of grave-goods. Interest in ancient burials had increased further in the early part of the century, as a result of the great controversies over human evolution. The search for evidence of the pattern of evolution led to an obvession with human bones, and prompted Bateman in 1861 to condemn the invaluable work of Colt Hoare: '... the costly folios of Sir Richard Hoare's 'Ancient Wiltshire' which are in a great measure useless to the scientific student, from the absence of any craniological Notices or Measurements' (1861, v).

Surface remains of monuments other than barrows were, however, noted in the travels of antiquaries as early as the eighteenth century. Stukeley observed field lynchets near Salisbury and in Cranborne Chase (1776, 138), and drew

a plan and profile of Danebury hillfort in Hampshire (MS in Devizes Museum Library). It is, however, to the indefatigible eye for field antiquities of Sir Richard Colt Hoare that the debt of the present study of settlements really begins; unlike most of his contemporaries, Hoare did not confine his excavating activities to barrows, and he noted and planned many examples of settlements and linear earthworks in Wiltshire (1812; 1821). He tested by excavation, albeit of a sketchy nature, whenever he suspected the presence of occupation remains; crop-marks, surface irregularities, unusually dark soil thrown up by moles and mere probability on topographical grounds were enough for the employment of 'the spade and pickaxe, those unerring indagatores' (1821, 189). Hoare claimed to be the first to recognise 'British settlements' (ibid., 105), and he was able also to distinguish field lynchets. To a very considerable extent, he fulfilled the motto adopted in his Introduction: 'We speak from facts, not theory' (1812, 7).

Warne continued this form of detailed fieldwork in Dorset, and carried out limited excavation of settlement sites at Gussage Cowdown and Bondsleigh (1872, 25, 14). The pits at the latter site and elsewhere in Dorset and Wiltshire were interpreted by Warne as 'pit dwellings', an idea common to many antiquaries of his time and which remained in vogue well into the present century. Mortimer examined several such pits in Yorkshire, but these were incidental to his excavations for he was concerned primarily with barrows (1905, 258).

Mortimer acknowledges the stimulation which he derived from the Great Exhibition of 1851 to carry out antiquarian

researches (ibid., ix n.). The Exhibition was just one of several events in the mid nineteenth century which had considerable effect upon the development of archaeology. Of particular importance for the exploration of settlements were the discoveries in 1839 of Irish crannogs and in 1853-4 of Swiss lake-dwellings, for these led to the search for and discovery of similar timber pile structures in England and Scotland. The first definitive work on British crannogs was published by Munro in 1882. The Glastonbury Antiquarian Society sponsored the excavations in 1892-1907 of the lake-village at Glastonbury, helped by the donation to the Society of 5 acres of land for the purpose (Bulleid and Gray, 1911).

It is in Scottish archaeology that the earliest record of an excavation of a settlement site may be found. Williams cut a remarkable section through the vitrified fort of Knockfarril in Ross and Cromarty, '... beginning without all the ruins, and cutting to the rock all the way ...', and he recognised the inner structures as houses (1777, 7, 12). The field-working tradition in Scotland was most firmly established a century later by Anderson and Christison, the latter producing in 1890 a field-survey so excellent in its form that it provides a model even for modern studies (Christison, 1890). Unlike Munro, Christison's work was prompted by purely local and personal factors; living in Peeblesshire in 1885-6, his interest was directed to local antiquities simply as objects for physical exercise, and this interest led to similar explorations in other areas (1894).

By 1908, Allcroft was able to refer to a 'general quickening of interest in all things savouring of antiquity'

(1908, vii), one of the results of which had been the establishment of a Committee on Ancient Defensive Earthworks and Fortified Enclosures by the Congress of Archaeological Societies in 1901. The Earthworks Committee put forward a provisional classification of earthworks, which influenced, to some extent, the fieldwork of Allcroft himself, Sumner (1913) and Williams-Freeman (1915), with the result that the surveys carried out were still concerned primarily with defensive sites rather than settlements. Total field surveys, county by county, began to appear after the foundation of the Victoria County Histories and the Royal Commissions on Ancient and Historical Monuments; in the former series, volume one on Durham was published in 1905, and the Scottish Royal Commission produced a volume on Berwickshire in 1909.

The information about settlements in these various field surveys was limited, since it was largely confined to surface remains. The first major excavations of undefended settlements were carried out at the end of the nineteenth century by General Pitt-Rivers, who succeeded in 1880 to the Rushmore estates in Dorset, 29,000 acres of Cranborne Chase which were rich in antiquities. Pitt-Rivers' meticulous excavations at the prehistoric and Romano-British villages of Rotherley, Woodcuts and others provided a detailed and invaluable source of information about domestic arrangements at these sites (1888, 1898). This attention to detail was unfortunately lacking in the major excavations of settlements which followed in the second and third decades of the present century; few structural remains other than pits were found, for example, by the Cunningtons at All Cannings Cross (1923), Clay at

Swallowcliffe and Fifield Bavant Downs (1925; 1924), Smith at Scarborough (1927) or Hooley at Worthy Down (1929), while the report on the excavations at Cold Kitchen Hill omits to mention the actual site at all (Kivell, 1925).

It was not until the 1930's that excavations of settlements produced again the measure of detailed information achieved by Pitt-Rivers, with the work of Holleyman and the Curwens in Sussex, and Stone and Bersu in Wiltshire. It is, therefore, only comparatively recently that a sufficient body of knowledge has existed to enable a general study of prehistoric settlements to be attempted. This has been achieved, to some extent, on a regional basis, but it is hoped that the present wider study will help towards an understanding of domestic traditions in the first millennium B.C. throughout Britain.

The survey will not include any discussion of the 'lake-villages' at Meare and Glastonbury in Somerset, partly because they appear to be unique and therefore incomparable but primarily because of the re-interpretation and re-excavation being carried out at Meare by Avery (1968; typescript interim report, 1968). It is becoming obvious from his work that current ideas about Meare and Glastonbury need radical revision; particularly interesting is the suggestion that the clay mounds at Meare do not, after all, represent houses and that the site is not a densely packed village at all (Avery, 1968, 36). One point which has arisen from the present writer's examination of the evidence from Glastonbury may be worth mentioning; detailed analysis of the stratigraphical relationship of one clay mound to another has revealed the presence of five structural periods

in the process of laying down the clay 'floors' which form the mounds.

It is not proposed to deal in detail with the subject of timber house-plans and reconstruction, although a basic survey will be made of the size and type of houses found on the sites under discussion. Estimation of whether structures represented in the archaeological record would function in a practical sense requires a knowledge of architectural theory which the present writer does not possess. Moreover, the subject is at present under full study by C. Musson at the University College at Cardiff, and should not be duplicated until the results of his work are available. Re-interpretation of the main house at Shearplace Hill in Dorset has been carried out independently (Avery and Close-Brooks, forthcoming), though the present writer has reservations about the application of their ideas on other settlements of the second or early first millennia B.C. (below, p.20).

An attempt was made, with the guidance of Professor Kenneth Jackson, to examine early Welsh and Irish literary sources in order to discover how useful they might be as evidence of customs in the late first millennium B.C. This attempt was abandoned, mainly because the present writer lacks the necessary linguistic knowledge and also because the validity of the approach seems very doubtful. It relies upon recognising early strata and linguistic archaisms in folk-tales and laws, and it is uncertain whether their origins may credibly be pushed back into the pre-Roman period. Several scholars have, however, claimed that this is possible (e.g. Gruffydd, 1958; Rynne, 1961; Jackson, 1964). As a result of the writer's study of historical sources, one

point of interest emerged in connection with the bone combs belonging to the second half of the first millennium B.C. These are normally interpreted as weaving-combs, but it is also possible that they were used for plucking wool from sheep. Plucking, or rooing, was certainly practised in antiquity (Forbes, 1964, 7) and is particularly suitable for the Soay species of sheep which has been identified from bone evidence as the modern descendant from the prehistoric European species (Ryder, 1966a, 94; 1966b). Examination of the areas of wear on pre-Roman bone combs might indicate their use, either for weaving or for plucking sheep. Some support for the latter interpretation may be found in the Laws of Hywel Dda; amongst a list of farming or crofting implements appear the following: 'An adze, a knife, a mattock, a sickle, a comb, a shears, a hedging-bill, a bill-hook . . .' (Richards, 1954, 93). These are all tools for use in the field rather than the home (apart from the ubiquitous knife), and this, together with the juxtaposition in the list of comb and shears, suggests that a sheep-plucking comb is meant. The Laws of Hywel Dda were not written down until the tenth century A.D. (and none of the surviving manuscripts can be dated before the twelfth century), but the traditions there described have been attributed to as early as the sixth century A.D. (Alcock, 1963, 196). Since most types of tool found on sites of the first half of the first millennium A.D. were already present in the pre-Roman period, it is not difficult to envisage the use then of sheep plucking combs.

For geological information the writer has relied upon the Geological Survey 'Ten-Mile' maps (OS, 1957) and regional surveys (IGS, 1948), together with the general works on England and Wales by Trueman (1949) and on Scotland by Sissons (1967).

In the interests of clarity, it is proposed not to adopt the metric system of linear measurement; since all but a few of the excavated sites under discussion were published using feet and inches, it would lead to confusion in referring back to original reports if measurements were converted here into the metric system.

The study incorporates some of the results of work carried out for an unpublished B.A. thesis on the minor linear earthworks of Wessex (Cardiff, 1965), though the survey of such earthworks has now been extended into other geographical areas.

I should like to thank the following people: Dr. Ian Stead for a typescript and drawings from his unpublished report of excavations at Blagden Copse; Mr. Michael Avery and Miss Joanna Close-Brooks for a typescript and drawings from an unpublished note on the main house at Shearplace Hill; Mr. Colin Bowen for allowing me to read an unpublished typescript entitled 'The Celtic Background'; Professor Barry Cunliffe for allowing me to read his Ph.D. thesis on Early Iron Age Pottery; Mr. Timothy Clough for a drawing of a sherd from Snarehill in Norwich Museum. I am also indebted to the Royal Commission on Ancient and Historical Monuments (Scotland) for allowing me to read the results of fieldwork in Peeblesshire prior to publication (1967), and to Mr. Ian Scott for providing very kindly the base map used here for distribution illustrations. I should also like to

thank Mr. Scott for his kindness in designing the title-page as well. The Department of Education and Science provided a financial grant which enabled me to carry out researches in library and field and for which which I am most grateful. My debt to Professor Stuart Piggott, supervisor and friend, is too great to allow adequate thanks.

Part I. Settlements of the later second and early first millennia B.C.

i. Cinerary Urn Settlements in Southern England

Domestic sites are very rare in the archaeological record before the beginning of the Deverel-Rimbury Culture in Southern England in the twelfth or thirteenth centuries B.C. This paucity of evidence must reflect the nature of domestic settlement, for it cannot wholly be explained in terms of chalkland erosion. Settlements prior to 1300 must, in general, have been flimsy in form and lacking any earthwork features which might be expected to survive; significantly, the few known sites of this period owe their recognition to the fact that there were visible surface traces of earthworks, with the exception of the Stockbridge pit which was discovered accidentally. There are no timber structures which can be assigned to this period.

The sites in question show two forms, both curvilinear. The only example of a large earthwork enclosure is Rams Hill in Berkshire, where an area 400 x 270 ft. is surrounded by a wide and shallow ditch. The bank which must have accompanied this ditch has been flattened by ploughing or erosion. Excavation revealed a single entrance with a post-hole on either side, and sherds of Collared Urn pottery, listed by Longworth among his primary series, were found at the top of the primary silt in the ditch (Longworth, 1961, 296). The small earthwork enclosure is represented by the site at Playden in Sussex, where an area 65 ft. in diameter is

enclosed by an unbroken line of ditch, again lacking any trace of a bank. The remains of burnt timbers were found in the bottom of the ditch, but its size (on average 5 ft. wide and 2½ ft. deep) would seem to preclude the possibility of a palisade set into the ditch. Three irregular pits were found in the centre of the enclosure, but their function remains enigmatic. It cannot be ruled out that this may be some sort of ritual site, for the lack of an entrance and the deliberate deposition of a layer of sand over the whole site would be unusual features for a settlement. A biconical pot with overall finger-nail decoration and a pinched-out foot (referred to below, p.35) was found on the ditch bottom, together with a triangular flint arrowhead. A second period of activity on the site is indicated by finds from a layer on top of the sand which include large numbers of flint flakes and cores, fragments of saddle quern and sherds of lugged jars with slack biconical profiles.

Playden is paralleled by a similarly enigmatic site at Middle Brow in Sussex. A circular area measuring about 100 ft. in diameter is enclosed by a continuous ditch which also lacks a bank. The site was again overlain by a layer of sand; the excavator of Playden suggested that the deposition of sand might have been designed to counteract the dampness of the clay subsoil, but this idea cannot be repeated for Middle Brow since the subsoil there is chalk. One quadrant of the latter enclosure was excavated, producing no traces of structures and only four sherds of pottery described as 'indeterminate' which are unillustrated in the report.

There seems to be a pre-Deveral-Rimbury phase of

occupation at Cock Hill in Sussex; sherds of cinerary urn fabric were found in the primary silt of the ditch and in the old land surface within the enclosure, but these sherds cannot be associated with any of the structural evidence on the site. The main occupation belongs to the Deveral-Rimbury period and consists, in structural terms, of a palisaded enclosure which was replaced by a ditch and bank. The U-shaped section of the ditch should probably be considered as a survival from earlier building tradition, for it is typical of enclosures and barrows associated with cinerary urn pottery of the mid second millennium B.C.

It is evident that there can have been no great break in time or habit between communities of cinerary urn and Deverel-Rimbury traditions, for the impression of overlap provided by Cock Hill is supported by several other sites whose main occupation belongs to the latter period. This is, moreover, corroboration in practical form of the development shown in contemporary pottery. The present study is not the place in which to argue in detail the cinerary urn origins of classic Deverel-Rimbury pottery, but it should be stated that the writer believes in an insular origin for all three main forms of vessel (i.e. bucket, barrel and globular). Including Cock Hill, seven Deverel-Rimbury settlement sites on the chalklands of southern England have produced cinerary urn sherds, all of the collared variety, together with two sites belonging to the associated group in E. Anglia. Only at Shearplace Hill can this material be related to any structure preceding the main settlement; here a curvilinear length of shallow ditch was found, overlain by the main enclosure (Rahtz and Ap Simon, 1962).

The overlap of pottery traditions apparent on these

settlement sites can also be discerned on burial sites of the Deverel-Rimbury culture. Several cemeteries have revealed primary or 'founder' burials accompanied by cinerary urns, usually but not exclusively of collared form, for example, those at Deverel (Miles, 1826), Pokesdown (Clay, 1927), Latch Farm (C.M. Piggott, 1938) and Steyning (Burstow, 1958). A link is also provided by the bronze razor of class I type found in a Deverel-Rimbury context at South Lodge (Pitt-Rivers, 1898), for such razors have been found frequently with cinerary urn associations (C.M. Piggott, 1946; Butler and Smith, 1956).

ii. The Deverel-Rimbury Culture

The date of the beginning of the cultural complex known as the Deverel-Rimbury culture is still uncertain. The association with the culture of a number of bronzes diagnostic of Hawkes' period Middle Bronze Age 2, approximately 1200-1000 B.C. (1960), provides a broad terminus ante quem, but it seems probable that the early development of the culture began before 1200 B.C. on grounds partially indicated in the preceding section. Although this is not the place to discuss the dating of the Deverel-Rimbury Culture in detail it is worth noting the following radio-carbon dates:

Wilsford shaft, Wiltshire - sample from bottom of shaft, 1380 ± 90 B.C. (Ashbee, 1966; N.P.L. 74).

Shearplace Hill, Dorset - composite sample, 1180 ± 180 B.C. (Rahtz and ApSimon, 1962; N.P.L. 19).

Gwithian, Cornwall - 1110 ± 103 B.C. (Ashbee, 1966; N.P.L. 21).

The distribution of Deverel-Rimbury settlements is considerably more sparse than that of burials belonging to the same cultural complex, but the overall pattern is similar (fig. 1). Settlements have been found in Dorset, Wiltshire, Sussex, possibly in Berkshire, and in East Anglia (forming part of the related Ardleigh Group). They are all enclosed with the sole exception known at present of Park Brow, and they represent the homes of small communities, perhaps 2 - 5 families strong, which might be termed hamlets rather than homesteads or villages. Shearplace Hill should probably be considered to represent a homestead. It is unfortunate

that there is insufficient evidence to indicate the social unit prevalent in the earlier second millennium B.C.

The site at Park Brow consists of eight circular platforms cut into the gentle slope of the chalk downs. One platform was totally excavated, revealing a number of post-holes and pits (fig. 2) which, although they do not form a clear pattern, must represent a circular timber house.

Sub-rectangular forms are predominant among the enclosed sites, including those in which habitation is as yet unproven. The class of site known as cattle enclosures has long been accepted as a feature of the Deverel-Rimbury Culture, but examination of the available evidence suggests that this may be a misleading idea. Enclosures in which there has been little or no excavation of the interior may yet prove to have been inhabited, while the sites stripped by General Pitt-Rivers in Cranborne Chase were almost certainly occupied. Martin Down in Hampshire and South Lodge in Wiltshire contained six and two pits respectively, and the latter site was found to have 'numerous soft places in the chalk', some of which may have been post-holes (Pitt-Rivers, 1898, 12). It seems possible that these two enclosures were inhabited rather than used for penning animals. It will be argued presently, however, that an enclosure on Harrow Hill in Sussex should be interpreted as a cattle enclosure belonging to the inhabitants of the settlement on New Barn Down.

Settlements contained within sub-rectangular enclosures may be divided into two groups. The first group is characterised by the presence of a single enclosure and is exemplified by Thorny Down, Blackpatch (fig. 3) and New Barn Down. The second group consists of sites possessing

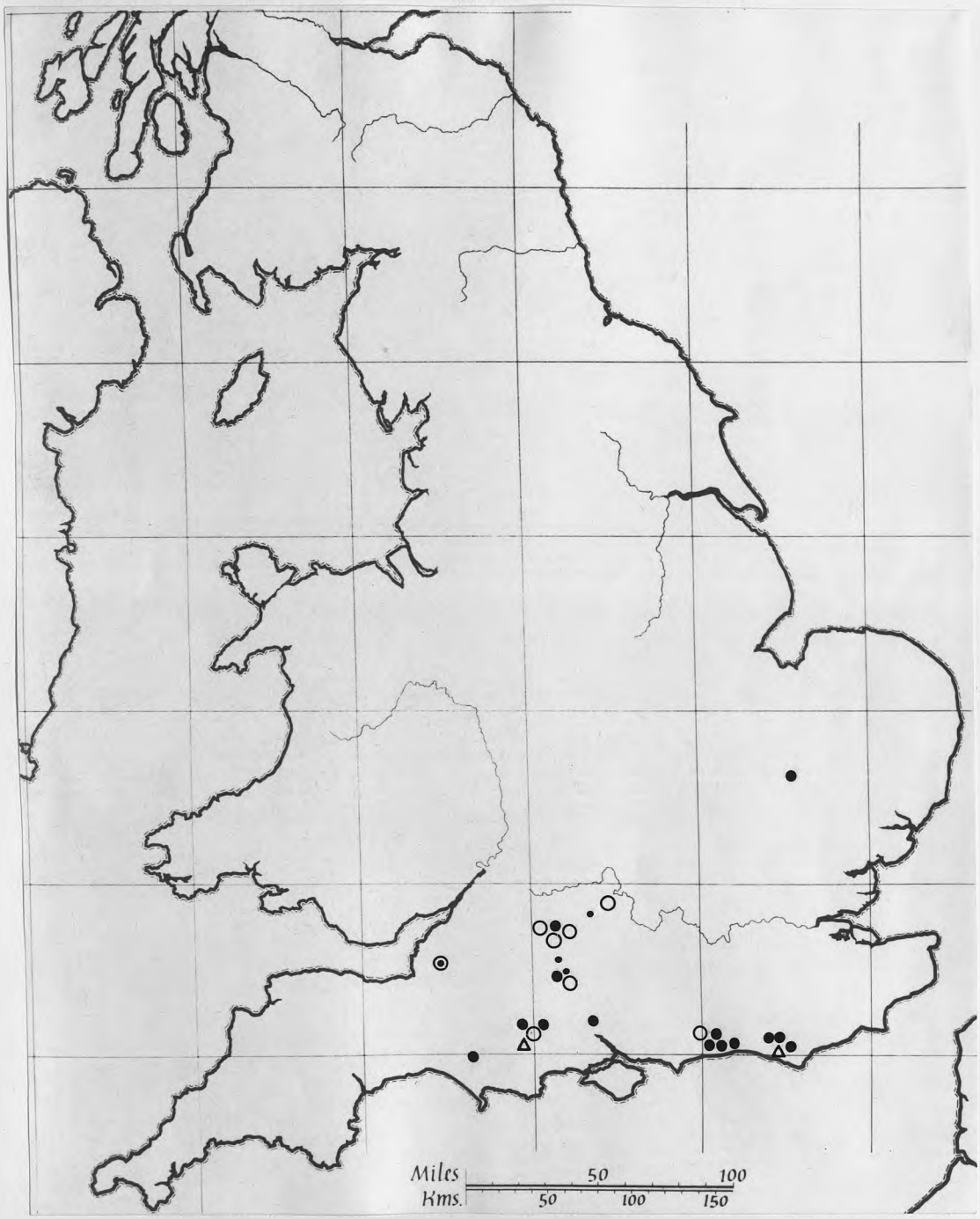


Fig. 1 Distribution of Deverel-Rimbury domestic sites

- ● settlements
- ◎ cave occupation
- · probable settlements or enclosures
- ○ enclosures
- △ occupation traces

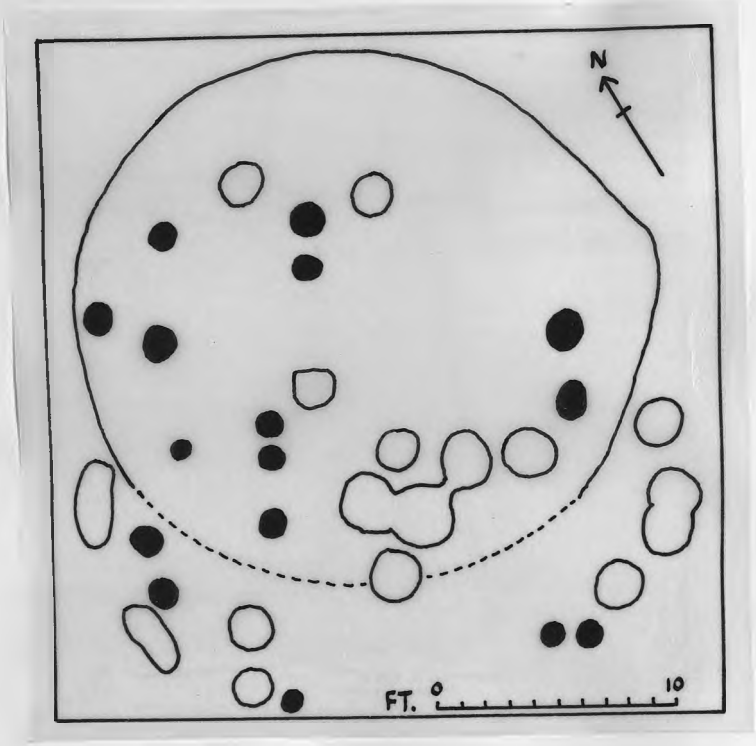


Fig. 2 Park Brow (after Wolseley, 1927, fig. C)

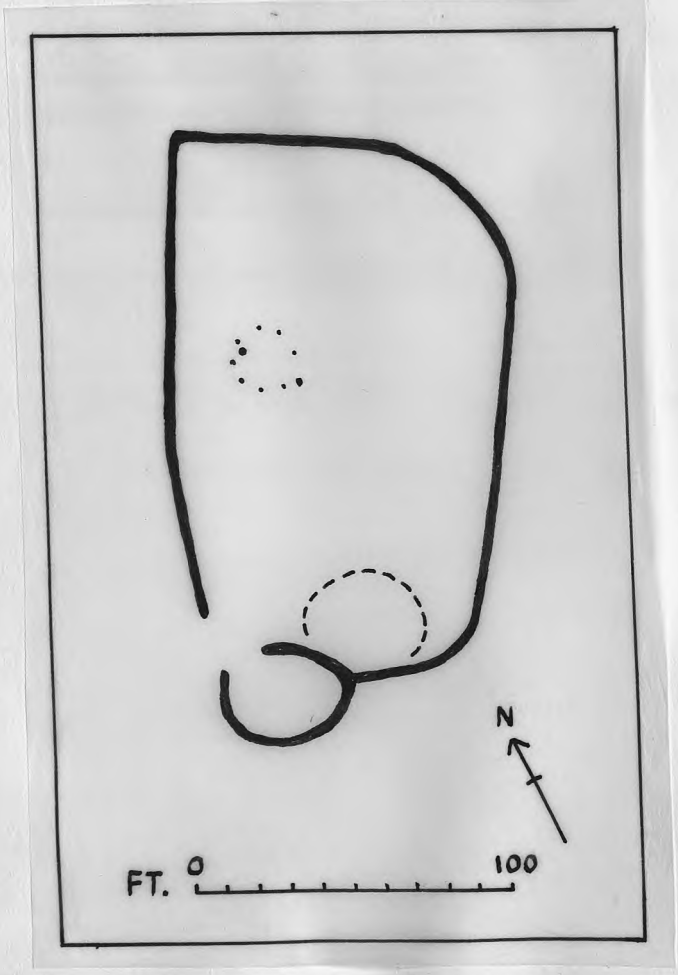


Fig. 3 Blackpatch (after Ratcliffe-Densham, 1953, fig. 1)

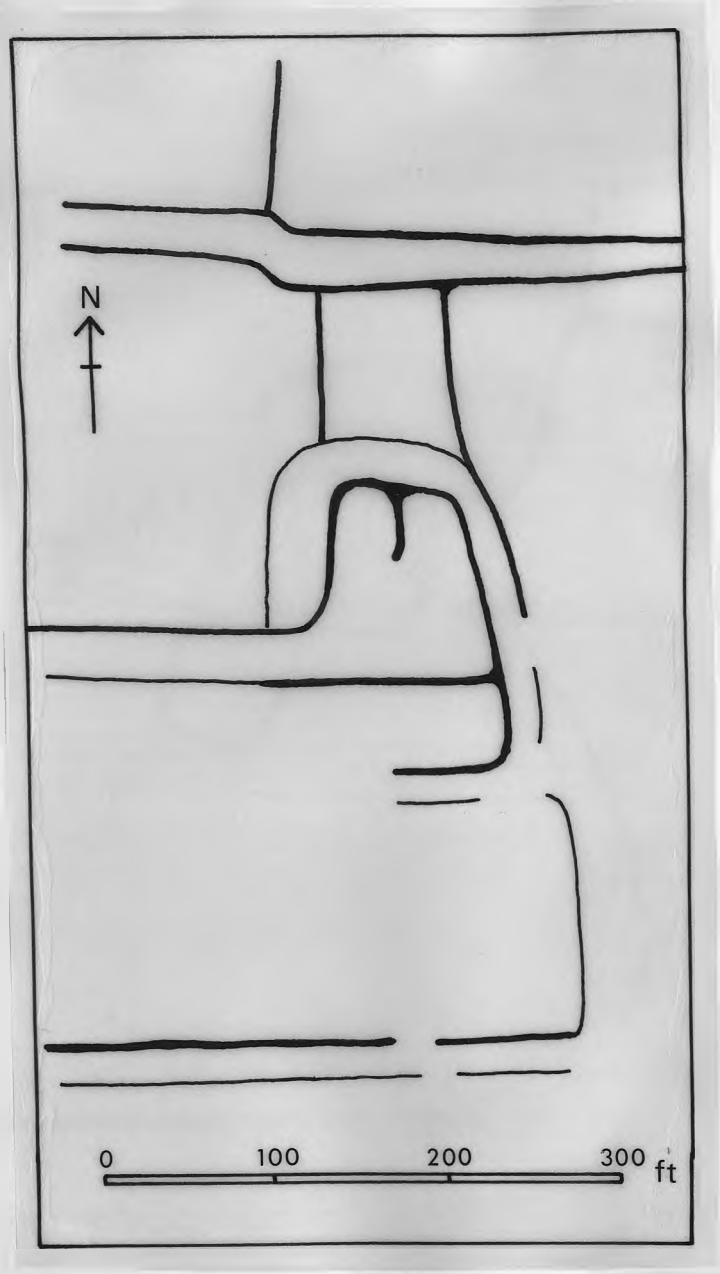


Fig. 4 Shearplace Hill, Dorset (after Rahtz and ApSimon, 1962, fig. 3)

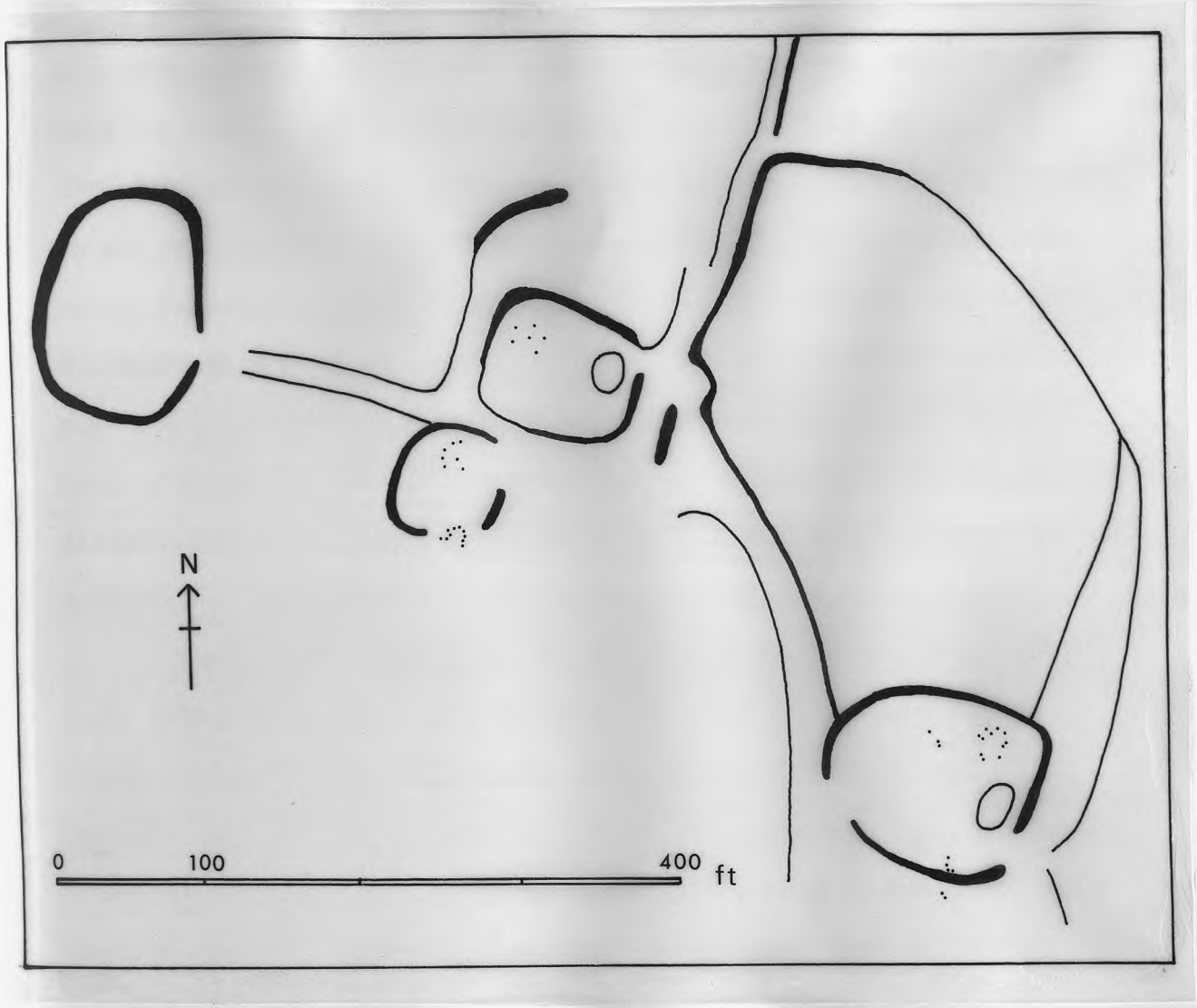


Fig. 5 Plumpton Plain Site A, Sussex (after Holleyman and Curwen, 1935, fig. 2)

more than one enclosure; these enclosures may adjoin one another, as at Shearplace Hill (fig. 4), or stand separately, as at Itford Hill and Plumpton Plain Site A (fig. 5). Oval or circular enclosures may be illustrated among settlements only by Cock Hill and Woodhenge. The function of curvilinear sites at Ogbourne Down East and West in Wiltshire is as yet uncertain. Both basic forms of enclosed settlement, sub-rectangular and curvilinear, are surrounded either by banks alone or by banks and ditches (at Woodhenge and similar sites where there is a continuous ditch the banks have presumably been ploughed flat). With the exception already noted of Cock Hill the ditches are all V-shaped in section.

Banks were preceded by palisades at Itford Hill, New Barn Down, Cock Hill and Shearplace Hill. At the first three sites, these palisades were set into individual post-holes, but at Shearplace Hill the palisade was set into a narrow trench. A similar palisade trench associated with Deverel-Rimbury pottery has been found near Badbury Rings in Dorset; excavation was limited, and the function of the trench is consequently unknown (MOPBW, 1966, 4). Part of a palisade trench has been revealed at the Kimpton cemetery in Hampshire, sealed beneath a flint platform into which cremations in Deverel-Rimbury urns had been set (Dacre, 1968). The form of this palisade is unusual because two rows of posts or stakes had been set into holes in the bottom of a small trench, but its purpose and date are uncertain. The use of timber palisades at this period forms a significant precedent for the palisaded sites of the mid first millennium B.C. In particular, the in-turned entrance through the palisade at Cock Hill presents a striking parallel for the entrance belonging to the palisaded phase at Little

Woodbury in Wiltshire (Bersu, 1940). The enclosure at Woodhenge is linked to a nearby linear earthwork by a stockaded ditch (i.e. a ditch bordered by post-holes), and this may provide a precedent for similarly stockaded linear earthworks of the mid first millennium B.C. (p. 199). The post-holes along the east side of the Woodhenge ditch were dug into the silt; this suggests that the posts may have replaced the ditch as a boundary and that the erection of the stockade took place late in the occupation of the settlement.

Excavated sites which have produced evidence of occupation must be surveyed briefly in order to provide material for comparison with settlements of the first millennium B.C. Post-holes representing circular or oval timber houses have been found at seven sites, with diameters ranging from 15 ft. at Itford Hill to 24 ft. at Shearplace Hill. Oval houses appear, together with circular forms, at Itford Hill, Shearplace Hill and New Barn Down. Piggott put forward the idea of rectangular houses at Thorny Down (1965, fig. 87), but the surviving post-holes fall more reasonably into circular patterns. The round house represented on these sites is of a simple post-ring form, sometimes with central roof support and sometimes possessing a porch. Duplication of post-holes at Shearplace Hill and Thorny Down for example makes interpretation as double-ring houses possible, but the simple post-ring type of house is obviously more normal. In an unpublished manuscript, Avery and Close-Brooks have postulated a larger and more elaborate reconstruction for House A at Shearplace Hill which would make the site anomalous in this respect (Avery and Close-

Brooks, forthcoming).

The settlement of New Barn Down lies on the south-eastern spur of Harrow Hill. On the summit of the hill is a sub-rectangular earthwork which was excavated in 1936 and interpreted as an Early Iron Age hill-fort (Holleyman, 1937). A re-examination of the results of this excavation has led the present writer to the conclusion that the site should be interpreted rather as a cattle enclosure dating to the early first millennium B.C. and that it should perhaps be linked with the New Barn Down settlement. The ditch of the univallate earthwork was found to measure about 8 ft. in width at the top, about 5 ft. across its flat floor, and 2 ft. in depth; shallow U-shaped ditches are a feature of sites belonging to the second millennium rather than the later first millennium B.C. Cutting II across the west entrance revealed a line of post-holes beneath the bank on either side; these represent a primary palisade of posts set, on average, about 2 ft. apart and consisting of timbers each about 9 ins. to 1 ft. in diameter (fig. 6; op. cit., fig. 1, pl. II). Two irregular rows of post-holes were found beneath the bank in Cutting III; these averaged only 3 ins. in depth, whereas those at the entrance were considerably deeper (only one appears in the drawn section, and is 1 ft. deep; op. cit., pl. II). The duplication of post-holes in Cutting III may perhaps be interpreted as replacement of the palisade. The two lines are certainly too irregular to be compared with the timber-faced rampart at Hollingbury as the excavator suggests (op. cit., 235). The shallow depth of the post-holes may be explained in terms of the surface having been levelled prior to the

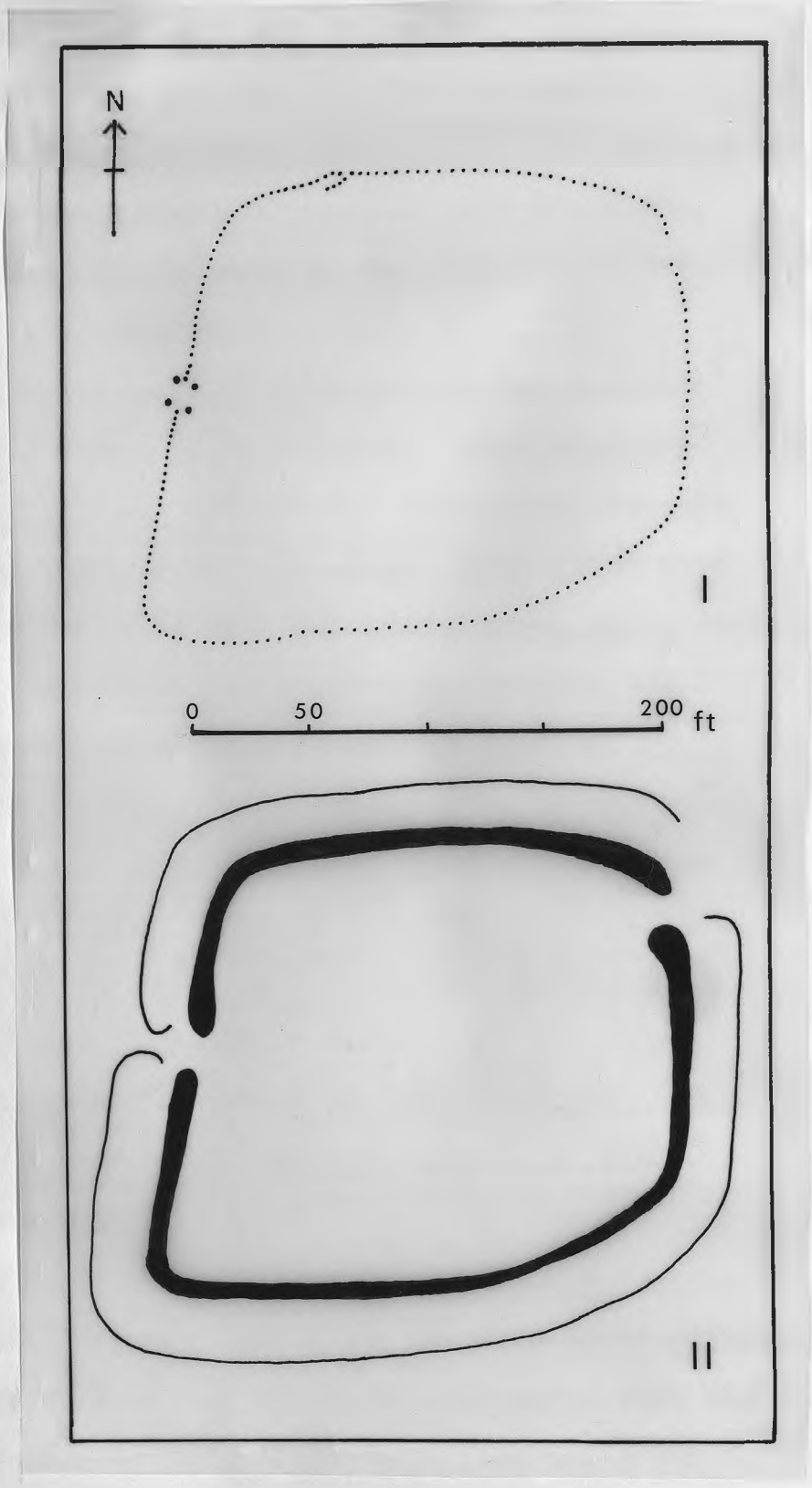


Fig. 6 Harrow Hill, Sussex, Phases I and II,
(after Holleyman, 1937, pl. I)

construction of the bank, for there is evidence for such levelling in the section, and the crest of the bank lay behind the line of the palisade. No trace of the palisade was found in the third cutting across the bank and ditch, but here the evidence is confused by the presence of two Neolithic flint-mining shafts.

Five small cuttings were excavated in the interior without finding any trace of occupation. This suggests that the enclosure was not inhabited. Holleyman remarked upon the unusually large number of animal bones which were found, for some 50-100 oxen were represented (op. cit., 250). He estimated that the whole earthwork might contain the remains of well over 1,000 oxen. This may provide the solution to the function of the enclosure, for it was most probably used to pen cattle. In this connection, it may be noted that William Cobbett observed a sheep-fold in Wiltshire in 1826 which enclosed an acre of land and contained about 4,000 sheep and lambs (1830; reprinted 1967, 304). Harrow Hill encloses threequarters of an acre and may well be large enough to contain at least the number of oxen estimated by Holleyman.

The structural evidence from Harrow Hill is closely comparable to that from New Barn Down, for both sites possess primary palisades followed by earthwork enclosures with the bank set just behind the line of the preceding palisade. The pottery from Harrow Hill can also be matched at New Barn Down among the late forms (e.g. Curwen, 1934, figs. 15, 17). It is suggested, therefore, that the cattle enclosure on Harrow Hill was constructed and used by the inhabitants of the New Barn Down settlement during the early first millennium

B.C. (the enclosure lies about half a mile from the settlement).

The area of Sussex downland on which these two sites are situated includes also the settlements at Blackpatch and Cock Hill, and the four sites may usefully be compared with one another in order to discover their relative sequence. Arguing on the basis of pottery and its approximation to classic Deverel-Rimbury forms, the sites fall into the following chronological sequence: Blackpatch, Cock Hill, New Barn Down, Harrow Hill. Predictably, the structural sequence represented is as follows: bank alone (Blackpatch), palisade (Cock Hill, New Barn Down, Harrow Hill), bank and ditch (Cock Hill, New Barn Down, Harrow Hill). Blackpatch and Cock Hill show flint-revetted banks, while the ditches at Cock Hill, New Barn Down and Harrow Hill are of shallow, U-shaped section.

It is possible that the granaries, corn-drying racks and working-hollows distinguished in settlements of the mid and later first millennium B.C. existed to some extent in Deverel-Rimbury settlements. Settings of post-holes at Thorny Down, Cock Hill and Shearplace Hill can with the eye of faith be reconstructed as granaries or racks, and the limited extent of excavation at other sites cannot allow contradiction of the idea (pace Wainwright, 1968, 113). Large shallow hollows exist at Cock Hill, New Barn Down, Itford Hill and Shearplace Hill, which may be interpreted in terms of working-areas; one such hollow at Cock Hill is accompanied by a row of post-holes possibly representing a wind-break. Shallow circular ponds were found at Cock Hill, Blackpatch and Shearplace Hill, and there is evidence to

suggest that these were clay- and straw-lined dew-ponds, constructed in much the same manner as dew-ponds dug in Wiltshire up to forty years ago (Manners, 1969).

It is necessary to examine the pits found on several Deverel-Rimbury sites in order to compare them with the grain storage pits of the second half of the first millennium B.C. On the Little Woodbury pattern, the classic storage pit is considerably larger than any Deverel-Rimbury pit. Nevertheless, the range of size among the later pits is such that a minimum of two feet in diameter and depth will be adopted here as a criterion (p.168), and pits of this minimum size do occur on Deverel-Rimbury sites at Itford Hill, Park Brow, Preshute Down, Martin Down and South Lodge. 11½ lbs. of barley were found at Itford Hill in a pit measuring 3 ft. 10 ins. in diameter and 2 ft. 1 in. in depth (Burstow & Holleyman, 1957, pit no. 26; pace Bowen and Wood, 1967, who do not accept this as a storage pit). Other sites contain pits of comparable diameter which are less than 2 ft. in depth.

Finds of grain, again barley, have also been made at Woodhenge and Ogbourne Maizey, while fragments of saddle querns have appeared on six settlements. The association of several enclosures with 'Celtic' field-systems reinforces the impression of an economy based on agriculture as well as stock-rearing. At this point, comparison may usefully be made with the settlement at Elp in the Netherlands (Waterbolk, 1964), which is broadly contemporary with Deverel-Rimbury sites in southern England. This is a farming settlement possessing, apart from rectilinear houses, settings of post-holes interpreted as barns, sheds, granaries and

fences, and pits.

An important guide to the nature of Deverel-Rimbury economy is provided by linear earthworks. These are discussed fully in the appropriate section (Part III, Section 4), but their implications for the Deverel-Rimbury Culture may be examined here. The earthworks in question are the plateau and contour dykes, frequently known as 'wandering' ditches, which traverse large areas of Wessex (pls. I, II). They are confined to the chalk plateaux of Wiltshire, Hampshire and Dorset, and appear both in univallate and bivallate form. The evidence for assigning them primarily to the Deverel-Rimbury Culture will be examined in detail later, but the conclusions which will arise may be anticipated here. They are evidently a secondary feature of the Culture, and they emphasize the increasingly stable nature of the economy around 1000 B.C. Since they appear often to separate areas of arable from those of pasture, it is evident that pastoralism was an essential part of the economy. The fact that some overlie 'Celtic' field-systems need not imply that the area of arable in use at any one time had diminished; new fields might well be laid out to replace those where the soil had been exhausted by intensive cultivation, and the abandoned fields turned over to pasture. Information about agricultural practice in the later second and first millennia B.C. is lacking (pace Applebaum, 1954), and the significance of abandoned fields can never be fully apparent. It is reasonable, however, to assume that some of the small pastures enclosed by linear earthworks, together with cattle enclosures like Harrow Hill, imply that the value of manure for arable fields was appreciated (Piggott, C.M., 1942, 61). The presence of a

I,II. Contour dyke, Casterley, Wilts., W.D.82.

small earthwork enclosure on Figheldean Down in Wiltshire may indicate such a practice, for it is apparently related to the system of plateau dykes and 'Celtic' fields although it cannot be dated or interpreted with certainty until it has been excavated. The use of these dykes seems to continue until the mid first millennium, thus providing evidence for some measure of cultural continuity; they are then replaced by cross-ridge and cross-spur dykes, reflecting perhaps, in the topographical change, the preference by about 600 B.C. for more defensive situations for settlement (Part III, 4).

The date of the end of the Deverel-Rimbury Culture is an even greater problem than that of its beginning, for there is a span of some three or four centuries, in which no other distinctive cultural complex can be recognised, between the main period of its activity and the appearance of iron-using cultures. The term 'Deverel-Rimbury Culture' has been used here to describe all sites producing pottery related to the forms found at the two type-sites; regional sub-divisions based on pottery detail such as that put forward by Calkin for Cranborne Chase (1962) mean little in terms of the actual settlements and burials. There is evidence to suggest that the Deverel-Rimbury Culture continued, perhaps in modified form, into the first few centuries of the first millennium B.C. Before considering this evidence, reference must be made to the 'iron slag' from Boscombe Down East (Stone, 1936) for, if its nature and association are accepted, it presents important

chronological implications. There was considerable uncertainty about the nature of the slag at the time of publication and, since it is now lost, the question cannot be definitely settled. It is possible that it was bronze slag with a high iron impurity. In either case, however, its provenance in the upper silting of the enclosure ditch suggests that it is of no importance in dating the initial occupation of the site.

The assemblages of pottery from New Barn Down and Plumpton Plain Site B include forms which should probably be attributed to the seventh and sixth centuries B.C. High-shouldered jars with finger-tipping on the shoulder-angles were found at New Barn Down, together with shallow 'platters' (Curwen, 1937, figs. 7, 8, 9, 12; 26, 28). Plain shouldered jars comprise Hawkes' Class B5 at Plumpton Plain B (1935). These forms are not part of the Deverel-Rimbury pottery repertoire and should be interpreted in terms of a late phase of occupation at the two settlements. This involves continuous habitation over a period of some four centuries (these two sites are not early examples among Deverel-Rimbury settlements); such a period may be difficult to credit, particularly since the evidence from post-holes does not seem to allow a sufficient number of re-buildings (unless the same holes were used again). It may be noted that a continuous occupation for more than four centuries has been estimated for the settlement at Elp in the Netherlands, on the basis of a series of radio-carbon dates (Waterbolk, 1964). There is some doubt about the associations of the wing-flanged bronze axe, found on the surface in Cutting VIII at Plumpton Plain B, but the date of this type of axe would certainly accord well

with the late phase of occupation postulated here (the axe belongs to Hawkes' period L.B.A. 2, about 750-650/600 B.C.). It may be noted that the post-holes found in Cuttings I and II fall more readily into rectangular than into circular patterns; they may represent one of the rare instances of rectangular timber structures in Britain in the first millennium B.C. (c.f. below, Part III, ii).

In the old terminology, the pottery under discussion from New Barn Down and Plumpton Plain B might be called Late Bronze Age. Forms which would be labelled Early Iron Age A have been found at Thorny Down, Blackpatch, Itford Hill and Shearplace Hill; these are probably more likely to represent a separate phase of activity on the sites during the sixth century than to indicate continuous occupation from Deverel-Rimbury times. The traces of this activity are scant and may represent no more than the haphazard debris from cultivation.

In contrast to these, at least four examples may be cited of settlements where pottery of modified Deverel-Rimbury form has been found either in association with 'Early Iron Age' vessels or stratified in occupation levels preceding settlement belonging to the latter phase. Recent excavations at Eldon's Seat in Dorset have revealed a primary phase of settlement associated with pottery derived clearly from the Deverel-Rimbury tradition (large coarse jars, both plain and decorated with finger-tipped cordons), together with well-finished shouldered jars and carinated bowls which cannot be dated earlier than the sixth or seventh centuries B.C. The implications of this assemblage have been discussed fully by Cunliffe and Phillipson (1968, 230 f.). This phase was followed after an

interval by one characterised by standard haematite-coated pottery of the early iron-using cultures of southern England. Bronze objects were present in the first phase, while iron appeared in the second. Four possible timber houses and a clay-lined water-pit were assigned to the primary phase, and Cunliffe suggests tentatively that the houses may have been enclosed within palisaded enclosures (op.cit., 199). Sherds showing modified Deverel-Rimbury influence were found in the occupation layer underlying the rampart of Chalbury hill-fort in Dorset, together with fine sandy ware belonging to the sixth or seventh centuries B.C. A number of small pits and an associated occupation level at Sheepsleights in Dorset produced coarse, finger-tipped cordoned buckets (some with T-shaped rims of classic Deverel-Rimbury type) as well as finer carinated jars and bowls.

Another site which should be assigned to this transitional period is that at Amberley Mount in Sussex. This is an open settlement comparable to Park Brow, consisting of two approximately circular platforms cut into the chalk and set within an originally extensive area of 'Celtic' fields. Post-holes cut into each chalk platform form circles averaging 16 and 18 ft. in diameter; since a pit was found between the post-holes of Hut I, these may represent internal roof support rather than external walls. The pottery indicates two phases of occupation, the first characterised by coarse bucket and barrel forms, both cordoned and finger-tip decorated, a rim sherd of a globular pot and a sherd illustrated as a base fragment (Ratcliffe-Densham, 1966, fig. 7, no. 16) which is in fact part of the shoulder of a large situlate jar. Pottery of the second phase of occupation includes a

fine carinated bowl with flaring rim dating to the sixth or fifth centuries B.C.

Similar evidence for the late survival of Deverel-Rimbury traditions can be found on burial sites. One of the most interesting is the Kimpton cemetery in Hampshire (Dacre, 1968; I am indebted to the excavator for allowing me to see the pottery and plans in advance of publication). The flint platform containing the Deverel-Rimbury burials was found to have a secondary addition at one edge, similarly built of flints but showing a straight joint with the main platform (Cist G). A cremation set into this additional area, was contained within a fine carinated bowl, which, had it been found at All Cannings Cross, would have occasioned no comment. The Kinson cemetery in Dorset produced urns of normal Deverel-Rimbury form together with a large situlate urn, with a high shoulder, out-turned neck and curvilinear incised decoration, which Calkin assigns to Hawkes' period Late Bronze Age 2 (Calkin, 1932; 1962, 43, fig. 16, no. 2). Warne illustrates another situlate urn from a barrow on Launceston Heath, which is decorated with finger-tip impressions at neck and shoulder and has vertical lines on the body formed either by incision or by applied cordons (Warne, 1866, 27; the drawing is not clear on the latter point and the urn is now lost).

Similar continuity of tradition appears in East Anglia. Sites in this area seem to have formed to some extent a distinct cultural zone throughout the later second and first half of the first millennium B.C., and it is proposed to deal with them as a separate group.

iii. The East Anglian Group

It has been recognised for some years, though not yet discussed in print, that at West Harling in Norfolk there are two periods of occupation rather than the single period envisaged by the excavators (Apling, 1932; Clark and Fell, 1953). Feachem recognised two building phases on Site II, and Hawkes found evidence to support this in an examination of the pottery. The early date of the settlement had already been indicated by the excavators, who suggested that its associated cultural assemblage represented 'a native Late Bronze Age tradition combined with an intrusive final Hallstatt culture' (Clark and Fell, 1953, 38). In order to examine the significance of this idea, not only at West Harling but also at other transitional sites in the East Anglian area, it is necessary first to explore the earlier background. The existence of a strong local pottery tradition during the second millennium B.C. has been recognised in the evidence from the Ardleigh cemetery in Essex and comparable sites (Erith and Longworth, 1960; Smith, 1961). It will be argued here that this phenomenon continued to flourish throughout the first half of the first millennium B.C., and that it provides evidence for the beginning of Hawkes' period 'Early Iron Age A' in this area before 600 B.C. The work of Clarke on British beakers has established the existence of a strong regional group in E. Anglia by about 1700 B.C. (D.L. Clarke, forthcoming), which indicates that the area must have been an important focus of settlement and cultural development for about 1200 years.

The geographical area in question is that covered by southern Norfolk, Cambridgeshire, Suffolk and Essex, with an outlying site at Fengate on the N.E. border of Northamptonshire (fig. 7). This involves a maximum distance of 90 miles between sites the farthest apart, which would represent three days travel on foot. Most sites occur either in coastal areas or along river valleys, on sand or gravel subsoils.

Before discussing the features distinctive of Erith and Longworth's Ardleigh Group of M.B.A. urns, a point should be made concerning nomenclature. It seems to the writer that unnecessary confusion has been caused by the use of the term 'bucket' to describe these pots, a term used not only by Erith and Longworth but also by Smith and Calkin. In form and fabric, they belong surely to the barrel class as normally understood for the Deverel-Rimbury culture. Few of the vessels of the Ardleigh Group are straight-sided as is the classic bucket form (the Honington urns are true buckets) and 79 out of 87 of the 'buckets' at Ardleigh itself are made of the excavators' pastes 2 and 3 with little or no flint grit, which is patently barrel fabric for buckets are normally made of coarser material. Intensive use of decoration is a classic feature of barrels rather than buckets. This may seem to be a small point, and does not alter any interpretations based on the pots in question, but consistency in nomenclature makes discussion easier.

The present discussion is concerned only with the barrel urns of the Ardleigh Group, not with the globular urns. All the vessels come from burials in flat cemeteries

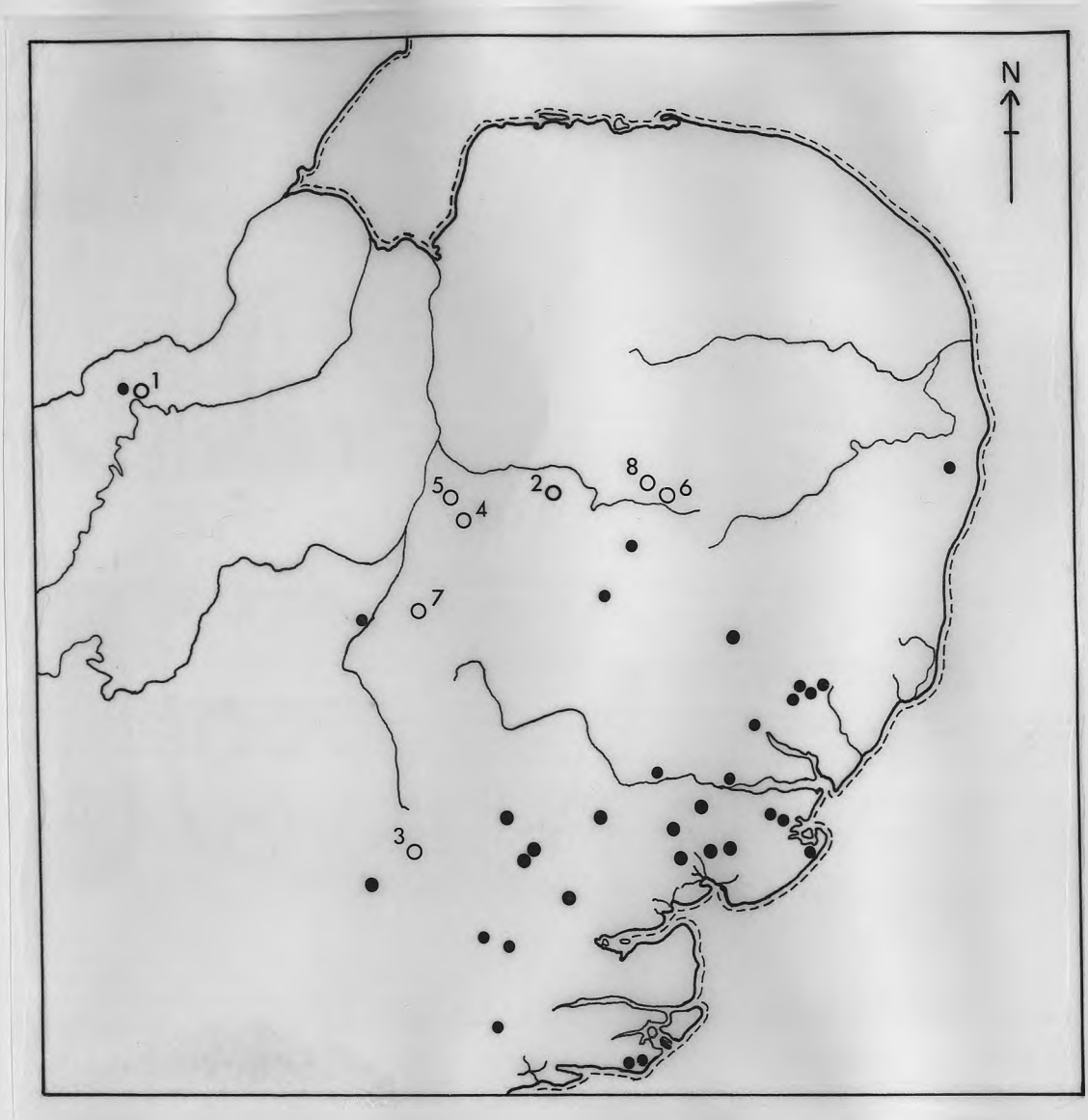


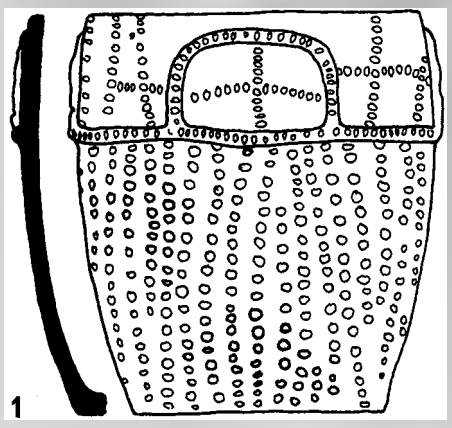
Fig. 7 Distribution of the East Anglian Group

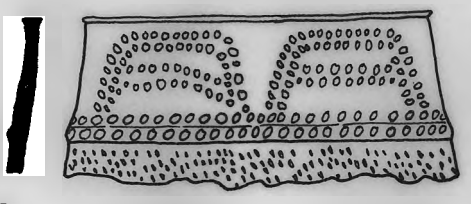
• urns (after Erith and Logworth, 1960, fig.8)

1 Fengate, 2 Lakenheath, 3 Linford,

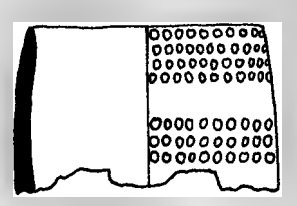
4 Mildenhall, 5 Shippea Hill, 6 Snarehill,

7 Swaffham, 8 West Harling.

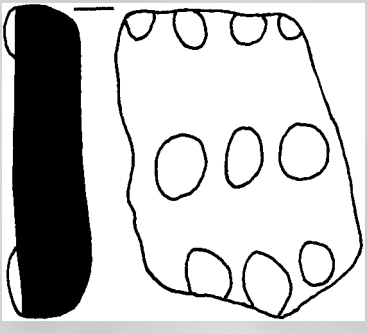




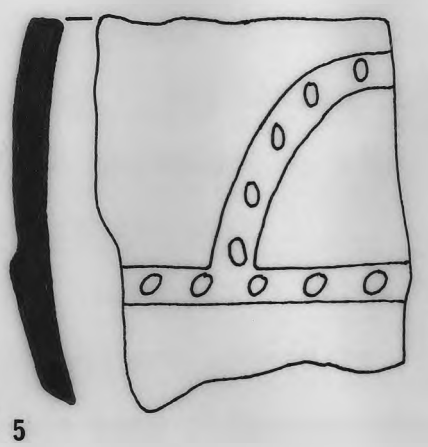
2



3



4



5

Fig. 8 1-3 Ardleigh, Essex (after Erith and Longworth, 1960, H4, fig.2; F3, fig.3; A6, fig.5; scale $\frac{1}{8}$)

4 Shippea Hill, Cambs. (after Clark, 1933, fig.9, full size)

5 Mildenhall, Suffolk (after Clark, 1936, fig.13, scale $\frac{1}{2}$)

or below low barrows, except for those from three settlement sites which should be added to Erith and Longworth's list (p.41). These barrel urns show the use of applied cordons and finger-tipping in common with Deverel-Rimbury decoration in southern England, but they possess additional features which make them a distinctive regional group. These are the use of overall finger-tipping, either random or in patterns, and the use of the horse-shoe motif created either by applied finger-tipped strips or by finger-tip impressions on the surface of the vessel (fig. 8, 1-3). Overall finger-tipped pottery has yet to appear on a settlement site belonging to the Ardleigh group. The Snarehill settlement in Norfolk possesses a barrel decorated on its upper part by two applied cordons with finger-nail decoration, one at the shoulder and one immediately below the flattened notched rim; the two cordons are linked by four applied horse-shoes decorated in the same finger-notched technique (unpublished; Norwich Museum). Sherds from the ditch of a small enclosed homestead at Swaffham, Cambs., show flattened rims, finger-nail impressions on the shoulder and 'raised ribs' (Fox, 1923, 47-8). Beneath the peat at Shippea Hill in the same county, an occupation layer was found which contained pottery showing finger-nail impressions on the rim and on a raised cordon just below the rim (fig. 8, 4), as well as a sherd with finger-tipped rim and two rows of finger-tip impressions below the rim (Clark, 1933, nos. 14, 9).

Attention has been drawn to the relationship between pottery of the Ardleigh group and urns of the Wessex Biconical/Hilversum class (Smith, 1961, 112 f.). Although

the biconical form does not appear among the Ardleigh group, a derivation from Wessex biconicals does account for the use of applied horse-shoe decoration. The connection with the Wessex culture is further supported by the lower part of a fragmentary barrel from the Ardleigh cemetery, which is decorated with bosses in the manner of 'grape-cups' of Manton type (Colchester and Essex Museum Report, April 1956 - March 1962, fig. 4, D.16). In this connection, it should be noted that the barrel urn with applied cordons and two rows of four applied horse-shoes from Nether Swell barrow CCXVI in Gloucestershire was associated with a Class IB bronze razor (Greenwell, 1877, 446-7; Abercromby, 1912, 376). It may also be significant that 69 out of 92 urns at Ardleigh itself were found to be in the inverted position typical of Wessex biconicals.

Overall finger-tipping is not a normal feature of Wessex biconicals, but it does occur on a pot from Puddletown barrow 25 in Dorset (Abercromby, 1912, 424A) and on the accessory vessel from Ringwould in Kent (Smith, 1961, fig. 1, 2). The latter forms a useful parallel for the accessory vessel from Great Oakley in the Ardleigh Group, and it is interesting to note that finger-tipped accessory vessels appear in the southern Deverel-Rimbury class at Rimbury and Milborne St. Andrew (Abercromby, 1912, 425g and 456f). Random finger-nail impressions occur above the shoulder on a devolved Wessex biconical from the settlement site at Mildenhall Fen in Suffolk (Clark, 1936, fig. 6, 2). The pottery from this site, which is predominantly biconical in form and which includes a sherd with a finger-printed applied horse-shoe above a similar shoulder cordon, is clearly

related to the Ardleigh Group but slightly earlier in date. A biconical vessel with overall finger-nail impressions was found in a ring-ditch enclosure at Playden in Sussex amongst an assemblage of biconicals and buckets with lugs or slashed rims (Cheney, 1935). The context of this find is particularly interesting in connection with the ring-ditch cemetery at Fengate in Northants., where four bucket urn sherds were found associated with one of about 130 secondary cremations (Hawkes, 1945). The sole close parallel to the Ardleigh Group pottery in form as well as decoration is the urn from Cranbury Common, Hants. (Godden, 1966, fig. 1). This is a true bucket urn with an inturned, finger-tipped rim, four lugs and close overall finger-tipping; the horse-shoe motif appears as a pattern in the finger-tipping (fig. 9, 4). A globular urn similar to those from Ardleigh was found at Cranbury Common (Godden, 1966, fig. 4), but may not have originated in the same barrow as the last since several were opened at the same time in 1882.

A recently excavated site at Wilde Street, Mildenhall, may be mentioned here (Kelly, 1967), for its pottery links it clearly with Clark's Mildenhall Fen site though not with the East Anglian Group. The importance of Wilde Street is in its evidence of association between pottery and a bronze dagger considered by Coles to show typological connections with daggers of both the early Middle Bronze Age and the Late Bronze Age (op.cit., 53). Kelly states that the pottery 'followed the general Deverel-Rimbury tradition of Southern England as described by Fox' (op.cit., 51). This is misleading for two reasons; first, the Wilde Street pottery is not of Deverel-Rimbury form at all, and second,

the reference to Fox is to his description of Collared Urns (1923, 39 f.) and ignores his statement that 'very few cineraries of types related to the Deverel-Rimbury group of Wessex .... have been found in our district' (op.cit., 41).

The use of applied cordons and finger-tip and finger-nail rustication is probably derived from local Rinyo-Clacton traditions (Butler and Smith, 1956; 12-14). It may be significant that the following Rinyo-Clacton sites taken from Smith's 1956 list are concordant with sites belonging to the Ardleigh Group: Shippea Hill, Ipswich, Great Bealings, Honington, Creeting St. Mary and Fengate (1956, Appendix VII). The link with Smith's Clacton style is also supported by the use of overall stab decoration on the Colchester 45 urn of the Ardleigh Group (op.cit., 192 f.). Two other decorative features support the early connections of the Ardleigh Group; these are the use of comb decoration at Wix, Ardleigh (a and c.2) and White Colne, and of cord decoration at Mildenhall Fan, Leiston in Suffolk (Smedley and Owles, 1962, 194 f., fig. 25, O, pl. XXIX), and the related urn already mentioned from Nether Swell.

In view of its connections with Wessex Biconicals, the beginning of the Ardleigh Group should probably be dated to about 1350 B.C. The pottery from Mildenhall Fen is contemporary with or immediately precedes the beginning of the Ardleigh Group, while the internal rim bevels of the Shippea Hill pottery should probably place the site early in the latter series. The Ardleigh cemetery contained a total of 110 burials, and this figure allows some calculation of the duration of use of the cemetery. The settlement which must have accompanied the cemetery has yet to be discovered,

but the size of the contemporary community at Swaffham may provide some indication of the number of people living at Ardleigh. The site at Swaffham consists of a circular ditched enclosure, 68 ft. in diameter, and must represent the homestead of a single family. If the Ardleigh community were of a similar size, a total of five deaths per generation might be involved. 110 burials would then represent 22 generations, each lasting 30 years, and this would give a total of 660 years for the duration of the cemetery; i.e. c. 1350-690 B.C. The total figure might be reduced to 500 years on the grounds that three times as many urns were bur ied in an inverted position as upright, indicating that burials were more frequent during the earlier years.

Few Deverel-Rimbury cemeteries possess as many burials as Ardleigh, and this fact may support the idea of small communities. The Rimbury cemetery was reported to contain about 100 urns (though 90 is a more probable figure judging from the numbering of the vessels), Stapehill contained more than 80, Latch Farm a total of 90, and Sugden Quarry 260. The latter figure may reflect the importance of Poole harbour for trading activities.

Two sites belonging to the Ardleigh Group were re-occupied in the mid first millennium B.C., and this lends some support to the idea that settlement represented by that group continued into the first few centuries of the first millennium. At Snarehill in Norfolk, a settlement represented by post-holes, gullies, pits and plain coarse pottery was established probably in the fifth or fourth centuries B.C. (Norwich Museum, unpublished). On Vince's Farm at Ardleigh, near the cemetery there is a curvilinear

enclosure with double ditches from which came pottery described as early in Iron Age A (Blake, 1965). Possible continuity of occupation at Lakenheath, Suffolk, will be mentioned shortly.

Hawkes has suggested that some of the secondary cremations in the ring-ditch cemetery at Fengate, Northants., may be of Early Iron Age date; pottery from the adjacent settlement is important to the present argument (Hawkes, 1943). A barrel-shaped vessel with a slight neck is decorated with a band of incised linear zig-zag ornament, coupled with two rows of stab marks (op.cit., R7). Although this pot lacks the applied cordons of the urn G.1 from Ardleigh and the urn from Brantham, the three vessels are linked by the use of similar incised linear decoration. At Fengate, this form of decoration is repeated on a situlate jar and three omphalos-based bowls; perhaps the latter may be seen as the counterparts in the mid first millennium B.C. of the incised globulars from Ardleigh, both forms representing the fine ware of their respective periods. Fengate is dated by an iron pin with bronze head which belongs to the Tarves type of swan's neck sunflower pin, assigned by Coles to the sixth and fifth centuries B.C. (1959), and by part of a bronze socketed axe of a type introduced in Hawkes' period Late Bronze Age 2 in the seventh century B.C. (Hawkes, 1960). A sherd was found at Fengate with imperforate lugs on the shoulder; this is similar to a vessel from All Cannings Cross, Wiltshire (Cunnington, 1923, pl. 42), and both must surely be related to the lugged globulars of the Ardleigh Group in East Anglia and the main Deverel-Rimbury complex in central southern England.

It is possible that influence from the Ardleigh Group

may be seen in the use of overall finger-tipping and multiple rows of finger-tip impressions on pottery from Lakenheath in Suffolk. Evidence for occupation at the site is confused, and there may well be an early, primary phase of the settlement (Briscoe, 1949; 1957).

The presence at West Harling of two phases of building and pottery has already been noted; the argument is concerned primarily with the evidence from Site II. The pottery shows extensive use of finger-tipped decoration, both on applied cordons and in rows on the surface of the vessels, but the most significant feature is the use of overall finger-tipping on pot no. 26 and vertical rows of finger-tip impressions on nos. 27 and 49 (fig. 9, 1-3). Pot 26 is moreover of biconical form, while pot 27 may perhaps be seen as of devolved biconical form. The biconical form is repeated on pots 28 and 51, the former showing notching on rim and shoulder. The use of overall finger-tipping is clearly a survival of the Ardleigh Group tradition, and vertical rows of finger-tipping from rim to base must be derived from the vertical applied finger-tipped cordons of the classic Deverel-Rimbury urn. The latter tradition of vertical body decoration appears in the Ardleigh Group only in the form of incised linear decoration. A minor trait of the Ardleigh Group is the application of finger-tipping to the base of the vessel; this appears on no. 3 from West Harling and on a pot found at Linford in Essex (Barton, 1962, fig. III no. 7).

The settlement at Linford should be assigned to the same group of transitional sites as West Harling and Fengate. A straight-sided vessel with a finger-tipped applied cordon is represented by one sherd (op.cit., fig. II, no. 11) and is strongly reminiscent of the bucket urn of Deverel-Rimbury

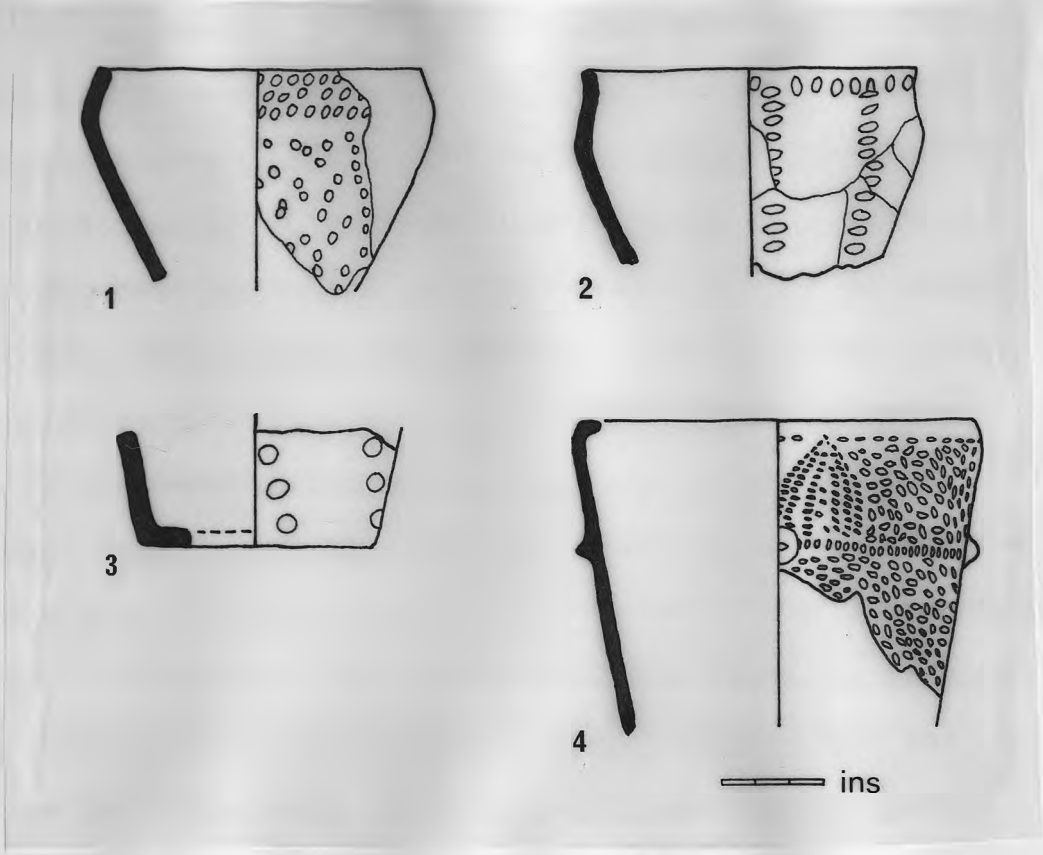


Fig. 9 1-3 West Harling, Norfolk (after Clark and Fell, 1953, figs.26, 27, 49, scale $\frac{1}{4}$)

4 Cranbury Common, Hants. (after Godden, 1966, fig.1)

tradition. The assemblage includes also two situlate vessels (op.cit., figs. I, 1 and III, 1) which show the straight necks and high angular shoulders of their bronze prototypes, while the latter shows spaced finger-tip impressions above the shoulder carination which are surely skeuomorphic rivets.

Since the pottery evidence upon which this section is based has been discussed in some detail, it may be useful to summarize the argument put forward. In the later second and early first millennia B.C., a regional cultural group related to the Deverel-Rimbury complex was established. This group, named after the Ardleigh cemetery, is represented by burials and a few settlements associated with a distinctive assemblage of pottery. The characteristic features of this pottery include the use of overall finger-tipping and the horse-shoe motif depicted either by applied finger-tipped strips or by finger-tip impressions on the surface of the vessel. A minor trait is the use of incised linear zig-zag ornament. It has been argued that the Ardleigh Group continued into the seventh century B.C., perhaps, like the main Deverel-Rimbury Culture, in modified form. This is supported by the repetition of features characteristic of Ardleigh Group pottery on vessels from settlements belonging to the mid first millennium, notably West Harling; an early date for such settlements is therefore indicated. It has been suggested that Phase I at West Harling should be assigned to the seventh century B.C., and site continuity has been demonstrated to varying degrees at Snarehill, Fengate, Ardleigh and Lakenheath. As a result, the absence of sites in the 'Late Bronze Age' is no more real a phenomenon in East Anglia than in the main Deverel-Rimbury area of southern

tradition. The assemblage includes also two situlate vessels (op.cit., figs. I, 1 and III, 1) which show the straight necks and high angular shoulders of their bronze prototypes, while the latter shows spaced finger-tip impressions above the shoulder carination which are surely skeuomorphic rivets.

Since the pottery evidence upon which this section is based has been discussed in some detail, it may be useful to summarize the argument put forward. In the later second and early first millennia B.C., a regional cultural group related to the Deverel-Rimbury complex was established. This group, named after the Ardleigh cemetery, is represented by burials and a few settlements associated with a distinctive assemblage of pottery. The characteristic features of this pottery include the use of overall finger-tipping and the horse-shoe motif depicted either by applied finger-tipped strips or by finger-tip impressions on the surface of the vessel. A minor trait is the use of incised linear zig-zag ornament. It has been argued that the Ardleigh Group continued into the seventh century B.C., perhaps, like the main Deverel-Rimbury Culture, in modified form. This is supported by the repetition of features characteristic of Ardleigh Group pottery on vessels from settlements belonging to the mid first millennium, notably West Harling; an early date for such settlements is therefore indicated. It has been suggested that Phase I at West Harling should be assigned to the seventh century B.C., and site continuity has been demonstrated to varying degrees at Snarehill, Fengate, Ardleigh and Lakenheath. As a result, the absence of sites in the 'Late Bronze Age' is no more real a phenomenon in East Anglia than in the main Deverel-Rimbury area of southern

England.

Additions to the Erith and Longworth list of sites belonging to the Ardleigh Group (1960):

Snarehill I, Brettenham, Norfolk (unpublished; Norwich Museum)

Swaffham, Cambs. (Fox, 1923[a], 47f.)

Shippea Hill, Cambs. (Clark, 1933, 266-296)

Leiston, Suffolk (Smedley and Owles, 1962, 194f.)

Settlements of the mid first millennium B.C. influenced by the Ardleigh Group:

Snarehill II, Norfolk

West Harling, Norfolk (Apling, 1932; Clark and Fell, 1953)

Lakenheath, Suffolk (Briscoe, 1949; 1957)

Calke Wood, Suffolk (Wacher, 1961)

Linford, Essex (Barton, 1962)

Fengate, Northants. (Hawkes, 1943)

As a postscript, it should be mentioned that, in the interval since this section was written, a paper has been published by Cunliffe on the early pre-Roman Iron Age in E. England (1968); it has not, however, been found necessary to alter the conclusions of this section. Although Cunliffe does not deal with the preceding pottery traditions, he argues a date as early as that suggested here for West Harling and culturally associated sites of his West Harling style-zone by comparison with pottery from Staple Howe in Yorkshire. The subject of rectangular houses, for which Cunliffe finds evidence on several sites in E. England, will be discussed in the chapter on timber structures within settlements (p.151).

His paper provides a survey of the cultural connections of early sites in the pre-Roman Iron Age of E. England, and deals more fully with the pottery of that period than has been attempted here (since it is with pre-Iron Age relationships that the present argument has been concerned). Cunliffe assigns the main phase of occupation at Fengate, Snarehill and Linford to rather later periods than are implied by the dating suggested here for the primary phases; his Fengate-Cromer style-zone begins in about the fifth century, and his Darmsden style-zone to which Snarehill and Linford belong begins in the fourth century B.C. (op. cit., 183). It may be noted in comparison, however, that Hawkes dates the Linford pottery together with allied ware from Mucking and Chadwell St. Mary to the fifth century B.C. (Jones et al., 1968, 214).

iv. Settlements of the early first millennium B.C. in southern England (Non-Deverel-Rimbury)

A case has been argued for the late survival of Deverel-Rimbury tradition in the first half of the first millennium B.C., but it remains still to examine those feq sites in southern England which show no signs of contact with the Deverel-Rimbury Culture. This cultural division is necessarily tentative, for the absence of traces of Deverel-Rimbury influence on the pottery from a site may be related to the limited extent of excavations rather than to its true cultural context. Justification for the division lies in the number of sites producing very coarse featureless pottery. Most of these lack any indication of the type of settlement represented (e.g. Fore Down, Sussex, Curwen, 1937, 227; Guy's Rift, Wiltshire, Hewer, 1926; Ram's Hill, Berkshire, Piggott and Piggott, 1940). Information about the type of settlement current amongst this group has been obtained from Kingley Vale in Sussex, Weston Wood in Surrey and Minnis Bay in Kent. A promising fourth has been excavated recently at Winterbourne Stoke cross-roads in Wiltshire and revealed circular structures, shallow pits and, possibly associated with these, a length of palisade trench (WAM, 63 (1968), 108-9). The use of a palisade also appears at Playden in Sussex; in chronological terms, the palisaded enclosure must fall somewhere between the Middle Bronze Age ring-ditch (p. 35) and the phase of activity represented by the black 'Iron Age' pottery found in the layer sealing a linear ditch associated with the enclosure (Cheney, 1935). This linear ditch curves slightly to avoid the ring-ditch site.

The palisaded enclosure is included in the appropriate section below (p. 81).

The settlement at Kingley Vale belongs to the class of earthwork enclosed homesteads. A semi-circular area, 80 x 50 ft., is enclosed by a discontinuous bank which is associated with a 'Celtic' field-lynchet. Ploughing of the field continued during or after the occupation of the homestead, for the entrance from the homestead into the field became obstructed by the further build-up of this positive lynchet. Very limited excavation in the interior revealed two storage pits and a post-hole, and produced a few sherds of coarse pottery together with a remarkable perforated vessel perhaps used in cheese-making. The form of this homestead is reminiscent of the smaller annexe at Blackpatch (fig. 3).

An open homestead at Weston Wood in Surrey is of particular interest for its information about the economy practised on the site. Excavation revealed the post-holes of a simple ring-post house, 20 ft. in diameter, with a central post for roof support and two shallow pits (fig. 10). Immediately to the N. and E. of this house were found the spade-dug furrows of two cultivated plots, each approximately 23 x 28 ft. A circular timber shed contained a saddle quern and rubber apparently in situ. A rectangular sunken working-floor with adjoining pit and a large number of external hearths comprised the remaining recognisable features of the site. The finds included two copper ingots, a bronze awl, and grains of carbonised wheat and barley which provided a radio-carbon date of 510 ± 40 B.C. (Cambridge). The pottery includes very coarse bucket forms, predominantly plain but including a

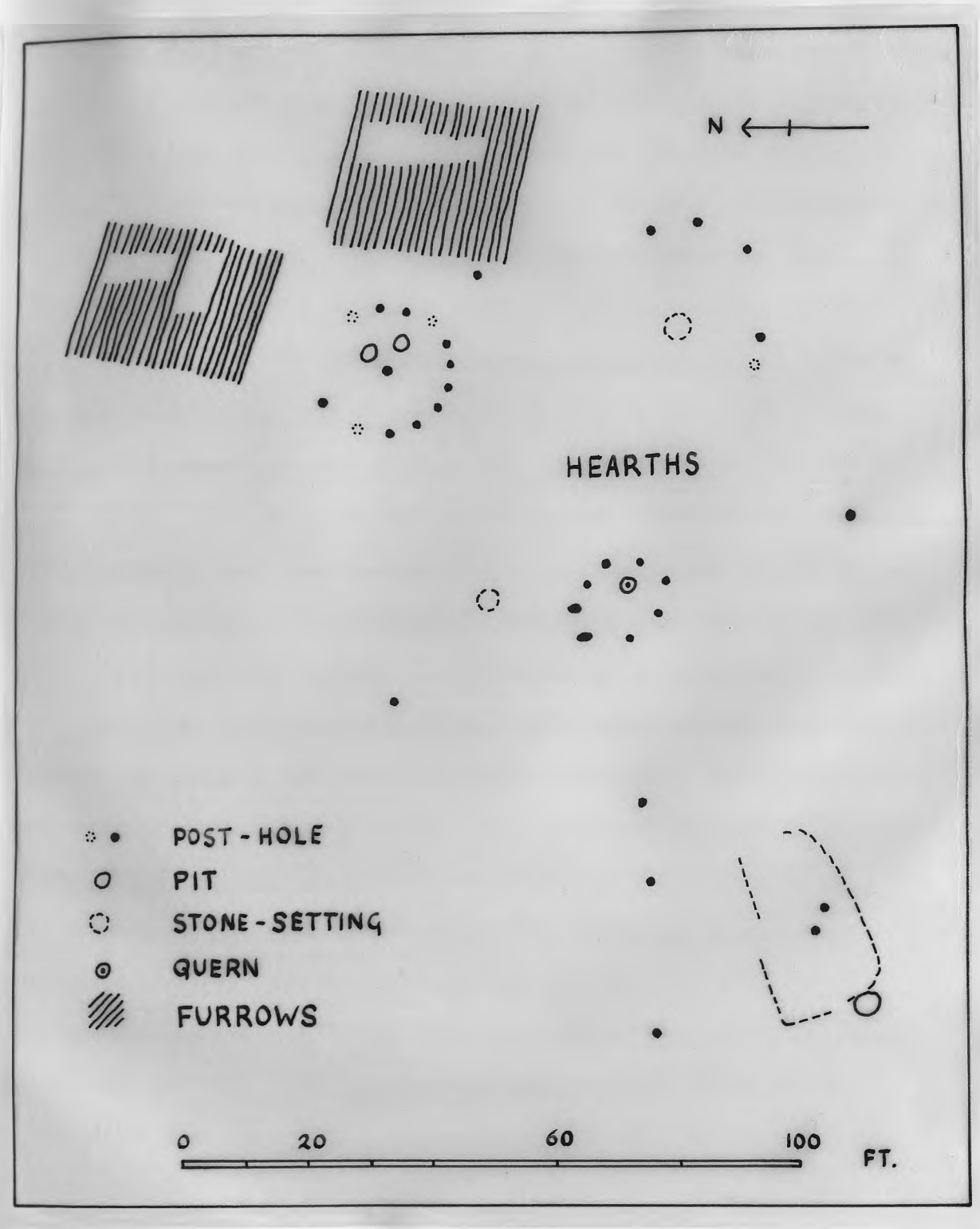


Fig. 10 Weston Wood (after Harding, 1964, fig. 2)

large pot 'with unusual punched design' achieved probably with the end of a stick (Harding, 1964, 13 ff.), together with carinated bowls and shouldered jars of finer ware. The latter compare well with the late pottery from New Barn Down.

The third site in this group is that at Minnis Bay, Birchington in Kent, and will be examined in some detail, for it has proved possible to re-interpret the chronological sequence on the site from the evidence recorded in the published excavation report. It should be stated at the outset that a number of gross inconsistencies exist between the published plan and section of the site (Worsfold, 1943, figs. 2, 3), but these do not affect the conclusions which may be drawn from the stratigraphical evidence. The site consists of a large hollow, partially filled by a gravel bank, and a number of pits. The excavator assigned the hollow and all of the pits to his Period I, followed by a temporary abandonment owing to flooding which is represented by a layer of dark brown silt. To Period II were assigned the gravel bank and scattered traces of wooden structures followed by another final flooding represented by a layer of blue-grey silt. The section shows, however, that the layer of brown silt appeared only in the hollow and in the adjoining pit 16; moreover, the pottery from the hollow and from both adjoining pits, 16 and 10, forms a unified group which is entirely different from the pottery found in the rest of the pits to the N. and E. The Period I occupation is therefore represented by the hollow and pits 10 and 16, while Period II consists of the gravel bank, timbers and pits 6-9, 11-14 and 17-23. Period I pottery comprises very coarse, round-shouldered jars with finger-tipping on the outside of slightly everted rims, the form of which can be matched at Angle Ditch (Pitt-

Rivers, 1888, pl. 264 no. 9), and plain shallow bowls of finer ware which have parallels at New Barn Down (Curwen, 1937, figs. 26, 28). It includes also a few sherds of finger-roughened coarse pottery, comparable to that found at Plumpton Plain Site B (Holleyman and Curwen, 1935, fig. 7, g). These particular parallels are quoted in order to emphasize the early connections of Period I. Period II is characterised by shallow carinated bowls and large situlate jars.

Absolute dating is indicated by the deposition in the gravel bank of a hoard of 73 bronze objects. These include several pieces which are diagnostic of Hawkes' period Late Bronze Age 2, about 750 to 650/600 B.C.: a socketed bronze sword of Burgess' Class IV, a bag-shaped chape, four winged axes and six decorated roundels recognised as bucket fitments by Piggott. The gravel bank into which the hoard was inserted seems to represent the earliest known example in S. Britain of timber-lacing; '... embedded in its upper portions were many horizontal timbers and vertical stages, evidently intended to strengthen its construction' (Worsfold, 1943, 33), and some timbers showed traces of having been bound together with withies. Scattered timbers overlying the hollow and a number of pits may represent relatively recent destruction by the sea of the bank or possibly of internal structures. It is suggested that Minnis Bay II was an enclosed settlement which has only partially survived land submergence into the sea; the site lies now on the foreshore and excavation had to be carried out between tides. Analyses of the silt and plant remains indicated fresh-water or fen conditions at the time of occupation (op.cit., Appendices I and III).

Minnis Bay I was apparently an open settlement with pits, which was abandoned for a time on account of flooding. The size of these pits is in some doubt, owing to the discrepancies between dimensions shown on the plans and sections and those stated in the text, but it is reasonably certain that they did not possess the depth and regularity of storage pits. (The damp conditions of the site would, in any case, render food storage impractical without the addition of impermeable containers.) The evidence of the bronze hoard must date Period II to the early sixth or even seventh centuries B.C., a conclusion which is supported by the shallow carinated bowls and situlate jars associated with that phase, and Period I may thus be assigned to the seventh century. Several pits have been re-excavated in recent years (I am indebted to Miss A. Powell-Cotton for her kindness in allowing me to examine the finds); additional pottery was found which supports the division of the pits suggested here as well as the early dating of both periods.

Considerable evidence for settlement forms in the later second and first millennia B.C. survives in south-west England; the moorlands of Cornwall and Devon abound in the remains of small enclosed pounds, isolated hut-circles and groups of hut-circles. There has been considerably more surface field-work than excavation (e.g. Radford, 1954; Fox, A., 1954); it is not yet possible to draw conclusions about settlement forms at any one period, though it is probably safe to assume that, at least by the mid first millennium B.C., open homesteads and villages were predominant. These consist of circular stone and timber houses of 10-30 ft. in diameter, and are frequently associated with small fields.

Some of these sites may be the south-western equivalents of open settlements like Amberley Mount in Sussex and the platform settlements of southern Scotland.

Savory has attempted to distinguish a Welsh branch of the Deverel-Rimbury Culture on the basis of pottery, notably from the Ogof-yr-esgyrn Cave and Merthyr Cynog in Brecknockshire (1958). Most of the pottery which he illustrates belongs to that class of plain, coarse, barrel-shaped pots which cannot be used as a cultural indicator and which could date to any period around the end of the second or earlier first millennium B.C.; some of it is lugged but this is not a feature confined to Deverel-Rimbury tradition. The rilled sherd from Merthyr Cynog which Savory assigns to globular influence is, as he admits, of totally dissimilar fabric from that of true globulars (op.cit., 47, fig. 5; Wainwright, 1967, 24).

v. Settlements of the early first millennium B.C. in Northern Britain

In view of the early dating and fen conditions of the timber-laced phase at Minnis Bay, it is interesting to note the appearance at least in Yorkshire of timber 'lake-dwellings' at a similar date. These sites were discovered in the latter part of the nineteenth century in the marshlands at the foot of the Wolds where gravel and clay overlie the chalk. In all cases, these sites seem to have been homesteads erected on substructures of vertical timber piles with horizontal timbers and brushwood; no evidence of the superstructures remains, though at West Furze it was noted that the surface of the platform had been strewn with sand, presumably in an attempt to maintain a relatively dry flooring (Smith, 1911, 600). The platform at West Furze was rectilinear in plan and measured about 50 x 72 ft. The plan of the site beside the Costa Beck, Pickering, shown by Elgee (1930, 183 f.) is largely conjectural, and it should be noted that the original reports (Spink, 1895; Duncombe, 1899) refer to four rows of vertical posts forming a causeway across the Costa Beck, whereas Elgee's plan shows only two rows. Recent excavations at Barmston have indicated that the settlement was established in marsh - rather than lake - conditions (Varley, 1968, 20), and the same may well have been true for the other Yorkshire sites. The pottery found at Pickering and at both Ulrome sites (West Furze and Round Hill) is coarse and poorly made, plain except for the presence of lugs and finger-tipping on the Pickering pottery, and indicates a date at least in the

first half of the first millennium B.C. This dating is supported by the find from West Furze of a bronze peg-pole socketed spearhead (complete with wooden peg and part of the wooden shaft *in situ*); this type made its appearance in Hawkes' period Middle Bronze Age 3, 1000-850 B.C. Two radio-carbon dates have been obtained from samples of wooden stakes at Barmston: 1010 ± 150 B.C. and 940 ± 150 B.C. (Varley, 1968, 14; BM 122, 123; Barker and Mackey, 1963, 105).

The settlement at Castle Hill, Scarborough (Smith, 1927) may belong to the seventh century B.C., for its bronzes include a ribbed socketed axe of a type characteristic of Hawkes' period Late Bronze Age 2, and the pottery includes a markedly globular form of jar with everted neck which is surely modelled on the bronze cauldrons of that period. The presence of the shank of an iron pin places Castle Hill among those sites, like Llyn Fawr in Glamorgan, at which the use of iron first appears. The form of the settlement is unknown; about 30 pits were excavated over an area of about half an acre beneath a Roman signal-station, together with hearths and an associated occupation layer in which the bronzes were discovered.

The cave occupations at Covesea, Morayshire (Benton, 1931), and Heathery Burn, Co. Durham (*Inv. Arch.*, GB 55, 1968), and the pre-fort occupation at Traprain Law in East Lothian (Curle and Cree, 1921) date to the period of the seventh and sixth centuries B.C. (Coles, 1960; Hawkes and Smith, 1957). Occupation of caves forms an incidental type of settlement which appears sporadically from the late second millennium B.C. onwards in suitable geological areas. The nature of the occupation at Traprain Law is unknown, though traces were

found of a possible small timber house.

Pottery similar to that from Covesea was found during the excavation of a stone hut-circle (no. F) at Dalruzion, Perthshire; this is of the type known as Flat-Rimmed Ware, though the term has come to be used rather loosely. The Dalruzion sherds show thick, coarse fabric and internal rim bevels (Thorneycroft, 1933, fig. 7). The hut-circle was one of several scattered among clearance cairns with no form of enclosure. The clearance cairns imply cultivation, and this may be supported by the discovery of a grain of barley in each of the houses F and Q1, and of saddle querns in Q1 (Thorneycroft, 1946). Similarities in house construction and pottery have been noted between Dalruzion and Green Knowe (RCAHMS, 1967, 23).

Unenclosed platform settlements are included tentatively in this Late Bronze Age section; this type of site was distinguished only recently (Feachem, 1961; RCAHMS, 1967, 70-74). In southern Scotland, unenclosed platform settlements have been found in Peeblesshire (46 examples), Roxburghshire, Midlothian and Lanarkshire, but only one site has been excavated, Green Knowe in Peeblesshire (Feachem, 1961). One of nine circular house platforms was excavated and found to measure 50 ft. in diameter, with stake-holes representing a house about 28 ft. in diameter. The house was of relatively unusual construction, with a wattle-screened cavity wall, inner circle of posts for roof support and internal wattle partitions. Part of a coarse barrel-shaped pot was found, the sole feature of which is a flat internal rim bevel.

Reference should be made at this point to the evidence for pre-palisade occupations at Harehope Rings and West Brandon,

EDINBURGH EX BIBL UNIV.

for these may date to as early as the seventh century B.C. (p.92). A circular timber house, 21 ft. in diameter, represents the primary phase at West Brandon in Co. Durham (Jobey, 1962, 23). At Harehope in Peeblesshire, House 1 is overlain by two successive houses belonging to the palisaded phases; this primary house is represented by a ring of post-holes 24 ft. in diameter (Feachem, 1960, 189). These traces of settlement were probably unenclosed and thus correspond well with the tradition of open homesteads and settlements embodied by unenclosed platform settlements and hut-circle sites.

vi. Summary and Discussion of Settlements of the later second and early first millennia B.C.

The scarcity of settlement sites which may be attributed to communities using cinerary urn pottery seems to indicate that, in southern England, the tradition of permanent, enclosed settlements was established by people of the Deverel-Rimbury Culture. There are no certain settlement sites associated with cinerary urns in northern Britain, and there the tradition of open, possibly seasonal, settlements seems to have survived at least until the seventh and sixth centuries B.C. The most significant fact arising from an examination of pre-Deverel-Rimbury sites in the south is that shallow U-shaped ditches were still the only form of ditch in use, whereas the V-shaped ditch appears later in the second millennium B.C. as a feature of the Deverel-Rimbury Culture.

Among other structural features characteristic of the latter cultural complex are the palisade, both post-hole and trench types, oval and circular timber houses and small storage pits. Less characteristic but nevertheless present are the stockaded linear ditch, the working-hollow and the dew-pond, while the existence of timber granaries and drying-racks, and even rectangular sheds, is possible. The predominant form among settlements is the sub-rectangular enclosure employing both palisades and earthworks, and this represents a small social unit of probably no more than five families. It is probable that cattle enclosures are not, in fact, as typical a feature of the Deverel-Rimbury Culture as has hitherto been believed, but the association with the culture of field-systems

and linear earthworks emphasizes the mixed nature of its economy.

The traditions of the Deverel-Rimbury Culture survived in modified form into the seventh century B.C., by which time there were other contemporary settlements which lack any trace of its influence. At this period, unenclosed settlements are recognisable in northern Britain, together with timber-built settlements in marsh or fen areas of Yorkshire.

This examination of types of settlements belonging to the second half of the second millennium and the first half of the first millennium B.C. is designed to act as a background for comparison with the classification of later settlement forms. A certain amount of chronological overlap is inevitable between Parts I and II of this study, and will be particularly apparent in connection with palisaded sites. The classification set out in Part II will be concerned primarily with settlement sites dating after 650 B.C., while the chronological range of settlements already discussed in Part I extends into the sixth century. This overlap is all to the good, for it emphasizes the major result of the work presented in this study; the structural origins of settlements belonging to the middle and later first millennium lie securely in earlier traditions and owe little to intrusive influences from Continental Europe. The adoption of 650 B.C. as an approximate starting-point for the main classification of settlements was indicated by structural evidence and by associated pottery and metal artefacts. Cunliffe's reformation in pottery and Burgess' period marked by Hallstatt C inroads into the native metal industry begin around 650 B.C. (Cunliffe, 1966; Burgess, 1968).

Part II Classification of Settlement Forms in the Middle and Later First Millennium B.C.

1. Palisaded Sites

i. Palisaded Homesteads

Following the terminology established by the Royal Commission on the Ancient and Historical Monuments of Scotland, homesteads are distinguished from settlements by the number of houses enclosed; one to three houses represent a homestead, while more than three houses constitute a settlement. There are thirteen such homesteads enclosed by single or double palisade trenches; they occur predominantly in N. England and S. Scotland, with an outlier in S. England (fig. 11). With the exception of this outlying site at Little Woodbury, lying on a plateau at 270 ft. O.D., palisaded homesteads are found on hills or ridges up to 1250 ft. O.D. The form of their enclosure is normally circular or oval, a structural tradition broken only at Greenbrough Hill and West Brandon where the palisade trenches are sub-rectangular in plan. In area, homesteads vary between the circular enclosure 60 ft. in diameter at McNaughton's Fort and that at Little Woodbury which is 410 ft. in diameter.

Just over half the total number of homesteads are surrounded by a single palisade trench, normally with only one entrance. The exception is Staple Howe in its first phase with two entrances; the enlarged enclosure of the second and third phases conformed by having a single entrance. Closely set double palisade trenches are known at West Brandon and Gray Coat, where the trenches are 6

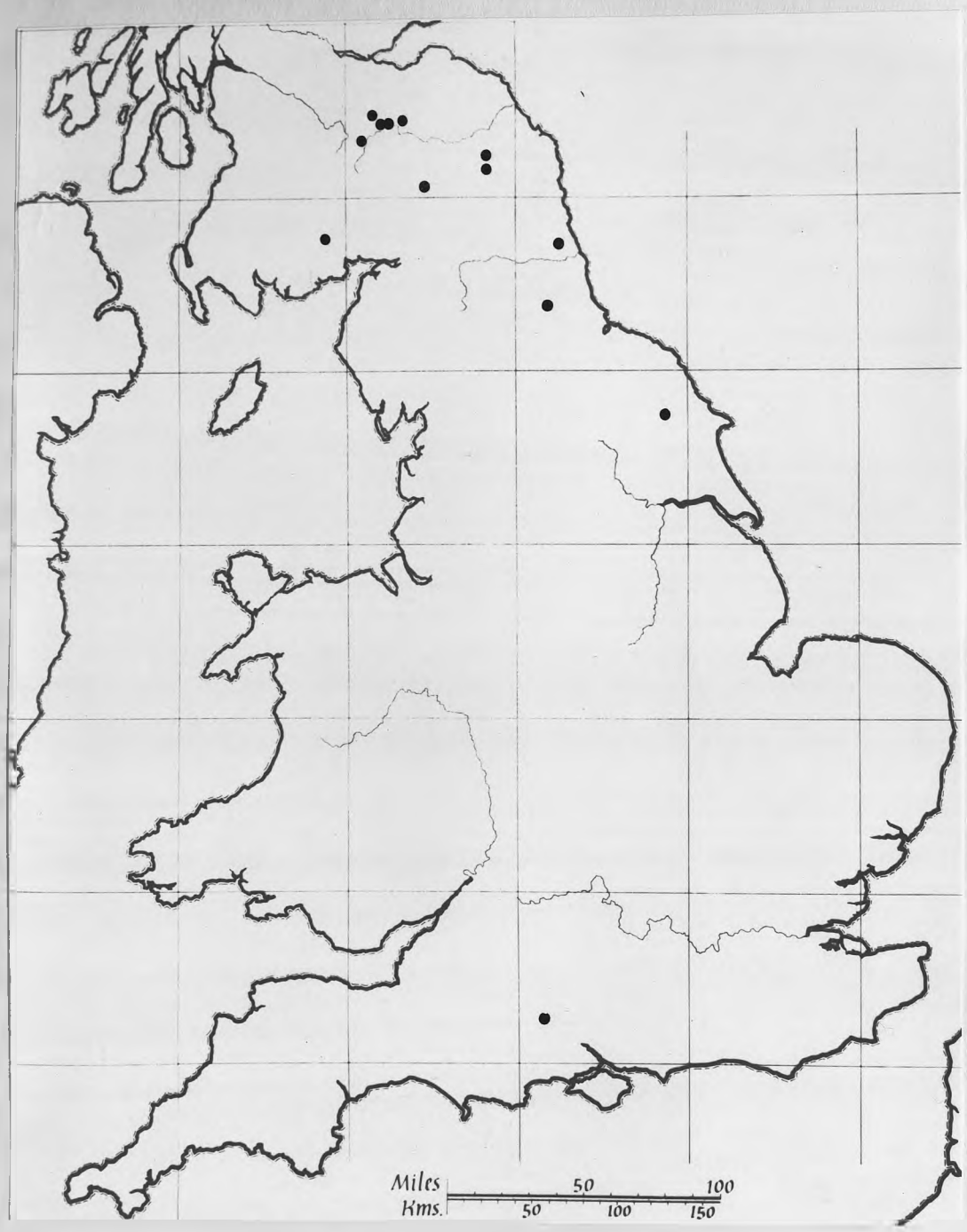


Fig. 11 Distribution of palisaded homesteads

and 10 ft. apart respectively. At Gray Coat, the trenches curve to join together on either side of the entrance, while at West Brandon each trench terminates in a large post-hole on either side of the entrance.

There are also two palisade trenches at South Hill Head, but they are neither closely set nor concentric to one another. The inner trench encloses an area 100 x 80 ft., while the outer encloses an area 155 x 120 ft. It has been suggested that the two trenches joined at the entrance but the site has not been excavated (RCAHMS, 1967, no. 205); superficially, it would seem to be in a slightly different structural class from the three true double-palisaded sites. South Hill Head is closely comparable in plan to the ditched site at Vince's Farm, Ardleigh in Essex (Blake, 1965). It is certainly unlikely that there was ever anything set between the two palisades at South Hill Head, whereas it is conceivable that the double palisades at West Brandon, and Gray Coat might have had brushwood filling the space between them, as was suggested by the excavator of the Hayhope Knowe palisaded settlement (C.M. Piggott, 1949, 60 f.).

Few sites have been excavated; most of the available information has been provided by the splendid fieldwork of the Royal Commission in Scotland and of Jobey in Northumberland. Steer notes that surface indications of palisade trenches take the form of slight grooves sunk into the turf, normally no more than 2 ft. wide and 6 ins. deep (Steer, 1949, 64), and excavations on five sites have provided information about the precise dimensions of these trenches. At West Brandon, the trenches were of approximately squared section and up to 1 ft. 8 ins. wide; the inner trench was

the same in depth as in width, while the depth of the outer trench increased in places to 2½ ft. The trench at McNaughton's Fort showed a similar squared section, 2 ft. wide and 3 ft. 3 ins. deep. At Little Woodbury, the U-shaped trench measured 10 ins. in width and 8 ins. in depth, while that at Staple Howe averaged 1 ft. in width and depth with a section varying between a rounded and a squared U-shape. The trench at Glenachan Rig formed a flat-bottomed V in section, and measured 1-1½ ft. in width at the top, 2 ft. in depth and 9 ins. in width at the bottom. These dimensions will be seen to correspond well with those of other types of palisaded sites.

The trenches must originally have held the upright timbers of the palisade. No example has been found amongst homesteads of an enclosing palisade set into individual post-holes, although it is possible that such sites have yet to be found since they would be rather more difficult to detect from surface remains. Sandstone packing survived in the West Brandon trenches to indicate that the upright posts of the palisade had been 6-9 ins. in diameter and about 9 ins. apart, thus forming a very sturdy barrier. Pockets of charcoal were noted in Trench II at Staple Howe, occurring at intervals of about 18 ins., and these must indicate the former position of upright timbers. On the basis of a number of individual post-holes found behind the palisade trenches, Brewster postulated a platform arrangement associated with the palisades of phases II and III (1963, 11); these post-holes occur sporadically and may represent look-out platforms or strengthening devices at specific points rather than a continuous platform. This arrangement

of palisade trench and parallel post-holes, together perhaps with the close-set palisade trenches at West Brandon, present an interesting and early link with Hallstatt traditions of fortification on the continent.

There is no evidence for the form of palisades above ground-level, but the upright timbers must have been strengthened by some form of horizontal tying, either timber or wattle.

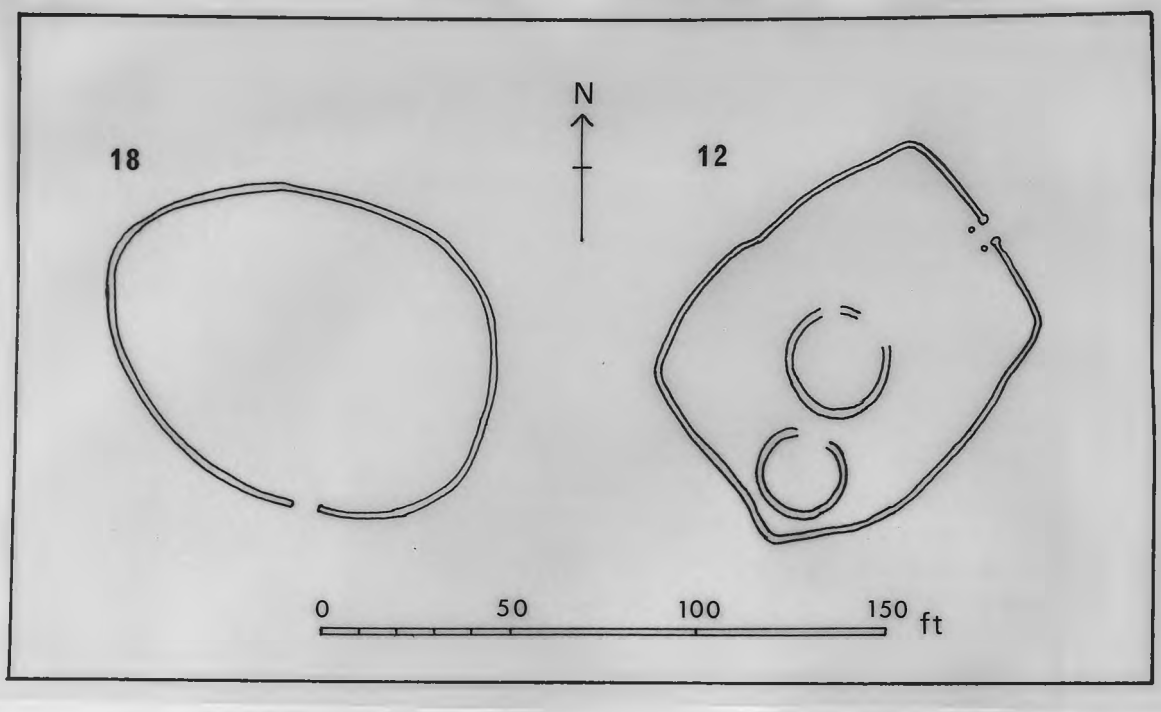
McNaughton's Fort possesses an anomalous feature which may suggest that the site should not be included without reservations among typical palisaded homesteads. This is the stone-revetted bank adjoining the palisade trench; the inner face of the bank runs flush with the outer lip of the palisade trench, which would suggest either that bank and palisade belong to the same original design, or that the bank was built against an existing but ineffectual palisade. The latter explanation seems the more reasonable, for the palisade is too close to the bank to be of any use in supporting a timber superstructure. The bank with its accompanying ditch and counterscarp bank may then be considered as secondary fortification, following closely upon the primary palisaded phase.

The presence of two entrances in phase I at Staple Howe has already been mentioned as an unusual feature among palisaded homesteads. The excavator claimed four entrances for this phase (Brewster, 1963, 9), but there is evidence for only two of these: the N.E. and S.W. entrances. The gateway suggested on the S.E. occurs at a point where the palisade trench becomes very shallow for a distance of 5 ft., and is more likely to represent the result of

erosion than a deliberate gap for an entrance. The fourth gateway was postulated on the S., at the same point as the phase II entrance, but the position of the phase I palisade along this section is so uncertain that it is impossible either to prove or disprove the existence of a gateway in phase I. Since the S.W. gateway lies only some 28 ft. to the W., another entrance in such close proximity is probably unlikely. It seems possible that the uneven nature of the phase I trench may indicate an unfinished state as much as the effect of erosion.

The entrances into palisaded homesteads show several forms, but they are all between 4 and 12 ft. wide, with the exception of the second and third phase entrances at Staple Howe, which are 25 and 20 ft. wide respectively. At Gray Coat and the S.W. entrance at Staple Howe I, the entrances take the form of simple gaps in the palisade trenches. These might be closed by single gates swinging from the last posts of the palisades, or by portable sections of fencing strapped or barred into position between the palisade posts on either side. The two ends of the enclosing palisade turn inwards for a short distance at Glenachan Rig, and the slight passage thus formed might be closed in a similar manner.

The sub-rectangular homestead at Greenbrough Hill has not been excavated, but fieldwork in July 1969 showed that part at least of the entrance arrangement has left visible traces in the turf (pl. III, fig. 12). The palisade trench showed up plainly as a linear depression containing grass which was a darker green in colour than the surrounding turf; at the entrance, the trench terminated in a large post-hole on either side of a gap which measured 6 ft. in width.



Figs. 18, 12 Blackbrough Hill and Greenbrough Hill, Roxburgh., palisaded enclosure and homestead (after RCAHMS, 1956, figs. 188, 211)

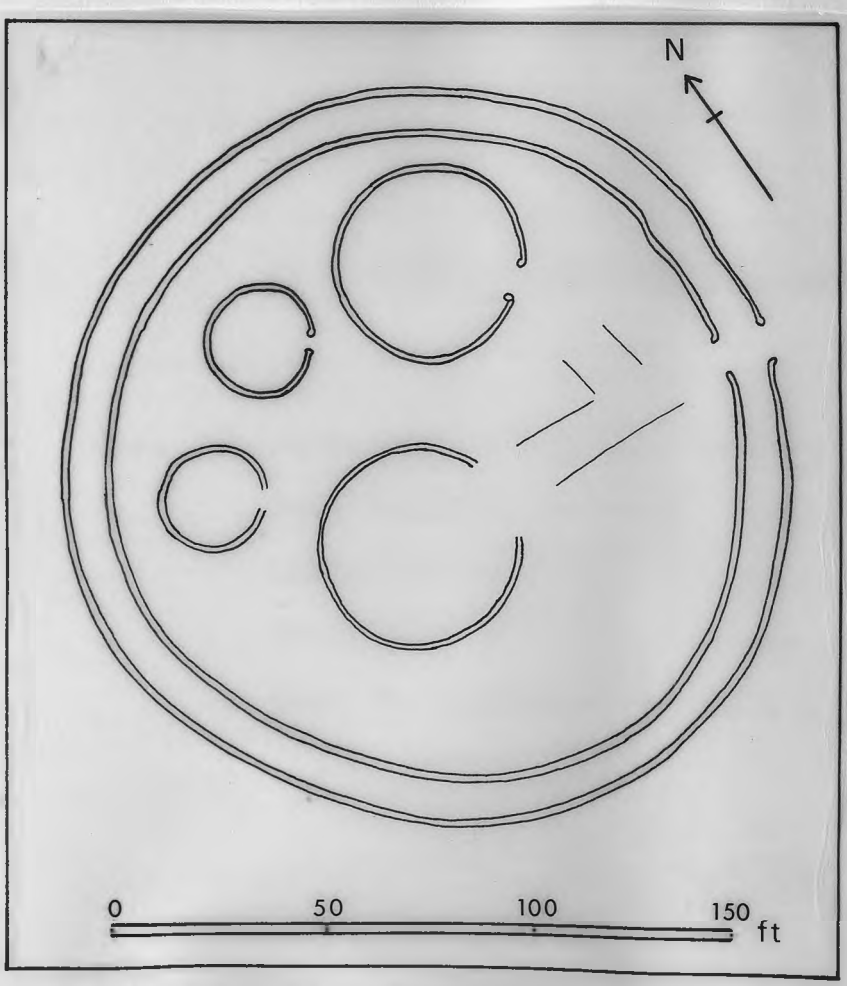


Fig.15 West High Knowes, Northumb., palisaded settlement (after Jobey, 1966, fig.3)

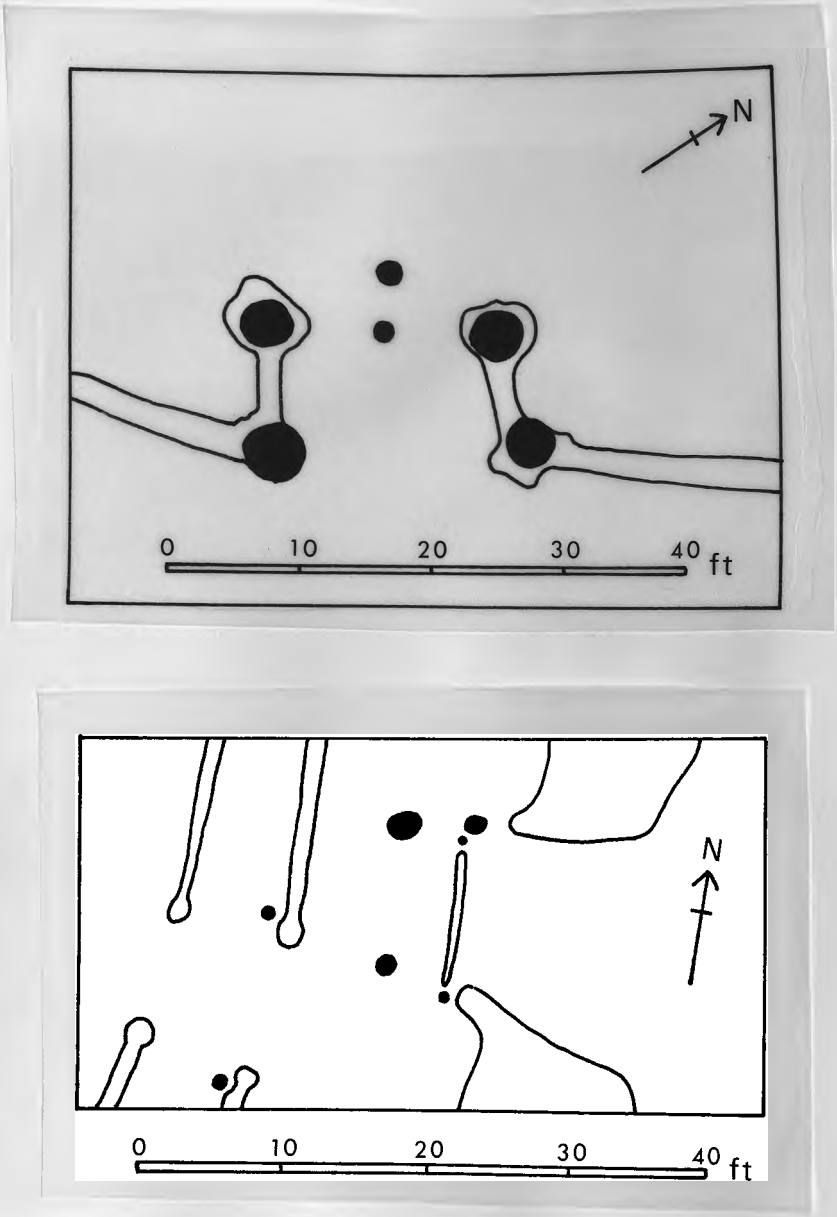
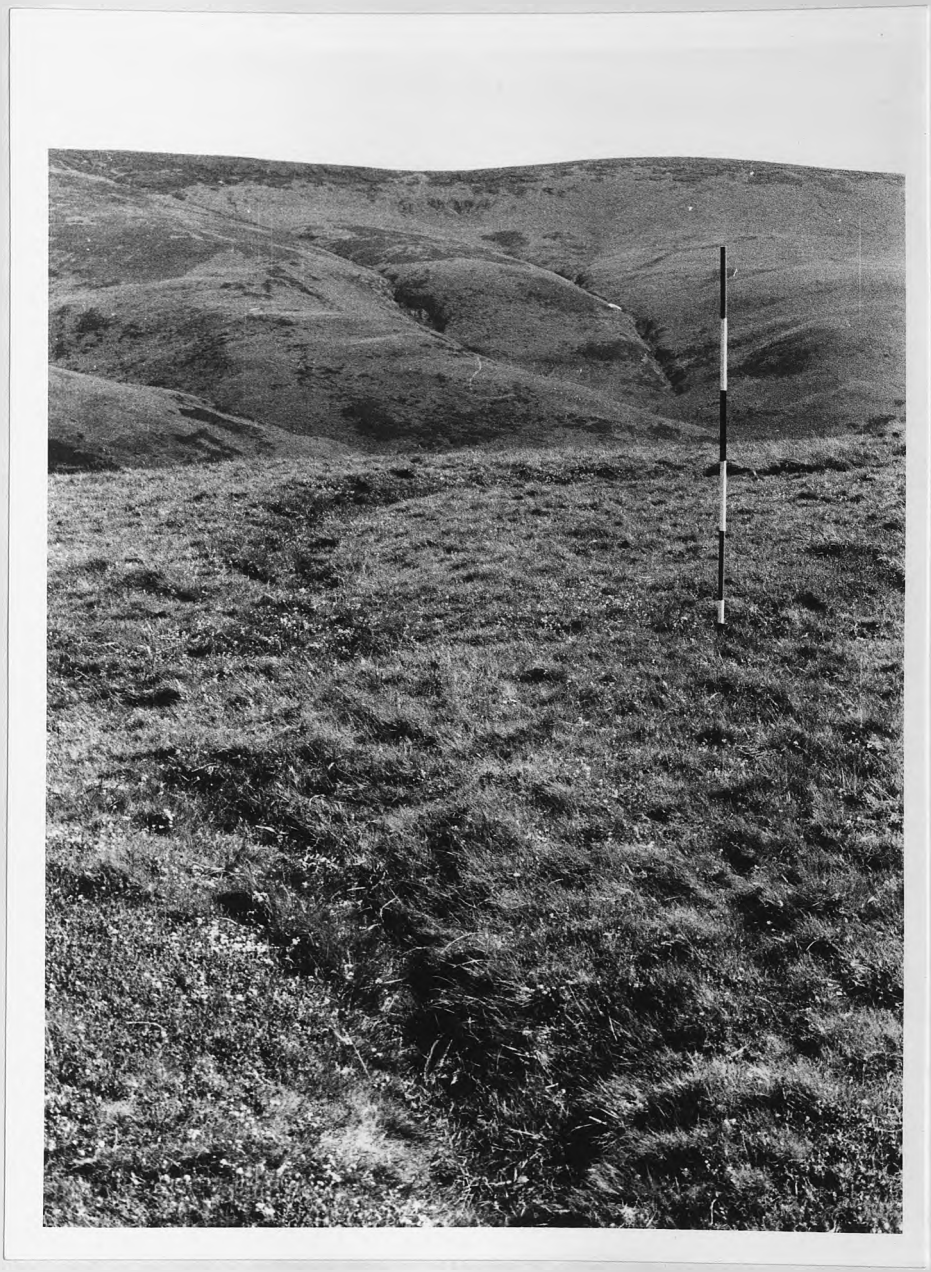


Fig. 13 Entrances into Little Woodbury and West Brandon, palisaded homesteads (after Bersu, 1940, fig. 8; Jobey, 1962, fig. 2 - including the entrance into the earthwork enclosed homestead)



III. Palisaded homestead, Greenbrough, Roxburgh.

On the inside of the entrance and set 4 ft. behind the palisade were visible a further pair of large post-holes which were about 7½ ft. apart (the ranging pole in pl. III marks the position of the inner post-hole on the S. side of the entrance). This surface evidence seems to indicate that the entrance possessed some form of timber porch, and a double-hinged gate supported by the palisade-terminals is probable.

There is an entrance gap 8 ft. wide through the double palisades at West Brandon II; each palisade trench terminates in a massive post-hole on either side of the entrance. A pair of smaller post-holes set immediately behind the outer palisade terminals were interpreted by the excavator as gate-posts (Jobey, 1962, 7); since they are about 12 ft. apart, one should perhaps envisage their use rather as retaining posts, for a portable barrier (fig. 13). A 10 ft. wide entrance passage appears at Little Woodbury; the palisade trench widens into a large post-hole on either side of the entrance and then turns inwards at right angles for a distance of 5 ft., terminating in another pair of large post-holes. Between this inner pair there is a single post-hole which represents probably the central support for a double timber gate. The excavator suggested that some form of tower might be construed from the overall setting of post-holes at the entrance (Bersu, 1940, 47); the presence formerly of a roofed structure would certainly explain the absence of any drip-line beneath the gate. Over a number of years, the action of rain-water dripping from a gate will erode a narrow groove into the surface of a chalk sub-soil.

The use of an entrance passage occurs also at McNaughton's Fort; there is a simple gap, 4 ft. wide, in the enclosing palisade, and this is flanked externally by short

lengths of palisade trench forming a passage 6½ ft. long and 8½ ft. wide, with a paved floor. This arrangement should, perhaps, be interpreted as some form of entrance porch, for there are no post-holes to indicate the existence of a second, outer gate. It can be matched at the palisaded settlement of Huckhoe in Northumberland.

The N.E. entrance at Staple Howe in phase I is 11 ft. wide and possesses three post-holes set at intervals of 2½ - 3 ft. across the causeway. These should probably be interpreted as a double gate with central post, linked on either side to the terminal posts of the palisade by horizontal timbers or wattle. The gateways belonging to the second and third phases at Staple Howe are more difficult to reconstruct, particularly since it is possible that post-holes lay beneath the two unexcavated baulks across the entrance. The gaps in the palisades are unusually wide (about 25 ft. in phase II, and about 20 ft. in phase III) and recall the broad gaps in southern Middle Bronze Age enclosures which are normally believed to have been closed by portable lengths of fencing. The curving line of post-holes within the coincident phase II and III entrances must belong to the original gateway arrangement in phase I.

The internal area of these homesteads seems to bear little relation to the number of houses present; single-house homesteads are not necessarily any smaller than those containing two houses. This fact must be connected with economy, and must reflect the need for space in which to pen animals and to carry out general domestic work. Iron-smelting at West Brandon may be added to the latter category, for the find of slag in one of the palisade trenches need not

restrict the use of the two rock-cut furnaces to the pre-palisade phase; repair-work on the timber uprights would be a reasonable explanation for the presence of slag in the material rammed into the trench. In many cases, surface traces of houses provide the sole source of information concerning the internal arrangements of homesteads. Traces of ring-ditch houses at South Hill Head and Meldon Burn indicate structures of 44 ft. and 34 ft. diameters respectively, while ring-groove houses vary between 25 and 50 ft. in diameter. One of the houses at Greenbrough Hill has an oval form, 22½ x 20 ft., which may perhaps indicate a relatively early date for the site (c.f. below, p.147). The dangers of drawing conclusions about house-types from surface traces were demonstrated by the excavations at Glenachan Rig, where a house of apparently ring-ditch type was found, on excavation, to possess nothing more than a slight gully surrounding the timber structure. The latter was represented by a ring of post-holes, 21 ft. in diameter, with a single central post-hole and a large eccentric fire-pit or hearth.

The site at West Brandon proved, on excavation, to contain a central house of two structural periods and at least three groups of post-holes. House A must belong to the palisaded phase of the site, while House B may belong to the succeeding ditched enclosure, though the connection is by no means certain. House A is represented by four concentric rings of post-holes, and a shallow pit which contained part of a saddle quern and some lumps of burnt daub. Among the groups of post-holes elsewhere in the enclosure were found two pairs, each 7 ft. apart, which may represent drying-racks. The presence of saddle querns does indicate the consumption of grain, but whether the grain was derived from trade or from plot-cultivation is unknown. The two remaining excavated sites are those at Staple Howe and

Little Woodbury, each of which belongs to a separate cultural tradition from that of the homesteads mentioned already but which belong, broadly, to the same structural category.

The first palisaded phase at Staple Howe contained a single oval house, represented by a levelled chalk platform 30 ft. x 20 ft. in area and a number of post-holes. It is difficult to reconstruct this house with any certainty; Brewster postulates a rubble outer wall and a gabled roof supported by two axial post-holes (1963, 29-40), but this leaves a number of inexplicable post-holes. The house possessed a clay oven as well as a hearth. It was succeeded by a circular house, about 30 ft. in diameter, formed by a ring of post-holes with a porch at the entrance and a number of internal post-holes, some of which must have supported the roof. There was an eccentric hearth, and an area of clay which the excavator interprets again, though less convincingly, as an oven (op.cit., 25). Contemporary with this house is the group of post-holes termed Hut III, adjoining a group of hollows, and a timber granary represented by five large post-holes forming a structure 8 ft. square. Two pairs of post-holes nearby, 8 ft. and 6 ft. apart respectively, may indicate drying-racks, and a working-hollow produced much carbonised grain, thus completing the impression of a farming family active in the production of corn. The absence of quern-stones is therefore remarkable, though part of a saddle quern was observed on the surface but removed between visits by persons unknown (op.cit., 134).

Little Woodbury is included as a homestead with some misgivings, for less than half its area was excavated and there may remain more houses in the unexcavated portions. Bersu

considered that the central position within the enclosure of his House I and the later House II indicates that only one house existed at any one time (1940, 100). The fact that House I was found to be secondary to Pit 124 (op.cit., 79) suggests, however, the existence of an earlier house elsewhere in the enclosure. If this is so, the central position of Houses I and II may not be significant for the number of houses existing at any one time. The relationship between Houses I and II is by no means certain; Bersu associated House I with the first phase palisade trench, D.P.1, and House II with the later trench, D.P.2, on the grounds of the common alignments of entrances (op.cit., 46, 48, 94, 100). It is possible that these are fortuitous alignments. Brailsford admitted to some doubt over the chronological relationship of House II to House I from pottery evidence (Brailsford and Jackson, 1948, 5).

The internal structures at Little Woodbury are well-known, for the homestead has long acted, somewhat misleadingly, as a type-site for settlements in southern England at this period. It is misleading as a type-site because, as is now generally recognised, there are no comparable excavated sites and extremely few unexcavated sites which appear, from surface traces, to be of a similar nature. The question of the significance of Little Woodbury will be taken up again in the section on earthwork enclosed homesteads, but it should be noted that Bersu considered the ditch at Little Woodbury to be unfinished (op.cit., 40), which indicates that the homestead should be classed primarily as a palisaded site rather than as an earthwork enclosed site.

Perhaps the most important aspect of the Little

Woodbury excavations is Bersu's masterly interpretation and recognition of the internal features. He was able to justify Pitt-Rivers' claim for above-ground timber granaries represented by settings of four posts at Rotherley (Pitt-Rivers, 1888, 55), and to interpret the pits found in large numbers at Little Woodbury as underground granaries. Pairs of post-holes were interpreted as drying-racks over which the corn in the ear would be hung, and large irregular hollows in the chalk as working areas in use at harvest-time. The two excavated houses proved to be circular timber structures, about 50 ft. and 32 ft. in diameter respectively. They are both of post-ring construction. The plan of House I shows two phases of building, each represented by a double ring of post-holes, a central setting of four post-holes about 10 ft. square and a porch structure at the entrance. The plan of House II shows one major building phase, represented by a single ring of post-holes with no obvious means of internal roof support.

Since only four sites have been excavated, there exists little direct evidence for dating palisaded homesteads. A flint flake was found at Glenachan Rig which is of no value for dating purposes. Jobey suggests a date in the third or second centuries B.C. for both enclosed phases at West Brandon on the grounds that, although saddle querns were present, there were none of rotary type (1962, 29). In the light of more recent excavations on palisaded sites in N. Britain, this dating may well be too low; the question will be taken up again in the general discussion on this class of site. More productive was the site at Staple Howe for a number of datable bronze objects were found. These included razors of continental Hallstatt C type, which were being produced in

N.W. Europe during the sixth century B.C.; unfortunately, neither razor has any stratigraphical value for one was a surface find and the other, though buried, was unrelated to any structure (Brewster, 1963, 111). They are, however, debris of a relatively brief occupation and are useful for dating. A radio-carbon date was obtained from grain found on the working-floor of 900 ± 150 B.C. (BM - 63); although the central date is too early, the lower end of the range 1200 - 600 supports the dating provided by the razors. The pottery fits well into the seventh and sixth centuries B.C., whether one looks for parallels to the continent, as does the excavator, or to native tradition. Finger-tipped applied cordons and line-filled decorative panels were already present in the insular pottery repertoire, but it is very useful to have a firm chronological context for sharply carinated bowls since these do form an innovation in the pottery of the mid first millennium B.C. An early context for this type of bowl is also indicated at Minnis Bay (p. 46), and in Yorkshire at Castle Hill, Scarborough (Smith, 1927; Wheeler, 1931). The pottery at the latter site was associated with native bronze types, including socketed axes, of the first half of the first millennium B.C., and shows finger-tipped applied cordons, plain shallow bowls, carinated bowls and a globular jar with straight everted rim which must owe something to the form of bronze cauldrons.

The site at Little Woodbury provides some idea of the period of time during which the palisaded homestead remained a current structural type, for, as Brailsford observes, occupation on the site must have begun relatively late in Hawkes' period Early Iron Age A and may have continued until

shortly before the local arrival of the Belgae (1948, 2). Amongst the pottery, carinated forms are absent whereas there is a high proportion of types belonging to Hawkes' period Early Iron Age B. The palisaded phase of the homestead must, therefore, date to a period within the second century B.C.

Despite the paucity of dating evidence from palisaded homesteads, it is obvious that this type of site was current for at least five centuries from the sixth to the second centuries B.C. The lower end of the bracket is supported by a radio-carbon date from McNaughton's Fort, obtained from charcoal found in the palisade trench: 280 $\pm$ 100 B.C. (Scott-Elliot et al., 1966, 75; GaK - 808).

ii. Palisaded Settlements

Sites possessing more than three houses within some form of palisaded enclosure are classed as settlements. Eighteen such sites have been noted and, although their distribution is slightly wider than that of palisaded homesteads, they are again concentrated in N. England and S. Scotland (fig. 14). A fifth site may eventually be added to the four known in Northumberland at Ell's Knowe where the presence of a palisade is as yet unproven (Jobey, 1962, 34).

The sites at Blewburton Hill and Muntham Court occur at 300 and 400 ft. O.D. respectively, and are situated on slight chalk hills. The more northerly sites occur at heights varying between 500 and 1500 ft. O.D. on Silurian and Ordovician rocks (mostly greywacke and shale) and on limestone and sandstone hills.

In common with palisaded homesteads, these settlements are enclosed by single or double palisades, but they are, on average, larger in area (fig. 15). Nether Dod is the smallest settlement, measuring 118 x 76 ft., while the largest settlement among those of which the dimensions are certain is Huckhoe, where the inner enclosure measures 300 x 240 ft. and the outer 350 x 290 ft. It may be significant for the relationship between the two classes of site that the smaller settlements are enclosed by a single palisade as are the majority of homesteads, while the larger sites are usually enclosed by a double palisade. They are all oval to circular in plan, apart from Muntham Court where the partially uncovered plan seems to be rectilinear.

With two exceptions, the enclosing palisades are set

Fig. 14 Distribution of palisaded settlements

into continuous small trenches of rounded or squared U-section which are 1-2 ft. wide and deep. The exceptions are Ffridd Faldwyn and Muntham Court, where the upright posts of the palisades are set into individual post-holes. Harehope and Dead Side are unusual among the remaining sites in that the trench is set into the top of an earthen bank (the term embanked palisade will be avoided here, for the present writer feels it to be misleading since it suggests earth piled up on either side of the posts rather than posts set into a bank). The Harehope trench is only about 9 ins. wide and 3-12 ins. deep, but this is, of course, the effect of erosion on the bank. Palisaded settlements may be divided into those enclosed by a single palisade and those enclosed by double or multiple palisades. Close-set double palisades appear at seven sites, their trenches set $5\frac{1}{2}$-11 ft. apart; they are normally concentric, but at Craik Moor the distance between the two trenches varies from 6 ft. down to $2\frac{1}{2}$ ft. Two concentric palisade trenches appear at Harehope and Braidwood: 22 ft. apart in phase I and 27 ft. apart in phase II at Harehope, 46 ft. apart at Braidwood. Although these widely-set examples are not double palisades in quite the same sense as close-set double palisades, they were intended to form pairs for they are linked together at the entrances. The outer pair of trenches at Castlehill falls into the same category since the trenches are 16 ft. apart; this site is unusual in possessing an inner double palisade and an outer pair of palisades. A discontinuous palisade trench was recorded within the double palisade at Craik Moor, and its line was apparently interrupted by lengths of bank (RCAHMS, 1956, 332). The site has not been excavated and this trench,

unlike the double palisade, was not visible in the turf when visited in 1969.

The settlement at Huckhoe has an inner double palisade and an outer single trench at a distance of 40-50 ft.; the dimensions of the latter correspond closely to those of the outer trench of the double palisade. The excavator suggests that the latter may not be a unified work, but may represent the replacement of one trench by another (Jobey, 1959, 224); he bases this idea on the facts that the outer trench is larger than the inner (1½-2 ft. wide and almost 2 ft. deep, against 1 ft. in width and depth), and that the two trenches are not physically associated with one another. The present writer prefers to interpret them as a double palisade for the following reasons. There are good parallels for double palisades 6 ft. apart, whereas there are no parallels for replacement palisades so close (and so uniformly close) to the original line. The discrepancy in size between the two trenches is small and is repeated elsewhere at Braidwood and West Brandon. The presence of two transverse trenches relating the outer to the inner trench is meaningless without the existence of a contemporary inner palisade. At the same time it must be admitted that the inner trench is absent in Jobey's section C, but this is probably the result of erosion and does not, in any case, support the idea of replacement. An outer single palisade trench was found at Hayhope Knowe, but was interpreted by the excavator as an inner revetment for the unfinished earthwork defences of the second phase (Piggott, C.M., 1949, 56f.).

An unfinished true palisade trench occurs at the multiple period settlement of Castell Odo in Caernarvonshire.

This, Alcock's phase 1B, seems to represent an attempt to protect the primary open settlement of timber houses, but the settlement suffered destruction before its completion and there followed a period of abandonment (Alcock, 1960, 90).

The site at Swallowcliffe Down in Wiltshire is classed fundamentally as an open settlement, but it possesses an unfinished palisaded phase. Slight traces of a ditch are still visible round the southern part of the settlement (pl. IV); this feature was sectioned by Clay, and proved to measure about 2½ ft. in width and depth, with steeply sloping sides and a flat bottom which measured 9 ins. in width (1925, pl. II). No traces of a bank appear in the section though the ground level rises slightly on the inner side of the ditch; the site has, however, been ploughed in recent times. This ditch is too small to function as a barrier, and it is suggested here that it should be interpreted as a palisade trench (this conclusion has also been reached independently by Cunliffe, 1966). Its dimensions compare well with those of the palisade trenches at, for example, Hembury, Huckhoe and Hayhope Knowe. Clay notes that the trench ends abruptly on the east and west sides of the settlement (1925, 62); this suggests that the feature is unfinished, and its clean chalk filling indicates that the work of building it did not reach the stage of erecting timber posts. It may be noted that the work began on the most vulnerable side of the settlement, for access would be from the south since the slope of the downland ridge falls steeply on the N. perimeter of the settlement area.

The upper ditch filling was sealed by an occupation layer which contained 'La Tene pottery and a fragment of haematited ware', together with a blue glass bead, none of which are described in detail (op.cit., 62). It is clear

IV. Palisaded settlement, Swallowcliffe, Wilts.

that the unfinished palisade belongs to an early phase in the period of occupation, probably some time within the fifth century B.C.

The settlement at Muntham Court is enclosed by a single palisade set into post-holes, and is strengthened by the addition of a shallow ditch a few feet beyond. Similar strengthening in the form of a stone wall and ditch is postulated by Hogg at Ingram Hill (1956, 154). He admits that there is no evidence for the contemporaneity (or the reverse) of the three features, apart from coincident entrances, but believes that the palisade alone would be insufficient to retain stock within the settlement. Palisades alone were considered an adequate form of enclosure at other sites, however, and certainly a stone wall should not require the additional force of a palisade. The palisade trench and stone wall are not concentric.

A number of sites have produced details of the timbers set into palisade trenches. Sandstone packing in the trenches at Huckhoe indicates that the upright posts were up to 1 ft. in diameter, while the remains of one post survived to show that it had been 8 ins. in diameter and made of oak. The posts in the outer trench were set close together, while those in the inner trench were set at 8 ft. intervals; this indicates a stronger outer palisade, which seems reasonable enough, and these close-set timbers were repeated in the single palisade trench some 40-50 ft. beyond. Packing in the trenches at Hayhope Knowe revealed that the upright timbers had been set at 1 ft. intervals and had been made of willow and alder. Double trenches at Camp Hill, Trohoughton, averaged 10 ins. wide and 1ft. deep, and traces of three posts indicate the

use of timbers 5 ins. in diameter. This site lies within an earthwork promontory fort, and it is uncertain to which structural phase the enclosed gullies and post-holes belong. The double palisade at Ffridd Faldwyn was formed by post-holes on average 9 ins. in diameter and 7 ins. deep, set at intervals of about 5 ft. 4 ins. apart in two rows separated from one another by 5½ ft. This arrangement was found to be less regular to the E. of the entrance than to the W., but it is, nevertheless, interesting to note its similarity, on a smaller scale, to the Hallstatt tradition of timber-lacing in earthen ramparts (the fort rampart which succeeded the palisaded phase at Ffridd Faldwyn was itself partially timber-laced).

At this point, it should be mentioned that pre-hillfort palisaded settlements have been postulated at Madmaston Camp in Oxfordshire (Fowler, 1960) and Sutton Walls in Herefordshire (Kenyon, 1953), but the evidence rests upon two post-holes and one post-hole respectively and cannot, therefore, be included even among possible palisaded sites, although there is certainly evidence for occupation primary to the construction of the earthen defences.

Information about entrances is available for only nine palisaded settlements; of these, seven possess a single entrance and two have two opposing entrances. At Ingram Hill, there is a gap 5 ft. wide on either side of which the palisade trench widens into a large post-hole. These holes probably held massive posts designed to support a timber gate. Entrances through double palisades were normally achieved by linking the two trenches on either side of a gap, thus creating a timber-lined entrance passage. The Braidwood entrance passage must have been unusually long and daunting to the uninvited visitor,

for it measures some 46 ft. long, with a double gate at the outer end and a single gate at the inner. One side of the entrance has been excavated at Huckhoe, revealing two short lengths of palisade trench, 1 ft. apart, flanking the entrance immediately beyond the main double palisade. A similar arrangement was uncovered at the homestead site at McNaughton's Fort in Kirkcudbright. The purpose of these short flanking palisades must have been either to lengthen the entrance way, perhaps in order to facilitate defence or stockpenning, or to provide some form of porch structure.

In contrast to McNaughton's Fort with its out-turned entrance, the arrangement at Ffridd Faldwyn represents an in-turned entrance way. This is 34 ft. wide, and on either side the double palisades turn inwards at right angles for a distance of 20 ft. There is evidence for a gate at the inner end of the passage; the post-holes indicate that this gate must have been a massive structure, certainly double and possibly with some form of timber superstructure. The gate-posts must have measured 1-2 ft. in diameter, in contrast to the posts of the palisade which were on average only 6 ins. or less in diameter. The slight nature of the flanking palisade makes it unlikely that there was an overhead bridge, but a roof over the gate would be feasible and would prolong the life of the timbers.

O'Neil postulates a hut on either side of the entrance at Ffridd Faldwyn but the evidence is too slight to allow serious consideration of the idea. There were, however, guard-houses at Harehope II; it is unfortunate that one side only of the entrance was excavated, particularly since that one side proved so elaborate, for one hesitates to assume an identical

arrangement for the other side. In the first phase, the entrance had been formed by a simple gap between the linked ends of the double palisade, but the smaller secondary enclosure possessed an entrance designed for greater control over incoming traffic. A gap of 18-20 ft. was formed by curving the inner and outer palisades towards one another but not actually linking. This enabled entry into the area between the two palisades to reach the guard-house, a rectangular structure about 7 x 4 ft. This overlooked the outer end of the entrance passage, where the width was reduced by additional palisading to 9 ft.

Settlements possessing two opposing entrances are represented by Castlehill and Hayhope Knowe. The former site is unexcavated and surface traces show merely that the entrance gaps are 10 ft. wide in the inner enclosure and 15 ft. wide in the outer. Evidence for gate structures exists at both entrances into the enclosure at Hayhope Knowe (fig. 16). The west entrance is 8 ft. wide and possesses a single small post-hole on one side. This post may have supported a gate, perhaps made of wickerwork within a frame since an 8 ft. long gate of solid timber would be too heavy for a supporting post only about 5 ins. thick. Opposite this post, there is a post-hole in the palisade trench which is set against the outer edge of the trench and which might perhaps represent a retaining post against which the gate might be closed (fig. 16). Two post-holes on one side and one on the other side of the east entrance represent gate-supports, and a shallow groove runs across the entrance between the posts. This measures about 5 ins. in width and 3 ins. in depth, but the excavator argues that erosion has taken place and that it was originally some

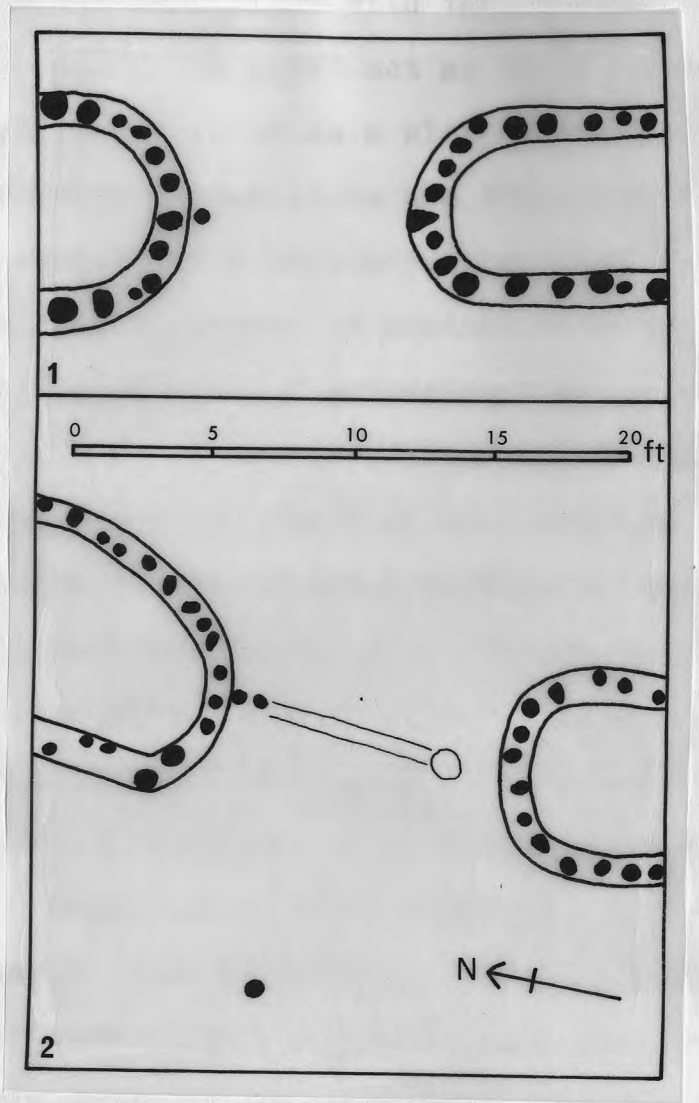


Fig. 16 Entrances into the palisaded settlement of Hayhope Knowe, Roxburgh;
1 West entrance, 2 East entrance
(after Piggott, C.M., 1949, fig. 6)

9 ins. deep (Piggott, C.M., 1949, 54). This is too substantial a feature for it to be a drip-line, and the excavator suggests that it 'must represent a more permanent feature, though no doubt associated with the opening or closing of a gate' (op.cit., 54). It might act as the groove into which a portable gate was set, or as a sleeper-beam threshold. In either case, the extra post-hole on one side might be connected with the support of a horizontal bar, placed into position behind the gate to secure it against entry (c.f. MacKie's reconstruction of such an arrangement at the Rhiroy semibroch, 1968, fig. 2). A similar trench was found across the entrance into the earthwork phase at West Brandon.

Little is known of the internal features of palisaded settlements owing to limited excavation. Several of the southern Scottish sites show surface traces of houses, owing to the widespread tradition of setting the outer wall of the house into a small trench which survives on the surface as a penannular groove. These vary, where excavated, between 25-45 ft. in diameter. Smaller houses, 20-25 ft. in diameter, appear at Harehope (House I) and at Castell Odo, and are represented by simple rings of individual post-holes, with or without surviving central roof supports. At the S. English sites of Muntham Court and Blewburton Hill, one and two storage pits respectively are probably to be associated with the enclosing palisades. A very large number of post-holes were excavated at Muntham Court; so many that it is impossible to pick out any patterns except for small rectilinear groups which may represent above-ground timber granaries.

Harehope Rings is situated about 160 ft. to the S.E. of a univallate linear earthwork. It is possible that the

occupants of the settlement built the dyke as an outer line of protection or as a land boundary. Feachem suggests that Harehope and sites similarly placed on gentle slopes may have been the work of communities living in peaceful times, unlike Hayhope Knowe and other settlements built in the commanding position proper to a hill-fort (1960, 189). The dyke at Harehope and the presence of an unusually strong entrance arrangement in the settlement seem to challenge this idea, and it may be that the topographical differences between sites reflect economic rather than social conditions. Feachem suggests also that the elaborate gateway belonging to Harehope II may indicate a date for its construction later than that for sites with simple entrances (op.cit., 187), but this assumption that elaboration means a later date is unsafe for it is not always supported by the evidence.

The northern distribution of most palisaded sites involves the inherent disadvantage for dating purposes of a lack of finds. Pottery, rare in itself, tends to be of indeterminate character. In his report of the excavations at Huckhoe, Jobey suggests that the palisaded phase must have continued into the second century A.D., since the earliest stone house of the succeeding phase was not occupied until the latter half of that century, although he notes that the pottery from the palisade trenches is akin more to local cinerary urns than to pottery of the late first millennium B.C. (1959, 251). Since that publication, Jobey has obtained a radio-carbon date from one of the timber uprights of the outer palisade of 510 ± 40 B.C. (1968; GaK - 1388), and points out its implications for the stone-built fort of phase II which must date to a period considerably earlier than that originally

envisaged. This pattern of re-appraisal is likely to be repeated for other sites, for it is obvious that dates such as the first century B.C. suggested for Hayhope Knowe, though reasonable at the time of publication, are in fact too low. At the latter site, an iron spearhead was found in the outer bedding trench of House VII (Piggott, C.M., 1949, 58) but, as the excavator pointed out, the type is not closely datable. From House I at Braidwood came part of a glass armlet datable to the first century A.D., but the find could not definitely be related either to the palisaded phase or to the secondary earthwork defences; the same lack of context is true for the fragmentary rotary quern found at Camp Hill, Trohoughton.

There is no direct dating evidence for the palisaded phase at Castell Odo. Alcock suggests a date at least as early as the fourth century B.C. for his phase I (which covers both the open and the palisaded periods), on the basis of pottery of Hawkes' period Early Iron Age A tradition. He finds parallels for this pottery at Castle Hill, Scarborough, at West Harling and, less convincingly, at Little Woodbury (1960, 127). To these may now be added Staple Howe, and the analogy with these three early sites in Yorkshire and Norfolk may indicate that the fourth century B.C. is too conservative an estimate; phase I at Castell Odo would not be out of place in a context perhaps as early as the fifth or sixth centuries. The occupation at Blewburton Hill began at a similar date.

iii. Palisaded Enclosures

A considerable number of palisaded sites are as yet unassociated with any structural traces of occupation, and must therefore be classified as enclosures until proved otherwise by excavation. There are thirty such sites, together with a further seven possible but unproven palisaded sites. Their distribution is essentially similar to that of palisaded settlements and homesteads, although four enclosures lying beyond the northern geographical boundary of this study have been included in order to complete the inventory of this class of site (fig. 17).

The area enclosed ranges, where known, from about 50 ft. in diameter at Hurly Hawkin and 75 x 60 ft. at Ven Law to 400 x 240 ft. at White Hill, but most cover less than an acre. Their form is predominantly oval, the exceptions being Seghill, Newbrough, Skelmore Heads, Hollingbury and Playden which are rectilinear (although the plans of the latter four are known only imperfectly).

Most sites are enclosed by a single palisade, the upright timbers of which were set into a small trench (fig. 18, pls. V, VI). Only four among the certain palisaded enclosures possess double trenches. A second trench was found about 5 ft. beyond the inner main palisade at Hownam Rings, but proved to be a replacement trench (Piggott, C.M., 1948, 200). The enclosures at Hogbridge and Morton Mains possess multiple palisade trenches, though the former is fundamentally a single palisade site and the latter a double palisade site. At Hogbridge a single trench is accompanied at a distance of 15-35 ft. by three trenches each 5 ft. apart,

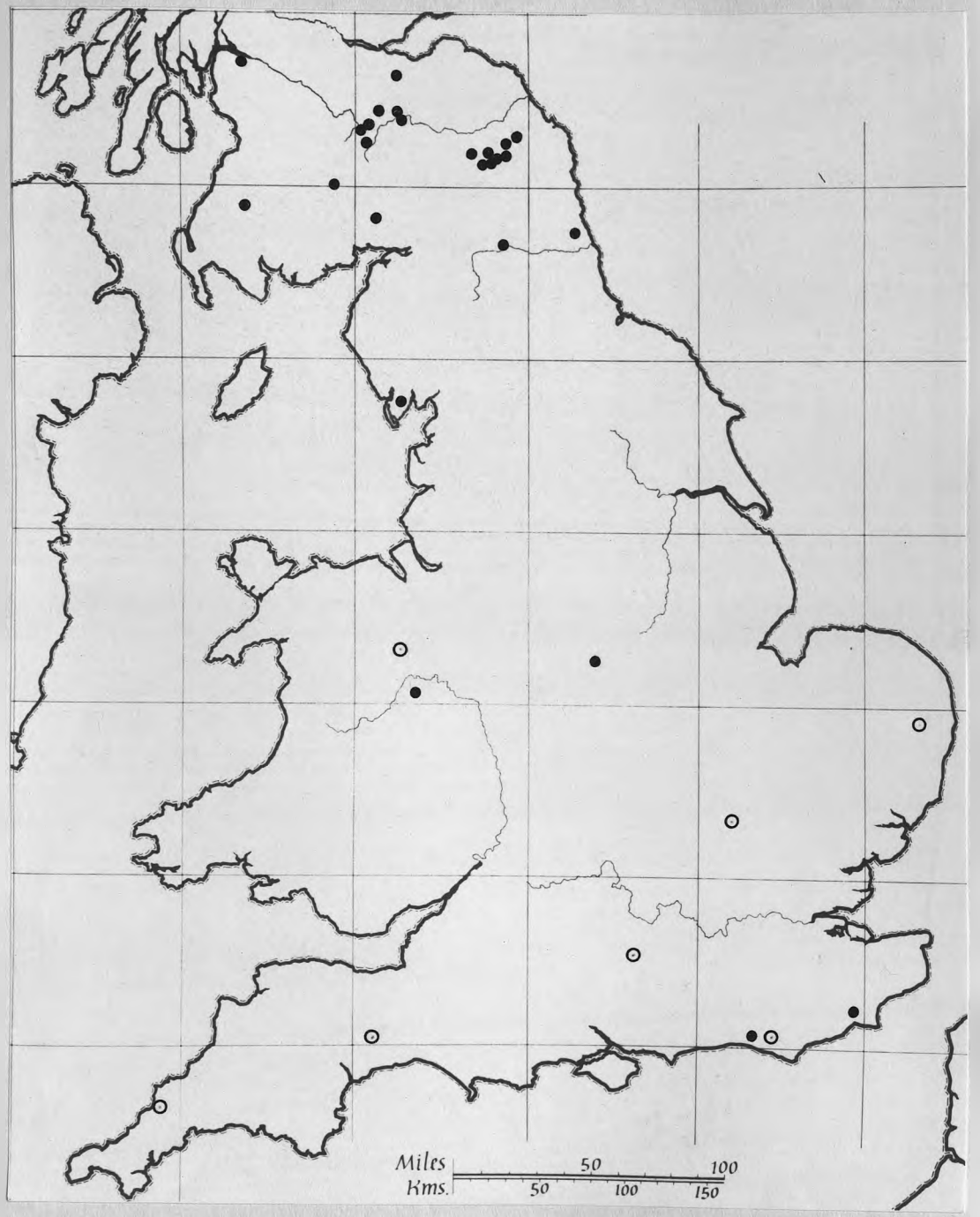


Fig. 17 Distribution of palisaded enclosures

● certain sites

o probable sites

V. Palisaded enclosure, Blackbrough, Roxburgh.

VI. Blackbrough, Roxburgh.

while at Morton Mains there are two trenches set close together with a third some few yards beyond. At most sites, these palisade trenches are the sole means of enclosure. The promontory site at Inchtuthil, which preceded the earthwork fort and which stands on the same plateau as the later Roman fort, consists of a small V-shaped trench with a ditch beyond it. A similar arrangement appears at Harthill, where a square-sectioned palisade trench, 1 ft. wide and deep, is separated by 14 ft. from a small ditch, 2 ft. 4 ins. wide and 1 ft. deep. The palisade set into individual post-holes at Playden lies about 1 ft. from the inner lip of a ditch, 2 ft. wide and 1 ft. deep; this is closely comparable to the arrangement at the palisaded settlement of Muntham Court, also in Sussex. It is reasonable to suppose that the material from these shallow ditches was used to form a strengthening embankment at the foot of the palisades. The distances between palisades and ditches at Inchtuthil and Harthill suggest, however, that the ditches functioned not merely as quarries but as additional lines of enclosure as well.

The site at Broome Heath should be mentioned in connection with enclosures of an elaborate nature. It is included among palisaded works only tentatively, until its excavation has been published in greater detail. The site consists of a penannular bank and ditch, with traces of a double palisade within the bank; until information about its size is available, however, it is impossible to be certain that this is not another house-enclosure like West Harling (p.141).

Among the few excavated examples, palisade trenches have been found to measure 10 ins. - 3 ft. in width and

8 ins. - 2 ft. 8 ins. in depth, excluding those at Hembury which are abnormally large and which will be discussed later. The trenches are normally U-shaped in section. Information about post-arrangement within the trenches has been obtained from only two uncertain sites. At Cappuck, stone-packed post-holes of 1 ft. diameter were sunk at intervals of 1 ft. into the bottom of a trench 3 ft. wide and 1 ft. 6 ins. deep. This represents a very substantial palisade, but its value as evidence is limited by the fact that only a short length of the trench was uncovered. The same limitation is attached to the evidence from the Caburn, where a short length of trench was excavated to expose traces of posts 9 - 12 ins. in diameter; these had been set at intervals of $1\frac{1}{2}$ - $2\frac{1}{2}$ ft. into a trench measuring 1 ft. 3 ins. wide and just under 1 ft. deep. The palisades at Breedon Hill and Playden were set not into continuous trenches but into individual post-holes. The Playden palisade consists of post-holes about 1 ft. in diameter which are set at intervals of approximately 12 ft; between the post-holes are irregularly spaced stake-holes, each about 4 ins. in diameter.

Few details are known about palisaded enclosures, and it is possible for this reason that many are in fact inhabited sites. The approximate size of the entrance is known from surface traces at three southern Scottish sites, for gaps are visible in the grooves marking the line of the palisades. At Blackbrough Hill, the entrance is about 3 ft. wide, at Glenwhappen Rig about 12 ft. wide, while at Fasset Hill the entrance through the main enclosure is about $7\frac{1}{2}$ ft. wide and that through the annexe or hornwork about 10 ft. wide (both entrances are on the same alignment). It has been pointed

out that the presence of an hornwork at this last site implies habitation rather than stock-penning in the main enclosure (RCAHMS, 1956, No. 660). The palisade trench in the interior of Hollingbury Camp has an entrance gap about 10 ft. wide, and the trench widens on either side into a larger post-hole. This structure is unfinished; it runs in a straight line for 153 ft., turning at a right angle at its N. end to run westwards for 5 ft.

Hollingbury presents an interesting problem. Partial excavation was carried out in 1931 by Curwen, revealing two structural phases and three periods of occupation, all within Hawkes' period Early Iron Age A. It is not clear, either from stratigraphy or finds, to which phase the palisade trench belongs. The first structural phase consists of an earthen bank and ditch running across the eastern part of the fort, approximately parallel with the E. rampart; its N. end is overlain by the N. rampart and ditch, with a hearth sealed between the two. This earthwork is too slight, and its N. end too curved, to allow interpretation as an earlier cross-ridge dyke. Curwen suggested that it might represent an earlier enclosure partially overlain by the hill-fort defences (1932, 7). Whether the rectilinear palisaded structure is to be associated with the enclosure or the fort, a comparison is prompted with the unfinished Romano-Celtic temple enclosure at Heathrow in Middlesex (Grimes, 1960, 25). This comparison can be no more than a tentative hint towards the possible function of the Hollingbury structure. Its straight side and angular corner does seem to be reminiscent of ritual and funerary building technique as seen at such sites at Woodyates, Roden Downs and Casterley.

If this structure is to be associated with the hill-fort of Hollingbury Camp, a further possibility arises; it may have been intended as a house-enclosure on the lines of the sub-rectangular palisaded compound enclosing a house in the hill-fort at Hod Hill in Dorset (Richmond et al. 1968, Enclosure 36, Hut 36A, 21-3). The fact that the entrance gap in the palisade trench and the E. entrance of the hill-fort coincide in their alignment may indicate contemporaneity. Narrow trenches have been found at a number of hill-forts, either sealed beneath their ramparts or on the line of their ditches; these are usually interpreted as palisade trenches of an earlier phase of occupation. The trench underlying the hill-fort rampart at Blewburton Hill in Berkshire has been accepted as evidence of an earlier palisade on account of its probable connection with the primary phase of occupation represented by pottery, pits and post-holes. Sites at which there is no such supporting evidence must be interpreted with greater doubt for they raise the question of marking-out trenches.

In any consideration of the latter, the classic site is that at Ladle Hill in Hampshire, where surface fieldwork was carried out by Piggott in 1930. This earthwork was interpreted as an unfinished hill-fort; the second stage of construction, that of enlarging the narrow marking-out trench into a ditch, was never completed. It is, of course, possible to prefer interpretation of the underlying trench as an earlier palisaded enclosure, as did Hawkes in his discussion of sites comparable to Quarley Hill (1939, 170); the point cannot be settled at Ladle Hill itself until the site has been excavated, but the evidence from Quarley Hill indicates clearly that the

If this structure is to be associated with the hill-fort of Hollingbury Camp, a further possibility arises; it may have been intended as a house-enclosure on the lines of the sub-rectangular palisaded compound enclosing a house in the hill-fort at Hod Hill in Dorset (Richmond et al. 1968, Enclosure 36, Hut 36A, 21-3). The fact that the entrance gap in the palisade trench and the E. entrance of the hill-fort coincide in their alignment may indicate contemporaneity. Narrow trenches have been found at a number of hill-forts, either sealed beneath their ramparts or on the line of their ditches; these are usually interpreted as palisade trenches of an earlier phase of occupation. The trench underlying the hill-fort rampart at Blewburton Hill in Berkshire has been accepted as evidence of an earlier palisade on account of its probable connection with the primary phase of occupation represented by pottery, pits and post-holes. Sites at which there is no such supporting evidence must be interpreted with greater doubt for they raise the question of marking-out trenches.

In any consideration of the latter, the classic site is that at Ladle Hill in Hampshire, where surface fieldwork was carried out by Piggott in 1930. This earthwork was interpreted as an unfinished hill-fort; the second stage of construction, that of enlarging the narrow marking-out trench into a ditch, was never completed. It is, of course, possible to prefer interpretation of the underlying trench as an earlier palisaded enclosure, as did Hawkes in his discussion of sites comparable to Quarley Hill (1939, 170); the point cannot be settled at Ladle Hill itself until the site has been excavated, but the evidence from Quarley Hill indicates clearly that the

excavator's palisade enclosure is in fact a marking-out trench for the univallate hill-fort. The trench in question appears only across the two fort entrances, its dimensions being 3½ ft. wide and 1 ft. 9 ins. deep at the N.E. entrance and 4 ft. wide, 2 ft. deep at the S.W. entrance. Elsewhere it has been destroyed by the digging of the fort ditch, a fact which confirms its function as a marking-out trench. This interpretation is supported by the size of the enclosed area, the relationship of the site to the linear ditch system and by the pottery finds. If this were a palisaded enclosure it would be an anomalous example on account of its unusually large size: 1100 x 550 ft. The hill on which the site lies is a focal point for a system of Middle Bronze Age linear ditches, three of which underlie the fort. This association made Hawkes compare the site to that on Ladle Hill, but the two are really quite different. The earthworks on Ladle Hill and parallel sites on Danebury Hill in Hampshire and Liddington Hill in Wiltshire are tangential to linear ditches, whereas the fort on Quarley Hill and that on Sidbury Hill in Wiltshire are superimposed upon the junctions of earlier ditch systems. The association of fort and ditch system at the latter two sites are fortuitous, a matter of topographical convenience. Hawkes suggested that Ditch 4 at Quarley Hill was dug to connect the 'palisaded enclosure' with the linear Ditch 1 nearby (1939, 167-9); there is no good evidence, however, to suggest that Ditch 4 is contemporary with any stage in the construction of the hill-fort, and no reason to discount the possibility that Ditch 4 may originally have continued inside the fort to meet Ditches 2 or 3. Further support for a single phase of building activity on the fort is provided by the

pottery associated with it, for this represents a homogeneous group within Hawkes' period Early Iron Age A.

Evidence of a nature similar to that at Quarley Hill has been found at Witchy Neuk, Northumberland, where a stretch of narrow trench was uncovered across one of the entrances of the promontory fort. This feature, 2 ft. in width and depth, is again more likely to represent a marking-out trench than an earlier enclosure, although the latter was suggested tentatively by Jobey. The site is also comparable to the southern sites discussed already on account of the univallate linear ditch with which it appears to be associated. Further support for the idea of marking-out trenches is provided by the site at Morton Mains in Dumfriesshire, where the remains of a narrow trench are visible between sections of unfinished ditch and bank (RCAHMS, 1920, no. 511; Feachem, 1955, 63).

The logical answer to the palisade versus marking-out trench problem seems to be this: where the trench lies on the line of the subsequent fort ditch, it should be interpreted as a marking-out trench, while a trench lying beneath the fort rampart should be seen as an earlier palisade enclosure. It would seem to be unnecessarily troublesome to fill in the marking-out trench with material from another ditch to form a rampart.

If this argument is accepted, there is a number of hill-forts where earlier palisaded phases may be postulated; these include Hembury, Winklebury (Hants.), Wilbury and Old Oswestry. At Hembury, a trench was found beneath both the inner and the second ramparts of the hill-fort; the excavator interpreted the inner trench as the timber revetment of the

first phase rampart and the outer trench as a palisade. Since this would be an anomalous arrangement among hill-forts, it may be preferable to envisage a primary double palisaded enclosure succeeded by stronger earthwork fortifications. There is, however, some reason to doubt the interpretation of these trenches as palisades or revetments. They are 2 ft. 2 ins. - 2 ft. 4 ins. wide and 3 - 4 ft. deep which is really very deep for trenches intended to contain upright timbers, unless one envisages massive posts almost filling the width of the trench. On the other hand, an even greater ratio of depth to width exists at Hollingbury. Few details have been published about Winklebury, where the rampart of the univallate fort sealed a narrow trench which probably represents an earlier enclosure. The trench beneath the rampart at Wilbury was found to be 2 - $2\frac{1}{2}$ ft. wide and 11 ins. - 1 ft. 3 ins. deep, and was interpreted by Applebaum as the revetment trench for a primary phase rampart which was never actually constructed (1949, 24). The belief that such a rampart was intended is based upon a thin layer of red clay sealed beneath the turf line underlying the existing rampart and extending from the trench to the edge of the fort ditch. This argument seems to be extremely tenuous, and an alternative interpretation as a palisade may be simpler and more acceptable.

O'Neill reports that a palisade trench was found beneath the rampart at Old Oswestry. The feature sealed beneath the rampart of the promontory fort of St. Mawgan-in-Pyder in Cornwall is difficult to interpret on account of its proportions: 2-4 ft. wide and about 1 ft. deep, but the excessive width may well be the result of erosion, and the trench should probably be classed as a palisade.

The hill-fort at Skelmore Heads in Lancashire provides a welcome example of a site at which an earlier palisade, sealed by the fort rampart, can be accepted with certainty. The trench, 15 ins. wide and 8 ins. deep, lies beneath the later rampart on the N. side of this sub-rectangular fort, but, at the N.E. corner, the trench curves southwards at a sharper angle than does the rampart and thus provides evidence of its independent existence (Powell, 1963, fig. 2). The site is unfortunately difficult to date in either phase; a few sherds were found along the line of the western rampart which are described as similar to pottery from Huckhoe, showing traces of local Bronze Age pottery tradition.

At Breedon Hill in Leicestershire, Wacher has re-interpreted the post-holes found first in 1957 at the tail of the hill-fort rampart as the remains of an earlier palisade rather than as rampart revetment. These post-holes were found in sections cut across the E. and N.W. defences of the fort. In connection with the use at Breedon of a palisade set into individual post-holes, it is worth noting a similar free-standing palisade employed at the promontory fort of Henllan in Cardiganshire along the natural defences of the promontory (presumably for the safety of occupants and stock; Williams, 1945).

Two other hill-forts should be mentioned in connection with earlier palisaded structures, though in neither case can the nature of those structures be ascertained. The rampart at Little Solsbury in Somerset overlies at right angles a palisade trench of which only a short stretch was excavated (P.P.S., XXIII (1957), 223; XXV (1959), 276). 'Palisade structures' were found beyond the fort at Castle Hill,

Eddisbury, Cheshire (Varley and Jackson, 1940, 63-4); these were not stratified in relation to the fort, but the implication has been made that they represent an earlier palisaded enclosure (O'Neill, 1942, 11).

Very little dating evidence has been found from palisaded enclosures. A radio-carbon date was obtained from the occupation layer sealed beneath the vitrified wall of the fort at Craigmarloch (DES, (1966), 39); this occupation layer is apparently associated with the palisade trench traced beyond the fort wall, but the site has yet to be published in detail. The date of 590 ± 40 B.C. (CM 91a) would certainly be very acceptable for a palisaded site. Two sherds of coarse pottery were found in association with the palisaded phase at Hownam Rings (Piggott, C.M., 1948, fig. 10) but are not closely datable, though they are comparable with the pottery from the palisaded settlement at Hayhope Knowe. A Dark Age date has been suggested for Hogbridge (RCAHMS, 1967, no. 201) on the grounds that its close-set triple palisades have no Iron Age parallels, but the palisaded settlement at Craik Moor is surely sufficiently similar to allow the inclusion of Hogbridge among palisaded sites of the first millennium B.C. The palisade trenches at Hollingbury and the Caburn were both associated with coarse pottery dating to the mid first millennium B.C. At Wilbury, one sherd attributed to Hawkes' period Early Iron Age A1 was found in association with the palisade trench (the sherd is neither described nor illustrated in the report; Applebaum, 1949).

The question of whether these enclosures were occupied by people or animals will not be solved without more extensive excavation, but, in those cases where the palisaded phase was

followed by the construction of a more substantial form of enclosure representing fortification, it is probable that the original palisaded enclosure contained human settlement. It is, of course, possible that the function of an enclosure might change. The existence of elaborate original palisaded arrangements denotes, almost certainly, human occupation. The multiple palisades at Hogbridge and Morton Mains fall into this last category, together with the palisaded hornwork in front of the entrance at Fasset Hill.

iv General Discussion of Palisaded Sites

Although the scarcity of direct dating evidence for southern Scottish sites makes chronological comparison between types of palisaded structure difficult, there does seem to be a noticeable tendency for homesteads to continue later than settlements. This contraction of the social unit towards the later first millennium B.C. is supported by examples of successive reduction in area on individual sites; for example, the second palisaded phase at the Harehope settlement is smaller in enclosed area than the first phase by approximately three-quarters of an acre. Similarly, the earthwork-enclosed settlement at Castlehill is secondary to and smaller in area than the primary palisaded settlement. At Craik Moor, successive stone and earthwork phases enclose considerably smaller areas than do the primary palisades.

It has been noted that palisades set into low banks occur at Harehope Rings, Dead Side and Woolshears Wood. This feature has also been found at the hill-fort of Bonchester Hill, Roxburghshire; excavation revealed that a double row of stakes had been set into the crest of a bank which formed part of the outermost defences. These outer defences were considered by the excavator to represent a final phase of building activity, dating to 'any time between the Roman and medieval periods' (Piggott, C.M., 1950, 128). Although this palisade is set into holes rather than into a continuous trench, the fact that it is set into a bank may suggest that palisaded banks represent a rather later building technique than that of palisades set into the ground-surface. This suggestion is very tentative, however, for it is contradicted to some extent by the evidence

from Dead Side; here the palisaded bank seems to have been succeeded by a stone wall (RCAHMS, 1967, 76). This would suggest that there was not a long gap in time between the techniques of building true palisades and palisaded banks, but it need not refute the general impression that the latter might be secondary in the sequence.

Many palisaded sites may be seen to have been succeeded, or in some cases, preceded, by other forms of settlement, and the structural sequence thus illustrated provides a useful basis for relative chronology. Twelve of the sites discussed were succeeded by the earthen banks and ditches of hill-forts. These comprise the palisaded settlements at Camp Hill (Trohoughton), Braidwood, Hayhope Knowe, Ffridd Faldwyn and Blewburton Hill, and the palisaded enclosures at White Hill, Hurly Hawkin, Inchtuthil, Kempy Fort, Orchill Fort, Skelmore Heads and Breedon-on-the-Hill (Leics.). The palisade at Castell Odo was replaced by a bank, and the palisades at West Brandon and Little Woodbury by ditches. Six palisaded sites were succeeded by stone walls; these include the settlements at Ingram Hill, Huckhoe and Dead Side, and the enclosures at Craigmarloch, Castle Law and Hownam Rings. At Ingram Hill and Huckhoe, there is evidence to suggest that the stone-wall phase followed swiftly upon the palisaded phases; the radio-carbon date for the Huckhoe palisade is thus important for the dating of stone-walled forts. This date is 510 $\pm$ 40 B.C. (GaK - 1388; Jobey, 1968). The stone-wall fort should thus belong to a period within the fifth century B.C., and this may suggest that similar forts should be up-dated into the fifth and fourth centuries. The fort at Bonchester I is associated with a La Tene Ic brooch, however, and should not begin before

the later third century B.C. The palisaded phase at Craigmarloch was succeeded by a timber-laced stone fort, the basal layer of which has provided a radio-carbon date of 35 ± 40 B.C. (DES, 1966, 39; CM, 468). This central date is very late in comparison with radio-carbon dates from other timber-laced forts (MacKie, 1969, 17); Craigmarloch may represent, like Bonchester, a late example of a structural tradition which began very much earlier.

At Hillside Knowe, a palisaded homestead was overlain by a stone-walled homestead containing three circular stone houses. This type of homestead is unlikely to date before the Roman period; the final phase at Hownam Rings consisted of stone houses associated with Roman pottery of the third century A.D.

Finally, four palisaded settlements were preceded by open settlements at Harehope Rings, West Brandon and Castell Odo (pp.51f.). There is also some evidence to suggest pre-palisade occupation at the homestead of Little Woodbury; doubt exists as to whether Pit 62 cuts or is cut by the palisade trench, while there are certainly pits preceding both timber houses (Bersu, 1940, pl. 1, 79-81). An alternative solution has already been offered (p.64), which assumes that another house exists elsewhere in the homestead and that Pit 62 is later than the palisade trench (if Bersu meant Pit 62 when he commented on the relationship of Pit 92 to the palisade, then the latter is primary).

A hypothetical structural sequence might be composed from all this stratigraphical evidence. This sequence would suppose that, in general, open settlements were succeeded by palisades, palisades by stone walls, stone walls by earthwork defences, and finally stone-walled settlements, open and enclosed, were built.

Four palisaded sites in Roxburghshire may tentatively be related to linear earthworks, which would form additional outlying barriers. On Steer Rig, the palisaded settlement lies on the crest of the main ridge and is flanked at either end of the ridge by cross-ridge dykes (RCAHMS, 1956, nos. 1074, 1075). The palisaded enclosure of Blackbrough Hill is situated on a southern spur of the main ridge, and access to this spur from the ridgeway is impeded by dykes which span the ridge on either side of the point at which the spur joins it. There is a single dyke on one side, and three set close together on the other (op.cit., nos. 385, 386). On the next spur to the S.E. lies the palisaded homestead of Greenbrough Hill, and access from the main ridge is similarly impeded by the last three dykes on one side of the neck of the spur and by a single cross-ridge dyke on the other side (op.cit., no. 387). Both of these spurs fall too steeply down to the Heatherhope Burn to allow access from that direction. On the other side of the main ridge from Blackbrough Hill is a more gently sloping spur at the head of which is situated the palisaded settlement of Craik Moor. This site might benefit from the dykes already mentioned which span the main ridge, and access up the slope of the spur would be barred by the presence of another dyke (op.cit., no. 769).

Another dyke lies close to the palisaded settlement at Harehope, Peeblesshire, but here its function seems to have been to guard the approach from Crailzie Hill rather than to bar access up from the foot of the spur (RCAHMS, 1967, no. 285).

The function of these dykes generally is discussed fully in the appropriate section and it will be argued that they date from the middle of the first millennium B.C. The topographical relationship of the palisaded sites and linear

earthworks discussed here suggests that they should be associated in function and date. There are no other settlements in the vicinity to which the dykes might alternatively be attributed. Linear earthworks are essentially local boundaries and barriers.

In a paper published recently, Mackie has put forward the idea of 'two important Late Bronze Age cultures', namely the Hownam culture and the Abernethy culture (1969, 25). The first of these is specifically relevant to the palisaded sites under discussion, but both are important here as general concepts. The Hownam culture belongs to the Tyne/Forth province of Piggott's scheme for the Northern Iron Age (1966, 8-14) and consists, according to Mackie's definition, of palisaded sites (1969, 21-22). The Abernethy culture is defined by 'the frequently recurring assemblages of . . . artifacts found in the timber-laced forts and in other sites' (op.cit., 19), and occupies the North-Eastern province, the Forth/Clyde valley and parts of the west coast in the Atlantic province. Both cultures are divided into Early and Late phases on the basis of the introduction of iron. The first point to emerge from this is a difference in cultural criteria; whereas the Hownam culture is defined by the form of its settlements, the Abernethy culture is defined by its portable artifacts.

Mackie considers that both cultures survived 'almost unchanged' from the Late Bronze Age to the arrival of the Romans (op.cit., 25). This involves a period of some seven hundred years, which is by no means impossible for a culture defined by a limited number of simple portable artifacts, though this is hardly a culture by Childe's definition (1956,

16). Mackie's Hownam culture is characterised by one form of settlement, palisaded sites, but this was largely replaced by other forms long before the Romans arrived; this concept of a Hownam culture is therefore inadequate to deal with the available archaeological material. Mackie's aims are admirable but unfulfilled, for with neither culture does he take into sufficient account the significance of changing architectural tradition. The importance of the latter becomes even greater in regions where other types of artifact are so few. Mackie, like Hodson on the chronology of the southern Iron Age (1964b), has made an attempt to simplify but has achieved, in effect, over-simplification. Nevertheless, both re-assessments of northern and southern chronologies represent the beginning of the process and cannot, at present, be judged finally.

Two major difficulties are involved in attempting to assess the cultural and chronological context of the Tyne/Forth palisaded sites. Few sites have been excavated (mostly to a very limited extent) and very few objects have been found in them, partly because of the limited excavations and partly because sites in the Tyne/Forth region seem to have been poverty-stricken in terms of surviving artifacts. This may be illustrated by the example of West High Knowes, where 3,300 sq. ft. were excavated and not a single object was found. Communities living in these northern palisaded sites must have relied heavily upon vessels made of perishable materials such as leather and wood, and upon bone tools. The value of metal tools and jewelry must have been so great that they became heirlooms or were melted down and the metal re-used. A small number of artifacts have been found, however, and these will be discussed presently.

Hownam was chosen by Mackie as the type-site for palisaded enclosures, homesteads and settlements on the grounds that it was the first of such sites to be excavated (op.cit., 21). It is, however, a multiple-phase site, and only two sherds of pottery were found in association with the palisaded phase. A single-phase site with a greater range of artifacts would be ideal as the type-site of a culture, but this does not yet exist in the archaeological record. The site at Harehope is close to the ideal, for although it shows two phases, they are both palisaded and the finds from the excavation comprise one sherd of pottery, the upper stone of a rotary quern and a stone disc. Whatever the name of the culture, it is clear that its diagnostic artifacts should include more than the structural form of its settlements. Palisades are not restricted to the Tyne/Forth province for even within North Britain they are part of Mackie's Abernethy culture as well, and it has already been pointed out that palisades are not the sole form of enclosure within the life-span of Mackie's Hownam culture.

The introduction of iron is not a safe criterion for dividing either culture into Early and Late phases. The scarcity of objects found means that the absence of iron from a site may be misleading and cannot prove that it was not in use. The question of survival in acid soils is involved, together with the element of value already mentioned. Above all, it cannot be assumed that iron goods or ore were available simultaneously over the large geographical areas in question. Only two Tyne/Forth palisades are associated with iron; the spearhead from Hayhope Knowe is not closely datable but is probably not earlier than the first or second centuries B.C.,

while a lump of iron slag was found in the palisade trench at Ingram Hill. Hogg interpreted the slag as debris from a pre-palisade occupation (1956, 154), but its presence may also be explained in terms of repair-work on the palisade. Fragments of iron were found at Craigmarloch (in the Abernethy culture) within the occupation layer which was dated to 590 ± 40 B.C. There is thus considerable difference in dating between those few sites on which iron has been found.

An alternative to the use of the introduction of iron as a criterion might be the appearance of rotary querns, but it is doubtful whether this would be any more satisfactory for similar reasons. The advantage of using rotary querns as a criterion for a division into Early and Late phases is that there is a lower terminus post quem for their introduction (on current dating, the second century B.C. is the earliest period during which the type may appear in Britain). A rotary quern is associated with the second palisaded phase at Harehope, while at Huckhoe the type appears in the phases following the palisaded settlement. The rotary quern from Camp Hill, Trohoughton, cannot be assigned with certainty to either phase.

None of the artifacts associated with palisaded sites are closely datable; these include saddle querns from West Brandon and Castle Law, rubbers and pounders from West Brandon and Glenachan Rig and a flint scraper from Huckhoe. Evidence for iron-working at Ingram Hill and West Brandon cannot certainly be attributed to the palisaded phases, but fragments of iron as well as shale rings were found in the occupation layer associated with the palisade at Craigmarloch. A stone disc belongs to the pre-palisade phase at West Brandon, while

another from Harehope cannot certainly be associated either with the palisaded phases or with the pre-palisade period. Plain coarse pottery of simple bucket form may be associated with the palisaded phases at Hownam, Hayhope Knowe, Harehope, Huckhoe, West Brandon and Craigmarloch; similar pottery is associated with the pre-palisade phase at West Brandon. Hogg associated a jar with in-turned rim with the palisade at Ingram Hill (1956, 155, fig. 4), and in-turned rims occur amongst the pottery from Craigmarloch. This rim-feature is evidently widespread and long-lived, for closely comparable pottery has been found, for example, at the early first millennium sites of Round Hill and West Furze in Yorkshire (Smith, 1911, 600, fig. 7) and at Hownam Rings in association with the post-palisade phases III and IV.

The artifacts associated with Tyne/Forth palisaded sites are thus no more diagnostic of a regional culture than are palisades themselves, and the Hownam culture as defined at present by Mackie does not exist. Returning, however, to the chronological sequence within the Tyne/Forth province as a whole, although dating evidence from palisaded sites is limited, datable objects have been found on other types of site. These are the exotic metal objects such as the La Tene Ic brooch from the stone fort at Bonchester, and these have been used by Piggott to indicate the outlines of the chronological framework which he devised in 1962 (1966, 8-12).

Both Piggott and Mackie have indicated the importance to dating of the structural sequence among N. British sites (Piggott, 1966, 13; Mackie, 1969, 22). This has already been discussed and it is clear that sufficient progress in recognising structural sequence has been made in recent years

to allow its use in a relative chronology. Evidence for successive reduction in size of settlements provides a further source of information for relative dating. It has been suggested here that palisaded banks may on the whole be later than palisades set into the ground. It is only by structural analysis that Mackie's Hownam and Abernethy cultures may be distinguished, for there is insufficient difference between the associated artifact-ranges and a geographical division is meaningless unless it is supported by the distribution of settlement forms. The use of cross-ridge and cross-spur dykes in the Tyne/Forth province provides a useful diagnostic type for a revised Hownam culture, for they do not appear in the area of the Abernethy culture.

In connection with the distribution of Tyne/Forth palisaded sites, it is noticeable that none occur on the inner Cheviot massif where the sub-rock is composed of pink granite. This may be owing partly to the relative inaccessibility of the area, but mostly to the more fertile soils which cover the rocks of the Old Red Sandstone formations surrounding the granite mass. The use of palisades may also owe something to the rocks on which they are situated; Trueman notes that, in recent times, few local rocks in the Cheviots have been used for building apart from drystone walling (1938, 182). A capping of boulder clay occurs over extensive areas of the Tyne/Forth province, giving rise to soils suitable for the growth of timber necessary for palisades. It has been estimated that the timber (mainly alder) required at Hayhope Knowe would involve clearing nine acres of coppice (Piggott, C.M., 1949, 61).

Although palisaded sites throughout Britain are treated

here as a single structural type, it must be stressed that this does not imply cultural unity; the principles followed in the present classification of settlement forms have been discussed in the introduction.

2. Earthwork Enclosed Sites

i. Earthwork Enclosed Homesteads

This class consists of earthwork enclosures containing up to three houses; 24 sites will be examined, including both excavated and unexcavated examples. Two sites in Peeblesshire are included although they have been classified as settlements in the Commission's Inventory (RCAHMS, 1967, nos. 195 and 228), for they contain only three and two houses respectively and, though unexcavated, are unlikely to have contained more judging from the position of those structures. The size of an enclosure and thereby the number of houses which it could conceivably contain is liable to be misleading as a criterion for classification; space may be required for working areas or stock and cannot, therefore, be assumed to represent space for houses. The truth of this may be demonstrated by comparing the areas of, for example, the homestead with two houses at Little Woodbury and the settlement with eleven houses at White Knowe: 410 ft. in diameter at the former against 315 x 160 ft. at the latter. The homestead at Berwick Down South has recently been excavated over its entire area, and traces of occupation were found to be confined almost completely within the S.W. half of the enclosure, leaving almost half an acre free for activities such as threshing or sheep-shearing. The distribution of the sites under discussion covers a large area of Britain from Fife in the north to Caernarvonshire in the west and Kent in the south-east (fig. 19). Six sites lie in Wiltshire, but this apparent density is to be related to the extensive degree of excavations carried out in that county.

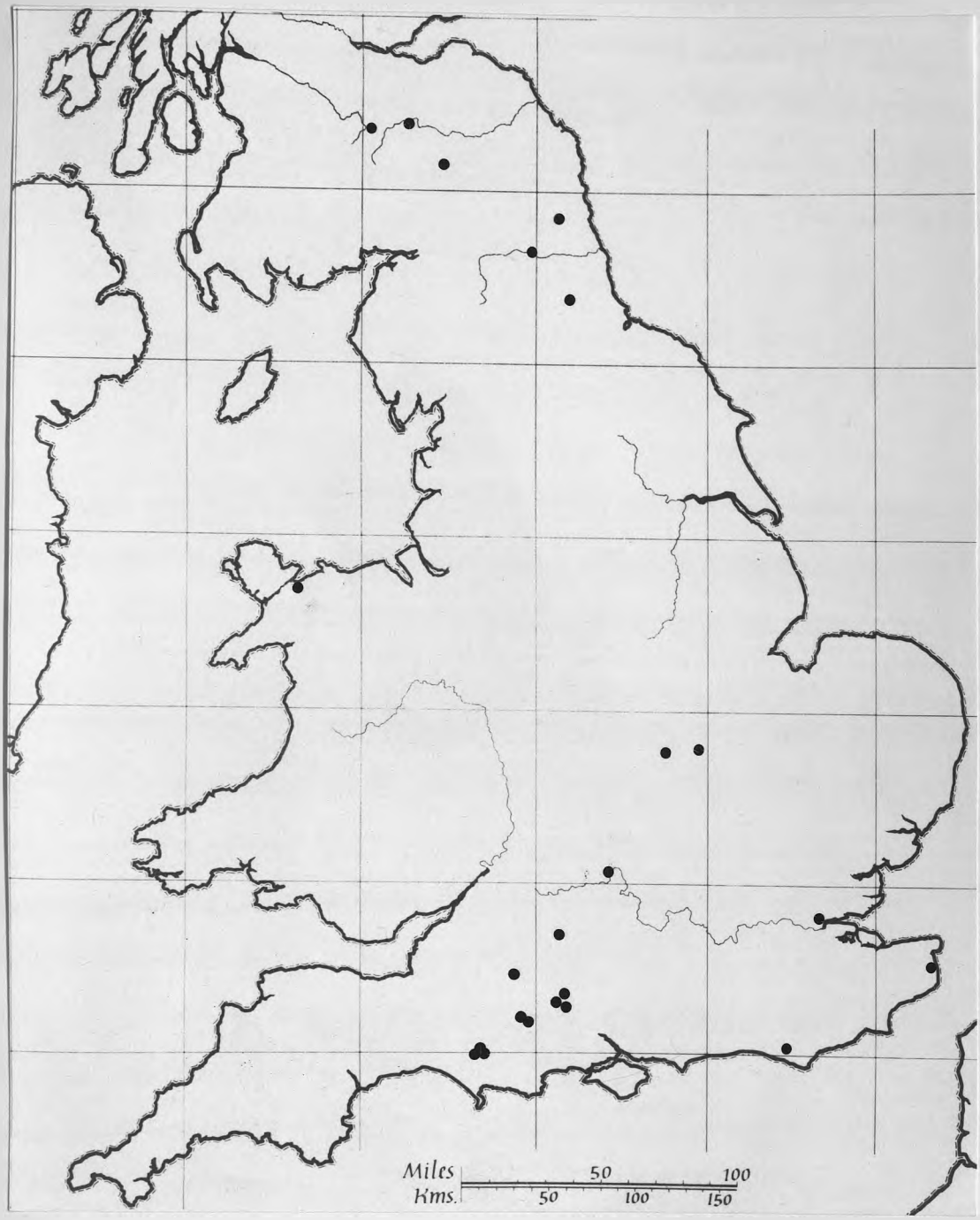


Fig. 19 Distribution of earthwork enclosed homesteads

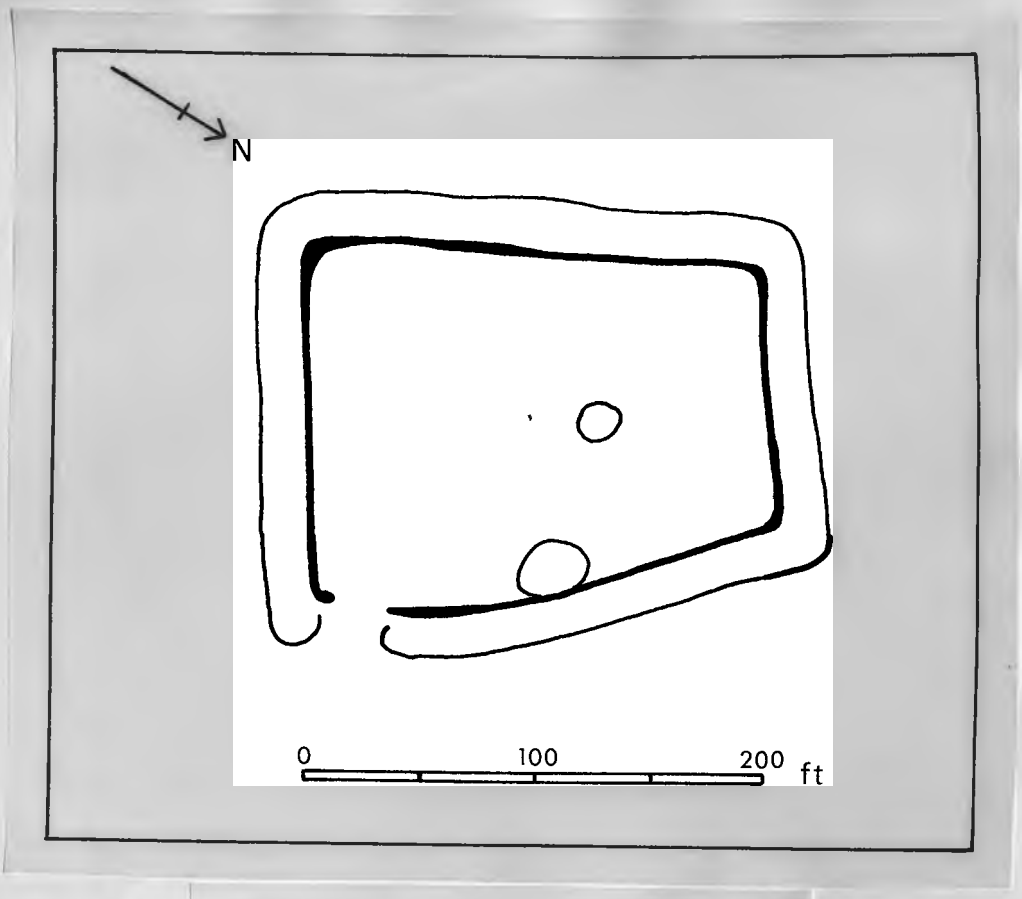
Unlike many sites in N. Britain which have largely escaped the obliterating action of the plough, classification of occupied sites elsewhere relies heavily upon excavation, for surface fieldwork can rarely show traces of internal structures. For this reason, detailed analysis of the distribution of most types of earthwork enclosed site under discussion would be unhelpful, though the width of distribution justifies the overall method of classification.

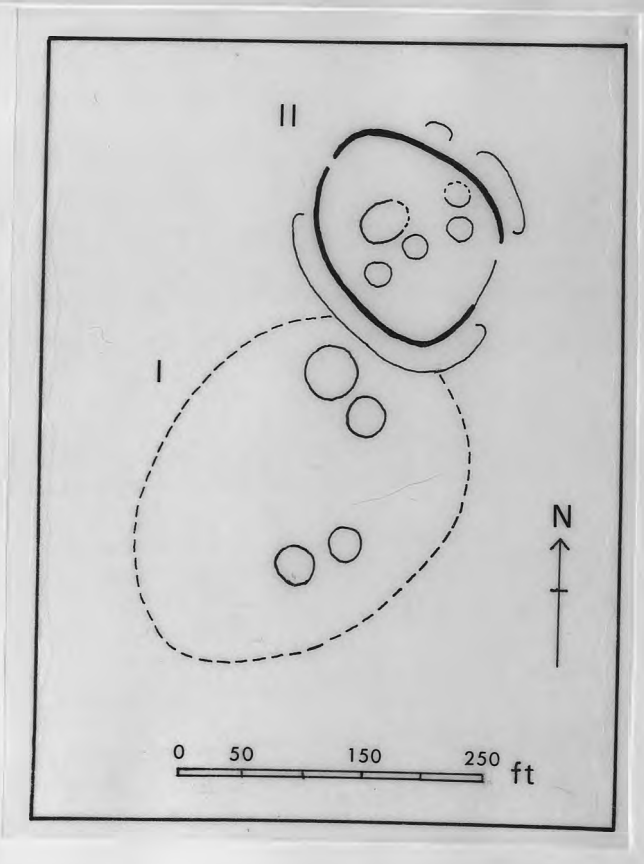
Earthwork enclosed sites are those surrounded by a ditch or bank or both, occasionally with a counterscarp bank or double banks and ditches, which are all continuous apart from entrances. Curvilinear and rectilinear plans appear among homesteads in almost equal proportions. Originally, the predominant type of earthwork was univallate, though in many cases the bank has subsequently been ploughed flat; at Mancombe Down and Charleston Brow North there are also counterscarp banks. Castlehill possesses double banks and ditches, while Gubeon Cottage is a bivallate enclosure. The homesteads at Thurrock and Berwick Down South are set within outer univallate enclosures, though at the latter site the outer bank and ditch is incomplete. The plan of this site, with its angular inner enclosure and outer curvilinear earthwork, is closely comparable to the west enclosure at Huish Hill in Wiltshire (p.128) and to the Romano-British homestead at Newham's Pit in Yorkshire (Brewster, 1957). Only two sites seem to have possessed a bank alone, Scotstarvit and Wiltonburn Hall; at the former, material for the bank was obtained at least partially by levelling the interior area. The sites at Llandegai and Woodcuts are included in this class with some reservations, although they are certainly homesteads

enclosed by earthworks. With Llandegai, the reservation concerns dating, for the homestead represents re-use of a Neolithic henge monument, and, until the excavations are published in full, it is possible that the secondary domestic occupation with its 'crude' pottery may belong to the later second or early first millennia B.C. The enclosure at Woodcuts has two ditched and partially embanked entrance-passages, and may belong to the banjo class; it is also unusual in having a discontinuous enclosing ditch.

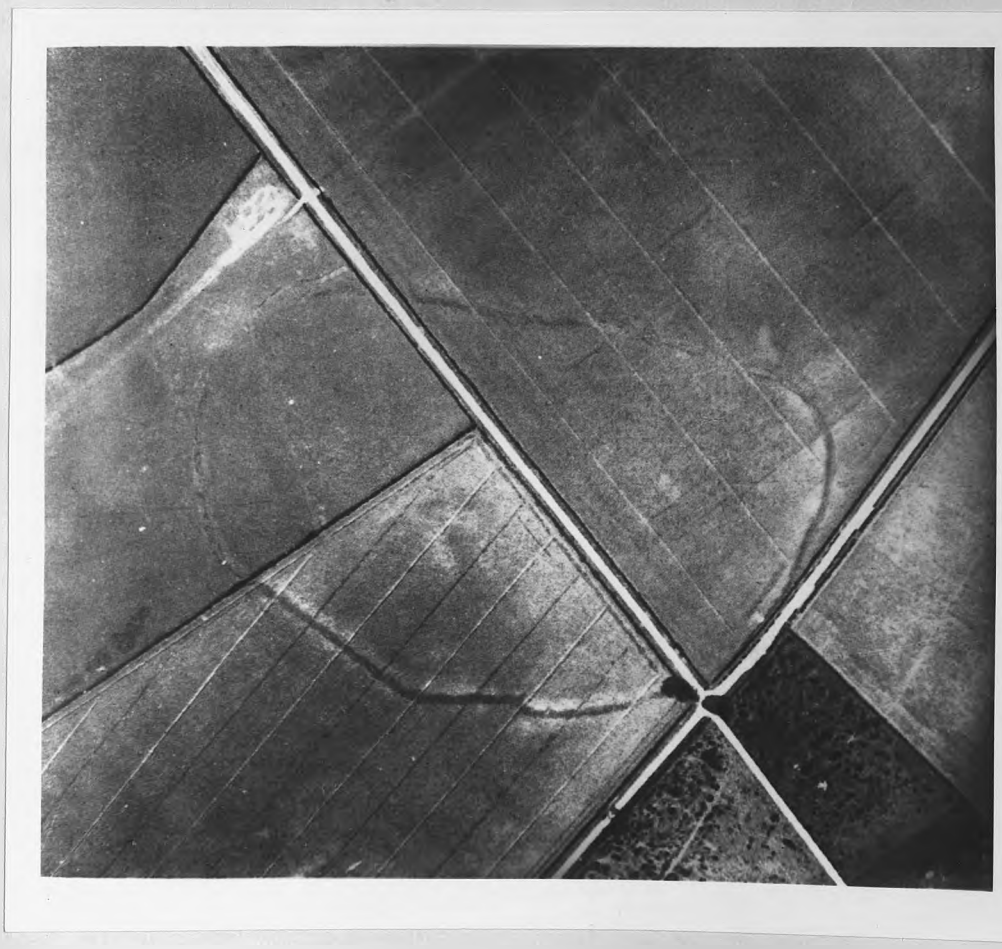
The building tradition represented by earthwork enclosed homesteads was not, on the whole, one adopted by hill-dwellers, though sites occur on chalkland plateaux up to 600 ft. O.D. Only six of the homesteads under discussion lie above the 700 ft. O.D. contour and may be termed hill-top enclosures. This topographical factor, together with a marked preference for the light soils resulting from chalk or gravel sub-soils, indicates an agricultural economy.

In size, homesteads vary between those at Stanton Harcourt which measure 60 x 40 ft. and 60 x 56 ft. and Little Woodbury which measures about 350 x 420 ft.; none exceed three acres in area. The only other homestead of a size similar to Little Woodbury is Highfield, but the latter lacks the proliferation of pits which makes Little Woodbury unusual and which has given rise to the idea that it was the home of a pre-eminent chieftain. This idea will be discussed later, but it is the present concern to demonstrate that Little Woodbury cannot legitimately be described as a type-site. It is possible to speak of a Little Woodbury type of economy but not of a Little Woodbury type of site. Its size and number of pits make it unusual among homesteads; Bowen and Fowler have defined the characteristics of the Little Woodbury type of site,





Figs. 20, 22 Earthwork enclosed homestead at Down Barn West, Wilts. (after Fowler et al., 1965, fig, 3) and earthwork enclosed settlements at Kemp's Castle, Roxburgh (after RCAHMS, 1956, fig. 502)



VII. Earthwork enclosed homestead, Down Barn West, Wilts.

VIII. Earthwork enclosed settlement, Pimperne, Dorset (Crawford, 1929, pl.XVIII).

and included an interior area of three to six acres, but there are no homesteads enclosing more than three acres at Little Woodbury or anywhere else (1966, 43).

The most accurate guide to the original proportions of an earthwork is the ditch from which material for the bank was derived. The dimensions of excavated ditches vary from the shallow U-shaped section at Corbridge (3-6 ft. wide and 1 ft. - 1 ft. 9 ins. deep), to the V-shaped ditches at Highfield and Deal (a maximum of 12 ft. wide and 9 ft. deep, and 10 ft. wide and 6 - 7 ft. deep respectively). This wide variation in size must reflect, to some extent, contemporary social conditions and the function of the enclosing earthwork. The unfinished condition of the ditch at Little Woodbury is frequently quoted as an example of efforts to meet a sudden local threat which passed before the defensive enclosure had been completed. At Highfield, the inconsistent dimensions of the ditch may reflect a similarly hurried attempt towards protection. The majority of ditch sections are V-shaped, sometimes with a narrow flat bottom or even a drainage channel as in one sector of the outer ditch at Berwick Down South (Wainwright, 1968, section 2, fig. 4). It is possible that the latter ditch is unfinished for the ditch section forms a shallow U-shape along part of its length, and there is a gap of about 500 ft. on the north side. The homestead lies on a spur, however, so that this outer ditch may have been designed simply as a barrier against approach up the slope in the same manner as a cross-spur dyke.

One of the features associated with the earthwork phase at Little Woodbury is the addition of two "antennae" ditches flanking the entrance. A partial parallel may be found at

Draughton, where an extension of the enclosure ditch flanks the north side of the entrance. At Little Woodbury, there is also a linear earthwork linking the homestead with the univallate fort of Great Woodbury; this feature will be discussed in connection with banjo and spectacles enclosures (pp. 126, 132).

The width of entrance gaps ranges from 7 ft. at Corbridge to 22 ft. at Berwick Down South, though most are between 8 and 12 ft. wide. Some evidence exists for the use of timber gateways, thereby reducing the width of the entrance. Double post-holes were found on either side of the entrance gap at Down Barn West, the inner posts of which must have been about 7 ft. apart; the excavators considered that the holes represented two posts set close together rather than successive posts, and this suggests the use of a timber bar set into place horizontally behind the gate when shut (Fowler et al., 1965, 58). A similar feature of double post-holes was found at the Pimperne settlement (Harding and Blake, 1963, 63). A setting of four post-holes was found immediately behind the gap in the ditch of Phase III at West Brandon, which may be interpreted as a timber porch, 10 ft. wide at the front, 8 ft. wide at the back and about 4 ft. deep. Two small post-holes and a trench (10 ins. wide, 5 ins. deep) are set behind the outer pair of porch post-holes and mark the position of the gate (fig. 13). If the presence of a porch is accepted, this small trench is unlikely to represent a drip-line since the gate would be largely protected from rain. The width of such a drip-line would, moreover, indicate a gate some 9 ins. thick, which would be too heavy for the small supporting posts. The trench may represent the groove into which a portable gate was set; alternatively, a sleeper beam might have been set

into it as a threshold to facilitate the use of a double permanent gate (c.f. Jobey, 1962, 11). The porch is certainly not big enough to accommodate the swing of a single gate, nor is 10 ft. a practical width for such a gate. The trench across the entrance may be compared with a similar feature at the palisaded settlement of Hayhope Knowe.

The site at Deal has not been published in full, but an interim note refers to the possibility of a timber gateway. Woodcuts presents an anomalous plan in Phase I, for it possesses two opposing ditched entrance-ways, together with four gaps from 14 to 115 ft. wide in the enclosure ditch. One explanation for these gaps may be that the ditch acted purely as a quarry for a continuous bank which has been ploughed away. The Northamptonshire sites have an odd feature in common, for the enclosing ditches have been dug across the entrances; this suggests that there was a local threat to the safety of the homesteads which necessitated additional protection at the weak point presented by the entrance. Dating evidence has not yet been published for Twywell, but at Draughton this event took place at some stage within Hawkes' period Early Iron Age A (Grimes, 1960, 23).

Among homesteads at which the number of houses is known, the majority contains a single circular house ranging in diameter from 17 ft. at Berwick Down South to 58 ft. at West Brandon III. Two main house-types are represented; the simple post-ring type with central roof-support appears at Berwick Down South and Corbridge, while the houses at West Brandon III and Scotstarvit incorporate a bedding-trench for the main wall with internal post-holes for roof-support. At West Brandon, there are external post-holes designed for timbers to support the eaves, together with a porch at the entrance.

The house at Gubeon Cottage is represented only by a circular area of paving. Three homesteads contain two houses, each about 25 ft. in diameter at Wiltonburn Hall and about 30 ft. at Hartree Hills, while at Little Woodbury the same houses were in use in this earthwork phase as in the palisaded phase. The homesteads at Castlehill, Twywell and Draughton contain three houses each, but the size is known only at Draughton where they measure 34 ft., 20 ft. and 19 ft. in diameter respectively. The houses at Draughton and Twywell show the same type of construction, which is characterised by circular gullies and internal post-holes. There is space in the enclosure at Woodcuts I for up to three houses, for the central area is free of pits. Excavations at Llandegai revealed the plans of two circular timber houses, one a maximum of 57 ft. in diameter (based on the drip-line from the eaves) and the other measuring 23 ft. in diameter. Houlder states: 'There were almost certainly other ancillary huts masked by the profusion of slots and post-holes found elsewhere' (1968, 220), but these may not belong to the same period as the main central house which dominates the enclosure.

Settings of two and four post-holes were also found at Llandegai, suggesting the presence of corn-drying racks or timber granaries and indicating an advanced agricultural economy. Timber structures and other internal features at Little Woodbury have already been discussed in connection with the palisaded phase. Berwick Down South forms the only other site at which internal timber structures other than houses have been found; Wainwright recognised four timber granaries represented by settings of 4, 5 and 6 post-holes (1968, 112), and these will be discussed in the appropriate section. Nine homesteads

have been found to contain pits which may be interpreted as normal storage pits, while the site at Gubeon Cottage in Northumberland revealed three oval pits the dimensions of which have not been published; the presence of part of a rotary quern incorporated into the paved floor of the house indicates consumption of grain if not storage.

Several homesteads appear to be associated with 'Celtic' field-systems, thus supporting the agricultural aspect of the economy practised by these communities in S. England. Charleston Brow North is set within an existing field, but this need not imply that the fields had gone out of use generally by this time.

It should be mentioned that more than one homestead is almost certainly represented among the complex of enclosures at Thurrock in Essex, but a fuller understanding of the involved history of the area must await detailed publication of the excavations. The site included here is that known as Double Rings, a double concentric ditched enclosure; traces of occupation in the form of hearths and a circular house-site of ring-gully type were found, but could not certainly be associated with the enclosure owing to later structures overlying the site (Jones et al., 1968, 214). A large timber house and several pits at East Winterslow in Wiltshire may belong to the earthwork enclosed homestead class, for the excavation report contains reference to 'indications' of an enclosing earthwork seen in the plough soil (typescript, Bishop Wordsworth School Arch. Soc.).

From the evidence of pottery and metal objects found on excavated sites, it is clear that earthwork enclosed homesteads as a structural and social type were being built and occupied

from about the fourth century B.C. until the first century A.D. (and continued into the Roman period). One of the earliest sites is Highfield, while Berwick Down South and Corbridge should be assigned to the period immediately preceding the local Roman occupation. This estimation of the chronological horizon of homesteads is based upon currently accepted dating of the artefacts from the individual sites concerned.

ii. Earthwork Enclosed Settlements

Enclosures containing more than three houses are considered to represent settlements of more than one family. This category includes enclosures where the number of houses is unknown but which are probably too large to represent homesteads. The discussion is primarily concerned with seventeen sites, but a survey will also be made of a further ten sites which cannot, at present, be classed either as settlements or homesteads. The distribution of these settlements extends over central southern England, with two examples in Wales and scattered sites as far north as Peeblesshire and Roxburghshire (fig. 21). They occur on chalk, clay and gravel subsoils, and on rocks of the Silurian and Ordovician series, up to 1250 ft. O.D.

There is considerable variety in the size of the enclosures and therefore in the size of the communities represented. Kemp's Castle II covers an area 160 x 130 ft. and contains five visible house-sites, while Heath Row encloses an area about 450 ft. across and contains eleven houses. The largest of this group is Enclosure C at Longbridge Deverill Cow Down, which covers eight acres. Three sites are very much larger and should be placed in a separate group since they are clearly villages rather than hamlets. These are Pimperne (11½ acres), Hog Cliff Hill (26 acres) and Abington Pigotts (about 20 acres). There are traces of only about a dozen houses at Hog Cliff Hill, but it is reasonably certain that excavation would uncover many more; even taking the ratio of one house per acre from the example of Berwick Down South, an area of 26 acres should

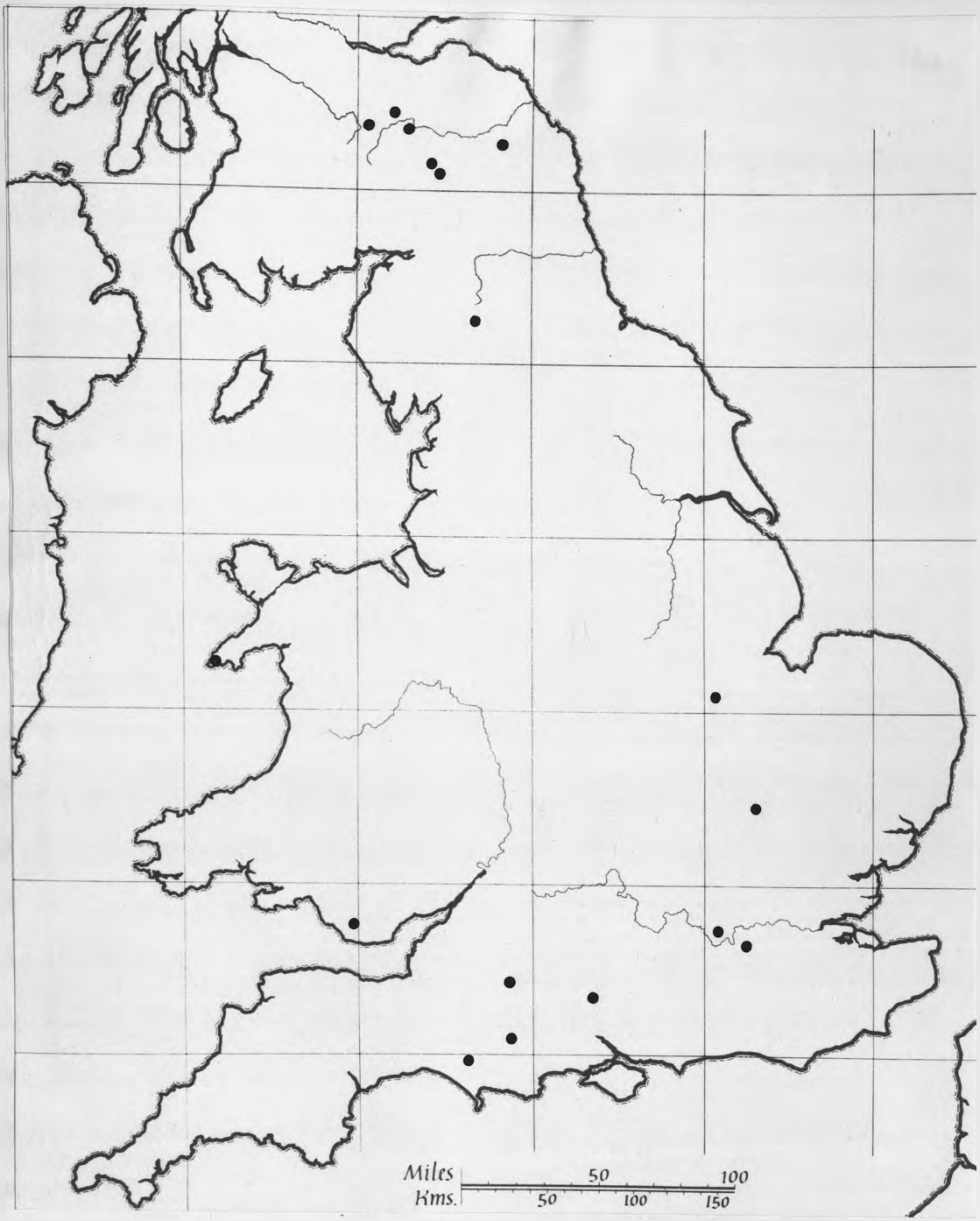


Fig. 21 Distribution of earthwork enclosed settlements

contain more than 12 houses. The labour involved in constructing a univallate enclosure of this size must have been considerable.

In any consideration of earthwork enclosed settlements the problem arises of the distinction between these and permanently occupied hill-forts. Implicitly the distinction is one of defensibility. In a case like that of Hog Cliff Hill, classification as an enclosed settlement is clear enough, for its ditch and bank are of proportions too slight to rank as defences, but the ditches enclosing the settlements at Meon Hill, Heath Row and Longbridge Deverill Cow Down (enclosure A) average 20 ft. in width and 8-9 ft. in depth, which are hill-fort proportions. Nevertheless, none of these settlements has been sited with defensibility in mind; Heath Row is on a low-lying plateau, while Meon Hill and Longbridge Deverill Cow Down are situated on the broad crests and upper slopes of ridges, all with maximum accessibility. Savory considered Mynydd Buchan I to be a fortified site, and postulated a rampart walk; he based the latter idea on two massive post-holes in the entrance which he interpreted as representing the supports for a timber bridge which linked the terminals of a hypothetical rampart walk (1955, 94). These two post-holes are, however, out of alignment with the post-holes of the gateway, and may perhaps be associated more reasonably with a gate belonging to a later phase of the site (there is evidence for three phases, op.cit., 91). Savory found the foundations of a massive, stone-built bastion at the entrance, and assigned this also to Phase I (op.cit., 93). The evidence for doing so consists of a layer of rubble in the Phase I ditch and fragments of pottery belonging to

Phase II in an occupation layer overlying the demolished bastion (1956, 15; 1955, 95). The ditch was, however, silted up before the layer of rubble was deposited, and this suggests that the Phase I ditch had ceased to function long before the bastion was demolished. This would seem an unlikely state of affairs if ditch and bastion were contemporary. The presence of Phase II pottery overlying the foundations of the bastion is not, moreover, incompatible with a Phase II date for the latter; the chaos involved in demolishing such a substantial and carefully-built stone structure would account for the displacement of a little occupation debris. The bastion fits altogether more reasonably into Phase II, to which other stone structures belong, than into Phase I which includes internal structures built entirely in timber. Re-interpreted in this way, Mynydd Buchan I is no longer an anomalous, heavily fortified settlement, though it does possess a relatively elaborate entrance which will be discussed presently.

Two Peeblesshire settlements are enclosed by double lines of earthwork in contrast to the rest which are of simple univallate form; the distance between the two lines is, however, very irregular and thus unsuitable for defence.

The majority of sites shows a circular or oval form, with the exceptions of the triangular enclosure at Mynydd Buchan, the rectangular site 35 at Tallington and an approximately square enclosure at Castle Hill, Dufton. This last site is also anomalous in possessing an external bank, for all other univallate examples have internal banks. Castell Odo and Black Hill are enclosed by a bank alone, for which quarry-scoops were found at the former site, and a bank forms the

inner line of enclosure at Nether Stewarton. These sites lie on hard bed-rocks which would make ditch-digging very difficult.

The double lines of enclosing earthwork at Nether Stewarton and Orchard Rig 1 may represent annexes for live-stock, but the annexe attached to one side of the enclosure at Black Hill was inhabited, for there are traces of three houses. These houses are smaller than those in the main enclosure, but it would be rash to draw any conclusions about function from this distinction. There are two entrances into the main enclosure, another two into the annexe, but none leading from one to the other; this may suggest two families living side by side.

The majority of settlements possess a single entrance formed by a simple gap in the enclosing earthwork; they vary in width from 8 to 16 ft., except for Tallington Site 7 which appears, from air-photographs, to have a gap of about 85 ft. The entrance into Enclosure B at Long-bridge Deverill Cow Down is reported to be broad and to possess short lengths of 'antennae' ditches flanking it (Chadwick, 1960, 19). At Mynydd Buchan, the bank turns inwards on one side of the entrance to form a passage-way with the terminal of the S. bank of the enclosure (the entrance occurs at the apex of the triangle formed by the enclosing ditch and bank). This passageway is 8 ft. wide at its outer end, widening to about 15 ft. at the inner end, and is about 54 ft. long. At the inner end is a line of four post-holes representing a double timber gate with a total span of 10 ft. A pair of double post-holes represents the gate at the east entrance of Pimperne; this suggests the use either of a portable gate or of a permanent

gate secured behind with a horizontal bar.

The settlements contain from four to seventeen houses in those cases where the number is known. The diameters of these houses measure from 15 ft. at Orchard Rig 1 to more than 50 ft. at Pimperne, but most are between 20 and 40 ft. in diameter. They are all circular, apart from examples of oval houses at Kemp's Castle, Black Hill and White Knowe, which might indicate an early date for those three sites (p.147). Most represent timber structures, but stone houses have been associated with Castell Odo and Castle Hill. In those cases where details are known, most houses belong to the type represented by an outer gully with internal post-rings, but those at Pimperne and Longbridge Deverill Cow Down are multiple post-ring structures. The settlement at Heath Row possesses a small temple (discussed by Lewis, 1966, 10-11); it must be assumed that Heathrow was a settlement of exceptional importance and prestige. It may be noted that House 3 in Enclosure B at Longbridge Deverill was set within a palisaded compound; this arrangement is closely similar to that of house 36 A at Hod Hill in Dorset, where there was also an enclosing palisaded compound (Richmond et al., 1968, fig. 14). This indicates a degree of pre-eminence within the settlements for both structures.

Apart from working-hollows at Longbridge Deverill, the only other internal feature known at present among earthwork enclosed settlements is the pit. Examples have been found on six sites in S. England; these comprise Hog Cliff Hill, Longbridge Deverill Cow Down, Fyfield Down, Meon Hill, Heath Row, and Abington Pigotts. Most of the

pits are of a size to qualify as storage pits, but those at Heath Row have been described as shallow (Grimes, 1960, 25).

The settlements at Fyfield Down and Longbridge Deverill are associated with contemporary field-systems and must, therefore, have grown their own grain. Two cross-ridge dykes lie to the south of White Knowe, and may perhaps be related to the settlement as outlying barriers to traffic along the ridgeway (RCAHMS, 1956, no. 189).

Dating evidence in the form predominantly of pottery is available for nine of the settlements under discussion. Of these, seven show occupations beginning in the sixth and fifth centuries B.C. and some may begin in the later seventh century. These comprise Carshalton, Longbridge Deverill, Fyfield Down, Hog Cliff Hill, Heath Row, Meon Hill and Abington Pigotts. The other two sites, Castell Odo 2 and Mynydd Buchan are unlikely to begin much before 300 B.C., by which time many of the other settlements of this type had been abandoned.

A considerable number of inhabited sites have been incompletely recorded and cannot be classified, though some were evidently enclosed by earthworks. Ten major sites are listed in the catalogue; their distribution extends from Wiltshire and Sussex to Yorkshire, and they lie on chalk and gravel sub-soils up to a height of 750 ft. above sea level. Recorded dimensions of ditches range from 6 to 17 ft. in width and 3 to 9½ ft. in depth, predominantly of V-section with narrow flat bottoms. The most frequently recurring internal

feature is the pit, but few post-holes have been recorded owing to the limited extent and circumstances of excavation. It is thus impossible to draw conclusions about the size of communities or about the economic context of most sites. The presence of storage pits brings the southern sites into the same agricultural tradition as many of the homesteads and settlements already discussed; the pits at Driffield in Yorkshire are large enough to rank as storage pits.

A series of excavations were carried out in the 1920s at Park Brow in Sussex, revealing a sequence of habitation sites from the later second millennium to the Roman period. The site with which this discussion is concerned is the rectilinear enclosed settlement attributed by the excavators to the 'Hallstatt - La Tene I' period (Wolseley and Smith, 1924, fig. 1; Wolseley et al., 1927, figs. A, O). The reports are not, unfortunately, clear about the extent of excavation carried out on the enclosing ditch; the description in Hawley's text seems to indicate that it was traced on the surface as a depression and not excavated, but the plan indicates more precise knowledge (Wolseley et al., 1927, 36, fig. O). It was interpreted as 'a strong palisade of considerable extent made of baulks of timber set side by side in a trench', but no evidence was recorded to support this. One section was certainly cut through this trench, and it was found to measure 5½ ft. in width at the top, 5 ft. at the bottom, and 2 ft. in depth in the chalk (3 ft. in depth from the surface, op.cit., fig. U, section L-M, feature IV); this part of the ditch cannot with certainty be associated with the rest of the enclosure, but Hawley considered it to represent the west side of the latter (op.cit., 39). A ditch of these dimensions and shape is unlikely to represent a

palisade trench. The enclosure seems from its plan to be unfinished and the same state may be true of its ditch section; the intention of its builders may have been to deepen the ditch eventually to the V-shape normal for ditches of the middle and later first millennium B.C.

The interpretation of the site is further confused by a setting of post-holes on the north side (op.cit., fig. 1, 'hut site III'). Ten post-holes were found in two parallel lines, each of five holes; at first glance, they appear to continue the line of the ditch westwards, but they are, in fact, slightly out of alignment with the ditch. This post-setting will be tentatively interpreted as a multiple-frame drying-rack (p. 161). Whatever the post-holes represent, they must have been made after the original design for the enclosure had been abandoned.

A number of post-holes and pits were found within the area of the enclosure, and other pits were found beyond the enclosing ditch, mainly to the north. These features, together with the pottery and metal objects recovered, suggest that the site represents a settlement. The provenance of the finds is not recorded in detail; this is unfortunate in view of the dating value of the La Tene Ic silver ring found in the area (op.cit., fig. J).

The enclosure at Park Brow lies alongside a double lynchet trackway set between 'Celtic' fields (pl. IX). Six sections were cut across the trackway, revealing the presence of two small ditches on the east side and one on the west side. A small circular embankment adjoins the trackway to the north of the settlement and is clearly a dew-pond (pl. X; this is discussed in the appendix on 'circus' earthworks).

IX. Double-lynchet track, Park Brow, Sussex.

X. Dew-pond, Park Brow, Sussex.

The objects found at Cold Kitchen Hill are not, unfortunately, provenanced; an unusually large body of material has built up over the years, indicating occupation which began at least as early as the mid first millennium B.C. and was still flourishing, though not necessarily without a break, in the Romano-British period. The surviving form of the site cannot, therefore, be ascribed definitely to the early part of this period. Adjoining rectilinear enclosures of this form have already been noted in the Deverel-Rimbury culture, but they do not often appear again until the Romano-British period; it may be significant in this connection that a looped socketed iron axe from Cold Kitchen Hill seems to have been styled upon bronze axes of the Late Bronze Age (VCH, 1957, 47). The wealth of artifacts, especially metal, from this site has been interpreted as evidence for a religious sanctuary, at least in the Roman period (Lewis, 1966, 124 f., 130).

iii. Earthwork Enclosures

There are hundreds of undated and unexcavated enclosures distributed over most of Britain and it would be impractical at this stage to attempt a survey of them all. The task of recording these enclosures has been undertaken in several areas by the Royal Commission on Ancient and Historical Monuments and by the Victoria County Histories. It is likely that many of them should be dated to the historic period, and there is certainly a great variety of functions represented (including recent activities such as afforestation). It is proposed to discuss and list a number of earthwork enclosures which have been chosen for their interest and representative variety. This will be followed separately by a survey of a special class of enclosures known as 'banjos', together with related enclosures known as 'spectacles'.

Three earthwork enclosed settlements have already been noted for possessing ditches on the inside rather than the outside of their banks (Hog Cliff Hill, Longbridge Deverill Cow Down A, Castle Hill Dufton). This arrangement may be seen at a number of enclosures, the maximum area of which is 4 acres; these include Bowley's Plantation in Dorset, Cotley Hill and Knook Castle in Wiltshire, Hayes Wood in Somerset, Waitby Castle in Lancashire, and Croglam Castle in Westmorland. An internal ditch may perhaps indicate animal-penning; this is suggested by the example of the medieval Park Pale at Long Bredy in Dorset (RCAHME, 1952, 41). The fact that at least three settlements possess the same feature makes this interpretation less convincing, although the size of Hog Cliff Hill may well indicate the use of the enclosure for stock-penning as well as

XI. Earthwork enclosure, Ringmoor, Dorset.

habitation. Internal ditches appear, however, among banjo enclosures, some of which are likely to have functioned as cattle enclosures (p.125). Limited excavation has been carried out at Bowley's Plantation, with the result that the site may be assigned to the Durotrigian period, probably early in the first century A.D. (Field, 1959, 103).

Enclosures vary widely in form and it is evident that no chronological significance may be attributed to shape. The primary use of the rectilinear enclosure at Hayes Wood may be dated to the mid first millennium B.C., while a rectangular site at Eaton Socon belongs to the first century A.D. Similarly, a curvilinear site at Ardleigh has been dated to Hawkes' period Early Iron Age A while two at Greenhithe belong to Early Iron Age B. An oval Belgic enclosure at Cassington, Oxon. measures 1100 x 800 ft. and is surrounded by a ditch 30 ft. in width and 11 ft. in depth (RCAHME, 1960, 15); this should be classed as a hill-fort which has been flattened, like Boscombe Down West Site P in Wiltshire (Richardson, 1951, 133-5).

An enclosure has been partially excavated recently at Portsdown Hill in Hampshire. It possesses two opposing entrances on either side of which the ditch turns inwards slightly; a complex of stake-holes was found in the east entrance, and traces were found in the ditch filling to indicate the presence originally of a bank on its inner side. The site is secondary to a stockaded linear earthwork which will be discussed in the appropriate section. The interior of the enclosure was not excavated and its function cannot therefore be estimated. It may be noted that William Cobbett thought very highly of the agricultural value of Portsdown Hill, particularly for growing wheat and barley: 'It is impossible that there can be, anywhere, a better corn country than this'

(1830, reprinted 1967, 130-1).

Several enclosures can be associated with field-systems including the 6 acre-enclosure at Farley Mount in Hampshire which is associated with 60 acres of fields. A double lynchet track seems to lead to the enclosure at Ringmoor in Dorset, and a 'Celtic' field-system has been set out on either side of the trackway (Warne, 1872, 20).

The rectilinear enclosure on Wilsford Down, Wiltshire, has been attributed to a class of Romano-British cattle-enclosures (Crawford and Keiller, 1928, 254, pl. L). This is a univallate earthwork enclosing some 50 acres; the fourth side has been ploughed away but is shown on Hoare's map of the Stonehenge area (1812, between 170-171, 211). A number of sections have been cut across the ditch and bank, and pottery of Early Bronze Age date was found in the old land surface beneath the bank (Annable, 1959, 229). This evidence provides a terminus post quem for the enclosure, but the actual date may well be considerably later. It has been compared with the enclosures on Rockbourne Down and at Soldier's Ring, Hants., but differences in form and construction should be noted. The Wilsford enclosure is univallate, whereas Rockbourne is enclosed by double ditches with a medial bank and Soldier's Ring is bivallate, and both are also more angular in plan than Wilsford. The appearance of the latter enclosure would seem to link it rather with the 'wandering' ditches of plateau and contour type which belong to the later second and early first millennia B.C.; lengths of these ditches traverse the downland around the Wilsford enclosure, and they do elsewhere form large enclosures (e.g. the Sidbury complex, Wilts.). Their purpose is probably to contain grazing cattle and sheep away from arable areas.

Soldier's Ring is closely comparable to the bivallate, angular enclosure at Roden Downs in Berkshire (Hood and Walton, 1948); the latter is a ritual and funerary enclosure belonging to the Roman period from the first to the fourth centuries A.D. and it is suggested that Soldier's Ring should be similarly interpreted. It contains a small, sub-divided enclosure similar in form to the funerary enclosure within Roden Downs (Hoare, 1812, opp. 231; Crawford and Keiller, 1928, 255-6). Sacred enclosures of this type in Britain have recently been discussed by Lewis and Piggott (Lewis, 1966, 5 f.; Piggott, 1968, 77 f.).

A number of hill-forts possess primary earthwork enclosures which are smaller and slighter than the succeeding defences; it is not known whether these were inhabited though it seems probable that many were so used.

iv. Banjo Enclosures

This type of site was recognised and named only recently, mainly as a result of new air-photographs taken over Hampshire; a preliminary list was published by Perry of sites in Wessex (1966). Similar enclosures have since been recognised elsewhere (I am indebted to Mr. Perry for drawing most of these to my attention). At least eleven sites are known on the chalklands of Hampshire, Wiltshire and Dorset, and isolated outliers occur on chalk in Kent, on limestone in Yorkshire, shale in Carmarthenshire, and on sandstone in Shropshire (fig.23). All these sites share the features of an approximately circular or sub-rectangular earthwork enclosure, and an embanked or sunken passage-way leading into the enclosure. They vary in the area enclosed from half an acre to two and a quarter acres, but are normally less than two acres in extent. The enclosure banks are placed on the inside of the ditches, with the exceptions of Gussage Cowdown, Church End Ring and Blagden Copse which possess external banks. At Maiden Castle, Grinton, the enclosure becomes bivallate on its northern side owing to its position on the scarp. The length of the passage-way varies between 75 and 360 ft., though most are less than 200 ft. The Maiden Castle site is anomalous in respect of its entrance-way, which is partially embanked and partially lined with stones.

Banjo enclosures are frequently linked by their passage-ways to linear earthworks. Sometimes these form part of an extensive system, as at Gussage Cowdown and Hamshill Ditches, and in many cases it is evident that the surviving lengths of linear earthwork must originally have belonged to some such

system. It is interesting, therefore, to note that, at Gussage Cowdown, traces of 'Celtic' field lynchets are confined to the east of the dyke system (not to be confused with the underlying Dorset Cursus). This suggests that the purpose of the dykes was to separate arable from pasture, a custom which appeared first in Wessex in the Deverel-Rimbury Culture. At Hamshill Ditches, the field system is again restricted to one side of both the enclosure and its associated ditches, but here another explanation seems probable. Hoare's plan of the multivallate linear earthwork associated with the enclosure shows it as an arc round the south side of the enclosure, with either end terminating in dense woodland (1812, opp. 109). Similar woodland may well have existed here at the time when the earthworks were built, in which case the latter would function as enclosing works, utilizing the woods as the remaining boundary of the enclosed area. This use of woodland may be seen at Grovely and Stockton earthworks on the same chalk ridge, and was probably apparent at one time at Gussage Cowdown, Hanging Langford Camp and Huish Hill. The discussion will return to these settlements presently. If the idea of enclosing earthworks round the Hamshill banjo is accepted, the site takes on the same general form as that at Gussage Cowdown; here, the banjo enclosure lies within a larger earthwork enclosure (pl. XII). Similar overall enclosure was achieved at Caer Din Ring by means of a univallate linear earthwork, which forms a barrier across the neck of the spur of land on which the enclosure lies.

The presence at the Gussage Cowdown enclosure of an external bank prompted Hoare to postulate a ritual function for the site (1821, pt. 2, 32; he compared it with the square

enclosure at Casterley in Wiltshire), while the same feature at Blagden Copse led Stead to suggest that the enclosure was a cattle-pen (forthcoming). Since Blagden Copse was a rescue excavation, Stead was able to explore only that part of the passage-way and adjoining linear earthwork threatened by road-making. With the possible exception of Bramdean, the excavation of which by Perry has not yet been published, there has not been any excavation within a banjo enclosure to prove the presence or absence of occupation material. It is, however, worth noting that Hoare's plan of Gussage Cowdown shows a number of depressions within the enclosure which may represent house-sites, as well as traces of settlement to the immediate north (1821, pt. 2, opp. 30-31). This suggests that the banjo enclosure was inhabited, and this may be true of other such sites. Some may represent cattle-pens, in which case one might expect to find a settlement in the proximity. The enclosure at Church End Ring is linked by a linear earthwork to the settlement of Hanging Langford Camp (pls. XIII - XV; Crawford and Keiller, 1928, pl. XVII). The topographical position of this enclosure supports interpretation as a cattle-pen, for it lies at the head of a sheltered combe with its entrance facing down the combe. This would be an excellent situation for cattle but damp and vulnerable for a settlement. Traces of settlement are visible outside the enclosure on Hoare's plan of Hamshill. It is more difficult to interpret apparently isolated sites. If the enclosure at Carn Goch were to be proved contemporary with the nearby hill-fort, the cattle-pen idea could be applied here, but it may be significant that, whereas the enclosure is of earthwork construction, the fort is stone-built.

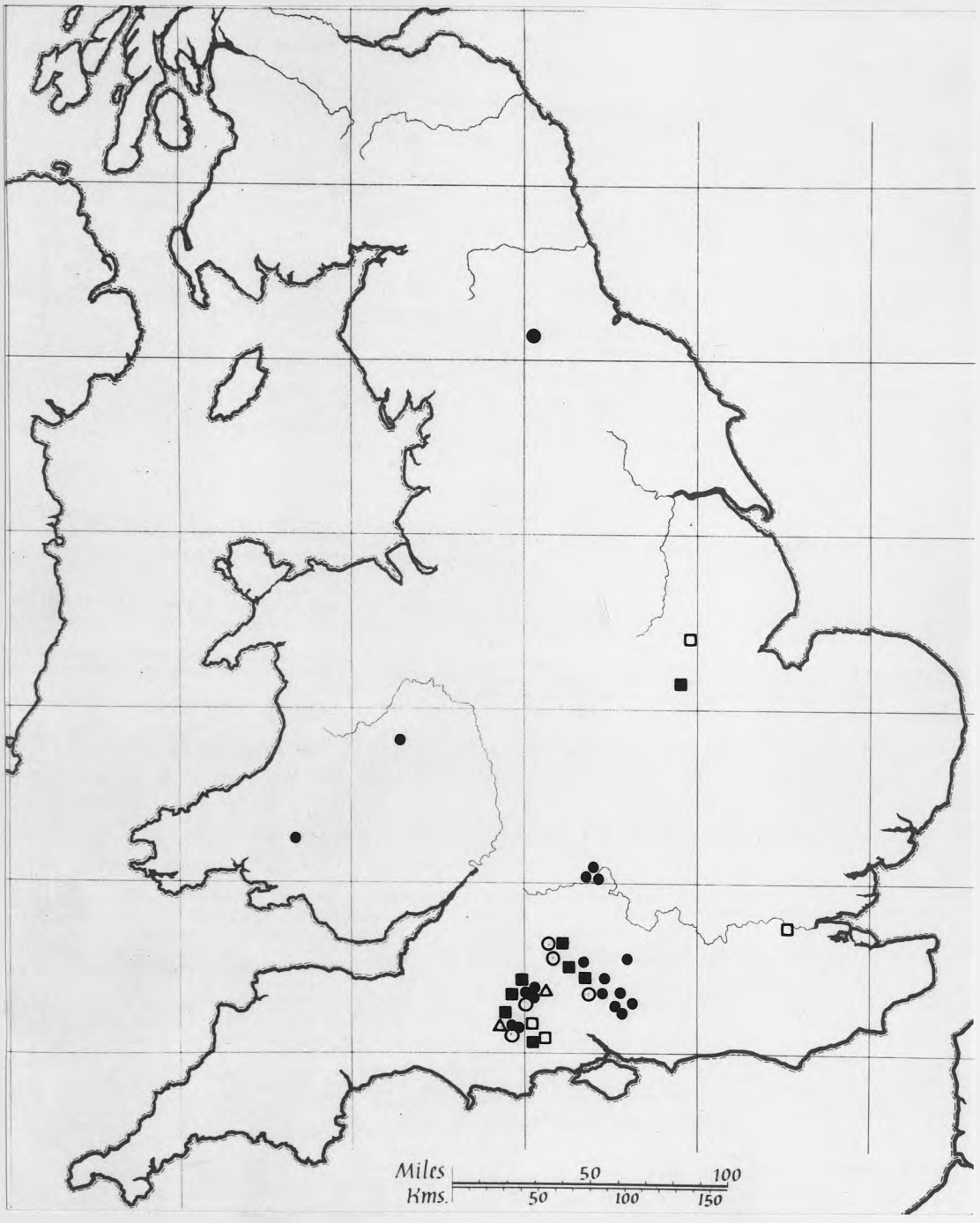
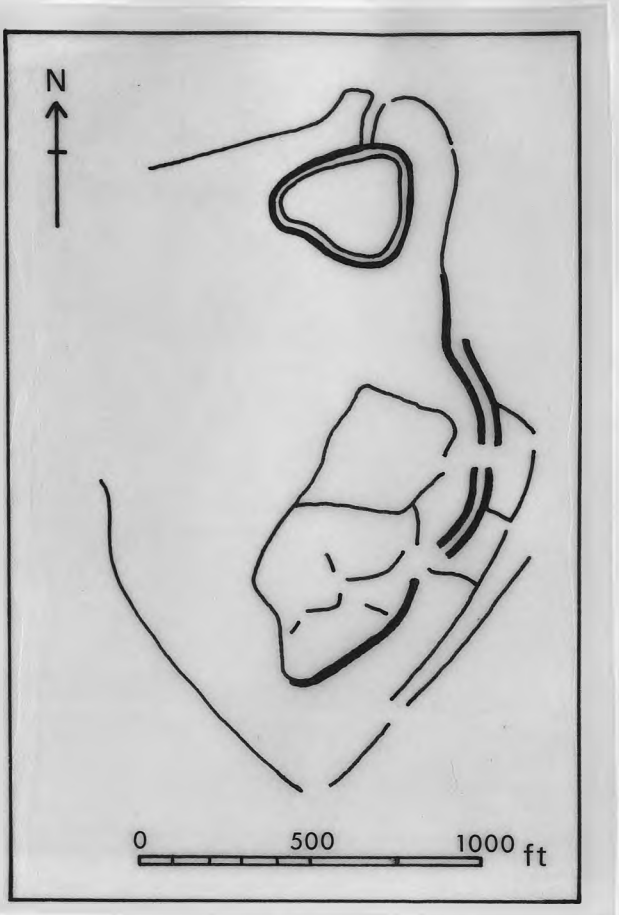
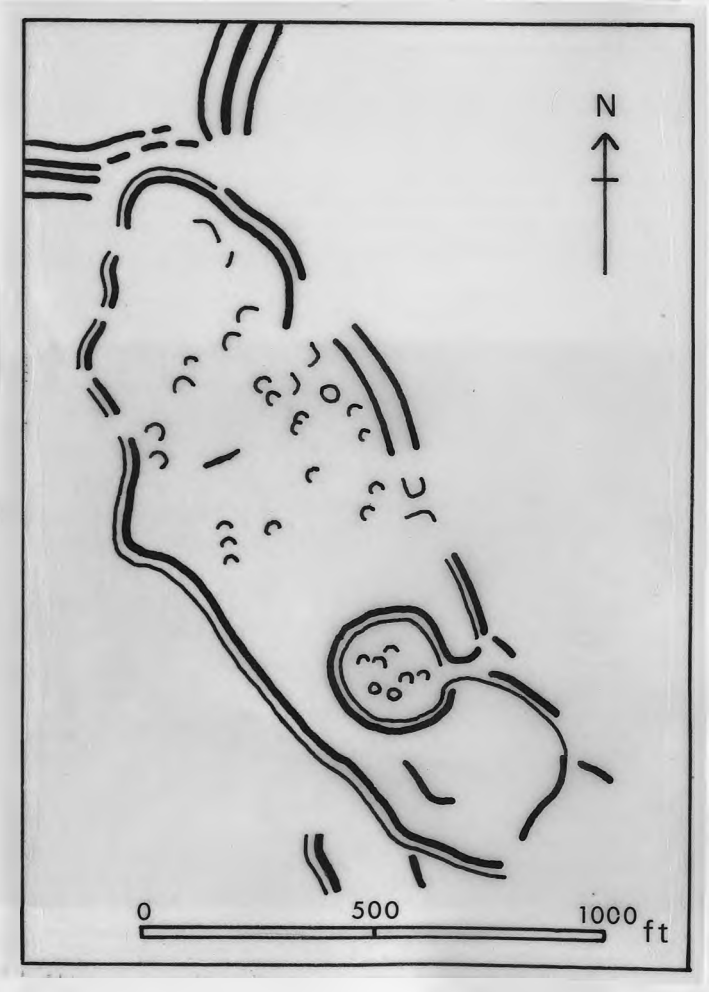


Fig. 23 Distribution of banjo and spectacles enclosures and complex ditch settlements

- ● banjos
- △ possible banjos
- ○ spectacles
- ■ complex ditch settlements
- □ probable complex ditch settlements





Figs. 24, 25 Banjo enclosures, Church End Ring and Gussage Cowdown (after Crawford and Keiller, 1928, pl.XVII; Hoare, 1821, 30)

XII. Banjo enclosure, Gussage Cowdown, Dorset (Crawford and Keiller, 1928, pl.XVI).

XIII. Banjo enclosure and complex ditch settlement, Church End Ring and Hanging Langford Camp, Wilts.

XIV. Banjo enclosure and complex ditch settlement, Church End Ring and Hanging Langford Camp, Wilts.

XV. Banjo enclosure, Church End Ring, Wilts.

Direct evidence for dating is limited but seems to indicate a late horizon in the pre-Roman Iron Age. The excavations at Blagden Copse produced pottery of Cunliffe's 'St. Catherine's Hill Group' (Cunliffe, 1964, 2-4) from the lower levels, and Belgic pottery from the upper levels. Church End Ring is associated with the settlement at Hanging Langford camp, the finds from which belong to the later second half of the first millennium B.C. (Crawford and Keiller, 1928, 117-8). Since Hanging Langford belongs to the complex ditch type of settlement, it becomes doubly significant that the pottery sequence from Blagden Copse matches that from the complex ditch site at Worthy Down in Hampshire. Both Gussage Cowdown and Hamshill are associated with multivallate earthworks, the appearance and proportions of which indicate that they should almost certainly be assigned to the Belgic period in Wessex. In view of the late dating horizon of these enclosures, it may be useful to note two similar sites belonging to the Roman period: a sub-rectangular enclosure with embanked passage-way at Toothill in Cheshire (Thomas, 1960), and a double curvilinear enclosure with ditched entrance-way, dating to the later fourth century A.D., at Risehow, Maryport in Cumberland (Blake, 1960). Another double curvilinear site, stone-embanked, at Bat's Castle, Dunster Park in Sussex (Allcroft, 1908, fig. 69), which has a wide passage-way, remains undatable. This last site lies close to a length of univallate earthwork with which its entrance-way may originally have been associated.

The prototypes for the idea of elongated entrance-ways may perhaps be seen in the 'antennae' ditches flanking the entrances into Little Woodbury, Draughton and Longbridge Deverill Cow Down (Enclosure B).

v. Spectacles Enclosures

This type of enclosure is closely connected in appearance and function with the last. The term 'spectacles' was invented by Crawford and Keiller to describe the linked pair of oval enclosures on Pewsey Down in Wiltshire (1928, 224), though the curious nature of those same enclosures had already been noted by Hoare (1812, 191). Sites of this type consist essentially of two oval or circular earthwork enclosures linked together by a linear ditch. Five certain sites are known and their distribution is confined to Dorset, Hampshire and Wiltshire (fig.23); all lie on chalkland at heights of 250-800 ft. above sea level. Most of the enclosures are univallate (though in many cases the bank has been ploughed away) with the exception of South Tarrant Hinton Down where the north enclosure is partially bivallate and the south enclosure has a ditch on either side of the bank on the southern and eastern sides. The enclosures at Huish Hill are unusual in possessing internal rather than external ditches. One enclosure is normally larger than the other, though at Hamshill the two enclosures seem to be approximately the same size. Crawford and Keiller recognised Hamshill as an example of spectacles enclosures but based the idea on the wrong evidence; they interpreted the western earthworks as the second enclosure (1928, fig. 16, g) but these do not in fact form an enclosure. The true second enclosure has been found only recently in the woodland to the north (Bowen and Fowler, 1966, 67).

Traces of occupation have been found in one of each pair of enclosures at Pewsey Down, South Tarrant Hinton Down and Huish Hill. Hoare carried out a little excavation in the

north enclosure on Pewsey Down and found 'a great deal of pottery and animal bones' (1812, 191), while Sumner noted surface irregularities denoting habitation in the south enclosure on South Tarrant Hinton Down (1913, 41). Within the west enclosure on Huish Hill may be seen a small univallate enclosure; this is shown on Hoare's plan and resembles, superficially at least, the earthwork homestead at Berwick Down South (Hoare, 1821, pl. III; Wainwright, 1968, fig. 2). This evidence suggests the possibility that spectacles enclosures represent settlements with accompanying cattle enclosures.

Here then is one link with banjo enclosures, for it has been argued that those attached to settlements are probably cattle enclosures (e.g. Church End Ring). There is, however, stronger evidence for linking the two exotic types of enclosure. The Southern enclosure at Hamshill has already been classified as a banjo enclosure on account of its entrance-way, but it is also part of a pair of spectacles enclosures and thus presents a combination of the two types. The presence of internal ditches has been noted at the banjo enclosures of Church End Ring and Gussage Cowdown, and appears again at the spectacles enclosure of Huish Hill. This feature does occur among other types of earthwork enclosed site, however, thus reducing its value as evidence for linking banjos and spectacles. More important is the association of the latter two types of enclosure with multivallate linear earthworks. This may be illustrated by the examples of Church End Ring, Gussage Cowdown, Hamshill and Huish Hill, where the enclosures and the massive banks and ditches form part of large settlement complexes. Traces of possible spectacles enclosures may be seen on Hoare's

plans of the Stockton and Grovely complexes, which are situated on the same chalk ridge as Hamshill and Church End Ring (1812, opp. 106, 110).

It is by their association with these large settlements that spectacles enclosures may be dated. Pottery and metal objects from Hamshill, Stockton Earthworks and Grovely Earthworks indicate that the main occupations belong to the first century B.C. and the first century A.D. (VCH, 1957, 36, 108). This provides a chronological parity between spectacles and banjos, for both belong to a period late in the pre-Roman Iron Age.

The accompanying map shows that these two types of enclosure share a common distribution in Wessex, though at present spectacles enclosures are restricted to a much smaller area than are banjos (fig. 23).

It may be noted that the earthwork homestead of Little Woodbury and the hill-fort of Great Woodbury are linked together by a linear ditch and thus resemble spectacles enclosures (Bersu, 1940, fig. 1).

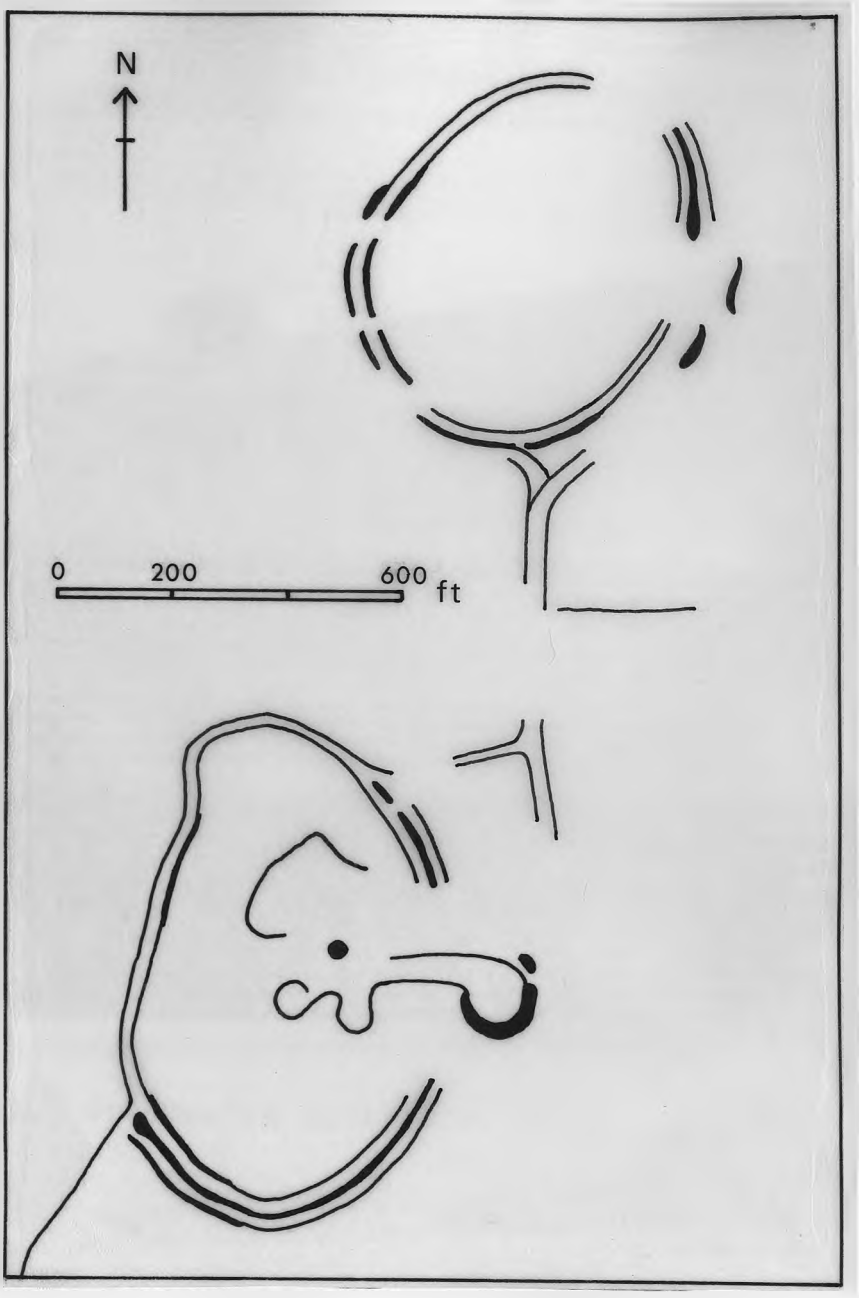


Fig. 26 Spectacles enclosure, South Tarrant Hinton Down, Dorset (after Sumner, 1913, pl. XX)

XVI. Spectacles enclosure, Huish Hill, Wilts.

vi. Discussion of Earthwork Enclosed Sites

Comparison of the dating evidence reveals that settlements predominate from about 650 B.C. until about 400 B.C., whereas homesteads are predominant from about 400 B.C. onwards. This impression of a shrinkage in the unit of settlement is supported by the evidence from at least three sites for successive reduction in the area enclosed. Site 35 at Tallington encloses an area measuring 480 x 320 ft., and was replaced in the first century A.D. by Site 37, which encloses an area of 250 x 150 ft., (Simpson, 1966, 15f.). Enclosure A at Longbridge Deverill Cow Down encloses an acre of land and is secondary to Enclosure B which encloses over seven acres. At Kemp's Castle in Roxburghshire, an enclosed settlement measuring 300 x 240 ft. is overlain by another enclosing an area of 160 x 130 ft. Examination of this site reiterates the warning already given about assuming that a smaller enclosed area means fewer houses; although excavation of the site might alter the balance, it appears from surface indications that Kemp's Castle I contained four houses while settlement II contained five houses.

It is possible that a sequence of reduction in size might be demonstrated by future excavations at Farley Mount, Hants.; a small inner enclosure may be seen attached to the main enclosure ditch on the N.W. (Crawford and Keiller, 1928, pl. XII).

Evidence suggesting that homesteads predominated among enclosed sites in the late first millennium B.C. has also been noted in the discussion of palisaded sites.

This emphasis upon homesteads rather than villages can

be extended into the Roman period in connection with native communities (Collingwood and Richmond, 1969, 175 f.). The reappearance of large settlements in the first century B.C. will be discussed in the following section, but it may be noted here that these are not simple enclosed sites and that they are associated often with multivallate earthworks of hill-fort proportions. Herein may lie the solution to the scarcity of enclosed settlements during the fourth to second centuries; it is possible that their place in the social pattern was taken over for a time by hill-forts.

One of the important results of the total excavation of Berwick Down South is that it allows estimation of the ratio of pits to houses. Since the house was re-built once (Wainwright, 1968, 110, fig. 6), an approximate figure of 17 pits may be estimated per lifetime of one house. On this basis, the presence of two or three houses might be suggested for the contemporary homestead at Woodcuts which contained about 40 pits at this period (this number of houses has already been postulated on the grounds of the space available). Both of these sites belong to the period immediately preceding the Roman Conquest, when the use of storage pits was beginning to die out (Radford, 1954, 12), and a slightly higher ratio might be allowed for the earlier site at Highfield. There, the presence of 69 pits might imply a total of three houses.

This brings the discussion back to the long-recognised problem of Little Woodbury with its proliferation of pits. Glanville-Jones suggested that Little Woodbury should be considered as an Early Iron Age equivalent of a llys, with the implications of pre-eminence (1961, 228 f.), but Alcock argued against the idea on the grounds of insufficient evidence for wealth in the form of metal artefacts (1962, 53). Bowen

and Wood have recently returned to the theory of a pre-eminent status for the site, basing their argument on the number of pits; they conclude that Little Woodbury must have provided grain for more people than were actually living inside the enclosure (1967, 14). They estimate a proportion of 180 pits to one house, but this may surely be reduced in view of the re-building of House I and the possibility of at least one more house in the unexcavated portion of the enclosure. Allowing four houses during the lifetime of the homestead, the proportion of pits to each house drops to 90. This is still a remarkably high figure (even if the pits were not all used for grain storage), and it must be accepted that the Little Woodbury pits served people living elsewhere as well as those living inside the homestead. The answer to this problem is surely that Little Woodbury acted as the home farm for Great Woodbury. The two enclosures seem to be contemporary and are, moreover, linked together physically by a linear ditch. Great Woodbury has been described as a hill-fort (VCH, 1957, 263), but its ditch is only about 6 ft. wide and about $3\frac{1}{2}$ ft. in depth and these are not hill-fort proportions (Bersu, 1940, 108, fig. 32). The pottery from this ditch suggests that the use of the enclosure continued longer than the occupation of Little Woodbury, but the primary phase is certainly contemporary with the latter homestead (op.cit., 109 f.). It is possible that the two enclosures should be classified as the prototype for spectacles enclosures.

A number of unexcavated enclosures containing stone house-foundations have not been taken into account, because they should most probably be assigned to the Roman period. Penchrise Burn in Roxburghshire may be cited as an illustration;

this is a bivallate enclosure with two opposing entrances, and it contains the stone foundations of two small houses (RCAHMS, 1956, no. 167). Jobey has observed that 'enclosed but non-defensive settlements of round, stone-built huts appear to be indicative of the pax Romana' in the Tyne/Forth area (1966, 1). In particular, the use of drystone walling as a method of enclosure is typical of Romano-British settlements, both in North Britain and in Wales. One exception may be the Phase II settlement at Ingram Hill in Northumberland; the stone wall and ditch succeeded the primary palisade and were probably associated with timber rather than stone houses. Since the wall lies close to and almost concentric with the palisade, it is possible that there was not a long interval between their construction. It may be suggested that the wall should be considered in relation to the stone-wall forts of accepted pre-Roman date rather than to stone-enclosed non-defensive settlements.

The chronological context is less clear for the stone-built settlements, both open and enclosed, on the moorlands of Devon and Cornwall. In this area, such settlements seem to have been current from the second millennium B.C. onwards, and it is only by excavation that their date may be established. Kenwyn in Cornwall is an example of a late first millennium settlement enclosed by a stone wall and ditch (PPS, XXVI (1960), 345).

3. Complex Ditch Settlements

This class of settlement is characterised by a system of ditches forming a series of irregular curvilinear and rectilinear enclosures of varying areas. It is probable that the material derived from the ditches was piled up alongside as banks, but these have not survived owing to modern ploughing. Seven sites lie on chalk plateaux, while the eighth is situated on a flat, low-lying area on sand on ironstone, and similar topographical conditions exist for a further five settlements which probably belong to the same type. This topographical characteristic is important for the incomplete survival of the sites concerned. Among the nine certain sites, distribution is confined primarily to Hampshire and Wiltshire, with an outlier in Lincolnshire, while the distribution of probable sites extends the area involved to Kent (fig. 27).

The complexes of ditched enclosures represented by these settlements lack any form of overall enclosure. The total acreage covered by these settlements varies widely from about four acres at Rotherley to about 62 acres at Stockton Earthworks and possibly as many as 100 acres at Grovely Earthworks (known as Ebsbury). It is clear that the larger complexes involve stock enclosures as well as settlements, and that they should also be considered, to some extent, as defensive systems akin to hill-forts. The three sites involved are Hanging Langford Camp, Grovely Earthworks and Stockton Earthworks, all on the same chalk ridge west of Salisbury. The complexes include lengths of massive, multivallate linear

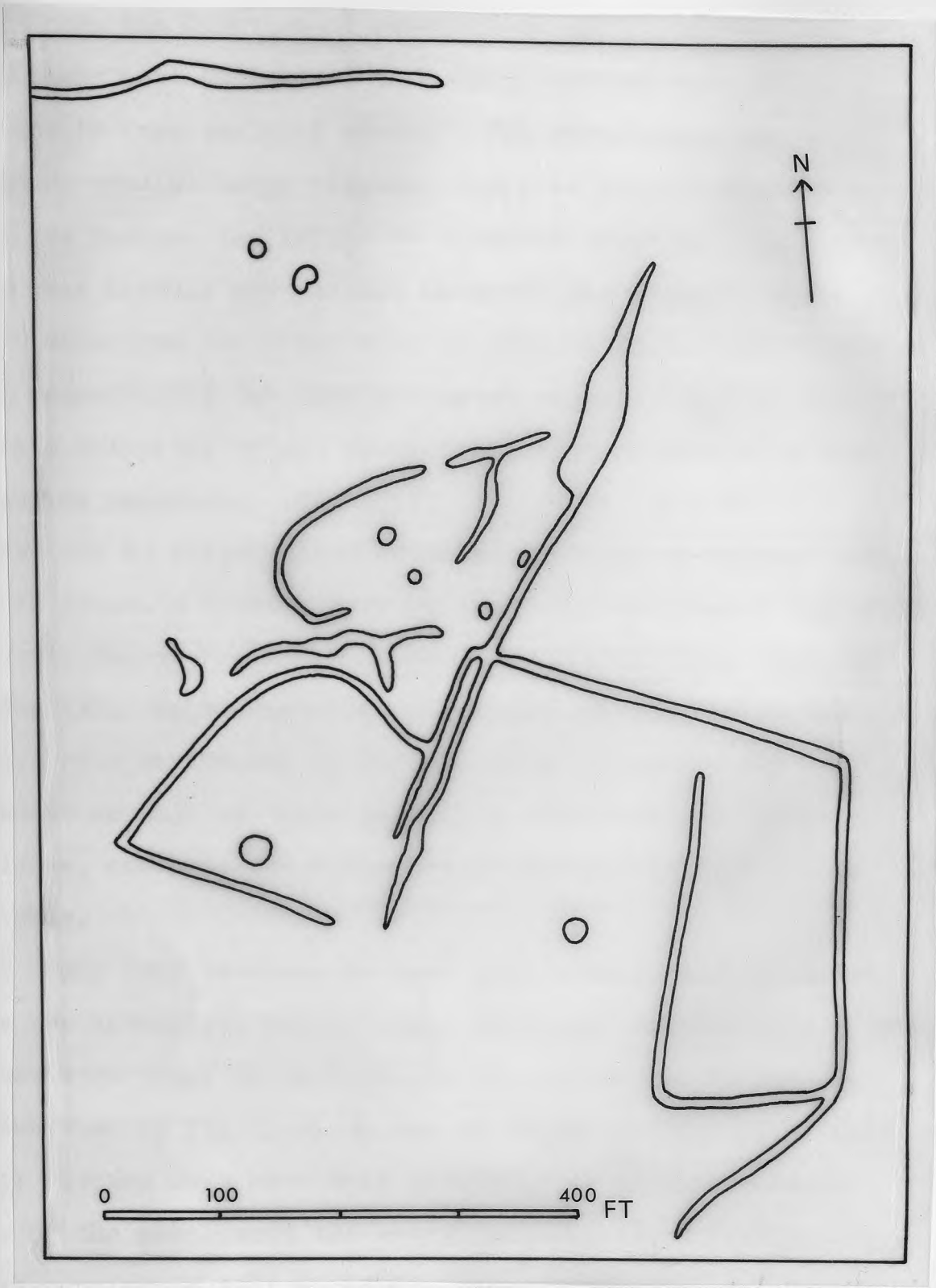


Fig. 27 Complex ditch settlement, Worthy Down, Hants. (after Hooley, 1929, fig.1)

earthworks, the function of which is enigmatic unless (as has already been suggested) they were combined with dense woodland to form enclosed areas. The three sites may then be interpreted as large village complexes which possessed a defensive nucleus for refuge in times of trouble. It may be noted that Grovely and Hanging Langford are situated about half a mile from the hill-forts of Grovely Castle and Bilbury Rings respectively (pottery and metal objects from the latter indicate activity, if not occupation, contemporary with that at Hanging Langford; VCH, 1957, 107, 129). Recent excavations at Bilbury have revealed evidence to suggest that, at some stage, a linear ditch had been dug to connect the hill-fort with Church End Ring and Hanging Langford Camp (WAM, 60 (1965), 135; no traces of such a ditch are visible in the turf). The earthworks on Huish Hill in Wiltshire may represent another of these partially defensive settlements complexes, and here the hill-fort of Martinsell lies half a mile away.

Only four settlements have been extensively excavated; these are Rotherley, Worthy Down, Owlesbury and Dragonby. The ditches were found to be V-shaped in section and to measure no more than $6\frac{1}{2}$ ft. in width and $4\frac{1}{2}$ ft. in depth. The function of the ditches must have been primarily to delimit separate areas of the settlement for activities such as threshing and animal-penning as well as habitation, though they would also have been useful for drainage. The accompanying plan of Worthy Down has been chosen to illustrate this class of site because it is probably less well-known than the others (fig.28). No internal features apart from pits were found at Worthy Down, but the position of the cuttings excavated was guided wholly

by surface traces and bosing. No pits were found at Dragonby, but storage pits were found at Rotherley and Owlesbury. The presence of a circular timber house has been suggested in the main enclosure at Rotherley, based on a six-foot square setting of post-holes; this setting occupies the centre of an area which measures about 70 ft. in diameter and which is devoid of other features (Hawkes, 1947, 38 f.). This may represent a house of the type found at Little Woodbury, where House 1 possessed a central setting of four post-holes forming a square ten-feet across and the whole structure measured about 50 ft. in diameter (Bersu, 1940, 78-92). Wainwright has recently contended that such a house is unlikely at Rotherley on the grounds that a contemporary house at Berwick Down South measured only 17 ft. in diameter and was of simple post-ring plan; the Berwick Down enclosure contained also a large featureless area designed presumably as a working-space (1968, 110). The 4-post setting in question at Rotherley may represent a granary rather than the central support of a house, but the surrounding area might well have been taken up by one or two small houses of Berwick Down South type. Granaries and drying-racks at Rotherley will be discussed in the appropriate section.

The settlement at Owlesbury is associated with a ditched trackway similar to that on Park Brow in Sussex (Collis, 1968, 21-3).

Pottery and metal objects from complex ditch settlements indicate clearly that this type of site belongs predominantly to the first century B.C. and the first century A.D. There is some evidence for earlier occupation on a number of sites, but this cannot certainly be attributed to the settlements in the form with which the present discussion is concerned. Complex

ditch settlements represent an instance of the reappearance in the first century B.C. of large communities living in non-defensive or semi-defensive hamlets and villages. The use and construction of this type of settlement continued into the Roman period. Occupation continued into that period at Stockton Earthworks, Rotherley, Owlesbury and Dragonby, and new settlements of the same type were founded, for example, at Casterley in Wiltshire and Woodyates in Dorset. The probable association of the last two sites with Romano-Celtic sanctuaries has been discussed recently by Piggott (1968, 76 f.), and it may be noted that a ditched funerary enclosure similar to that at Woodyates has been uncovered at Owlesbury.

Rivet drew attention to the significance of Caesar's description, relating to the stronghold of Cassivellaunus, of the British custom of fortifying 'a thick-set woodland with rampart and trench' (De Bello Gallico, V); Rivet observed that the earthworks at Wheathampstead are not continuous and that the explanation lies in the fact that the site would have the additional protection of natural woodland (1958, 44). The same explanation has been offered here for the discontinuous earthworks at Hanging Langford and elsewhere, and it seems likely that these may also be associated with Caesar's description of Belgic strongholds.

Bowen and Fowler observed, in connection with Rotherley, that: 'This lack of overall enclosure is general in the Roman period' in Dorset and Wiltshire (1966, 46). The movement towards large unenclosed settlements began at least a century before the Roman Conquest with the construction and use of the complex ditch type.

Hanging Langford Camp is connected by a linear earthwork,

which is double for part of the way, to the banjo enclosure of Church End Ring (pl. XIII), and the complex of earthenworks on Huish Hill includes two enclosures of spectacles type. Traces of a possible banjo enclosure are visible on Hoare's plan of Grovely (1812, opp. 110). The link between complex ditch settlements and enclosures of banjo and spectacles type may be further supported by the presence at Gussage Cowdown and Hamshill of strong multivallate ditches similar to those at Hanging Langford and elsewhere ('Seven Ditches' at Gussage Cowdown, Crawford and Keiller, 1928, 114). If banjo and spectacles enclosures may be explained at least partially in terms of cattle-penning, their association with complex ditch settlements in Wiltshire and Dorset may emphasize the pastoral aspect of the economy practised by the inhabitants. The fact that settlements elsewhere lack circular enclosures need not mean that stock-penning was absent, for any of the irregular enclosures forming the ditch system which characterises these sites might have functioned in this way. Banjo and spectacles enclosures cannot, in any case, be considered the norm for cattle enclosures in the first century B.C.

4. Open Settlements

There is considerable evidence for occupation in settlements lacking any form of enclosure. The sites in the catalogue for this section include only those at which a lack of enclosure is certain or reasonably certain, but an additional list is provided of important settlements for which the record is too incomplete to allow positive classification (either as open or enclosed examples). The distribution of pre-Roman open settlements extends from Cornwall to Sussex in South England and as far north as Caernarvonshire and Denbighshire in Wales and Norfolk in East England (fig. 28). This does not include the evidence from several hill-forts for primary, pre-rampart settlement where the nature and extent of that occupation is uncertain; this may represent no more than the temporary habitations of the working-parties engaged on building the forts. The distribution of open settlements is closely related to that of storage pits, for many are known only as concentrations of pits; the value of the accompanying map is therefore limited.

It is also impossible to be certain of the size of settlements represented mainly by pits, for houses and working-spaces may in many cases have extended the area occupied. There is evidence from several enclosed sites to indicate that pits and houses tended to be confined to one part of the site (e.g. Highfield, Berwick Down South). It is nevertheless possible to make some estimation of the social units involved. The largest area covered by pits is probably that on Boscombe

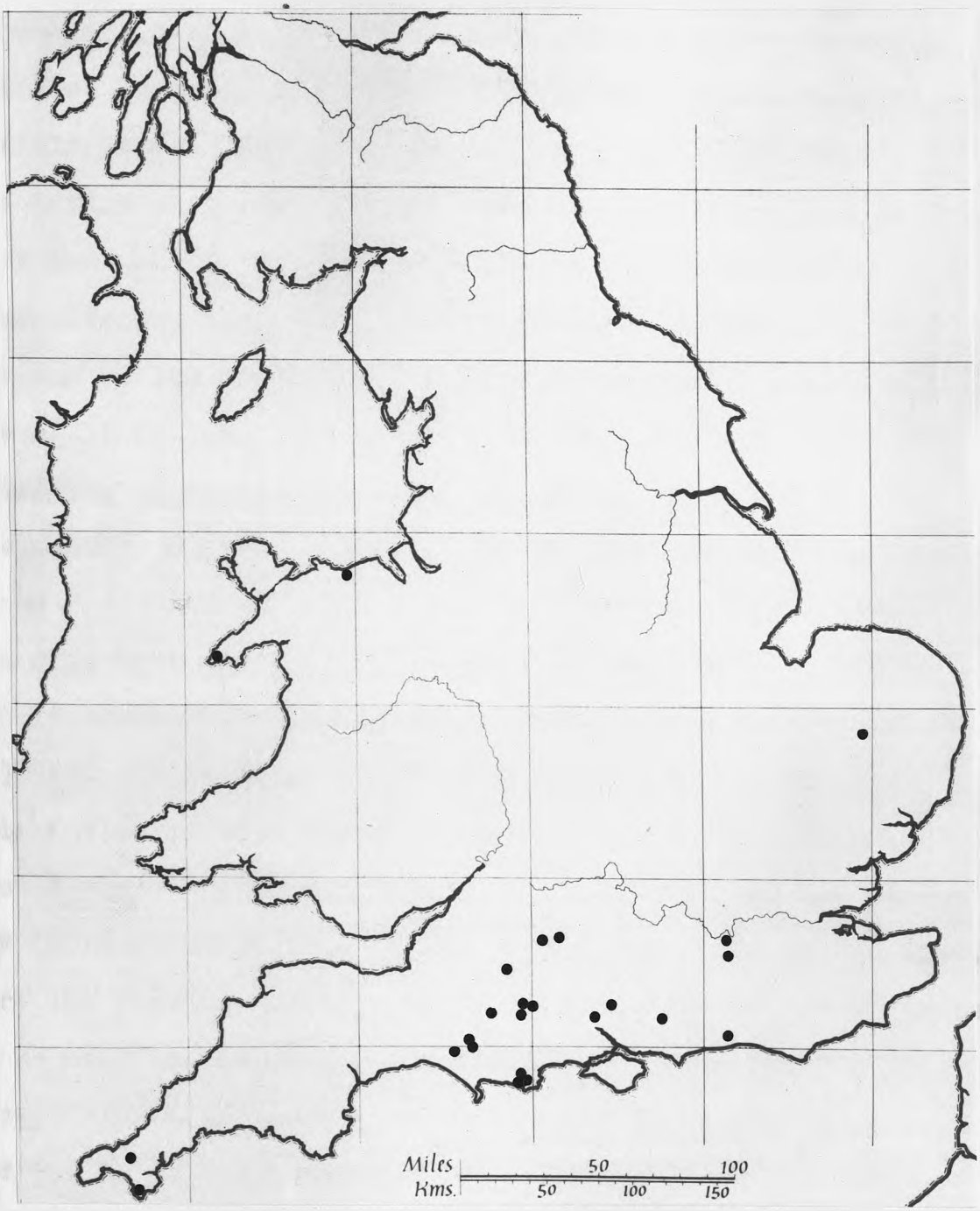


Fig. 28 Distribution of open settlements

Down West; Area Q and adjacent pits which may be contemporary extend perhaps over about seven acres (certainly not 16 acres as estimated by Bowen and Fowler, 1966, 45). Swallowcliffe and Fifield Bavant East cover about four acres each, while Fifield Bavant West covers about two acres.

Attention was drawn in the discussion of earthwork enclosed sites to the value of Berwick Down South for estimations of the proportion of pits to houses. Furthermore, a space of 13 ft. was left round the house, and this is useful in attempting to assess the possible number of houses at, for example, Swallowcliffe. The latter is probably the only open settlement at which such an assessment might be legitimate, because some indication of the extent of the site is provided by the unfinished palisade trench. Some eleven houses, each about 30 ft. in diameter, might be envisaged as the maximum possible number of this basis. Since 101 pits were found, this would allow only about 9 pits to each house and this seems too low (a ratio of pits to houses of 1:1 was found at Hod Hill, but here the function of hill-forts is involved and the evidence cannot be used in comparison with non-defensive settlements). If an approximate proportion of 20-25 pits to each house is allowed (p. 131), the possible number of houses at Swallowcliffe drops to five. A similar proportion is indicated at Marnhull, where 132 pits and 5 probable houses were found. Williams assigned 66 pits and 3 houses to her Iron Age A period, and 26 pits and 2 houses to her Iron Age B period (1950, 23-9); it is tempting to see in these numbers evidence for a reduction in the use of storage pits as time went on but any conclusions about Marnhull are limited by the fact that the site was incompletely recorded owing to gravel-digging operations.

These are all small hamlets or homesteads rather than villages and the same interpretation is true for the other open sites listed in the catalogue, with the exception of Dinorben and possibly Cattistock. Savory assigned about 15 houses to his primary Phase 0 at Dinorben (1964, 75) and a similar number of houses may be represented by the hollows at the unexcavated settlement of Cattistock.

The homestead at West Harling is unusual among open sites, for the two circular houses and the rectangular structure are contained within small earthwork enclosures. It is classed as an open site because these enclosures are only just large enough to encompass the structures within them and are essentially part of those structures rather than enclosures round habitation complexes. The unfinished rectangular structure on Site IV will be discussed separately (Part III, 1), but it seems to be broadly contemporary with the two circular houses and thus forms part of the homestead. The internal diameters of the house-enclosures on Sites II and III measured about 65 ft. and 94 x 106 ft. respectively. Site II was enclosed by a ditch and internal bank, but there were no traces of a bank accompanying the oval ditched Site III. A third probable house-enclosure was found about a third of a mile to the east of Site II, and seemed to be contemporary (Clark and Fell, 1953, 38). The explanation for this structural technique may probably be found in the local traditions of East Anglia. West Harling has already been linked with earlier tradition on the basis of pottery (Part I, iii), and the prototype for the form of the homestead may probably be seen at Swaffham. Here, a shallow ditch enclosed an area measuring 68 ft. in diameter (Fox, 1923, 47 f.).

The pottery from Site II indicates that occupation here began earlier than on Sites III and IV. The question of whether two structural phases might be present in the post-hole setting on Site II was put forward by Clark and Fell but without success (op.cit., 8 f.); others have since recognised the plans of two successive houses, though not in print. Fig. 29 shows a possible rendering of the original plan (op.cit., fig. 3); this provides one house with a porch and a double ring of post-holes (A, about 48 ft. in diameter) and another with porch, a single ring of post-holes and a central roof-support (B, about 35 ft. in diameter). House A faces north while House B faces west, and each has its own causeway through the enclosing bank and ditch. There is no stratigraphical evidence to indicate which house came first, nor is the pottery from the post-holes helpful (op.cit. 8), though the similarity in plan of House B to the simple post-ring house on Site III may suggest that House A is primary. If so, its analogy with the main house at Shearplace Hill is important in view of dating (Rahtz and ApSimon, 1962, fig. 5, House A).

Apart from houses and pits, the features found among open settlements include timber granaries and drying-racks (discussed in Part III, 1), working-hollows, working-floors and drainage ditches. Clay found three shallow hollows, each about 20 ft. long, at Swallowcliffe, and interpreted them as granaries and a cooking-place (1925, 62); these should be interpreted as working-floors. Paved and clay-lined floors were found at All Cannings Cross, where they were attributed to houses (Cunnington, 1923, 57-9; below, p. 153).

Swallowcliffe is primarily an open site but a secondary phase is represented by an unfinished palisade trench (p. 71); the problem of the adjacent semi-circular earthwork or 'circus'

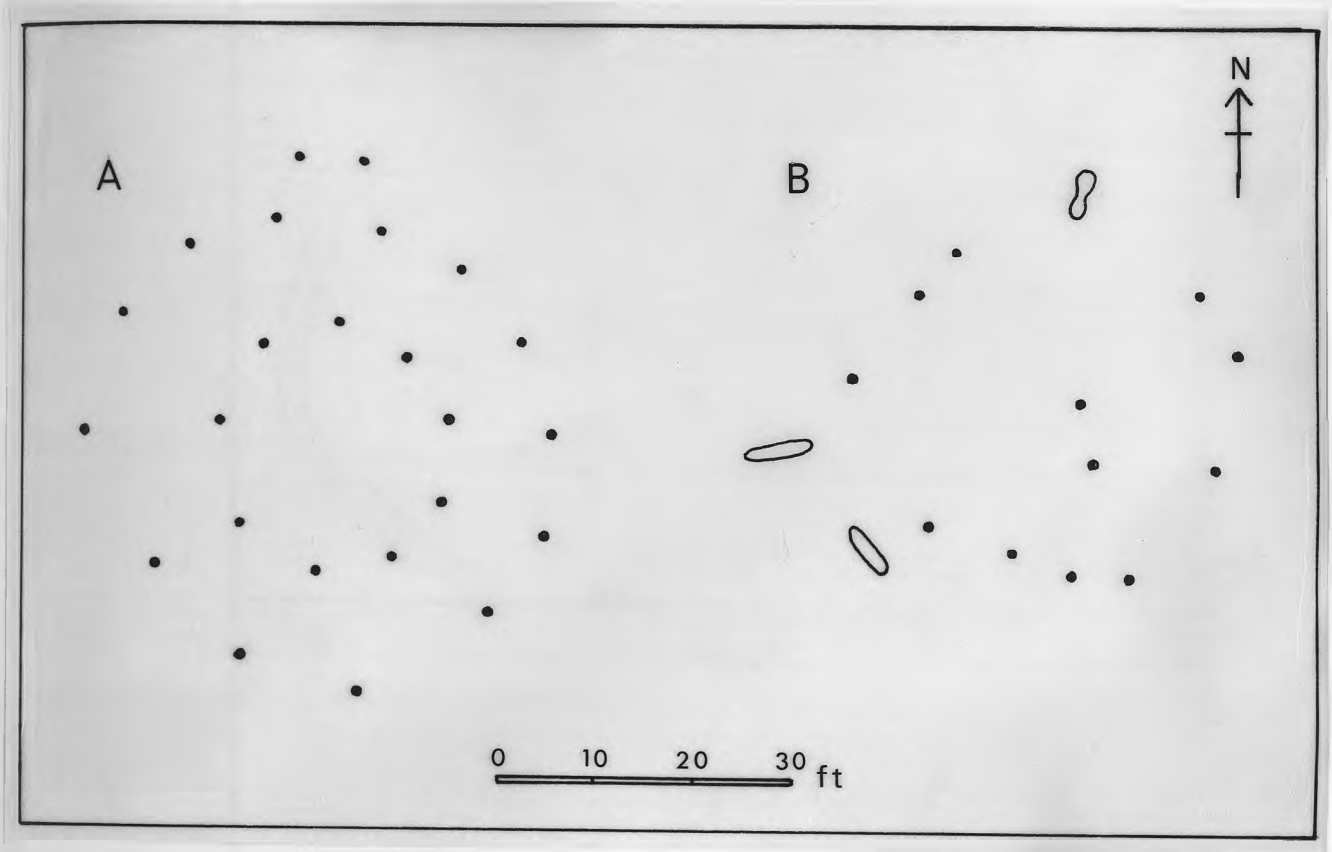


Fig. 29 West Harling, Norfolk, Houses A and B in Enclosure II (after Clark and Fell, 1953, fig 3)

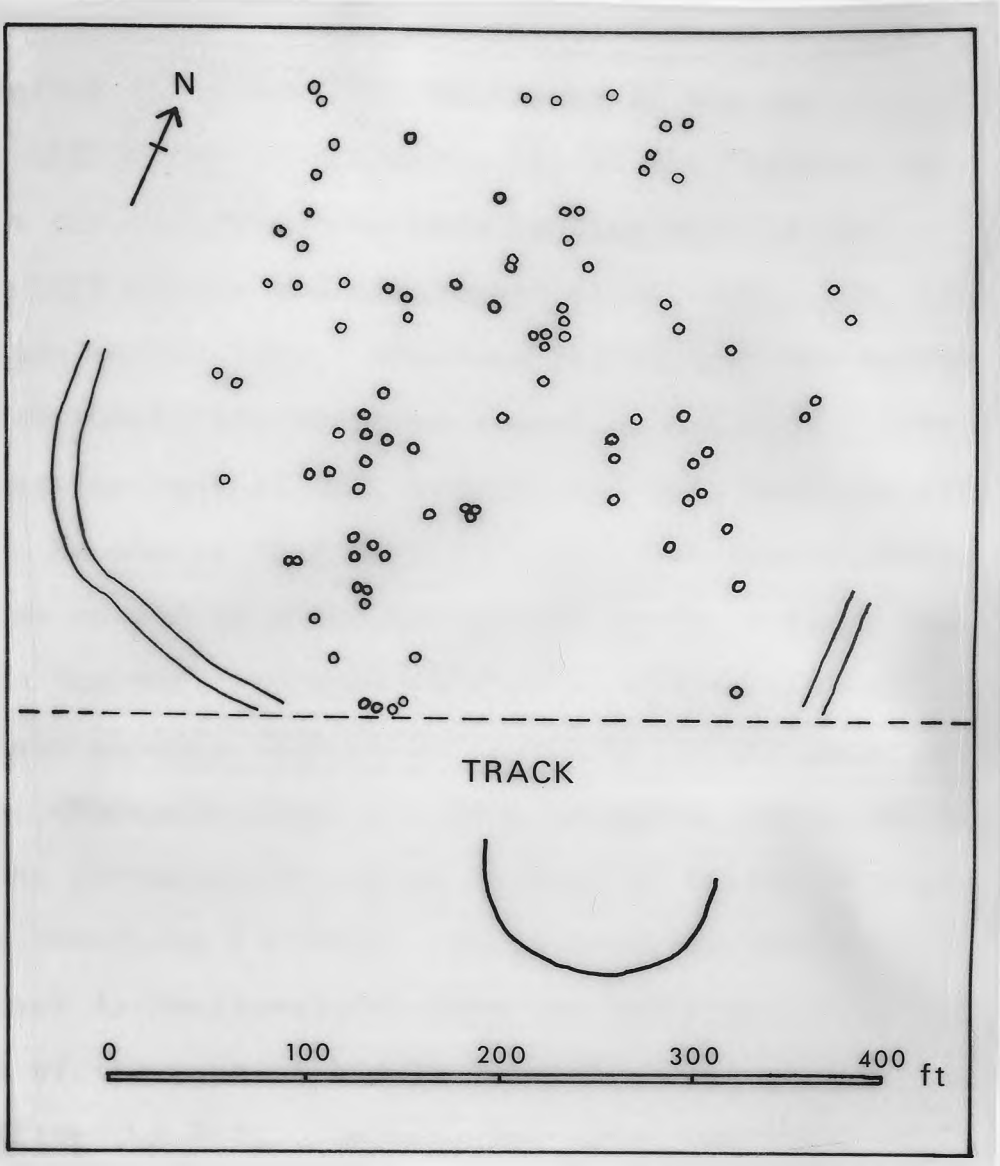


Fig. 30 Swallowcliffe Down, Wilts., open settlement, palisaded settlement, 'circus' (after Clay, 1925, pl.I)

will be discussed separately in the appendix. This earthwork cannot certainly be associated with the settlement because it is separated from the latter by the tracks of the old turnpike road. Some indication of the antiquity of the 'circus' is provided by a curious discovery made by Clay when he was excavating a barrow near the settlement (1926, 435; VCH, 1957, 149, Alvediston barrow 1b). Skirting the edge of the barrow, Clay found two wheel-ruts which he traced by means of a line of mole-hills past the bank of the 'circus' and into Swallowcliffe settlement. He states that 'the ruts were the same distance apart as those caused by a modern waggon' (1926, 435). The wheel-ruts in the east entrance to Maiden Castle, Dorset, included a pair showing Piggott's 'standard' Celtic gauge of 4 ft. 8½ ins. (Wheeler, 1943, 47, 109; Piggott, 1965, 244 f.). This is almost certainly the gauge typical of Wiltshire waggons in the early twentieth century. It is possible that Clay found the track to Swallowcliffe from the Ebble valley up the gentle slope of the spur of Middle Down which was used in the mid first millennium B.C. Perhaps the cross-spur dyke on Middle Down (Part III, 4; W.D. 18) was constructed at the same time as the palisade trench designed to enclose the settlement, in order to control this access-route (Pl. XXII).

The settlement at Fifield Bavant East seems to have possessed a small rectangular cattle enclosure about half an acre in area. The pits surround this univallate earthwork on the north and west (Clay, 1924, fig. opp. 457).

Both Fifield Bavant settlements and Swallowcliffe should be related to the cross-ridge and cross-spur dykes on the Ebble-Nadder ridge, as well as to 'Celtic' field-systems in the vicinity. Fifield Bavant West is certainly associated with an extensive field-system, and this would necessitate the

construction of a cattle enclosure in order to protect the crops from straying animals. With regard to dykes, the Fifield Bavant settlements would benefit from the cross-ridge examples on Row Down and Compton Down (W.D. 107, 75, 74), and Swallowcliffe from the same dyke on Row Down and the system of cross-ridge and cross-spur examples to the west and south (W.D. 19-24). These control the main ridge-way and the gently sloping southern spurs, while the northern escarpment is extremely steep. Fowler has postulated recently the use of certain of these dykes on the Ebble-Nadder ridge as land-boundaries, dividing up the ridge-top into approximately equal units of land (1964). This idea will be discussed in Part III, section 4, but it may be noted here that its application would attribute twice as much land to the Fifield Bavant settlements together as to the Swallowcliffe settlement.

The settlements at Knowle Hill and Berwick Down North may also be related to cross-ridge and cross-spur dykes, and Cattistock, Eldon's Seat and Twyford Down are associated with 'Celtic' field-systems. Berwick Down North was presumably succeeded in the early first century A.D. by the homestead on the southern-most part of the spur, though the two sites are unlikely to represent continuous occupation of the area. The Battlesbury pits probably represent a settlement which was primary to rather than contemporary with the hill-fort on the evidence of pottery and artefacts from both sites (the finds from Battlesbury Camp are summarised in VCH, 1957, 118; pace Wainwright, 1968, 140, who considers the earlier settlement to be contemporary with the fort).

On the evidence of associated pottery and metal artifacts, open settlements are a feature of the mid first millennium

continuing into the second century B.C., with traces of occupation continuing into the first century A.D. at least at Marnhull and Twyford Down. This type of settlement is thus not closely datable to one particular period, and most individual sites seem to have been occupied through more than one century. The nature of the settlement changed at Castell Odo and Dinorben; the open settlement at the former was succeeded, like Swallowcliffe, by an unfinished palisade, and at Dinorben by a hill-fort. Occupation at All Cannings had ceased by about 400 B.C. if not earlier, and the peripheral Urnfield tradition embodied in much of the pottery is well-known, indicating that the settlement began in the seventh century B.C. Analysis of the provenance of finds from All Cannings indicates that occupation began in the southern part of the area excavated and was gradually extended northwards. Attention has been drawn recently to the Armorican affinities of the fragmentary socketed bronze axe (Cunnington, 1923, pl. 18, 3; Burgess, 1968, 32).

It is unfortunate that Clay does not provide the provenance of the pottery from the two Fifield Bavant settlements, but it is possible to suggest, on the basis of metal artefacts, that the eastern site may be slightly later than the western. With the exception of a bronze-coated iron knife from the east settlement, all bronze artefacts were found in the west settlement (consisting of pits 78-107). Although lumps of iron slag were found in pits belonging to the west site, all iron artefacts are confined to the east site (pits 1-77).

It is inevitable that there should be a large number of occupied sites which cannot be classified at all; the excavation of such sites has been incomplete for one reason or

another, and it is consequently impossible to distinguish whether they were open or enclosed. For most of these, the evidence consists merely of pits which will be included in the appropriate section (Part III, 2), but a list may be found in the catalogue of the major examples of these sites of uncertain type.

PART III ECONOMY

1. Timber Structures

i. Houses

Dwelling houses in Britain during the middle and later first millennium B.C. were invariably circular or oval in form; the evidence for rectangular structures will be discussed separately, for it is believed that these, where they may be accepted, were not inhabited but were used as work-sheds and store-houses. It is not unreasonable to suppose that buildings for different purposes might be constructed in different forms. This survey is concerned with houses in homesteads and settlements and not those in hill-forts since arrangements in the latter do not, with the exception of storage pits, granaries and racks, come within the scope of this study.

Among dwelling-houses, the circular form is predominant but a few oval examples may be found. There is evidence to suggest that the latter represent a survival from building tradition of the later second and early first millennia B.C. (oval houses were found, for example, in the Deverel-Rimbury settlements of Itford Hill, Cock Hill and New Barn Down). In the later first millennium, oval houses of simple post-ring and ring-groove types have been found on seven sites, none of which are likely to date from later than the fourth century B.C. The earliest examples are those at Staple Howe and Eldon's Seat, and the latest are those at Harting Hill. Staple Howe and Harting Hill demonstrate the method adopted to roof oval houses, for axial post-holes were found and these probably represent the supports for gabled roofs.

Circular timber houses may be divided into four major

structural types, which are termed simple post-ring, advance post-ring, ring-gully and ring-ditch (fig. 31). The simple post-ring type is represented by a single circle of individual post-holes, usually with one central post-hole for roof-support. These are normally small, measuring from 15 ft. to 24 ft. diameter, but the two examples at Staple Howe reach a maximum of 30 ft. in diameter. This type of house may be seen in Deverel-Rimbury settlements, and it continues in use until, and into, the Roman period throughout most of England, Wales and southern Scotland. Only one of these houses has been found to possess a porch (Hut 6 at Eldon's Seat).

The advanced type of post-ring house consists of multiple rings of individual post-holes, usually with a porch. This type may be sub-divided into three forms characterised by Little Woodbury, Longbridge Deverill Cow Down and Pimperne respectively. The Little Woodbury type shows two concentric rings of post-holes, the outer ring of which is more substantial than the inner, a central setting of four post-holes for roof-support and a porch. The only certain examples are at Little Woodbury itself, measuring 50 ft. and 32 ft. in diameter, for although a similar house has been claimed at East Winterslow, the irregularity and shallow depth of its post-holes makes its type uncertain. The Cow Down type of house shows two concentric rings of post-holes, the inner ring of which is more substantial than the outer, a central ring of post-holes for roof-support and a porch. The only examples are again those at the type-site, where they measure from 30 ft. to 45 ft. in diameter. The smallest of these is set within a small palisaded enclosure or yard, similar to that found in the hill-fort of Hod Hill (Richmond et al., 1968, fig. 14, Enclosure 36). The Pimperne

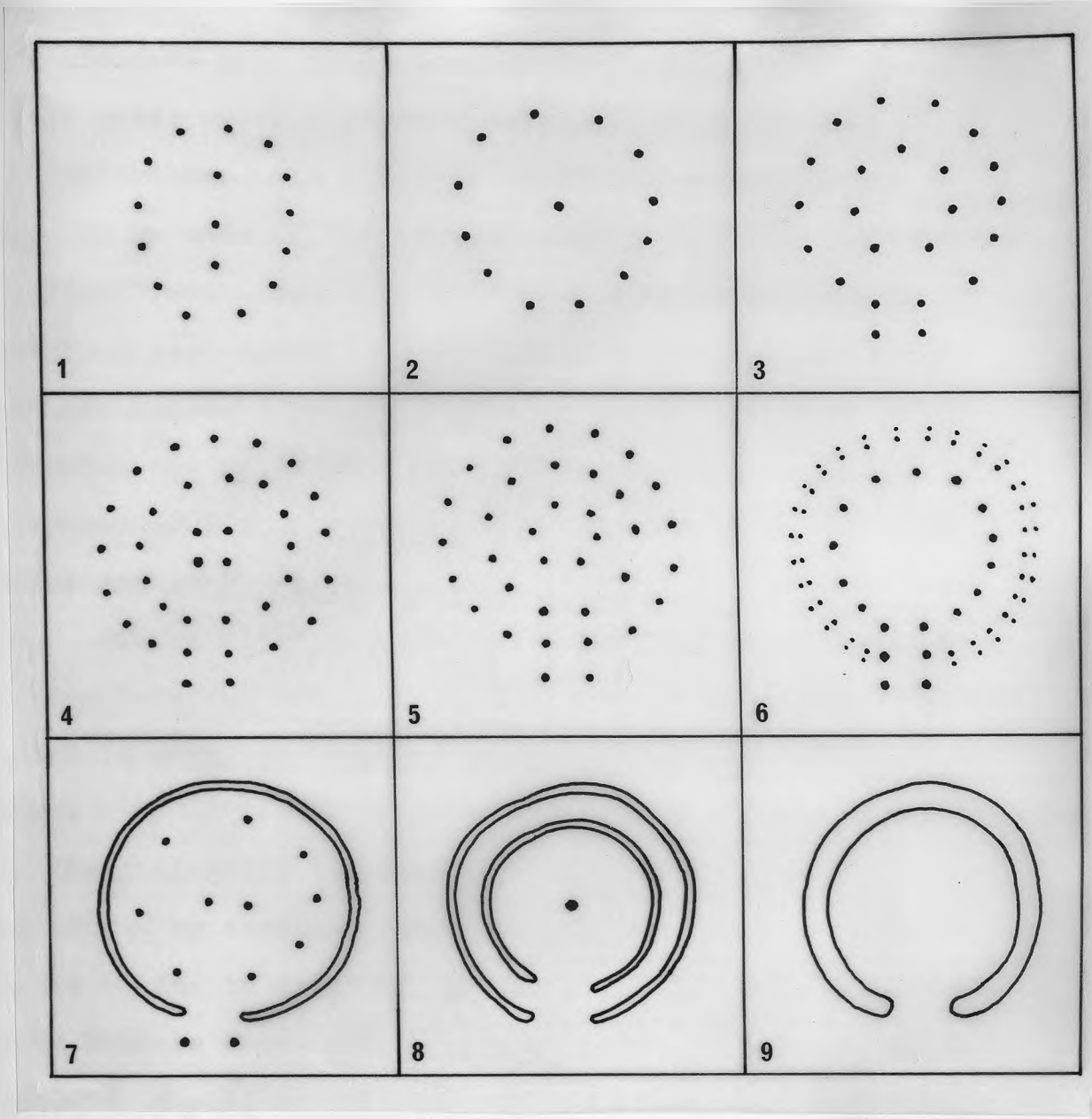


Fig. 31 Diagram of house-types

1 Simple post-ring, oval e.g. Harting Hill

2 Simple post-ring, circular e.g. Berwick Down South

3 Advanced post-ring e.g. West Harling

4 Advanced post-ring e.g. Little Woodbury

5 Advanced post-ring e.g. Longbridge Deverill Cow Down

6 Advanced post-ring e.g. Pimperne

7 Ring-gully e.g. Fifield Down

8 Double ring-gully e.g. Hayhope Knowe

9 Ring-ditch e.g. Camerton

type of advanced post-ring house is characterised by two close-set outer circles of post-holes and an inner ring of deeper post-holes. At Pimperne itself, no recognisable pattern can be made of the central scatter of small post-holes, but at West Brandon there is a central ring of post-holes representing roof-support. The Pimperne example possessed a porch and measured 50 ft. in overall diameter, while at West Brandon the house measured 58 ft. in overall diameter.

These houses of advanced post-ring type are thus few in number and confined, with one exception, to Wiltshire and Dorset. The earliest appearance of the type is probably at Longbridge Deverill Cow Down in the seventh and sixth centuries B.C., and it survives into the second century at Little Woodbury.

The ring-gully (or ring-groove) type of house is characterised by a single small trench forming a circle from 19 ft. to 58 ft. in diameter and an inner ring of post-holes. Those at Hayhope Knowe and Scotstarvit are unusual in having two concentric gullies (or shallow grooves in the case of Hayhope Knowe), and the larger house at Scotstarvit measured about 62 ft. in diameter. Some houses have additional central post-holes for roof-support and a few have projecting porches. House B at West Brandon revealed a circle of post-holes outside but set close to the main gully. This seems to be the predominant type of timber house beyond the chalklands of Wessex, but the value of the observation is severely limited by the fact that gullies are more likely to show traces visible on the surface than are post-holes. Ring-gully houses are certainly the predominant type associated with palisaded sites. The structural tradition represented seems to have begun in the

sixth or seventh century B.C. and to have continued at least until the third century, if not later, at Heath Row.

The fourth main type of timber house is marked by a shallow penannular ditch with a ring of post-holes set just within the inner lip of the ditch and one or more central post-holes for roof-support. They measure between 18 and 40 ft. internally and are found mostly in southern Scotland. The houses at Glenachan Rig were considered before excavation to belong to the ring-ditch class but proved to have nothing more than a very slight groove surrounding a house of simple post-ring type. It is possible that other houses of superficial ring-ditch form may be proved otherwise by excavation. Examples at Sandown Park and Aldwick may be dated as early as the sixth century B.C., but that at Camerton takes the type down at least to the third century. No post-holes were found associated with the penannular ditch at Sandown Park, only a central patch of clay, and it is possible that the site does not represent a house. Ring-gullies and ditches are sometimes interpreted as drainage channels; certainly ring-ditches might be more suited to the disposal of rain-water dripping from the eaves than to the support of the main wall of the house. The distinction must be made between these ditches and those at West Harling, where the houses were contained within their own univallate enclosures.

ii. Rectangular Structures

Students of the Early Iron Age have recognised for many years the marked contrast between continental building tradition and that in Britain; in general, rectangular houses are predominant on the European mainland, whereas circular houses are the rule in Britain. At the same time, Hawkes has observed that Continental rectangular houses have been recorded 'nowhere nearer to Britain than beyond the Rhine' and that round houses may be common throughout Western Europe (1966, 298). Attempts have been made to find rectangular houses in Britain, most recently by Cunliffe (unpublished thesis, Cambridge, 1966; 1968), but these are, on the whole, unconvincing. Cunliffe accepts the existence of rectangular structures at West Harling and Snarehill, and suggests possible examples at Feltwell in the same county of Norfolk, at Calke Wood in Suffolk and at Linton in Cambs.: 'Evidence from each individual site is sparse, but if we take all the facts together there is little doubt that rectangular buildings formed part of the cultural assemblage' (Cunliffe, 1968b, 180). The evidence from West Harling comes from Site IV, where incomplete traces of shallow U-slots were found within a rectangular ditched enclosure (Clark and Fell, 1953, 12-14). This is certainly an unfinished rectangular structure of some sort, contemporary with the settlement, but whether intended as a house can never be established. The closest parallel is the rectangular enclosure at Pilsdon Pen in Dorset, where similar beam-slots have been found and interpreted tentatively as part of a temple complex belonging to the first century B.C. (Curr.Arch., 14 (1969), 78-81).

The evidence from Feltwell and Snarehill consists of

sub-rectangular 'floors' sunk a few inches into the occupied surface. At Snarehill, this is associated with one or two possible hearths and a little cobbling and laid clay. A slight sunken area was found at Linton, while at Calke Wood the evidence consists of part of a clay floor with three adjacent post-holes. The present writer cannot accept the latter example as evidence for a rectangular structure; the post-holes and clay floor seem not to be associated for they are not coincident either in position or alignment (Wacher, 196', fig. 4). Wacher interpreted the three post-holes as central supports for the gabled roof of a rectangular house, but this is here considered insufficient evidence (op.cit., 11). Clay floors of unrecorded form were found at Runcton Holme in Norfolk. An interpretation of these sub-rectangular features as working floors seems preferable perhaps for threshing or similar activities. It is possible that some may represent the floors of oval houses, which survive into the mid first millennium B.C.; this may be illustrated by the evidence from Postwick, Norfolk. Here an area 13 x 6 ft. had been sunk about 1 ft. into the gravel, and a single central post-hole survived. An oval house was also found at Linford, Essex, where post-holes marked the perimeter of an area 18 x 22 ft.

The impression given by the coincidence of these sub-rectangular floors in East Anglia is that, whatever they represent, they are a regional cultural feature. This impression may be countered, however, with similar evidence elsewhere in S. England. A sunken rectangular area was found at Charleston Brow South in Sussex; no post-holes were found, and the line of the N.W. side was broken by a storage pit. Pottery and bronze objects from the site date the occupation to the fifth or

sixth century B.C. Three rectangular shallow hollows were uncovered at Swallowcliffe Down, Wilts.; two were unassociated with any occupation material, but pottery and animal bones were found in the third. Paved and cobbled floors have been interpreted as the remains of rectangular structures at Shenberrow, Gloucestershire, Wittenham Clumps, Berkshire and All Cannings Cross in Wiltshire. At Shenberrow, a sub-rectangular area had been covered with rammed gravel and rough stone paving, and a single post-hole was found in one corner. Part of a rectilinear area of chalk rubble and quartzite pebbles was uncovered at Wittenham Clumps, associated, like Shenberrow, with pottery dating early in Hawkes' period Early Iron Age A. Sites C, D and E at All Cannings Cross consist of adjoining sub-rectangular floors of burnt clay and chalk paving, which the excavators interpreted as rectangular houses with paved yards. Isolated paved floors occurred at Sites F, G and H and were similarly interpreted as the yards belonging to houses of which no trace survived. Neither type of floor was associated with any trace of post-holes.

Such floors are clearly working-areas rather than the foundations of structures. Threshing, pottery-making and the initial stages of leather-working might be among the activities carried out on working-floors. A cart-park was suggested as a use for the cobbled area at Ivinghoe Beacon (Cotton and Frere, 1968, 198).

Despite its irregularity, the setting of post-holes on Site L at Maiden Castle looks more promising as a rectangular house. This belongs to Wheeler's A phase of the fort; Hut DH on Site D in his B phase consisted of a gravel floor 9 x 8 ft. with a post-hole in each corner, and contained an oven and

traces of bronze-working (Wheeler, 1943, pl. VIII). This is possibly a key to rectilinear structures: traditionally, dwelling-houses were circular but work-sheds might well be rectangular. Three rectangular houses were recognised at Marnhull, Dorset, but their plans marked by post-holes were recovered only partially owing to gravel-digging. Part of a possible rectilinear timber structure was also found at Hawk's Hill, Surrey, again dating to a phase early in Hawkes' period Early Iron Age A. Recent excavations within the hill-fort of Ivinghoe Beacon, Bucks., have revealed three rectilinear post-settings. That on Site B represents an irregular structure similar to Maiden Castle Ll. The two structures on Site A consist each of four post-holes with a central post-hole; the excavators suggest that these may represent either granaries or huts with hipped roofs (Cotton and Frere, 1968, 194-5).

Finally, dressed timbers found at Meare, Somerset, have been thought to belong to small square structures preceding the clay mounds, but Avery's excavations suggest that the timbers may be considerably earlier than the Iron Age settlement (Avery, 1968, 38 f.; Bulleid and Gray, 1943, e.g. mounds 9, 13). Similar dressed timbers occur at Glastonbury; three forming part of a timber frame approximately 10 ft. square were found between Mounds LXI and LX (Bulleid and Gray, 1911, pls. XXXIII, XXIX). Other timbers with mortise-holes are mentioned in the text and interpreted there as traces of rectangular structures (op.cit., 56-7). It is also possible to find rectilinear arrangements of posts and several rectilinear clay floors at Glastonbury, e.g. Mound XXXIV (op.cit., pl. XXXIX); the most regular setting is one consisting of eight timber piles forming a square with sides

10 ft. long and a central pile (close to Mounds XXIX and XIV, op.cit., pl. XIV).

Rows of rectangular four-post structures have been uncovered within the hill-forts of Croft Ambrey, Credenhill and Midsummer Hill in Herefordshire, and Stanford has claimed that they are houses (1965, 1967). At Croft Ambrey these structures measure from 8 x 6 ft. to 10 x 12 ft. and show a maximum of seven phases of re-building. It seems more likely that they are granaries, though undeniably odd to find so many in rows, but the problem cannot be discussed until the excavations have been fully published.

It may be noted that the post-holes in cuttings II and VIII on Site B at Plumpton Plain fall more reasonably into linear settings than into circles or ovals (Holleyman and Curwen, 1935, 30 f.); the excavated areas were too limited, however, to allow these post-holes to be interpreted as any specific structure.

iii. Timber Granaries

Pitt-Rivers drew attention to the existence at Rotherley of 'four good size post-holes (marked Group 5 on plan), about 7 ft. apart which I suggest may have been the supports of small granaries, such as are still to be seen in the villages about here, standing on four supports' (1888, 55). This suggestion was strengthened by the discovery of grains of wheat in the post-holes of another granary (Group 4). A further two possible granaries were recognised, including the setting (Group 1 in the main circle) which has also been interpreted as the central support for a Little Woodbury type of house (p.136). It seems surprising that Pitt-Rivers' idea about granaries was not taken up by the Cunningtons at All Cannings Cross; Site A is closely comparable to the Rotherley structures, but the excavators considered only the possibility that it might represent a house (Cunnington, 1923, 57). It consists of four post-holes set in an 8 ft. square, each hole measuring 1 ft. 3 ins. in diameter and about $2\frac{1}{2}$ ft. deep. Bersu revived the idea of timber granaries in connection with the four-post settings at Little Woodbury (1940, 97 f.), and suggested that Sites A and B at All Cannings Cross should be interpreted in the same way (op.cit., 107). Site B lay in a trial trench and the fourth post-hole was never uncovered; since the three known post-holes do not form part of a square like Site A, the setting may not represent a granary. Bersu distinguished six granaries at Little Woodbury, most of which occurred near the N.W. perimeter of the homestead (G7 in text, op.cit., 97, is presumably G3 on plan, pl. 1).

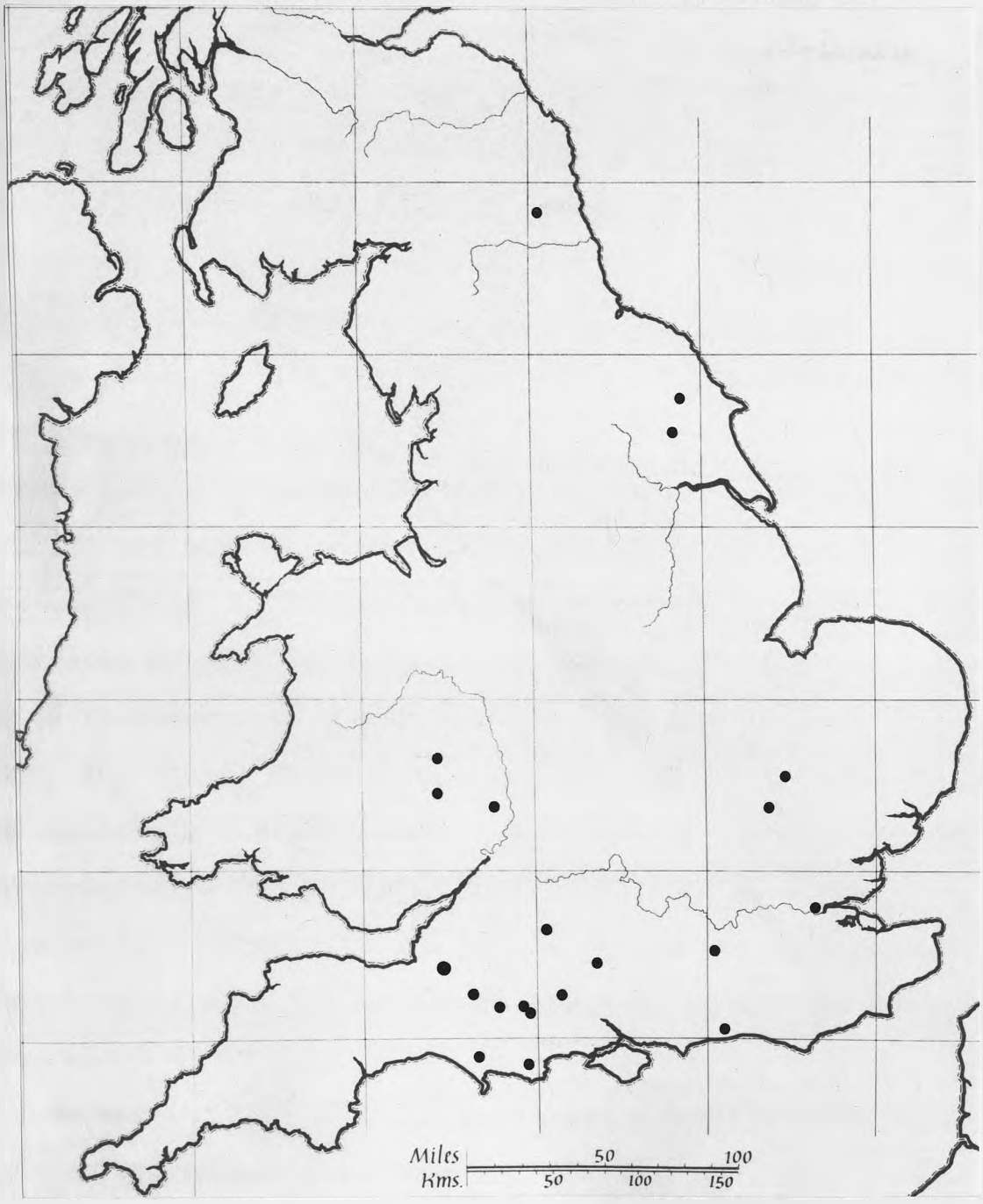


Fig. 32 Distribution of granaries

It is possible to recognise rectilinear settings of four post-holes in almost any mass of holes, but this is misleading. At Rotherley and Little Woodbury, the type-sites for granaries, groups of four post-holes stand out on account of their depth and isolation from other features. Several groups at Little Woodbury are further distinguished by the fact that the posts had been replaced in a slightly different position, so that their plan gives the impression of over-lapping squares. In size, the structures represented vary from 6 ft. square at Marnhull and Rotherley to 12 ft. square at Credenhill. It is possible that the larger structures did not fulfil the same function as the smaller; they need not all be granaries. Four posts 12 ft. apart would require considerable cross-strengthening to bear the strain of an overhead storehouse of the stilt-type envisaged at Little Woodbury and Staple Howe. Some may well have been work-sheds or storehouses at ground level. Most groups consist of four post-holes, but a few examples have been found with five or six post-holes; these are all over 8 ft. square in area, and the extra posts were presumably designed to strengthen the structure.

Wainwright has recently published a list of granaries for comparison with those found at Berwick Down South (1968, 113). He groups them into types according to the number of post-holes, but this criterion seems to the present writer to be an accidental factor dependent upon individual necessity rather than building tradition and not, therefore, worthy of classification. Wainwright's list is completed and emended here in the accompanying catalogue. He notes a 7-post granary at Rotherley; Pitt-Rivers was careful to label this irregular setting stake- rather than post-holes, and the structure

represented would have been too flimsy for a granary (Pitt-Rivers, 1888, Group 6). Hawkes suggested that this setting might represent a drying-rack (1947, 38; below, p. 162). Wainwright includes a granary at Park Brow in Sussex to which attention was first drawn in this connection by Piggott (1939, 220 f.). It is difficult to know why Wainwright does not claim a 6-post granary here as well as a 4-post example, for the site-plan shows an alignment of 10 post-holes in all (Wolseley et al, 1927, fig. P). It will be argued later that this setting at Park Brow represents a multiple-frame drying rack rather than granaries, or even a barn as Piggott suggested (1939, 220, n.). The example at Hawk's Hill included by Wainwright is less certain than that included here, for only three post-holes were uncovered; inexplicably, he omits the complete example which is also 8 ft. square.

Piggott included two 4-post granaries at Park Brow and a 6-post granary at Glastonbury, but it is felt that the proximity of these settings to other post-holes which might well be related to them makes their interpretation dubious (1939, 220, n. 5 and 6, fig. 14).

Traces of timber granaries have been found on twenty sites belonging to the pre-Roman Iron Age. Nine of these sites are hill-forts and the rest include all the major forms of settlement, both open and enclosed, homesteads and villages. Their distribution extends from Dorset to Muntham Court in Sussex and Huckhoe in Northumberland (fig. 32), and they are situated predominantly on chalk sub-soil though several occur on sandstone and limestone. In height above sea level, the sites range from 250 ft. to about 800 ft. In the cases of the Northumberland and Yorkshire examples, it is possible that

the grain stored in the granaries was not grown locally (c.f. distribution of field-systems and plot cultivation, pp.187f.). No trace of grain was found at Huckhoe and this fact leaves open the question of the nature of the produce in the rectangular structure. Drying-racks were also found on the site, but these may have been used for hay rather than corn in the ear. It is possible that a 'granary' might have been used to store commodities other than grain. The stilted store-houses in use until recently among the Lapps were used for elk and reindeer meat as well as skins. The 4-post setting on Site B at Maiden Castle contained a hearth within its area, and this might suggest that the post-holes represent a frame for drying and smoking animal meat or for drying corn. A similar arrangement was found on Site 4 at Marnhull; the excavator suggested that the hearth was not contemporary with the post-setting because its presence did not accord with interpretation of the structure as a granary (Williams, 1950, 31). An alternative suggestion for the function of such structures with hearths has recently been made by Piggott; they might be shrines (1968, 61 f.).

It has already been suggested that timber granaries were in use as early as the later second millennium B.C. (p.23). Dating evidence from the sites included here shows that they were certainly a familiar feature of homesteads and settlements from at least 600 B.C. into the early first century A.D. Square timber granaries have been found at Site 37, Tallington in Lincolnshire, where they are dated to the second half of the first century A.D., but this is a rare late occurrence of the form (Simpson, 1966, 15-16).

iv. Drying-Racks

Pairs of post-holes were first interpreted as drying-racks by Bersu at Little Woodbury (1940, 94-6). In particular, he recognised two series of post-holes which represented successive 2-post frames; Group C1-C5 consisted of 11 frames and Group C15-20 of 15 frames. His reconstruction of a drying-rack shows two upright posts with a number of horizontal struts between them (op.cit., fig. 28). At Little Woodbury, the post-holes were set 6 to 8 ft. apart. It is, of course, even easier to find pairs of post-holes amongst a complex of holes than to find settings of four as granaries; the examples included here are all pairs which stand out in relative isolation and which may reasonably be associated as pairs of post-holes. One of the frames postulated at Berwick Down South consists of two post-holes 12 ft. apart; this distance may suggest an unstable structure, but the holes are 1½ ft. deep and could have held posts up to 1 ft. in diameter (Wainwright, 1968, fig. 9, P, R). Wainwright interpreted these two post-holes and the adjacent pair as a possible granary or drying rack (op.cit., 112, Granary D) but a comparison of the size of the four holes points clearly to the presence of two pairs. Post-holes P and R are just over 1 ft. in diameter and 1½ ft. in depth, while O and Q are about 6 ins. in diameter and depth (op.cit., fig. 8).

Evidence for drying-racks has been found on seventeen sites, the distribution of which is similar to that of timber granaries except for a gap in the Welsh Marches (fig. 33; published information about Credenhill, Midsummer Hill and Croft Ambrey is too sparse to judge whether racks are present). The

racks included range from 5 to 12 ft. across and may be divided into two types; these are the single-frame type as found at Little Woodbury and the multiple-frame type which has been found only at Meon Hill and Park Brow. The latter type was known to Bersu (1940, 95) but he failed to recognise any examples in the archaeological record and the type seems not to have been considered since. It consists of a number of 2-post frames set in an alignment, and the material to be dried is hung over struts or ropes attached longitudinally to the uprights. A modern example is illustrated here for comparison (pl . XVII); this rack at Culnadalloch in Argyll (NM 947332) measures 5 ft. wide and the frames are set 10 to 12 ft. apart. The entire structure is roofed and diagonal tie-beams have been employed to strengthen it. One of the advantages of this type of rack is that the corn or hay may be laid across a number of horizontal supports in the manner of a domestic airing cupboard (pl. XVIII), instead of hanging insecurely over one on the single-frame type. The examples at Meon Hill and Park Brow consist of four and five frames respectively (a total of eight and ten post-holes respectively). It is likely that they were roofed for practical reasons of climate but this can never be proved.

In connection with drying and storing hay, attention is drawn to modern hay-rick stances accompanying the multiple-frame drying-rack at Culnadalloch; they consist of circular drystone platforms, each measuring about 8 ft. in diameter (pl. XIX). The abandoned remains of such stances might easily be interpreted as house-sites, and it is suggested that the possibility of hay-rick stances might be taken into consideration in connection with small circular features scattered about

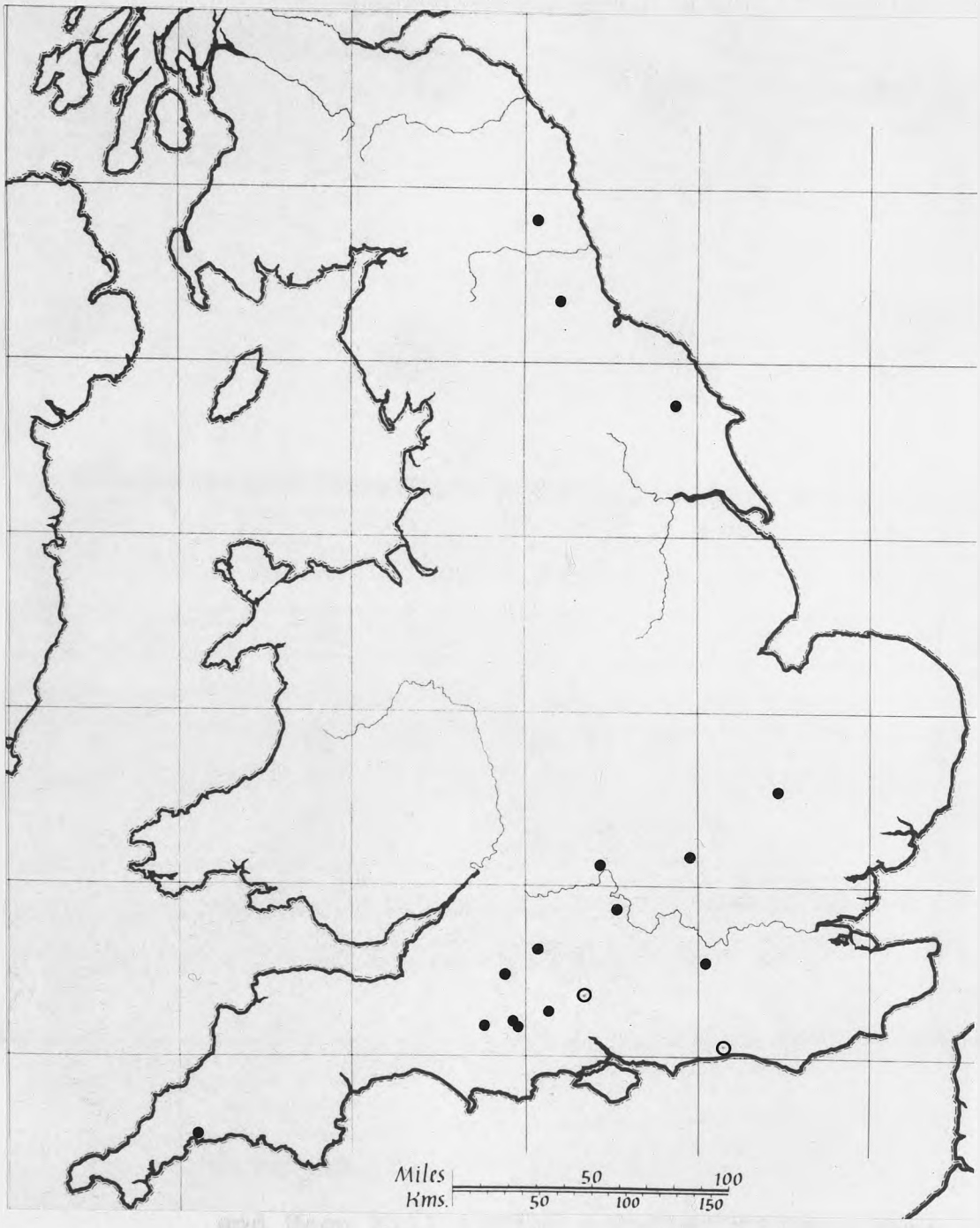


Fig. 33 Distribution of drying-racks

● single-frame type

o multiple-frame type

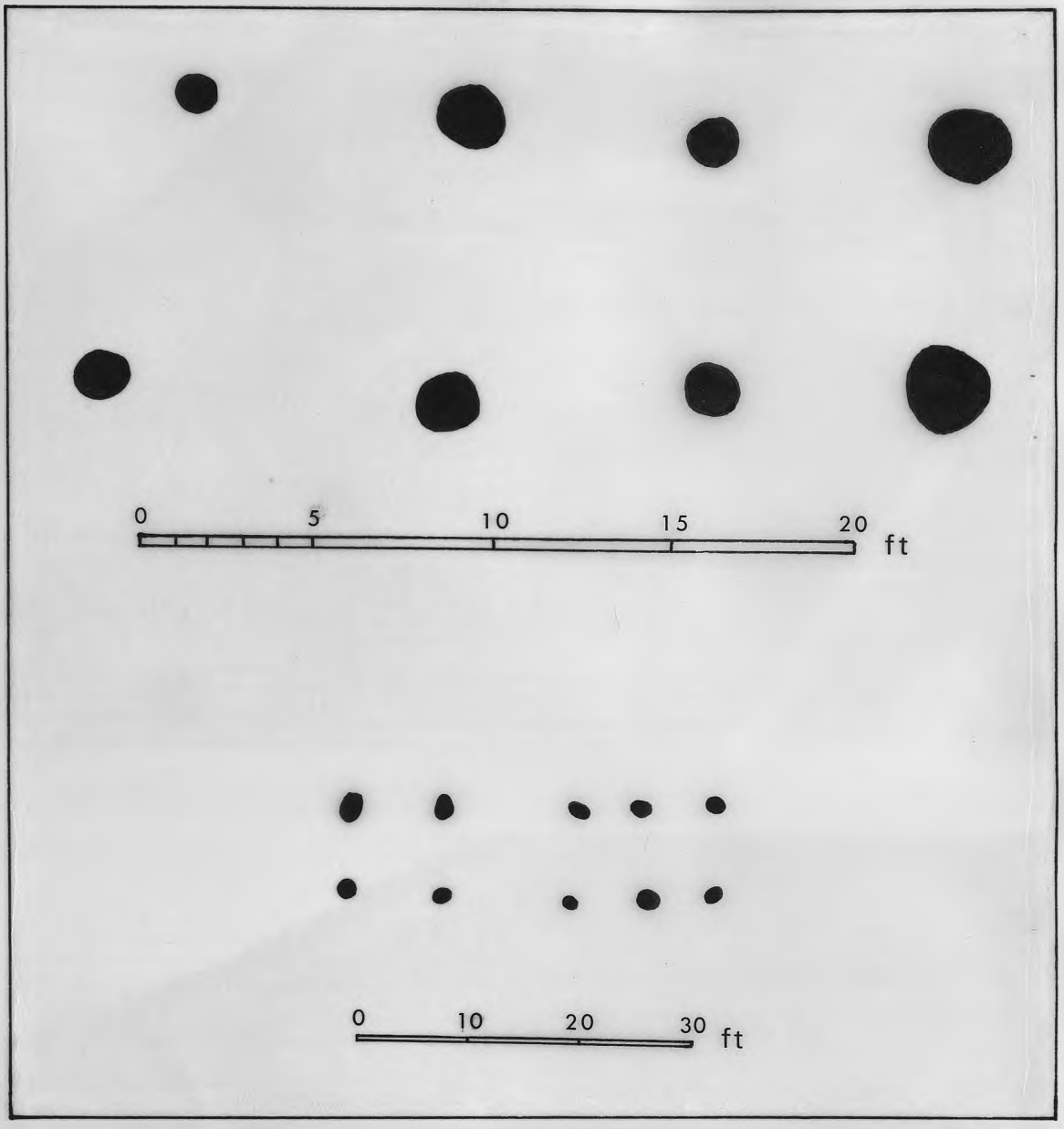


Fig. 34 Multiple-frame drying-racks at Park Brow and Meon Hill (after Wolseley et al., 1927, fig. P; Liddell, 1937, fig. 3)

XVII, XVIII. Multiple-frame drying-rack, Culnadalloch, Argyll.

XIX. Hayrick stances, Culnadalloch, Argyll.

'Celtic' fields (e.g. Middle Hill, Cattistock, Dorset; RCAHME, 1952, 73). The purpose of such stone-built platforms is to protect the basal layer of hay from contact with damp ground.

Hawkes suggested in his re-interpretation of the site that Group 6 at Rotherley, Wilts., might represent a drying-rack, (1947, 38). The seven holes in this group were described by Pitt-Rivers as stake-holes, making a sharp distinction between these and post-holes (1888, pl. XCIV), and the present writer prefers to leave open the question of their function. It has been suggested that the outer pair of porch post-holes belonging to the house (Structure IV) at Ivinghoe Beacon might instead be interpreted as a drying-rack (Cotton and Frere, 1968, 196). These two large post-holes lie 17 ft. apart, and this is too large a span for a rack (it is also unusually large for a porch).

It is conceivable that drying-racks were used for other materials as well as corn in the ear and hay; wool, skins, and even meat are commodities which might require drying. It has already been suggested that the square settings of four post-holes on Site B at Maiden Castle and Site 4 at Marnhull, Dorset, may represent drying-frames since hearths were found between the post-holes (p.159). Such a frame might have been used for smoking meat and fish, or for drying corn in the ear though much of the heat from the fire would be lost in an open structure (c.f. Scott, 1951, 197-8). It is noticeable that most drying-racks appear on sites which possess timber granaries as well, but this need not mean that their functions are supplementary. The coincidence of racks and granaries is in part a reflection of the quality and extent of excavations.

Dating evidence from the sites concerned indicates that drying-racks of both types were in use from at least 600 B.C. down to the Roman conquest and probably, to some extent, into the Roman period (racks dating to the later first century A.D. were found at Tallington Site 37, Lincolnshire; Simpson, 1966). It has been suggested that drying-racks should not be considered as an Iron Age innovation, but that they were already in use in a few settlements of the later second and early first millennia B.C. (above, p.23). The introduction of both racks and granaries, as well as storage pits, should probably be linked with the agricultural expansion which took place in the second half of the second millennium B.C. and which is reflected in the field-systems and linear earthworks of that period.

2. Storage Pits

All types of pit are examined here in order to distinguish storage pits from those used for other purposes. In the catalogue are lists of pits showing significant features which are discussed in the text, and which are based upon as full a table of storage pits as possible at present; this includes those shown on Piggott's and Radford's maps, together with those found since their maps were compiled and others not included there (Piggott, 1958a; 10; Radford, 1954, fig. 4).

Antiquarian ideas about the function of pits were mentioned in the introduction to this study. The term 'pit dwellings' occurs regularly in archaeological literature until well into the present century, finally to be replaced with equal conviction by the idea of grain storage in pits, largely owing to the work of Bersu at Little Woodbury in the late 1930s. One of the earliest references to pit dwellings was made by Hoare (1812, 36-7) in connection with the vast concentration of irregular pits known as the Pen Pits on his own lands in Somerset. Warne considered them to be relatively recent in construction (1872, 14), and the problem was finally tackled by Pitt-Rivers, who excavated among the Pen Pits in his capacity as Inspector of Ancient Monuments (1884). Although he could not discount the possibility of habitation, the lack of finds other than large numbers of quern-stones led him to believe that they represented surface quarrying for stone as part of a local quernstone industry. These pits were unusual, however, in their number and irregularity; the more normal form of pit was labelled a dwelling on the strength of

ethnological parallels and Victorian concepts of savagery. Warne noted many examples in Dorset and Wiltshire (1872, 12-16; quoting Milton's poetry as confirmation of the idea of their habitation).

The most important occasion in the history of pit interpretation was the excavation at Worlebury hill-fort, when many pits were emptied and the excavators concluded: 'For what purpose, then were these holes made? Evidently, we think, for the storage of food; if we may rest that opinion upon their suitability for the purpose, and on the fact that deposits of grain were found at the bottoms of many of them' (Dymond and Tomkins, 1886, 69). The layered filling of the pits at Rotherley led Pitt-Rivers to think of them as earth-closets (1888, 60), though he concluded that there were too many at Woodcuts for that purpose only and suggested that some might be 'store-pits' (1887, 12 f.). An isolated and irregular pit beyond the N.E. rampart at Winkelbury was designated a pit-dwelling, but otherwise Pitt-Rivers seems not to have believed in subterranean houses (1888, 242 f.). Mortimer and Allcroft were still maintaining the idea of pit-dwellings, although the latter allowed that some pits might be used for storage, rubbish, water or burials (Allcroft, 1908, 243 ff.). Mortimer found pit-dwellings in the course of barrow excavations (1905, 103, 258; that at Hanging Grimston is now recognised as the bedding trench of a timber facade). Sumner seems to have dropped the habitation idea, for he postulated their use for refuse disposal or as quarries for chalk for arable land (1913, 69). The Cunningtons considered Pit 2 at Casterley to be a dwelling-place on account of its size (1913, 77), but smaller pits at All Cannings Cross were interpreted in

terms of storage and refuse disposal (Cunnington, 1923, 60). The reverse in terms of size was put forward by Clay as a result of his excavations at Fifield Bavant and Swallowcliffe; he believed that the deeper pits were used for storage, while those found to be about 6 ft. deep with 'seats' or recesses cut into their walls were habitations (1925, 61). He provided a section through a reconstructed 'Dwelling Pit' in the report on the Fifield Bavant excavations (1924, pl. I).

In his discussion of the function of the pits at Little Woodbury, Bersu discarded the ideas both of habitation and of refuse disposal and argued in favour of grain storage in the larger pits, and suggested that receptacles for water might have been set into the shallower pits (1940, 60 ff.). Since 1940, the concept of grain storage in pits has become established archaeological belief. Radford published a catalogue and distribution map of pre-Roman storage pits in 1954, and the map was revised in 1961 by Piggott. The need to test the viability of underground grain storage was first met in 1964, when a series of practical experiments was begun by the Ancient Agriculture Research Committee sponsored by the British Association for the Advancement of Science (Bowen and Wood, 1967). Four pits were dug into chalk downland at Broadchalke in Wiltshire; two were made about 4 ft. in diameter and 5 ft. deep, one a miniature version of similar proportions and the fourth was constructed so that its width was greater than its depth. All were lined with basketry. Varied conditions were created in the method of sealing the pits and the moisture content of the grain placed in them, and it was found that grain could be stored successfully during the winter providing that an adequate seal on the pit was achieved and that the grain was

not allowed to come into contact with the chalk floor or sides of the pit. The use of basketry linings and some form of raised flooring is thus essential, as well as sealing lids made conveniently of clay cob on wickerwork. Evidence from prehistoric pits indicating the use of such devices will be examined subsequently.

Other experiments in grain storage have been carried out by Cunliffe in connection with the effect of parching the corn before storage, and by Reynolds using smaller pits than those above (1967). Among the results of the latter experiments were the discoveries that artificially dried grain stored better than undried and that storage could be reasonably successful in unlined pits. It was also discovered that a pit could be opened and then re-sealed during the winter without spoiling the grain.

Storage pits are usually considered to be an Iron Age innovation (Radford, 1954, 12; c.f. Piggott, 1958, 5). Burstow claimed the title for 14 of the pits at the Deverel-Rimbury site of Itford Hill in Sussex (1957, 172, 175, 177 f., 186), but failed to be convincing because, apart from any other consideration, he omitted to provide note of the criteria by which he distinguished between storage pit and post-hole, and a comparison of dimensions shows little difference between the two. This has led to disbelief in pit storage on the site at all (Bowen and Wood, 1967, 4 n. 20). Pre-Iron Age pits are considerably smaller than the average Iron Age storage pit, but there are pits of earlier date (above, p.24) which conform to the basic criteria adopted in this study; it is reasonable to accept that underground storage of food was practised in the later second millennium B.C., though on a smaller scale

(c.f. Smith, 1964, on Neolithic storage pits). If this idea is accepted, that rather puzzling feature of many pre-Iron Age settlements, the 'cooking-hole', diminishes in importance. The erosion factor must also be considered in relation to the surviving dimensions of early pits.

There is an obvious difficulty in distinguishing between a small pit and a large post-hole. In the present study, the minimum dimensions for a storage pit are two feet in diameter and in depth; although the capacity of such a pit is small, it is not considered wholly improbable for a small establishment. At the same time, there can be no certainty about the purpose of any pit without evidence. There is a corresponding problem about the upper limits of size which should be allowed for storage pits. Unusually large examples, such as Pit 1 at Darmsden in Suffolk (Cunliffe, 1968 , 184-9) which is 16 ft. in diameter and 12 ft. deep (and contained a basal layer of ash 3 ft. deep), are unlikely to have been used for grain storage since the available cubic capacity would surely be unmanageable and the risk involved of losing so much grain would be too great. An arbitrary figure of 10 ft. as a maximum dimension for diameter and depth might be acceptable for storage pits; this would include the largest pits at Hunsbury, Little Woodbury and Shenberrow.

Clay-lined pits are normally interpreted as water tanks, but food storage would be equally feasible. The fact that the clay-lined pit at Fifield Down had been burnt at some stage in its use might indicate food storage rather than water, on the grounds that the burning represents sterilisation of the bacteria formed during grain storage. One of the Standlake pits possessed clay-lined sides and a stone-lined floor, the

latter feature pointing surely to food storage since the pit would not be water-tight. The presence of fragments of clay cob in a clay-lined pit at Meon Hill may represent an original lid to the pit, a feature equally necessary to food or water storage. One of thepits at Rotherley, however, revealed wicker impressions on its clay lining, which must indicate use of the pit for grain storage. A clay-puddling pit for use in potting might well survive in the guise of a clay-lined pit, thus adding a further complication to interpretation of such pits. Three clay-lined pits at Hod Hill were interpreted in this way, but these are anomalous in being conical in shape (Richmond et al., 1968, 22 f.).

It is significant that, at All Cannings Cross, the clay-lined pits are small and dug into the topsoil alone, not into the underlying chalk (Cunnington, 1923, 62). The loose nature of the soil would necessitate clay-lining for stability. Several of these small pits revealed clay roofs similar to those of other chalk-cut pits, but they are probably more likely to represent water-storage than either grain-storage or cooking (c.f. Cunnington, 1923, 63n.). Shallow clay-lined pits at Henllan in Cardiganshire were interpreted in this way, and it is noticeable that they were found within houses (Williams, 1945, 235). Similar small water-tanks have been found recently at Ivinghoe Beacon in Buckinghamshire and Eldon's Seat in Dorset. A clay-lined pit at Ivinghoe Beacon measured about 3 to 3½ ft. in diameter and 1 ft. 9 ins. deep and was interpreted as a water-pit (Cotton and Frere, 1968, 199). Cunliffe suggested the same explanation for Pit 62 at Eldon's Seat, one of five clay-lined pits measuring from 1 ft. 4 ins. to 2 ft. 2 ins. in diameter and 8 ins. to 1 ft. in depth (1968, 197-9).

It is noticeable that none of these small clay-lined pits have revealed any trace of iron slag, although they are of a size suitable for bowl furnaces (c.f. O'Kelly, 1961).

Elgee records the excavation by Davies of a pit at Castleton in Yorkshire, which should be mentioned here since it is clay-lined (Elgee, 1930, 142). It was found to be about 8 ft. in diameter, tapering to 2 ft. at a depth of about 3½ ft., and its clay-lined sides had been burnt. It was filled with charcoal, except for a hollow 6 ins. in diameter which was interpreted as the remains of a post. This vertical post in the bottom centre of a pit recalls the arrangement of Celtic ritual shafts (Ross, 1968), and the fact that the Castleton pit was embanked strengthens the comparison, despite the shallow nature of the pit (although material dug from normal domestic pits survives sometimes to give an impression of embankment, c.f. Worlebury).

Stone-lined pits are a simpler matter; except where a pit is dug into bedrock and therefore incidentally lined, a stone-lined pit must have been intended for the preservation of food. The Worlebury pits are rock-cut, but their numbers are so large that food storage must be involved. One of the pits at Kingsdown Camp was found to have a natural rock floor and sides lined with stone slabs. Among the hundreds of pits at Danes Camp, Conderton, were found many lined with drystone walling, similar to those discovered in 1856 on Walton Down, Clevedon, with 'walled lining' (Dymond and Tomkins, 1886, 6). A pit at Poxwell had been re-used (after it had become partially filled-up) by the introduction of a stone floor and lining; this latter arrangement was interpreted by the excavator as a corn-drying oven (Wacher, 1968), but credence must await the full report. A stone-cut pit at Pennygent Gill had been lined with drystone walling and corbel-roofed with stone slabs, but is

unfortunately, undatable (Raistrick, 1939, 131-3). Two of the pits at City Farm East had been lined with compacted stony loam and were interpreted as pits for roasting iron ore on the evidence of iron slag found in them (Case et al., 1965, 43 f.).

An unusual stone-lined pit at Sheepsleights was considered by Calkin to date to Hawkes' period I.A.A (in a letter, 1965, to H.C. Bowen, to whom I am indebted for the information). This rectangular pit, 8 x 6½ ft. and 3 ft. deep, was found to be lined with slabs of stone, half-burnt on their inner sides, and to contain patches of burnt grain mixed with clay. The presence of grain and the evidence of burning suggest that the pit was designed for grain storage, but, if it does date to the mid first millennium B.C., it is unusual in its form. The pit might have been used for drying corn in the ear; the depth of the pit would allow a fire to be laid on the floor (thus accounting for the evidence of burning on the stone lining) and the corn to be laid on a rack across the mouth of the pit without too great a risk of setting fire to the corn. Calkin noticed that gaps had been left between the stone slabs in each corner, and he suggested that posts might have been set in the gaps. Such posts could support a wooden rack. Feachem discussed briefly the use of stone-lined pits in central and northern Scotland, without describing their form, and prefers to interpret them in terms of storing meat, tanning or even wolf-trapping (1957, 50).

It is possible that the rectangular pit at Sheepsleights was designed to hold silage. This might be true for many stone- and clay-lined pits, and is an explanation which is normally overlooked. Used as winter fodder for cattle, the

feeding value of silage is considerably higher than that of root crops. The gaps in the stone lining of the pit would allow drainage. Fraser Darling recommends a pit 3 ft. deep and 12 ft. square for silage, preferably lined with concrete or clay and fitted with some means of drainage (Fraser Darling, 1945, 64 f.). Such a pit will hold the full June mowing of two acres of grass.

Unlined pits of similar rectilinear dimensions occur elsewhere, and may perhaps bear tentative interpretation as silage or manure pits. Three were found at West Blatchington, the largest of which measured 12 x 9 ft. and about 4 ft. deep (Norris and Burstow, 1950; 1952), while a pit dug into gravel at Long Wittenham measured 19 x 15 ft. and 2 ft. 3 ins. deep (Savory, 1937). The latter dates to the mid first millennium B.C., for it yielded sharply carinated bowls, finger-tipped situlate jars and a bronze axe-pendant. In view of this dating, it is significant to note examples of similar pits dating to the early first millennium and second millennium B.C.; two at the Deverel-Rimbury site of Itford Hill in Sussex, for example, measured 5 x 6 ft. and 1½ ft. deep, and 3 ft. 4 ins. x 6 ft. and about 1 ft. deep, respectively (Burstow et al., 1957).

Deliberately laid floors are a more common feature in pits than linings. Their value would be in forming a barrier between the grain and the potential dampness of the subsoil into which the pit had been dug. The most extraordinary example of such a floor is that at Worlebury, where, in one pit, was found 'a flat board under the grain, and strips of wood to separate the kinds' (Dymond, 1902, 77). Evidence for wooden floors were also found at Fifield Bavant and Aldwick, and although these three are the only surviving examples, there is no means of telling how common a feature this may have been

elsewhere. Stone and chalk paved floors occur on several sites, while at others a basal layer of stones fulfilled the same purpose. A pit was excavated at Down Barn West which proved to have a lining of flints to a height of 2 ft. above the chalk bottom, with clay filling the medial space; the flints were interpreted by the excavators as support for some form of flooring, possibly basketwork, (Fowler et al., 1965, 59). It was suggested that the clay might represent fallen pit-lining, but it seems possible that the clay had been placed deliberately at the bottom of the pit in order to keep the flints in place.

A pit in use for grain storage needs to be covered and sealed. Five clay roofs or 'domes' were found in situ at All Cannings Cross (Cunnington, 1923, 64, 73, pits 39, 40, 45, 46, 51), and, oddly, remain the sole examples of their kind. One had been strengthened by the addition to the clay of a layer of sherds (op.cit., 61, 67, pit 39) and another by the addition of small flat chalk lumps (op.cit., 61, pit 46), while the lower surfaces of all clay roofs were studded with pebbles for the same purpose (op.cit., 61). These five pits possessed sloping extensions beyond the perimeter of their roofs; the excavators termed these extensions 'entrance passages', on the grounds that the clay roofs were impenetrable and immovable, and interpreted the pits as ovens (op.cit., 61). It is difficult to envisage, in practical terms, how these pits were used, either for storage or for corn-drying. Access by means of the 'entrance passages' would be most awkward, and, if used for storage, rain-water would be directed into the pit through the chalk rubble blocking the extension. It is not necessary, of course, to accept that the clay roofs remained

in position, but this will not lessen the problem of the unroofed extensions. Clay considered that several of the pits at Fifield Bavant had steps and openings from one into the other (1924, 469-471), but the drawn sections suggest that these are examples of composite pits, with secondary pits dug partially into existing pits.

A number of pits have, on excavation, produced lumps of burnt and unburnt clay or cob which may represent the remains of pit roofs, but there are several alternative explanations for the presence of such fragments as rubbish.

The use of basketry linings in pits has been indicated on four sites. Wicker impressions were found on the clay lining of pits at Rotherley and Dane's Camp, Conderton, while possible traces of the basketry itself were found at Poxwell and Worlebury. Bowen points out that these wicker linings would be removed from the pits after each season of storage in order to dry them, for the labour involved in making them must have rendered them too valuable to abandon (in lit.; c.f. Bowen and Wood, 1967, 9). He suggests that this may account for the rarity of wicker remains on sites; a further factor may be the burning-out of pits between seasons.

It is possible that textile containers were used within pits, but this type of evidence is unlikely to survive normally. Traces of a sack were found, together with grain and an iron sickle blade, in a pit at Longbridge Deverill Cow Down (Annable, 1961, 32).

Food storage in pits must inevitably involve fumigation of the pit by fire during its lifetime, in order to destroy bacteria. Traces of burning are one of the most common

features of excavated pits, often in the form of thick basal layers of ash which may represent the firing *in situ* of rotten wickerwork linings. Among the older records of excavations there is frequently mention of 'hearths' on pit floors; this interpretation of burning originated in the concept of 'pit dwellings'. Scorching on the sides of pits at Marnhull was taken to indicate that hot hearth material had been thrown into them (Williams, 1950, 25), but fumigation is probably a more likely explanation. It may be noted that the modern use of storage pits in Cyprus involves drying the corn by means of heating the pit previously by a fire which is then cleared out before filling the pit with grain (Bowen and Wood, 1967, 4). The list which follows does not include pits which merely contain ashes and charcoal in the body of their filling, for such traces are likely to derive from hearths and bonfires elsewhere in the settlement.

There remains a large number of pits which show none of the evidence already noted for their use; in many cases, the lack of evidence is owing to the poor standard of record, but in others, it is obvious that the pits were originally featureless. This makes detailed interpretation impossible beyond the probability of storage. It has been demonstrated that successful grain storage is possible in unlined pits (Reynolds, 1967, 69). The discovery at Mucking, Thurrock of a small pit dug into gravel and containing an upright pottery storage jar proves that small size and lack of features are not evidence against the use of a pit for food storage (MOW, 1967, 8). This method of storage would be particularly appropriate to gravel and heavy clay soil conditions. Bersu suggested that shallow pits of his Group A at Little Woodbury might have held

vessels (Bersu, 1940, 63).

Finally, there is that category of evidence which involves finds of grain in pits, a rare occurrence in the archaeological record. The amount of grain, barley and wheat, is normally small, with the exception of Pit 46 at Fifield Bavant which produced a bushel of barley. The discovery of horsebeans at Marnhull (Williams, 1950, 69) may represent storage of food other than cereals. An interesting point has been raised recently about the relative advantages attached to storage in pits and above gr ound in timber granaries (Wainwright, 1968, 116). Grain was found at Berwick Down South both in pits and in the post-holes of timber structures interpreted as granaries; on analysis, most of the grain from the pits proved to be wheat, while most of that from the granary post-holes was barley. It was suggested that above ground storage might be most suitable for barley, since this type of grain would be harvested early and would, therefore, be drier than wheat harvested later in the season in wetter conditions. He pointed out also that barley grains tend to pack more tightly than wheat and would benefit from the air circulation available in above-ground granaries.

Attention has been drawn in recent years to the question of ritual shafts, following discoveries of late second millennium B.C. shafts in Eastern Europe, especially Czechoslovakia, and in Britain. A study of later first millennium B.C. ritual pits and shafts has been carried out by Ross (1968), the relevance of which to the present work is that it begs the question of the distinction between normal pits for storage or other purposes and ritual shafts. Ross includes, for example, a pit at Danebury in Hants. which measured 4 ft. 10 ins. in diameter and 8 ft. deep as a ritual shaft, although it fits quite happily into the category of normal storage pits

/but

ignores a pit at the Caburn in Sussex which has a tapering shaft 13 ft. deep (Allcroft, 1908, 284).

It is not proposed to give a full catalogue of storage pits, for this is a subject requiring detailed and specific research into individual pits, including many unpublished examples, the records of which exist in local museums. A list is provided, however, in the catalogue to Part I of the small storage pits of the later second and early first millennia B.C. Apart from about thirty additional sites in areas already represented on Piggott's map (1958, 10), the distribution of storage pits has widened to include Lincolnshire, Norfolk, Suffolk and Essex in East England, and Herefordshire in the Welsh Marches. Stead has discounted the Scarborough pits as examples of storage pits (1965, 71) but they are deep enough to qualify as such. Driffield provides another example of storage pits in Yorkshire; those at Pennygent Gill and The Hulleys cannot unfortunately be dated, and the dimensions of the pits at Granger's Pit have not been published (Brewster, 1963, 145). Those at Gubeon Cottage in Northumberland are included tentatively in the survey for they cannot certainly be attributed to the pre-Roman period.

The north-west boundary of the Woodbury type of economy thus remains, in terms of storage pits, approximately along the line of the Jurassic Ridge with only a few sites beyond that line (Piggott, 1958, 12). Recent excavations at Staple Howe and Grimthorpe have emphasized the absence of storage pits on the whole in northern Britain, but have demonstrated the possibility of grain storage above ground in timber granaries.

The implications of this form of evidence, together with that of field-systems, will be discussed later. Wheeler observed that the absence of storage pits north of the Jurassic Ridge cannot be explained in terms of geology, for they are not confined to chalk sub-soils in the south (1954, 27 f.). They are frequently found on gravel and limestone, and even on clay sub-soils. There is a tendency for pits dug into gravel to be smaller than those dug into more stable sub-soils, though the practical difficulties of achieving a deep pit under gravel conditions were overcome at Chadlington by the use of a clay lining. Comparison of the date and dimensions of individual pits shows that shallow examples are either very early (e.g. Kingley Vale, and the palisaded phase at Blewburton) or dug into unstable sub-soils (e.g. City Farm West, Mount Farm). The pits on sites which have been extensively excavated show a considerable range of size and capacity, and this reflects probably the variety of uses for which they were dug.

The absence of storage pits from sites which have been extensively excavated south of the Jurassic Ridge is significant for the spread of the Woodbury type of economy within that area. Although too little of the internal area of Ivinghoe Beacon has been excavated to allow any conclusions to be drawn from the apparent lack of pits, they are certainly absent from Heath Row and West Harling (though the excavations were confined to the house-enclosures at the latter site, and pits may exist in the surrounding area). These settlements occur, however, in an area in East England where storage pits are not a frequent feature and where agriculture may not have played a significant part in the economy before the first century B.C. (Piggott, 1958, 8 f.).

Small pits have been found on other sites at Thurrock, and the discovery of a storage jar in one of them may indicate a means of storing limited amounts of grain (though the commodity thus stored need not have been corn; MOW, 1967, 8). Saddle querns and impressions of grain on pottery from West Harling support the consumption of corn.

3. 'Celtic' Field-systems

This subject has been discussed fully by Bowen (1961, with an excellent bibliography), and regional surveys have been carried out notably by the Royal Commission on Ancient and Historical Monuments in Dorset (1952), the Victoria County Histories in Wiltshire (1957), by Crawford in Wessex (1928; 1929), Hope-Taylor in Surrey (1948), Rhodes in Berkshire (1950) and the Curwens in Sussex (Curwen and Curwen, 1923; Curwen, E.C., 1929; 1937). The Ordnance Survey map of Roman Britain shows the distribution of surviving fields throughout Britain (1956), and detailed distributions of those in central Hampshire and on part of Salisbury Plain were mapped by Crawford and the Ordnance Survey (Crawford, 1928, end map; OS, 1933). These surveys have been concerned primarily with 'Celtic' fields rather than strip lynchets, and, since the former are the predominant type of field during the first millennium B.C., they are also the primary subject of the present discussion.

The term 'Celtic' field is generally accepted as a useful label, although the Celtic element is meaningless in terms of date and ethnic context, for it serves to distinguish this type of field from strip lynchets and plot-cultivation. Bowen defines the essential characteristics of 'Celtic' fields as small size and approximate rectangularity (1961, 2), and they are visible on the surface as conjoining areas delimited by earthen banks (or lynchets) or by rows of boulders (pls. XX, XXI).

A statistical analysis based on percentage histograms

XX. 'Celtic' field-system, Sheep Down, Dorset.

XXI. 'Celtic' field-lynchets, Crow Hill, Dorset.

has been carried out by Atkinson in connection with 'Celtic' field-systems in Dorset (unpublished). He examined some thirty thousand acres of fields, comparing the dimensions of individual examples and the acreage of groups of fields (groups separated from one another by more than a quarter of a mile were considered to represent individual field-systems). The most frequent size of each field was found to be between ½ - 1½ acres, and, although the most frequently recurring measurement both of length and breadth was 200 ft., fields were found to be predominantly rectangular in shape. A total of 152 field-systems were recognised and most covered less than 75 acres, although some extended over as many as one thousand acres.

An analysis of this sort is invaluable not only for defining the average 'Celtic' field-system but also for attempting to assess the size of contemporary communities. This last involves the problem of dating field-systems; Atkinson's sample included fields of wide chronological range from at least the later second millennium B.C. into the Romano-British period. Datable sherds of pottery are frequently picked up from the surface of 'Celtic' fields (their presence may be explained in terms of manuring arable land with the contents of the farmyard compost-heap), but these may relate only to one period in the use of the fields. The most acceptable method of dating is by association with settlements of known date; the evidence for this will be discussed later. The application of Atkinson's statistical method elsewhere depends upon the availability of adequate information, and this is in fact limited.

The list of surviving 'Celtic' field-systems in Wiltshire

involves a total of about thirty thousand acres divided into 160 groups (VCH, 1957, 272-279). The smallest of these groups covers about 20 acres and the largest 1,500 acres, but most extend over areas of between 20 and 150 acres (86 groups). Of these, the most frequently recurring size lies between 50-75 acres (39 groups). These conclusions compare well with Atkinson's results for Dorset. It may be noted that groups of fields in which 'Early Iron Age' pottery has been found are predominantly between 100-300 acres in extent (12 out of 19 groups).

Individual field dimensions are not available for Berkshire, but almost 7,500 acres of 'Celtic' fields are known; by adopting Atkinson's criterion of separation by a quarter of a mile, Rhodes has distinguished twenty-six groups (including the Sparsholt/Eastmanton Group in the postscript to Rhodes, 1950). The acreage of these groups varies from 5 to 1,945, but the majority covers 5 - 220 acres (21 out of 26 groups). The most frequent acreage of groups of fields in Berkshire is thus apparently greater than that in Dorset and Wiltshire. With regard to surface finds of pottery, most groups have yielded only Romano-British sherds (17 groups; op.cit., 13); although surface discoveries are unreliable, it may be tentatively suggested that the increase in size of Berkshire field-systems reflects the growth of agriculture in the area in Romano-British times. Rhodes listed thirty-seven Romano-British sites in Berkshire, whereas only seven sites have revealed the presence of pre-Roman storage pits.

In discussing 'Celtic' fields in Sussex, Curwen observed that they tended to be rectangular in shape, that their length was rarely more than 400 ft. and that their breadth was usually

over 100 ft. (1929, 77). The measurements for individual fields of six Sussex groups have been provided by the Curwens (1923, 49). These six groups total 113 acres and each is small in comparison with size of field-systems in Dorset and Wiltshire; the largest is that at Buckland Park where the fields extend over an area of 33½ acres. The value of conclusions drawn from a sample of only six groups of fields is limited, but it may be noted that most of these fields enclose ½ - 2 acres and that most of them measure 300 - 450 ft. in length and 100 - 250 ft. in breadth.

Detailed information is even more limited in Surrey, where the discovery of 'Celtic' field-systems is more recent than in Wessex and Sussex (Hope-Taylor, 1948). Dimensions are provided for a single group of 25 fields on Farthing Down, which covers a total of 38 acres (op.cit., 54); most fields lie between 1 - 1½ acres in extent, though the largest covers over 4 acres. They are predominantly long and narrow in shape, for the most frequent breadth is 100 - 200 ft. while the most frequent measurements of length fall into two groups, the first of which is 350 - 450 ft. and the second is 500 - 550 ft. In view of the fact that these fields are characteristically long and narrow, it may be noted that their use seems to have been confined to the period from the late first century B.C. to the second century A.D. (op.cit., 59 f.). Bowen has suggested a Romano-British context for long fields which are normally characterised by proportions of 4 or 5 to 1 (1961, 24). Although a number of settlements are associated with field-systems, little information is available about the total acreage of those fields. The ideal would be a settlement where the number of houses was known in association with a

field-system of known extent, but this is unfortunately lacking. Farley Mount is unexcavated but shows an enclosure containing 6 acres associated with some 60 acres of 'Celtic' fields, and the latter figure may be considered reasonably normal on the basis of the above analyses. Using the figure adopted by Bersu for the consumption yield of corn per acre (7 bushels), this field-system might provide 420 bushels of consumption corn each year. Again using Bersu's figure for the annual consumption per head (4½ bushels), this would provide corn for about 90 people. A settlement enclosure covering 6 acres would hold this number of people comfortably; allowing four people to an average timber house 30 ft. in diameter, this would involve three or four houses per acre (less crowded than Heath Row but considerably less spacious than Berwick Down South).

Several methods of demarcating 'Celtic' fields seem to have been used. The simplest is the baulk or unploughed strip which is then heightened into a lynchet both by the action of ploughing which displaces the soil and by the deposition of stones in the course of field-clearance (e.g. Mills, 1949). A small ditch was found at the edge of the field at Gwithian and represented the primary form of field-division; it was followed by a more normal lynchet and a stone bank which probably represents field-clearance (Megaw et al., 1961, 208 f.). Evidence suggesting the use of a fence was found at Fifield Down (Fowler, 1967, 24). There is a striking contrast between the fields in southern England and those in Wales and N. Britain in the disposal of stones from field-clearance; in the south, stones were normally piled along the edge of the field as a linear bank, whereas in Wales

and the North the cairn of stones is a characteristic feature of all forms of ancient cultivation.

It is possible that many fields which survive as long narrow fields represent two or three pre-Roman fields which were later amalgamated into single long fields by removing the dividing lynchets. The probability of this observation has been demonstrated at Totterdown, where the original field-system consisted of rectangular fields up to 200 ft. long; the lay-out had then been altered, removing some lynchets to obtain fields measuring about 500 ft. in length. Excavations showed, on the basis of pottery from the ploughsoil of the fields, that the whole process from the original setting-out of the fields to the use of the altered fields had taken place within the later first and early second centuries A.D. (Bowen and Fowler, 1966, 58 f., fig. 9). These fields had been laid out on either side of a contemporary trackway, and this arrangement may be seen in a number of field-systems. These are known as double-lynchet trackways owing to the effect of ploughing in the fields on either side; where the track runs along the crest of the ridge or spur, a negative lynchet is formed on either side, and where the track runs along the contours of a slope a negative lynchet is formed on its lower side and a positive lynchet on its upper side. It is possible that some of these double-lynchet ways are in fact merely ditches demarcating areas of fields belonging to separate communities, but others are certainly tracks. The example on Park Brow was proved to be a track by excavation, for it consisted of an 18 ft. wide strip bordered by small ditches (Wolseley et al., 1927, 36-8; a similar trackway was excavated at Buckland Bank, Curwen and Curwen, 1923, 35-8). Double-lynchet tracks are a feature of field-systems from the later

second millennium B.C. onwards; one is associated, for example, with the Deverel-Rimbury settlement of New Barn Down.

The distribution of 'Celtic' field-systems has been depicted by Piggott and the Ordnance Survey and need not be repeated here (Piggott, 1958, 8; OS, map of Roman Britain, 1956). The main concentrations lie on the chalklands of Wessex and Sussex, with a further concentration belonging to the Roman period in the fenlands round the Wash. The pattern of distribution is likely to be misleading to some extent, simply because it can show only those areas of fields which have not been obliterated by modern deep ploughing. The chief areas of first class arable in 1939 were the Fenland, the Humber warplands, S.W. Lancashire, the loams of the Thames gravel terraces, the dip slopes of the North Downs and the Sussex coastal plain (Coppock, 1964, 37). Traces of 'Celtic' fields in these areas could only be recognised, as in the Fens, by the use of air-photographs. The thin calcareous soils of limestone and chalk areas and the grey-brown podsolic soils of Old Red Sandstone, Triassic rocks, glacial loam and sand areas are easily ploughed though not first-class arable land (op.cit., 35 f.). These include the southern chalklands and the Lincolnshire and Yorkshire Wolds, the Cotswolds, the Plain of Hereford, the lower Trent valley and Norfolk, and the soils in these areas are liable to have little depth. Modern ploughing would swiftly remove traces of earlier field-systems. This may be demonstrated by the detailed topographical distribution of 'Celtic' fields on the chalklands of southern England; surviving fields are found frequently on the slopes of the downs (sometimes extending into the heads of combes, e.g. pl. XXI) below the limits of modern ploughing on the ridge-tops

and upper plateaux. The distribution of storage pits, granaries and drying-racks implies cultivation in several of these areas where the soils are suitable for primitive agriculture but where traces of 'Celtic' fields are lacking (e.g. the Plain of Hereford, the Lincolnshire Wolds, Norfolk).

The accompanying map shows the distribution of types of grain found on sites of the later second and first millennia B.C. (fig. 35). Different varieties of cereal are suited to different climates, and it is useful to summarise the predominant distributions in 1959 (op.cit., 69-77). The cultivation of barley was concentrated in Norfolk and Suffolk and on the chalklands of Berkshire, Hampshire and Wiltshire in S. England and the Yorkshire Wolds, while wheat predominated in Sussex, Kent, Essex, the Fenlands, the Midlands and S.W. Lancashire. The cultivation of oats was a primary feature of agriculture in Wales and N.W. England. Comparison with the distribution of grain found on settlements of the second half of the first millennium B.C. is not, unfortunately, helpful, probably because the survival of actual grain is not representative of the distribution of cereal types cultivated at that time (a list is provided in the catalogue of sites included in the present study where grain has been found; see also, Helbaek, 1952).

Since the known distribution has not altered radically, the conclusions drawn by Piggott in connection with 'Celtic' fields and the economic boundary of the Jurassic Ridge still hold good (1958, 7 f.). There may have been cultivation elsewhere on a less permanent basis than field-systems, leaving no trace on the surface; hoe-plots and arable fields are recognisable because they are enclosed, but limited,

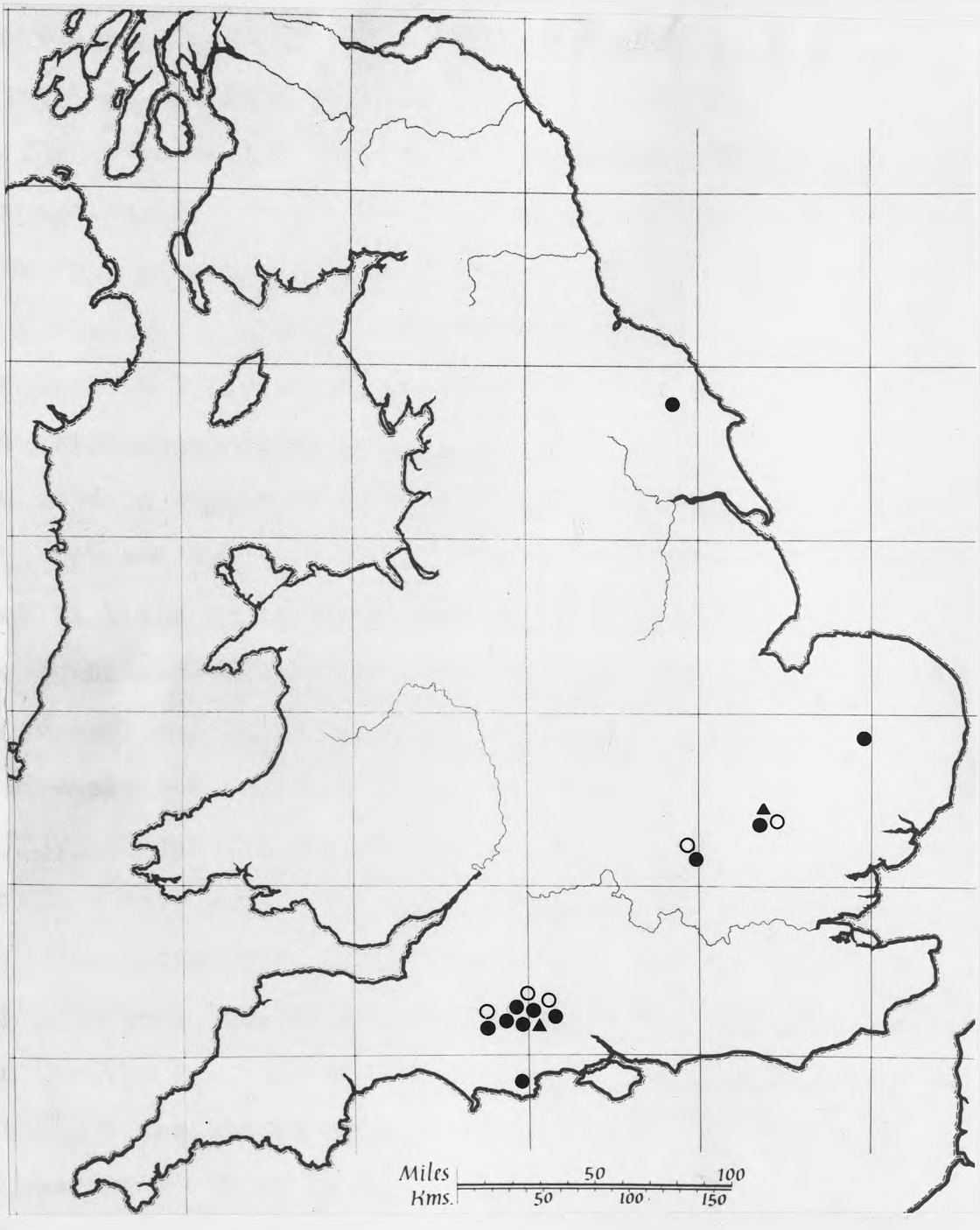


Fig. 35 Distribution of grain from settlements

● wheat ○ barley ▲ oats

impermanent cultivation such as that at Weston Wood becomes apparent only on excavation. Pollen samples from soil sealed beneath the outer ramparts of Bonchester Hill, Roxburgh, indicated that the land had been cultivated to some degree before the defences had been built (Dimbleby, 1960). This sort of agriculture is in keeping with the nature of Piggott's Stanwick Type of economy, based on pastoralism (1958, 14).

Bonney has recently published an analysis of the topographical and geological contexts of Iron Age and Romano-British settlements in Wiltshire, showing that pre-Roman sites are confined to easily-worked soils and tend to be situated on hill-tops and spurs. Romano-British sites are not wholly confined to light soils and predominate in lower-lying areas, especially hill-slopes and valleys (1968). He suggested that this move to lower situations and sometimes to heavier soils might be explained in terms of agricultural development (op. cit., 37). Seventeen groups of 'Celtic' fields in Wiltshire have yielded only Romano-British sherds, involving a total area of 3800 acres (VCH, 1957, 273-278); they are situated on slopes between 300-700 ft. above sea level, most frequently between the 550 ft. and 650 ft. contours. This would appear to contradict the theory of a shift in arable to lower-lying areas, but the survival factor is involved here and the resulting topographical distribution may represent only part of the original pattern.

Sherds of pottery from the ploughsoil of 'Celtic' fields can do little more than indicate the period of use and can rarely be used to date the original laying-out of the fields. A hoard of bronze armlets was found in a 'Celtic' field at Ebbesbourne Wake in Wiltshire and may be dated to the eleventh

century B.C.; the hoard appeared to have been left on the surface of the field rather than buried in the plough-soil (Shortt, 1949, 105 f.). Buried or not, the presence of the hoard indicates that the field was no longer in use after its deposition. Apart from this instance, dating evidence for fields relies upon their association with settlements, barrows and linear earthworks. There is a growing body of evidence derived from stratigraphy to indicate an early date for the inception of plough cultivation; plough-furrows have been found beneath a Neolithic long barrow at South Street, Avebury, Wilts., and ploughing at Gwithian, Cornwall, has been dated to the end of the Early Bronze Age (WAM, 1967, 124; Megaw et al., 1961, 204-214).

A number of round barrows seem to overlie the lynchets of fields, but the only reasonably certain example is the Deverel Barrow in Dorset (Miles, 1826, 17; Bowen, 1961, 30). The Curwens drew attention to the implications of two round barrows overlying lynchets on Middle Brow and Offham Down in Sussex as early as 1923 (53 f., 58). Two disc barrows at Grafton in Wiltshire appear to overlie lynchets, but Bowen has argued that the barrows are primary, on the grounds that their banks are overlain by ancient ploughsoil (1961, 16, 30). Nevertheless, the angle between the barrows and the lynchets suggests that a threefold sequence should be seen here; the barrows were placed on top of the lynchets of an existing field, and ploughing was resumed afterwards. The univallate enclosure on Ogbourne Maizey Down in Wiltshire overlies part of a field-system; the enclosure has been attributed to the Deverel-Rimbury period but evidence is unfortunately scanty (Piggott, C.M., 1942, 52).

Several Deverel-Rimbury settlements are associated with contemporary fields in Sussex and Hampshire, though, as Bowen pointed out, contiguous earthworks are not always contemporary (1961, 29). For this reason, presumably, he discounted the apparent association of fields and settlement at Itford Hill, but their contemporaneity is surely likely enough to warrant acceptance. It is more difficult to establish the relationship of the Park Brow house-sites to the field-system in which they are situated. The enclosure on Martin Down is likely to be related to the univallate linear earthwork to the south-west, and this dyke is certainly associated with the fields laid out on either side. Another linear earthwork to the east of the enclosure contained pottery comparable with that from the enclosure and may be seen to be later than one part of the field-system but possibly contemporary with another part (Pitt-Rivers, 1898, 190; Bowen, 1961, 35, 23, fig. 3A). The pottery need not imply that the dyke is contemporary with the enclosure, but, if it is derived from the ploughsoil of the field-system as Bowen suggests, it may date the use of the fields.

There are many examples in Wessex of linear earthworks related to 'Celtic' field-systems, but it is not always possible to establish the nature of the relationship. One of the best illustrations of fields laid out against existing linear earthworks is still that discovered from the air by Crawford at Beach's Barn, Fittleton (1928, 40 f., pl. XIV), and another may be seen on Amesbury Down (OS, 1933). The latter complex also includes fields lying across the line of dykes, but it is not possible to distinguish the sequence represented. Dykes cutting across earlier lynchets occur

frequently, though this need not imply that the field-systems involved had as a whole gone out of use; in many instances, it is clear that the dykes separate areas of arable from those of pasture (the function of these dykes of the plateau and contour classes will be discussed in the following section). There are also cases where dykes are overlain by field-systems. The construction of this type of linear earthwork may be dated to the Deverel-Rimbury period, and the stratigraphical evidence provided by associations of dykes and fields is a useful source of relative chronology for individual field-systems.

The relationship of dykes and fields on Figheldean Down has been used by Applebaum as the basis for a complex hypothesis concerning agricultural practice during the second half of the first millennium B.C. (1954). His ideas are stimulating, but the actual evidence at Figheldean does not support his sequence there (it was not possible then, as it is now, to re-check Crawford's air-photographs on the ground, but, even so, the plan which Applebaum used does not support his interpretation; c.f. original plan, Crawford, 1928, opp. 42). Briefly, the following points should be noted. The 'Paddock' is clearly earlier, not later, than Applebaum's Northern Group of fields, for the fields are laid out in relation to the N.E. boundary of the 'Paddock' and at least one lynchet may be seen to overlie it. His arguments for the continuation of ditch C across to the 'Ellipse' and for the contemporary date of the track F with any part of the Figheldean complex are founded on pure speculation and cannot be used as evidence for further speculation (1954, 109). He interprets the ditches, and those elsewhere in the area, as droveways contemporary with the hill-fort of Sidbury (op.cit., 111); they are boundaries,

not droveways, and are almost certainly overlain by Sidbury. They stop short of the defences of Sidbury in a manner which indicates that they are overlain by the fort, and fieldwork in 1967 confirmed the traces seen on an air-photograph of one of the ditches continuing across the interior of the fort (Allen air-photograph, Devizes Museum; indicated on OS maps of the area as a footpath).

Two pre-Iron Age settlements of the later first half of the first millennium B.C. are related to 'Celtic' fields. Kingley Vale is set within a field, utilizing part of a lynchet, and may be either contemporary with or secondary to the field-system; the same conclusion is true for Amberley Mount, where two houses are set within some 80-90 acres of fields.

Many settlements belonging to the middle and later first millennium may originally have been associated with 'Celtic' field-systems, the traces of which are situated nearby, but others can be directly associated with fields. Fifield Down (Site ODXI/A) preceded the formation of a lynchet, though the field-system cannot certainly be attributed either to the pre-Roman Iron Age or the Romano-British period (Fowler, 1967, 22, 24). Contemporaneity has been proved by excavation at Eldon's Seat, and the enclosure on Knighton Hill is clearly secondary to the fields which underlie it; the remaining sites in the catalogue are either contemporary with or earlier than the associated fields. The houses at Eldon's Seat were stratified in relation to a lynchet and it may be noted that ploughing continued after occupation had ceased, representing re-use of the same fields by a later community (Cunliffe et al., 1968, 204). Two phases of ploughing are

evident in the field-system on Chute Down in Wiltshire, for a secondary hollow-way cuts through one field and subsequent ploughing has created a new lynchet against it (WAM, 56 (1961), 37).

'Celtic' fields indicate normally the use of traction ploughs. Bowen has suggested that the small fields on the slope of a spur south of Kingston, Dorset, indicate cultivation with a hoe, on the grounds that the angle of the slope would make ploughing impossible (1961, 21). The homestead at Weston Wood, Surrey, is associated with two cultivation plots which were hand-dug, probably with a spade; the evidence is in the angle of the V-shaped furrows and in the size of the plots (each measured about 23 x 28 ft.; Harding, 1964, 13). These must be termed cultivation plots rather than fields and they represent an entirely different economy from that represented by 'Celtic' fields. The difference may be likened to the modern contrast between crofting and farming economies. The Weston Wood plots are so small that they might be considered in terms of a vegetable garden (though grains of wheat and barley were found; Harding, 1964, 14), but cultivation plots elsewhere are large enough to allow very limited production of corn. Those at Wayworth in Yorkshire are curvilinear in shape and measure about 80 ft. in diameter and about 110 x 180 ft. respectively; these are particularly interesting because they are accompanied to the immediate west by a 'Celtic' field-system (Elgee, 1930, 146 f.). Neither type of cultivation can be dated, but it is possible that the small curvilinear plots were succeeded by the field-system (the individual fields of which are only a little larger in area than the big cultivation plot).

It is probable that these plots were contemporary with 'Celtic' field-systems elsewhere, and that they reflect a predominantly pastoral economy. The small 'garden' plots at Weston Wood may be dated, if their association with the homestead is accepted, to about the sixth century B.C.

4. Linear Earthworks

'....many a long, though anxious chace, have I been led in the investigation of them' (Hoare, 1821, 108).

The classification followed in this section was put forward in an unpublished B.A. thesis on the linear earthworks of Wessex (Cardiff, 1965); the study of this type of earthwork is now extended to include comparable examples in other parts of Britain, for it is evident that they form an important aspect of the social and economic context of settlements from the later second millennium B.C. until the Romano-British period in those areas. The material for the study has been derived primarily from the work of the Royal Commissions on Ancient and Historical Monuments in Dorset and the Cheviots (RCAHME, 1952; RCAHMS, 1956), from the work of Hoare and Grinsell in Wiltshire (Hoare, 1812, 1821; VCH, 1957, 249-260), the Curwens in Sussex (Curwen, E. and E.C., 1918; Curwen, E.C., 1951), the Foxes in Wales (1935; Fox, A., 1937; Fox, C., 1955) and Mortimer in Yorkshire (1905). This has been supplemented with extensive field-work in Wiltshire and selective field-work in Dorset, Hampshire, Berkshire, Sussex, Yorkshire and the Cheviots, over the years 1964-9.

Linear earthworks were first recognised as a major class of field monument by Hoare at the beginning of the nineteenth century, and the results of his meticulous field-work form an important source of information, in conjunction with air-photographs, for tracing ploughed-out earthworks. Hoare seems to have originated the use of the term 'covered-way' in

connection with linear earthworks, and this idea was developed in the present century by the Curwens in connection with Sussex dykes (Hoare, 1812, 196; Curwen, E. and E.C., 1918). The term was derived from military practices, and may be illustrated from a War Office manual of field-engineering; 'communication trenches' are there explained as bivallate linear earthworks, while 'cover trenches' are univallate earthworks (1914, 29). This idea of 'covered ways' or protected trackways was repeated as recently as 1954 by Applebaum.

Mortimer succeeded Hoare in the study of dykes, though he was working in Yorkshire, and put forward the idea of their function as boundaries separating arable from pasture as well as 'ways of communication' (1905, 378). The theory of economic boundaries between arable and pasture was taken up again by Crawford in 1924, utilising the advantages of air-photography. During the following decade, Stone carried out a series of excavations in Wiltshire and obtained important dating evidence for dykes, while Hawkes published a paper on Quarley Hill in which he established the stratigraphical relationship of ditch system to hill-fort (Stone, 1932; 1936; Hawkes, 1939).

Stone's excavations at Boscombe Down East gave rise to the idea that linear ditches might be part of the Deverel-Rimbury cultural complex (1936), but this complex has never been fully examined in print. Cross-ridge and cross-spur dykes were studied by Fowler in a regional survey based on the Ebble-Nadder ridge west of Salisbury, and were assigned tentatively to the middle of the first millennium B.C. (1964, 51). The present study will differentiate between the dykes of these two mai

periods and will demonstrate that their use (and economic implications) are not confined to Wessex.

Linear earthworks may be divided into two main typological and chronological groups. The first consists of plateau and contour dykes (classes I and IV) and the second of cross-ridge and cross-spur dykes (classes II and III). Plateau and cross-ridge dykes occur both in univallate and bivallate form, while contour and cross-spur dykes are invariably univallate; their form is primarily related to the topographical context, and, for this reason, the criteria upon which the classification is based are essentially topographical. This emphasis upon topography is justified when the mechanics of digging a ditch are considered; it is extremely difficult, when constructing a ditch on a slope, to place the material derived from the ditch on its upper lip. Even if this were accomplished, the first heavy rainfall would wash the bank back into the ditch. Ditches dug on a slope are therefore univallate in form, and this is an unsatisfactory criterion for classification. When conditions are equally favourable for a univallate or a bivallate dyke (i.e. on level ground), its form must be related directly to its function and thus becomes an interpretative feature.

i. Plateau and Contour Dykes in Wessex

These two classes of linear earthwork occur predominantly on the chalklands of Wessex and Yorkshire, where they follow a continuous course often forming extensive systems over large areas of land. Their names indicate the topographical situations in which they are found, for plateau dykes occur on the gently undulating surface of plateau areas while contour dykes are found on slopes where they run approximately parallel to the contours. The latter are invariably univallate in form, with the bank on the lower side of the ditch (figs. 36, 38). Plateau dykes occur both in univallate and bivallate form, with occasional trivallate examples, and the banks of bivallate and trivallate dykes are always of equal size.

The discussion will deal separately with the earthworks of Wessex and Yorkshire, for, although they belong to the same types and fulfil similar functions, they are very different in date.

The Wessex dykes represent part of the Deverel-Rimbury complex, though some probably continued in use into the mid first millennium B.C. Their distribution is more restricted than that of the Deverel-Rimbury Culture in general, for none exist in Sussex or Surrey, few in central Hampshire and none in the East Anglian area. The attribution of these types of linear earthwork to the Deverel-Rimbury Culture arises largely from their stratigraphical relationship with sites belonging to earlier and later periods, and is thus a process of elimination rather than one of direct association with that Culture. For this reason, the former category of evidence

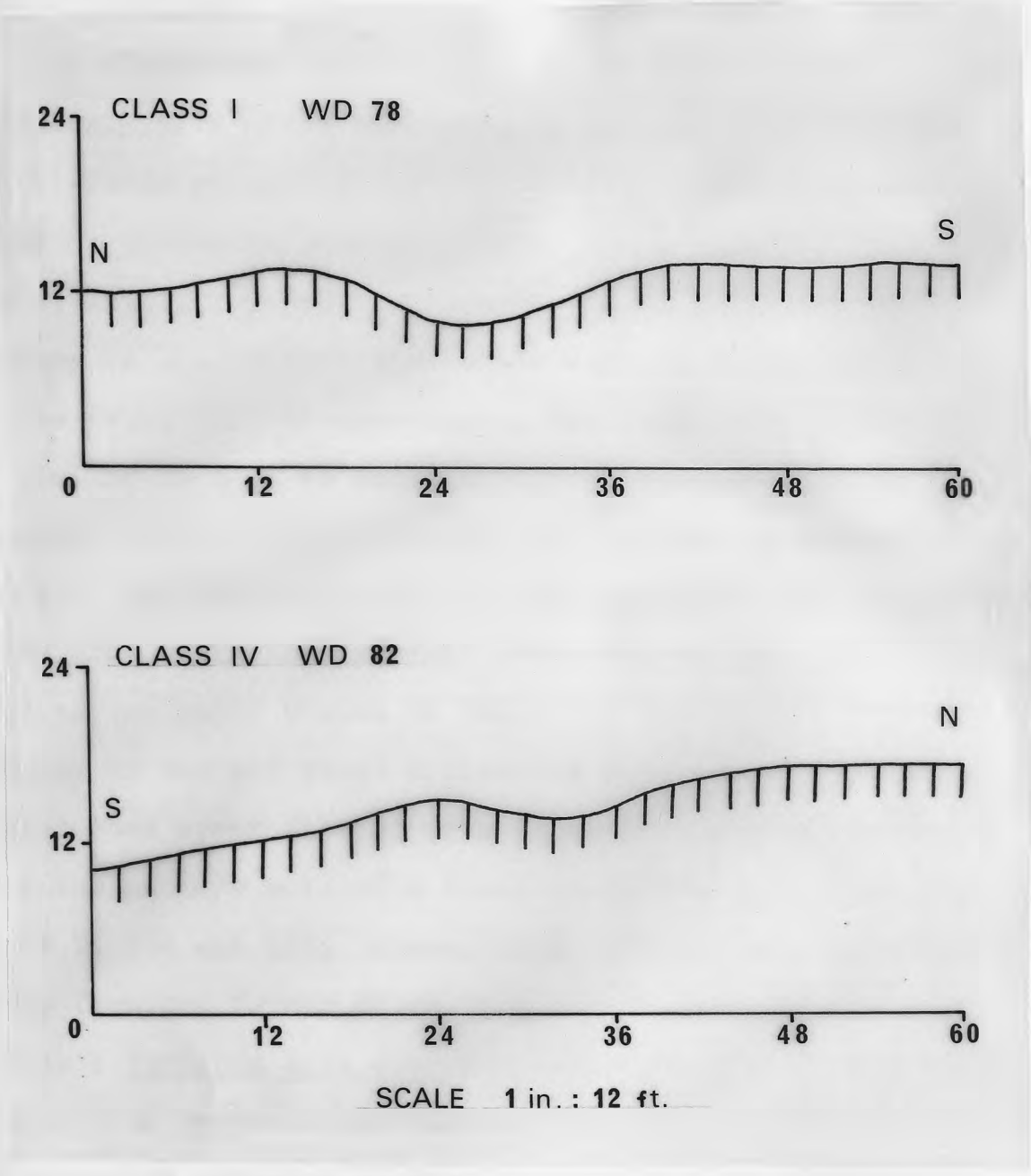


Fig. 36 Profiles of plateau and contour dykes, Wilts.

will be discussed first.

No plateau or contour dyke can be proved to be contemporary with sites belonging to the pre-Roman Iron Age. The hill-forts of Quarley and Ladle Hill in Hampshire and Sidbury in Wiltshire overlie earlier dykes (Hawkes, 1939, 170; Piggott, 1931). Liddington Castle, Wilts., appears to be secondary to the contour dyke which runs up to its western defences (W.D. 4); in appearance, the relationship here is very similar to that at Ladle Hill. A plateau dyke is tangential to the outer enclosure at Danebury in Hampshire (H.D. 9); the bank and ditch of this enclosure are very slight and are presumably the earliest structure on the site, preceding two major phases of hill-fort building. Pottery belonging to the mid first millennium B.C. has been found in the disturbed upper filling of a ditch on Roche Court Down and in the primary silt of a ditch on Winterbourne Dauntsey Down (W.D. 194 and 188; Stone, 1932, 570; 1934, 451). The pottery from the former ditch is clearly intrusive and merely provides a terminus ante quem for its construction, but the evidence from Winterbourne Dauntsey indicates that the earthwork should be assigned to the sixth or seventh centuries B.C. This is the latest proven example among the group of linear earthworks under discussion, but it is comparable in structure to that associated with the Deverel-Rimbury settlement of Woodhenge. The Winterbourne Dauntsey ditch is accompanied on either side by a row of post-holes representing a palisade, and post-holes were found along one side of the ditch at Woodhenge. The latter were dug into the side of the ditch, and may represent a secondary attempt to strengthen the boundary; they are set 6-7 ft. apart, unlike the Winterbourne

Dauntsey post-holes which are set about 3½ ft. apart, and it is difficult to envisage the method of cross-tying which would be necessary if an effective fence were intended.

Winterbourne Dauntsey has recently been cited as a parallel for the double stockade on Portsdown in Sussex, belonging to the mid first millennium B.C. (Bradley, 1967, 49). The latter is not, however, a true linear earthwork, for the ditch between the two rows of post-holes is slight (2½-3 ft. wide and only 9" - 1 ft. 10 ins. deep with a flat bottom) and, as Bradley observed, should be interpreted merely as a quarry for material probably used for a slight embankment at the foot of each palisade (op.cit., 46). This double timber fence is at present anomalous, but the closest parallel would probably be the fence bordering a 'Celtic' field at Fifield Down (Fowler, 1967, 24).

Plateau and contour dykes are thus earlier than the middle of the first millennium B.C. There is considerable evidence to indicate that they were constructed later than about 1200 B.C. in the form of relationships with round barrows. Many dykes are apparently aligned upon barrows and others overlie barrows. The plateau dyke on Orcheston Down, for example, swerves round a bowl-barrow (VCH, 1957, 187, Orcheston 7; W.D. 152), and that on All Cannings Down makes a right angle turn at and incorporates a bowl-barrow (VCH, 1957, 148, All Cannings 5; W.D. 5). Beach's Barn, Fittleton, may be cited as one of several examples of dykes cutting through barrows (Crawford, 1928, 40; W.D. 96).

It is difficult, however, to find much evidence of direct association with Deverel-Rimbury sites. Plateau dykes are associated with the Woodhenge and Boscombe Down East

enclosures (unlocated, Cunnington, 1929, 50, pl. 45; W.D. 8, Stone, 1936). The latter enclosure is primary to the linear earthwork but pottery from both indicates that they are broadly contemporary, and this is supported by the similarity in ditch construction. The enclosure adjoining a linear earthwork which belongs to the Sidbury complex may be comparable to Boscombe Down East and would be worth excavating for this reason; its existence was discovered by Crawford, who suggested that it might be a sheep-fold or cattle enclosure, but it seems to have been overlooked since then (1928, 40; W.D. 96). It is about 100 ft. square, slightly smaller than Boscombe Down East. The enclosure on Martin Down is not directly associated with the plateau dyke nearby; pottery similar to that from the enclosure was found in the primary silt and in the bank of the linear earthwork, suggesting that it is probably secondary to the enclosure (Pitt-Rivers, 1898, 110). The dyke cuts through part of a 'Celtic' field-system which is almost certainly contemporary with the enclosure, but respects the edge of another field (Bowen, 1961, 23, fig. 3A). It may, therefore, belong to a late phase in the use of the enclosure. Although it is not possible to demonstrate any direct relationship, it may be noted that the settlement on Thorny Down lies within a complex of plateau dykes (Stone, 1937, pl. I).

The Marlborough Downs in Wiltshire are bounded on the north, west and south by a continuous ridge, leaving a central 'bowl' open to easy access from the south-east. It may be significant, therefore, that this central area is bounded on the south-east by a univallate linear earthwork (W.D. 148) and that there is evidence for Deverel-Rimbury settlement within

the 'bowl' (Piggott, C.M., 1942).

A number of sections have been cut through plateau and contour dykes without obtaining any dating evidence (with the exception of Stone's excavations which have already been discussed). The ditches vary between 8 - 15 ft. in width at the top and $3\frac{1}{2}$ - $5\frac{1}{2}$ ft. in depth, and show a V-shaped section with a narrow flat bottom measuring 3 ins. - 2 ft. 9 ins. in width.

These dimensions (based on nine excavated examples) are important in connection with the function of these earthworks. With the two exceptions, the floor width of these dykes is quite inadequate to allow them to be interpreted as cattle-ways (though W.D. 38 on Totterdown was apparently utilized in part by a later double-lynchet track, Bowen and Fowler, 1966, 60, fig. 9). Crawford put forward the idea that they functioned as boundaries separating pasture from arable (1928, 42), but it is difficult, in fact, to find any certain examples of linear earthworks contemporary in construction with the setting-out of a field-system. Two plateau dykes on Corton Down have been related to field-systems; both are earlier than the fields which are laid out on either side of one dyke and which overlie the second (W.D. 66, 66A; Fowler et al., 1965, 71 f.). Many other dykes can be related to fields in a secondary sense of cutting across them, and, since 'Celtic' fields were almost certainly in use at the same time as linear earthworks, it is reasonable to assume that Crawford's theory is correct. It is evident that fewer fields were in use, however, and that plateau and contour dykes represent a mixed, or even predominantly pastoral, economy. This idea was put forward more than twenty years ago by Mrs. Guido (Piggott, C.M., 1942, 61), though it has been argued

here that cattle enclosures may not be as characteristic a feature of the Deverel-Rimbury Culture as they seemed then (p. 18). At the same time, however, small enclosed areas formed by linear earthworks may have functioned in the same way as true cattle enclosures, providing manure for the fields. Since primary associations of Deverel-Rimbury sites and linear earthworks are rare, it may even be legitimate to suggest that this growth in the pastoral aspect of Deverel-Rimbury economy represents a secondary phase in the Culture. It has already been argued that the only certain cattle enclosure, that on Harrow Hill, belongs to a late phase of the Culture in Sussex (p.21-3).

Linear earthworks may well have functioned as social boundaries as well, dividing the lands of one farming community from another, and the labour involved in their construction indicates that those communities were not inconsiderable in size. This is the growing population which was later to provide enough men to build hill-forts. A date soon after the middle of the first millennium B.C. has been argued for Grim's Ditch and Dray's Ditches in the Chilterns (Dyer, 1963; 1961), but these, together with Portsdown and Winterbourne Dauntsey, are rare late examples of plateau and contour dykes. These types of earthwork are not a feature of iron-using cultures of the later first millennium, except where they are used for limited and specific purposes in connection with settlements and enclosures (e.g. linking spectacles enclosures).

ii. Plateau and Contour Dykes in Yorkshire

The chalk Wolds of E. Yorkshire are threaded with an extensive system of linear earthworks, part of which was mapped by Mortimer (1905, end map, the symbols on which are explained in 1895). Several of these dykes consist of lines of pits rather than continuous ditches, and Mortimer excavated part of two examples on Allerston and Ebberston Moors. Two lines of pits at Allerston were found to be set 2-3 ft. apart, and to consist of pits measuring 5-6 ft. in diameter and 3½ ft. in depth, set about 3-7 ft. apart (1895, 267). A similar double line of pits on Ebberston Moor provided evidence to suggest that these pits represent the first stage in the construction of the earthwork, for towards the north end of the dyke the pits were found to be increasingly elongated in form until finally they merged into a continuous ditch (1895, 268). Mortimer concluded therefore that rows of pits represent unfinished dykes (though in 1898 he returned to the idea that they represent underground dwellings).

Pitt-Rivers cut a section through a normal univallate plateau dyke, Danes Dike near Flamborough Head (1881) and Wacher sectioned Double Dike at Riplingham in 1956-7. The latter consisted of two ditches with a medial bank, measuring about 34 ft. in overall width; the ditches proved to be V-shaped, and measured 8½ ft. in width at the top and 5½ ft. in depth (Wacher, 1965).

There is little dating evidence to indicate the period at which these earthworks were constructed. Although the Wolds are scattered with round barrows, few of the dykes appear to have been aligned upon them. Some appear to be

related to deserted medieval villages; the Argam Dike, for example, seems to alter its alignment in order to skirt a village. This apparent relationship is probably fortuitous however, for deserted villages are a common feature of the Wolds and may well have been situated close to existing earthworks which might be re-used as boundaries. There was no connection between linear earthwork and village at Riplingham (Wacher, 1965), and the fact that many dykes are followed in part by parish boundaries suggests an earlier date for their construction.

It is suggested here (and was implied by Piggott, 1958, 14 f., 18) that these earthworks should be assigned to the first two or three centuries A.D., and that the laying-out of the extensive systems represented was begun around the middle of the first century by communities of a late pre-Roman Iron Age context such as those at Emmotland and Ferriby (the pottery from sites of this period is discussed in Brewster, 1963, 145-7). This dating for the Yorkshire plateau and contour dykes is indicated by structural analogy with pit alignments and the great earthwork enclosures at Stanwick. The distribution of pit alignments shows a concentration on the river gravels of the Midlands and Eastern England, from whence a spread in the use of such boundaries to the chalklands of E. Yorkshire is not improbable (RCAHME, 1960, 28-31). They have been dated to the first and second centuries A.D. and interpreted as boundary works, the pits providing material for continuous banks (Simpson, 1966, 18 f.). At Stanwick, a system of massive linear earthworks was constructed during the first century A.D. and covers a total area of about 850 acres (Wheeler, 1954). The enclosures were interpreted in terms of a pastoral economy (op.cit., 27-30) and have been used by Piggott as the type-

site for his Stanwick type of economy based on pastoralism, in which he included the dyke systems of the Yorkshire Wolds (1958, 14 f.). The multivallation and massive dimensions of some of these earthworks are in keeping with the structural tradition of the late pre-Roman period as illustrated by Wheathampstead and some of the complex ditch settlements in Wiltshire.

It will be argued later that the cross-dykes of the N. Yorkshire limestone moorlands are of similar date and purpose.

A number of plateau and contour dykes are known in Roxburgh and Northumberland and these belong to the same context. The Black Dike in Northumberland is overlain by Hadrian's Wall, while a bivallate dyke is secondary to the hill-fort of Lantoncraigs in Roxburgh (RCAHMS, 1956, no. 494). Examples of similar earthworks at this period in S. Britain are rare, but those on Minchinhampton and Rodborough Commons in Gloucestershire and Grim's Dyke in Oxfordshire, may be cited (Clifford, 1938; O'Neil, 1953; St. Joseph, 1968; Harden, 1937). The construction of these types of linear earthwork then re-appeared in the late Roman and post-Roman periods.

iii. Cross-Dykes

The distribution of cross-ridge and cross-spur dykes is considerably wider than that of plateau and contour dykes; they are concentrated in Wessex, Sussex, Wales, Yorkshire and the Cheviot Hills of Roxburgh and Northumberland. Cross-ridge dykes are situated astride the crests of ridges, with either end terminating at the point below which the scarp drops steeply (pl. XXIII, XXIV). They are predominantly univallate or bivallate in form, and the latter usually have one bank larger than the other (fig. 37). Multivallate examples are known in Yorkshire and Sussex, and series of two or three dykes set close together may be found in Sussex, Yorkshire and the Cheviots. Cross-spur dykes are situated astride gently sloping spurs and are invariably univallate, with the bank on the lower side of the ditch (pl. XXV: fig. 38).

Like plateau and contour dykes, two main chronological groups are apparent among cross-dykes, though both lie within the pre-Roman Iron Age, and these will be discussed separately. The date of the Welsh examples is uncertain and these will form a final section in the discussion.

iii.a Wessex, Sussex and the Cheviots

Until 1964 when Fowler published a paper on the cross-dykes of the Ebble-Nadder ridge near Salisbury, most of the interpretative work on these earthworks had been carried out in Sussex by the Curwens. As late as 1951 Curwen was re-stating the old 'covered-way' or 'cattleway' theory, and Fowler set out specifically to disprove this idea in connection with

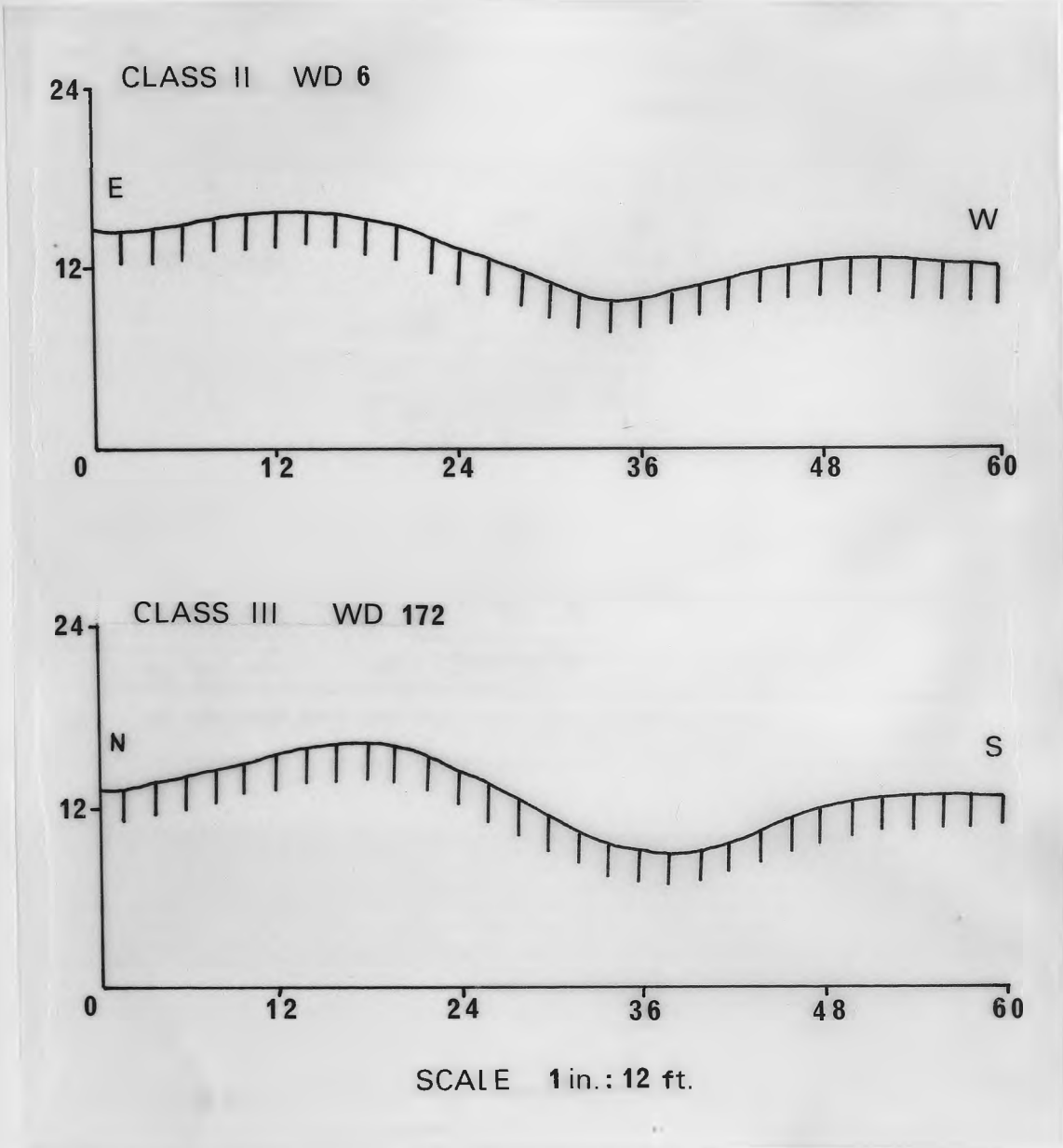
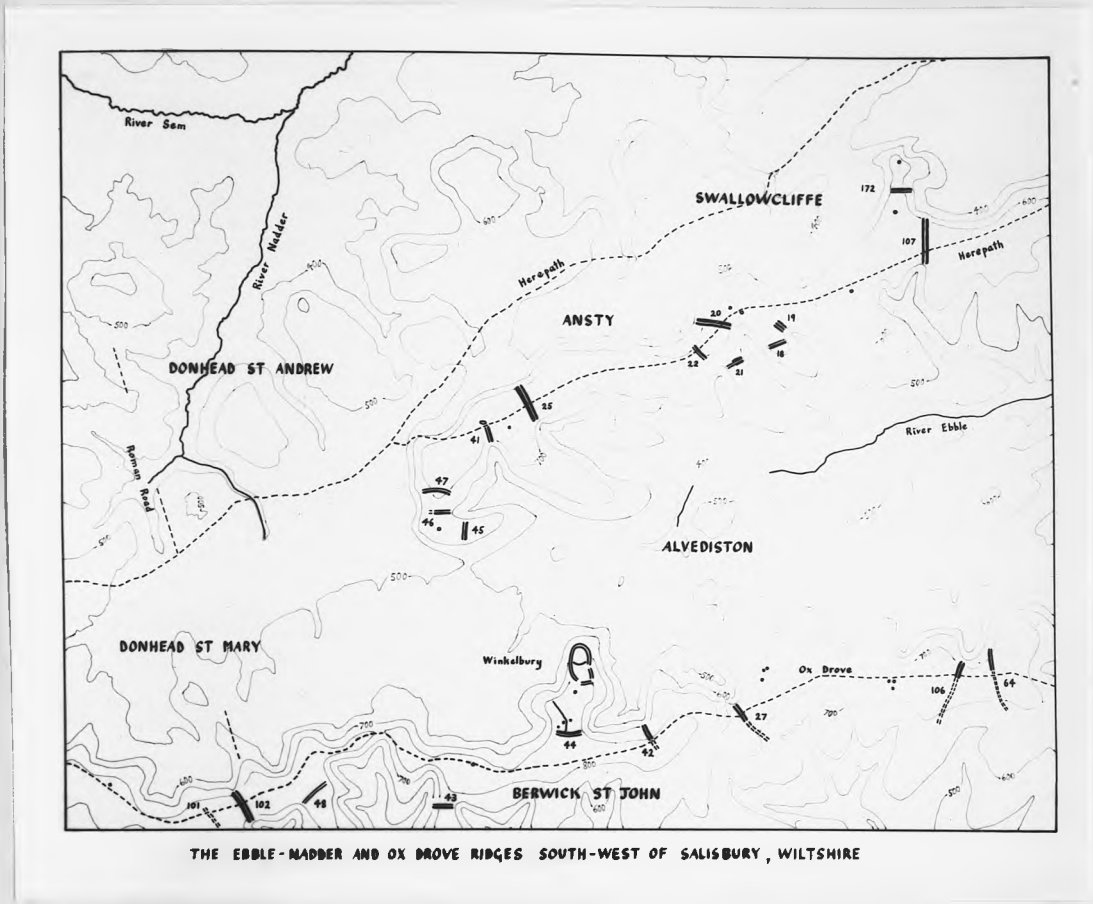


Fig. 37 Profiles of cross-ridge and cross-spur dykes, Wilts.



THE EBBLE-NADDER AND OX DROVE RIDGES SOUTH-WEST OF SALISBURY, WILTSHIRE

XXII. Cross-dykes near Salisbury, Wilts.

XXIII. Cross-ridge dyke, Middle Down, Wilts., W.D.20.

XXIV. Cross-ridge dyke, Highden Hill, Sussex, S.D.28.

XXV. Cross-spur dykes, Cold Kitchen Hill, Wilts., W.D.131,131a.

bivallate cross-ridge dykes. He argued very convincingly that these are primarily land boundaries and that, on the Ebble-Nadder ridge at least, they divide up the ridge-top into approximately equal areas (1964, 48 f.). He interpreted cross-spur dykes as trackways and as barriers against traffic up the spurs (op.cit., 50). It was emphasized that these suggestions concerned only the dykes on that particular ridge, however, and Fowler's ideas should be discussed only in connection with this area, though it is proper to discover whether they may be applied elsewhere.

The bivallate dykes do occur at regular intervals on the Ebble-Nadder ridge, but the question of how far this may be attributed to deliberate policy must remain open. Such a policy would imply a considerable degree of social organisation, and this is not apparent elsewhere in connection with dykes though it may be involved in the construction of hill-forts. The present writer believes that more emphasis should be placed upon the likely function of cross-ridge dykes as barriers as well as boundaries. Fowler argued from the lack of evidence for entrances through the dykes that the ridge was not a route for traffic at the time when the dykes were built (op.cit., 47), but the same evidence may be used to indicate that the dykes were built to impede and control traffic. Certainly, if it is allowed that cross-spur dykes might have function as access-control points (op.cit., 50), it must also be allowed that the ridge-top provided a route for such traffic as well.

Both Fowler and Bowen emphasize the significance of tracks or terrace-ways issuing from the ends of cross-spur dykes and interpret the latter as trackways as well as barriers (Fowler, 1964, 50; Bowen, 1961, 32). These terrace-ways are

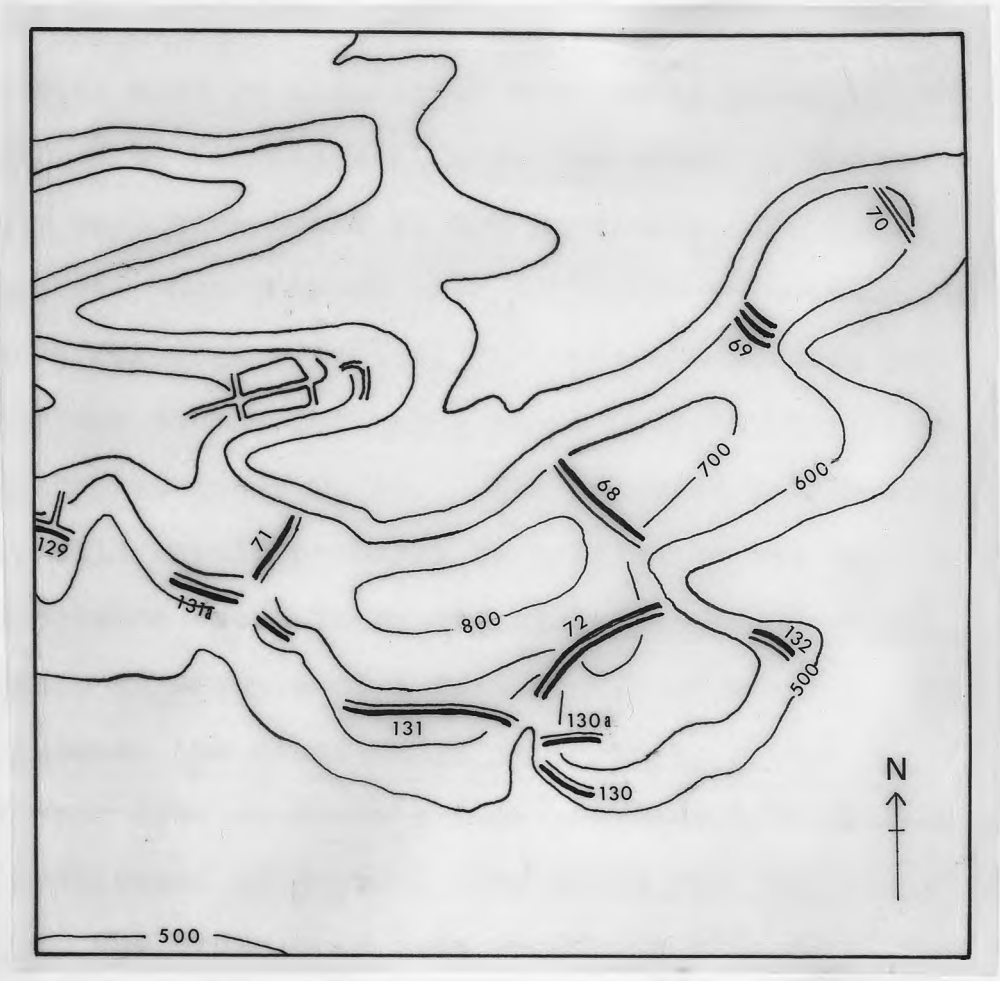
no more marked a feature than the sheep-tracks which may be found throughout the chalk pasturelands, and are surely likely to be considerably more recent than the dykes. It is difficult to envisage the need for an elaborately constructed trackway over a spur, for the slopes are gentle enough for any animal to negotiate (and an alternative route round the foot of the spur would be little longer). It is suggested here that cross-spur dykes should be interpreted in the same way as cross-ridge-dykes, wherever they occur; they controlled access up to the ridge-tops and prevented cattle from straying into the valleys.

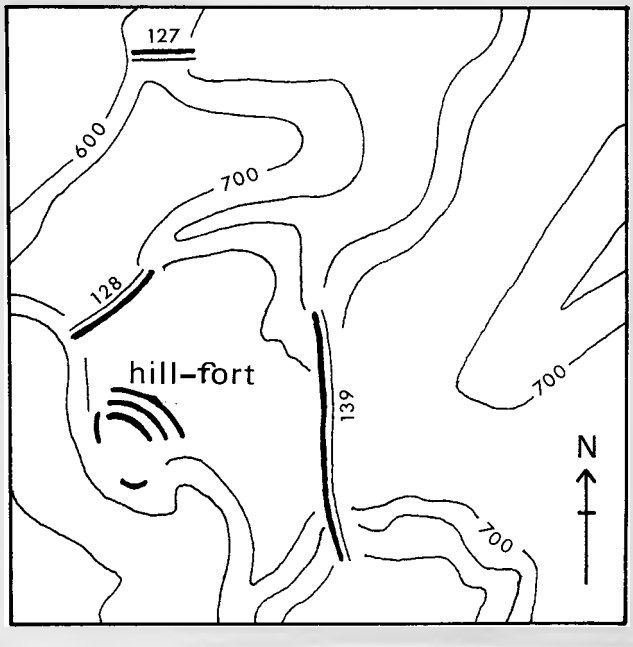
The function of both types of cross-dykes as barriers as well as land boundaries may be illustrated by their relationship to hill-forts and settlements. Many of these relationships have already been noted in connection with the types of settlements concerned, and have been found in all the areas under discussion now. The only physical association is that at Chiselbury, where the hill-fort is associated on either side with a length of dyke which completes the span across the ridge (W.D. 75). The hill-forts of Whitesheet Hill and Chanctonbury Ring are examples where the fort is flanked on either side by a cross-ridge dyke (pls. XXVI, XXVII; W.D. 128, 139, S.D. 11 and 12). The hill on which Woden Law is situated is separated from the main ridge by a neck of land spanned by five dykes; the three central examples are considerably slighter in their proportions than the others, and this may indicate two phases of dyke-building (pls. XXVIII-XXX; R.D. 40, 59, 52-54). All the Peeblesshire cross-dykes are clearly related to hill-forts or settlements, for they lie close (normally within 100 ft.) to the enclosing banks and

XXVI, XXVII. Cross-ridge dyke and hill-fort, Whitesheet Hill, Wilts., W.D.128.

XXVIII. Cross-ridge dykes, Woden Law, Roxburgh., R.D.59,52-4,40.

XXIX, XXX. Cross-ridge dyke, Woden Law, Roxburgh., R.D.59.





Figs. 38, 39 Cross-dykes on Cold Kitchen Hill and Whitesheet Hill, Wilts.

ditches and bar access to them. Those on Langlaw Hill and Woodhouse Hill must be associated with early phases of the forts; P.D. 6 on Langlaw Hill lies too close to the outer defences to have been built at the same time, and P.D. 10 has apparently been incorporated into the outer defences. On analogy with Roxburgh examples, the dyke at Harehope Rings may even belong to the palisaded phase rather than to the succeeding hill-fort (P.D. 4). The cross-spur dyke on Winkelbury Hill should probably be related to the earlier and smaller enclosure overlain by the hill-fort (W.D. 44). Knowle Hill presents an example of a settlement, apparently open, situated between two cross-ridge dykes (D.D. 17 and 18), while the cross-spur dyke on Berwick Down provides a barrier between the open settlement of Berwick Down North and the main ridge (W.D. 43). The cross-spur dyke on Middle Down bars access to that part of the ridge on which the Swallowcliffe settlement is situated (W.D. 18).

Cross-dykes of both types may be seen to form systems on Cold Kitchen Hill and Butser Hill; they cannot be related to settlements, but it is clear that they represent boundaries to prevent cattle or sheep from straying from their hill-top pastures (W.D. 68-72, 130-132; H.D. 1-4 and 6-8).

The occurrence in Wessex of exceptionally massive cross-ridge dykes and in Sussex and the Cheviots of series of close-set cross-ridge dykes implies the additional factor of defence. These should probably be related to the social conditions which necessitated the construction of hill-forts. The massive proportions of the dyke on Win Green, for example, are comparable with hill-fort ramparts and ditches (W.D. 102). Such dykes are clearly barriers, not merely land boundaries.

Few cross-dykes have been excavated in Wessex and Sussex and only one in Roxburghshire. A bivallate cross-ridge example was sectioned on Glatting Down and its ditch proved to be V-shaped and to measure about $7\frac{1}{2}$ ft. in width at the top, $3\frac{1}{2}$ ft. deep and about 2 ft. wide across the flat bottom; fragments of a Deverel-Rimbury decorated globular vessel and Romano-British sherds were found in the secondary silt of the ditch and cannot be used to date its construction (Curwen, 1918, 57 f. S.D. 15). Another bivallate dyke on Newtimber Hill revealed a ditch measuring 15 ft. in width at the top and 6 ft. in depth (op.cit., 37 f. S.D. 32). V-sectioned ditches, often with narrow flat bottoms, are characteristic of cross-dykes. Clay sectioned four bivallate cross-ridge dykes, and the ditches prove all to be V-shaped in section, approximately 8-9 ft. in width and 5-6 ft. in depth (1927b, 63; W.D. 20, 75, 107). The cross-spur dyke on Buxbury Hill possessed a ditch measuring about 10 ft. in width at the top, 5 ft. in depth, and this showed an unusually wide flat bottom about 4 ft. across (W.D. 172, Fowler, 1965, 49). This evidence supports Fowler's theory of the use of cross-spur dykes as trackways, but, since it is the only excavated example, its implications are limited. A cross-ridge dyke at Litton Cheney was found to possess a similar ditch with a wide flat bottom, but there was evidence to suggest that the dyke had been re-cut and converted from its original use into a trackway (D.D. 20; Wacher, 1958).

Excavation of another Dorset dyke has revealed details of its construction; two stake-holes, one on either side of the bank, were interpreted as marking-out posts, while a line of stake-holes at the terminal of the dyke were interpreted as

a revetment to prevent the bank material from sliding down the escarpment (D.D. 4, Wacher, 1957).

Dating evidence for cross-ridge and cross-spur dykes has to be drawn mainly from the implications of relationships with hill-forts and settlements of the second half of the first millennium B.C. Some of these have been discussed in connection with function and they indicate that the dykes should be assigned to the approximate period from the sixth or fifth centuries until the second century B.C. Clay cut sections through four cross-ridge dykes on the Ebble-Nadder Ridge (commenting that they were so similar that 'they were marked out by the same person', 1927, 63); pottery similar to that from the Swallowcliffe settlement was found at the top of the primary silt of W.D. 20. The presence of Romano-British pottery in the final silting of W.D. 172 provides a terminus ante quem for the construction of the dyke (Fowler, 1965, 49), while the secondary silting of D.D. 4 contained pottery described as 'seemingly of Late Bronze Age or Early Iron Age character' (Wacher, 1957, 115). The north entrance into Eggardun hill-fort is guarded by a cross-ridge dyke (D.D. 5) but its chronological relationship to the fort is uncertain, though it is likely to be contemporary. The earthwork known as Great Ditch Banks in Wiltshire has been excavated and dated by Durotrigian pottery to the first century A.D., but this is not, in fact, a true cross-ridge dyke and it was interpreted as part of the boundary of a settlement (VCH, 1957, 253, D.60; Rahtz, unpublished).

There is no direct dating evidence for the Cheviot dykes, and it would be useful to discover the relationship between Dere Street and the dykes across its line by excavation. The

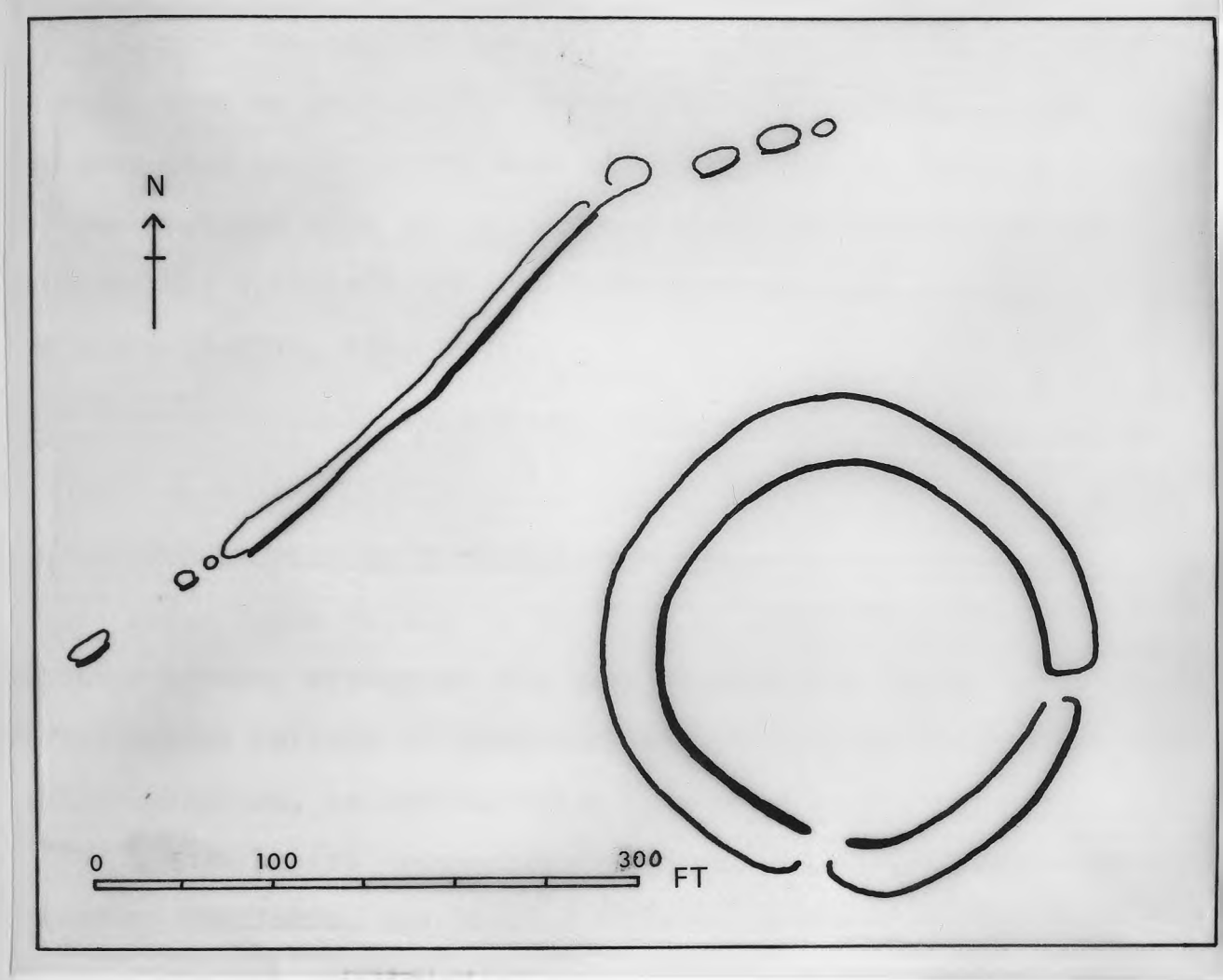


Fig. 40 Cross-ridge dyke, Harehope Rings, Peebles.
(after RCAHMS 1967, fig. 102)

impression given by the siting of dykes in relation to settlements is that they are, like the southern examples, not only pre-Roman but early pre-Roman.

One of the implications of cross-dykes is the importance of ridge-ways as prehistoric routes of communications. This may have been particularly true in Sussex, for in 1702 Celia Fiennes recorded that the county was renowned for the mud and consequently difficult travel conditions on roads situated off the chalk (Morris, ed., 1947).

iii b Cross-Dykes in Yorkshire and Wales

These dykes belong to the same general classification as those already discussed but they represent a later chronological horizon of dyke-building. They were built for similar purposes, as boundaries and barriers.

The Yorkshire cross-dykes are confined to the northern limestone moorlands, and should be considered as the counterparts of the plateau and contour dykes of the chalk Wolds; the two groups are linked by structural techniques as well as by their probable contemporaneity. Multivallation occurs among cross-ridge dykes at, for example, Normanby and John Cross Rigg (Y.D. 18, 15), while unfinished dykes represented by pits were examined by Mortimer on Middle Ridge, Danby (Y.D. 16, 17; 1898). The latter were accompanied by banks, demonstrating that the pits were primarily quarries and that the most important feature was the bank. The importance of the bank is also illustrated by examples possessing stone revetments or even large stones set on end in the crest of the bank (e.g. Y.D. 19, 26; Elgee, 1930, 148). Elgee described

the cross-ridge dyke on Horn Ridge as 'stone-parapetted' (1933, 82), but this feature was no longer visible when the site was visited in 1968 (pl. XXXI; Y.D. 14). The use of stone-revetment is another link with plateau and contour dykes on the Wolds (and with Stanwick).

It is difficult to find traces of the communities responsible for building cross-dykes on the Yorkshire Moors. The closest relationship between dykes and any other type of site is on Danby Rigg, where two dykes are situated above a spur on which lies a large group of cairns; it is not certain whether these are all burial cairns or whether some are clearance cairns. The uplands of these limestone moors are, at the present day at least, very inhospitable, and are not suitable for pasture. It is nevertheless evident that many dykes must have functioned as land boundaries, and not simply as control barriers on routes of communication; the dyke on Horn Ridge, for example, cuts off the end of a ridge which falls far too steeply to allow access from the valleys on either side and must have been intended to enclose the end of the ridge (it faces away from the latter).

The cross-dykes of Glamorganshire, Radnorshire and Montgomeryshire have been studied primarily by Fox, partly in connection with Offa's Dyke. They are all of cross-ridge type and are predominantly univallate in form. They occur at heights of up to 2000 ft. above sea level, and are clearly related to ridgeways as barriers.

Fox postulated that the Radnorshire and Montgomeryshire dykes were built by the Mercians in the seventh and eighth centuries A.D. as a protection against raiders from the west (1955, 286); this was based primarily upon the similarity of

XXXI. Cross-ridge dyke, Horn Ridge, Yorks., Y.D.14.

XXXII. 'Circus', Swallowcliffe, Wilts.

construction between these and Offa's Dyke, in the sense that they were dug in straight stretches (op.cit., 161-4). The Glamorganshire cross-ridge dykes have been assigned to the eighth and ninth centuries A.D. in a series of papers by Fox and Fox, on the grounds that they simulate earlier Mercian techniques of construction (Fox, A., 1946). Since then, pollen analysis of soils buried beneath four Glamorganshire dykes has been used to support the latter dating (Crampton, 1966). The dykes were constructed on heathland, or declining heathland, which spread over the South Wales upland during early Medieval times (op.cit., 389).

The present writer is not competent to judge evidence of the latter nature, though it does not appear to provide a sufficiently exact chronology to warrant support of a dating period confined even to two centuries. On the archaeological side, there is not enough evidence to assign any of these dykes with certainty to the post-Roman period. Alignment is rarely a meaningful criterion for comparative purposes, for it depends primarily upon local topography, and short cross-dykes are normally straight since they run merely from scarp to scarp. Both geographical groups of Welsh dykes are typologically identical to those elsewhere in Britain, and the latter have been dated to the pre-Roman Iron Age, perhaps with some of the Yorkshire examples continuing into the second century A.D. The present writer finds it difficult to believe that the Welsh dykes are not part of the same late pre-Roman or Roman Iron Age horizon of dyke construction. The Glamorganshire dykes at least might be attributed to Silurian activities (though the importance of the ridgeways spanned by these dykes is attested as early as the sixth century by the Llyn Fawr

metalwork). O'Neil has suggested that the linear earthworks on Minchinhampton and Rodborough Commons in Gloucestershire should be attributed to the Silures in the first century A.D. (1953); if this is accepted, the construction of control dykes may well have been a custom among the late pre-Roman communities of South Wales and the Marches.

Conclusions

Settlement forms and economy current during the middle and later first millennium B.C. have been examined in order to establish whether it is legitimate to refer generally to types belonging to that period as a whole. The need for such a survey has become apparent in recent years, as the amount of material has accumulated; this has only been attempted hitherto on a regional basis, and a broad survey of non-defensive sites throughout Britain has therefore been attempted here. This is a new approach to the problem, and has the advantage that it demonstrates the degree of unity in building-tradition throughout the area. In order to do this, it has been necessary to ignore the cultural divisions apparent among artefacts, especially fine pottery, and the success of the approach is inherent in the resultant classification. Since the spread of artefact-types depends upon the extent of trading activities and local requirements or even fashion in the styles favoured, the cultural implications of those artefacts need have little connection with the fundamental settlement-types or the social pattern reflected by them. Adams has recently emphasized the doubtful validity of arguing 'from pottery to people', pointing out that exotic fine pottery is subject to quite rapid stylistic change but that this change need have no bearing upon the fortunes and make-up of the population (1968, 197-202).

The classification of settlement-forms put forward here is based primarily upon the methods of construction employed and secondarily upon the social units represented. It is thus a mixture of factual and interpretative information and the

latter, because it is even more subjective than the material evidence upon which it is founded, is the weakest aspect of the classification. The limitations involved in interpreting a site as a homestead or settlement have been discussed, but the implications of the social unit are so important for any reconstruction of life in the prehistoric period that the attempt to distinguish those units must be made and then modified as necessary. Settlements include all those sites containing more than three houses, and therefore represent several social units from small hamlets to villages, but detailed interpretation is best carried out in this case in relation to individual sites.

Three major types have been recognised, all of which occur both as homesteads and as settlements, and all of which appear throughout Britain. Palisaded sites are concentrated in N. Britain, but sufficient examples have been found further south to permit recognition of the type as common throughout the area. They belong to the period from the seventh to the second centuries B.C., and a tendency has been demonstrated for homesteads to continue longer in that period than settlements. Earthwork enclosed sites have a similarly wide distribution, but are concentrated in S. Britain. They may be dated to the period from the seventh century onwards, but there is a distinct chronological difference between homesteads and settlements; the former appear from about the fourth century B.C., while settlements are confined to the preceding period from the seventh to the fourth centuries. Both major types of enclosed site include examples in which occupation has yet to be proved and which are classified simply as enclosures. Two specialised types of earthwork enclosures

have been examined, and it has been argued that both, banjos and spectacles, are as likely to have been inhabited as to have been used for stock-penning. There is evidence to suggest that spectacles enclosures may represent a combination of inhabited enclosure and cattle-pen. The two types are clearly related, and have a restricted chronological horizon in the first century B.C. and the first century A.D. Spectacles are confined to Wessex, while banjo enclosures are concentrated in the same area but occur sporadically in other parts of Britain as well.

The third major type of site consists of unenclosed homesteads and settlements, and these have been found south of a line from North Wales to Norfolk. The type is not closely datable and seems to have existed throughout the middle and later first millennium B.C.

Complex ditch settlements represent a minor type recognised here for the first time; they are concentrated in Wessex and belong to the first century B.C. and the first century A.D. It has been demonstrated that complex ditch settlements and banjo and spectacles enclosures belong to the same cultural and chronological horizon. With the exception of a few banjos, all three types of site occur in plateau areas, normally on the chalk, and this topographical factor has important implications for the economy of the period. Palisaded and earthwork enclosed sites, together with open settlements and homesteads, have been found in a wide variety of topographical contexts which can have only local implications. All settlement-types show a marked preference for light soils however, reflecting the limitations of contemporary agricultural implements. Where the sequence of

settlement-types is known, palisades invariably precede earthworks and are often preceded themselves by open sites.

The second aim of this study has been to discover whether these settlement-types are confined to the middle and later first millennium B.C. or whether precedents may be found in earlier traditions. To this end, settlements belonging to the later second and early first millennia have been examined in Part I, together with features indicative of economy, and it has been found that there are few aspects of the later first millennium which cannot be matched on earlier sites. Most of the evidence for domestic sites in this earlier period belongs to the Deverel-Rimbury cultural complex in southern England, beginning in the twelfth or thirteenth centuries B.C. The predominant unit of settlement is the small community of perhaps two to five families, though there are a few examples of single family homesteads. The sites are almost all enclosed, and the methods of construction include palisades, banks and ditches, and banks alone. Most are sub-rectangular in shape and consist either of single enclosures or of a number of enclosures. Palisades are invariably succeeded by earthworks, and ditches are, for the first time, V-shaped in section (unlike the shallow U-shaped ditches of earlier tradition). Park Brow is at present the sole example of an open settlement, but this is probably because the latter type leaves little trace on the surface (the open settlements of the later period owe their discovery usually to the presence of large pits which show up as surface depressions).

It has been argued that some of these Deverel-Rimbury settlements were occupied well into the first millennium B.C., and evidence from pottery associations with carinated wares

of the mid first millennium supports this argument. The existence of a regional group in E. Anglia related to the Deverel-Rimbury complex is well-known, and a few settlement sites have been added to its list of burials; it has been demonstrated that the influence of this regional group may be seen in pottery from sites of the mid first millennium in E. Anglia, and that the whole complex indicates continuity of tradition.

Attention has been drawn to a number of sites in S. Britain where there is no trace of Deverel-Rimbury influence in the pottery; they are contemporary with late Deverel-Rimbury sites and are important in filling the apparent gap between the mainstream of Deverel-Rimbury activity and the earliest Iron Age sites. Though the number of these truly Late Bronze Age sites is small, it is noticeable that open settlements and the use of palisades are present. It has been suggested that Phase II at Minnis Bay represents the earliest example of timber-lacing in southern Britain.

As a result of this survey of earlier settlements, it has become evident that there is little in the way of structural techniques among sites of the middle first millennium which cannot be paralleled in earlier tradition. Open, palisaded and earthwork enclosed settlement-forms are common to both periods. The differences lie in the increased size of the social unit in the mid first millennium, and in the fact that sub-rectangular forms are predominant in the earlier period whereas, by about 600 B.C., the majority of enclosed sites are curvilinear. The ditch is the most important feature of later earthworks, whereas Deverel-Rimbury tradition maintains the use of ditches primarily as quarries for banks.

Separate house-enclosures as at Plumpton Plain A are not on the whole a feature among later settlement-forms, with the exception of West Harling where the pottery indicates a strong element of influence from the Ardleigh Group of the Deverel-Rimbury complex.

This is not the place to explore the problem, but the appearance of V-shaped ditches and palisades in the Deverel-Rimbury period needs an explanation; in the scarcity of earlier settlements, the answer may lie in barrow structure. The use of palisades in the later first millennium in southern Britain is surely evidence of continuity, but it is perhaps surprising that no evidence for palisades have been found at Longbridge Deverill Cow Down for example; further excavation at All Cannings Cross might be informative on this point. The use of palisades may also owe something to continental Urnfield tradition, though this would involve an actual movement of people rather than just trade bringing the early forms of pottery in the mid first millennium which show peripheral Urnfield influence. The double palisade at Ffridd Faldwyn is surely related to the timber-lacing technique, as are the double palisades of N. Britain. These last are not apparently of insular origin, and the whole S. Scottish complex of palisades and timber-laced forts must be attributed to the connections across the North Sea which are apparent in a number of artefact forms. These sites are the northern counterparts of the earliest hill-forts in S. Britain; the situation of Minnis Bay with its timber-laced bank is surely significant in considering origins, for it lies on the coast of Kent close to the continent.

The only types of site in the later first millennium

B.C. which cannot be derived from the earlier traditions discussed in S. Britain are complex ditch settlements and banjo and spectacles enclosures; the dating of these is however so uniformly late (first century B.C. at the earliest) that it is unnecessary to seek origins earlier than the immediately preceding period. They represent development of the earthwork tradition to meet special requirements; it has been suggested that Great and Little Woodbury may be seen as the prototype for spectacles/banjo enclosures, while the massive linear earthworks associated with the whole complex should be attributed to the influence of the Belgae.

It has been argued that Little Woodbury should not be taken as a type-site, because it is not a typical homestead and possesses a unique density in its internal arrangements; it fulfills a special function in storing grain for people living elsewhere, and might be best considered as a home-farm for Great Woodbury.

As a result of the comparison of settlement-forms throughout the later second and first millennia, it has been demonstrated that the essential origins of Iron Age settlements are insular. This involves the question of the 'invasion-hypothesis' brought into prominence by Clark, and the results of the present study largely support his ideas in relation to the beginning of the Iron Age in southern Britain (1966, 185 f.). Hawkes challenged Clark's ideas, and, in particular, posed the question of site continuity between Bronze Age and Iron Age; in the 'very near total absence' of this continuity, he argued that indigenous evolution must be demonstrated rather than assumed (1966, 298). It is hoped that the present study has gone some way towards demonstrating this continuity.

The apparent absence of sites which may be assigned to the period between the Deverel-Rimbury Culture and the beginning of the Iron Age has hitherto been a stumbling-block to demonstrating site continuity; the problem has been overcome here by arguing that Deverel-Rimbury tradition in modified form continued on settlements well into the first millennium, by establishing the existence of non-Deverel-Rimbury settlements immediately preceding the Iron Age, and by joining the current trend in pushing back the date of the initial Iron Age settlements.

Since the form of settlements in the middle and later first millennium is essentially insular in origin, the predominance of the circular house may be seen not as a problem but as a logical continuance of tradition. Advanced types of timber house are then a refinement of existing tradition, and the early date of the Longbridge Deverill Cow Down house-type is evidence that this refinement was not slow in developing. It has been argued that rectilinear structures are work-sheds rather than dwelling-houses, and these are a natural development from timber granaries. The latter appear in Deverel-Rimbury contexts (e.g. Thorny Down), and with the idea of overhead storage in simple rectangular or square structures comes the establishment of the rectilinear plan for store-houses and sheds in general. Drying-racks, working-hollows and small storage pits are also part of the economic pattern in the later second and early first millennia.

Evidence for economy, apart from the development of metal technology, is an important aspect which has been omitted on the whole from the 'invasion hypothesis' controversy. The influence of economy upon the pattern and form of settlements

cannot be overestimated, and it has considerable relevance to the question of indigenous development. It has been argued here that all the major features of the 'Woodbury type' of economy can be found in the Deverel-Rimbury period, and this supports the theme of basic continuity from the later second millennium onwards. Economic practice is of course closely related to environment, and need not imply the total absence of population change; taken in conjunction with the rest of the evidence, however, it does support the rejection of the 'invasion-hypothesis'.

It is possible, from the evidence of 'Celtic' field-systems, linear earthworks and pits, to draw certain conclusions about economic development during the later second and first millennia B.C. Throughout the period, the economy of S. Britain was mixed, but tendencies towards predominantly agricultural or pastoral economies are apparent. The early Deverel-Rimbury Culture is associated with field-systems denoting regular cultivation, while later in that period associations with plateau and contour dykes and stock enclosures indicate that the pastoral element had increased in importance by then. By the mid first millennium, the appearance of very much larger grain storage pits and the abandonment on the whole of large linear earthwork systems indicate a return to a predominantly agricultural economy. This type of economy flourished in S. Britain until the end of the millennium, by which time the construction of specialised types of cattle or sheep enclosure had begun. This swing back towards the importance of pastoralism does not imply that agriculture was any less vital a feature of the economy, for it may indicate renewed appreciation of the value of manure.

The predominance of pastoralism in N. Britain is reflected by extensive systems of linear earthworks in Yorkshire, and this 'Stanwick type' of economy is typical of the area throughout the period of this study.

The cross-dykes of the middle and later first millennium B.C. have been studied here for the first time as a major aspect of social and economic life both in southern and northern Britain, and a full catalogue has been provided. These are in fact one of the few innovations of the later period, and should perhaps be seen as one aspect of a developing economy together with the evidence for more intensive agriculture. They are also evidence for the degree of social organisation and perhaps the warrior aristocracy implicit in hill-forts and weaponry of the middle and later first millennium.

The settled nature of settlements and economy throughout the period covered by this study is also apparent in the existence of luxury pottery like Deverel-Rimbury globular urns and later haematite carinated ware. This does not mean that pottery-making should be seen as a domestic activity, for in fact the pottery trade must have been as vital and widespread as that of metal artefacts; the elaborately decorated barrel urn, almost two feet tall, from South Lodge was hardly thrown together on the hearth by a Deverel-Rimbury housewife.

Appendix

The 'Circus' Earthwork

The presence of a circular embankment alongside the ditched trackway on Park Brow has been interpreted here as a dew-pond (p. 117). Curwen drew attention to this embankment and others in Sussex at Bow Hill and Buckland Bank, and postulated their use as sacred meeting-places or 'circi' (1929, 38-41; Curwen allowed that the Park Brow 'circus' had originated as a pond). This idea was based upon the discovery of 'ritual deposits' of Roman pottery in the centre of the hollows at Park Brow and Buckland Bank (op.cit., 91), but in fact such deposits of pottery sherds would accumulate quite naturally in the course of silting in ponds. An interpretation of these small embanked features as ancient dew-ponds is therefore more reasonable at present than any other.

Sumner noted larger semi-circular embankments in Cranborne Chase associated with the banjo enclosure at Gussage Cowdown, the spectacles enclosures on South Tarrant Hinton Down and with traces of earthworks on Tarrant Hinton Down, near Chettle (1913, pls. XLIV, XX, XXI). He suggested that they should be interpreted as cattle shelters for protection against the wind (op.cit., 41 f.; the earthwork on Chettle Down which he included in this class should be considered as a banjo enclosure). Another semi-circular embankment may be seen adjoining the settlement on Swallowcliffe Down in Wiltshire, and is particularly important in attempting to assess the function and date of circuses. At Swallowcliffe, a low bank encloses on three sides an area measuring 120 x 70 ft.

(pl. XXXII). A number of small cuttings were excavated by Clay without finding any evidence for its function, and he concluded that it must represent a 'circus', similar to the Sussex examples, which was used as the 'village moot' (1925, 62-3, pl. I). It is larger and shallower than the Park Brow dew-pond, but not unlike the circular embankments representing larger abandoned ponds (e.g. Red Lion Pond, Itford Hill, Sussex, T Q 445055). The Swallowcliffe embankment is separated from the settlement by the old Salisbury-Shaftesbury turnpike road, and it is consequently impossible to judge whether it was originally a full circle or whether it was associated with the unfinished palisade trench surrounding the southern part of the settlement. It is unlikely to relate to the eighteenth century road, for there was a turnpike less than four miles away at Chiselbury (Crawford and Keiller, 1928, 76, pl. VII: the Chiselbury turnpike is, moreover, rectangular in form). Its position accords well with the projected alignment of the palisade trench, however, and support for their original association may perhaps be provided by analogy with Chiselbury Camp. This univallate hill-fort lies on the same chalk ridge some $3\frac{1}{2}$ miles to the east of Swallowcliffe, and possesses a semi-circular embankment at the entrance forming a horn-work (Crawford and Keiller, 1928, pl. VII). It is possible that the Swallowcliffe embankment was similarly designed as an entrance-work, and it is noticeable that the examples at Gussage Cowdown and South Tarrant Hinton Down are placed at the entrances into the enclosures.

Catalogue

The numbers of the sections in this catalogue correspond to those of the text sections which they accompany. Entries for settlements and homesteads give the number of known houses on each site, but this is rarely a guide to the total number present owing to limited excavations. In the case of unexcavated sites, the number of houses refers only to those visible on the surface, and cannot include others which may be present but which do not leave surface traces (e.g. post-ring houses).

Silurian and Ordovician rock series are normally greywacke or shale in composition.

The catalogue is designed to provide the basic information about each site, and details may be obtained from the relevant works to which reference is made as well as from the text. The essential lay-out of each entry in Parts I and II is as follows:

1. County
2. Site, National Grid Reference
3. Height above sea-level, nature of sub-soil, size of homestead/settlement/enclosure
4. Internal features or essential associated features, e.g. length of entrance-way for banjo enclosures
5. Major bibliographical references.

The lay-out of entries in the catalogue accompanying Part III varies according to the subject.

I, i. Cinerary Urn Sites:

Middle Brow, Sussex, TQ 337123 (Holleyman and Yeates, 1960, 143-149)

Playden, Sussex, TQ 9121 (Cheney, 1935, 152-156)

Rams Hill, Berks., SU 314863 (Piggott and Piggott, 1940)

I, ii. Deverel-Rimbury Sites

Settlements

Open:

Sussex

Park Brow, TQ 153086

300 ft. O.D., chalk, 8 houses, pits

Wolseley et al., 1927, 1-6

Plumpton Plain B, TQ 359122

550 ft. O.D., chalk, 3 houses, pits

Holleyman and Curwen, 1935, 28-38; Hawkes, 1935, 46-59

Palisaded:

Dorset

Shearplace Hill, SY 640986

600 ft. O.D. chalk, c. 80 x 130 ft. Internal features uncertain.

Rahtz and ApSimon, 1962

Sussex

Cock Hill, TQ 089097

300 ft. O.D., chalk, 140 ft. in diameter, 3 houses

Ratcliffe-Densham, 1961

Itford Hill, TQ 447053

450 ft. O.D., chalk, c. 80 x 125 ft., 3 houses

Burstow and Holleyman, 1957a; Piggott, 1965, 152

New Barn Down, TQ 084092

300 ft. O.D., chalk, c. 80 x 140 ft., 2 houses

Curwen, 1922, 32-5; 1934a; 1937, 179-182

Earthwork enclosed:

i. single sub-rectangular:

Hampshire

Martin Down, SU 043201

300 ft. O.D., chalk, 2 acres, 2 pits, 4 post-holes

Pitt-Rivers, 1898, 185-215

Sussex

Blackpatch, TQ 092092

350 ft. O.D., chalk, 90 x 140 ft., 1 house, dew-pond

Ratcliffe-Densham, 1953

New Barn Down, TQ 084092

300 ft. O.D., chalk, 130 x 220 ft., 2-3 houses

Curwen, 1922, 32-5; 1934a; 1937, 179-182

Wiltshire

Ogbourne Maizey Down, SU 158737

550 ft. O.D., chalk, ¾ acre, internal features unknown

VCH, 1957, 94, E.174

Preshute Down, SU 142742

700 ft. O.D., chalk, ¾ acre, 1 pit, 1 post-hole

Piggott, C.M., 1942, 50 f.

South Lodge, ST 954174

350 ft. O.D., chalk, ¾ acre, 1 pit, post-holes

Pitt-Rivers, 1898, 1-45

Thorny Down, SU 203338

500 ft. O.D., chalk, ½ acre, No. of houses, pits

Stone, 1937; 1941

ii. multiple sub-rectangular:

Berkshire

East Garston Down, SU 363780

400 ft. O.D., chalk, c. 300 x 400 ft. Unexcavated

Bachelier, 1965

Dorset

Shearplace Hill, SY 640896

600 ft. O.D., chalk, c. 500 x 500 ft., 3 houses, pits, dew-pond

Rahtz and ApSimon, 1962

Sussex

Itford Hill, TQ 447053

450 ft. O.D., chalk, c. 180 x 440 ft., 13 houses, pits

Burstow and Holleyman, 1957a

Plumpton Plain A, TQ 359122

600 ft. O.D., chalk, 4 enclosures measuring from 60 x 60 ft. to 85 x 135 ft. internally, 4 houses

Holleyman and Curwen, 1935, 21-28, 32-38; Hawkes, 1935, 39-46, 55-59

iii. curvilinear:

Cambridgeshire

Swaffham, TL 5763

75 ft. O.D., chalk, 68 ft. in diameter. Internal features unknown

Fox, 1923a, 47 f.

Sussex

Cock Hill, TQ 089097

300 ft. O.D., chalk, 160 ft. in diameter, 3 houses, pits, dew-pond

Ratcliffe-Densham, 1961

Wiltshire

Woodhenge, SU 150432

300 ft. O.D., chalk, 1/10 acre, No. of post-holes

Cunnington, 1929, 49-51

Cattle enclosure

Sussex

Harrow Hill, TQ 081100

500 ft. O.D., chalk, $\frac{3}{4}$ acre, I palisaded, II earthwork enclosed

Holleyman, 1937

Enclosures:

Angle Ditch, Dorset, ST 9516 (Pitt-Rivers, 1898, 58-61, 102-110)

Boscombe Down East, Wilts., SU 232372 (Stone, 1936)

Figheldean Down, Wilts., SU 184490 (Crawford, 1928, 42)

Fittleton, Wilts., SU 197513 (Crawford, 1928, 40 f.)

Ogbourne Down West, Wilts., SU 171744 (Piggott, C.M., 1942, 52)

Ogbourne Down Centre, Wilts., SU 174744 (Piggott, C.M. 1942, 52)

Preshute Down, Wilts., SU 138747 (VCH, 1957, 268)

Sheep Down, Berks., SU 470847 (Rhodes, 1950, 21)

Cave occupation:

Soldier's Hole, Somerset, ST 467540 (Balch, 1928, 204-8)

Occupation traces:

Badbury, Dorset, ST 956030 (MOW, 1965, 4)

Rottingdean, Sussex, TQ 374044 (unpublished)

I, iv. Settlements in S. England in the early first millennium B.C.

Open:

Dorset

Eldon's Seat I, SY 939776

260 ft. O.D., clay, 4 houses, pits, possibly within palisaded enclosures

Cunliffe and Phillipson, 1968, 197-201, 206-237

Kent

Minnis Bay I, TR 280695

Modern shore-line, chalk, large hollow, 2 pits

Worsfold, 1943

Surrey

Weston Wood, TQ 053485

350 ft. O.D., sand, 2 houses, pit

Harding, 1964; Godwin and Ellis, 1964, 126

Sussex

Amberley Mount, TQ 042123 and 041123

450 ft. O.D., chalk, 2 houses, pits

Ratcliffe-Densham, 1966

Earthwork Enclosed:

Kent

Minnis Bay II, TR 280695

Modern shore-line, chalk, 15 pits within timber-laced bank of unknown extent

Worsfold, 1943

Sussex

Kingley Vale, SU 822106

300 ft. O.D., chalk, 80 x 50 ft., 2 pits, 1 post-hole

Curwen, 1934b.

Playden, TQ 9121

100 ft. O.D., clay, c. 40 x ? ft., palisaded

Internal features unknown

Cheney, 1935, 157

Sites of uncertain type:

Dorset

Chalbury I, SY 695858

Whitley, 1943

Sheepsleights, SY 969784

Calkin, 1949

Storage Pits of the later second and early first millennia B.C.:

Itford Hill, Sussex (Burstow and Holleyman, 1957a; 178, pit 26)

Kingley Vale, Sussex (Curwen, 1934b, 212, pit 1)

Martin Down, Hants. (Pitt-Rivers, 1898, 188, pit G)

Minnis Bay, Kent (Worsfold, 1943, 31 f., pit 10)

Park Brow, Sussex (Wolseley, 1927, 1, pit 4)

Preshute Down, Wilts. (Piggott, C.M., 1942, 51)

South Lodge, Wilts. (Pitt-Rivers, 1898, 17, P)

Settlements associated with grain in the later second and early first millennia B.C.:

Itford Hill, Sussex	barley	(Burstow and Holleyman, 1957a; 177)
Ogbourne Maizey Down, Wilts.	barley	(VCH, 1957, 94, E.174)
Weston Wood, Surrey	barley, wheat	(Harding, 1964, 14)
Woodhenge, Wilts.	barley	(Cunnington, 1929, 50)

II, 1, i. Palisaded Homesteads

Durham

West Brandon II, NZ 201399

850 ft. O.D., sandstone, ¾ acre

Double palisade, 1 house

Jobey, 1962

Kirkcudbrightshire

McNaughton's Fort I, NX 873778

400 ft. O.D., Silurian rock series, 60 ft. in diameter

Single palisade

Scott-Elliot et al., 1966

Northumberland

Burradon, NZ 270729

200 ft. O.D., Coal Measures, rectangular

Single palisade, 1 house

Jobey, 1962, 32

Peeblesshire

Glenachan Rig, NT 106328

984 ft. O.D., shale, 108 x 84 ft.

Single palisade, 2 houses + 1 external house

Feachem, 1959; RCAHMS, 1967, no. 197

Hillside Knowe, NT 340433

1050 ft. O.D., Silurian series, 160 x 100 ft.

Double palisade, 1 house

RCAHMS, 1967, no. 200

Meldon Burn, NT 215414

950 ft. O.D., Ordovician series, 85 x 70 ft.

Single palisade, 1 house

RCAHMS, 1967, no. 202

South Hill Head, NT 220416

1200 ft. O.D., Silurian series, 155 x 120 ft.

Double palisade, 1 house

RCAHMS, 1967, no. 205

White Knowe, NT 169463

1200 ft. O.D., Ordovician series, 115 x 105 ft.

Single palisade, 1 house

RCAHMS, 1967, no. 208

Roxburghshire

Gray Coat, NT 471052

1100 ft. O.D., shale, 154 x 123 ft.

Double palisade, 1 house

RCAHMS, 1956, no. 994

Greenbrough Hill, NT 813169

1250 ft. O.D., igneous lavas, 95 x 75 ft.

Single palisade, 2 houses

RCAHMS, 1956, no. 316

Shoulder Hill, NT 825233

1000 ft. O.D., igneous lavas, size unknown

Single palisade, 3 houses

RCAHMS, 1956, no. 670

Wiltshire

Little Woodbury I, SU 150279

270 ft. O.D., chalk, 410 ft. in diameter

Single palisade, 2 houses

Bersu, 1940; Brailsford, 1949

Yorkshire

Staple Howe, SE 898749

370 ft. O.D., chalk, I 210 x 80 ft.
II 255 x 100 ft.

Single palisade, I 1 house
II 2 houses

Brewster, 1963; Barker and Mackey, 1960, 28 f.

II, 1, ii Palisaded Settlements

Berkshire

Blewburton Hill I, SU 547863

300 ft. O.D., chalk, size unknown

Single palisade

Bradford, 1942a; Collins, 1947; 1953.

Caernarvonshire

Castell Odo II, SH 187284

550 ft. O.D., Ordovician series, 280 ft. in diameter

Single palisade, no. of houses

Alcock, 1960

Dumfriesshire

Camp Hill, Trohoughton, NX 997727

300 ft. O.D., sandstone, 140 ft. in diameter

Double palisade

Simpson and Scott-Elliot, 1963.

Midlothian

Braidwood, NT 193596

1050 ft. O.D., sandstone, 180 x 120 ft. internally

Double palisade, ? 6 houses

Stevenson, 1949; Piggott, 1958b; DES, (1968), 26

Montgomeryshire

Ffridd Faldwyn I, SO 217969

950 ft. O.D., shale, size uncertain

Double palisade, 2 houses

O'Neil, 1942

Northumberland

East High Knowes, NT 971125

1200 ft. O.D., igneous lavas, 220 x 205 ft.

Double palisade, 16 houses

Jobey and Tait, 1966, 9-23

West High Knowes, NT 971125

1200 ft. O.D., igneous lavas, 150 ft. in diameter

Double palisade, 4 houses

Jobey and Tait, 1966, 9-23

Huckhoe I, NZ 073828

500 ft. O.D., limestone, 300 x 240 ft. internally

Double palisade + outer single palisade

Jobey, 1962; 1968

Ingram Hill I, NU 012158

550 ft. O.D., igneous lavas, 128 x 145 ft.

Single palisade, 7-8 houses

Hogg, 1942; 1956

Peeblesshire

Castle Hill I, NT 291400

1050 ft. O.D., Silurian series, 250 ft. in diameter

Double palisade + outer double palisade, 2 houses

Feachem, 1966, 63 f., fig. 3; RCAHMS, 1967, no. 195

Dead Side, NT 268361

1100 ft. O.D., Silurian series, 110 x 190 ft.

Single palisade, 2 houses

RCAHMS, 1967, no. 196

Harehope Rings, NT 203448

1100 ft. O.D., Silurian series, II 240 x 200 ft., III 155 x 120 ft.

Double palisade, 1 house

Feachem, 1960; RCAHMS, 1967, no. 285

Nether Dod, NT 078227

900 ft. O.D., Silurian series, 118 x 76 ft.

Single palisade, 3-5 houses

RCAHMS, 1967, no. 204

Roxburghshire

Craik Moor I, NT 811190

1500 ft. O.D., Silurian series, 480 x 320 ft.

Single palisade + outer double palisade, 1 house

RCAHMS, 1956, no. 650

Hayhope Knowe I, NT 860176

1100 ft. O.D., igneous lavas, 300 x 175 ft. internally

Double palisade, 12 houses

Piggott, C.M., 1949; RCAHMS, 1956, no. 665

Steer Rig, NT 859254

1200 ft. O.D., igneous lavas, 225 x 150 ft.

Single palisade, 5 houses

RCAHMS, 1956, no. 1044

Sussex

Muntham Court, TQ 109095

400 ft. O.D., chalk, size unknown

Single palisade

Burstow and Holleyman, 1956a & b; 1957b; Holleyman, 1960

Wiltshire

Swallowcliffe, ST 967254

730 ft. O.D., chalk, 500 ft. in diameter

Single palisade

Clay, 1925, 62, pl. II; 1927a

II, 1, iii Palisaded Enclosures

Angus

Hurly Hawkin I, NO 332328

250 ft. O.D., sandstone, 50 ft. in diameter

Single palisade

DES, (1965), 2 f.; (1967), 1.

Dumfriesshire

Harthill, NY 132825

200 ft. O.D., shale, 300 x 220 ft.

Single palisade

Cormack, 1963

Morton Mains I, NS 892006

1000 ft. O.D., Silurian series, 300 ft. in diameter internally

Double palisade and outer single palisade

Feachem, 1955, 63

Potholm Hill, NX 362880

700 ft. O.D., shale

Double palisade

Feachem, 1955, 63

Midlothian

Castle Law I, NT 229638

1000 ft. O.D., igneous lavas, size uncertain

Single palisade

Piggott and Piggott, 1952, 191-194

Lancashire

Skelmore Heads I, SD 274752

325 ft. O.D., limestone, ? 470 x 350 ft.

Single palisade

Powell, 1963

Leicestershire

Breedon Hill I, SK 406234

400 ft. O.D., limestone, size unknown

Single palisade

TLAHS, XXXIII (1957), 79 f.; XLII (1967), 85

Northumberland

Newbrough, NY 877677

200 ft. O.D., limestone, rectilinear, size unknown

Double palisade

Jobey, 1962, 32

Seghill, NZ 282748

150 ft. O.D., Coal Measures, 1 acre

Single palisade

Jobey, 1962, 32

West Sinkside, NT 882264

900 ft. O.D., igneous lavas, 130 ft. in diameter

Single palisade

Jobey, 1962, 32; 1966, 92 f.

Yeavering Bell I, NT 929293

1180 ft. O.D., igneous lavas, 160 ft. in diameter

Single palisade

Jobey, 1962, 34

Peeblesshire

Glenwhappen Rig, NT 068228

1100 ft. O.D., Silurian series, 230 x 125 ft.

Single palisade

RCAHMS, 1967, no. 198

Hogbridge, NT 260390

590 ft. O.D., Silurian series, 155 x 140 ft. internally

Single palisade + outer triple palisade

RCAHMS, 1967, no. 201

Mitchelhill, NT 064340

1000 ft. O.D., Ordovician series, 215 x 150 ft.

Single palisade

RCAHMS, 1967, no. 203

Ven Law, NT 258412

1000 ft. O.D., Silurian series, 75 x 60 ft.

Single palisade

RCAHMS, 1967, no. 206

White Hill I, NT 055338

1300 ft. O.D., Ordovician series, 400 x 240 ft.

Double palisade

RCAHMS, 1967, no. 207

Woolshears Wood, NT 144425

900 ft. O.D., Ordovician series, 115 x 105 ft.

Single palisade

RCAHMS, 1967, no. 209

Perthshire

Inchtuthil I, NO 115393

150 ft. O.D., gravel, 200 x 100 ft.

Single palisade

Abercromby et al., 1902, 230, fig. 1

Kempy Fort I, NN 977213

200 ft. O.D., sandstone, 250 x 165 ft.

Single palisade

Christison, 1900, 119 f.; 1901, 38, fig. 12

Orchill Fort I

600 ft. O.D., sandstone, size uncertain

Double palisade

Christison, 1900, 117-119, fig. 56; 1901, 21-23, fig. 4

Renfrewshire

Craigmarloch I, NS 344719

450 ft. O.D., basalt lavas, size unknown

DES, (1963), 42 f.; (1964), 46 f.; (1965), 34; (1966), 39

Roxburghshire

Blackbrough I, NT 809177

1250 ft. O.D., igneous lavas, 110 x 85 ft.

Single palisade

RCAHMS, 1956, no. 302

Cappuck I, NT 690200

310 ft. O.D., shale, size unknown

Single palisade

Richmond, 1951, 142 f.; RCAHMS, 1956, no. 803

Fasset Hill, NT 851206

1220 ft. O.D., igneous lavas, 205 x 168 ft.

Single palisade

RCAHMS, 1956, no. 660

Henfield, NT 753113

1000 ft. O.D., igneous lavas, 143 x 113 ft.

Single palisade

RCAHMS, 1956, no. 801

Hownam Rings I, NT 791194

1000 ft. O.D., sandstone, ? 375 x 250 ft.

Single palisade

Piggott, C.M., 1948; RCAHMS, 1956, no. 301

Stanshiel Hill, NT 780133

1160 ft. O.D., igneous lavas, 455 x 175 ft.

Single palisade

RCAHMS, 1956, no. 317

Shropshire

Minsterley I, SJ 356057

375 ft. O.D., shale, size unknown

Single palisade

PPS, XXV (1959), 276

Sussex

Hollingbury, TQ 322078

550 ft. O.D., chalk, 153 x ? ft.

Single palisade

Curwen, 1932

Playden, TQ 9121

100 ft. O.D., clay, rectangular, c. 40 x ? ft.

Single palisade

Cheney, 1935, 157

Uncertain Palisaded Enclosures

Cornwall

St. Mawgan-in-Pyder, SW 874654

300 ft. O.D., sandstone, size uncertain

Single palisade

Threipland, 1956

Devon

Hembury, ST 113030

750 ft. O.D., marlstone, size uncertain

Double palisade

Liddell, 1930-5

Hampshire

Winkelbury, SU 613529

400 ft. O.D., chalk, size unknown

Single palisade

PPS, XXVI (1960), 345

Hertfordshire

Wilbury Hill, TL 202325

280 ft. O.D., clay, size unknown

Single palisade

Applebaum, 1949

Norfolk

Broome Heath, TM 343912

25 ft. O.D., clay, size unknown

Double palisade

MOW, 1966, 6

Shropshire

Old Oswestry, SJ 296310

425 ft. O.D., Coal Measures, size unknown

Single palisade

O'Neill, 1942, 11

Sussex

The Caburn, TQ 444089

450 ft. O.D., chalk, size unknown

Single palisade

Wilson, 1939

Hill-fort marking-out trenches

Buckinghamshire

Ivinghoe Beacon, SP 960169 (Cotton and Frere, 1968, 194)

Hampshire

Ladle Hill, SU 479568 (Piggott, 1931)

Quarley Hill, SU 263424 (Hawkes, 1939, 169-171)

Northumberland

Witchy Neuk, NY 982994 (Wake, 1939, 129; Jobey, 1962, 32)

II, 2, i. Earthwork Enclosed Homesteads

Caernarvonshire

Llandegai, SH 594712

140 ft. O.D., gravel, 300 ft. in diameter

Re-used henge, 2 houses

Houlder, 1968

Dorset

Woodcuts I, ST 963181

500 ft. O.D., chalk, 300 ft. in diameter

Pits

Pitt-Rivers, 1887, 7-239; Hawkes, 1947, 42-44

Durham

West Brandon III, NZ 201399

850 ft. O.D., sandstone, 1 acre

1 house

Jobey, 1962

Essex

Thurrock, TQ 673803

100 ft. O.D., gravel, size unpublished

1 house

MOW, 1965, 4 f.

Fife

Scotstarvit, NO 361108

340 ft. O.D., sandstone, 120 x 150 ft.

1 house

Bersu, 1948

Kent

Deal, TR 362509

100 ft. O.D., chalk, 160 ft. in diameter

1 house

Arch. Cant., XLVI (1934), 207-9

Northamptonshire

Draughton, SP 776766

500 ft. O.D., clay, 100 ft. in diameter

3 houses, pits

Grimes, 1960, 21

Twywell, SP 952788

200 ft. O.D., ironstone, 138 x 50-85 ft.

3 houses, pits

MOW, 1967, 10

Northumberland

Corbridge Site XI, NY 982648

150 ft. O.D., limestone, 60 x 56 ft.

1 house

Richmond and Gillam, 1955, 218; *contra* Jobey, 1962, 31 f., where the site is classified as palisaded.

Gubeon Cottage, NZ 140823

340 ft. O.D., clay, ¾ acre

1 house, 1 pit

Jobey, 1957.

Oxfordshire

Stanton Harcourt, Beard Mill A, SP 3905

200 ft. O.D., gravel, 60 x 40 ft.

1 house, pits

Williams, 1951; RCAHME, 1960, 15

Peeblesshire

Castle Hill II, NT 291400

1050 ft. O.D., Ordovician series, 120 x 90 ft.

Double banks and ditches, 3 houses

RCAHMS, 1967, no. 195

Hartree Hills, NT 066358

1100 ft. O.D., Ordovician series, 150 x 130 ft.

2 houses

RCAHMS, 1967, no. 228

Roxburghshire

Wiltonburn Hill, NT 478151

800 ft. O.D., Silurian series, 150 x 75-100 ft.

2 houses

RCAHMS, 1956, no. 253

Sussex

Charleston Brow North, TQ 484054

550 ft. O.D., chalk, 100 x 75 ft.

Pits

Parsons and Curwen, 1933, 174-180

Wiltshire

Berwick Down South, ST 942197

700 ft. O.D., chalk, 1 acre

1 house, pits, granaries, drying-racks

Wainwright, 1968

Down Barn West, SU 167365

300 ft. O.D., chalk, ½ acre

Pit

Fowler et al., 1965, 56-61

Fifield Down, SU 131702

700 ft. O.D., chalk, 1½ acres

1 house

Fowler, 1967, 17-24; WAM, 63 (1968), 109

Highfield, SU 133308

240 ft. O.D., gravel, 400 ft. in diameter

Stevens, 1934

Little Woodbury, SU 150279

270 ft. O.D., chalk, 420 ft. in diameter

Unfinished ditch, 2 houses, pits, granaries, drying-racks

Bersu, 1940; Brailsford, 1949

Mancombe Down, ST 895471

600 ft. O.D., chalk, 1 acre

Internal features unknown

Fowler et al., 1965, 52-6

Probable Sites

Dorset

Cerne Abbas, Black Hill, ST 670006

650 ft. O.D., chalk, 75 ft. in diameter

RCAHME, 1952, 83

Cerne Abbas, Black Hill, ST 675004

700 ft. O.D., chalk, 78 x 84 ft.

RCAHME, 1952, 83

Smacam Down, SY 657994

600 ft. O.D., chalk, 120 x 150 ft.

1 house

RCAHME, 1952, 83

II, 2, ii. Earthwork Enclosed Settlements

Caernarvonshire

Castell Odo, SH 187284

550 ft. O.D., Ordovician series, 280 ft. in diameter

2 houses

Alcock, 1961

Cambridgeshire

Abington Pigotts, TL 301451

100 ft. O.D., chalk, 20 acres

Internal features uncertain apart from pits

Fox, 1923b

Dorset

Hog Cliff Hill, SY 625965

550 ft. O.D., chalk, 26 acres

10-12 houses

Rahtz, 1960; 1961

Pimperne, ST 891097

300 ft. O.D., chalk, 11½ acres

1 house

Harding and Blake, 1963

Glamorganshire

Mynydd Buchan I, SS 963756

200 ft. O.D., limestone, ⅔ acre

3-5 houses

Savory, 1949; 1954; 1955

Hampshire

Meon Hill, SU 344352

300 ft. O.D., chalk, 460 x 520 ft.

Internal features uncertain apart from pits

Crawford and Keiller, 1928, 107 f., pl. XIIIb; Liddell, 1933; 1937

Lincolnshire

Tallington Site 35, TF 0908

100 ft. O.D., gravel, 480 x 320 ft.

1 house

Simpson, 1966, 15

Middlesex

Heath Row, TQ 084765

50 ft. O.D., clay, 450 ft. across

11 houses

Grimes, 1960, 25

Peeblesshire

Nether Stewarton, NT 211456

1150 ft. O.D., Ordovician series, 190 x 100 ft.

5 Houses

RCAHMS, 1967, no. 238

Orchard Rig I, NT 302346

1250 ft. O.D., Silurian series, 200 x 175 ft. internally

Double banks and ditches, 17 houses

RCAHMS, 1967, no. 239

Parkgatestone Hall, NT 083353

1000 ft. O.D., Ordovician series, 160 x 150 ft.

1 house

RCAHMS, 1967, no. 242

Roxburghshire

Black Hill, NT 830240

1000 ft. O.D., Ordovician series, 180 x 110 ft. + annexe 170 x 75 ft.

3 houses in main enclosure, 3 in annexe

RCAHMS, 1956, no. 657

Kemp's Castle I, NT 438165

1140 ft. O.D., Silurian series, 300 x 240 ft.

4 houses

RCAHMS, 1956, no. 867

Kemp's Castle II, NT 438165

1140 ft. O.D., Silurian series, 160 x 130 ft.

5 houses

RCAHMS, 1956, no. 867

White Knowe, NT 494079

1000 ft. O.D., shale, 315 x 160 ft.

11 houses

RCAHMS, 1956, no. 159

Surrey

Carshalton, TQ 2764

150 ft. O.D., chalk, 500 ft. in diameter

Internal features unknown

Lowther, 1945

Westmorland

Castle Hill, NY 702230

700 ft. O.D., Ordovician series, 1 acre

7 houses

RCAHME, 1936, 94 f.; Lowndes, 1963, 94

Wiltshire

Longbridge Deverill Cow Down, ST 887405

600 ft. O.D., chalk, A : 1 acre, B : 7 acres, C : 8 acres

A : 1 house, B : 3 houses, C : 2 houses; pits

Annable, 1959, 231 f.; 1961, 31 f.; Chadwick, 1960; Callow et al., 1966, 340

Enclosed habitation sites of unknown size of community:

Bedfordshire

Totternhoe, SP 981221

500 ft. O.D., chalk, ? house, pit

Hawkes, 1940

Hertfordshire

Whiteley Hill, TL 388397

200 ft. O.D., chalk, 480 ft. in diameter

Double concentric ditches, 1 pit

Willerson and Cra'sles, 1958

Oxfordshire

Allen's Pit, Dorchester, SU 575962

180 ft. O.D., gravel, 120 x ? 250 ft.

Sub-divided internally by ditch

Bradford, 1942c

City Farm East, SP 430111

230 ft. O.D., gravel, 16 pits

Case et al., 1965, 42-4

City Farm West, SP 430111

230 ft. O.D., gravel, 500 x 120 ft.

Post-holes, pits, drying-racks

Case et al., 1965, 44-50, fig. 17

Sussex

Park Brow, TQ 154089

350 ft. O.D., chalk, 200 x 130 ft.

Post-holes, pits, drying-rack

Wolseley et al., 1924, 347-9 ; 1927, 30-40

Wiltshire

Boscombe Down West Site R, SU 191386

350 ft. O.D., chalk, 100 pits

Richardson, 1951, 130-133

Cold Kitchen Hill, ST 837388

750 ft. O.D., chalk, series of adjoining rectilinear enclosures, no details known

Kivell, 1925; 1926[a]; VCH, 1957, 47-9

Harnham Hill, SU 137286

300 ft. O.D., chalk, 16 pits

Piggott, C.M., 1938[b]

Yorkshire

Driffield, TA 007560

50 ft. O.D., gravel, ditches, pits, post-holes

Philips, 1962

II, 2, iii. Earthwork Enclosures (a representative selection)

Dorset

Bowley's Plantation, SY 768879

150 ft. O.D., chalk, ¼ acre

Field, 1959

Ringmoor, ST 809086

750 ft. O.D., chalk, 150 x 110 ft.

Warne, 1872, 20

Essex

Ardleigh, TM 056284

100 ft. O.D., clay, 115 x 75 ft., double ditches

Erith, 1967

Hampshire

Farley Mount, SU 402291

550 ft. O.D., chalk, 6 acres

Crawford and Keiller, 1928, 102 f., pl. XII; Bowen and Fowler, 1966, 45

Portsdown West, SU 673064

400 ft. O.D., chalk, 175 x 150 ft.

Bradley, 1967, 46-55

Teg Down, SU 458297

400 ft. O.D., chalk, 120 ft. across

Crawford and Keiller, 1928, 110, pl. XIV

Kent

Greenhithe, TQ 583732

200 ft. O.D., chalk, A : 54 ft. in diameter; B : 138 ft. in diameter, pit

Detsicas, 1962

Northamptonshire

Maxey Site 17, TF 1208

25 ft. O.D., gravel, 250 x 220 ft.

RCAHME, 1960, 14

Somerset

Hayes Wood, ST 772608

500 ft. O.D., clay, 1¼ acres

Stone and Wicks, 1935

Westmorland

Croglam Castle, NY 572465

700 ft. O.D., sandstone, 1½ acres

RCAHME, 1936, 143

Waitby Castle, NY 757084

750 ft. O.D., sandstone, size uncertain

RCAHME, 1936, 234

Wiltshire

Fifield Bavant, SU 009256

500 ft. O.D., chalk, ½ acre

Adjoining open settlement of Fifield Bavant East

Sumner, 1913, pl. XXVII; Clay, 1924, pl. I

Knook Down, SU 948437

550 ft. O.D., chalk, 2 acres

Hoare, 1812, 81; VCH, 1957, E. 129.

Wilsford Down, SU 113405

300 ft. O.D., chalk, 50 acres

Hoare, 1812, Map of Stonehenge opp. 170, 170 f.;
Crawford and Keiller, 1928, pl. L; Annable, 1959, 229.

Woodford Clump, SU 107358

450 ft. O.D., chalk, 2-3 acres

Hoare, 1812, 215; Crawford and Keiller, 1928, pl. XLVa

II, 2, iv. Banjo Enclosures

Carmarthenshire

Carn Goch, SN 691243

650 ft. O.D., shale, c. 600 x 400 ft.

Length of entrance-way : 200 ft.

Forde-Johnson, 1962, 83 f.

Dorset

Chettle Down, ST 945148

300 ft. O.D., chalk, 180 x 130 ft.

Length of entrance-way : 30 ft.

Sumner, 1913, pl. XXIV

Gussage Cowdown, ST 993141

300 ft. O.D., chalk, 200 ft. in diameter

Length of entrance-way : 100 ft.

Hoare, 1821, pt. 2, 30 f.; Crawford and Keiller, 1928, 113, pl. XVI; Perry, 1966, 42.

Hampshire

Blagden Copse, SU 364523

500 ft. O.D., chalk, c. 200 ft. diameter

Length of entrance-way : 150 ft.

Perry, 1966, 40 f.; Stead, forthcoming

Bramdean, SU 628282

350 ft. O.D., chalk, 180 ft. diameter

Length of entrance-way : 75 ft.

Perry, 1966, 42

Preshaw House, SU 573226

350 ft. O.D., chalk, 280 ft. diameter

Length of entrance-way : 330 ft.

Perry, 1966, 40, 42

Upper Cranbourne Farm, SU 492424

300 ft. O.D., chalk, 150 ft. diameter

Length of entrance-way : 200 ft.

Perry, 1966, 42

Vernham Dean, SU 340570

500 ft. O.D., chalk, 200 ft. diameter

Length of entrance-way : 90 ft.

Perry, 1966, 42

Warren Farm, SU 540268

500 ft. O.D., chalk, 150 ft. diameter

Length of entrance-way : 90 ft.

Perry, 1966, 42

Woodhams Farm, SU 488334

150 ft. O.D., chalk, 150 ft. diameter

Length of entrance-way : 150 ft.

Perry, 1966, 42

Worting, SU 600514

350 ft. O.D., chalk, 200 ft. diameter

Length of entrance-way : 150 ft.

Perry, 1966, 42

Kent

Salt Farm, TQ 5967

200 ft. O.D., chalk, ?

Length of entrance-way : ?

Arch. Cant., XLVII (1935), 241; Jessup, 1941, 74

Oxfordshire

Blackditch Field, SP 4105

200 ft. O.D., gravel, ?

Length of entrance-way : ?

Ant., IX (1935), 478 f.

Brighthampton, SP 3803

150 ft. O.D., gravel, ?

Length of passage-way : ?

Riley, 1943, 86

Northmoor, SP 4202

150 ft. O.D., gravel, ?

Length of entrance-way : ?

Riley, 1943, 98 no. 28

Shropshire

Caer Din Ring, SO 3081

1450 ft. O.D., sandstone, 300 ft. diameter

Length of entrance-way : 200 ft.

VCH, 1908, 372 f.

Wiltshire

Church End Ring, SU 012357

450 ft. O.D., chalk, 300 ft. diameter

Length of entrance-way : 180 ft.

Crawford and Keiller, 1928, 116-118; Perry, 1966, 42

Hamshill Ditches, SU 060332

450 ft. O.D., chalk, 150 ft. in diameter

Length of entrance-way : 100 ft.

Crawford and Keiller, 1928, 97-9, pl. XIb; Perry, 1966, 42

Yorkshire

Maiden Castle, Grinton, NZ 1403

1000 ft. O.D., limestone, $1\frac{3}{4}$ acres

Length of entrance-way : 360 ft.

VCH, 1912, 65

II, 2, v. Spectacles Enclosures

Dorset

South Tarrant Hinton Down, ST 921113

350 ft. O.D., chalk, S. enclosure : 8 acres
N. enclosure : 5 acres

Sumner, 1913, 41 f., pl. XX; Barker, 1960, 84

Hampshire

Rowbury Farm, SU 340394

250 ft. O.D., chalk, acreage unknown but one enclosure larger than the other

Crawford and Keiller, 1928, 226

Wiltshire

Hamshill, SU 060332

450 ft. O.D., chalk, S. enclosure : 150 ft. diameter
N. enclosure : similar

Bowen and Fowler, 1966, 67

Huish Hill, SU 155638

800 ft. O.D., chalk, E. enclosure : 3½ acres
W. enclosure : 4 acres

Hoare, 1821, pl. III

Pewsey Down, SU 175574

650 ft. O.D., chalk, W. enclosure : 300 x 360 ft.
E. enclosure : 380 x 430 ft.

Hoare, 1812, 191; Crawford and Keiller, 1928, 224-6, pl. XLI

II, 3. Complex Ditch Settlements

Hampshire

Owlesbury, SU 525246

300 ft. O.D., chalk, 10-15 acres

Collis, 1968

Worthy Down, SU 469350

350 ft. O.D., chalk, 17 acres

Hooley, 1929

Lincolnshire

Dragonby, SK 905138

300 ft. O.D., sand on Pecten Ironstone, c.20 acres

May, typescript interim reports, 1964-7

Wiltshire

Grovely Earthworks, SU 060355

500 ft. O.D., chalk, ? 100 acres

Hoare, 1812, 110-11, pl. opp. 110; Crawford and Keiller, 1928, pl. XVIII; VCH, 1957, 74

Hanging Langford Camp, SU 013353

600 ft. O.D., chalk, c. 18 acres

Hoare, 1812, pl. opp. 108; Crawford and Keiller, 1928, pl. XVII; VCH, 1957, 107 f.

Huish Hill, SU 159639

800 ft. O.D., chalk, c. 20 acres

Hoare, 1821, pl. III

Rotherley, ST 949195

650 ft. O.D., chalk, 4 acres

Pitt-Rivers, 1888, 51-231; Hawkes, 1947, 36-42

Stockton Earthworks, ST 972362

650 ft. O.D., chalk, c. 62 acres

Kiwell, 1926b

Probable Examples

Dorset

Gussage Cowdown, ST 993141

300 ft. O.D., chalk, c. 15 acres

Hoare, 1821, pt. II, 30 f.; Crawford and Keiller, 1928, 112-114, pls. XV, XVI

Kent

Crayford, TQ 510751

110 ft. O.D., gravel, area unknown

Ward Perkins, 1938

Lincolnshire

Ancaster, SK 987432

250 ft. O.D., limestone, area unknown

Barley, May and Wilson, typescript interim report, 1965

Wiltshire

Hamshill, SU 060332

450 ft. O.D., chalk, c. 15 acres

Crawford and Keiller, 1928, 97-9, pl. XIb

II, 4. Open Settlements

Caernarvonshire

Castell Odo I, SH 187284

480 ft. O.D., Ordovician series, no. of houses

Alcock, 1960

Cornwall

Carwynnen, SW 658365

600 ft. O.D., granite, 2 houses

Thomas, 1954

Kynance Gate, SW 687139

200 ft. O.D., granite, no. of houses

PPS, XXIV (1958), 216

Denbighshire

Dinorben O, SH 936767

500 ft. O.D., limestone, c. 15 houses

Savory, 1964, 75, fig. 11

Dorset

Cattistock, SY 578990

550 ft. O.D., chalk, 16 house-sites

RCAHME, 1952, 73

Dickley Hill, ST 657003

650 ft. O.D., chalk, 2 house-sites, small enclosure, pits

RCAHME, 1952, 84

Eldon's Seat II, SY 939776

260 ft. O.D., chalk, IIa 2 houses, IIc 1 house, pits

Cunliffe and Phillipson, 1968

Gallows Gore, SY 978790

450 ft. O.D., limestone, pits, 2 possible house-sites

Calkin and Piggott, 1939; Calkin, 1949, 40-42

Knowle Hill, SY 934823

400 ft. O.D., chalk, hollow, timber granary

Forde-Johnston, 1957

Marnhull, ST 795198

200 ft. O.D., limestone, pits, 5 houses, granaries, racks

Williams, 1950

Weam Common Hill, ST 654016

600 ft. O.D., chalk; 1 house-site, pits

RCAHME, 1952, 84

Hampshire

Twyford Down, SU 492268

300 ft. O.D., chalk, pits

Stuart and Birkbeck, 1937

Norfolk

West Harling, TL 975857

50 ft. O.D., gravel, 2 houses, 1 rectilinear structure

Apling, 1932; Clark and Fell, 1953

Surrey

Hawk's Hill, TQ 155554

250 ft. O.D., chalk, pits, post-holes, granaries, drying-racks

Hastings, 1965

Sandown Park, TQ 128850

165 ft. O.D., gravel, house

Burchell and Frere, 1947

Sussex

Findon Park, TQ 141097

500 ft. O.D., chalk, pits, post-holes

Fox and Wolseley, 1928

Harting Hill, SU 791185

700 ft. O.D., chalk, 2 houses

Keef, 1950

Wiltshire

All Cannings Cross, SU 080635

500 ft. O.D., chalk, pits, working-floors, granary

Cunnington, 1923

Battlesbury, ST 897459

500 ft. O.D., chalk, pits, post-holes, drying-racks

Chadwick and Thompson, 1956

Berwick Down North, ST 942196

750 ft. O.D., chalk, pits, 2 houses

Bowen and Fowler, 1966, 46, fig. 2

Boscombe Down West, Site Q, SU 189398

350 ft. O.D., chalk, pits

Richardson, 1951, 127-9, fig. 2

Fifield Bavant East, SU 009257

500 ft. O.D., chalk, pits

Clay, 1924

Fifield Bavant West, SU 001255

550 ft. O.D., chalk, pits

Clay, 1924

Swallowcliffe Down I, ST 967254

730 ft. O.D., chalk, pits

Clay, 1925; 1926, 435; 1927

Major Settlement Sites of Uncertain Type

Berkshire

Radley, SU 521968

150 ft. O.D., gravel, pits, gullies

Leeds, 1935

Southcote, SU 694722

150 ft. O.D., gravel, pits, ditches

Piggott and Seaby, 1937

Wittenham Clumps, SU 565925

200 ft. O.D., chalk, hollow

Rhodes, 1948

Buckinghamshire

Lodge Hill, SP 793001

550 ft. O.D., chalk, pits

Head and Piggott, 1944

Thorney Farm, TQ 044796

100 ft. O.D., gravel, pits

Dennington and Gallant, 1964

Cambridgeshire

Linton, TL 556464

50 ft. O.D., chalk, pits

Fell, 1952

Dorset

Pin's Knoll, SY 541905

300 ft. O.D., greensand

Bailey, 1960; 1964

Sheepsleights, SY 969784

300 ft. O.D., limestone, pits

Calkin, 1949, 30-32

Essex

Chadwell St. Mary, TQ 6478

50 ft. O.D., gravel, pits, ditches, granaries

Manning, 1962

Linford, TQ 567180

100 ft. O.D., gravel, pits, 1 house

Barton, 1962

Hampshire

Redenham, SU 293485

250 ft. O.D., chalk, pits

Engleheart, 1922, 217 f.

Hertfordshire

Aldwick, TL 398388

300 ft. O.D., chalk, pits, 1 house, granary

Cra'ster, 1961; 1965

Holwell, TL 166322

200 ft. O.D., sand, pits

Applebaum, 1934

Jack's Hill, TL 233291

400 ft. O.D., chalk, pits

Tebbutt, 1932

Norfolk

Postwick, TG 2907

5 ft. O.D.,gravel, 1 house

Clarke, 1938

Runcton Holme, TF 619099

20 ft. O.D., gravel, clay floors

Clark and Hawkes, 1933

Northamptonshire

Fengate, TL 1999

20 ft. O.D., gravel, pits, gullies

Hawkes, 1943

Oxfordshire

Chinnor, SP 767005

800 ft. O.D., chalk, pits, post-holes

Richardson and Young, 1951

Kirtlington, SP 4919

250 ft. O.D., gravel, pit, possible oven

Benson and Harding, 1966

Mount Farm, SU 583969

190 ft. O.D., gravel, pits, ditches

Myres, 1937

Standlake, SP 385046

200 ft. O.D., gravel, pits, ditches

Stone, 1859; Bradford, 1942

Yarnton, SP 475114

200 ft. O.D., gravel, pits, 1 house-site, ditches

Lowther, 1947 & Bradford

Somerset

Camerton, ST 690564

500 ft. O.D., limestone, ditches, pit

Wedlake, 1958

Suffolk

Lakenheath, TL 729835, 733830

20 ft. O.D., sand, pits

Briscoe, 1949; 1957; Gell, 1949

Surrey

Green Lane, SU 834452

350 ft. O.D., gravel, pits, post-holes

Oakley, Rankine and Lowther, 1939, 183-202

III, 1, i. Houses

Simple post-ring type : oval

Deverel-Rimbury period

Cock Hill, Sussex	15 x 20 ft.
Itford Hill, Sussex	20 x 16 ft. 20 x 18 ft. 22 x 18 ft. 12 x 15 ft.
New Barn Down, Sussex	15 x 20 ft.

Middle and later first millennium B.C.

Eldon's Seat, Dorset	17 x 24 ft.
Harting Hill, Sussex	20 x 16 ft.
Linford, Essex	18 x 22 ft.
Postwick, Norfolk	13 x 6 ft.
Staple Howe, Yorks.	30 x 20 ft.

Simple post-ring type : circular

Deverel-Rimbury period

Blackpatch, Sussex	20 ft.
Cock Hill, Sussex	15 ft.
Itford Hill, Sussex	20 ft., 16 ft., 22 ft.
New Barn Down, Sussex	22 ft.
Park Brow, Sussex	22 ft.
Plumpton Plain A, Sussex	20 ft.
Shearplace Hill, Dorset	16 ft., 24 ft.
Thorny Down, Wilts.	15 - 20 ft.

Middle and late first millennium B.C.

Berwick Down S., Wilts.	17 ft.
Corbridge, Northumb.	22 ft.
Eldon's Seat, Dorset	22 ft., 24 ft.
Glenachan Rig, Peebles.	28 ft.
Harehope, Peebles.	24 ft.

Llandegai, Caerns.	23 ft.
Mynydd Buchan, Glam.	15 ft., 20 ft.
Staple Howe, Yorks.	26-8 ft., 30 ft.
West Brandon, Durham	21 ft.
West Harling, Norfolk	35 ft., 36 ft.
Weston Wood, Surrey	12 ft., 20 ft.

Advanced post-ring types (middle and later first millennium B.C.)

? East Winterslow, Wilts.	48 ft.
Little Woodbury, Wilts.	32 ft., 50 ft.
Longbridge Deverill Cow Down, Wilts.	30 ft., 35 ft., 38 ft., 45 ft.
Pimperne, Dorset	50 ft.
West Brandon, Durham	58 ft.
West Harling, Norfolk	48 ft.

Ring-Gully type

Ancaster, Lincs.	41 ft.
Berwick Down North, Wilts.	35 ft.
Castell Odo, Caerns.	20 ft.
Dead Side, Peebles.	25 ft.
Draughton, Northants.	19 ft., 20 ft., 34 ft.
East High Knowes, Northumb.	24 - 38 ft.
Fifield Down, Wilts.	30 ft.
Gray Coat, Roxburgh.	50 ft.
Greenbrough, Roxburgh.	20 x 22½ ft., 25 ft.
Harehope, Peebles	20 ft., 36 ft.
Heath Row, Middlesex	33 ft. max.
Hog Cliff Hill, Dorset	25 - 35 ft.
Kemp's Castle I, Roxburgh	30 ft., 42 ft.
Kemp's Castle II, Roxburgh.	19 ft., 24 ft., 42 x 32 ft.
Llandegai, Caerns.	47 ft.
Steer Rig, Roxburgh	36 ft. max.

West Brandon, Durham	58 ft.
West High Knowes, Northumb.	25 ft., 26 ft., 48 ft., 50 ft.
White Knowe, Peebles	45 ft.
Double Ring-groove type:	
Hayhope Knowe, Roxburgh	25-45 ft.
Scotstarvit, Fife	52 ft., 62 ft.
Ring-ditch type:	
Aldwick, Herts.	40 ft.
Black Hill, Roxburgh.	26 - 34 ft.
Braidwood, Midlothian	28 ft., 32 ft. (internally)
Camerton, Somerset	32 ft. (internally)
Castlehill, Peebles.	30 ft.
Hartree Hills, Peebles.	30 ft.
Meldon Burn, Peebles.	34 ft.
Parkgatestone Hall, Peebles.	40 ft.
Sandown Park, Surrey	18 ft. (internally)
South Hill Head, Peebles.	44 ft.

III, 1, ii. Sub-rectangular 'floors'

Site	Size	Reference
Berks.		
Long Wittenham	19 x 15 ft.	Savory, 1937
SU 540924		
Wittenham Clumps	?	Rhodes, 1948
SU 565925		
Bucks.		
Ivinghoe Beacon	19 x ? ft.	Cotton and Frere,
SP 960169		1968, 198
Cambs.		
Linton	16 x 9 ft.	Fell, 1952, 31
TL 556 464		
Dorset		
Maiden Castle	9 x 8 ft.	Wheeler, 1943, 94, pl. VIII
SY 669865		
Glos.		
Shenberrow	11-16 x 19 ft.	Fell, 1961, 21
SP 080334		
Norfolk		
Feltwell	50 x 20 ft.	Cunliffe, 1968, 179
TL 7190		
Postwick	13 x 6 ft.	Clarke, 1938
TG 2907		
Snarehill	20 x 14 ft.	Cunliffe, 1968, 180
TL 9383	20 x 12 ft.	
Sussex		
Charleston Brow S.	18 x 13 ft.	Parsons and Curwen,
TQ 484054		1933, pl. II.

Wiltshire

All Cannings Cross SU 080635	C paving 27 x 18 ft. clay 16 x 10 ft. D paving 15½ x 10 ft. clay 14 x 10 ft. E paving 16 x 8 ft. clay 12 x 6 ft. F paving 14 x 10 ft. G paving 15 x 9 ft. H cobbling 20 ft. sq.	Cunnington, 1923, 57 f., 68
Swallowcliffe ST 967254	20 x ? ft.	Clay, 1925, 62

Rectilinear post-hole settings

Bucks.

Ivinghoe Beacon SP 960169	Site A, 12 ft. sq. 12 x 15 ft. Site B, 14 x 13 x 18½ x 16½ ft.	Cotton and Frere, 1968, 194, 196

Dorset

Maiden Castle SY 669865	21 x 13 ft.	Wheeler, 1943, 124, fig. 22
Marnhull ST 795198	20 x 12 ft.	Williams, 1950, H1

Surrey

Hawk's Hill TQ 155554	?	Hastings, 1965, fig. 2, C4

Rectilinear beam-slot structures

Dorset

Pilsdon Pen ST 412013	?	Curr. Arch., 14 (1969), 80

Norfolk

West Harling IV TL 975857	?	Clark and Fell, 1953, fig. 9.

III, 1, iii. Timber Granaries

Site	No. of posts	Size	Reference
Cambs.			
Wandlebury	4	10 x 8½ -	Hartley, 1957,
TL 493534		10 x 10 ft.	13
Dorset			
Knowle Hill	4	8 ft. sq.	Forde-Johnston,
SY 934823			1957, 107
Maiden Castle	4	7 ft. sq.	Wheeler, 1943,
SY 669865	6	9 ft. sq.	90, pl. VII
Marnhull	4	6 ft. sq.	Williams, 1950,
ST 795198			29-31.
Essex			
Chadwell St. Mary	?	?	Manning, 1962, 129,
TQ 649783			fig. 2.
Hants.			
Balksbury	?	?	MOW, 1967, 9
SU 351446			
Herefords.			
Credenhill	4	8 x 6 -	Stanford, 1966,
SO 450445		12 x 12 ft.	7 f.
Croft Ambrey	4	8 x 6 -	Stanford, 1966,
SO 445668		10 x 12 ft.	7 f.
Midsummer Hill	4	?	Stanford, 1966;
SO 760375			1967
Herts.			
Aldwick	4	8 ft. sq.	Cra'ster, 1961,
TL 398388			32

Northumb.			
Huckhoe	4	4 x 5½ ft.	Jobey, 1959,
NZ 073828			234, fig. 8
Somerset			
Glastonbury	8	10 ft. sq.	Bulleid and Gray,
ST 493408			1911, pl. XIV;
			Piggott, 1939, 220 n.
South Cadbury	4	6 ft. sq.	Curr. Arch., 8
ST 6225			(1968), 212
Surrey			
Hawk's Hill	4	8 ft. sq.	Hastings, 1965, 7
TQ 155554			
Sussex			
Muntham Court	6	10 x 8 ft.	Holleyman, 1960, 20
TQ 109095			
Wilts.			
All Cannings Cross	4	8 ft. sq.	Cunnington, 1923,
SU 080635			57, Site A
Berwick Down S.	5	10 x 6 ft.	Wainwright, 1968,
ST 942197	6	10½ ft. sq.	112
Little Woodbury	4	7 x 5 ft.	Bersu, 1940, 97
SU 150279	4	7 ft. sq.	
	4	8 ft. sq.	
	4	9 ft. sq.	
Rotherley	4	6 ft. sq.	Pitt-Rivers, 1888,
ST 949195	4	8 ft. sq.	55, pl. XCIV
Yorkshire			
Grimthorpe	4	6 ft. sq.	Stead, 1968, 155
SE 816534	4	8 ft. sq.	
	4	10 x 8 ft.	
Staple Howe	5	8 ft. sq.	Brewster, 1963,
SE 898749			47-55

III, 1, iv. Single-frame Drying-racks

Site	Size	Reference
Berks.		
Blewburton Hill	5 - 6 ft.	Collins, 1947,
SU 547863		fig. 2
Bucks.		
Ivinghoe Beacon	6 ft.	Cotton and Frere,
SP 960169		1968, fig. 7
Cambs.		
Wandlebury	5½ ft.	Hartley, 1957,
TL 493534		12
Cornwall		
Castle Dore	5 - 6 ft.	Radford, 1951,
SX 103548		pl. XII
Dorset		
Marnhull	6 - 8 ft.	Williams, 1950,
ST 795 198		26
Northumb.		
Huckhoe	5½ - 6 ft.	Jobey, 1959, 234,
NZ 073828		figs. 6, 8
West Brandon	6 - 7 ft.	Jobey, 1962, 22,
NZ 201399		fig. 6
Oxon.		
City Farm West	7 - 10 ft.	Case et al., 1965,
SP 430111		fig. 17
Surrey		
Hawk's Hill	5 - 10 ft.	Hastings, 1965,
TQ 155554		fig. 2
Wiltshire		
All Cannings Cross	9 ft.	Cunnington, 1923,
SU 080635		57, Site B

Battlesbury	4 - 7 ft.	Chadwick and Thompson,
ST 897459		1956, 264
Berwick Down S.	5 ft.	Wainwright, 1968,
ST 942197	12 ft.	fig. 9
Little Woodbury	6 - 8 ft.	Bersu, 1940, 94 - 6
SU 150279		
Rotherley	8 - 10 ft.	Pitt-Rivers, 1888,
ST 949195		pl. XCIV
Yorkshire		
Staple Howe	6 - 8 ft.	Brewster, 1963,
SE 898749		endplate

Multiple-frame Drying-racks

Hants.		
Meon Hill	4-frame	Liddell, 1937
SU 344352	27 x 9 ft.	fig. 3
Sussex		
Park Brow	5-frame	Wolseley et al.,
TQ 154089	35 x 10 ft.	1927, fig. P

III, 2. Clay-lined pits

All Cannings Cross, Wilts. (Cunnington, 1923, 62)

Cassington, Oxon. (Leeds, 1935, 37 f.)

Chadlington, Oxon, (Leeds, 1935, 32)

Marnhull, Dorset (Williams, 1950, 25)

Mount Farm, Oxon. (Myres, 1937, 24)

Standlake, Oxon, (Stone, 1859, 95)

Woodcuts, Dorset (Pitt-Rivers, 1887, 13, 148, 244)

Stone-lined pits

Barnwood, Glos. (Clifford, 1934, 230)

Clevedon, Somerset (Dymond and Tomkins, 1886, 66)

Dane's Camp, Worcs. (PPS, XXV (1959), 275 f.)

Kingsdown Camp, Somerset (Gray, 1930, 71)

Maiden Castle, Dorset (Wheeler, 1943, 99)

Walton Down, Somerset (Dymond and Tomkins, 1886, 66)

Worlebury, Somerset (Dymond and Tomkins, 1886, 45; Dymond, 1902, 46)

Pits with wooden floors

Aldwick, Herts (Cra'ster, 1965, 31 f.)

Fifield Bavant West, Wilts. (Clay, 1924, 472)

Worlebury, Somerset (Dymond, 1902, 75, 77)

Pits with stone floors

Barnwood, Glos. (Clifford, 1934, 230)

Down Barn West, Wilts. (Fowler et al., 1965, 59)

Fifield Bavant East, Wilts. (Clay, 1924, 465)

Maiden Castle, Dorset (Wheeler, 1943, 98 f.)

Mount Farm, Oxon. (Myres, 1937, 23)

Swallowcliffe, Wilts. (Clay, 1927, 540 f.)

Pits with clay floors

All Cannings Cross, Wilts. (Cunnington, 1923, 63)

Fifield Bavant East, Wilts. (Clay, 1924, 463-466)

Maiden Castle, Dorset (Wheeler, 1943, 98 f.)

Pits with sand floors

Swallowcliffe, Wilts. (Clay, 1925, 68 f.)

Evidence for wicker linings in pits

Dane's Camp, Worcs. (Bowen and Wood, 1967, 5)

Poxwell, Dorset (Wacher, 1968)

Worlebury, Somerset (Dymond, 1902, 77)

Pits showing traces of burning

All Cannings Cross, Wilts. (Cunnington, 1923, 64)

Aldwick, Herts. (Cra'ster, 1961, 31; 1965, 1)

Boscombe Down West, Site R, Wilts. (Richardson, 1951, 131)

Casterley, Wilts. (Cunnington and Cunnington, 1914, 76, 79)

Marnhull, Dorset (Williams, 1950, 25)

Meon Hill, Hants. (Liddell, 1937, 18 f., pits II, III)

Stanton Harcourt, Oxon. (Stone, 1859, 215)

Swallowcliffe, Wilts. (Clay, 1925, 68 f.)

Twyford Down, Hants. (Stuart and Birkbeck, 1937, 193)

Woodcuts, Dorset (Pitt-Rivers, 1887, 232-4)

Pits containing grain

Berwick Down S., Wilts. (Wainwright, 1968, 116)

Fifield Bavant East, Wilts. (Clay, 1924, 466)

Little Woodbury, Wilts. (Brailsford, 1949, 165)

Longbridge Deverill Cow Down, Wilts. (Annable, 1961, 32)

Maiden Castle, Dorset (Wheeler, 1943, 375)

Portland, Dorset (Wainwright, 1968, 116)

Rotherley, Wilts. (Pitt-Rivers, 1888, 94, 97-99)

Stanton Harcourt, Oxon. (Stone, 1859, 215)

Twywell, Northants. (MOW, 1967, 10)

Winkelbury, Wilts. (Pitt-Rivers, 1888, 278 f., pits 3, 7)

Woodcuts, Dorset (Pitt-Rivers, 1887, 175 f., pit 43)

Worlebury, Somerset (Dymond, 1902, 77, 80)

III, 3. Sites associated with 'Celtic' field-systems

Later second and early first millennia B.C.

Amberley Mount, Sussex (Ratcliffe-Densham, 1966)

Blackpatch, Sussex (Ratcliffe-Densham, 1953)

Itford Hill, Sussex (Burstow and Holleyman, 1957a)

Kingley Vale, Sussex (Curwen, 1934b)

Martin Down, Hants (Pitt-Rivers, 1898, 185-215; Bowen, 1961, 33f., fig. 3A)

New Barn Down, Sussex (Curwen, 1922, 32-5)

Plumpton Plain A, Sussex (Holleyman, 1935)

Middle and later first millennium B.C.

Black Patch, Sussex (Curwen, 1937, 227)

Cattistock, Dorset (RCAHME, 1952, 73)

Cerne Abbas, Black Hill, Dorset (RCAHME, 1952, 83)

Charleston Brow, Sussex (Parsons and Curwen, 1933)

Eldon's Seat, Dorset (Cunliffe and Phillipson, 1968)

Farley Mount, Hants. (Crawford and Keiller, 1928, 102 f.; Bowen and Fowler, 1966, 45)

Findon Park, Sussex (Fox and Wolseley, 1928)

Fyfield Down, Wilts. (Fowler, 1967)

Gussage Cowdown, Dorset (Crawford and Keiller, 1928, 113)

Hamshill Ditches, Wilts. (Crawford and Keiller, 1928, 97)

Knighton Hill, Wilts. (Crawford and Keiller, 1928, 10, 131-7; Hawkes, 1947, 33)

Longbridge Deverill Cow Down, Wilts. (Chadwick, 1960, 18)

Long Mynd, Shropshire (Crawford, 1954)

Park Brow, Sussex (Wolseley et al., 1927)

Pimperne, Dorset (Harding and Blake, 1963, 63)

Ringmoor, Dorset (Warne, 1872, 20)

Smacam Down, Dorset (RCAHME, 1952, 83)

Teg Down, Hants. (Crawford and Keiller, 1928, 110)

Twyford Down, Hants. (Stuart and Birkbeck, 1937)

Woodcuts, Dorset (Hawkes, 1947, 42)

Settlements associated with grain

Abington Pigotts, Cambs. (Fox, 1923b, 225)

Fifield Bavant East, Wilts. (Clay, 1924, 466)

Little Woodbury, Wilts. (Brailsford, 1949, 165)

Longbridge Deverill Cow Down, Wilts. (Annable, 1961, 32)

Marnhull, Dorset, (Williams, 1950)

Owlesbury, Hants. (Collis, 1968, 19)

Rotherley, Wilts. (Pitt-Rivers, 1888, 94, 97, 99)

Sheepsleights, Dorset (unpublished)

Staple Howe, Yorks. (Brewster, 1963, 139)

Swallowcliffe, Wilts. (Clay, 1925, 90)

Totternhoe, Beds. (Hawkes, 1940, 489 f.)

Twywell, Northants. (MOW, 1967, 10)

West Harling, Norfolk (Clark and Fell, 1953, 36)

Woodcuts, Dorset (Pitt-Rivers, 1887, 175 f.)

III, 4. Linear Earthworks

The classification followed here is that presented by Bachelier (1965):

Class I = plateau dykes

Class II = cross-ridge dykes

Class III = cross-spur dykes

Class IV = contour dykes

i. Plateau and Contour Dykes

Berkshire

B.D.1 East Garston Down, SU 366797-363781
IV, univallate, bank to W., large sector destroyed by horse gallop; terminates to S. in probable Deverel-Rimbury settlement

B.D.4 Lambourn, SU 283781-302776, together with branch 301776-302786
I, univallate, bank to N. and E.
Crawford, 1953, 112, fig. 16

B.D.5 Lambourn , SU 280795-302794
I, univallate, bank to N.; contemporary with or earlier than field lynchets on Bailey Hill; W. sector ploughed away
Crawford, 1953, 112, fig. 16

B.D.6 Lambourn , SU 341807-346832
I, univallate, bank to W.
Crawford, 1953, 113, fig. 17

Dorset

D.D.1a Ashmore, ST 907160-925172
IV, univallate, bank to S.E.

D.D.28 Melbury Hill, ST 872190-885195

IV, univallate, bank to N.; overlain by cross-ridge dyke (D.D.2)

Sumner, 1913, 66, pl. XLII

D.D.30 South Tarrant Hinton Down, ST 916104-919109

I, bivallate; avoids Pimperne long barrow; probably related to South Tarrant Hinton Down spectacles enclosures

Sumner, 1913, 42, 76, pl. XLVI

Hampshire

H.D.9 Nether Wallop/Longstock, SU 326377-335376

I, univallate, bank to N.

H.D.10 Over Wallop. SU 250397-244375

I, bivallate; joins W.D. 12 at SU 245380

O.S., 1933 ; Hawkes, 1939, fig. 1

H.D.11 Over Wallop, SU 253370-264377

I, ? ; part of system from Isle of Wight Hill to Roche Court Down

OS, 1933

H.D.12 Pentridge (Dorset)/Martin/Damerham/Rockbourne, SU 043189-056180-095189

I, univallate, bank to S. and W.; overlain by Bokerley Dyke (late fourth century A.D.); probably part of same system with W.D.56; section cut by Sumner on Knoll Down

Sumner, 1913, 61 f.; Piggott, C.M., 1944

H.D.13 Quarley, 1. SU 246445-262419 2. 259424-262424
3. 246444-263423-266424 4. 260421-261422
I, univallate (sub-numbers are those assigned to these dykes by Hawkes, 1939); system of dykes preceding the construction of Quarley hill-fort
Hoare, 1821, Iter III, 46; Crawford, 1928, 32, pl. X; Hawkes, 1939

H.D.14 Shipton Bellinger, SU 248454
I, univallate, bank to N.; probably part of the Quarley complex
Hawkes, 1939, fig. 1

Wiltshire

The following list provides the class and form (where known) of all plateau and contour dykes in Wiltshire, and represents a summary of the relevant results from an unpublished survey of these earthworks (Bachelier, 1965). It is not considered necessary to repeat the detail provided in that survey, for the earthworks are peripheral to the main theme of the present work and a full catalogue of them would form a disproportionately large section here. The numbers of the dykes are those given originally by Grinsell (VCH, 1957, 249-260).

Class I univallate

W.D. 3, 5, 38, 50, 51, 53, 56b, 58, 78, 85, 88, 95, 96, 97, 108, 114, 116, 117, 119, 124, 125, 126, 138, 141, 143, 144, 145, 146, 147, 149, 152, 167, 181, 183, 190, 191

Class I bivallate

W.D. 11, 12, 32, 34, 39, 55, 56a, 56c, 66, 67, 76, 84, 87, 136, 142, 157, 179b, 180, 186, 193, 194, 194a, 197

Class I uncertain form (ploughed flat)

W.D. 1, 5a, 8, 9, 10, 28, 30, 31, 36, 40, 77, 80, 86, 89, 92, 93, 94, 98, 99, 105, 110, 111, 112, 113, 115, 118, 133, 134, 140, 161, 162, 165, 171, 173, 174a, 176, 178, 185, 187, 188, 196

Class IV univallate

W.D. 4, 7, 15, 59, 81, 82, 83, 137, 153a, 154, 164, 166, 174, 179a, 192

Yorkshire

The discussion of plateau and contour dykes in Yorkshire presented in the text is based primarily upon map-work, together with some fieldwork in 1968. A catalogue of these earthworks has not been attempted, partly because their chronological horizon is beyond the scope of this study but mainly because a full survey is part of the current programme of the York branch of the Royal Commission on Ancient and Historical Monuments (England). A catalogue of cross-dykes is, however, offered here, in order that the section on these types of linear earthwork may be accompanied by as full a catalogue as possible.

III, 4, ii. Cross-Ridge and Cross-Spur Dykes

Berkshire

B.D.3 Inkpen Hill, SU 357622

II, bivallate, ploughed out S. of ridgeway, possibly related to Walbury hill-fort

Dorset

D.D.1 Askerswell Down, SY 543919

II, bivallate, probably related to hill-fort; re-used in ? medieval period as part of enclosure

RCAHME 1952, 15

D.D.2 Bell Hill, ST 797079

II, bivallate

D.D.3 Bowdens Hill, ST 740025

II, univallate, bank to N.W.

D.D.4 Bowdens Hill, ST 742023

II, univallate, bank to S. and slight upcast to N., E. end ploughed away; associated with settlement complex to S.; section excavated to Wacher (1957)

D.D.5 Eggardun Hill, SY 539950

II, bivallate, related to hill-fort

D.D.6 Folly Hill, ST 617004

II, univallate, bank to E.

RCAHME, 1952, 235

D.D.7 Folly Hill, ST 616004

II, univallate, bank to S., related to D.D.6

RCAHME, 1952, 235

D.D.8 Fontmell Down, ST 884184

II, bivallate, larger bank to S.W.

Sumner, 1913, 67

D.D.9 Fontmell Down, ST 883184

III, univallate, bank to S.W.

Sumner, 1913, 67

D.D.10 Giant Hill, ST 668023

III, univallate, bank to S.W., incorporated into settlement

RCAHME, 1952, 82

D.D.10a Hambledon Hill, ST 849121

II, trivallate; clearly related, with D.D.10b and 10c, to Hambledon hill-fort

Sumner, 1913, pl. II

D.D.10b Hambledon Hill, ST 852123

II, bivallate

Sumner, 1913, pl. II

D.D.10c Hambledon Hill, ST 854123

III, univallate, bank to E.

Sumner, 1913, pl. II

D.D.11 Hatt's Barn, ST 901186

II, bivallate, larger bank to W.

Sumner, 1913, 66

D.D.12 Haydon Down, SY 548933

III, univallate, bank to S.

RCAHME, 1952, 14

D.D.13 Hilfield, Great Ditch, ST 639043

II, univallate, bank to E.

RCAHME, 1952, 235

D.D.14 Hog Hill, ST 643006

II, univallate

RCAHME, 1952, 234

D.D.15 Kingston Russell, SY 581904

II, univallate, bank to W.

RCAHME, 1952, 129

D.D.16 Kingston Russell, SY 584902
II, univallate, bank to S.E.
RCAHME, 1952, 129

D.D.17 & D.D.18 Knowle Hill, SY 934823
II, two univallate dykes associated with open settlement
Forde-Johnston, 1957

D.D.19 Litton Cheney, SY 544915
II, univallate, bank to S.
RCAHME, 1952, 137

D.D.20 Litton Cheney, SY 553918
II, univallate, bank to W.; two sections excavated, 1956
RCAHME, 1952, 137; Wacher, 1958

D.D.21 Long Bredy, SY 571911
II, univallate, bank to S.W.
RCAHME, 1952, 42

D.D.22 Loscombe Hill, ST 619003
II, bivallate
RCAHME, 1952, 235

D.D.23 Loscombe Hill, ST 623004
II, bivallate
RCAHME, 1952, 235

D.D.24 Lyscombe Hill, ST 735028
II, univallate, bank to N.E.; probably related to Nettlecombe Tout hill-fort

D.D.25 Lyscombe Hill, ST 732026
II, bivallate, larger bank to S.W., E. end ploughed away

D.D.26 Lyscombe Hill, ST 726021
III, univallate, bank to S.W.

D.D.27 Melbury Hill, ST 877197

II, bivallate, larger bank to W.; overlies earlier contour dyke

Sumner, 1913, 66

D.D.29 Stratton, SY 649961

II, univallate, bank to S.W.; 'Celtic' field-system to E.

RCAHME, 1952, 229

D.D.31 Wears Hill, SY 571862

II, univallate, bank to E.

RCAHME, 1952, 11

Glamorganshire

G.D.1 Bedd Eiddil, SS 971997-973997

II, univallate, bank to S.E.

Fox, A., 1936, 282; Crampton, 1966, 385

G.D.2 Bwlch yr Avan, SS 920951-924957

II, bivallate

Fox, A., 1936, 283; Crampton, 1966, 382-4, fig. 4

G.D.3 Bwlch y Clawdd, SS 945947

II, univallate, bank partially revetted in dry-stone walling

Fox, A., 1936, 283

G.D.4 Bwlch Garw, SS 894949-895947

II, univallate, bank to S.E.; bank revetted with drystone walling

Crampton, 1966, 380-2

G.D.5 Cefn Morfydd, SS 786983-790980

II, univallate, bank to S.; Roman camp about one mile along ridge to N.E.

Fox, A., 1936, 281 f.

G.D.6 Clawdd Trawscae, SS 120996

II, univallate, bank to S.

Fox, C. and A., 1935, 418; Fox, A., 1936, 283

G.D.7 Ffos Ton Cenglau, SS 919020-918030

II, univallate, bank to S.W.

Fox, A., 1936, 280 f.; Crampton, 1966, 384 f.

G.D.8 Mynydd Caerau,

II, univallate

Fox, A., 1936, 283

G.D.9 Mynydd Maendy, SS 950950

II, univallate

Fox, A., 1936, 283

G.D.10 Tyla Glas Farm, SN 110025

II, univallate, bank to S.

Fox, C and A., 1935, 419; Fox, A. 1936, 283

Hampshire

H.D.1 Buriton, Butser Hill, SU 719202

III, univallate; 'Celtic' field-system to S.

Piggott, 1930, 192

H.D.2 Buriton, Butser Hill, SU 718204

III, univallate, bank to N.E.; cut by ? medieval track

Piggott, 1930, 192

H.D.3 East Meon, Hillhampton Down, SU 711199

II, bivallate

Piggott, 1930, 198

H.D.4 East Meon, Butser Hill, SU 713200

II, bivallate

Piggott, 1930, 198

H.D.5 East Meon, Wether Down, SU 678193

II, bivallate

H.D.6 East Meon/Langrish, Butser Hill, SU 712201

II, univallate, bank to N.E.

Piggott, 1930, 193-6

H.D.7 Langrish, Butser Hill, SU 711204

III, univallate, bank to W.

Piggott, 1930, 192

H.D.8 Langrish, Butser Hill, SU 713203

III, univallate, bank to W.

Piggott, 1930, 192

Montgomeryshire

M.D.1 Black Gate, Double Deyches, SO 104857

II, bivallate

Fox, 1955, 161, 168, fig. 70

M.D.2 Short Ditch, Lower, SO unlocated

II, univallate, bank to S.E.

Fox, 1955, 113 f., fig. 46

M.D.3 Short Ditch, Upper, SO unlocated

II, univallate, bank to E.; partially ploughed out

Fox, 1955, 167

M.D.4 Two Tumps, Double Dyches, SO 116850

II, bivallate

Fox, 1955, 161, 168, fig. 70

Peeblesshire

The numbers following each entry in brackets refer to the article numbers in the Inventory of Peeblesshire (RCAHMS, 1967)

P.D.1 Blyth Hill, NT 124457

II, univallate, bank to S.W.; related to hill-fort (no. 261)

P.D.2 Edston, NT 227397

II, univallate, bank to S.; related to hill-fort (no. 279)

P.D.3 Goseland Hill, NT 081351

II, univallate, bank to S.; probably related to settlement (no. 224)

P.D.4 Harehope Rings, NT 196445

II, univallate, bank to S.E.; unfinished, related to hill-fort or to underlying palisaded site (no. 285)

P.D.5 Helm End, NT 110353

II, univallate, bank to N.E.; related to hill-fort (no. 286)

P.D.6 Langlaw Hill, NT 100382

II, univallate, bank to S.E.; related to primary phase of hill-fort (no. 300)

P.D.7 Milkieston Hill, NT 248459

II, univallate, bank to S.E.; related to hill-fort (no. 304)

P.D.8 Upper Kidston, NT 223432

II, ditch only surviving; related to hill-fort (no. 323)

P.D.9 Whiteside Hill, NT 168461

II, univallate, bank to S.W.; related to hill-fort (no. 331)

P.D.10 Woodhouse Hill, NT 208373

II, univallate, bank to N.; related to early phase of hill-fort and incorporated into later defences (no. 334)

P.D.11 Worm Hill, NT 110297

II, univallate, bank to S.E.; related to hill-fort (no. 335)

Radnorshire

Ra.D.1 Cefn y Crug, SO 163642

II, univallate, bank to S.

Jerman, 1935, 83; 1934, 341

Ra.D.2 Pen y Clawdd, SO 180700

II

Jerman, 1935, 83; 1934, 341

Ra.D.3 Shepherd's Well, SO 187649

II, univallate, bank to E.

Jerman, 1935, 83; 1934, 341

Ra.D.4 Short Ditch, SO unlocated

II, univallate, bank to S.E.

Fox, 1955, 168, fig. 67

Ra.D.5 Two Tumps, SO 120844

II, bivallate

Fox, 1955, 161, 168, fig. 70

Roxburgh

The numbers following each entry in brackets refer to the article numbers in the Inventory of the County of Roxburgh (RCAHMS, 1956).

R.D.1 Belford Hope, NT 805195

II, bivallate (no. 768)

R.D.2 Birny Knowe, NT 415107-418107

III, univallate (no. 895)

R.D.3 Blackhall Hill, NT 780118-781120

II, univallate, bank to W. (no. 398)

R.D.4 Black Law, NT 617186-625179

II, ? ; possibly related to Dunion hill-fort (no. 40)

R.D.5 Browndean Laws, NT 725106

II, univallate, bank to N.W. (no. 496)

R.D.6 Brownhart Law, NT 789096-792095

II, univallate, bank to N.E.; overlain by Roman Dere Street (no. 839)

R.D.7 Callow Cairn, NT 809147-806145

II, univallate, bank to S.E. (no. 389)

R.D.8 Callaw Cairn, NT 809145-811147

II, univallate, bank to N.W. (no. 390)

R.D.9 Callaw Cairn, NT 810144-811145

II, ? ; one of group with R.D.7 and 8 (no. 391)

R.D.10 Callaw Hope, NT 813136

II, ? (no. 392)

R.D.11 Camp Tops, NT 862179

II, univallate, bank to N. (no. 776)

R.D.12 The Castles, NT 830186-833188

II, ? (no. 771)

R.D.13 Causeway Rig, NT 612029-617030

II, univallate; one of group with R.D.14, 15 and 16 which are known only from air-photographs; overall width of group about 350 yds. (no. 969)

R.D.17 Craik Moor, NT 806180

III, univallate, bank to W. (no. 385)

R.D.18 Crib Head, NT 381070-381072

II, ? (no. 1024)

R.D.19 Crom Rig, NT 424055-427054

II, ? (no. 1025)

R.D.20 Cushat Knowe, NT 767088

III, univallate, bank to N.W.; situated about 140 ft. from R.D.21 (no. 843)

R.D.21 Cushat Knowe, NT 767088

III, univallate, bank to N.W.; situated about 140 ft. from R.D.20 (no. 843)

R.D.22 Dick's Knowe, NT 803159

II, univallate (no. 388)

R.D.23 Ephope Law, NT 730095

III, univallate, bank to N.W. (no. 498)

R.D.24 Ewes Doors, NY 372986-373987

II, univallate becoming bivallate at N.E. end; one of group of three together with two univallate dykes just with Dumfriesshire (no. 1027)

R.D.25 Falla Knowe, NT 748150-751149

II, bivallate (no. 836)

R.D.26 Fairwood Fell, NT 741069-744071

II, ? (no. 846)

R.D.27 Green Humbleton, NT 849273

III, univallate, bank to N.W.; probably related to fort (no. 1071)

R.D.28 Green Knowe - Muckle Sund Hope, NT 823169-828170

II, univallate, bank to N.; possibly related either to Greenbrough palisaded homestead or to Sundhope Kipp hill-fort (no. 387)

R.D.29 Grubbit Law, NT 796237

II, two ditches with medial bank (no. 767)

R.D.30 Heather Hope - Singingside Hope, NT 813179-812176

II, univallate, bank to N.E., unusually sinuous (no. 386)

R.D.31 Heather Hope - Singingside Hope, NT 815177-813175
II, univallate with bank to S.E. becoming bivallate with larger bank to S.E. (no. 386)

R.D.32 Heather Hope - Singingside Hope, NT 816176-815175
II, univallate, bank to N.W.; these last three dykes may be related either to the palisaded sites of Blackbrough and Greenbrough, or to the hill-forts of Blackbrough and Sundhope Kipp (no. 386)

R.D.33 Hill Pond, NT 614171
II, two ditches with medial bank (no. 41)

R.D.34 Hindhope Burn, NT 773094
III, bank only visible (no. 841)

R.D.35 Hownam Rings, NT 791189
II, univallate, bank to N.W., apparently unfinished; probably related to hill-fort or preceding palisaded enclosure (no. 384)

R.D.36 Humbleton Sike, NT 851272-853273
III, univallate, bank to W. (no. 1072)

R.D.37 Humbleton Sike, NT 851271-853273
III, univallate, bank to W.; situated about 45 ft. from R.D.36; both possibly related to Green Humbleton hill-fort

R.D.38 Hunthall Hill, NT 778117-776117-775119
II, univallate, bank to S. and W. (no. 400)

R.D.39 Hunthall Hill, NT 772116
II, univallate, bank to S.W., unusually massive and sinuous (no. 840)

R.D.40 Hunthall Hill, NT 772120
II, bivallate with larger bank to N. becoming univallate with bank to N. at S.W. end owing to gradient; one of group with R.D.52-4 and 59, probably related to Woden Law hill-fort (no. 401)

R.D.41 Knock Hill, NT 739114
III, univallate (no. 838)

R.D.42 Lamblair Edge, NT 718077-722078
II, univallate becoming bivallate at N.E. end (no. 499)

R.D.43 Langside Law, NT 769129-772130
II, univallate (no. 405)

R.D.44 Merrypath Rig, NY 372996-374996
III, univallate (no. 1026)

R.D.45 Newton Hill, NT 496077-491078
III, univallate (no. 189)

R.D.46 Newton Hill, NT 494074-491076
III, univallate; situated about 355 yds. to S.W. of R.D.45 (no. 189)

R.D.47 Outer Hare Cleuch, NT 831159-832160
II, univallate, bank to N.W. (no. 773)

R.D.48 Shank End, NT 765157
III, univallate, bank to E. (no. 407)

R.D.49 Shank End, NT 763158
III, univallate, bank to E.; probably related to R.D.48 (no. 407)

R.D.50 Steer Rig, NT 857244
II, univallate, bank to N.; with R.D.55 probably related to Steer Rig palisaded settlement (no. 1075)

R.D.51 Stob Rig, NT 851271
III, univallate (no. 1073)

R.D.52 Stob Rig, NT 851271
III, univallate, bank to W.; one of group with

R.D.27, 36 and 37, possibly related to Green Humbleton hill-fort (no. 1073)

R.D.51 Thorny Hill, NT 799148
II, univallate, bank to S.E.; possibly related to Huntfold hill-fort (no. 393)

R.D.52 Whitehope, NT 772122
II, univallate, bank to N.W.; one of group with R.D.53 and 54, and, since these are slighter, they may precede R.D.40 and 59; all probably related to Woden Law hill-fort (no. 402)

R.D.53 Whitehope, NT 772121
II, univallate, bank to N.W. (no. 402)

R.D.54 Whitehope, NT 772121
II, univallate, bank to N.W. (no. 402)

R.D.55 White Law, NT 858258
II, two ditches with medial bank becoming univallate at E. end with bank to S.; with R.D.50 probably related to Steer Rig palisaded settlement (no. 1074)

R.D.56 Whiteside Hill, NT 770085-773086
III, univallate, bank to N. (no. 842)

R.D.57 Windy Gyle, NT 850153
II, univallate (no. 781)

R.D.58 Windy Gyle, NT 851152
II, univallate; related to R.D.57 as part of pair (no. 781)

R.D.59 Woden Law, NT 771121
II, two ditches with medial bank, E. end destroyed by Dere Street, W. end follows contours of hill-side becoming two terraces owing to gradient; one of group with R.D. 52-54 and 40, all probably related to Woden Law hill-fort (no. 403)

R.D.60 Wondrum Hill, NT 812193

II, bivallate becoming univallate with bank to N. at S.E. end owing to gradient (line of N.W. end is not continued by a row of boulders contra RCAHMS, 1956, p.369); probably related to Craik Moor palisaded site or hill-fort (no. 769)

Sussex

S.D.1 Alfriston Down, TQ 508036

III, univallate, bank to E. changing to W. along S. part of dyke owing to gradient

Curwen, 1929, 123 no. 3; 1951, 102

S.D.2 Barpham Hill, TQ 067096

II, bivallate, larger bank to S.

Allcroft, 1922, 75 f.; Curwen and Curwen, 1922, 20 f.; Curwen, 1929, 125, no. 14

S.D.3 Blackcap, TQ 372125

II, bivallate

Curwen and Curwen, 1918, 36 f., no. II; Curwen, 1929, 123, no. 5

S.D.4 Bow Hill, SU 825115

II, bivallate

Curwen and Curwen, 1918, 49 f., no. XIV

S.D.5 Bullock Hill, TQ 372062

III, univallate, bank to S.E.

S.D.6 Burton Down, SU 955135

III, univallate, bank to N.W.

Curwen, 1929, 127, no. 20

S.D.7 Burton Down, SU 958133

III, univallate, bank to N.W.

Curwen, 1929, 127, no. 21

S.D.8 Bury Hill, TQ 003118

II, bivallate

Curwen and Curwen, 1918, 42, no. VIII; Curwen, 1929, 126, no. 17b

S.D.9 Bury Hill, TQ 003110

II, bivallate

Curwen and Curwen, 1918, 41 f., no. VII; Curwen, 1929, 126, no. 17a

S.D.10 Camp Hill, TQ 043114

II, bivallate; probably related to ploughed-out hill-fort

Curwen and Curwen, 1922, 52 f.; Curwen, 1929, 126, no. 15

S.D.11 Chanctonbury Ring, TQ 135120

II, univallate, bank to E.; probably related to hill-fort

Allcroft, 1908, 279; Curwen and Curwen, 1918, 53-55

S.D.12 Chanctonbury Ring, TQ 143117

II, univallate, bank to N.W.; overlain by pond dating to end of nineteenth century

Allcroft, 1908, 279; Curwen and Curwen, 1918, 53-55

S.D.13 Cissbury Camp, TQ 142082

II, bivallate; overlain by hill-fort, possibly related to 'Celtic' field-system

Allcroft, 1922, 83

S.D.14 Fore Down, TQ 538018

II, bivallate; associated with 'Celtic field-system

Curwen, 1929, 123, no. 2; 1951, 99 f., fig. 19

S.D.15 Glatting Down, SU 968127

II, bivallate; overlain by Roman Stane Street, excavated by the Curwens

Curwen and Curwen, 1918, 42-44, 57 f., no. IX

S.D.16 Harting Hill, SU 797186

II, univallate, bank to W., S. end ploughed out; one of group with S.D.17, 18, 19, situated 200 ft. from S.D.17

Curwen and Curwen, 1918, 50-53, no. XV

S.D.17 Harting Hill, SU 797186

II, univallate, bank to W., S. end ploughed out; situated 200 ft. from S.D.16 and 30 ft. from S.D.18; incorporating round barrow

Curwen and Curwen, 1918, 50-53, no. XV

S.D.18 Harting Hill, SU 797186

II, bivallate, S. end ploughed out; situated 30 ft. from S.D.17 and 30 ft. from S.D.19

Curwen and Curwen, 1918, 50-53, no. XV

S.D.19 Harting Hill, SU 797186

II, bivallate, larger bank to E., S. end ploughed out; situated 30 ft. to E. of S.D.18

Curwen and Curwen, 1918, 50-53, no. XV

S.D.20 Heyshott Down West, SU 894165

II, univallate, bank to E.; one of group with S.D.21, 22, 23; situated 23 ft. to W. of S.D.21

Curwen and Curwen, 1918, 48 f., no. XII

S.D.21 Heyshott Down West, SU 894165

II, bivallate; situated 23 ft. to E. of S.D.20 and 45 ft. to W. of S.D.22

Curwen and Curwen, 1918, 48 f., no. XII

S.D.22 Heyshott Down West, SU 894165

II, trivallate, larger central bank; situated 45 ft. to E. of S.D.21 and an average of 20 ft. to W. of S.D.23

Curwen and Curwen, 1918, 48 f., no. XII

S.D.23 Heyshott Down West, SU 894165

II, univallate, bank to W.; situated an average of 20 ft. to E. of S.D.22

Curwen and Curwen, 1918, 48 f., no. XII

S.D.24 Heyshott Down East, SU 906165

II, univallate, bank to E.; one of group with S.D.25, 26, 27; situated 180 ft. to W. of S.D.25

Curwen and Curwen, 1918, 46-8, no. XI

S.D.25 Heyshott Down East, SU 907165

II, univallate, bank to E.; situated 180 ft. to E. of S.D.24 and 150 ft. to W. of S.D.26

Curwen and Curwen, 1918, 46-8, no. XI

S.D.26 Heyshott Down East, SU 908165

II, trivallate, S. end ploughed out; situated 150 ft. to E. of S.D.25 and 570 ft. to W. of S.D.27

Curwen and Curwen, 1918, 46-8, no. XI

S.D.27 Heyshott Down East, SU 910165

II, sextavallate, ploughed out on S.; situated 570 ft. to E. of S.D.26

Curwen and Curwen, 1918, 46-8, no. XI

S.D.28 Highden Hill, TQ 111118

II, bivallate, larger bank to E.; 'Celtic' field-system to S.

Curwen and Curwen, 1918, 38 f., no. V ; Curwen, 1951, fig. 18

S.D.29 Kithurst Hill, TQ 084126

III, univallate, bank to N.E.

Curwen, 1951, fig. 23

S.D.30 Linch Down, SU 843174

II, bivallate

Curwen and Curwen, 1918, 49, no. XIII

S.D.31 New Hill Barn, TQ 157098

II, bivallate; situated ½ mile to N. of Park Brow settlement

Curwen, 1929, 124, no. 9; 1951, fig. 22

S.D.32 Newtimber Hill, TQ 275124

II, bivallate; excavated in 1915

Curwen and Curwen, 1918, 37 f., no. III; Curwen 1929, 124, no. 7

S.D.33 Perry Hill, TQ 056097

II, bivallate, ploughed out (1967)

Curwen and Curwen, 1922, 21

S.D.34 Rackham Bank, TQ 051125

II, univallate, bank to W., unusually massive;

Associated with semi-circular embankment ('circus') on W.

Curwen and Curwen, 1922, 45-8; Curwen, 1929, 125, no. 13a; 1932; 1951, 102

S.D.35 Rackham Hill, TQ 045125

II, bivallate, ploughed out (1967)

Curwen and Curwen, 1922, 48 f.; Curwen, 1929, 125, no. 13b

S.D.36 Steep Down, TQ 168068-177068

III, univallate, bank to S.; anomalous curving dyke, W. part fulfils role of normal cross-spur dyke but E. part crosses combe to adjacent spur and there follows contours

Allcroft, 1908, fig. 215; Curwen, 1929, 124 f., no. 10

S.D.37 Steep Down, TQ 165075-169078

II, univallate

Allcroft, 1908, fig. 215; Curwen, 1929, 124, no. 10; 1951, 105

S.D.38 Steyning Round Hill, TQ 165103-166102

III, univallate, bank to E.

Curwen 1951, fig. 22

S.D.39 Steyning Round Hill, TQ 163103-164099

III, univallate, bank to E.; situated 800 ft. to W. of S.D.38

Curwen, 1951, fig. 22

S.D.40 Steyning Flagstaff Hill, TQ 160109

III, univallate, bank to N.E.

Curwen, 1951, fig. 22

S.D.41 Sullington Hill, TQ 094124

III, univallate, bank to N.E.

Curwen, 1929, 39; 1951, fig. 23

S.D.42 Summer Down, TQ 266109

II, bivallate; probably related to Devil's Dyke hill-fort

Curwen and Curwen, 1918, 38, no. IV; Curwen, 1929, 124, no. 8a.

S.D.43 Summer Down, TQ 261105

II, bivallate; probably related to Devil's Dyke hill-fort

Curwen, 1929, 124, no. 8b

S.D.44 Swanborough Hill, TQ 384062

II, bivallate

Curwen, 1929, 124, no. 4

S.D.45 Upwaltham Hill, SU 951126

II, univallate, bank to W.

Curwen and Curwen, 1918, 45, no. X

S.D.46 Upwaltham Hill, SU 950126

II, bivallate; situated 8-75 ft. from S.D.47

Curwen and Curwen, 1918, 44 f., no. X

S.D.47 Upwaltham Hill, SU 950126

II, bivallate; situated 8-75 ft. from S.D.46

Curwen and Curwen, 1918, 44 f., no. X

S.D.48 West Harting Down, SU 765186

II, univallate, bank to W.

Curwen and Curwen, 1918, 53, no. XVI

S.D.49 Whiteways Plantation, TQ 003105

II, bivallate; situated 95 ft. to N. of S.D.50

Curwen and Curwen, 1918, 39-41, no. VI; Allcroft, 1922

S.D.50 Whiteways Plantation, TQ 003104

II, bivallate; situated 95 ft. to S. of S.D.49

Curwen and Curwen, 1918, 39-41, no. VI

S.D.51 Willingdon Hill, TQ 576008

II, bivallate

Curwen and Curwen, 1918, 35 f., no. I; Curwen, 1929, 123, no. 1

S.D.52 Wiston Barn, TQ 154110

II, bivallate

S.D.53 Wolstonbury, TQ 286135

II, bivallate; probably related to hill-fort

Curwen, 1929, 124, no. 6

S.D.54 Woollavington Down, SU 941158

II, ?

S.D.55 Woollavington Down, SU 946156

II, ?

S.D.56 Woollavington Down, SU 936160

II, ?

Wiltshire

The Roman numerals following references to Hoare, 1812 or 1821, indicate the Station map on which the dyke is depicted.

W.D.2 Aldbourne, SU 261790

II, bivallate; overlain by Roman road; one of group of three with W.D.2a and 2b

Hoare, 1821, XI-XII

W.D.2a Aldbourne, SU 258792
II, bivallate; probably related to W.D.2 and W.D.2b; overlain by Roman road
Hoare, 1821, XI-XII

W.D.2b Aldbourne, SU 257793
II, univallate, bank to S.E.; probably related to W.D.2 and 2a; overlain by Roman road
Hoare, 1821, XI-XII

W.D.6 All Cannings, SU 090647
II, bivallate, larger bank to E.; overlain by Wansdyke (later sixth century A.D.)
Hoare, 1821, X

W.D.14 Alton, SU 113636
III, univallate, bank to N.
Hoare, 1821, X

W.D.18 Alvediston, ST 972250
III, univallate, bank to S.; probably related to Swallowcliffe settlement
Fowler, 1964, 55

W.D.19 Alvediston, ST 972252
II, bivallate; situated only 6 ft. from W.D.19a and clearly related to it, perhaps representing two periods
Fowler, 1964, 52

W.D.19a Alvediston, ST 972252
II, univallate, bank to S.; related to W.D.19; both probably related to the Swallowcliffe settlement
Fowler, 1964, 52

W.D.20 Alvediston/Ansty, ST 968248

II, bivallate, larger bank to S.E.; sectioned by Clay; probably related to Swallowcliffe

Sumner, 1913, 64; Clay, 1927, 62-4; Fowler, 1964, 52

W.D.21 Alvediston/Ansty, ST 968248

II, bivallate, larger bank to N.

Sumner, 1913, 64; Fowler, 1964, 52

W.D.22 Alvediston/Ansty, ST 964249

II, univallate, bank to E.

Fowler, 1964, 55

W.D.25 Alvediston/Ansty/Berwick St. John, ST 947244

II, bivallate, larger bank to W.; unusually massive

Sumner, 1913, 64; Fowler, 1964, 51 f.

W.D.27 Alvediston/Berwick St. John, ST 967213-971209

II, bivallate

W.D.41 Berwick St. John, ST 944241

II, univallate, bank to E.

Fowler, 1964, 55

W.D.42 Berwick St. John, ST 958210

II, bivallate

Sumner, 1913, 65

W.D.43 Berwick St. John, ST 938202

III, univallate, bank to S.; probably related to Berwick Down North open settlement

Sumner, 1913, 65

W.D.44 Berwick St. John, ST 951211

III, univallate, bank to N.; probably related to hill-fort of Winkelbury

Hoare, 1812, VIII

W.D.45 Berwick St. John, ST 940231

III, univallate, bank to E.

Fowler, 1964, 54

W.D.46 Berwick St. John/Donhead St. Andrew, ST 938233

II, univallate, bank to S.

Fowler, 1964, 54

W.D.47 Berwick St. John/Donhead St. Andrew, ST 937235

II, univallate, bank to S.

Sumner, 1913, 64; Fowler, 1964, 54

W.D.48 Berwick St. John/Donhead St. Mary, ST 925204

III, univallate, bank to S.E.

W.D.49 Bishop's Cannings, SU 037667

III, ditch

W.D.54 Bishop's Cannings, SU 030674-033669

III, ditch

W.D.57 Bishopstone/Burcombe Without, SU 063292-069294

II, bivallate; largely ploughed away

Sumner, 1913, 63; Fowler, 1964, 54

W.D.63 Bower Chalke, ST 999212

II, ploughed away

W.D.64 Bower Chalke/Ebbesborne Wake, ST 993218-994213

II, univallate, bank to W.

W.D.68 Brixton Deverill, ST 846386-849384

III, univallate, bank to E.; related to W.D.68a, 69, 70, 71, 72, 130, 130a, 131, 131a, 132, enclosing area of Cold Kitchen Hill

W.D.68a Brixton Deverill, ST 848385

III, univallate, bank to W.; situated 26 ft. to E. of W.D.68 to which it is related

W.D.69 Brixton Deverill, ST 852390

II, trivallate; separates Cold Kitchen Hill from Brims Down to N.E.

W.D.70 Brixton Deverill, ST 857395

III, ploughed out

W.D.71 Brixton Deverill, ST 838383

II, univallate, bank to W.; separates Cold Kitchen Hill from Brimsdown Hill to N.W.

Hoare, 1812, I

W.D.72 Brixton Deverill/Kingston Deverill, ST 846378-850382

II, bivallate

Hoare, 1812, I

W.D.73 Broad Chalke/Burcombe Without/Compton Chamberlayne, SU 047290

II, bivallate; largely destroyed by ploughing

Sumner, 1913, 63; Fowler, 1964, 53 f.

W.D.74 Broad Chalke/Compton Chamberlayne, SU 032277

II, bivallate; largely ploughed away

Sumner, 1913, 63; Fowler, 1964, 53

W.D.75 Broad Chalke/Fovant, SU 018284 and 019278

II, bivallate; a length of dyke on either side of and associated with Chiselbury hill-fort

Crawford and Keiller, 1928, 74-7, pl. VII; Fowler, 1964, 53

W.D.79a Burcombe Without, SU 066296

III, univallate, bank to N.; probably related to 79b

Sumner, 1913, 63, pl. XXXV; Fowler, 1964, 56

W.D.79b Burcombe Without, SU 066297

III, univallate, bank to N.; one of pair with W.D.79a

Sumner, 1913, 63, pl. XXXV; Fowler, 1964, 56

W.D.91 Colerne, ST 832742-831744

II, univallate, bank to W.

Hoare, 1821, 103

W.D.101 Donhead St. Mary, ST 915202

II, ploughed away

Hoare, 1812, VIII/IX

W.D.102 Donhead St. Mary, ST 917204-919201

II, bivallate, larger bank to W., unusually massive

Sumner, 1913, 66, pl. XLI

W.D.106 Ebbesbourne Wake, ST 988211-991218

II, bivallate, ploughed away at S. end

Hoare, 1812, VIII/IX; Sumner, 1913, 65

W.D.107 Ebbesbourne Wake/Sutton Mandeville, ST 987263-987259

II, bivallate

Sumner, 1913, 64; Fowler, 1964, 52

W.D.122 Ham, SU 331611-331614

II, univallate, bank to E.

W.D.123 Ham, SU 334615

II, univallate, bank to W.; extends unusually far down escarpment owing to gentle nature of slope; N. end lost in quarry

W.D.127 Kilmington, ST 805358

III, univallate, bank to N.

W.D.128 Kilmington/Stourton, ST 803350

II, bivallate, larger bank to S.E., related probably to White Sheet hill-fort, forming one of a pair of dykes with W.D.139 flanking the fort

Hoare, 1812, I

W.D.129 Kingston Deverill, ST 831384

III, univallate, bank to S.; associated with short length of ditch running up the slope at right angles to dyke

W.D.130 Kingston Deverill, ST 847345

III, univallate, bank to S.; one of Cold Kitchen Hill system of cross-dykes

W.D.130a Kingston Deverill, ST 847377

III, univallate, bank to S.; one of Cold Kitchen Hill system of cross-dykes

W.D.131 Kingston Deverill, ST 839378-844377

III, univallate, bank to S.

W.D.131A Kingston Deverill, ST 833383-838381

III, univallate, bank to S.

W.D.132 Kingston Deverill, ST 854379

III, univallate, bank to E.; unusually sinuous; like last two, this forms part of the Cold Kitchen Hill system

W.D.139 Mere, ST 810350-811343

II, bivallate, larger bank to W.; with W.D.128, clearly related to White Sheet hill-fort as outlying barriers

Hoare, 1812, I

W.D.150 Ogbourne St. Andrew, SU 164757-167763

II, bivallate; extends unusually far down slope to N. possibly in connection with a 'Celtic' field-system

W.D.150 Ogbourne St. Andrew/Wroughton, SU 149766-151758

II, bivallate; possibly related originally to Barbury hill-fort; extended and re-used perhaps as a trackway in early medieval times by inhabitants of deserted medieval village or farm at S. end

Crawford and Keiller, 1928, 242, pl. XLVI

W.D.153 Pewsey/Wilcot, SU 169633

II, bivallate; probably related to Giant's Grave promontory fort

Hoare, 1812, X

W.D.170 Stanton St. Bernard, SU 101639-102637

II, univallate, bank to E.; overlain by recent afforestation enclosure

W.D.172 Sutton Mandeville, ST 984266

III, univallate, bank to N.; sectioned by Fowler

Sumner, 1913, 64, pl. XXXVI; Fowler, 1964, 55 f.; 1965

W.D.175 Tollard Royal, ST 939199

III, univallate, bank to S.; possibly contemporary with or re-used by inhabitants of Berwick Down North settlement

Sumner, 1913, 65 f., pl. XL; Wainwright, 1968, fig. 2, 104

Yorkshire

Y.D.1 Casten Dike, Kilburn, SE 515818

II, ?

Y.D.2 Crown End, NZ 660070

II, univallate with bank to E. and line of boulders to W.; probably related to settlement on Crown End

Elgee, 1930, 142

Y.D.3 Danby Rigg, NZ 705055

II, bivallate at E. end becoming trivallate towards W.; related to Y.D.4

Elgee, 1930, 135, fig. 44

Y.D.4 Danby Rigg, NZ 708060

III, bank only; related to Y.D.3 and possibly to cairn-field on slope to N.

Elgee, 1930, 135, fig. 44

Y.D.5 Dargate Dikes, SE 895913

II, ?

Y.D.6 East Toft Dike, SE 848922-852921

III, univallate, bank to S., unusually sinuous

Elgee, 1930, 160

Y.D.7 East Toft, SE 842920

III, univallate; probably related to Y.D.6

Y.D.8 Girrick Moor, NZ 703114

II, univallate, bank to N., bank revetted with stone

Elgee, 1930, 149; Elgee and Elgee, 1933, 82

Y.D.9 Hackness, SE 954932

II, bivallate

Y.D.10 Hazelhead Moor, SE 856944-861943

II, bivallate

Y.D.11 Hesketh Dike, SE 515877

II, ditch only surviving

Elgee, 1930, 160

Y.D.12 High Stone Dike, Castleton Rig, NZ 682040

II, univallate, stone-revetted bank to N.

Elgee, 1930, 139; Elgee and Elgee, 1933, 82

Y.D.13 High Stone Dike, NZ 684047

II, univallate, bank to N.; probably related to Y.D.12 as part of a pair

Elgee, 1930, 139; Elgee and Elgee, 1933, 82

Y.D.14 Horn Ridge, SE 661964

II, univallate, bank to S.E.

Elgee, 1930, 158; Elgee and Elgee, 1933, 82

Y.D.15 John Cross Rigg, NZ 900021-906022

II, quadravallate

Elgee, 1930, 157

Y.D.16 Middle Ridge, NZ 740107

II, two rows of pits with bank on either side; limited excavation in 1897 by Mortimer

Mortimer, 1898; Elgee, 1930, 151

Y.D.17 Middle Ridge, NZ 744106

II, two rows of pits with bank on either side; probably related to Y.D.16 about ¼ mile to the W.

Mortimer, 1898; Elgee, 1930, 151

Y.D.18 Normanby, NZ 923046

II, trivallate

Elgee, 1930, 158

Y.D.19 North Ings Moor, NZ 645124

II, univallate, bank to E., crest of bank set with upright stones

Elgee, 1930, 148

Y.D.20 Pepper Hill, SE 553911

II, univallate, bank to N.

Y.D.21 Thiches Dikes, Silpho, SE 970932-972934

II, bivallate; related to Y.D.21a

Y.D.21a Thiches Dikes, SE 972929-976926-978929

II, bivallate; related to Y.D.21 and both enclose small area of ridge-top

Y.D.22 Thompson's Rigg, SE 848941

II, ?

Y.D.23 Thompson's Rigg, SE 833934

II, ? ; probably related to Y.D.24

Y.D.24 Thompson's Rigg, SE 830932

II, ?

Y.D.25 Thompson's Rigg, SE 826925

III, bank only; probably related to settlement to E.

Y.D.26 William Howe, NZ 775034

III, bank set with upright stones; with Y.D.27 encloses cairn-field

Y.D.27 William Howe, NZ 778035

III, bank only

Abbreviations

Andover AS	Andover Archaeological Society
Ant. J.	Antiquaries Journal
Ant.	Antiquity
Arch.	Archaeologia
Arch. Ael.	Archaeologia Aeliana
Arch. Camb.	Archaeologia Cambrensis
Arch. Cant.	Archaeologia Cantiana
Arch. J.	Archaeological Journal
Arch. Newsletter	Archaeological Newsletter
BAJ	Berkshire Archaeological Journal
Bradford Textile Soc. J.	Bradford Textile Society Journal
BBCS	Bulletin of the Board of Celtic Studies
Bull. Inst. Arch. London	Bulletin of the Institute of Archaeology University of London
Curr. Arch.	Current Archaeology
DES	Discovery and Excavation in Scotland
HFCAS Newsletter	Hampshire Field Club and Archaeological Society Newsletter
IGS	Institute of Geological Sciences
JRAI	Journal of the Royal Anthropological Institute
MOW MOPBW	Ministry of Public Buildings and Works, annual excavation reports
OS	Ordnance Survey
Oxon.	Oxoniensia
PCAS	Proceedings of the Cambridge Archaeological Society
PDNHAS	Proceedings of the Dorset Natural History and Archaeological Society
PHFCAS	Proceedings of the Hampshire Field Club and Archaeological Society
PPS	Proceedings of the Prehistoric Society

PPSEA	Proceedings of the Prehistoric Society of East Anglia
PSA	Proceedings of the Society of Antiquaries of London
PSAS	Proceedings of the Society of Antiquaries of Scotland
PSANHS	Proceedings of the Somerset Archaeological and Natural History Society
PSIA	Proceedings of the Suffolk Institute of Archaeology
RCAHME	Royal Commission on Ancient and Historical Monuments (England)
RCAHMS	Royal Commission on Ancient and Historical Monuments (Scotland)
Sx AC	Sussex Archaeological Collections
Sy AC	Surrey Archaeological Collections
TBGAS	Transactions of the Bristol and Gloucestershire Archaeological Society
TCWAS	Transactions of the Cumberland and Westmorland Archaeological Society
TDGAS	Transactions of the Dumfries and Galloway Archaeological Society
TEAS	Transactions of the Essex Archaeological Society
TSDAS	Transactions of the Scarborough and District Archaeological Society
VCH	Victoria County History
WAM	Wiltshire Archaeological Magazine
YAJ	Yorkshire Archaeological Journal

Additions

C W	Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society
Inv. Arch.	Inventaria Archaeologia
TLCAS	Transactions of the Lancashire and Cheshire Archaeological Society

Bibliography

Abercromby, J.
Ross, T.
Anderson, J.
1902 'Account of the excavation of the Roman station at Inchtuthil, Perth', PSAS, XXXVI (1901-2), 182-242.

Abercromby, J.
1912 The Bronze Age Pottery of Great Britain and Ireland (1912).

Adams, W.Y.
1968 'Invasion, Diffusion, Evolution?', Ant., XLII (1968), 194-215.

Alcock, L.
1960 'Castell Odo: an embanked settlement on Mynydd Ystrum, near Aberdaron, Caerns.', Arch. Camb., CIX (1960), 78-135.

1963 Dinas Powys (1963).

Allcroft, H.
1908 Earthwork of England (1908).

Annable, F.K.
1959 'Excavation and fieldwork in Wiltshire: 1958', WAM, LVII (1959), 227-239.

1961 'Fieldwork in Wiltshire 1960', WAM, 58 (1961), 30-38.

Apling, H.
1932 'A Hallstatt settlement at West Harling, Norfolk', PPSEA, VII (1932), 111-22.

Applebaum, E.S.
1934 'An Early Iron Age site at Holwell, Herts.', Ant. J., XIV (1934), 383-8.

1949 'Excavations at Wilbury Hill, an Iron Age hill-fort near Letchworth, Herts., 1933', Arch. J., CVI (1949), 12-45.

1954 'The Agriculture of the British Early Iron Age as exemplified at Figheldean Down, Wilts.', PPS, XX (1954), 103-112.

Ashbee, P.
1966 'The dating of the Wilsford Shaft', Ant., XL (1966), 227-8.

Avery, M.
1968 'Excavations at Meare East, 1966', PSANHS, 112 (1968), 21-39.

1968 Meare Lake Village: interim report 1968 typescript (1968).

Avery, M. Close-Brooks, J.	forth-coming	'Shearplace, Sydling, Dorset, Revisited', (forthcoming).
Bachelier, A.	1965	Minor Linear Earthworks in Wessex unpublished B.A. thesis, Cardiff (1965).
Bailey, C.J.	1960	'An Early Iron Age / Romano-British site at Pin's Knoll, Litton Cheney', PDNHAS, LXXXI (1960), 124-6.
	1964	'Second interim report on excavations at Pin's Knoll, Litton Cheney', PDNHAS, LXXXV (1964), 95f.
Balch, H.E.	1928	'Excavations at Wookey Hole and other Mendip Caves, 1926-7', Ant. J., VIII (1928), 193-210.
Barker, R.L.	1960	'Finds from some settlement sites in Cranborne Chase,' PDNHAS, LXXXII (1960), 83-5.
Barker, H. and Mackey, C.J.	1960	'British Museum Natural Radiocarbon Measurements II', Radiocarbon, 2(1960), 26-30.
	1963	'British Museum Natural Radiocarbon Measurements IV', Radiocarbon, 5 (1963), 104-108.
Barton, K.J.	1962	'Settlements of the Iron Age and pagan Saxon periods at Linford, Essex', TEAS, 1 (1962), 57-101.
Bateman, T.	1861	Ten Years' Diggings ..... in Derby, Stafford and York, 1848-1858 (1861).
Benson, D. and Harding, D.W.	1966	'An Iron Age Site at Kirtlington, Oxon.', Oxon., XXI (1966), 157-161.
Benton, S.	1931	'The excavation of the Sculptor's Cave, Covesea, Morayshire', PSAS, LXV (1930-1), 177-216.
Bersu, G.	1940	'Excavations at Little Woodbury, Wiltshire', PPS, VI (1940), 30-111.
	1948	''Fort' at Scotstarvit Covert, Fife', PSAS, LXXXII (1947-8), 241-263.

Bersu, G.	1961	Bericht über den v. International Kongress für Vor- und Frühgeschichte, Hamburg (1961).
Blake, B.P.	1965	'Ardleigh, Essex', TEAS, 1,4 (1965), 261f.
Bonney, D.J.	1968	'Iron Age and Romano-British Settlement Sites in Wiltshire: some Geographical Considerations', WAM, 63 (1968), 27-38.
Bowen, H.C.	1961	Ancient Fields (1961).
Bowen, H.C. and Fowler, P.J.	1966	'Romano-British Settlements in Dorset and Wiltshire', in Thomas, 1966, 43-67.
Bowen, H.C. and Wood, P.D.	1967	'Experimental Storage of Corn Underground and its Implications for Iron Age Settlements', Bull. Inst. Arch. London, 7 (1967) 1-14.
Bradford, J.S.P.	1942a	'An Early Iron Age site on Blewburton Hill, Berks.', BAJ, XLVI (1942), 97-104.
	1942b	'Early Iron Age settlement at Standlake, Oxon.', Ant. J., XXII (1942), 202-214.
	1942c	'An Early Iron Age site at Allen's Pit, Dorchester', Oxon., VII (1942), 36-60.
Bradley, R.	1967	'Excavations on Portsdown Hill 1963-5', PHFCAS, XXIV (1967), 42-58.
Brailsford, J.	1949	'Excavations at Little Woodbury', PPS, XV (1949), 156-168.
Brailsford, J. Jackson, J.	1948	'Excavations at Little Woodbury', PPS, XIV (1948), 1-23.
Brewster, T.C.M.	1963	The Excavation of Staple Howe (1963).
Briscoe, G.	1949	'Combined Beaker and Iron Age sites at Lakenheath, Suffolk', PCAS, XLII (1948), 9-111.
	1957	'Combined Early Iron Age and Romano-British site at Wangford', PCAS, LI (1957), 19-30.
Bulleid, A. and St. George Gray, H.	1911-17	The Glastonbury Lake Village 2 vols. (1911-17).

Bulleid, A.
Gray, H. St. G. 1943–53 The Meare Lake Village, 2 vols., (1943–53).

Burchell, J.P.T. and Frere, S. 1947 'The occupation of Sandown Park, Esher, during the Stone Age, the Early Iron Age and the Anglo-Saxon Period', Ant. J., XXVII (1947), 24–46.

Burgess, C.B. 1968 'The later Bronze Age in the British Isles and North-western France', Arch. J., CXXV (1968), 1–45.

Burley, E. 1956 'A Catalogue and Survey of the Metal Work from Traprain Law', PSAS, LXXXIX (1955–6), 118–226.

Burstow, G.P. 1958 'A Late Bronze Age urnfield on Steyning Round Hill, Sussex', PPS, XXIV (1958), 158–164.

Burstow, G.P.
Holleyman, G.A. 1956a 'Excavations at Muntham Court, Findon', Sussex Notes and Queries, XIV (1956), 196–8.

1957a 'The Late Bronze Age settlement on Itford Hill, Sussex', PPS, XXIII (1957), 167–212.

1957b 'Excavations at Muntham Court, Findon, Sussex', Arch. Newsletter, 6,4 (1957), 101 f.

Butler, J.J. and Smith, Isobel 1956 'Razors, Urns and the British Middle Bronze Age', Annual Report of the Institute of Archaeology, London, XII (1956), 20–52.

Calkin, J.B. 1932 'A Late Bronze Age Urnfield at Kinson, Dorset', PDNHAS, LIV (1932), 79–86.

1949 'The Isle of Purbeck in the Iron Age', PDNHAS, LXX (1949), 29–59.

1962 'The Bournemouth Area in the Middle and Late Bronze Age', Arch. J., CXIX (1962), 1–65.

Calkin, J.B. and Piggott, C.M. 1939 'Iron Age 'A' Habitation Site at Langton Matravers', PDNHAS, LX (1939), 66–72.

Callow, W.J. Baker, M.J. and Hassall, G.I. 1965 'National Physical Laboratory Radiocarbon Measurements III', Radiocarbon, 7 (1965), 156-161.

1966 'National Physical Laboratory Radiocarbon Measurements IV', Radiocarbon, 8 (1966), 340-347.

Case, H. et al. 1965 'Excavations at City Farm, Hanborough, Oxon.', Oxon., XXIX-XXX (1964-5), 1-98.

Chadwick, S. 1960 'Early Iron Age Enclosures on Longbridge Deverill Cow Down, Wiltshire', in Frere, 1960, 18-20.

Chadwick, S.E. and Thompson, M.W. 1956 'Note on an Iron Age habitation site near Battlesbury Camp, Warminster', WAM, LVI (1955-6), 262-4.

Cheney, H.J. 1935 'An Aeneolithic Occupation site at Playden, near Rye', Ant. J., XV (1935), 152-164.

Childe, V.G. 1956 Piecing together the Past (1956).

Christison, D. 1888 'Notice of Ancient Remains in Manor parish and other districts of Peeblesshire', PSAS, XXII (1887-8), 192-207.

1890 'Forts, camps and motes of the upper ward of Lanarkshire', PSAS, XXIV (1889-90), 281-352.

1894 Early Fortifications in Scotland (1894).

1900 'The forts, 'camps' and other field-works of Perth, Forfar and Kincardine', PSAS, XXXIV (1899-1900), 43-120.

1901 'Excavation undertaken by the Society of Antiquaries of Scotland of earthworks adjoining the 'Roman road' between Ardoch and Dupplin', PSAS, XXXV (1900-1), 15-43.

Clark, J.G.D. 1933 'Report on an Early Bronze Age site in the S.E. Fens', Arch. J., XIII (1933), 246-258.

1936 'Report on a Late Bronze Age site in Mildenhall Fen, W. Suffolk', Ant. J., XVI (1936), 29-50.

	1966	'The Invasion Hypothesis in British Archaeology', Ant., XL (1966), 172–189.
Clark, J.G.D. and Fell, C.I.	1953	'The Early Iron Age site at Micklemoor Hill, West Harling', PPS, XIX (1953), 1–40.
Clark, J.G.D. and Hawkes, C.F.C.	1933	'Early settlements at Runcton Holme, Norfolk', PPSEA, VII (1933), 199–202, 231–262.
Clarke, D.L.	forth-coming	The Origin and Development of British Beaker Pottery (forthcoming).
Clarke, R.	1938	'Iron Age hut at Postwick', Norfolk Arch., XXVI (1938), 271–277.
Clay, R.C.C.	1924	'An Early Iron Age site on Fifield Bavant Down', WAM, XLII (1922–24), 457–96.
	1925	'An inhabited site of La Tène 1 date on Swallowcliffe Down', WAM, XLIII (1925–7), 59–101.
	1927a	'Supplementary report on the Early Iron Age village on Swallowcliffe Down', WAM, XLIII (1925–7), 540–7.
	1926	'The Barrows on Middle Down, Alvediston', WAM, XLIII (1926), 432–439.
Clifford, E.M.	1934	'An Early Iron Age site at Barnwood, Glos.', TBGAS, 56 (1934), 227–35.
	1938	'The earthworks at Rodborough, Amberley and Minchinhampton', TBGAS, 59 (1938), 287–307.
Cobbett, W.	1830	Rural Rides (1830, reprinted 1967).
Cocks, A.H.	1909	'Pre-historic pit dwellings at Ellesborough', Records of Bucks., IX (1909), 349–61.
Coles, J.	1959	'Scottish Swan's-Neck Sunflower Pins', PSAS, XCII (1958–9), 1–9.
	1960	'Scottish Late Bronze Age Metal-work: Typology, Distributions and Chronology', PSAS, XCIII (1959–60), 16–134.

Coles, J.M.
Simpson, D.D.A. 1968 Studies in Ancient Europe (1968)

Collins, A.E.P. 1947 Excavations on Blewburton Hill, 1947', BAJ, 50 (1947), 4–29.

1953 Excavations on Blewburton Hill, 1948 and 1949', BAJ, 53 (1953), 21–64.

Collis, J.R. 1968 'Excavations at Owlesbury, Hants: an interim report', Ant. J., XLVIII,i (1968), 18–31.

Cormack, W.F. 1963 'Palisaded enclosure at Harthill, Lockerbie', TDGNHAS, XLI (1962–3), 116f.

Cotton, M.A. 1961 'Robin Hood's Arbour: and Rectilinear Enclosures in Berkshire', BAJ, 59 (1961), 1–35.

Cotton, M.A. and Frere, S.S. 1968 'Ivinghoe Beacon Excavations 1963–5', Records of Bucks., XVIII, 3 (1968).

Crampton, C.B. 1966 'An Interpretation of the pollen and soils in Cross-Ridge dykes of Glamorgan', BBCS, XXI, IV (1966), 376–389.

Cra'ster, M.D. 1961 'The Aldwick Iron Age settlement, Barley, Herts.', PCAS, LIV (1961), 22–46.

1965 'Aldwick, Barley: recent work at the Iron Age site', PCAS, LVIII (1965), 1–11.

Crawford, O.G.S. 1928 Air Survey and Archaeology (1928, first edition, 1924).

1929 Air-Photography for Archaeologists (1929).

1953 Archaeology in the Field (1953).

Crawford, O.G.S. and Keiller, A. 1928 Wessex from the Air (1928).

Crossley-Holland, P. 1942 'Iron Age pottery from Chinnor, Oxon.', Oxon., VII (1942), 108f.

Cunliffe, B.W. 1964 Winchester Excavations, 1949–1960, vol. 1 (1964).

	1963	'Excavations near Eldon's Seat, Encombe, Dorset', PDNHAS, 85 (1963), 98f.
	1964	'Excavations near Eldon's Seat, Encombe, Dorset', PDNHAS, 86 (1964), 109.
	1966	'Stoke Clump, Hollingbury and the Early Pre-Roman Iron Age in Sussex', SxAC, CIV (1966), 109-120.
	1966	Regional Groupings within the Iron Age of Southern Britain, unpublished Ph.D. thesis, Cambridge (1966).
	1968	'Early Pre-Roman Iron Age Communities in Eastern England', Ant. J., XLVIII (1968), 175-191.
Cunliffe, B. and Phillipson, D.W.	1968	'Excavations at Eldon's Seat, Encombe, Dorset, England', PPS, XXXIV (1968), 191-237.
Cunnington, B.H. and M.E.	1914	'Casterley Camp', WAM, XXXVIII (1913-14), 53-105.
Cunnington, M.E.	1923	The Early Iron Age Inhabited Site at All Cannings Cross Farm, Wiltshire, (1923).
	1929	Woodhenge (1929).
Curle, A.O. Cree, J.E.	1921	'Account of the excavations on Traprain Law during the summer of 1920', PSAS, VII (1920-1), 153-206.
Curwen, E. & E.C.	1918	'Covered ways on the Sussex Downs', SxAC, LIX (1918), 35-75.
	1922	'Notes on the Archaeology of Burpham and the neighbouring downs', SxAC, LXIII (1922), 1-53.
	1923	'Sussex Lynchets and their associated field-ways', SxAC, LXIV (1923), 1-65.
Curwen, E.C.	1929	Prehistoric Sussex (1929).
	1931	'Timber palisades at Hollingbury', Ant., V (1931), 491f.

Curwen, E.C.	1932	'Excavations at Hollingbury Camp, Sussex', Ant. J., XII (1932), 1-16.
	1934a	'A Late Bronze Age Farm and a Neolithic Pit-Dwelling', SxAC, LXXV (1934), 137-170.
	1934b	'A Prehistoric Site in Kingley Vale, near Chichester', SxAC, LXXV (1934), 209-215.
	1937	The Archaeology of Sussex (1937).
	1951	'Cross-ridge dykes in Sussex', in Grimes, 1951, 93-107.
Dacre, M.W.	1968a	'The Kimpton Urnfield', Andover AS, 3 (1968), 6-9.
	1968b	'Kimpton', Curr. Arch., 11 (1968), 284-286.
Decker, K.V. and Scollar, I.	1962	'Iron Age square enclosures in the Rhineland', Ant., XXXVI (1962), 175-8.
Dennington, R.F. and Gallant, L.	1964	'The Iron Age pottery from Thorney Farm, Iver', Records of Bucks., 17 (1964), 240-256.
Detsicas, A.P.	1962	'Greenhithe: Excavations at Stone Castle Quarry', Arch. Cant., LXXVII (1962), 200f.
Dimbleby, G.W.	1960	'Iron Age Land Use on Bonchester Hill', PSAS, XCIII (1959-60), 237f.
Duncombe, C.	1899	'Evidence of lake-dwellings on the banks of the Costa, near Pickering, N. Yorks.', JRAI, 1 (1899), 150-154.
Dunning, G.C.	1931	'Salmonsbury Camp, Gloucestershire', Ant., V (1931), 489-91.
Dyer, J.F.	1961	'Dray's Ditches, Bedfordshire, and Early Iron Age territorial boundaries in the eastern Chilterns', Ant. J., XLI (1961), 32-43.
	1963	'The Chiltern Grim's Ditch', Ant., XXXVII (1963), 46-49.
Dyer, J.F. and Hales, A.J.	1961	'Pitstone Hill - a study in field archaeology', Records of Bucks., XVII (1961), 49-56.

Dymond, C.W.	1902	Worlebury an Ancient Stronghold in the County of Somerset, (1902).
Dymond, C.W. Tomkins, Rev. H.G.	1886	Worlebury: an Ancient Stronghold in the County of Somerset, (1886).
Dymond, D.P. and Stead, I.	1959	'Grimthorpe: a hill fort on the Yorkshire Wolds', Ant., XXXIII (1959), 208-213.
Elgee, F.	1930	Early Man in N.E. Yorkshire (1930).
Engleheart, G.H.	1922	'On Roman Buildings and other antiquities in a district of North-West Hampshire', PHFCAS, IX (1922), 214-8.
Erith, F.H.	1967	'The Iron Age 'A' Farmstead at Ardleigh', Colchester Arch. Group Bulletin, 10, 4 (1967), 54.
Erith, F.H. and Longworth, I.H.	1960	'A Bronze Age urnfield on Vinces' Farm, Ardleigh, Essex', PPS, XXVI (1960), 178-192.
Feachem, R.W.	1955	'Iron Age and Early Medieval Monuments in Galloway and Dumfriesshire', TDGAS, XXXIII (1954-5), 58-65.
	1957	'Castlehill Wood Dun, Stirlingshire', PSAS, XC (1956-7), 24-51.
	1959	'Glenachan Rig Homestead, Cardon, Peeblesshire', PSAS, XCII (1958-9), 15-24.
	1960	'The palisaded settlements at Harehope, Peeblesshire. Excavations, 1960', PSAS, XCIII (1959-60), 174-191.
	1961	'Unenclosed Platform Settlements', PSAS, XCIV (1960-1), 79-85.
	1965	The North Britons: the prehistory of a Border people (1965).
Fell, C.I.	1951	'A Late Bronze Age urnfield and Grooved Ware occupation at Honington, Suffolk', PCAS, XLV (1951), 30-43.

Fell, C.I.	1952	'An Early Iron Age settlement at Linton, Cambs.', PCAS, XLVI (1952), 31–42.
	1961	'Shenberrow Hill Camp, Stanton, Glos.', TBGAS, 80 (1961), 16–41.
Field, N.H.	1959	'An excavation at the earthwork in Bowley's Plantation, Owermoigne, Dorset', PDNHAS, LXXXI (1959), 102–3.
Field, N.H. Matthews, C.L. Smith, I.F.	1964	'New Neolithic sites in Dorset and Bedfordshire', PPS, XXX (1964), 352–381.
Forbes, R.J.	1964	Ancient Technology, vol. IV (1964).
Forde–Johnson, J.L.	1957	'Preliminary report on excavations on Knowle Hill, 1957', PDNHAS, LXXIX (1957), 106f.
	1962	'Earl's Hill, Pontesbury, and related hillforts in England and Wales', Arch. J., CXIX (1962), 66–91.
Fowler, P.J.	1960	'Excavations at Madmaston Camp, Swallowcliffe 1957–8', Oxon., XXV (1960), 3–48.
	1964	'Cross–Dykes on the Ebble–Nadder Ridge', WAM, 59 (1964), 46–57.
	1967	'The archaeology of Fifield and Overton Downs, Wiltshire', WAM, 62 (1967), 16–33.
Fowler, P.J. Musty, J.W.G. and Taylor, C.C.	1965	'Some earthwork enclosures in Wiltshire', WAM, 60 (1965), 52–74.
Fox, A.	1936	'The Short Dykes of Glamorgan', BBCS, VIII, III (1936), 280–4.
Fox, C.	1923a	Archaeology of the Cambridge Region (1923).
	1923b	'A settlement of the Early Iron Age at Abington Pigotts, Cambs.', PSEA, IV (1923), 211–33.
Fox, C. and A.	1934	'The Short Dykes of Glamorgan', BBCS, VII, II (1934), 221.

Fox, C. and A.	1935	'Field Survey of Glamorgan', BBCS, VII, IV (1935), 418–420.
Fox, . . C.	1955	Offa's Dyke (1955).
Fox, C. and Wolseley, G.R.	1928	'The Early Iron Age Site at Findon Park, Findon, Sussex,' Ant.J., VIII (1928), 449–460.
Frere, S.S.	1950	'The Iron Age pottery from Harting Down, Sussex', SxAC, LXXXIX (1950), 187–191.
	1960	Problems of the Iron Age in Southern Britain (c.1960).
Gardner, W. and Savory, H.N.	1964	Dinorben (1964).
Gell, A.S.R.	1949	'An Early Iron Age site at Lakenheath, Suffolk', PCAS, XLII (1948), 112–116.
Gilyard-Beer, R.	1955	'Grim's Bank, Little Heath, Berkshire', BAJ, 54 (1954–5), 56f.
Godden, B.	1966	'List of Bronze Age Pottery in Southampton City Museums', HFCAS Newsletter, 1,3 (1966), 34–37.
Godwin, H. and Ellis, E.H.	1964	'Cambridge University Natural Radiocarbon Measurements VI', Radiocarbon, 6 (1964), 116–137.
Gray, H. St. George	1930	'Excavations at Kingsdown Camp, Mells, Somerset, 1927–9', Arch., LXXX (1930), 59–98.
Greenwell, W.	1877	British Barrows (1877).
Grimes, W.F.	1950	'The archaeology of Skonor Island', Arch. Camb., CI (1950), 1–22.
	1951	Aspects of Archaeology (1951).
	1960	'Settlements at Draughton .... and Heathrow, Middlesex', in Frere, 1960, 21–28.
Gruffydd, W.J.	1958	Folklore and Myth in the Mabinogion (1958).

Harden, D.B. 1937 'Excavations on Grim's Dyke, N. Oxon.', Oxon., II (1937), 74–92.

Harding, D.W. 1960 'Excavation of Multiple Banks, Thickthorn Down, Dorset', PDNHAS, 81 (1960), 110–113.

Harding, D.W. Blake, I.M. 1963 'An Early Iron Age settlement in Dorset', Ant., XXXVII (1963), 63–4.

Harding, J.M. 1964 'Interim report on the excavation of a Late Bronze Age homestead in Weston Wood, Albury, Surrey', SyAC, 61 (1964), 10–17.

Hartley, B.R. 1957 'The Wandlebury Iron Age Hill-fort, Excavations of 1955–6', PCAS, L (1957), 1–27.

Hastings, F.A. 1965 'Excavation of an Iron Age Farmstead at Hawk's Hill, Leatherhead', SyAC, LXII (1965), 1–43.

Hawkes, C.F.C. 1935 'The pottery from Plumpton Plain', PPS I (1935), 39–59.

1939 'Excavations at Quarley Hill, 1938', PHFCAS, XIV (1939), 136–190.

1940 'Site of the Late Bronze / Early Iron Age transition at Totternhoe, Beds.', Ant. J., XX (1940), 487–91.

1943 'The Early Iron Age settlement at Fengate, Peterborough', Arch. J., C (1943), 188–223.

1947 'Britons, Romans and Saxons round Salisbury and in Cranborne Chase: reviewing the excavations of Gen. Pitt-Rivers, 1881–1898', Arch. J., CIV (1947), 27–78.

1959 'The ABC of the British Iron Age', Ant., XXXIII (1959), 170–82.

1960 'A Scheme for the British Bronze Age', unpublished (1960).

1966 'British Prehistory: The Invasion Hypothesis', Ant., XL (1966), 297 f.

Hawkes, C.F.C., Myres, J.N.L. and Stevens, C.G. 1930 'St. Catharine's Hill, Winchester', PHFCAS, XI (1930), 1–310.

Hawkes, C.F.C. and Smith, M.A. 1957 'On some buckets and cauldrons of the Bronze and Early Iron Ages', Ant. J., XXXVII (1957), 131–98.

Head, J.F. and Piggott, C.M. 1944 'An Iron Age site at Bledlow, Bucks.', Records of Bucks., XIV (1944), 189.

Helbaek, H. 1952 'Early Crops in South Britain', PPS, XVIII (1952), 194–233.

Hewer, T.F. 1926 'Guy's Rift, Slaughterford, Wilts.: an Early Iron Age Habitation', WAM, XLIII (1926), 483.

Hoare, R.C. 1812 Ancient Wiltshire, I (1812).

1821 Ancient Wiltshire, II (1821).

Hodson, F.R. 1960 'Reflections on the ABC of the British Iron Age', Ant., XXXIV (1960), 318.

1962 'Some pottery from Eastbourne, the Marnians and the pre-Roman Iron Age in Southern England', PPS, XXVIII (1962), 140–155.

1964a 'La Tène chronology, continental and British', Bull. Inst. Arch. London, IV (1964), 123–42.

1964b 'Cultural grouping within the British pre-Roman Iron Age', PPS, XXX (1964), 99–110.

Hogg, A.H.A. 1942 'Excavations in a native settlement at Ingram Hill, Northumberland', Arch. Ael., XX (1942), 110–133.

1956 'Further excavations at Ingram Hill', Arch. Ael., XXXIV (1956), 150–160.

1958 'The secondary Iron Age in Britain ', Ant., XXXII (1958), 189.

Holleyman, G.A. 1935 'The Celtic field-system in southern Britain', Ant., IX (1935), 443–454.

1937 'Harrow Hill Excavations, 1936', SxAC, LXXVIII (1937), 230–252.

1957 'Muntham Court, Sussex', Sussex Notes and Queries, XIV (1955–7).

Holleyman, G.A.	1960	'Muntham Court, Findon, Sussex', in Frere, 1960, 20.
Holleyman, G.A. and Curwen, E.C.	1935	'Late Bronze Age Lynchet settlements on Plumpton Plain, Sussex', PPS, I (1935), 16–38.
Holleyman, G.A. Yeates, C.W.	1960	'Excavations in the Ditchling Road Area N. of Brighton, 1950–7', SxAC, XCVIII (1960), 133–149.
Hooley, R.W.	1929	'The excavations at Worthy Down, Winchester', PHFCAS, X (1929), 178–192.
Hope-Taylor, B.	1948	'Celtic Agriculture in Surrey', SyAC, L (1948), 47–72.
Houlder, C.	1968	'The Henge Monuments at Llandegai', Ant., XLII (1968), 216–221.
IGS	1948	British Regional Geology: The Midland Valley of Scotland (1948).
	1948	British Regional Geology: The South of Scotland (1948).
Jackon, K.H.	1964	The Oldest Irish Tradition: a Window on the Iron Age (1964).
Jerman, H.N.	1933	'Some newly discovered dykes in central Wales', BBCS, VII,I (1933), 82–4.
	1935	'A field survey of some dykes in East Central Wales', BBCS, VII, III (1935), 341–3.
	1936	'Short Dykes on the Kerry Hills, Montgomery', BBCS, VIII, I (1936), 280.
Jessen, K. Helbaek, H.	1944	Cereals in Great Britain and Ireland in Prehistoric and Early Historic Times (1944).
Jessup, R.F.	1941	'Crop markings at Fawkham, Kent', Arch. Cant., LIV (1941), 74.
Jobey, G.	1959	'Excavations at the native settlement at Huckhoe, Northumberland', Arch. Ael., XXXVII (1959), 217–278.

Jobey, G. 1962 'An Iron Age Homestead at West Brandon, Durham,' Arch. Ael., XL (1962), 1-34.

Jobey, G. and Tait, J. 1966 'Excavations on palisaded settlements and cairnfields at Alnham, Northumberland', Arch. Ael., XLIV (1966), 5-48.

Jobey, G. 1965 'Hill-forts and settlements in Northumberland', Arch. Ael., XLIII (1965), 21-64.

1968 'A radio-carbon date for the palisaded settlement at Huckhoe', Arch. Ael., XLVI (1968), 293-5.

Jones, M.U., Evison, V.I. and Myres, J.N.L. 1968 'Crop-mark sites at Mucking, Essex', Ant. J., XLVIII (1968), 210-30.

Keef, P.A.M. 1950 'Harting Hill Hut Shelters', SxAC, LXXXIX (1950), 179-191.

Kelly, T.C. 1967 'A Series of Late Middle Bronze Age Sites, Wilde Street, Mildenhall', PSIA, XXXI, I (1967), 47-56.

Kenyon, K.M. 1953 'Excavations at Sutton Walls, Herefordshire, 1948-51', Arch. J., CX (1953), 1-87.

Kivell, R. de C.N. 1925 'Objects found during excavations on the Romano-British site at Cold Kitchen Hill, Brixton Deverill, 1924', WAM, XLIII (1925), 180-191.

1926 a 'Objects found during excavations on the Romano-British site at Cold Kitchen Hill, Brixton Deverill, 1924', WAM, XLIII (1926), 327-332.

1926 b 'Objects found during excavations on the Romano-British site at Stockton Earthworks, 1923', WAM, XLIII (1926), 389-394.

Leeds, E.T. 1935 'Recent Iron Age discoveries in Oxon. and N. Berks.', Ant. J., XV (1935), 30-41.

Liddell, D.M. 1930-5 'Report on the excavations at Hembury Fort, Devon', PDAES, I (1929-32), 40-63, 90-120, 162-190; II (1933-6), 135-175.

Liddell, D.M.	1933	'Excavations at Meon Hill', PHFCAS, XII (1933), 126-162.
	1937	'Report of the Hampshire Field Club's Excavations at Meon Hill', PHFCAS, XIII (1937), 7-54.
Lloyd, J.M.E.	1901	'Wanten or Wanton Dyke: with some remarks on upper and lower 'Short Dykes', Arch. Camb., I (1901), 279-98.
Longworth, I.H.	1961	'Origins and development of the Collared Urn tradition in England and Wales', PPS, XXVII (1961), 263-306.
Lowndes, R.A.C.	1963	''Celtic fields', farmsteads, and burial-mounds in the Lune valley', TCWAS, LXIII (1963), 77-95.
Lowther, A.W.G.	1945	'Report on Excavations at the Site of the Early Iron Age Camp in the Grounds of Queen Mary's Hospital, Carshalton, Surrey', SyAC, XLIX (1944-5), 56-74.
Lowther, A.W.G. Bradford, J.S.P.	1947	'Iron Age pottery from Yarnton, further notes', Oxon, XI-XII (1946-7), 175-181.
Mackie, E.W.	1968	'Excavations on Loch Broom, Ross and Cromarty', second interim report (1968).
	1969	'Radio-carbon dates and the Scottish Iron Age', Ant., XLIII, 169 (1969), 15-26.
MacNeill, E.	1935	Early Irish Laws and Institutions (1935).
Manners, J.E.	1969	'Dew Ponds', Country Life, (13 Feb. 1969), 360-363.
Manning, W.H.	1962	'Excavation of an Iron Age and Roman site at Chadwell St. Mary', TEAS, I (1962), 127-140.
May, J.	1964	Dragonby 1964, interim typescript (1964).
	1965	Dragonby 1965, interim typescript (1965).

Megaw, J.V.S. et al.	1961	'The Bronze Age settlement at Gwithian: repliminary report on the evidence for early agriculture', PWCFC, 2, 5 (1960-1), 200-215.
Miles, W.A.	1826	The Deverel Barrow (1826).
Mills, A.	1949	'A Section of 'Celtic' field terraces at Streatley Warren, Berks.', BAJ, 51 (1948-9), 51-2.
Morris, C.	1947	The Journeys of Celia Fiennes (1947).
Mortimer, J.R.	1895	'The origin of some lines of small pits on Allerston and Ebberston Moors, near Scamridge Dykes, in the neighbourhood of Scarborough', Arch. J., LII (1895), 266-270.
	1898	'An Ancient British settlement consisting of a double row of pits on Danby North Moor, Yorks.', Arch. J., LV (1898), 155-165.
	1905	Forty Years' Researches in British and Saxon Burial Mounds of East Yorkshire (1905).
Myres, J.N.L.	1937	'A prehistoric and Roman site on Mount Farm, Dorchester. Oxon., II (1937), 12-40.
Norris, N.E.S. and Burstow, G.P.	1950	'A prehistoric and Romano-British site at West Blatchington', SxAC, LXXXIX (1950), 1-56.
	1952	'A prehistoric and Romano-British site at West Blatchington', SxAC, XC (1952), 221-240.
Oakley, K.P. Rankine, W.F., Lowther, A.W.G.	1939	'Occupation Site on the Short-heath Ridge: 'Green Lane Site',' in A Survey of the Prehistory of the Farnham District (1939), 183-202.
O'Neil, B.H.St.J.	1942	'Excavations at Ffridd Faldwyn Camp, Montgomery, 1937-9', Arch. Camb., XCVII (1942-3), 1-57.

	1952	'The Bulwarks: a Linear Earthwork in the Cotswolds', in O'Neil, B.H. & H.E., 1952, 37.
OS	1933	Celtic Earthworks of Salisbury Plain, Old Sarum sheet (1933).
	1957	Geological Survey 'Ten-Mile' Map (1957).
Parsons, W.J. and Curwen, E.C.	1933	'An agricultural settlement on Charleston Brow, near Firle Beacon', SxAC, LXXIV (1933), 164–180.
Perry, B.T.	1966	'Some Recent Discoveries in Hampshire', in Thomas, 1966, 39–42.
Philips, J.T.	1962	'An Iron Age site at Driffield, East Riding, Yorks.', YAJ, XL (1959–62), 183–191.
Piggott, C.M.	1938a	'A Middle Bronze Age Barrow at Latch Farm, Hants.', PPS, IV (1938), 169–187.
	1938b	'An Iron Age A Site on Harnham Hill', WAM, XLVIII (1937–8), 513–522.
	1942	'Five Late Bronze Age enclosures in North Wiltshire', PPS, VIII (1942), 48–61.
	1944	'The Grim's Ditch Complex in Cranbourne Chase', Ant., XVIII (1944), 65–71.
	1946	'The Late Bronze Age Razors of the British Isles', PPS, XII (1946), 121–141.
	1948	'The excavations at Hownam Rings, Roxburghshire, 1948', PSAS, LXXXII (1947–8), 193–225.
	1949	'The Iron Age settlement at Hayhope Knowe, Roxburghshire: excavations 1949', PSAS, LXXXIII (1948–9), 45–67.
	1950	'The Excavations at Bonchester Hill, 1950', PSAS, LXXXIV (1949–50), 113–137.
	1950b	'Late Bronze Age Enclosures in Sussex and Wessex', PPS, XVI (1950), 193–5.

Piggott, C.M. Seaby, W.A.	1937	'Early Iron Age site at Southcote, Reading', PPS, III (1937), 43-57.
Piggott, S.	1930	'Butser Hill', Ant., IV (1930), 187-200.
	1931	'Ladle Hill: an unfinished hill-fort', Ant., V (1931), 474-485.
	1939	'Timber Circles: A Re-Examination', Arch. J., CXVI (1939), 193-222.
	1958a	'Native Economies and the Roman Occupation of North Britain', in Richmond, 1958, 1-27 (reprinted 1961).
	1958b	'Excavations at Braidwood Fort, Midlothian, and Craig's Quarry, Dirleton, E. Lothian', PSAS, XCI (1957-8), 61-77.
	1965	Ancient Europe (1965).
	1966	'A Scheme for the Scottish Iron Age', in Rivet, 1966, 1-16.
Piggott, S. Piggott, C.M.	1940	'Excavations at Ram's Hill, Uffington, Berkshire', Ant. J., XX (1940), 465-480.
	1952	'Excavations at Castle Law, Glencorse ....', PSAS, LXXXVI (1951-2), 191-4.
Pitt-Rivers, A.	1887	Excavations in Cranborne Chase, vol. I (1887).
	1888	Excavations in Cranborne Chase, vol. II (1888).
	1892	Excavations in Cranborne Chase, vol. III (1892).
	1898	Excavations in Cranborne Chase, vol. IV (1898).
Powell, T.G.E.	1963	'Excavations at Skelmore Heads near Ulverston, 1957 and 1959', TCWAS, LXIII (1963), 1-30.
Radford, C.A. Ralegh	1951	Report on the excavations at Castle Dore (1951).
	1954	'The tribes of Southern Britain', PPS, XX (1954), 1-26.

Rahtz, P.A.	1960	'Interim report on excavations at Hog Cliff Hill, Maiden Newton', PDNHAS, LXXXI (1960), 94.
	1961	'Second interim report on excavations at Hog Cliff Hill, Maiden Newton', PDNHAS, LXXXII (1961), 83.
Rahtz, P. and ApSimon, A.M.	1962	'Excavations at Shearplace Hill, Sydling St. Nicholas, Dorset', PPS, XXVIII (1962), 289–328.
Raistrick, A.	1939	'Iron Age settlements in West Yorks.', YAJ, XXXIV (1939), 115–150.
Ratcliffe-Densham, H.B.A. and M.M.	1953	'A celtic farm on Blackpatch', SxAC, XCI (1953), 69–83.
	1961	'An anomalous earthwork of the Late Bronze Age on Cock Hill, Sussex', SxAC, XCIX (1961), 78–101.
	1966	'Amberley Mount: Its Agricultural Story from the Late Bronze Age', SxAC, CIV (1966), 6–25.
Reynolds, P.J.	1967	'Experiment in Iron Age Agriculture', TBGAS, LXXXVI (1967), 60–73.
Rhodes, P.P.	1948	'A prehistoric and Roman site at Wittenham Clumps, Berks.', Oxon., XIII (1948), 18–31.
	1950	'The Celtic field-systems of the Berkshire Downs', Oxon., 15 (1950), 1–28.
Richards, M.	1954	The Laws of Hywel Dda (1954).
Richardson, K.M.	1951	'The excavation of Iron Age villages on Boscombe Down West', WAM, LIV (1951), 123–168.
Richardson, K.M. and Young, A.	1951	'An Iron Age A site on the Chilterns', Ant. J., XXXI (1951), 132–148.
Richmond, I.A.	1951	'Exploratory trenching at the Roman fort of Cappuck, Roxburghshire, in 1949', PSAS, LXXXV (1950–1), 138–145.
	1958	Roman and Native in North Britain (1958, reprinted 1961).

Richmond, I.A. Gillam, G.P.	1955	'Some excavations at Corbridge, 1952–4', Arch. Ael., XXXIII (1955), 218–52.
Riley, D.N.	1943	'Archaeology from the Air in the Upper Thames Valley', Oxon., 8 (1943), 64–101.
	1947	'A Late Bronze Age and Iron Age Site on Standlake Downs, Oxon.', Oxon., XI–XII (1946–7), 27–43.
Rivet, A.L.F.	1966	The Iron Age in Northern Britain (1966).
Ross, A.	1968	'Shafts, pits, wells – sanctuaries of the Belgic Britons?' in Coles and Simpson, 1968, 255–286.
Rowntree, A.	1931	The History of Scarborough (1931).
RCAHME	1952	Dorset (1952).
	1960	A Matter of Time (1960).
	1936	An Inventory of the Historical Monuments in Westmorland (1936).
RCAHMS	1920	Inventory of Dumfriesshire (1920).
	1956	The County of Roxburgh (1956).
	1967	Peeblesshire (1967).
Rutter, J.G.	1959	'The Iron Age pits on Castle Hill, Scarborough', TSDAS, I (1959), 32–44.
Ryder, M.L.	1966a	'Shetland Sheep and Wool', Bradford Textile Soc. J. (1965–6), 91–99.
	1966b	'The exploitation of animals by Man', Advancement of Science, 23 (1966), 9–21.
Rynne, E.	1961	'The Introduction of La Tène into Ireland', in Bersu, 1961, 705–9.

St. Joseph, J.K. 1968 'Air Reconnaissance: Recent Results, 15', Ant., XLII (1968), 311-314.

Savory, H.N. 1937 'An Early Iron Age site at Long Wittenham, Berks.', Oxon., II (1937), 1-11.

1949 'Excavation of an Early Iron Age fortified settlement on Mynydd Buchan, Llysworney, Glamorgan, 1949-50,' BBCS, XIII (1949), 247.

1954 'The Excavation of an Early Iron Age fortified settlement on Mynydd Buchan, Llysworney, Glam., 1949-50', Arch. Camb., CIII (1954), 85-108.

1956 'The Excavation of an Early Iron Age Fortified Settlement on Mynydd Buchan, Llysworney, Glam., 1949-50', Arch. Camb., CIV (1956), 14-51.

1958 'The Late Bronze Age in Wales: Some new discoveries and new interpretations', Arch. Camb., CVII (1958), 3-63.

Scott, Sir Lindsay 1951 'Corn-drying kilns', Ant., XXV (1951), 196-208.

Scott-Elliot, J., Simpson, D.D.A. and Coles, J.M. 1966 'Excavations at McNaughton's Fort, Kirkcudbright', TDGAS, XLIII (1966), 72-79.

Shortt, H. 1949 'A hoard of bronze armlets from Ebbesbourne Wake, Wilts.', WAM, LIII (1949), 104-112.

Simpson, W.G. 1966 'Romano-British Settlement on the Welland Gravels', in Thomas, 1966, 15-25.

Simpson, D.D.A. and Scott-Elliot, J. 1963 'Excavations at Camp Hill, Trohoughton, Dumfries.', TDGAS, XLI (1962-3), 125-134.

Sissons, J.B. 1967 The Evolution of Scotland's Scenery (1967).

Smedley, N. Owles, E. 1962 Pottery of the Early and Early Middle Bronze Age in Suffolk', PSIA, XXIX (1962), 175-197.

Smith, I.F. 1956 The Decorative Art of Neolithic Ceramics in South-Eastern England and its Relations, unpublished Ph.D. thesis, London, (1956).

Smith, I.F. 1961 'An Essay towards the Reformation of the British Bronze Age', Helinium, I (1961), 97-118.

1964 'Note on the distribution of Neolithic storage-pits', in Field, Matthews and Smith, 1964, 367-375.

Smith, R.A. 1911 'Lake-dwellings in Holderness, Yorks.', Arch., LXII (1911), 593-610.

1927 'Pre-Roman remains at Scarborough', Arch., LXXVII (1927), 179-200.

Spink, J. 1895 'Lake-dwellings in the Vale of Pickering', Proc. Yorks. Geolog. and Polytechnic Society, XIII (1895).

Stanford, S.C. 1965 Croft Ambrey: Fourth Interim Report (1965)

1966 Midsummer Hill Camp, Eastnor, Herefordshire: First Interim Report (1966).

1967 Midsummer Hill Camp, Eastnor, Herefordshire: Second Interim Report (1967).

Stead, I.M. 1965 The La Tène Cultures of Eastern Yorkshire (1965).

1968 'An Iron Age Hill-fort at Grimthorpe, Yorkshire, England', PPS, XXXIV (1968), 148-190.

forthcoming 'Excavations in Blagden Copse, Hurstbourne Tarrant, Hampshire, 1961', (forthcoming).

Steer, K. 1949 'The Identification of Palisaded Enclosures from surface indications', in Piggott, C.M., 1949, 64-67.

Stevens, F. 1934 'The Highfield pit dwellings', WAM, XLVI (1934), 579-624.

Stevenson, R.B.K. 1949 'Braidwood fort, Midlothian: the exploration of two huts', PSAS, LXXXIII (1948-9), 1-11.

Stone, J.F.S. 1932 'Saxon Interments on Roche Court Down, Winterslow', WAM, XLV (1932), 568-582.

Stone, J.F.S. 1933 'A settlement site of the Beaker period on Easton Down, Winterslow', WAM, XLVI (1933), 225–242.

1935 'Excavations at Easton Down, Winterslow, 1933–1934', WAM, XLVII (1935), 68–100.

1936 'An enclosure on Boscombe Down East', WAM, XLVII (1936), 466–489.

1937 'A Late Bronze Age habitation site on Thorny Down, Winterbourne Gunner', WAM, XLVII (1937), 640–660.

1941 'The Deverel-Rimbury settlement on Thorny Down, Winterbourne Gunner, S. Wilts.', PPS, VII (1941), 114–133.

Stone, J.F.S. Wicks, A.T. 1935 'Trial excavations at Hayes Wood Enclosure, Freshford, Somerset', PSANHS, LXXXI (1935), 138–148.

Stone, S. 1859 [Standlake], PSA, IV (1856–9), 92–100.

1859 [Stanton Harcourt], PSA, IV (1856–9), 215–217.

Stuart, J.D.M. Birkbeck, J.M. 1937 'A Celtic village on Twyford Down, Winchester, excavated 1933–4', PHFCAS, XIII (1937), 188–207.

Stukeley, W. 1776 Itinerarium Curiosum (1776).

Sumner, H. 1913 The Ancient Earthworks of Cranborne Chase (1913).

1917 The Ancient Earthworks of the New Forest (1917).

1931 Local Papers (1931).

Tebbutt, C.F. 1932 'Early Iron Age settlement on Jack's Hill, Great Wymondley, Herts.', PPSEA, VI (1932), 371–4.

Thomas, C. 1954 'An Early Iron Age site at Carwynnen, Camborne', PWCFC, I 2 (1953–4), 48–52.

Thomas, C.	1966	Rural Settlement in Roman Britain (1966).
Thomas, N. Thomas, C.	1955	'Excavations at Snail Down, Everleigh', WAM, XVI (1955), 127-148.
Thorneycroft, W.	1933	'Observations on Hut-circles near the Eastern Border of Perthshire, North of Blairgowrie', PSAS, LXVII (1932-3), 187-208.
	1946	'Further observations on Hut-circles', PSAS, LXXX (1945-6), 131-135.
Threipland, L.M.	1956	'An Excavation at St. Mawgan-in-Pyder, North Cornwall', Arch. J., CXIII (1956), 33-83.
Trueman, A.E.	1949	Geology and Scenery in England and Wales, Penguin edition (1949).
Varley, W.J.	1968	'Barmston and the Holderness crannogs', East Riding Archaeologist, I, 1 (1968), 12-27.
Varley, W.J. Jackson, J.W.	1940	Prehistoric Cheshire (1940).
Vatcher, F. de M. and H.L.	1965	'An excavation of an earthwork near Badbury Rings, Dorset', PDNHAS, 87(1965), 101 f.
VCH	1912	Yorkshire (1912).
	1957	A History of Wiltshire, I, I (1957).
Wacher, J.S.	1957	'Interim Report on Excavations at Bowden's Hill, Melcombe Horsey', PDNHAS, 79 (1957), 115.
	1958	'Litton Cheney Excavations 1956', PDNHAS, 80 (1958), 160-177.
	1961	'Excavations at Calke Wood, Wattisfield, 1956', PSIA, XXVIII (1961), 1-28.
	1968	Poxwell, Dorset, interim Typescript (1968).
Wainwright, G.J.	1967	Coygan Camp (1967).

Wainwright, G.J. 1968 'The Excavation of a Durotrigian Farmstead near Tollard Royal in Cranbourne Chase, Southern England', PPS, XXXIV (1968), 102-147.

War Office 1914 Manual of Field Engineering (1914).

Ward Perkins, J.B. 1938 'An Early Iron Age site at Crayford, Kent', PPS, IV (1938), 151-168.

Warne, C. 1866 Celtic Tumuli of Dorset (1866).

1872 Ancient Dorset (1872).

Waterbolk, H.T. 1964 'The Bronze Age settlement of Elp', Helinium, IV (1964), 97-131.

Wedlake, W.J. 1958 Excavations at Camerton, Somerset. (1958).

Wheeler, R.E.M. 1931 'Prehistoric Scarborough', in Rowntree, 1931, 9-39.

1943 Maiden Castle Dorset (1943).

1954 The Stanwick Fortifications, N. Riding of Yorkshire (1954).

Whitley, Margaret 1943 'Excavations at Chalbury Camp, Dorset, 1939', Ant. J., XXIII (1943), 98-121.

Willerson, J.C. and Cra'sles, M.D. 1958 'Excavations at Whiteley Hill, Barley', PCAS, LII (1958), 2-5.

Williams, A. 1945 'A promontory fort at Henllan, Cards.', Arch. Camb., XCVIII (1945), 226-40.

1947 'Excavations at Langford Downs, Oxon. (near Lechlade) in 1943 ', Oxon., XI-XII (1946-7), 44-64.

1950 'Excavations at Allard's Quarry, Marnhull, Dorset', PDNHAS, 72 (1950), 20-75.

1951 'Excavations at Beard Mill, Stanton Harcourt, Oxon., 1944', Oxon., XVI (1951), 5-22.

Williams, J. 1777 An account of some remarkable ancient ruins lately discovered in the Highlands and Northern parts of Scotland (1777).

Williams-Freeman, J.P. 1915 Field Archaeology as illustrated by Hampshire (1915).

Wilson, A.E. 1939 'Excavations at the Caburn, 1938', SxAC, 80 (1939), 193-213.

Wolseley, G.R. and Smith, R.A. 1924 'Discoveries near Cissbury', Ant. J., IV (1924), 347-59.

Wolseley, G.R. Smith, R.A. and Hawley, W. 1927 'Prehistoric and Roman settlements on Park Brow', Arch., LXXVI (1927), 1-40.

Wood, P. and Hardy, J.R. 1962 'Perborough Castle and its field-systems', BAJ, 60 (1962), 53-61.

Worsfold, F.H. 1943 'A report on the Late Bronze Age site excavated at Minnis Bay, Birchington, Kent', PPS, IX (1943), 28-47.

Additions

Alcock, L. 1962 'Settlement Patterns in Celtic Britain', Ant., XXXVI (1962), 51-4.

Allcroft, A.H. 1922 'The Sussex War Dyke', SxAC, LXIII (1922), 54-86.

Blake, B. 1960 'Excavations of native sites in Cumberland, 1956-8', CW, LIX (1960), 1-14.

Brewster, T.C.M. 1957 'Excavations at Newham's Pit, Staxton, 1947-8', YAJ, XXXIX (1957), 193-223.

Burstow, G.P. Holleyman, G.A. 1956 b 'Excavations at Muntham Court, Findon', Sussex Notes and Queries, XIV (1956), 216 f.

Clay, R.C.C. 1927 b 'Some Prehistoric Ways', Ant., I (1927), 54-65.

Collingwood, R.G. Richmond, I.A. 1969 The Archaeology of Roman Britain (1969).

Coppock, J.T. 1964 An Agricultural Atlas of England and Wales (1964).

Elgee, F. and H.W. 1933 Yorkshire (1933).

Feachem, R.W.	1960	'The palisaded settlements at Harehope, Peeblesshire, excavations, 1960', PSAS, XCIII (1959-60), 174-191.
Fowler, P.J.	1965	'The Cross-Dyke on Buxbury Hill, Sutton Mandeville: a field survey and excavation', WAM, 60 (1965), 47-51.
Fox, A.	1954	'Celtic Fields and Farms on Dartmoor - in the light of recent excavations at Kestor', PPS, XX (1954), 87-102.
Fraser Darling, F.	1945	Crofting Agriculture (1945).
Glanville Jones, R.J.	1961	'Settlement Patterns in Anglo-Saxon England', Ant., XXXV (1961), 221-232.
Hood, S. Walton, H.	1948	'A Romano-British cremating place on Roden Downs, Berks.', Trans. Newbury and District F.C., IX (1948), 10-62.
Jobey, G.	1957	'Excavations at the native settlement, Gubeon Cottage, Northumberland', Arch. Ael., XXXV (1957), 163-179.
Jobey, G.	1966	'A Field Survey in Northumberland', in Rivet, 1966, 89-110.
Jobey, G. Tait, J.	1966	'Excavations on palisaded settlements and cairnfields at Alnham, Northumberland', Arch. Ael., XLIV (1966), 5-48.
Lewis, M.J.T.	1966	Temples in Roman Britain (1966).
Munro, R.	1882	Ancient Scottish lake-dwellings or crannogs (1882).
O'Neil, B.H. St. J and H.E.	1952	'The Roman Conquest of the Cotswolds', Arch. J., 109 (1952), 23-38.
Piggott, S.	1968	The Druids (1968).
Pitt-Rivers, A.	1881	[Danes Dike, Flamborough Head], British Association Report (1881).
	1884	Report on Excavations in the Pen Pits near Penselwood, Somerset (1884)
Richmond, I.A. et al.	1968	Hod Hill, vol. II (1968).
Rivet, A.L.F.	1958	Town and Country in Roman Britain (1958).

Savory, H.N.	1964	See Gardner and Savory, 1964.
Thomas, F.	1960	'A fresh survey of the earthwork on Toothill', TLCAS, LXX (1960), 84-7.
VCH	1908	Shropshire (1908).
Wacher, J.	1965	'Excavations at Riplingham, E. Yorks., 1956-7', YAJ, XLI (1965), 608-669.
Wake, T.	1939	'Excavations at Witchy Neuk, Hepple', Arch. Ael., XVI (1939), 129-139.