

MONOGRAPH 3

IWADE



OCCUPATION OF A NORTH KENT VILLAGE FROM THE MESOLITHIC TO THE MEDIEVAL PERIOD BY BARRY BISHOP AND MARK BAGWELL







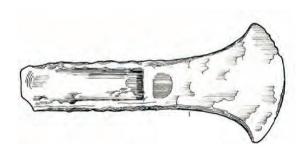
IWADE

OCCUPATION OF A NORTH KENT VILLAGE FROM THE MESOLITHIC TO THE MEDIEVAL PERIOD

lwade

Occupation of a North Kent Village from the Mesolithic to the Medieval period

By Barry Bishop and Mark Bagwell Foreword by David Yates



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Front cover:

A reconstruction of the Late Iron Age farmstead, by Trevor Bishop

Back cover:

From left to right:

Middle Bronze Age bucket urn, Excavation of Late Iron Age circular structure, Medieval gilded buckle

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Foreword

This is a fascinating account of over 6,000 years of land use and sporadic occupation on the southern fringes of the historic village of Iwade. Any detailed and well illustrated archaeological report is to be welcomed but this narrative especially so, as the excavators and specialists have interpreted their discoveries in a wider context - looking at the extent to which changing ways of living at Iwade reflect wider regional social and economic trends. This approach to the discoveries is especially apt, due to Iwade's particular location. It is sited on a promontory providing a natural routeway out towards Sheppey - an isle whose prehistoric significance has only recently been realised with the discovery of a Neolithic causewayed enclosure and two early first millennium BC ringworks or elite compounds. It also forms part of the north Kent coastal strip, a zone of intensive later prehistoric settlement stretching from the Wantsum Channel in the east, right up to the mouth of the Thames. This coastline in turn forms one side of the Greater Thames estuary - the great thoroughfare linking the politically powerful Thames Valley communities to a wider continental world.

Three main peaks of activity were revealed in the investigations, initially the setting out of a formal field-system during the Late Bronze Age, then the construction of an enclosed farmstead during the Late Iron Age and, after another substantial gap, further land allocation in the Middle Ages. These bursts of activity are in sharp contrast to the periods of less intense use which separate them - and it is these 'negatives' in the archaeological record that are just as interesting as any of the major construction phases. The abandonment of the trackway and associated stock pens at the end of the Bronze Age provides further proof of a recurrent pattern of widespread social dislocation affecting communities on either side of the estuary and along the Thames Valley in the early first millennium BC. The next episode of formal land enclosure at Iwade, commencing in the Late Iron Age, also appears to have come to an abrupt

end. The pottery evidence suggests that the settlement ceased during the middle of the first century AD, around the time of the Roman Conquest. Many other Late Iron Age sites in the Swale area were also abandoned during this time suggesting possible 'native displacement'. Apparently, both the collapse of the inter-regional exchange network of the Bronze Age and the Roman Conquest were traumatic times for the local population and neighbouring communities. Despite these breaks, there is a degree of continuity - one tradition did not change. The detailed environmental sampling programme incorporated into the excavation analysis reveals that arable farming never played a significant role at Iwade. Instead, in each phase of farming intensification, whether during the Late Bronze Age, Late Iron Age or Medieval era, livestock rearing dominated, even to the extent that the attendant shepherds and herders ignored the abundant natural resources which could be gathered from the nearby estuary waters. The changes in economic tempo recorded at Iwade and interest in the precise nature of the farming regimes, provide research foci for all future excavations in the area.

Co-operation between developers and excavators has resulted in the publication of a very detailed account of discoveries at Iwade. The significance of those finds can be better appreciated because they are discussed within a broader regional context. Iwade is a relatively small excavation but it offers a wealth of archaeological information. In particular, it confirms an intensity of prehistoric settlement along the north Kent coastal strip, which is of national significance. That evidence, hidden from view, provides the potential to chart the spread of new ideas and technological advances around the Greater Thames Estuary and examine in finer detail the nature of wider European contact, which helped shaped England's heritage.

David Yates

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Summary

This volume tells the story of the inhabitants of a small area of North Kent over a period of some 6,000 years, as revealed by archaeological excavations conducted to the south of the village of Iwade.

The story begins during the Later Mesolithic, when hunter-gatherers used a hollow created by a fallen tree to repair their microlithic toolkit. For the next 3,500 years or so the site was repeatedly visited, with people dropping occasional artefacts, but leaving us with little other evidence of their presence. An exception to this occurred around the middle of the Neolithic, when two pits were dug and filled with pottery and flintwork.

During the Middle Bronze Age, evidence for a more 'settled' way of life increases, and by the Late Bronze Age a trackway and fields have been constructed across the site. These developments signal a new relationship with the land, a new form of land tenure and the beginnings at the site of explicit agricultural production. This new landscape was founded on and inhabited through strong ritualised principles, evidenced by numerous deliberately placed objects, including pottery, cremated human remains and even a bronze palstave.

The agricultural landscape appears to have been abandoned shortly after the end of the Late Bronze Age, around 600BC, and there is a hiatus in evidence for occupation at the site until a new, enclosed farmstead is

established during the Late Iron Age, around 100BC. The settlement indicates a return at the site to agricultural production and appears to have been structured according to prevalent principles of social organization and ways of viewing the world. It was abandoned around the time of the Roman Conquest, perhaps as a direct result of it, with only occasional visits, possibly by pastoralists, during the Roman period.

Although Saxon and Viking activity is recorded in the vicinity, there is little further evidence of occupation at the site until the Medieval period when a new settlement focus formed, perhaps linked to renewed attempts to utilize the marshes. This coincides with the establishment of a routeway traversing the site; a routeway that appears to continue through until the present day, and affirms the site's importance in communications with the Isle of Sheppey.

This volume presents detailed and profusely illustrated accounts of the archaeological features, artefact types and environmental evidence. It interprets these in terms of the economies practised, systems of social organization and the site's physical location, notably the importance of the adjacent marshland, and attempts to put the lives of the inhabitants into a more 'human' perspective. The findings are placed within a broader geographical context, with a brief discussion of the current state of knowledge of the archaeology of North Kent.

Acknowledgements

This volume is based on a series of major excavations and a long-term programme of post-excavation work, none of which would have been possible without the hard work of many individuals involved at all stages of the project. The text is the product of a collaboration between the site supervisor, Mark Bagwell, whose relentless enthusiasm resulted in so much information being recovered, and who provided the initial phasing and interpretations of that information, the post-excavation team whose specialist knowledge of the finds and environmental evidence was integral to understanding the evidence, and Barry Bishop, who developed this information into the written account that is presented here. Although based on data generated during the project, the final interpretations and the story presented remain the sole responsibility of Barry Bishop.

Pre-Construct Archaeology would like to thank Hillreed Homes and Ward Homes for generously funding the excavation and for the help and interest of their employees and to Duncan Hawkins of CgMs Consulting who commissioned Pre-Construct Archaeology to undertake the work on the developer's behalf. Lis Dyson, Kent County Council's Planning Officer and Duncan Hawkins formulated and monitored the excavation strategy, and provided help and advice during the fieldwork.

In addition, many thanks are also due to Dr Paul Wilkinson and Tim Allen for sharing their considerable knowledge of the archaeological remains of the Swale area, the Swale Search and Recovery Club who undertook full metal detector surveys of the site and to Phil Talbot and the

Sittingbourne Heritage Museum for accepting the archive from the site and agreeing to put it on public display for the benefit of the present inhabitants of the area.

The principal authors are indebted to Peter Moore as project manager, and Lorraine Darton and David Divers who managed the post-excavation work. Thanks are also due to the many who have provided support and advice during the project, including Gary Brown, David Yates and especially Victoria Ridgeway and to Jonathan Butler, Peter Moore and Robert Nicholson for proof reading and suggesting corrections to the text. The authors are also indebted to the late Peter Reynolds for sharing his considerable knowledge of Iron Age settlements. Thanks are due to Haydn Pearson of English Nature, who enabled the use of Figure 6, which remains the copyright of Peter Wakely and English Nature.

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Chapter 1 Background to the Project

As part of the wider Thames Gateway Strategic Growth Area, a Government-led initiative aimed at achieving sustainable growth and housing supply in the southeast over the next 15 years, the Sittingbourne/Sheppey area, incorporating Iwade, had been earmarked for major housing development (Fig. 1). Consequently, several blocks of land have been developed for housing around the historic core of Iwade village over the last few years.

This report describes the findings and significance of archaeological investigations conducted by Pre-Construct Archaeology on two such blocks, located on the southern fringes of the village and separated by Sheppey Way, centred on National Grid Reference TQ 899 674 (Fig. 2). The western block, Site A consisting of Area A, was located at Pink's Corner and was bounded to the east by Sheppey Way and to the west by a small stream. The eastern block, Site B consisting of Areas B, C and D, was located immediately

across Sheppey Way from Area A, and was bounded to the north and east by Grovehurst Road. Both blocks were previously in agricultural usage.



Fig. 1 The location of Iwade (scale 1:750,000)

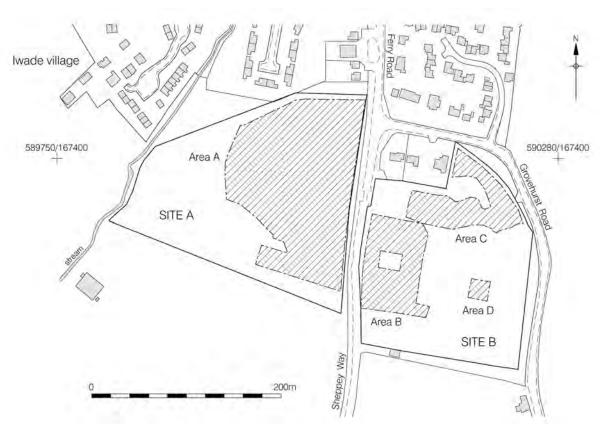


Fig. 2 Areas of excavation (scale 1:4,000)
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PLANNING BACKGROUND

All archaeological work was undertaken in accordance with the existing planning framework, principally underlined by national Planning Policy Guidance Note 16 (PPG 16), and specifically by the Kent Structure Plan Policy ENV 18 and Swale Borough Council's Local Plan Framework Policy E10. In essence, these ensure adequate provision is made to excavate and record archaeological remains where preservation of those remains in situ is not considered reasonable, and prior to their destruction through development. Site A was proposed for development by Hillreed Homes Ltd. and Site B by Ward Homes Ltd. Both developers employed Duncan Hawkins of CgMs Consulting to give archaeological advice, and the investigations were monitored on behalf of Kent County Council by Lis Dyson. The mitigation and excavation strategy was determined in consultation between Duncan Hawkins and Lis Dyson.

METHODOLOGY

Following the findings of a Desk Based Assessment (Hawkins 1999), archaeological evaluations were conducted at both sites during January and March 2000. These identified the presence of archaeological features, principally in the north of both sites and those areas bordering Sheppey Way (Bagwell 2000a; 2000b). Accordingly, open area excavations were undertaken between May and October 2000 and an assessment report produced (Bagwell 2001). One large area at Site A and three smaller areas at Site B were examined, their locations determined by the extent of archaeological features found during the archaeological evaluation. At Site B, several plots of land remained unexcavated due to the presence of orchard trees, which were to be incorporated as 'green spaces' into the proposed housing development (Fig. 3). Where areas outside the excavation areas were topsoil-stripped, it was agreed to monitor these under watching brief conditions.



Fig. 3 The excavation in progress, facing east, with retained orchard trees visible in the left foreground

During the excavations, topsoil and other undifferentiated soil horizons were removed in successive spits by mechanical excavator under archaeological supervision. As archaeological features were revealed during topsoil removal, they were marked and surveyed by total station theodolyte. This provided an instant plan to assist the archaeological excavation strategy and it proved to be the most practical method for the planning of large areas and linear features.

Specific areas of particularly intense archaeological activity, and where features were found to be intercutting, were cleaned by hand to establish relationships between them. Where relationships were not observed, slots were excavated across them to ascertain relationships in section. All postholes, ring-gullies, small pits and hearths were completely excavated; larger pits were half-sectioned, and sample slots were excavated across the ditches.

Single context recording was employed throughout the investigations. The completed archive, consisting of all retained finds, record sheets, plans, correspondence and photographs will be deposited at Sittingbourne Heritage Museum under the site codes IWA 00 and IWB 00.

Amalgamation of the Records

At the archaeological evaluation stage, Sites A and B were given individual context numbering systems. However, it became apparent that the archaeological remains straddled both sides of Sheppey Way, the road which separated Sites A and B. Therefore, at the excavation stage, it was decided to investigate both sites as one, and their archive records were amalgamated and assessed together in one detailed report, including all specialist analysis of the excavated artefacts (Bagwell 2001). The site archive reflects this: the context, small find, section and sample numbers sequence for the two sites were amalgamated to make a continuous numbering sequence.

SCOPE OF THIS REPORT

The complementary nature of the archaeological findings from the two sites have enabled the results from the excavations to be combined in order to present a more complete picture of the variety of activity and the changing fortunes of settlement within the Iwade village area. The results from these excavations can be considered important not least because:

- There is a paucity of published North Kent prehistoric settlement sites of any period.
- Although there is a fair amount of data relating to Iron
 Age settlement in Kent, it is widely regarded as
 unintegrated and unsorted (Haselgrove et al. 2001, 24 and
 Table 3).

- Little work has been done on the changing nature of the exploitation of the landscape in North Kent.
- There is a lack of detailed published accounts of certain artefact types from the region, the most important ones addressed here being the Late Bronze Age and Late Iron Age pottery types.

It should be noted that the authors recognize the importance of presenting a 'contextual' approach to this report, involving the integration of all data, but offer no apologies for including detailed specialists reports, as it is hoped that these will provide useful data in aiding comparative work for both the burgeoning number of sites awaiting full postexcavation analyses and the undoubtedly numerous sites that still await discovery. This is especially important as the area is included with the 'Thames Gateway' economic regeneration zone, and the region is earmarked for significant redevelopment in the next few years.

Dating Terminology

In recent years there have been laudable attempts to avoid or underemphasize the conventional period nomenclature of Neolithic, Bronze Age, Iron Age etc, with their implications of unflinching boundaries separating batches of social inertia. Nevertheless, the authors here concede that no adequate alternatives are currently available that would either

be as familiar to the reader or allow the text to be as easily read. Although somewhat regrettable, the use of traditional terminology has been recognized as a useful tool, and has been adopted throughout this report as it is widely understood and acts as an aid in structuring and comprehending the vast expanse of time that separates the reader from the earliest settlers of Iwade. Approximate date ranges for the periods used are given below, but these in no way imply that any such periodization would have been recognizable to those living through them, or that any meaningful distinction necessarily can be drawn between the end of one period and the beginning of the next.

Later Mesolithic:	7500BC - 4500BC
Early Neolithic:	4500BC - 3200BC
Later Neolithic:	3200BC - 2300BC
Early Bronze Age:	2300BC - 1700BC
Middle Bronze Age:	1700BC - 1150BC
Late Bronze Age:	1150BC - 600BC
Early Iron Age:	600BC - 300BC
Middle Iron Age:	300BC - 100BC
Late Iron Age:	100BC - AD43
Roman:	AD43 - AD400
Saxon:	AD400 – AD1066
Medieval:	AD1066 – AD1485



Fig. 4 Phased plan of all excavated features (scale 1:2,000)

Chapter 2 Iwade: a small village in Kent

Prior to the large-scale housing developments which have initiated this volume, Iwade was a small and unimposing village. It is situated three miles north of Sittingbourne in Kent, its northern boundary extending to the Swale waterway, which separates the Isle of Sheppey from the mainland, to which the only access remains the Kingsferry Bridge, located some 2km northeast of the village. The Parish boundary encompasses Chetney, Ferry, Ridham and Coldharbour Marshes. Its name is well suited; in AD 1179 it is recorded as *Ywada*, *or* 'Ford or crossing place where yew trees grow' (OE $\overline{n}v + (ge)wed$). The crossing place referred to is to the Isle of Sheppey, recorded as *Scepeig* in AD 696 – 716 and *Scape* in the Domesday Book, meaning 'Island where sheep are kept' (OE *sceap* + $e\overline{g}$) (Mills 1998).

THE NORTH KENT REGION

Iwade is located in a region that can be said to form a distinct physiographic zone, with its own particular topography. Throughout this report, this region has been termed 'North Kent' and roughly coincides with the coastal and estuarine land north of the North Downs, from the Hoo peninsula to the Isle of Thanet (Fig. 5). This area extends approximately 70km east to west and measures an average of about 15km wide from the North Downs to the coast. Also known as the North Kent 'Uplands' or 'Foothills', it consists of a long band of gently undulating country often fringed to the north by low-lying marshland and mudflats.

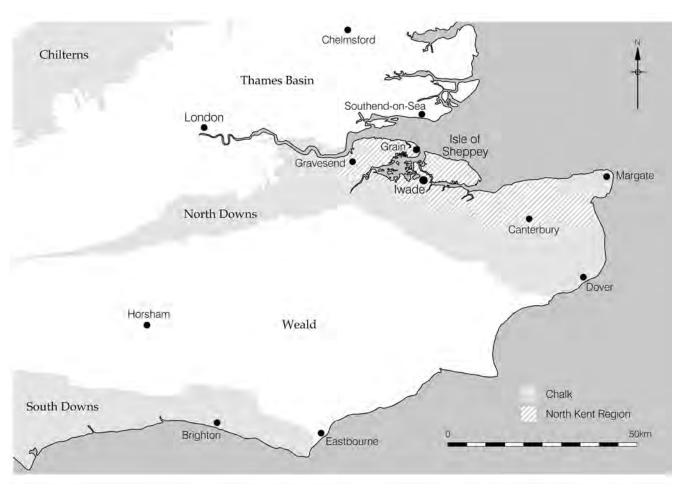


Fig. 5 Iwade and the North Kent region (scale 1:1,000,000)

The North Kent region forms the southern landmass of the area defined by Williams and Brown (1999) as the Greater Thames Estuary. Its fringes are characterized by a maze of creeks and estuaries surrounded by shingle, salt-marsh and mudflats, alongside extensive tracts of drained and agriculturally improved land. This is no less true of the low-lying areas around the Swale, which interlinks with the confluence of the rivers Medway and Thames. The Thames Estuary has for millennia been a major route of communication and influence between Britain and the Continent. Its cultural importance, combined with its complex patterns of sedimentation and associated potential for preservation, has resulted in a rich and nationally important archaeological legacy formed from the Palaeolithic to the present-day (Fulford et al. 1997; Williams and Brown 1999).

Nevertheless, the estuary as it appears today is a relatively recent phenomenon. At the end of the last glaciation lowered sea levels would have resulted in the sea, along with the estuarine reaches of the Thames, being some considerable distance to the north and east, with much of what is now the Thames estuary being dry ground.

An Ever-Changing Coastline

The Thames Estuary has been subject to continuous change throughout the past, its shape and extent being constantly modified by changes in relative sea level, which have fluctuated but overall have risen considerably since the last glaciation, as well as by widespread erosion and sedimentation; all complex and dynamic processes that have continued up to the present (Williams and Brown 1999). The most comprehensive analyses of Holocene sedimentary and vegetational development within the lower Thames remain those of Devoy (1977; 1979; 1980), which demonstrate a series of broad marine transgressions interspersed with regressions, resulting in the inundation of the Late Devensian landscape under a wedge of sands, silts, clays and peats, a sequence recorded as being over 25m deep at the Hoo peninsula (Devoy 1979). Due to the complexity of these processes, on a site-specific basis other, more localized, factors may be of greater consequence in determining sedimentary development. This may be especially pertinent in the Iwade area, where the intricate interplay between the Thames, the Medway and the Swale would have fashioned the sedimentary sequence in the surrounding floodplain. Although broad patterns of sea level change are reasonably well known, the effect of these on coastline evolution prior to the formulation of historical records is much less certain (Williams and Brown 1999, 11) and, despite much recent work, the precise changes to the nature of the low-lying areas in the Iwade region throughout prehistory remain obscure. What is certain is that during the earlier parts of the Holocene much of what is now marshland would have been



Fig. 6 The Chetney Marshes today (photograph by Peter Wakely, © English Nature)

dryland, with significant dryland areas now submerged beneath the estuary. Such factors have significant archaeological implications concerning the nature, extent and chronology of the exploitation of particular locales within the floodplain.

As the morphological development of the Swale is not precisely understood, the developing relationship between the floodplain, the Isle of Sheppey, and the mainland also remains unclear. Allen (2000), however, has argued that the Swale represented a major river valley throughout the Holocene period, perhaps a significant eastwards flowing branch of the River Medway. If so, the Isle of Sheppey may have been a river-bound island during the earlier Holocene, although the location of any potential crossing points must remain speculative. Alternatively, it is possible that during the early Holocene the Isle of Sheppey was part of a peninsula projecting out into what is now the Thames estuary and bounded by the Medway and Swale.

The greatest rises in relative sea level appear to have occurred during the early Holocene. Although the Thames may have been more constricted than now, and large areas of the Thames Estuary remained dry (eg Williams and Brown 1999, fig. 4), by the Later Mesolithic the basic elements of the present floodplain, the division between highland and lowland, the complex marsh habitats and littoral margins, would have been familiar to the inhabitants of the Iwade area (cf Devoy 1980, 141). The precise extent, location and layout of the various elements would never have remained static, however, and the floodplain surrounding Iwade would have altered considerably according factors such as climatic variability, groundwater run-off rates, degrees of sedimentation and erosion and, not least, the ebbs and flows of relative sea level.

The Local and Regional Environment

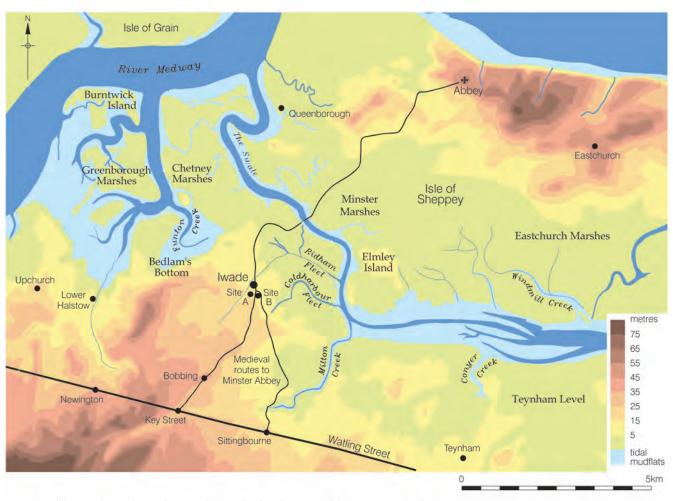
The location of the site throughout much of the Holocene, on higher ground adjacent to extensive marshland, would ensure the availability of abundant natural resources, including fish, wild fowl, seasonal grazing and shell fish, especially oysters, as well as mineral resources such as salt and pottery-quality clays. These have all been exploited throughout the Prehistoric and Roman periods and intensively during the Medieval and Post-Medieval periods. Furthermore, the fertile soils on the higher ground would have been admirably suited to agriculture, and the region has been described as "one of the most easily and profitably farmed tracts of land in Britain" (Holgate 1981, 228). In the vicinity of Iwade, the higher ground is frequently capped by brickearth, which forms a fine-grained and fertile soil that is easily drained, providing rich pasture and easily cleared and tilled

lands, much preferred by early agriculturalists (Bogucki 1988).

In addition to agricultural and marshland resources, Everitt (1976) suggests that the names of Chetney, immediately north of Iwade, as well as others in North Kent such as Chatham and Chattenden, may come from the Celtic *ced meaning wood, suggesting that during the Late Iron Age this area may still been at least partially wooded, although at least with Chattenden this element may relate to a personal name (Mills 1998). Watling Street, the road linking London to Canterbury and the channel ports, traverses the region and runs less than 4km to the south of Iwade, enabling excellent communications. Also within relatively easy access are the chalk uplands of the North Downs, less than 5km to the south and, beyond them, the heavily wooded claylands of the Weald.

These factors have ensured that the region has remained an important focus for settlement. Everitt (1976) indicates that the North Kent coastal belt has always been one of the most heavily populated and wealthiest parts of the county, and it is likely to have been amongst the first regions significantly taken under human management. This is supported by the evidently dense patterns of settlement and extensive systems of fields established by at least the Late Bronze Age. Although somewhat of a hiatus may have occurred during the Early and Middle Iron Age, the region appears to have returned to being a fully developed agricultural landscape during the Late Iron Age, and continued as an important agricultural area during the Roman occupation.

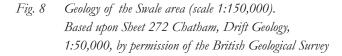
Everitt (1976) also notes the historical prevalence of sheep farming in Kent, although before the Norman Conquest pig and perhaps cattle may also have been important. However, sheep farming was likely to have always been important in the marshlands, as indicated by the origins of the name 'Sheppey'. Before the Norman Conquest, society and settlement structure in Kent may have been heavily influenced by pig farming, which appears to have involved a transhumance system of seasonally moving pig herds from the settlements along the North Kent coast to the Weald and the south coast marshes, as indicated by numerous north-south orientated routeways but a virtual absence of east-west routes. The scale of such movement is demonstrated by place name evidence, for example, the name of Tenterden, near Romney Marsh, arose from 'the woodland pasture of the Thanet dwellers'; implying a seasonal migration of at least 50km. Such practices waned after the Norman Conquest but vestiges survived until the 17th century, and even now sheep over-wintered in the higher regions are taken down to the marshes in summer.

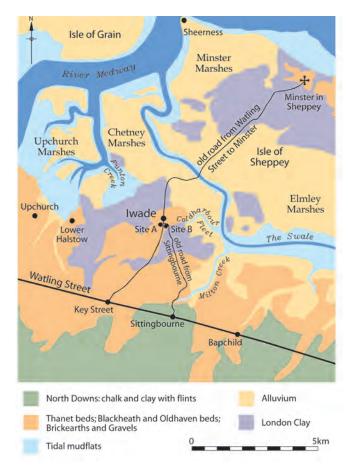


Topography of the Swale area, showing Medieval routes to Minster Abbey (scale 1:100,000)

TOPOGRAPHY OF THE SITE

Both sites lie on a small promontory formed by streams located to the east and west. Immediately to the west of Site A is a minor stream which flows northwards to join Ridham Fleet, where it turns towards the east to join the Swale. To the east of Site B the land falls towards Coldharbour Fleet, which also flows northwards before turning to the east and joining the Swale. Coldharbour Fleet is now a minor stream although recent fieldwork indicates that it may have once been much larger, possibly allowing boats to be brought up close to the site (P Wilkinson, pers comm.). This promontory forms part of a larger expanse of higher ground, separated by the valleys of the River Medway to the west and the Swale to the north and east, and more locally, between the south-north flowing Funton Creek to the west and Milton Creek to the east (Fig. 7). The site occupies the highest point in the immediate vicinity, centred around the 16m contour, and it commands views across the large expanses of marshes, the Swale and the Isle of Sheppey to





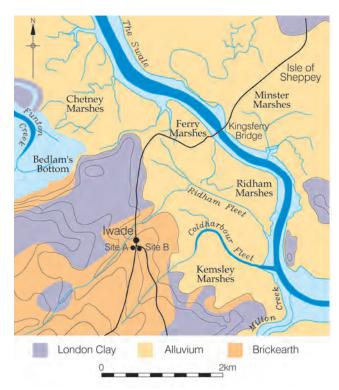


Fig. 9 Topography and geology in the vicinity of Iwade (scale 1:62,500). Based upon Sheet 272 Chatham, Drift Geology, 1:50,000, by permission of the British Geological Survey

the north, and the North Downs to the south.

Regardless of its suitability for settlement, the area around Iwade would always have provided a convenient access for movement between the mainland and the Isle of Sheppey, the marshes and coastal fringes. During the Late Bronze Age, the Late Iron Age and the Medieval period north-south aligned trackways were prominent features of the landscape. Although in each case they were no doubt utilized for local, intrasite movement, the persistence of such routeways would also suggest that these lines of access were also utilized in a wider network of communication. The

junction of the old roads from Watling Street, Sheppey Way to the west and Grovehurst Road to the east, occurred immediately north of the sites, with Sheppey Way separating Sites A and B, and Grovehurst Road forming the eastern boundary of Site B. From the junction these routes continued as Ferry Road towards the main crossing point of the Swale at Kingsferry Bridge. From Watling Street, good communications with London and the rest of Britain could be assured. In recent times, Iwade has been provided with a bypass, the A249, which continues to provide the main crossing to Sheppey.

GEOLOGY

Iwade is located within the southeastern extent of the lower Thames Basin. This syncline is formed predominantly of Eogene London Clay, and is bounded by the Cretaceous Chalk of the North Downs and the Chilterns. In the vicinity of the site, the London Clay is overlain by Pleistocene deposits mapped as Head Brickearth by the British Geological Survey (1977) (Fig. 9). The excavations demonstrated that London Clay was present across the site but locally brickearth, consisting of orange-brown sandy siltclay up to 0.50m thick, was limited to those parts lying above 14mOD (Fig. 10). Below this contour, on the northern and eastern fringes of the site, the London Clay was mixed with frequent patches of sub-angular flint cobbles and gravels. In the most easterly area excavated, Area D, the London Clay was incised by a series of minor water-worn channels, rarely more than 2m wide, which sloped downhill to the east towards Coldharbour Fleet. These were thought to represent a springline, formed at the junction of the relatively permeable brickearth and the underlying impermeable London Clay.

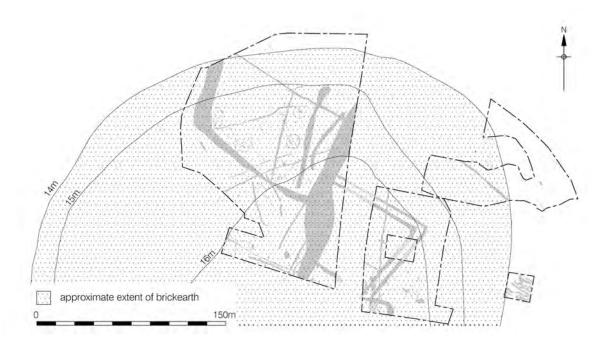


Fig. 10 The excavated features in relation to the extent of brickearth as revealed during the excavation, showing contours (mOD) (scale 1:3,000)

Chapter 3 The Earlier Prehistoric Periods



Evidence relating to the earlier Prehistoric periods indicates transient activity occurring at the site from the Mesolithic to the Middle Bronze Age. By contrast, a more permanent relationship with the landscape is evidenced by the Late Bronze Age as, although no direct evidence of settlement was seen, a field-system and trackway were recorded (Fig. 11).

Ambiguities in the precise dating of the later Bronze Age pottery traditions, combined with the paucity of stratigraphical associations, has resulted in difficulties in establishing the exact timing of the construction of the field-system or the nature of the transition between the Middle and Late Bronze Age. In this report, these periods are differentiated solely by the use of Deverel-Rimbury pottery during the Middle Bronze Age and post Deverel-Rimbury pottery during the Late Bronze Age. Deverel-Rimbury pottery was in use from around 1700BC and continued until around 1150BC, although other evidence suggests that in North Kent its main currency of use may be towards the end of that period. The dating of the post Deverel-Rimbury pottery suggests it appeared sometime during the last few centuries of the second millennium BC and continued in use until the end of the Late Bronze Age, around 600BC.

A few features contained exclusively Deverel-Rimbury pottery but all of the elements of the field-system and trackway produced post Deverel-Rimbury pottery, indicating that it was constructed during the Late Bronze Age period. Some limited evidence provided by the pottery suggests that the field-system may have continued in use into the earliest parts of the Iron Age, although it was abandoned soon after, and there appears to have been a hiatus in archaeologically visible activity at the site until the establishment of an enclosed settlement during the Late Iron Age.

THE MESOLITHIC

An irregularly shaped feature with undulating sides located to the west of Area A, measuring 1.25m by 0.90m and 0.17m deep (Fig. 12), contained 21 pieces of struck flint, including a microlith and a micro-burin attributable to the

Late Mesolithic period (*see* Fig. 37). The lithics indicate a short episode of toolkit repair or maintenance, involving some core reduction and microlith manufacture. As such, the assemblage does not indicate anything more than a short stop for a hunting group, possibly utilising the shelter of a naturally formed tree-throw hollow for the short duration that it took to carry out the repairs. Other struck flints from this period were recovered scattered across the site as residual finds from later contexts, suggesting that activity may have been more extensive than indicated by the single feature identified, although these would still only suggest fairly short-term visiting of the site.

NEOLITHIC AND EARLY BRONZE AGE ACTIVITY

Two small circular pits [1137] and [1139] located only 1m apart and measuring 0.42m and 0.38m in diameter and c. 0.50m in depth were excavated in the north of Area B (Figs. 13, 14). Both produced Ebbsfleet style Peterborough ware pottery, dateable to the second half of the fourth millennium BC (see Fig. 30), charcoal, struck flint (see Fig. 40) and burnt flint fragments, whilst pit [1139] also contained fragments of sheep or goat bone. The pottery sherds were mostly distributed around the edges of the pits and flat against their sides, suggesting careful deposition. They were sampled for evidence of cremated bone or other environmental evidence but with negative results. Groups of sherds from the two pits were from either the same or an identical vessel, most were un-weathered, but rim sherds from both pits were burned. These similarities suggest that both pits contained fragments from the same vessel, and therefore the pits were filled at the same time or the fill of one pit had derived from the other.

Despite the identical pottery, the struck flint assemblages differed between the pits; pit [1137] contained a high number of retouched and possibly utilized flakes, whilst the assemblage from pit [1139] was dominated by knapping waste. The apparently selective nature of the deposition of the flintwork would support an interpretation of the pits as having ceremonial or ritual significance and add further support that they were open at the same time.

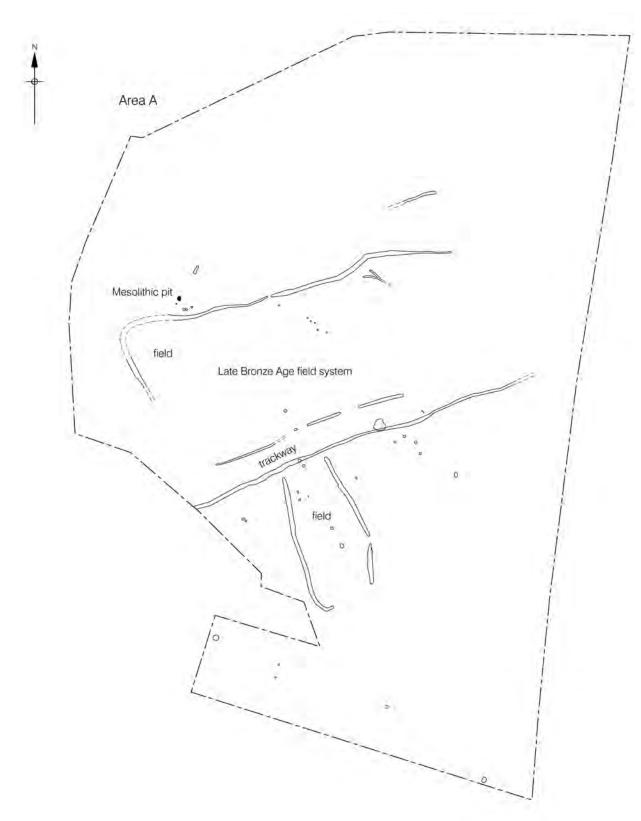
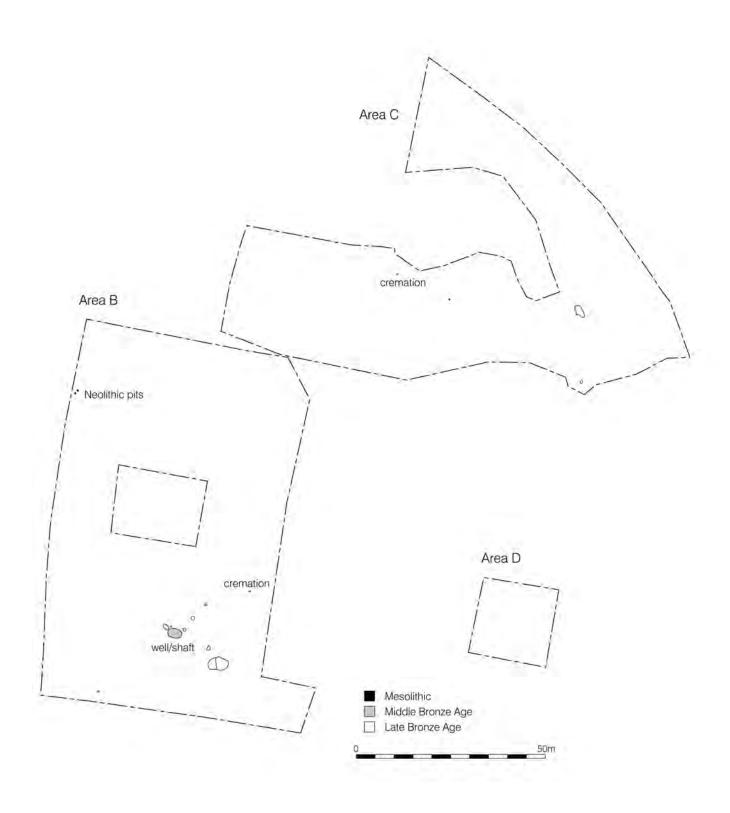


Fig. 11 Mesolithic to Late Bronze Age features (scale 1:1,000)



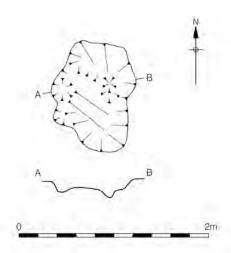


Fig. 12 Mesolithic tree - throw hollow, plan and profile (scale 1:40)

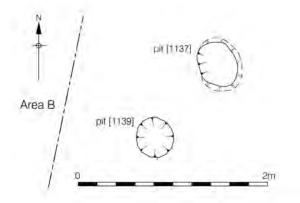


Fig. 13 Neolithic pits (scale 1:40)

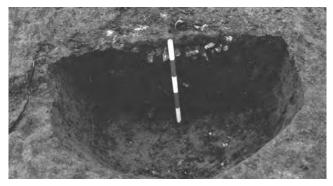


Fig. 14 Neolithic pit [1137] during excavation

Other diagnostic struck flints recovered from later features, such as two leaf-shaped arrowheads, a transverse arrowhead and a barbed and tanged arrowhead can be attributed to the Neolithic and Early Bronze Age periods, demonstrating activity over a longer period than indicated by cut features. Nevertheless, the small number of implements involved suggests that, as with the Later Mesolithic evidence, activity at the site may have been persistent but only sporadic and probably short term.

MIDDLE BRONZE AGE ACTIVITY

There were no indications of any actual settlement or related agricultural systems dating to the Middle Bronze Age at Iwade, although five features were identified containing pottery of Deverel-Rimbury traditions, three of which contained single near-complete vessels (Figs. 15-21).

Two pits, [101] (Fig. 16) and [1119] (Fig. 17), although located 115m from each other, contained straight-sided bucket urns and were of similar dimensions to the vessels; presumably they had been deliberately dug in order to contain the pots (Fig. 19). Both vessels were removed complete and their fills carefully excavated, but neither contained any evidence of cremations or other environmental information. The urns may have been intended as storage vessels as they were constructed of very coarse fabrics. Their production clearly involved a significant investment, particularly apparent in the case of the vessel from pit [1119], which also showed signs of having been repaired.

A large pit [1145], located in the south of Area B, measured 4m east-west by 2.55m north-south and was 1.82m deep. It was by far the deepest feature recorded at the site, cutting through the brickearth deep into the London Clay (Figs. 17, 20, 21). As such, it would have easily retained ground water, and may have acted as a well, its profile suggesting that it might have been recut or cleaned out after its initial construction. An alternative interpretation is that it may have been dug primarily as a shaft for ritual or religious purposes, and one of its lower fills contained a single, near complete globular bowl dated to ϵ . 1500 – 1000BC, but no other domestic refuse, suggesting that the vessel may have acted as a ritual offering. It is perhaps more likely that it fulfilled both functions. Similar wells or waterholes were frequently provided with rich arrays of artefacts, often of unusual characteristics (eg Barrett et al. 2001), emphasising the importance of such features to communities engaged in a herding economy. Its uppermost fill produced Late Iron Age pottery, suggesting that it was either finally infilled or partially recut during this time and, either way, remained as a recognizable depression for some time.

The other two features dated to the Middle Bronze Age were located close to each other in the northwest of Area A. They comprised a clay-lined pit [941] and a posthole [921], both of which were very shallow (Fig. 18). Clay-lined pits are often interpreted as storage pits, although this example measured only 0.60m by 0.40m, and as such was of limited capacity. Nevertheless, it did contain nineteen large and freshly broken bucket urn sherds, which, like the pits containing the near complete pots, may have represented a ritual offering.

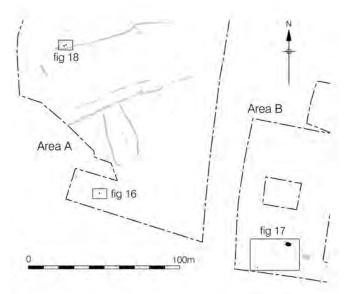


Fig. 15 Middle Bronze Age pits (scale 1:2,500)



Fig. 16 Middle Bronze Age pit [101] containing complete pottery vessel (scale 1:40)





Fig. 17 Middle Bronze Age well or shaft [1145] and pit [1119] (scale 1:400)

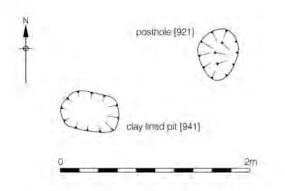


Fig. 18 Middle Bronze Age pits [921] and [941] (scale 1:40)

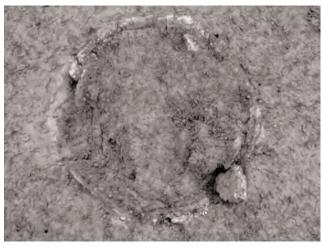


Fig. 19 Middle Bronze Age pit [101] before excavation, showing in situ pottery vessel

The Copper Alloy Palstave

A copper alloy palstave of a form dating to ϵ . 1500 –1275BC was recovered from a Late Bronze Age ditch (Fig. 22, 24). Although this may have been residually deposited from an earlier feature, it could have been deliberately deposited some considerable time after its manufacture, possibly having been kept as an 'heirloom' or even having been found during the construction of the Late Bronze Age field-system.

Cremations

Cremated human remains consisting of pyre residues or 'token' cremations were recovered from two small pits [1151] and [2015], both located towards the east of the excavations (Fig. 23). These were radiocarbon dated to a 1300 to 1030 cal. BC, spanning the Middle – Late Bronze Age transition. Neither was contained within burial urns or associated with any artefactual evidence, although they may have been contained in receptacles made of materials that have since decayed. Pits [1115] and [117], as well as containing large quantities of pottery, also contained burnt bone fragments. Although these could not be positively identified as human, they could potentially have indicated token cremation deposits.

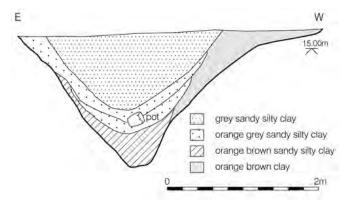


Fig. 20 Section through Middle Bronze Age well or shaft [1145], showing position of complete pottery vessel (scale 1:50)



Fig. 21 Middle Bronze Age well or shaft [1145] during excavation, looking southeast, a Late Bronze Age pit and a Late Iron Age pit in the background

THE LATE BRONZE AGE FIELD-SYSTEM AND TRACKWAY

By the beginning of the Late Bronze Age (*c.* 1150BC) elements of a field-system and trackway had been established at the site (Fig. 24). These comprised a series of linear ditches, predominantly arranged on a northeast-southwest alignment, following the contours of the hillside. Associated with them were fencelines, pits, hearths and a pond. The pottery indicates continued activity at the site throughout the Late Bronze Age. Nevertheless, there was insufficient evidence to confidently assess any developments at the site during this period, and it is therefore necessary to consider the evidence as forming a broadly contemporary phase of activity lasting from around the end of the second millennium BC until *c.* 600BC.

The trackway ran northeast-southwest and was 7m wide, being defined by two parallel ditches covering a distance of at least 93m, and continuing beyond the limits of excavation. Its southern edge was defined by a single ditch varying between 0.45m and 0.75m deep and up to 1.30m wide. Its northern boundary was composed of three shorter ditch segments, which together measured 52m long, varying between 0.30m and 0.70m wide, and 0.08m to 0.22m deep. Twelve sections were excavated across the ditches revealing steep or concave sides with rounded bases. They were filled with an homogeneous sandy silt-clay deposit and contained few inclusions.

Perpendicular to the southern side of the trackway were two northwest-southeast aligned ditches, enclosing a rectangular-shaped area of land encompassing *c.* 560m² and possibly delineating a field or paddock with a possible entranceway located on its eastern side. This formed a gap of 1.7m and the ditch forming the southern side was reinforced with an arrangement of six stakeholes along its eastern edge, interpreted as a

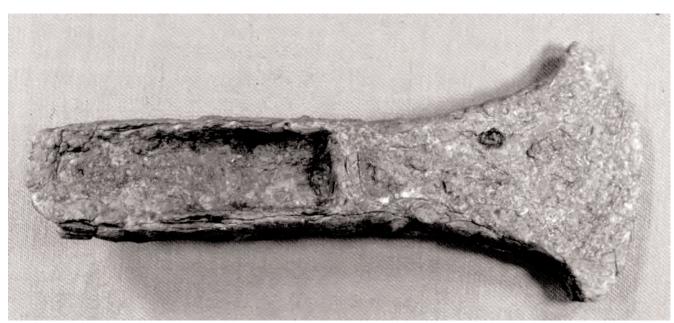


Fig. 22 The Middle Bronze Age palstave

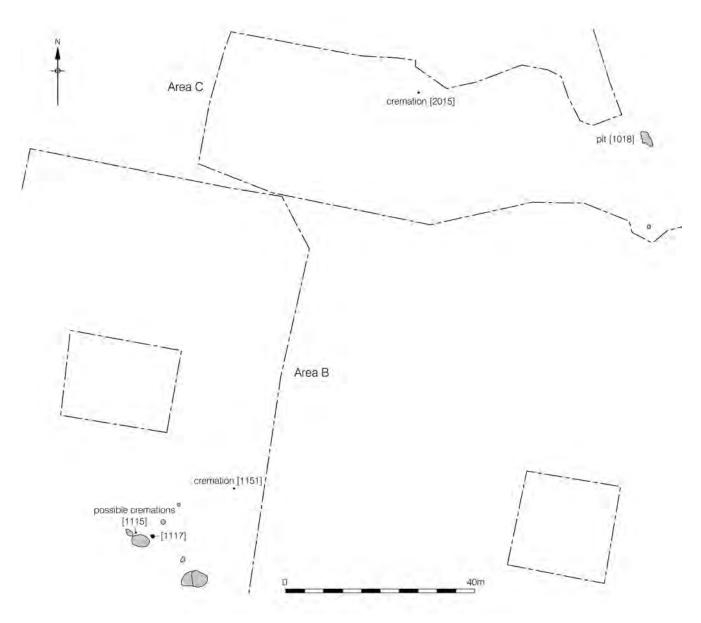


Fig. 23 Location of cremated deposits (scale 1:800)

fenceline (Figs. 25, 26). The field ditches varied in width between 0.72m and 1.20m and were between 0.22m and 0.66m deep. Seven sections were excavated across them revealing that they mostly had concave sides with rounded bases and they produced 214 sherds of pottery dateable to the Middle and Late Bronze Age periods. Struck flints recovered included flakes, cores and scrapers; burnt flint was also present. Within the enclosure just four features were recorded, consisting of three postholes and a pit, although no evidence of obvious settlement features or structures were observed.

Some 34m to the north of the trackway and parallel to it was a further ditch, approximately 75m long and up to 1.40m wide and 0.64m deep, also containing a possible entranceway. To the southeast of the entranceway was a roughly linear arrangement of seven postholes covering approximately 15m and interpreted as the remnants of a

fenceline, which may suggest attempts at livestock control, forcing movement towards the 1m gap in the entranceway (Fig. 27). The ditch continued to the west and may have returned to the south. Another parallel ditch was located 11m to the north; this was much more shallow and may have continued westwards but for truncation by later ploughing.

The various ditches comprising the field-system and trackway were all rather variable in their shape and size. Their plans and profiles suggested that they may have been originally dug as a series of rather irregularly aligned overlapping segments. Comparable characteristics have been noted in other similarly dated field-systems and may suggest that the field-system as a whole was constructed by a number of different work gangs, each digging short sections of the ditches, although it is unclear whether the relationship between the work gangs and those organizing their efforts would have been based on cooperation or coercion (Yates 2004).

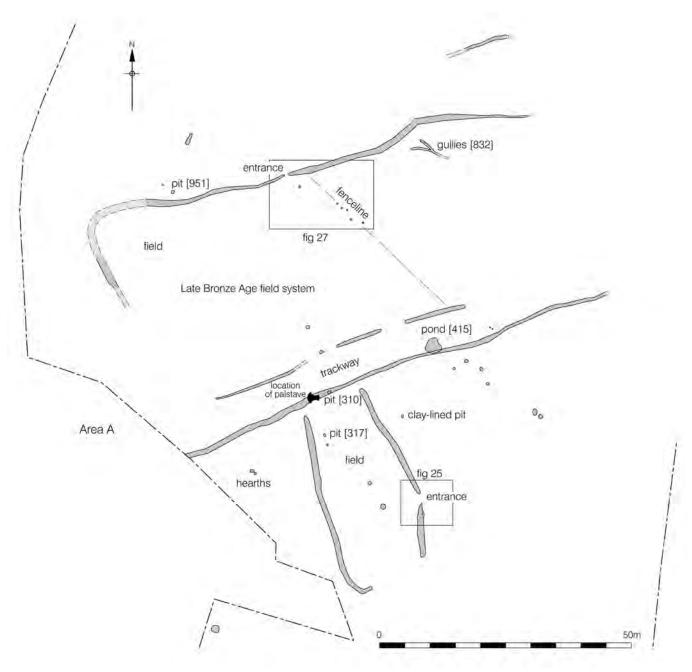


Fig. 24 Bronze Age field-system and trackway showing the location of the palstave (scale 1:750)

Some evidence of other activities from this phase, mostly consisting of small pits and postholes, was revealed scattered throughout the excavated areas. The majority of these were fairly small and shallow (between 0.10m and 0.65m deep), and no particular foci for more intensive activities could be discerned. A single 'Y' shaped gully [832] was recorded north of the trackway, possibly having a drainage function although no associated structural evidence was present. Two features located in the southwest of Area A, filled with burnt clay and containing burnt flint and daub, were interpreted as hearths. Although suggestive of domestic activities there was no further evidence of dwellings or other structures in their vicinity. A pit measuring over 3m in diameter with a depth 0.48m cut through the upper fill of

the southern trackway ditch and may have represented a pond or watering hole [415].

Several of the features contained pottery assemblages that may indicate formalized deposition. A small pit [310] that cut the southern trackway ditch between the two ditches of the southern field contained a fragmented but near complete straight-sided jar. Two shallow clay-lined pits [383] and [951] to the northwest and southeast of the field-system may have been initially used as storage pits, although they contained large freshly broken sherds which may have been selectively deposited. In addition to a substantially complete pottery vessel, pit [951] also produced fragments of quernstone and a refittable flint core and flakes. In Area B a cluster of pits was recorded, two of these [1196] and [1198]

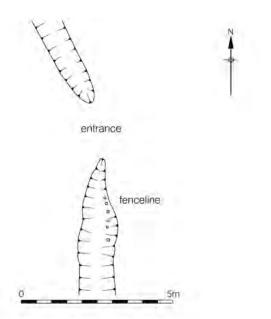


Fig. 25 Detail of the entrance to the southern field (scale 1:125)



Fig. 26 The entrance to the southern field after excavation, looking north, after rain, showing its potential for drainage

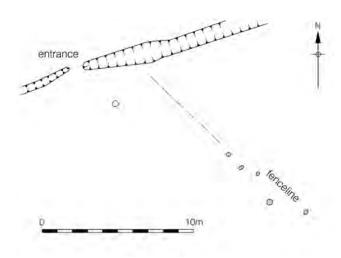


Fig. 27 Detail of the entrance to the northern field (scale 1:250)

were over 3m in diameter but only 0.40m and 0.50m deep. These may represent watering holes and they also contained high quantities of potsherds (Fig. 28).

Adjacent to the earlier Middle Bronze Age well or shaft [1145] were pits [1115] and [1117]. Although [1117] had been disturbed by later pitting, both originally measured ϵ . 0.35m in diameter and had large pottery sherds lining their edges (Fig. 29), as well as containing quantities of charcoal, burnt flint and burnt bone. It is possible that the bone could have represented 'token' cremations, although none could be positively identified as human. Northwest of these was pit [1135]. This was circular and measured 1m in diameter with steep sides and was 0.34m deep. Recovered from it were quern fragments, two substantially complete pots, large quantities of charcoal, burnt flint and a few charred wheat or barley rachis.

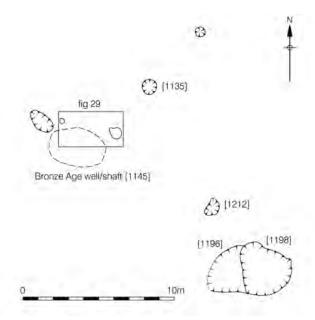


Fig. 28 Late Bronze Age pits in Area B (scale 1:250)

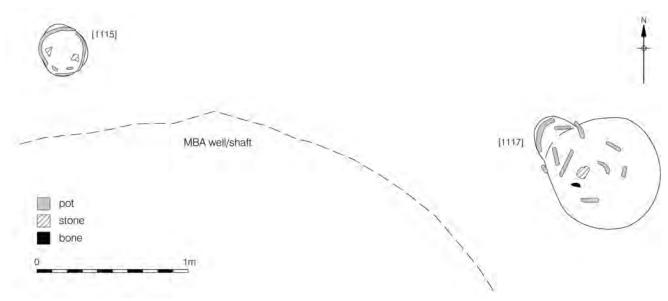


Fig. 29 Detail of Late Bronze Age pits [1115] and [1117] showing in situ pottery vessels (scale 1:25)

Earlier Prehistoric Finds Assemblages

NEOLITHIC AND BRONZE AGE POTTERY

SUE HAMILTON AND MIKE SEAGER THOMAS

The Nature and Importance of the Iwade Earlier Prehistoric Pottery

The Iwade earlier Prehistoric pottery (pre-Late Iron Age) encompasses several ceramic traditions and periods (Neolithic, Middle Bronze Age, and Late Bronze Age/Early Iron Age) and provides an extended ceramic sequence for the mid-North Kent region. Its analysis has necessitated the establishment of a regional chronological framework of pottery traditions, against which to assess the precise dating and range of the Iwade pottery. This has been done by considering the stratigraphic context of local assemblages and calibrating all the available local radiocarbon dates associated with this pottery and by using parallels with well-dated sites in adjacent regions of southeast Britain. The Iwade pottery sequence importantly complements the pottery sequence for the more extensively studied region of east Kent.

The assemblage from Iwade comprises c. 1300 sherds weighing over 33kg, excluding residual sherds from later features. These include fragmented but nearly complete pots, which were recovered from a series of pits and ditches, with few stratigraphic relationships present. The majority of the diagnostic, earlier Prehistoric pottery falls within the post Deverel-Rimbury pottery tradition, broadly dated to the Late Bronze Age (Barrett 1980, 311; Needham 1996, 134-137).

Additionally, the site yielded Ebbsfleet Ware, dating to the middle Neolithic (Smith 1974), and Deverel-Rimbury or Middle Bronze Age pottery. A few sherds may belong to the Early Iron Age.

The dating of the Iwade pottery is complicated by similarities between the fabrics of the different periods represented. It was often difficult to date features and pottery groups, which wholly comprised undiagnostic body sherds. Some 20 'feature assemblages', however, were unambiguous in their dating. This was due to the absence from them of later material, the presence of sherds of diagnostic form and decoration, the large size of these and their unabraded condition (implying burial soon after use). Of these features one is Neolithic, five are Middle Bronze Age and fourteen are Late Bronze Age. The remainder of the earlier prehistoric contexts cannot be precisely dated owing to the absence from them of feature sherds; but on the basis of their fabrics they have a Bronze Age, rather than an earlier, terminus post quem.

Methodology

The pottery was analysed using the pottery recording system recommended by the Prehistoric Ceramics Research Group (1992). Owing to similarities between Fabrics 7 and 8 and some Late Iron Age fabrics, it was impossible to quantify earlier prehistoric, non-feature sherds from Iron Age features. Sherds were ascribed a fabric type on the basis of macroscopic examination. These were then counted and weighed to the nearest whole gram. The weathering of the different fabric groups from each feature was subjectively assessed on a scale of 1 to 10. 1 is an intact, unweathered pot, 2 a sherd on which both breaks and surface finish survive unweathered, 5 a sherd

with unabraded breaks but no surviving surface finish, 9 a sherd on which breaks have been highly rounded, and 10 a disaggregated sherd. Finally, each diagnostic sherd was assigned both a form and a decorative type, and dated parallels for these were identified. Vessels discussed in the text have been assigned a unique number code (prefix P).

Note: All radiocarbon dates in the following discussion are quoted in calendar years BC at two sigma, and were calibrated using the CALIB programme of Stuiver and Reimer (1993) using their intercept method and bi-decadel data set.

Fabrics

Sixteen earlier prehistoric pottery fabric types were distinguished for the Iwade assemblage. All of the Neolithic, Bronze and Early Iron Age fabrics (Fabrics 1-16 below) are tempered with calcined flint and contain varying sizes and quantities of naturally occurring micaceous quartz sand. Additionally, individual fabrics incorporate one or more of the following: charred or burnt-out organic material, ironoxide nodules, and grog. One fabric is associated with feature sherds of Neolithic type, four with feature sherds of Middle Bronze Age type, one with both Middle Bronze Age and Late Bronze Age types, and one (Fabric 8) with both Late Bronze Age and Early Iron Age types. The remaining Iwade earlier prehistoric pottery fabrics are associated wholly with Late Bronze Age forms (Table 1).

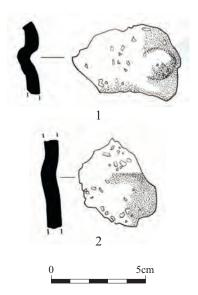


Fig. 30 Neolithic pottery (scale 1:2)

Neolithic Pottery

A small quantity of Neolithic pottery was recovered from Iwade, mostly recovered from pits [1137] and [1139], and in addition a few sherds from later features were identified.

Fabric

The in-turned, incised rim and deeply in-curved neck with fingertip-impressions of P46 are characteristic of Peterborough Ware. The fabric (Fabric 11) compares to other Neolithic pottery fabrics from Kent (eg Baston Manor: Smith 1973, 9). This ware stands out from the Iwade Bronze Age fabrics because of its thinner walls, the patchy surface presence of its flint temper, and its laminar appearance. The latter suggests that the vessel walls were beaten or 'puddled' in order to thin them. Additionally, the inclusion of flint temper of a pink colour may indicate a different source of flint to that utilized in the majority of Bronze Age fabrics.

Discussion

Groups of sherds from pits [1137] and [1139] are either from the same, or an identical vessel. Most are unweathered, but rim sherds from both pits are burned. This indicates either that the pits were filled at the same time, and shared some sort of functional relationship, or that the fill of one pit was derived from that of the other.

Similarities between the particular sub-style of Peterborough Ware to which it belongs, the Ebbsfleet style, and the earlier, Grimston/Lyles Hill series suggests a start date for this towards the middle of the fourth millennium BC (Smith 1974, 112). This is supported by the radiocarbon date of 3755-2921 cal BC (4660BP±150, BM-113) from wood peat immediately above the type-site at Ebbsfleet (Smith 1974), and by radiocarbon dates associated with similar pottery from sites outside the county, such as Combe

Neolithic Pottery (Fig. 30)

- 1 P46. Pit 1137, fill 1136. Concave, deeply fingertipimpressed neck, internally and externally slashed collar and rounded rim. Fabric 11. Smooth to pimpled surfaces. cf Ebbsfleet (Burchell and Piggott 1939, 418: fig. 7), Combe Hill (Musson 1950, 109: fig. 3)
- 2 P41. Pit or Hearth 1122, fill 1121. Out-pressed cordon and slightly expanded, rounded to flattened rim. Fabric 11. Pimpled surfaces.

Fabric Descriptions: The fabrics described below are ordered from fine wares to coarse wares.

Fabric 1 (date: post Deverel-Rimbury):	Moderate (10%), medium sand-sized calcined flint grit. Dark grey
Fabric 2 (date: Deverel-Rimbury):	(unoxidized) surfaces and core. Occasional, red (oxidized) sherds. Sparse (3%) to moderate (10%), coarse sand-sized calcined flint grit. Orange (oxidized) surfaces and grey (unoxidized) core.
Fabric 3 (date: post Deverel-Rimbury):	Sparse (3 - 7%), coarse to very coarse sand-sized calcined flint grit. Dark grey (unoxidized) to brown surfaces and core. Possibly a fine ware equivalent of Fabric 5. Burnt sherds closely resemble Fabric 2.
Fabric 4 (date: post Deverel-Rimbury):	Sparse (5%) to moderate (10%), coarse sand-sized calcined flint grit. Abundant medium quartz sand. Dark grey (unoxidized) surfaces and core.
Fabric 5 (date: post Deverel-Rimbury):	Moderately well sorted, sparse (7%) to common (20%), coarse sand-sized calcined flint grit. Sparse (3%) chaff-hollows/carbonaceous flecks. Buff (oxidized) to grey (unoxidized) surfaces and grey brown core. (?) A coarse ware equivalent of Fabric 3.
Fabric 6 (date: post Deverel-Rimbury):	Rare (2%) coarse sand-sized to small granule-sized calcined flint grit. Abundant fine quartz sand. Orange (oxidized) exterior surfaces and dark grey brown (unoxidized) interior surfaces and core. (?) A fine variant of Fabric 15.
Fabric 7 (date: post Deverel-Rimbury):	Rare (2%) coarse sand-sized to small granule-sized calcined flint grit. Unquantifiable amounts of grog. Rare (<1 - 2%) chaff-hollows. Orange (oxidized) to brown (unoxidized) exterior surfaces and dark grey to dark grey brown (unoxidized) interior surfaces and core.
Fabric 8 (date: post Deverel-Rimbury and Early Iron Age):	Sparse (7%) to moderate (10%), coarse sand-sized to small granule-sized (and occasionally larger) calcined flint grit. Rare (1%) to sparse (3%) chaff-hollows/carbonaceous flecks. Red-brown (oxidized) to dark grey (unoxidized) exterior surfaces and dark grey to dark grey-brown
Fabric 9 (date: Deverel-Rimbury):	(unoxidized) interior surfaces and core. (?) A fine variant of Fabric 14. Well-sorted, sparse (5%) occasional very coarse sand-sized and frequent small granule-sized calcined flint grit. Orange (oxidized) surfaces and core.
Fabric 10 (date: post Deverel-Rimbury and ?Deverel-Rimbury):	Moderate (7%) to common (20%), coarse sand-sized to large granule-sized calcined flint grit. Rare (<1% - 2%) chaff-hollows/carbonaceous flecks.
Fabric 11 (date: Neolithic):	Usually dark grey to dark grey-brown surfaces and core, and occasional lighter grey- or red-brown surfaces. (?) A fine variant of Fabric 14. Patchy, sparse (5%), coarse sand-sized to large granule-sized calcined flint grit frequently with the reddish hue of burnt Tertiary material. Abundant
Fabric 12 (date: Deverel-Rimbury):	(?)silt. Red-brown (oxidized) exterior surfaces and dark grey to dark grey brown (unoxidized) interior surfaces and core. Well-sorted, sparse (7%) to moderate (10%), medium to large granule-sized and occasional very coarse sand-sized flint grit. Rare (<1%) iron-oxide nodules. Very rare (<1%) carbonaceous flecks. Orange (oxidized) exterior
Fabric 13 (date: Deverel-Rimbury):	surfaces and grey (unoxidized) to buff (oxidized) interior surfaces and core. Sparse (7%) to moderate (10%), coarse sand-sized to large granule-sized calcined flint grit. Rare (<1%) iron-oxide nodules. Buff to red-brown (oxidized) exterior surfaces and dark grey (unoxidized) core. Rare (1%) to
Fabric 14 (date: post Deverel-Rimbury):	sparse (3%) carbonaceous flecks. Closely resembles sherds in Fabric 14. Patchy, moderate (10%) to common (20%), coarse sand-sized to very small pebble-sized calcined flint grit. Rare (<1%) chaff-hollows/carbonaceous flecks. Dark grey-brown to dark grey (unoxidized) exterior surfaces and core, and occasional red-brown (oxidized) exterior surfaces. (?) A coarse variant of Fabric 8 or Fabric 10.
Fabric 15 (date: post Deverel-Rimbury):	Rare (2%) to sparse (5%), coarse sand-sized to (conspicuous) very small pebble-sized calcined flint grit. Rare (<1%) Iron-oxide nodules. Rare (1 - 2%) carbonaceous flecks. Abundant fine to medium quartz sand. Orange (oxidized) to dark brown (unoxidized) surfaces and core. (?) A coarse variant of Fabric 6.
Fabric 16 (date: post Deverel-Rimbury):	Sparse (10%) to moderate (15%), coarse sand-sized to very small pebble-sized calcined flint grit. Sparse (3%) fired-out chaff hollows. Rare (<1%) Iron-oxide nodules. Dark grey (unoxidized) surfaces and core. Orange (oxidized) surface patches. Severely burnt sherds, such as occurred in Context 303, are grey to buff.

Table 1 Internal dating of pottery forms and fabrics

D 1 1	Vess	el types					
Deduced Fabric							fabric date
	Neolithic	Deverel-	Forms	Post Deverel-Rimbury			
		Rimbury	in common			Later EIA	
				Plain*	Decorated*		
71					P22, P62		LBA
72		P47					MBA
73			P23†	P3, P17,	P7, P24,		LBA
				P45, P56	P50, P57		
74			P15		P63		LBA
75			P16	P35			LBA
76				P28			LBA
77			P51	P29, P64			LBA
78			P10, P11,				
			P12 , P19,	P52, P59	<u>P21</u> ,	<u>P4, P5</u>	LBA-EIA
			P34, P53,				
			P58, P65				
79		P25					MBA
710			P18, P31,				
			P36†, P43,	P13, P32,			
		P8	P48, P49,	P42, P44,	P14		MBA-LBA
			P55	P54			
711	P41, P46						Neolithic
712		P2, P33 †					MBA
13		P1, P20, P30		P26			MBA-LBA
714			P4, P27,	P60, P66	P61 , <u>P6</u>		LBA
			P37, P38				
715					P39		LBA
716		P 9†		P67			MBA-LBA

feature sherds from typologically and/or stratigraphically dated contexts: P2 = Deverel-Rimbury dated context; P3 = post Deverel-Rimbury dated context; P5 = Late Iron Age dated context; † = boss. NB this refers to the presence or absence of decoration on individual vessels and does not imply any chronological distinction.

Hill, East Sussex (3638–2923 cal BC) (4590±110BP, I-11613: Drewett 1994, 7). At the latest, the style went out of use in the first centuries of the following millennium.

Kent findspots of Peterborough ware include Ebbsfleet (Burchell and Piggott 1939), Baston Manor, Hayes (Smith 1973, 13), Castle Hill, Folkestone (Macpherson-Grant 1989, 60) and White Horse Stone (Glass 1999, 192).

Deverel-Rimbury, Post Deverel-Rimbury and Early Iron Age Pottery

Five features produced solely Deverel-Rimbury pottery finds (pits [101], [920] and [940], posthole [1119] and well or shaft [1145]. Additionally two Deverel-Rimbury bossed jars (P9 and P33), and a cordoned (?) bucket urn (P8) were residual in Late Bronze Age contexts (pits [310] and [951]).

Fabrics

The Iwade Bronze Age and Early Iron Age fabrics closely compare to contemporary fabrics from Kent. The textural range is from very fine to very coarse fabrics. The Iwade Deverel-Rimbury and post Deverel-Rimbury pottery overlaps at the extremes of fabric texture, but the firing characteristics are usually sufficiently different to distinguish separate fabrics for each phase. Occasionally, however, this makes dating difficult. One of the Deverel-Rimbury vessels (P8) occurs in Fabric 10 that is otherwise associated with the post Deverel-Rimbury assemblage. At Iwade, with one exception (Fabric 2, a fine fabric), all Deverel-Rimbury fabrics are coarse or very coarse (cf Macpherson-Grant 1992b, 60), whereas the post Deverel-Rimbury fabrics encompass the entire textural range. This is in line with the more extensive range of vessel types associated with the later tradition (Barrett 1980). Most post Deverel-Rimbury bowls from Iwade are in fine fabrics. Most jars, even those that are finely finished, are in intermediate or coarse fabrics. Three, 'minority', post Deverel-Rimbury fabrics stand out.

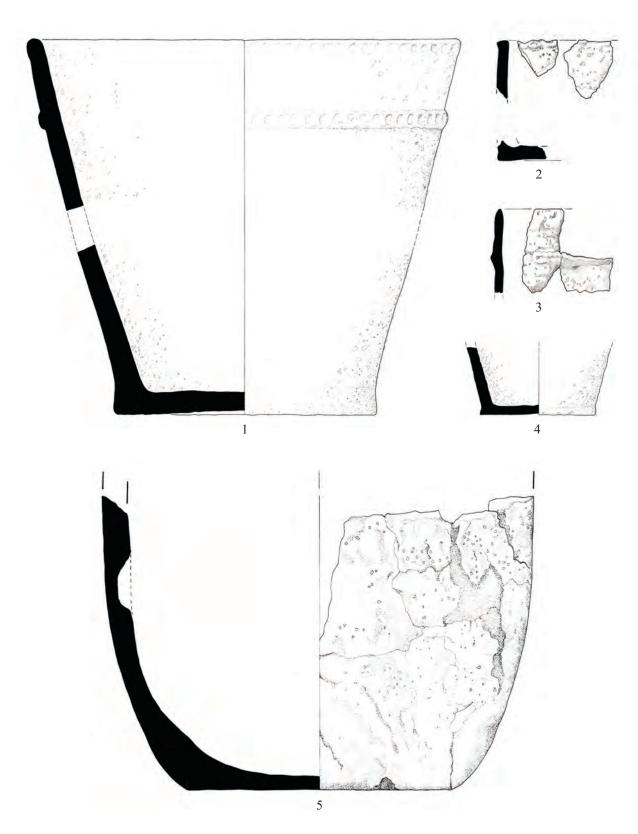
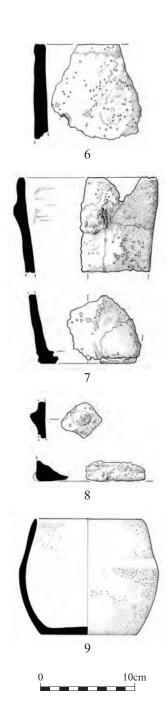


Fig. 31 Deverel-Rimbury pottery (scale 1:4)



Deverel-Rimbury Pottery (Fig. 31)

- 1 P1. Pit 101, fill 100. Flat, expanded base and convex then straight sides of near complete but fragmented straight-sided jar or bucket-urn with fingertip impressions below a flat rim and on an applied or slightly raised cordon. Fabric 13. Pimply, wiped and finger-smeared surfaces. cf Nethercourt, Ramsgate, and Bridge, Kent (Macpherson-Grant 1980b, 172: fig. 26.148; 1992b, 59: fig. 4), and Ardleigh, Essex (Erith and Longworth 1960, 183: fig. 4).
- 2 P30. Pit 941, fill 940. Flat base with straight, upright sides, and straight, upright body with deeply fingertipimpressed rim of straight-sided jar or bucket-urn. Fabric 13. Pimply, wiped or finger-smeared surfaces.
- 3 P8. Pit 310, fill 311. Straight, upright body of straightsided jar or bucket-urn with rounded rim and undecorated, applied cordon. Fabric 10. Pimply, (?) finger-smeared surfaces partially degraded by fire.
- 4 P2. Pit 101, fill 100. Flat, slightly expanded base and straight slightly flared sides of (?)straight-sided jar or bucket-urn. Fabric 12. Pimply surfaces. cf Bridge and Dolland's Moor, Kent (Macpherson-Grant 1980b, 172: fig. 26.149; 1992b, 59: fig. 4).
- **5** P40. Pit 1119, fill 1118. Flat, base and convex then straight sides of bucket-urn.
- 6 P25. Ditch 833, fill 486. Straight, upright body of (?)straight-sided jar with flattened rim. Fabric 9. Pimply, finger-smeared inner surfaces; original exterior surfaces
- 7 P9. Pit 310, fill 311. Flat, slightly pinched-base, convex then straight sides of fragmented but near complete straight-sided jar with rounded rim and circular boss. Fabric 16. Pimply, finger-smeared surfaces.
- 8 P33. Pit 951, fill 949. Flat base with slightly fingerpinched, straight, upright sides, and straight, upright body of straight-sided jar or bucket-urn with two nipplelike bosses and rounded to flattened rim. Fabric 12. Original surfaces lost. cf Burghfield, Berkshire (with associated radiocarbon date) (Bradley et al. 1980, 270: fig. 32.39) and Sunbury, Greater London (Barrett 1973, 115: fig. 2.20).
- 9 P47. Pit 1145, fill 1175. Flat base, globular body, weak shoulder, and straight, slightly in-turned upper shoulder/neck of near complete but fragmented bowl with rounded rim. Fabric 2. (?)Burnished. cf Kimpton, Hants. (Dacre and Ellison 1981, 178: fig. 16.14)

One is grog-tempered (Fabric 7), the other two quartz sandtempered (Fabrics 4 and 15). Elsewhere in Kent, grog and sand tempered fabrics have been identified as possible Continental, or extra-regional imports (Couldrey 1988, 45; Macpherson-Grant 1994a, 255). Since all of the fabrics identified at Iwade contain mica, and may derive from the same clay source, it is thought more likely that these 'minority fabrics' were part of a local repertoire. A single intermediate post Deverel-Rimbury fabric (Fabric 8) survived into, or recurred during the Early Iron Age.

Middle Bronze Age Pottery (Deverel-Rimbury Traditions)

The Deverel-Rimbury potting tradition of Lowland Britain is assigned to the Middle Bronze Age (c. 1700-1150BC) (Needham 1996, 132-134). Its dating is based upon associated radiocarbon dates and metalwork, particularly from Wessex, Sussex and Surrey. Kent itself is largely without internal dating evidence. A barrow cemetery at Bridge, however, yielded radiocarbon dates of 1410-935 cal BC (HAR-1493, 2970 ± 80 BP) and 1367 - 834 cal BC (HAR-1492, 2880 ± 80BP), indirectly associated with Deverel-Rimbury pottery (Macpherson-Grant 1980b, 170). At Netherhale Farm on the Isle of Thanet, a domestic Deverel-Rimbury pottery assemblage includes an unstratified, decorated sherd reminiscent of that on the vessel which contained the Birchington Middle Bronze Age palstave hoard, dated to c. 1300-1000BC (Macpherson-Grant 1992b, 60), and a Deverel-Rimbury bucket urn from Ramsgate contained three Middle Bronze Age 'Picardy' pins (Hawkes 1942, 26). Additionally, Kent Deverel-Rimbury pottery has close parallels with that from surrounding counties (Champion 1982). This limited evidence suggests that Kent Deverel-Rimbury pottery belongs to the latter part of the wider Deverel-Rimbury tradition.

Straight-sided bucket urns

Straight-sided bucket urns were the principal type associated with the Iwade Deverel-Rimbury assemblage. They are generally in coarse or very coarse fabrics and correspond to Ellison's (1980) 'heavy duty' and 'everyday' wares. Some were very large, and it is likely that they were used for storage. P1 (Fig. 31.1) has a flat-topped rim with a line of fingertip impressions around the vessel top and another below. P30 (Fig. 31.2) has fingertip impressions on top of the rim. The trait of fingertip impressions around, and more specifically on top of the rim is characteristic of Deverel-Rimbury urns

from southeast England. In Kent the latter occurs, for example, on a cordoned bucket urn from Ringwould (Champion 1982, fig. 12.1). Sites from neighbouring counties that have yielded similar vessels include Ardleigh Rings, Essex (Couchman 1975, 21: fig. 2), Kimpton, Hampshire (Dacre and Ellison 1981, 180: fig. 18), and Acton in Greater London (Barrett 1973, 117: fig. 4). Applied cordons are also common on Deverel-Rimbury urns from the region. These tend to be decorated with fingertip-impressions (eg Bridge: Macpherson-Grant 1980b, 172: fig. 26.147). That around the upper body of P8, a straight-sided bucket urn from pit [310], however is plain (Fig. 31.3).

Some of the Iwade bucket urns have technical or constructional features, which continue in Late Bronze Age assemblages, in particular splayed bases and finger smearing (eg P2, Fig. 31.4). P40 has a rounded, out-curving base (Fig. 31.5). P25, which belongs to a straight-sided bucket urn with a flat-topped rim, has a post firing perforation (Fig. 31.6). Such holes are interpreted as rivet holes used for mending broken vessels with leather thongs. Rivet holes are common on Deverel-Rimbury urns. They have been particularly discussed in a Sussex context (Ellison 1972; Hamilton 1997a, 38) and suggest that the largest Deverel-Rimbury urns were not readily replaced once broken. Their large size, and the substantial quantity of raw material (clay and flint tempering) required in their manufacture, would have necessitated a significant amount of production investment, and they may have been produced by specialists, or have been seasonally produced.

Bossed jars

Vessels with bosses form a component of both Deverel-Rimbury and post Deverel-Rimbury assemblages in Lowland Britain. Several were present in Iwade post Deverel-Rimbury contexts, two of which belong to the earlier Deverel-Rimbury tradition (P9 and P33). P9 is nearly complete (Fig. 31.7). It has a circular boss with a diameter of c. 25mm centred 40mm below the rim. The wall of the vessel is near upright except towards the base from which it out-curves. Its base is flat and slightly expanded and its rim rounded. The vessel is in a very coarse fabric. Larger but otherwise similar Deverel-Rimbury vessels come from Greater London (Barrett 1973, 114: fig. 1). P33 is a very large, coarse, thickwalled straight-side urn (c. 300mm diameter) in a Deverel-Rimbury fabric (Fig 31.8). It is flat-based and had at least two round bosses. A similar bossed urn at Knights Farm, Berkshire was associated with a radiocarbon of 1686-1222 cal BC (3195±95BP, BM-1594) (Bradley et al. 1980, 269). Horizontal grouping of different Deverel-Rimbury types,

including vessels with bosses, at Kimpton, Hampshire (Dacre and Ellison 1981, 190) and Ardleigh Rings, Essex (Couchman 1975), may indicate that they belong to a late phase of Deverel-Rimbury activity. This is consistent with the radiocarbon dating from Kent that suggests that its Deverel-Rimbury traditions fall in the latter part of the Deverel-Rimbury period (see above).

Globular bowl

Fine ware bowls are a less often recognized component of Deverel-Rimbury assemblages. A notable example from Kent is the incised and stamp-decorated bowl containing the Birchington palstave hoard (see above). The material from Netherhale Farm contained a stamp-decorated fine ware sherd, which may come from a similar bowl (Macpherson-Grant 1992b, 64). At Iwade, the well or shaft [1145] produced a near complete but fragmentary, plain, thin-walled globular bowl with a rounded rim (P47) (Fig. 31.9) smaller than, but of similar form to, vessels in late Deverel-Rimbury groups from Kimpton (Dacre and Ellison 1981, 178: fig. 16). It is in a fine Deverel-Rimbury fabric. Unlike the Birchington and Netherhale vessels, it was undecorated. No other pottery finds were recovered from this context.

Later Bronze Age and Early Iron Age Pottery (Post Deverel-Rimbury)

The majority of the Iwade earlier Prehistoric pottery assemblage falls within the post Deverel-Rimbury potting tradition for lowland Britain. This tradition belongs to a period between the end of the Middle Bronze Age (c. 1150 BC) and the Early Iron Age (c. 600 BC) (Barrett 1980, 311; Needham 1996, 134-137). It is suggested here that this tradition can be sub-divided into three roughly sequential, typological groups. Together with a few sherds belonging to the immediately succeeding tradition, variously dated to the Early or Early to Middle Iron Age (c. 600–300BC) (Cunliffe 1991, 72; Macpherson-Grant 1992a, 291-292), the following groups provide a framework for the discussion of the Iwade pottery.

'Undecorated' assemblages

The earliest group comprises plain ware or 'undecorated' assemblages. In Kent these include those from Coldharbour Road, Gravesend (Barclay 1994) and possibly Highstead (period 1) (Macpherson-Grant 1994a). In southeast Britain,

it includes, for example, those from Queen Mary's Hospital, Carshalton, in Surrey (Adkins and Needham 1985), Runnymede Bridge (Area 2, unit 5, and Area 6, units I - J), on the Surrey/Berkshire border (Longley 1980; Needham and Spence 1996), and Kingston Buci in West Sussex (Curwen and Hawkes 1931). Characteristic vessel forms of this group include shouldered jars with pronounced, but usually rounded shoulders, together with convex jars, biconical bowls with obtuse but often sharp shoulder angles and concave upper necks, and lugged and cordoned jars. Apart from occasional cabled or fingertip-impressed decoration on jar rims or applied cordons, vessels were largely undecorated.

'Transitional' assemblages and 'decorated' assemblages

'Transitional' assemblages outside Kent are best characterized by the pottery from Runnymede Bridge (Area 2 unit 7 and Area 6, units K - M) (Longley 1980; Needham and Spence 1996), and West Beach, Selsey, in West Sussex (Seager Thomas 2001). During this period decoration on vessel-bodies, both linear and fingertip-impressed, became more common, as did fine ware bowls with in-turned rims, but there are no new vessel forms. It was succeeded by a 'decorated' tradition. The latter is epitomized by the assemblages from Petter's Sports Field, Egham, (O'Connell 1986) and Esher in Surrey (Burchell and Frere 1947), Chanctonbury Ring (Hamilton 1980 and 2001) and Stoke Clump in West Sussex (Cunliffe 1966), and Lofts Farm in Essex (northern, outer enclosure ditch) (Brown 1988). Within their respective counties, Petter's Sports Field and Chanctonbury Ring are probably the earliest. These assemblages mark a floruit in linear, finger-tip impressed and tooled/incised decoration. Rim decoration, rather than being placed on top as in earlier groups, was frequently external. Increasingly common vessel forms included angular, tripartite jars and angular, bi-partite bowls with incised or notched shoulder cordons. Many earlier vessel types, however, continued to be produced. Kent's position in relation to these two groups is anomalous. Macpherson-Grant (1991 and 1994a, 280) describes most post Deverel-Rimbury assemblages from east Kent as 'decorated'. Apart from the presence of decoration, however, the published vessels display few of the characteristics of 'decorated' assemblages. It is likely that some or all of these, including those from Kingston Down, Monkton Court, Highstead (period 2) and East Northdown, Margate (Smith 1987) belong in the earlier 'transitional' group. Conversely, Minnis Bay, Birchington, a site generally thought to be early, yielded

at least one form that can be attributed to the 'decorated' tradition (Worsfold 1943, 38: 8.3).

Later forms

The final group comprises assemblages from Highstead (period 3) and Barham Down in Kent (Macpherson-Grant 1980b; Macpherson-Grant 1991, 42), and from sites such as Green Street, Eastbourne, in East Sussex (Hodson 1962), and Park Brow, West Sussex (Wolseley and Smith 1924). Characteristic vessel forms include the pedestal base, and the 'onion-shaped' jar. Additionally, there was a floruit in painted decoration (bichrome and polychrome) (Barham Down and Highstead period 3: Macpherson-Grant 1991, 42; Whitfield Bypass: Davey and Macpherson-Grant 1996, 68). Many Kent vessels of this group are coarser than their equivalents in preceding traditions (P Couldrey, pers comm.). For example, the exterior surfaces of jars are often roughly coated below the shoulder with clay slurry known as 'rustication'.

Dating

The foregoing sequence has been established by the identification of discrete typological groups, some of which have meaningful stratigraphic or horizontal relationships to other groups, and by a series of associated radiocarbon dates. At Rams Hill, Berkshire, a 'decorated' assemblage was stratified above an 'undecorated' assemblage (Bradley and Ellison 1975). Upper levels at Runnymede Bridge (Areas 2 and 6) contained greater proportions of 'decorated' material than lower levels (Longley 1980; Needham and Spence 1996). Differences in the presence of 'decorated' pottery occurred between feature or area groups from sites such as Highstead (P Couldrey, pers comm.), Lofts Farm (Brown 1988) and Weston Wood, in Surrey (Russell 1989), while at Selsey, individual features 1km apart contained, respectively, 'transitional' and 'decorated' assemblages (Seager Thomas 2001). Radiocarbon-dated associations with 'undecorated' assemblages at Runnymede Bridge, Area 6 (units H - I) (Needham and Spence 1996, 80), and Ford, West Sussex (Hamilton 2003, 84), fluctuate around the beginning of the first millennium BC. Dates associated with later, 'transitional' groups such as Runnymede Bridge, Area 6 (units J - K) (Needham and Spence 1996, 80), Selsey (Seager Thomas 2001), and Yapton, West Sussex (Hamilton 2003), straddle the eighth century BC. The same is true of comparable associations from Kent (see below). The focus of radiocarbon dates associated with early, 'decorated' groups from Petter's Sports Field (Needham 1990) and Albury (area 1) (Russell

1989, 7) is slightly later. These post Deverel-Rimbury pottery traditions are not uniformly present, or of the same duration, in all places. In Sussex, for example, there are relatively few sites belonging to the final, 'decorated' group (Hamilton 2001 and 2003). In Kent, Essex and the West Country sites yielding wholly plain wares assemblages are equally rare (eg Macpherson-Grant 1994a, 280). Radiocarbon dates associated with 'rusticated' pottery - all from the Continent - indicate a start date contemporary with British 'decorated' post Deverel-Rimbury traditions and continue into our Middle Iron Age (van Heeringen 1989; Schinkel 1998).

Anachronisms within the currently recognized post Deverel-Rimbury sequence are common. Odd pedestal bases (usually dated later, eg Hodson 1962), occur in 'transitional' assemblages from beyond Kent, such as Runnymede Bridge, Area 6 (unit L) (Needham and Spence 1996, 156: fig. 83.842), Mucking North Rings, Essex (Barrett and Bond 1988, 31: fig. 22.84), and in an 'undecorated' assemblage from Ford Airfield (Hamilton n.d.). The morphology of Kent 'decorated' bowls (eg Monkton Court: Macpherson-Grant 1994a, 282-283: fig. 20) resembles that of earlier, 'undecorated' material from outside the county (eg Queen Mary's Hospital, Carshalton: Adkins and Needham 1985, 24: fig. 8.215). Some vessel forms, such as pinch-splayed bases, are long-lived. Additionally, some stratigraphically distinct assemblages display no discernible differences, and suggest considerable longevity for individual post Deverel-Rimbury pottery groupings (eg Mucking, North Rings, periods I and II: Barrett and Bond 1988, 35). The extent to which the Kent post Deverel-Rimbury ceramic groups overlap is currently unclear.

Post Deverel-Rimbury Pottery Types

Convex jars

Two types of convex jar are present at Iwade., as detailed below. The first type forms a significant part of the evidence for the presence of an 'undecorated' assemblage at Iwade, and comprises medium-sized, thin-walled, roughly finished convex jars with a rounded, in-curving rim. Three vessels of this type are present (P18, P31, and P48, Figs. 32.1, 32.2, 32.3). All are from Late Bronze Age contexts without decorated sherds, and are in Fabric 10, which is associated with post Deverel-Rimbury pottery forms, as well as forms which straddle both Deverel-Rimbury and post Deverel-Rimbury traditions (Table 1). P12, P34 and P38 (Figs. 32.4, 32.5, 32.6) are less obviously convex but share a family resemblance to this type of convex jar. P12 (Fabric 8) was associated with decorated material. P34 is in the same fabric

as P12 but came from the eastern field boundary south of the trackway, this yielded no decorated sherds but the western field boundary similarly yielded an 'undecorated' assemblage.

The second type was represented by a large, thickerwalled roughly finished convex jar with upright or incurving, fingertip impressed rim (P26, Fig. 32.7) and a flat, finger-furrowed base (P20, Fig. 32.8). This vessel is in the same fabric as P1 (Fabric 13), a large Deverel-Rimbury urn, but it was associated with 'decorated' post Deverel-Rimbury sherds.

Convex jars are not widely reported from Kent assemblages. Exceptions include jars from Highstead (Macpherson-Grant 1991, 40), and the Bridge Bypass sites at Barham and Kingston Downs (Macpherson-Grant 1980b, 142: 6.27; 148: fig. 10.51; 149: fig. 11.64). Of these, only one from Kingston Down resembles the Iwade vessels. However, convex jars form a widespread and long-lived component of both Deverel-Rimbury and post Deverel-Rimbury potting traditions outside Kent. Convex jars with rounded rims, for example, occur in 'undecorated' assemblages from Aldermaston Wharf, Berkshire (Bradley et al. 1980, 240: fig. 16.125 and other vessels) and Kingston Buci (Curwen and Hawkes 1931, 193: fig. 3), as well as in 'decorated' assemblages from Weston Wood (area 1) (Russell 1989, 23: fig. 11.1), and Harting Beacon, West Sussex (Hamilton 1979, 28: fig. 6.1). In view of their thin walls and the recurrent association of their fabric with other post Deverel-Rimbury groups on site, P18, P31 and P48 are thought likely to be Late Bronze Age. An earlier, rather than later, date for them within this period is indicated by the more frequent occurrence of convex jars in 'undecorated' assemblages from Iwade and southeast Britain. P20/26 is less easy to parallel (figs, 32.7, 32.8). It resembles and has the same feel as a 'later' probably Middle Bronze Age vessel from Newington, near Folkestone (see Macpherson-Grant 1992b, 59, although the Iwade vessel looks larger), and some Sussex Deverel-Rimbury material. The nearest best parallel for it, however, is in the 'decorated' assemblage from Weston Wood (area 1) (Russell 1989, 27: fig. 14.25). It may therefore be contemporary with, or even slightly later than, the material with which it was found.

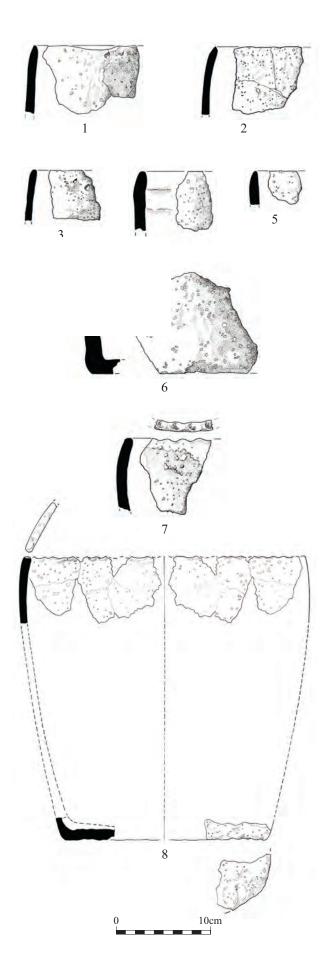
Shouldered jars

This is the principal jar form at Iwade. These belong to 'undecorated' and 'transitional' pottery groups at Iwade. Only one (P21, Fig. 33.1) can be reconstructed from the rim to below the shoulder. This vessel was residual in a Late Iron

Age context. It has a cabled rim, a straight, flared neck and a rounded shoulder. Three other upper shoulder/neck forms occur. The first comprises vessels with upright necks (P32, P44 and P60, Figs. 33.2, 33.3, 33.4). The second comprises vessels with continuous, concave upper-shoulders, which blend without interruption into an upright, or slightly flaring neck (P6, P35 and P39, Figs. 33.5, 33.6, 33.7) and the third comprises vessels with short flared necks (relative to shoulder length) and straight shoulders (P52 and P67, 33.8, 33.9).

Parallels for these Iwade vessels occur in 'undecorated', 'transitional' and 'decorated' assemblages from southeast Britain. For example, comparable upright necks (P32, P44 and P60) occur in assemblages from Queen Mary's Hospital ('undecorated' assemblage: Adkins and Needham 1985, 26: fig. 9.313), and Petter's Sports Field ('decorated' assemblage: O'Connell 1986, 70.255). At Iwade these types not only occurred in features which yielded wholly undecorated sherds, but also in features which yielded decorated sherds. Plastic decoration on the bodies of three of the Iwade shouldered jars (P6, Fig. 33.5: cabled rim top and fingertipimpressed shoulder, P14, Fig. 33.10: fingernail-impressed shoulder, and P39: fingertip-impressed shoulder) suggests a 'transitional' or 'decorated' attribution, rather than an earlier dating for the majority of the Iwade jars. P35 (Fig. 33.6), however, a large vessel with a concave upper shoulder and fingertip-impressed rim, can only really be paralleled in the 'undecorated' assemblage from Queen Mary's Hospital (Adkins and Needham 1985, 19: fig. 3.1). Since this vessel has no later associations at Iwade, it seems reasonable to suggest a slightly earlier date for it. Similar attributions can be argued for P32.

The attribution of P4 (Fig. 33.11) with a much-expanded rim is more difficult, it was found with P6 (see above), and an expanded base and lower part of a shouldered jar with 'rusticated' exterior surfaces (P5, Fig 33.12) in a Late Iron Age hearth [303]. The only Kent parallels for the P6 rim are those associated with the 'rusticated' vessels from the Barham Down and Highstead (period 3) assemblages (Macpherson-Grant 1980b, 140: fig. 5.10; 1991, 42). In view of the similarity between the rims of rusticated vessels from Barham Down and Highstead and P4, it is probable that P5 forms the base of the former vessel. At its earliest, 'rustication' overlaps with 'decorated' post Deverel-Rimbury traditions, but in Kent it is more widely associated with traditions immediately post-dating post Deverel-Rimbury assemblages (Macpherson-Grant 1991, 41-42; 1994b, 278). This vessel therefore indicates a slightly later phase of activity at Iwade.



Post Deverel-Rimbury convex jars (Fig. 32)

- 1 P18. Pit 383, fill 381. Very slightly convex body and rounded rim of (?) convex jar. Fabric 10. Pimpled surfaces.
- 2 P31. Pit 951, fill 949. Slightly concave side and rounded rim of finger-pinched convex jar. Fabric 10. Pimpled surfaces. cf Kingston Down (Macpherson-Grant 1980b, 149: fig. 11.64), Aldermaston Wharf, Berkshire (Bradley et al. 1980, 240: fig. 16.125), Kingston Buci (Curwen and Hawkes 1931, 193: fig. 3), Runnymede Bridge, area 6 (unit H) (Needham and Spence 1996, 140: fig. 67.680) and Harting Beacon (Hamilton 1979, 28: fig. 6.1).
- 3 P48. Pit 1194. Slightly concave side and rounded to flattened rim of convex jar. Fabric 10. Pimpled, fingersmeared surfaces. cf Aldermaston Wharf, Berkshire (Bradley et al. 1980, 240: fig. 16.125), Kingston Buci (Curwen and Hawkes 1931, 193: fig. 3), Runnymede Bridge, area 6 (unit H) (Needham and Spence 1996, 140: fig. 67.680) and Harting Beacon (Hamilton 1979, 28: fig. 6.1).
- 4 P12. Pit 329, fill 328. Upright, finger-pinched, body with rounded to flattened rim of (?)straight-sided or convex jar with two roughly tooled horizontal lines on inner surface. Fabric 8. Pimply surfaces.
- **5** P34. *Ditch* 973, *fill* 290. Rounded rim of (?) convex jar. Fabric 8. Pimpled, finger-smeared surface.
- 6 P38. Context 1001. Flat base with slightly concave sides. Fabric 14. Pimpled, wiped or finger-smeared surfaces.
- P26. Ditch 833, fill 486. Convex side and fingerimpressed rim of large convex jar or hemispherical bowl. Fabric 13. Original surfaces lost. Same vessel as P20. cf Weston Wood, Albury (area 1) (Russell 1989, 27: fig. 14.25), Aldermaston Wharf (Bradley et al. 1980, 242: fig. 18.160) and Bishopstone, East Sussex (Hamilton 1977, 110: fig. 47). Possible Middle Bronze Age parallel from Newington, near Folkestone (Macpherson-Grant 1992b, 59).
- 8 P20. Context 492. Flat/finger-furrowed base and fingertip-impressed rim. Fabric 13. Original surfaces lost. Note: rim closely resembles that of P26.

Fig. 32 Post Deverel-Rimbury convex jars (scale 1:4)

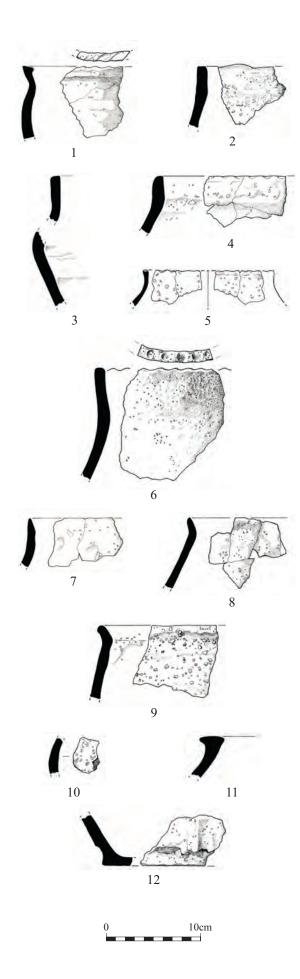


Fig. 33 Post Deverel-Rimbury shouldered jars (scale 1:4)

Post Deverel-Rimbury shouldered jars (Fig. 33)

- 1 P21. Gully 601, fill 619. Cabled rim, short, flared neck and rounded shoulder of shouldered jar. Fabric 8. Pimply surface. cf Ford (Hamilton n.d., vessel 22), Runnymede Bridge, areas 2 (group 5) and 6 (Longley 1980, 45: fig. 23.88; 1991, 179: fig. 76.7), and Petter's Sports Field (with fingertip-impressed shoulder) (O'Connell 1986, 70: fig. 55.249).
- 2 P32. Pit 951, fill 949. Upper shoulder of (?)shouldered jar with upright, finger-pinched neck and flattened rim. Fabric 10. Pimply, wiped or finger-smeared surfaces. cf Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 20: fig. 4.11)
- 3 P44. Pit 1135, fill 1134. Rounded to angular, fingerpinched shoulder angle of shouldered jar with upright neck. Rim rounded externally and squared to the rear. Fabric 10. (?)Finger-smeared surfaces. cf Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 26: fig. 9.313) and Petter's Field (O'Connell 1986, 40: fig. 55.255)
- 4 P60. Pit 1198, fill 1197. Upper shoulder and upright neck of large (?)shouldered jar with internal carination at base of neck. Fingertip-impressed rounded rim squared at the back. Fabric 14. Pimpled surfaces. cf Runnymede Bridge, area 6 (Longley 1991, 206: fig. 103.563)
- **5** P6. Hearth 303, fill 302. Fingertip-impressed (?)shoulder angle, slightly expanded cabled-rim, and slightly concave upper shoulder/upright neck of small shouldered jar. Fabric 16. Burnt: original surfaces lost. cf Runnymede Bridge, area 6 (unit J) (Needham and Spence 1996, 148: fig. 75.735) and Monkton Court (Macpherson-Grant 1994a, 270: fig. 14.79)
- 6 P35. Ditch 978, fill 288. Concave upper shoulder/upright neck of (?)shouldered jar with fingertip-impressed rim. Fabric 5. Original surfaces lost. of Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 19: fig. 3.1).
- 7 P39. Pits 1018, fill 1017. Slightly concave (?)upper shoulder/upright neck of (?)shouldered jar with widely spaced fingertip-impressions and sharply bevelled rim. Fabric 15. Original surfaces lost.
- 8 P52. *Pit 1196, fill 1195*. Upper shoulder and sharply flaring neck of shouldered jar. Fabric 8. Pimpled, (?)finger-smeared surfaces.
- **9** P67. *Pit 1212, fill 1211*. Short flared neck and finger-pinched, conical shoulder. Fabric 16. Traces of finger smearing on internal angle of shoulder and neck; otherwise original surfaces lost. cf Runnymede Bridge (Longley 1980, 43: fig. 21.52; 1991, 183: fig. 80.54) and Barham and Kingston Downs, Kent (Macpherson-Grant 1980b, 140: fig. 5.15; 150: fig. 12.71).
- **10** P14. *Pit 329, fill 328.* Fingernail-impressed, (?)angular shoulder angle of shouldered bowl or jar. Fabric 10.
- 11 P4. Hearth 303, fill 302. Slightly concave upper shoulder and flat to rounded externally expanded rim of large shouldered jar. Fabric 8. Burnt: original surfaces lost. cf Barham Down, Kent (Macpherson-Grant 1980b, 140: fig. 5.10), Dosset Court, Deal (Parfitt 1985, 212: fig. 4.15), Highstead (phase 3) (Macpherson-Grant 1991, 42).
- **12** P5. Hearth 303, fill 302. Flat, expanded base with straight, flaring walls. Fabric 8. Applied 'rustication'.

Jars with bosses

The Iwade assemblage also includes sherds from up to five bossed-jars. Two of these jars clearly belong to the Deverel-Rimbury tradition (P9 and P33), and have been discussed above. The three other bossed-jars are likely to be post Deverel-Rimbury, although their precise attribution in the post Deverel-Rimbury sequence is problematic.

The shape and size of the boss on P10 (Fig. 34.1) matches that of P9 almost exactly, but it is in a different fabric and belongs to another vessel. The other bosses (P23 and P36, Figs. 34.2 and 34.3) are oval and slightly smaller (c. 20mm x 10mm). P36 is in an intermediate fabric. P23, which has been burnished, is in a fine fabric and is aligned horizontally along the shoulder angle of a probable shouldered bowl or jar.

With the exception of a perforated example from Canterbury (Macpherson-Grant 1992b, 56: fig. 1), there are no published bosses from the later Bronze Age sites of Kent. They are, however, a frequent component of Deverel-Rimbury assemblages from the lower Thames Valley (eg Barrett 1973) and Sussex (Ellison 1978). Bosses occur, but less abundantly, in post Deverel-Rimbury assemblages from southeast Britain. Examples occur in assemblages from the Thames Valley (Brooklands, Surrey: Hanworth and Tomalin 1977, 30: fig. 18.128; Runnymede (Area 6): Longley 1991, 199: fig. 96.939), and Sussex (Ford: Hamilton n.d.; Kingston Buci: Curwen and Hawkes 1931, 194: fig. 14). The thin walls of P23 and P36, and the carination on P23, are recurrent traits of this post Deverel-Rimbury tradition. Additionally, P23 and P36 come from otherwise unambiguous post Deverel-Rimbury contexts, and the fabrics of all three vessels are associated with post Deverel-Rimbury types, or types, such as convex jars (see above), which straddle both Deverel-Rimbury and post Deverel-Rimbury traditions (Table 1).

Precise dating of the Iwade post Deverel-Rimbury bossed jars is difficult. It is likely that they relate to more than one phase of the site. P36 was associated with P35, a shouldered jar best paralleled in the 'undecorated' assemblage from Queen Mary's Hospital (Adkins and Needham 1985, 19: fig. 3.1), P23 resembles the Brooklands bossed vessel noted above, which also forms part of a 'decorated' assemblage.

Fine ware bowls and decorative motifs

The assemblage includes sherds from up to eleven fine ware bowls. One of these may be a hemispherical bowl (P56, Fig. 35.1). It has a square rim and is undecorated. The rest are all probably bipartite bowls but, owing to their fragmentation no complete profile can be reconstructed and it is difficult to

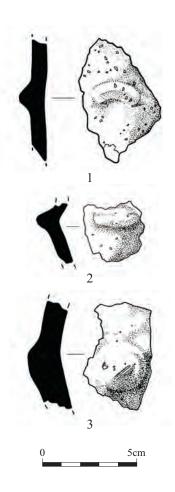


Fig. 34 Post Deverel-Rimbury jars with bosses (scale 1:2)

Post Deverel-Rimbury jars with bosses (Fig. 34)

- 1 P10. Posthole 321, fill 320. Rounded boss. Fabric 8. Pimply, finger-smeared surfaces.
- 2 P23. Ditch 833, fill 486. Oval boss aligned horizontally on (?)shoulder angle of shouldered bowl or jar. Fabric 3. Burnished.
- 3 P36. Ditch 978, fill 423. Oval boss. Fabric 10. Pimpled surface.

be sure. There are two rim types: rounded rims (P3 and P17, Figs. 35.2, 35.3), and slightly expanded rims (P64 and P59, Figs. 35.10, 35.4). Motifs employed include incised triangles (P50, Fig. 35.5), tooled hatching and horizontal lines (P7 and P22, Figs. 35.6, 35.7), furrowing (P57 and P62, Figs. 35.8, 35.9) and haematite coatings (P64, Fig. 35.10). Additionally, P24 (Fig. 35.11), which may be from a slightly shouldered bowl, has a line of small tool-impressed dots on its shoulder. Of these vessels, the most complete are P7, which is decorated above and below a rounded shoulder, and P62, a narrow-furrowed bowl.

When they occur in abundance as at Iwade, decorated wares tend to be associated with late post Deverel-Rimbury pottery traditions, but parallels for the Iwade bowls are spread through the 'undecorated', 'transitional' and 'decorated' groups outlined above. Early parallels for plain

rounded-rim bipartite bowls (P3 and P17) exist, for example, in the 'undecorated' assemblage from Runnymede, Area 2 (layer 5) (Longley 1980, 42: fig. 20.34; 48: fig. 26.162). Nevertheless, this type occurs in later post Deverel-Rimbury assemblages as well (eg Stanwell, Surrey: O'Connell 1990, 49, fig. 32.92) and, consequently, is a poor chronological indicator. Much the same is true of furrowed decoration. Although it occurs in 'undecorated' assemblages, such as that from Kingston Buci (Curwen and Hawkes 1931, 194: fig. 15), it reoccurs later (Needham 1995). The early parallels for the Iwade furrowed bowls are imprecise (furrowing on the vessel from Kingston Buci is more pronounced than that on either of the two the Iwade examples, P57 and P62). Other parallels for the Iwade bowls straddle both 'transitional' and 'decorated' post Deverel-Rimbury assemblages. Bowls with expanded or 'beaded' rims similar to P59 and P64 occur, for example, in assemblages from the Trundle (Curwen 1929, 57), Bishopstone (Hamilton 1977, 117: fig. 54.96), Lofts Farm (Brown 1988, 265: fig. 14.30), Monkton Court Farm (Macpherson-Grant 1994a, 266: fig. 10.39), Runnymede Bridge, Area 2 (Longley 1980, 59: fig. 37.421) and other sites. However, no Iwade bowl is exclusively characteristic of 'decorated' or later assemblages. Additionally, outside Kent, the rounded shoulder form of P7, like vessels from many other Kent assemblages classified as 'decorated' (eg Macpherson-Grant 1994a, 282-283: fig. 20), is better paralleled in 'undecorated' or 'transitional' assemblages (eg Queen Mary's Hospital, (Adkins and Needham 1985, 24: fig. 8.215). Overall, therefore, the Iwade bowls look 'transitional' rather than 'decorated'.

Other form and decoration types

At Iwade, other widely recurrent post Deverel-Rimbury types are consistent with an earlier rather than later dating of the assemblage. They include a burnished tool-impressed decorated (pointed stick) body sherd (P63, Fig. 36.1), a prominent, applied, fingertip-impressed cordon (P65, Fig. 36.2), and a heavily gritted base (P66, Fig. 36.3). Parallels for applied, fingertip-impressed cordons suggest an earlier 'undecorated' or 'transitional' grouping for them. Parallels for the tool-impressed shoulders suggest a 'transitional' attribution. Heavily gritted bases widely occur in 'undecorated', 'transitional' and 'decorated' assemblages. One of the pits from the cluster in Area B, in addition to containing decorated material, yielded a huge, slab-sided vessel with cabled rim (P61, Fig. 36.4). This vessel is not readily paralleled but is likely to be of a similar date on the basis of its rim decoration. Additionally, a coarse ware hemispherical bowl with an internally bevelled rim came from another pit in the cluster, which yielded a wholly

undecorated assemblage. This form is present throughout the post Deverel-Rimbury period, although it is more common in 'transitional' groups. Other decorated vessels are illustrated as Figs. 36.5 - 36.22.

Regional Affinities of the Iwade Post Deverel-Rimbury Pottery Types

Southeast traits

Traits belonging to many of the Iwade vessels can be paralleled on sites throughout the southeast region. Expanded rim shouldered bowl forms similar to P59 and P64, for example, have a wide distribution encompassing Kent, Essex, Surrey, Sussex, and further afield (see above). Likewise, all four forms of shouldered jars described above have been found in these counties. Precise parallels for the decoration on the Iwade shouldered bowls are fewer. The incised-hatched triangle (P50) is closely paralleled at Runnymede and Esher. Broad hatching and chevron motifs occur on a number of Kent sites, but decoration below the shoulder (eg P7) is unusual, occurring within the southeast only in Essex (eg Mucking South Rings: Jones and Bond 1980, 476: fig. 3.3). Essex also provides a very close parallel for one of the Iwade furrowed bowls (P62). Furrowed decoration also occurs on other Kent sites, in the Thames Valley and in Sussex. Several other vessels or decorative types present at Iwade have not hitherto been noted on Kent sites. For vessels similar to one of the bipartite bowls with rounded rims (P3), for example, it is necessary to look to Surrey and Sussex. Clearly, the pottery assemblages from Iwade and other Kent post Deverel-Rimbury sites are part of a broad regional tradition.

Local traits

Four vessel traits may be locally specific:

Square rims on hemispherical bowls. The rims of most post Deverel-Rimbury hemispherical bowls, including some Kent vessels (eg Kingston Down: Macpherson-Grant 1980b, 149: fig. 11.56), are rounded. P56, however, is squared (see Fine ware bowls above). At least four other Kent assemblages include this trait - Mill Hill, Deal (Champion 1980, 236: fig. 6.10), Monkton Court Farm (Macpherson-Grant 1994a, 276: fig. 11.46-49), and East Northdown, Margate (Smith 1987, 226: fig. 11.17).

Dotted decoration. Dotted shoulder decoration (P24) has so far only been recognized at Iwade.

A decorative tradition in Kent on vessel types, which elsewhere precedes 'decorated' traditions. Either there was an earlier

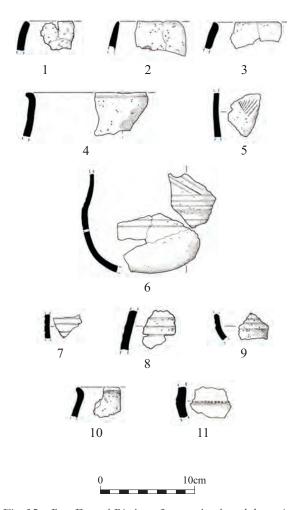


Fig. 35 Post Deverel-Rimbury fineware bowls and decorative motifs (scale 1:4)

Post Deverel-Rimbury fineware bowls and decorative motifs (Fig. 35)

- 1 P56. Pit 1198, fill 1197. Slightly convex upper shoulder and flat rim of bi-partite bowl or hemispherical bowl. Fabric 3. Burnished.
- 2 P3. Pit or hearth 116, fill 115. Straight upper shoulder of (?)bi-partite bowl with rounded rim and pre-firing hourglass perforation. Fabric 3. Burnished. cf Runnymede Bridge, area 2 (group 5) (Longley 1980, 42: fig. 20.34), Stanwell (O'Connell 1990, 49: fig. 32.92) and Petter's Sports Field, Egham (O'Connell 1986, 67: fig. 48.98).
- 3 P17. Pit 383, fill 381. Very slightly convex upper shoulder of bi-partite bowl with rounded and internally bevelled rim. Fabric 3. Burnished. cf Barham Downs, Kent (Macpherson-Grant 1980b, 142: fig. 6.24; 144: fig. 7.42), Selsey Bill (Seager Thomas 1998, 14: fig. 4. 15;

- 2001: fig. 3.5), Heathrow (Grimes and Close-Brooks 1993, 135: fig. 29.70), and Runnymede Bridge (Longley 1980; 48: fig. 26.162).
- 4 P59. Pit 1198, fill 1197. Straight upper shoulder of (?)large bi-partite bowl with flattened, externally expanded and internally bevelled rim. Fabric 8. Burnished.
- P50. Pit 1196, fill 1195. Slightly convex body sherd of with an incised, hatched triangle above or below a horizontal burnished line. Fabric 3. Burnished. cf Runnymede Bridge, area 2 (group 7) (Longley 1980, 58: fig.36.374), Esher (Burchell and Frere 1947).
- 6 P7. Pit 310, fill 311. Rounded body, rounded shoulder angle, and concave upper shoulder of bi-partite bowl decorated with three tooled horizontal lines and diagonal hatching above and two tooled horizontal lines below shoulder angle. Fabric 3. Burnished. cf Monkton Court and Highstead (phase 2) (Macpherson-Grant 1994a, 282: fig. 20), Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 24: fig. 215) and Runnymede Bridge, area 6 (Longley 1991, 181: fig. 78.28).
- 7 P22. Ditch 833, fill 486. Body sherd with three parallel, tooled lines similar to those of P7. Fabric 1. Burnished.
- 8 P57. Pit 1198, fill 1197. Body sherd of wide-furrowed bowl. Fabric 3. Burnished. cf Minnis Bay (Worsfold 1943, 38: fig. 8.4), Sturry and Mill Hill, Kent (Needham 1995, 164), Kingston Buci, West Sussex (Curwen and Hawkes 1931, 194: fig. 15), and Runnymede Bridge (area 6) (Longley 1991, 191: fig. 88.187; Needham and Spence 1996, 156: fig. 83.832).
- 9 P62. Pit 1212, fill 1211. Shoulder of narrow-furrowed bowl. Fabric 1. Burnished. cf Broomfield, Essex (Brown 1995, 9: fig: 7.19).
- 10 P64. Pit 1212, fill 1211. Externally expanded, rounded and internally bevelled rim and very slightly convex upper shoulder. Fabric 7. Burnished. Possible haematite coating. cf Minnis Bay (Worsfold 1943, 36: fig. 6) and Monkton Court, Kent (Macpherson-Grant 1994a, 266: fig. 10.39), Lofts Farm, Essex (Brown 1988, 265: fig. 14.30), Runnymede Bridge (Longley 1980, 59: fig. 37.421), Selsey Bill (Seager Thomas 2001, fig. 8.68), Stoke Clump (Cunliffe 1966, 110: fig. 1.1) and the Trundle, West Sussex (Curwen 1929, 57), and Bishopstone, East Sussex (Hamilton 1977, 117: fig. 54.96). Hematite coating: Minnis Bay (Middleton 1995, 207) and Monkton Court (Macpherson-Grant 1994a,
- 11 P24. Ditch 833, fill 486. Dot-impressed shoulder angle and slightly concave upper shoulder of (?)weakly shouldered bowl or jar. Fabric 3. Burnished.

flowering of linear decoration in Kent than elsewhere (see above), or, in terms of vessel morphology, local potting traditions were conservative.

'Rustication'. Although paralleled in a different form (overall fingertip impressions) at sites such as Petter's Sports Field (O'Connell 1986, 68: fig. 51), the adoption of 'rustication' appears to be a local phenomenon.

These characteristics may reflect Kent's peripheral position. Alternatively, they may reflect the county's proximity to the Continent. The latter is suggested by, firstly, the occurrence of possible sea-borne imports elsewhere in the county (eg Welling: Couldrey 1988, 45); secondly, an abundance of foreign parallels for 'rustication' (eg van Heeringen 1989); and, thirdly, a concentration of foreign pottery types such as assiettes tronconiques in Kent (eg Kingston Down and Highstead: Macpherson-Grant 1980b, 149: fig. 11.62; P Couldrey, pers comm.) and along the Sussex coast (Selsey and Shinewater Park: Seager Thomas 2001; Hamilton 2003).

Overall Dating of the Iwade Post Deverel-Rimbury **Assemblages**

Fourteen of the Iwade features yielded clear post Deverel-Rimbury feature assemblages. Five produced material that corresponds to the 'undecorated' group characterized above, seven material that corresponds to the 'transitional' group characterized above, and two which could relate to either. The relatively low weathering of these feature assemblages indicates that they were buried soon after they went out of use. Both the features, therefore, and the material they contain can be assigned broadly contemporary dates.

'Undecorated' assemblages

The evidence for an 'undecorated' phase at Iwade comprises several wholly undecorated post Deverel-Rimbury 'feature assemblages', the presence of several convex jars with rounded rims (rare in Kent 'transitional' and 'decorated' assemblages), and individual vessels (such as P36 and P35) best paralleled in 'undecorated' assemblages. The radiocarbon dates associated with analogous, 'undecorated' assemblages suggest that these straddle the beginning of the early first millennium BC. Broadly contemporary groups from Kent include that from Coldharbour Road, Gravesend, with a radiocarbon date of 1260-863 cal BC (2880±65BP, OxA-4719) (Barclay 1994, 389), and perhaps Highstead (period 1) (Macpherson-Grant 1994a, 280).

Transitional' asemblages

The presence of decoration on shouldered bowls and jars, together with the absence of later characteristics (eg external rim decoration, shoulder notches, and angular, tripartite vessels) defines the presence of a 'transitional' assemblage at Iwade. Other Kent assemblages in this 'transitional' tradition include sites such as Kingston Down and Monkton Court Farm. Radiocarbon dates associated with analogous, 'transitional' assemblages outside Kent suggest that they commence somewhere in the middle of the ninth century BC and continue at least into the following century. Locally, there is no supporting radiocarbon evidence.

Later forms

Finally, two sherds from a Late Iron Age feature correspond closely to types that immediately follow the post Deverel-Rimbury tradition from the county. Owing to the lack of radiocarbon dates associated with similar pottery, the dating of this material is uncertain but a date well into the Early Iron Age is suggested for it. Other Kent assemblages belonging to this group include Highstead (period 3) (Macpherson-Grant 1991, 42; P Couldrey, pers comm.), Ebbsfleet, Thanet (Macpherson-Grant 1992a, 290), Barham Downs (Macpherson-Grant 1980b) and the Whitfield-Eastry Bypass Early Iron Age site (Davey and Macpherson-Grant 1996, 68).

Conclusion

Site organization

The occurrence of Deverel-Rimbury, 'undecorated' and 'transitional' post Deverel-Rimbury pottery in the same area indicates a high degree of settlement continuity. The exact nature of the Middle Bronze Age (Deverel-Rimbury) occupation is uncertain. The good condition of the Late Bronze Age (post Deverel-Rimbury) material indicates proximate occupation, probably of a domestic nature. This post Deverel-Rimbury pottery encompasses a diverse range of vessel size and type and suggests the presence of a domestic settlement of a non-specialist nature. There is a small amount of ceramic evidence for the continued use of the site into the Early Iron Age period.

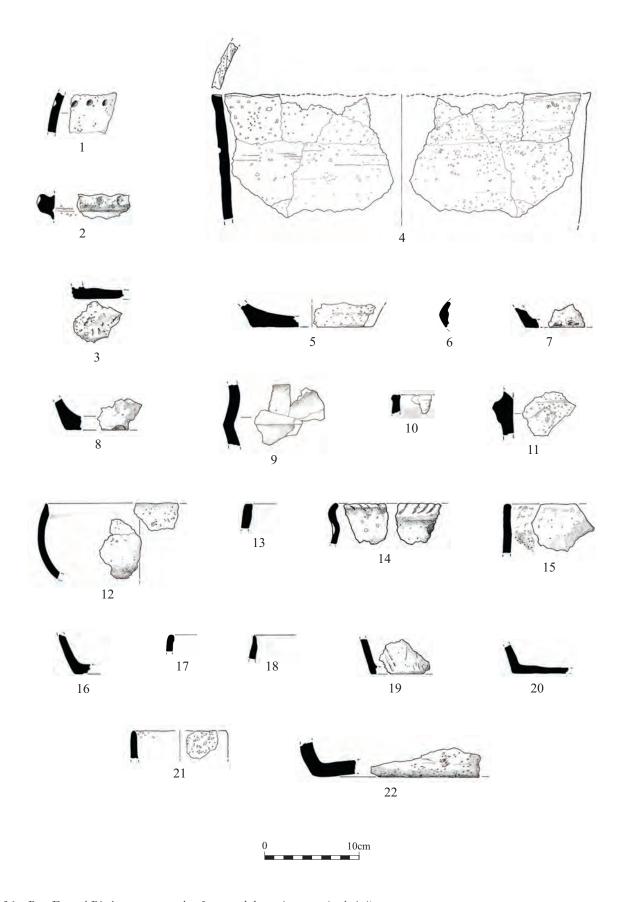


Fig. 36 Post Deverel-Rimbury pottery: other forms and decoration types (scale 1:4)

Other forms and decoration types of post Deverel-Rimbury pottery (Fig. 36)

- 1 P63. Pit 1212, fill 1211. Convex body sherd with a horizontal line of c. 4mm deep 'stabbed' impressions. Fabric 4. Burnished exterior; finger-smeared interior. cf Kingston Down, Kent (Macpherson-Grant 1980b, 148: fig. 10.52), Selsey (Seager Thomas 2001, fig. 3.10), Runnymede Bridge, area 2 (group 7) (Longley 1980, 58: fig. 36.390).
- 2 P65. Pit 1212, fill 1211. Pronounced applied cordon with fingertip impressions. Fabric 8. Original surfaces lost. cf Mill Hill, Deal (Champion 1980, 238: Fig. 6.4-6) and Welling (Couldrey 1988, 46: fig. 3.7), Kent, Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 20: fig. 4.7), Runnymede Bridge, area 6 (Longley 1991, 199: fig. 96.391), Mucking South Rings (Jones and Bond 1980, 476: fig. 3. 14), Selsey (Seager Thomas 1998, 14: fig. 4.3) and Yapton (Hamilton 1987, 60: fig. 5.13), West Sussex.
- 3 P66. Pit 1212, fill 1211. Heavily gritted base. Fabric 8. Pimpled internally. cf Monkton Court Farm, Kent (Macpherson-Grant 1994a, 253-4: plate I), Bosham, West Sussex (Hamilton 1997b, 83), Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, 29) and Runnymede Bridge (Longley 1980, 65).
- 4 P61. *Pit 1198, fill 1197*. Straight, upright or slightly inclined side of very large jar with finger-pinching below slightly externally expanded, cabled rim. Fabric 14. Pimpled, finger-smeared surfaces. cf Dosset Court, Deal (Parfitt 1985, 212: fig. 4.8).
- 5 P11. Pit 329, fill 328. Flat base with straight, slightly flaring sides. Fabric 8. Pimply surfaces.
- **6** P13. *Pit* 329, *fill* 328. Rounded to angular shoulder angle of shouldered bowl or jar. Fabric 10.
- 7 P15. Pit or post-hole 335, fill 334. Flat, slightly fingerpinched base with straight, slightly flaring sides. Fabric 4

- **8** P16. *Pit 343, fill 342*. Flat base with straight, slightly flaring sides. Fabric 7.
- **9** P28. *Ditch* 833, *fill* 837. Sharply carinated shoulder angle and slightly concave upper shoulder of shouldered jar. Fabric 6. Burnished.
- **10** P29. *Ditch* 833, *fill* 837. Flattened slightly expanded rim. Fabric 7.
- **11** P37. *Ditch* 987, *fill* 396. Large oval (?)boss. Fabric 14. Original surfaces lost.
- **12** P42. *Pit 1135, fill 1134*. Rounded shoulder and rounded, (?)slightly in-turned, internally bevelled rim of hemispherical bowl. Fabric 10. Pimpled surfaces.
- **13** P43. *Pit 1135, fill 1134.* Internally pinched, rounded to flattened rim. Fabric10. Pimpled surfaces.
- **14** P45. *Pit 1137, fill 1136*. Internally bevelled rim with toolimpressed decoration. Fabric 3. (?)Burnished.
- **15** P49. *Pit 1194*. Body of (?)upright or slightly flared straight-sided jar internally finger-pinched below a rounded rim. Fabric 10. Pimpled surfaces.
- **16** P51. *Pit 1196, fill 1195*. Flat base with flaring, slightly convex sides. Fabric 7. Pimpled surfaces.
- **17** P53. *Pit 1196, fill 1195*. Flattened to rounded rim finger-pinched below. Fabric 8. Pimpled surfaces.
- **18** P54. *Pit 1196, fill 1195*. Rounded rim, thin neck and upper shoulder of (?)shouldered jar. Fabric 10. Pimpled surfaces.
- **19** P55. *Pit 1196, fill 1195*. (?)Flat base with straight, slightly flaring sides. Fabric 10. (?)Grass-impressed.
- **20** P58. *Pit 1198, fill 1197*. Flat base with straight to concave, slightly flaring sides. Fabric 8. Original surfaces lost.
- 21 P19. Pit 383, fill 414. Rounded rim. Fabric 10. Pimpled surfaces.
- **22** P27. *Ditch* 833, *fill* 486. Flat base with flaring slightly concave sides. Fabric 14. Pimply, finger-smeared surfaces.

Regional implications of the Iwade pottery

The Iwade assemblage makes a significant contribution to regional studies of Kentish prehistoric pottery. Iwade notably increases the amount of 'undecorated' post Deverel-Rimbury pottery recognized from Kent. Macpherson-Grant (1994a, 280) states that, up to that time, 'no purely 'plain-ware' assemblages have been recognized.' The 'undecorated' assemblage from Iwade is, in this respect, exceptional. The poor representation of undecorated assemblages in Kent can be attributed to one or, more probably, a combination of three factors:

- There may have been a sudden increase in settlement density around the time pottery decoration first became popular
- There may have been an unrecognised early floruit in linear decorated pottery

 Sites such as Iwade suggest long-term settlement continuity, and a muddling of early, 'undecorated' assemblages with later 'transitional' or 'decorated' assemblages may have been consequent in the recovery and analysis of such assemblages.

Given the relative lack of evidence for Middle Bronze Age settlement from Kent generally, its presence at Iwade, and the unique evidence for early post Deverel-Rimbury activity there, the first of these options is possible. However, there is no clear reason why there might have been such an increase, and it is inconsistent with the evidence for the widespread deposition of contemporary, Ewart Park metalwork in the county. The second option is more likely. Not only is the morphology of Kent 'decorated' wares different from that of, for example, Sussex and Surrey, but also there is evidence that local potting traditions were subject to extra-regional

influence. It therefore may have been unusually innovative. Finally, at Iwade, there is evidence for settlement continuity. This has clear implications for the study of the later Bronze Age within the region.

MESOLITHIC, NEOLITHIC AND BRONZE AGE LITHIC MATERIAL

BARRY BISHOP

Mesolithic/Early Neolithic

Twenty-one struck flints were recovered from a tree-throw hollow (see Fig. 12). These comprised core trimming flakes, a core and core rejuvenation flake, several blades, a broken microlith and a micro-burin (Figs. 37.1, 37.2). The microlith consisted of a broken narrow blade scalene triangle of Later Mesolithic affinities. Similarities in the raw material suggest that many of these pieces were knapped from the same nodule with at least two of the blades refitting sequentially. The core, of a similar raw material as the blades, had been exhausted and rejuvenated into a small flake core.

With the exception of an obliquely truncated point, possibly representing a large microlith (Fig 38.1), no other diagnostically Mesolithic material was recovered from the site, although a small number of blades and blade cores and possibly a few implements such as a long-end scraper and the serrated flakes, all recovered from later features, may have belonged to this period (Figs. 38.2, 38.3, 38.4). However, with the exception of a few diagnostic implements, it is notoriously difficult to differentiate Mesolithic and Early Neolithic industries on technological or typological grounds, and the recovery of two leaf shaped arrowheads (Figs. 38.5, 38.6), most likely of Early-Middle Neolithic date (Saville 1990, 154), indicates that low-key intermittent activity at the site continued into this period.

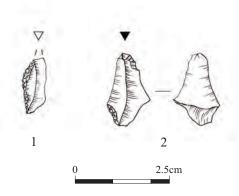


Fig. 37 Flintwork from the tree-throw hollow: 1. microlith 2. micro-burin (scale 1:1)

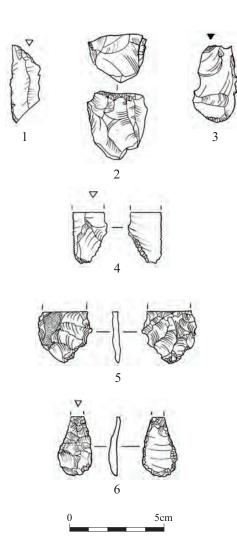


Fig. 38 Mesolithic/Early Neolithic flintwork: 1. obliquely truncated point 2. blade core 3. long-end scraper 4. serrated flake 5 - 6. leaf-shaped arrowheads (scale 1:2)



Mesolithic/Early Neolithic flintwork: flakes, blades, tools and cores

Later Neolithic/Early Bronze Age

Following the possibly earlier Neolithic activity as indicated by residual flintwork the next definite traces of occupation consist of two pits, both dated by Peterborough Ware to the Middle/Late Neolithic (see Fig. 13).

Pit [1137], produced an unusual assemblage of seven struck pieces consisting of a piercer, an edge-trimmed flake, a flake core that had been reused as a scraper, an end-scraper (Figs. 40.1, 40.2, 40.3, 40.4) and three unretouched narrow flakes. Edge damage on all three of the unretouched flakes suggests they may have been utilized as cutting implements. Conversely, only a single tool, an end scraper, was present out of eleven pieces from pit [1139] (Fig. 40.5). A few narrow flakes were present but most of the material consisted of small trimming flakes, broken flakes or irregular core reduction waste. This assemblage would appear to be largely debris discarded into the pit from core reduction activities.

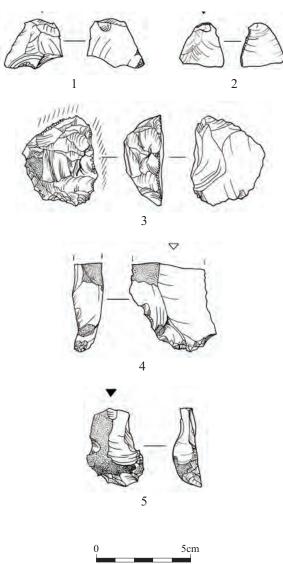


Fig. 40 Flintwork from the Neolithic pits. From pit [1137]: 1. piercer 2. edge-trimmed flake 3. core reused as a scraper 4. end scraper. From pit [1139]: 5. end-scraper (scale 1:2)

A proportion of the lithic material recovered from later features would be technologically and typologically compatible with a Later Neolithic/Early Bronze Age date, including a chisel type transverse arrowhead and a Sutton-b type barbed and tanged arrowhead (Green 1980) (Figs. 41.1, 41.2), and some other items, such as an almost circular end scraper (Fig. 41.3) may also belong to these periods. This may indicate more extensive occupation of the site during these periods than suggested by the number of sub-soil features identified, although the total numbers are low and most likely continue to reflect only short-term transient activity.

Middle and Late Bronze Age

Of the Middle Bronze Age features identified, only one context, the upper fill of well or shaft [1145], contained more than single undiagnostic flakes. This assemblage consisted of an unusual collection of material that clearly belonged to more than one period (see Figs. 38.5, 41.2-3, 42.4), and appeared to have represented a cache of antique or unusual items, some at least deposited long after they had been manufactured. As pottery evidence suggested that this feature, although originally constructed during the Middle Bronze Age, may not have been finally infilled and levelled until the Late Iron Age, this assemblage is discussed under

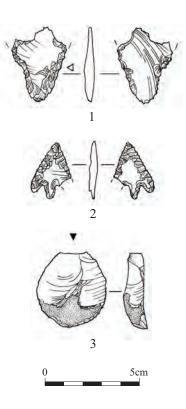


Fig. 41 Later Neolithic/Early Bronze Age flintwork 1. chisel type transverse arrowhead 2. barbed and tanged arrowhead 3. end scraper (scale 1:2)

Iron Age flintworking (see Chapter 4).

Altogether, 314 struck flints were recovered from Late Bronze Age features. Some of these pieces undoubtedly derived from earlier episodes of activity, although the greater part of the assemblage was technologically and typologically characteristic of industries dateable to the latter parts of the Bronze Age. Although it is difficult to distinguish between industries of the Middle and Late Bronze Age and some mixing may have occurred, the limited nature of the Middle Bronze Age occupation as well as the presence of refittable flakes and the identification of individual knapping episodes in secure association with both undecorated and transitional assemblages of post Deverel-Rimbury type pottery, demonstrates the continuation of a reasonably large scale of flintworking into the mid 9th century BC.

The raw material utilized consisted of locally available thermal chunks or rounded pebbles and cobbles of flint, with occasional reuse of earlier discarded material. It was of variable knapping quality; some was reasonable but much comprised coarse cherty flint and pieces prone to thermal fracture. The condition of the material was mostly good although some variations were evident; pieces that were recovered from the field-system and trackway ditches generally demonstrated greater edge nicking and abrasion than the pieces from some of the pits. Although differing quantities of residual material entering ditches and pits may partially be responsible, different depositional practices may also have been important.

The principle reduction strategy appeared to consist of an ad hoc and expedient approach to obtain serviceable edges, either from broad thick flakes or on the 'cores' themselves. Cores and core fragments were well represented, contributing 20% of the assemblage, which although a high figure should not be surprising given the usually short duration of the knapping sequence. They were variable in size, ranging from nearly 500g to less than 12g, with an average weight of 84g. A few extensively reduced cores, with multiple randomly orientated striking platforms, were present, but most characteristic were irregularly worked examples with only short sequences of flakes removed from any platform. They often showed evidence of having been later used as chopping or pounding type tools or as crude 'picks' (Fig. 42.1- 42.4). Several had numerous incipient cones of percussion around the platform demonstrating futile attempts to further reduce the core, and although no serious attempts were made at rejuvenating the core they were sometimes re-orientated and new platforms sought (Fig 41.5). Platforms frequently used thermal or cortical surfaces and there was little evidence of any attempts to prepare the platform, although some of the cores had trimmed or edge damaged platform edges, which may represent evidence of

utilization. These had usually been minimally worked to produce steep 'scraper' or denticulated edges, sometimes by the removal of flakes 'keel-style', and often provided with finer retouch along the working edge (Fig. 43). The flakes removed, although large for retouch, were often too small to have had any practical use, and it is assumed that the blanks were knapped primarily with the intention of producing various types of heavy duty cutting, chopping or scraping tools (cf Herne 1991).

The flakes produced were mostly thick and squat, and with a few exceptions were small, rarely exceeding 50mm maximum dimension. They were characterized by frequent pronounced bulbs of percussion and hinge fractures, their dorsal surfaces often retaining significant cortex with few previous flake scars present. Secondarily worked pieces represented 8% of the total although few formal tool types were present. The retouch tended to be rather coarse and could be located anywhere on the flake. Irregular, steeply retouched pieces, often with denticulated or scraping type edges, dominated (Fig. 44). A few finely worked scrapers were also present which, along with pieces such as edge trimmed and blunted backed flakes, may have originated from earlier industries. It has been noted that denticulated or 'ragged' edges on scrapers would have been detrimental to hide working, but a possible interpretation as flax strippers has been suggested for similar examples found at Reading Business Park (Brown 1992, 92). Many of the unretouched flakes demonstrated edge damage consistent with use as lighter cutting tools although the possibility of accidental or post-depositional damage precluded confident identification.

The characteristics of this industry can be paralleled with those of other assemblages from southern Britain dating to between the Middle Bronze Age and Iron Age, including sites such as Coldharbour Road, Gravesend (Bradley 1994) and East Northdown, Margate (Smith 1987), both in North Kent, as well as farther afield, such as Reading Business Park (Brown 1992), Grimes Graves (Herne 1991) and the numerous sites reviewed by Young and Humphrey (1999).

Despite the apparent low level of technological skill employed the strategies followed do not necessarily mean that the process was inefficient or unimportant, rather, as with the Middle Bronze Age industry from Grimes Graves, such a strategy may be regarded as "a highly efficient enterprise, making full use of the available resources to minimize effort and maximize the desired output...geared to immediate satisfaction rather than delayed expectation" (Herne 1991, 35).

Two basic discard practices were evident, as demonstrated by the variability in condition and the homogeneity of the assemblages from different contexts. Most of the Late Bronze Age deposits contained none or only a few pieces, the condition of which suggesting that by

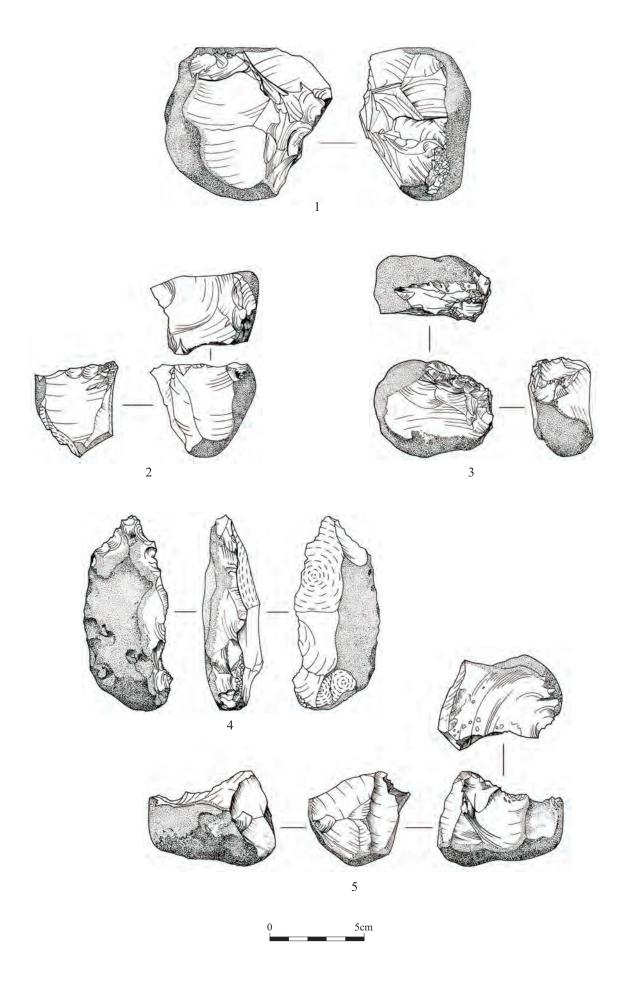


Fig. 42 Middle - Late Bronze Age cores (scale 1:2)

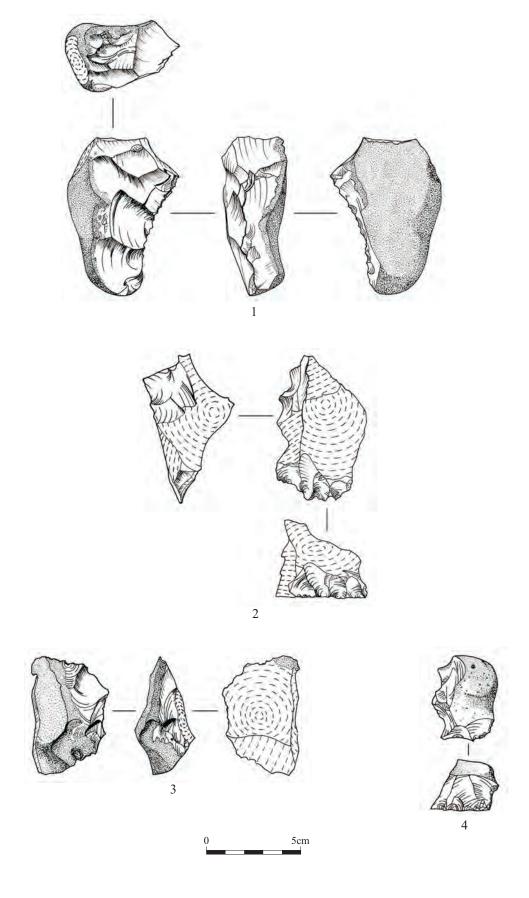


Fig. 43 Middle - Late Bronze Age core-tools (scale 1:2)

and large the lithic material had been middened or at least had been lying around for some time prior to gradual incorporation into open features, and these probably represented general background rubbish. A few features produced higher quantities and, as this material was generally sharp and unabraded, may indicate that in some circumstances the debris from knapping was collected soon after the event and purposefully deposited directly into the features. Pit [310] contained 21 struck pieces, including a single crude scraper and four minimally reduced pebble cores; although some pieces may have originated from the same nodule, it was clear that several must have been used to produce the assemblage. Pit [193] produced 23 pieces, most of which consisted of primary flakes and knapping debris with many of the pieces appearing to have come from the same nodule. A crude scraper and an edge-trimmed flake were also recovered. Pit [951] produced smaller quantities, consisting of eight flakes and three core fragments, of which three of the flakes sequentially refitted to one of the cores

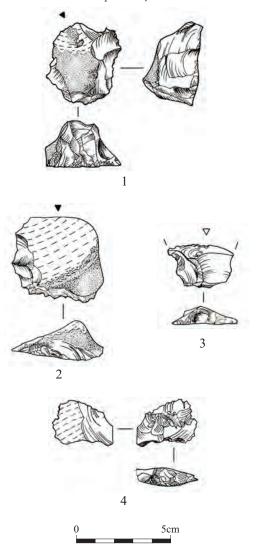


Fig. 44 Middle - Late Bronze Age scrapers/denticulates (scale

(Fig. 45), and other flakes were likely also to have come from a single core. Again, this pit would appear to have been the receptacle for debris from specific knapping episodes. Similarly, pit [162] produced twenty struck pieces, including a crude scraper and two flakes showing convincing evidence of having been utilized, one as a cutting implement and one as a piercer. Although this assemblage was more variable than those above, it still appeared to be mostly the produce from a limited number of cores. Posthole [321] produced an assemblage of twelve struck pieces, mostly consisting of small flakes and flake fragments but including four pieces that appeared to have originated from the same core, although refitting was unproductive. In addition, a thick recorticated flake that had subsequently been reworked as a core or a core-scraper was also present. The quantities and condition of the material from this feature would suggest that either core reduction occurred close by or that it was used as a receptacle for the disposal of core reduction waste. The material from these features possibly represented immediate and opportunistic reduction events, with tools and usable pieces produced, utilized and discarded within a limited period. Although some of these features provide evidence for individual knapping episodes, only a small proportion of the total waste from even a short knapping episode would appear to be present.

These patterns may result merely from fortuitous disposal of rubbish, although some form of special deposition may also be considered. Deposits of complete pots or large freshly broken sherds are often considered to represent special or 'placed' deposits (eg Guttmann and Last 2000, 355), and three of the pits that contained higher than average quantities of worked flint, [310], [193] and [951], also contained substantially complete pottery vessels. Special

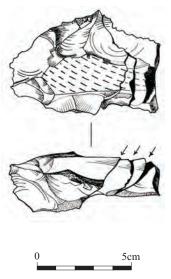


Fig. 45 Refitting core and flakes from pit [951] (scale 1:2)

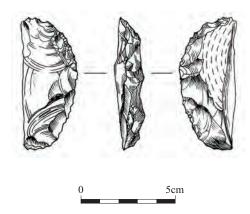


Fig. 46 Flint axe fragment from pit [1117] (scale 1:2)

deposits may include items such as food, animals or even human remains, but often consisted of 'rubbish' and everyday material items (eg Needham 1993; Brück 1995; Needham and Spence 1997). Flintworking from this period has rarely been included in discussions of these kinds of activity, although the knapping of flint in a ceremonial ring-ditch at Bourne Bridge in Cambridgeshire has been interpreted as having had a special or ritual significance (Pollard 1998). One other possible incidence of unusual deposition may include the fragment from a flaked axe (Fig. 46) recovered from pit [1117] in the Area B cluster, which also contained deliberately placed pottery. The axe fragment is rather abraded and almost certainly pre-dates the pottery with which it was recovered. Residual deposition cannot be ruled out although it is possible that it was recognized as being an unusual or special item, and valued and deposited accordingly.

THE PALSTAVE

MARTYN BARBER

Condition

The object appears near complete (Fig. 47), although postdepositional processes have resulted in a heavily corroded surface over the entire palstave, considerably obscuring any relevant surface detail (see below). In addition, there has been some splitting along the blade sides, along the blade edge itself, and along the top of the stops and septum flanges. The palstave is a bright green colour over most of its surface.

Description

The palstave is a fairly constant width from butt to stop, although there is a faint broadening just before the stop is reached. There is a slight narrowing just below the stop before the sides flare out towards the blade end. The sides of the blade themselves diverge and are fairly straight for much of their length, the concavity increasing notably towards the

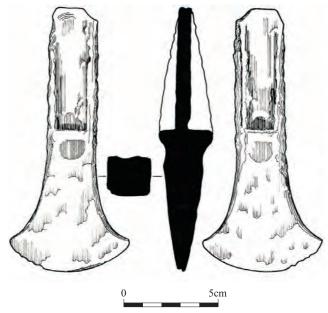


Fig. 47 Middle Bronze Age palstave (scale 1:2)

cutting edge itself, this greater concavity probably a result of the post-casting working of the blade. There is a notable asymmetry probably due to working of the blade, though it is possible that an element of asymmetry was present from the start. The cutting edge itself seems to have been intact on deposition but the condition of the palstave makes it impossible to be totally certain. At the other end, one corner of the otherwise straight butt is absent. It is impossible to be certain, given the condition of the object, but the absence is more likely to be of pre-depositional rather than postdepositional origin, perhaps representing a casting fault.

Table 2 Principal measurements of the palstave

Dimension	Measurement
Maximum length	139mm
Maximum blade width	59mm
Maximum butt width	25mm
Maximum stop width	25mm
Maximum butt thickness	7mm
Maximum stop thickness	28mm
Weight	359g

In profile, the stop can be seen to rise a little above the blade and the flanges. The flanges start close to the butt itself, and appear to rise in a more or less straight line, reaching their maximum height just before reaching the stop, at which point they level off. The flanges turn almost 90 degrees into the stop, which as noted is a little higher on both faces than the flanges. A deep 'blowhole', a not uncommon casting fault, exists under the stop on one side only.

Below the stop on both sides is a faint trace of 'shield pattern' decoration, represented by a vaguely shield-shaped depression bordered by a slightly raised rib which continues to the stop but does not appear to represent a direct

continuation of the septum flanges. The maximum length of the 'shield' is a. 16mm. Given the surface condition, the depression is certain while the surrounding rib is better described as 'probable'. Even less certain is the possible presence of a median rib descending the blade face for perhaps 20-30mm from the base of the shield towards the blade on one side only.

Evidence of post-casting working is severely limited by the surface condition of the palstave. As already noted, the asymmetric expansion of the blade indicates some hammering and perhaps sharpening occurred. Along the sides of the palstave, traces of a casting seam appear as straight, slightly raised ridge or rib on both sides, suggesting that they had been tidied up considerably but not completely removed.

Classification

As the dominant axe form of the British Middle Bronze Age, palstaves have been subjected to considerable typological scrutiny over the years. For southern England, the most recent classification scheme is that published by Rowlands (1976). Also of relevance is Schmidt and Burgess' (1981) consideration of Bronze Age axeheads from Northern Britain, which for palstaves followed a different typological route to that taken by Rowlands, resulting in a degree of incompatibility. The fact that two such major studies could produce contrasting classifications is not merely due their very different geographical foci, but also reflects the considerable variability evident among palstave forms. This variability, coupled with a lack of independent chronological control over the palstave sequence, means that assigning any given object to a particular 'type' and, consequently, a date is not as straightforward a process as is sometimes presumed.

It is impossible to satisfactorily place the Iwade palstave among any of the 'types' identified by Schmidt and Burgess (1981), though the features it possesses are, individually and in various combinations, far from unusual. Unsurprisingly, it is easier to find a place for the Iwade palstave within Rowlands' (1976) classification, though even here there are problems. It has clear affinities with his Class 1 group 3. This Class contains what he refers to as 'developed shield pattern palstaves', ie palstaves bearing shield pattern decoration (which itself can take many forms), and whose flanges do not continue beyond the stop ridge. Rowlands then subdivided this class according to overall length, group 3 comprising those between 12cm and 16cm. However, the Iwade palstave also shares elements with Rowlands' (1976, 32-33) Class 3 (his 'Birchington' type) group 2 palstaves, the sub-groups in this case being determined not by body length but by blade width. Rowlands suggests that the narrower bladed group 2 palstaves should have a typical blade width between 50 and 60mm.

Inconsistency among the criteria used to define classes (and groups) is a feature of both Rowlands' and Schmidt and Burgess' schemes, and indeed many others. The variation evident among palstave forms has contributed to differing opinions as to what the important features are, though one also senses some underlying uncertainty as to the overall purpose of the classification. Often there seems to be a presumption from the start that Bronze Age metalwork is inherently capable of subdivision into distinctive 'types', whereas in fact clear dividing lines are few and far between.

As Rowlands' corpus demonstrates, many palstaves from southern England resemble the Iwade palstave in one or more respects, and comparisons with the available Kent material confirms that the Iwade object features nothing out of the ordinary for the region, but without clearly matching any of the previously recorded axeheads. The object it most closely resembles is a palstave in Maidstone Museum (acc. reg. 1993.64) provenanced to Murston, near Sittingbourne, though this provenance is far from certain. If correct, however, then the likely findspot is less than 4km southeast of the Iwade site.

Three palstaves were reported to have been discovered while digging brickearth at Murston in March 1864, along with some 'bones of large dimensions'. Shortly after discovery they were reported to be in the possession of a Mr Smeed of Gore Court, Sittingbourne (Hewitt 1864; Burgess 1976, 89). The palstave in Maidstone Museum was presented to the museum at an unknown date by a Mr George Smeed and is said to be from Murston, though there appears to be no documentary confirmation of this. It is slightly shorter and narrower than the Iwade example, but is broadly similar in form and relative proportions. Interestingly, its decoration comprises a shallow shield-shaped depression surrounded by a faint raised rib and, on one side, a faint suggestion of a raised median rib or ridge. Moreover, it is also missing one corner of the butt, this being a far from uncommon feature among palstaves from the region, reinforcing the suggestion that this is a by-product of the casting process.

Rowlands (1976, 313: no. 631) places this Murston palstave in his Class 3 group 1, something which appears to stem from a mismeasurement of the blade width. At 59mm, it belongs in his group 2 with the Iwade example, though both palstaves demonstrate the difficulties of using such a feature to define different groups or classes, Rowlands did not distinguish between as-cast palstaves and those whose blades had been subsequently worked, a process that almost always results in an expansion of the blade.

Typologically then, the Iwade palstave presents some

difficulties but is far from alone in this. Nonetheless, the range of features present, and the schemes of both Rowlands (1976) and Schmidt and Burgess (1981) suggest that it probably belongs somewhere in the Taunton phase of metalworking, currently dated to c. 1400-1275BC (Needham et al. 1998, 82), though a slightly earlier date, in the latter stages of the Acton Park phase (Acton Park 2 - c. 1500-1400BC; ibid.) is not completely out of the question. More precise dating is not possible, as few radiocarbon dates have as yet been obtained on organic material in direct association with Bronze Age metalwork. Consequently it is difficult to refine the likely date of manufacture with reference to 'developed' features, such as the absence of flanges along the sides of the blade, or to the absence of a side-loop, often regarded as an indicator of a likely date later rather than earlier in the sequence of palstave development.

LATE BRONZE AGE STONE OBJECTS

IAN RIDDLER AND ALAN VINCE

Eight fragments of probable quernstones were recovered from Late Bronze Age features, seven cut from a finegrained, grey, ferruginous sandstone and the remainder of sandstone from the Lower Greensand. A thin-section of the grey sandstone has been prepared by Paul Hands of the Dept of Earth Sciences, University of Birmingham. Alan Vince notes that in thin-section the rock was revealed to be a chert, formed by the replacement of a bioclastic limestone by silica. Rounded bivalve shell fragments, rounded brown amorphous grains and fragments of echinoid shell, all up to 2mm long were identified together with a moderate quantity of round vesicules. The rock does not appear to be a typical

Lower Cretaceous chert and contains no detrital quartz grains. Its origin is therefore uncertain at present.

The identification of the smaller fragments as pieces of saddle querns rely in part on a comparison with the larger example recovered from gully [831]. Saddle querns of this type, formed from oval or sub-oval blocks of sandstone, are commonly found in deposits within south eastern England, although there have been relatively few discoveries in Kent. Perhaps the most important comparable group comes from a site at Hayes Common in West Kent (Philp 1973, 44-45 and fig 19, 147–150). There, however, the quern fragments were made from carstone, a stone type that does not occur at Iwade before the Late Iron Age. However, similar fragments of saddle quern have been found recently in excavations by Pre-Construct Archaeology near Ashford in Kent and from excavations by the Canterbury Archaeological Trust near Borstal Hill, Whitstable. On current evidence, it is likely that this stone type was local to Kent and was used for saddle guerns during the Late Bronze Age and the earlier part of the Iron Age.

The distribution of saddle querns in relation to structures is of interest. At Itford Hill in Sussex, for example, the quern fragments were confined to a single food-preparation structure in one phase and to two similar structures in a later phase (Drewett et al. 1988, 107 and fig 4.7). Hill has drawn attention to the structured deposition of objects, including querns, during the Iron Age in Wessex (Hill 1995, 47–48, 55, 65, 88 and 108). Similar conclusions could perhaps be drawn for Late Bronze Age material as well. The querns here were recovered from the pond [415] and two pits [951] and [1135] both of which contained substantially complete pottery vessels. The more complete lower stone (Fig. 48) was recovered from gully [831] to the north of the trackway.

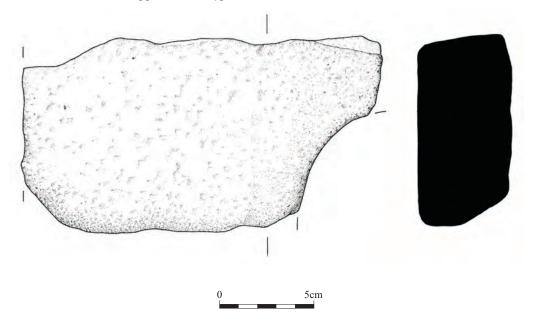


Fig. 48 Late Bronze Age quernstone (scale 1:2)

Saddle querns occur essentially in earlier prehistoric contexts and are thought to have been replaced during the early Iron Age by rotary querns (Curwen 1937). Evidence from both Danebury and Balksbury suggests, however, that they continued in use for a longer period of time, well into the Middle Iron Age (Cunliffe 1984, 418; Buckley 1995, 42). Comparison with the Balksbury sample suggests that the more complete lower stone from gully [832] conforms to Buckley's smaller type, which had dimensions equating to 300mm x 180mm x 80mm (Buckley 1995, 42). It is broken across the middle, providing dimensions of >100mm x 195mm x 55mm and includes a smooth, lightly concave upper surface.

The small fragment of Lower Greensand may have been used originally as a quern but only a small piece survived, devoid of any traces of working surfaces.

FUNERARY ACTIVITY

The Cremations

NATASHA DODWELL

All of the bone was recovered and examined using osteological evaluation methods of Bass (1992) and Steele and Bramblett (1988). Shallow pits [1151] and [2014] contained 137g and 525g respectively of white/buff coloured cremated bone fragments. Among them were identifiable fragments of human, adult-sized skull, limb shafts and phalanges. Rib fragments and a single tooth (1st mandibular premolar) were also identified from [2014]. Although the largest fragment from both pits was 35mm, the majority were only c. 10mm and this, together with the small quantity of bone recovered, prohibit closer aging or sexing of the individuals. Although the fragment size from these two cremations is small, it falls within the normal ranges observed and there is nothing to suggest deliberate fragmentation. The fills of both features contained brown/black sandy silt as well as cremated bone and it is therefore assumed that the bone was evenly mixed with the pyre material/debris. When no discernible layering or ordered deposition is observed, McKinley (1997, 57, 71) has suggested that the deposits might better be classified as 'pyre/cremation related features' rather than 'cremation



Fig. 49 Cremated remains from [2014]

burials'. The quantity of bone recovered from these cremations is substantially less than that expected from an adult cremation (McKinley 1993). Whilst this may in part be the result of truncation it is probable that only a percentage of the burnt body was collected from the pyre or that this material represents pyre debris rather than true burial.

Radiocarbon Dating of the Cremations

NICK BRANCH

Three samples were submitted for radiocarbon dating to Beta Analytic, Florida, USA. Unfortunately, two of the samples were reported 'void' due to the absence of organic carbon (sample RHUL1) and the paucity of organic carbon (sample RHUL2). The result of sample RHUL3 is reported below. The radiocarbon date was calibrated to the INTCAL '98 curve (Stuiver et al. 1998) using OXCAL v 3.5 (Bronk Ramsey 1995 and 2001).

The result indicates that the material is clearly Middle to Late Holocene in age, and probably associated with the other evidence of Middle to Late Bronze Age activity recorded at the site.

Context	1150
Sample	224 (RHUL3)
Type of analysis	AMS
Laboratory Code	Beta-177108
δ 13C/12C ratio	-24.4 ‰
Uncalibrated radiocarbon date	2960 ±40 BP
Calibrated date; 2 sigma:	3250 to 2980 cal BP
	(1300 to 1030 cal BC)

Discussion of the Earlier Prehistoric Periods

The period from the Mesolithic to the Middle Bronze Age was represented by only a few features, although residual flintwork suggests the site may have been repeatedly visited, albeit sporadically.

The earliest evidence of human activity at the site consisted of a quantity of flintwork recovered from a pit, which was interpreted as a naturally formed hollow created by a fallen tree. The flintwork could be dated to the Later Mesolithic and suggested that the hollow was used, perhaps as a temporary shelter, for the manufacture and repair of microlithic equipment by transient hunter-gatherers. Similarly dated features containing flintwork have been recorded from across Southern Britain, although there is little consensus as to their precise nature and role. Treethrow hollows containing a far more extensive but otherwise similar lithic industry were recorded at Beddington (Bagwell et al. 2001) in the London region. It is thought that these naturally created hollows may have fortuitously exposed raw materials in the underlying sub-soils, which were subsequently exploited by Mesolithic populations. At Farnham in Surrey pits containing substantial quantities of Mesolithic flintwork were originally interpreted as 'pit dwellings', a suggestion substantiated by the presence of

hearths and structural elements indicating they may have been 'inhabited' as shelters, although it is also likely that they may have acted as quarries, providing raw materials used for flint knapping (Clarke and Rankine 1939). Other possible tree-throw hollows containing Mesolithic or Early Neolithic flintwork have been recorded at Coldharbour Road, Gravesend (Mudd 1994), Selmeston in Sussex (Clark 1934), and Weston Wood in Surrey (Machin 1976). It has been suggested (Evans et al. 1999) that fallen trees may have served as important settlement foci and landscape markers in the thickly wooded environments of the Early Neolithic, and this could equally apply to the Mesolithic.

A similar pattern of sporadic and temporary visiting of the site continued into the Early Neolithic, as indicated by the recovery of leaf-shaped arrowheads from later features. By the Middle Neolithic there is some evidence that the site was becoming a focus for more overtly ceremonial activity. Two pits containing the remains of substantially complete Peterborough Ware vessels were present, the contemporaneity of their filling indicated by some sherds cross-fitting between the pits. Struck flint assemblages were also recovered from the pits; in one of the pits the struck assemblage was dominated by retouched pieces, possibly representing an individual 'toolkit', while the other pit contained mainly knapping waste. Pits with apparently highly structured fills are a common characteristic of many Neolithic and Bronze Age sites, often representing the sole

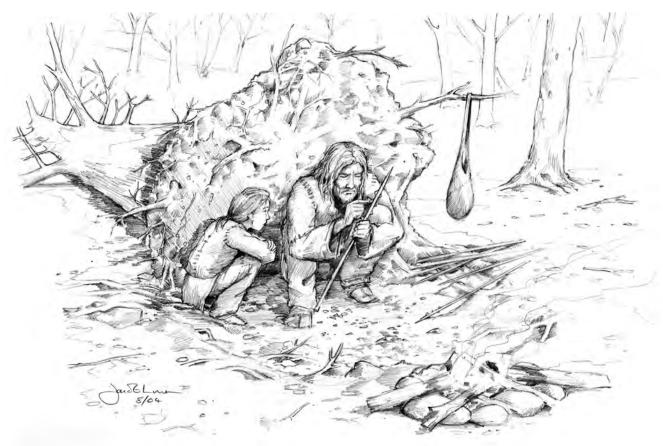


Fig. 50 Reconstruction of Mesolithic tree - throw scene, by Jake Lunt

surviving evidence for what may have been occupation sites. Their contents are often regarded to have been carefully placed and imbued with meaning, and it is frequently argued that they represent the marking out of culturally or topographically significant places in a ceremonial or symbolic manner (eg Thomas 1999).

The recovery of transverse and barbed and tanged arrowheads testifies to continued visiting of the site during the Later Neolithic and Early Bronze Age, although other than the two pits containing Peterborough Ware, no further structural evidence for occupation during these periods was forthcoming. It would be unlikely that any evidence of insubstantial temporary structures would have survived, and settlement sites of the Neolithic and Early Bronze Age are often only recognized from surface scatters of flintwork and, more rarely, pottery (Brück 1999a; Pollard 1999). The residual flintwork recovered during the excavations here may suggest that occupation during these periods was perhaps a little more intensive than indicated by the two pits, although it should be noted that very little residual pottery was identified, and any occupation would be likely to have been limited.

During the Middle and Late Bronze Age evidence for a more 'settled' way of life increases. The dating of the pottery from these periods would suggest a degree of continuity in activity from around the middle of the second millennium BC to the end of the Bronze Age/beginning of the Iron Age, around 600BC. The differentiation between the Middle and Late Bronze periods is based exclusively on the respective use of Deverel-Rimbury and post Deverel-Rimbury pottery types. Due to difficulties in precisely dating these types, the paucity of stratigraphic associations and the likelihood that a proportion of the pottery would have been residually deposited, the exact relationship between the two periods is uncertain. However, only a few pits, a posthole and a shaft or well contained exclusively Deverel-Rimbury pottery, whilst the field-system, trackway and many other features contained post Deverel-Rimbury pottery, suggesting that these elements had not been established until late in the second millennium BC at the earliest.

Unlike some parts of southern Britain, where complex agricultural landscapes characterized by settlements set within extensive field-systems were established during the Middle Bronze Age, there were no indications of such systems at Iwade until the Late Bronze Age and no actual settlement foci were identified for either period. However close by at Kemsley Fields and Kemsley North important evidence for an apparently very extensive Middle and Late Bronze Age settlement associated with a series of ditched enclosures and linear earthworks, possibly representing fieldsystems, has been recently revealed (Willson 2001; T Allen, pers comm.). Instead, during the Middle Bronze Age the site

appears to resume as a focus for ceremonially orientated activity, most explicitly demonstrated by the identification of two cremation burials, one of which was radiocarbon dated to c. 1300–1030 cal BC. In addition to the cremations, five Middle Bronze Age features were identified, spread sparsely across the site. Three of these, two pits and a deep well or shaft, contained near complete vessels (eg Figs. 51, 52), whilst a further pit contained relatively high quantities of freshly broken pottery sherds. Little evidence of actual settlement was recognized, and rather than simple rubbish disposal, the deposition of near complete pots may again represent more symbolically orientated activity, such as the commemoration of chronologically or spatially significant aspects of the occupation (Needham and Spence 1997; Brück 1999b; Brück 1999c). The deposition of a near complete vessel in the possible well is especially of interest, in that such features would have been a vital part of the pastoralist's annual cycle and were often embellished by symbolically charged items deposited within them, such as metalwork, quernstones, curated artefacts, animal and human remains, and 'token' cremations (Yates 2004).

An unusual feature of these deposits was that they appeared to have taken place away from the focus of actual settlement, as it is argued that in most cases such practices took place within the domestic sphere (eg Brück 1995; 1999b). This bias may at least in part be due to the nature of archaeological fieldwork, which naturally focuses on actual settlement sites. Nevertheless, if Iwade was part of the agricultural cycle, as suggested by the presence of the possible well, it may still have been a significant location, perhaps the last 'resting place' while going to and from the marshes, and accordingly embellished with added meaning as an important component of the seasonal 'rounds'. Other evidence of unusual deposition occurring away from settlement sites has been forthcoming, such as at Hillborough, near Reculver, where a number of complete Middle and Late Bronze Age pots were deposited within a group of otherwise isolated pits and ditches, which also may have marked a seasonally visited temporary stopping place (Bishop forthcoming).

The small quantity of human remains present in the Iwade cremations would suggest that they represented symbolic depositions, where the act and location of the burial may have carried more meaning than simply providing a resting place for the deceased. Brück (1995) has argued that the relative paucity of evidence for funereal activity during the latter parts of the second millennium BC suggests excarnation had become increasingly important. This would allow for the repeated handling, use and exchange of body parts, which may have been utilized in ritual practices. Cremated remains may also have been used in a similar manner, as it would appear that only 'token' parts



Fig. 51 Middle Bronze Age pot from pit [101]



Fig. 52 Middle Bronze Age pot from pit [1119]

of the cremated remains were selected and deposited here, and it is possible that they acted as a kind of 'currency' when negotiating issues such as status, inheritance, tenure etc., by appealing to ancestral precedence and a past social order.

The two cremations were both found in the very eastern part of the excavations, and rather than representing an obvious cemetery, their placing suggests that they were being used to make specific statements about the land, possibly reinforcing territorial claims, defining zones within the landscape or ensuring the fertility of the land. In this specific context, there is a possibility that they were used to define the area of ceremonial activity represented by the deposits of pottery, or possibly certain significant points in the emerging agricultural landscape to the west (see below). Across the estuary at North Shoebury in Essex two Middle Bronze Age cremations were found on the periphery of the settlement (Wymer and Brown 1995, 152), whilst at South Hornchurch, in the London Borough of Havering, similar 'token' cremations to those from Iwade were interpreted as

representing ritual acts, which preceded and provided a spatial context for the subsequent Late Bronze Age agricultural landscape established in the area (Guttmann and Last 2000). At South Hornchurch there were also a number of deposits containing quantities of large and freshly broken pottery sherds, which it was suggested may have represented deliberately broken (killed) vessels analogous to the 'token' cremations and which were also frequently used to signify boundary contexts (ibid., 355). At Shrubsoles Hill on the Isle of Sheppey numerous cremations were recorded focussing on an Early Bronze Age ring-ditch. Many of these were also 'token' cremations, and were interpreted as demonstrating concerns with establishing 'lineage' or 'dynastic' continuity and ancestral legitimation to claims to the land. Such concerns may also be evidenced by the construction of a large boundary ditch during the Middle Bronze Age and a subsequent enclosure, perhaps used as a field during the Late Bronze Age. A complete Middle Bronze Age vessel was also recovered, found deposited in a pit located close to the area characterized by the cremations. Here it was suggested that the vessel might relate to the disposal of materials used in the funerary rites, but not considered suitable for burial with human remains (Coles et al. 2003, 13).

At Iwade, although no prior attempts at land division were identified, by the Late Bronze Age the site appeared to have undergone a dramatic transformation, with the imposition of fields and a trackway, dividing and visibly marking out the land. Again, no evidence was found for actual settlement, although the nature of the features and the good condition of the associated pottery do indicate that those responsible for the new layout were living close by. The field-system was based on a northeast-southwest alignment, approximately following the contours of the site. However, similar alignments are frequently repeated in other Late Bronze Age field-systems irrespective of the local topography, indicating that the layout here may have also involved a degree of conformity above that of purely practical considerations, possibly involving some cosmological or other principles.

The economic basis of the agricultural system is difficult to elucidate, although the presence of fields, ponds, pits, a trackway and fencelines suggest it was associated with the movement and control of livestock. The animal bone recovered from this phase was dominated by cattle and sheep/goat, with only a single pig bone recovered. It has been suggested that in the lower Thames Valley similar layouts of fields and trackways, such as those recorded at South Hornchurch (Guttmann and Last 2000) and at Coldharbour Lane, Gravesend (Mudd 1994), were geared towards stock management and the seasonal movement of animals from high to low ground. The layout of the fieldsystem at South Hornchurch Phase 2 is particularly

reminiscent of that at Iwade, consisting of a long droveway connecting a series of rectilinear field plots (Guttmann and Last 2000, fig. 7), and both share a striking resemblance to the Late Bronze Age/Early Iron Age trackway and fieldsystem recorded at North Shoebury (Wymer and Brown 1995, fig. 22). At South Hornchurch, it was suggested that the fields may have been used for crops, although it was argued that during the fallow period they could have been used for corralling stock, with the animals providing valuable manure for the next season of crops.

The kinds of unusual deposition seen at the site during the Neolithic and Middle Bronze Age continue into the Late Bronze Age. Although evidently geared towards practical economic production, the underlying rationale to agricultural production and its associated field-system may have been embedded in a less prosaic framework. The lives of the farmers would have been dependant upon and governed by the changing seasons and the annual agricultural cycle, which would have come to define their place in the world and their understanding of it. Fundamental aspects to the success of this lifestyle, the very fabric of the agricultural landscape, including the fields, trackways, watering holes etc, would have been imbued with meaning and embellished by actions that we now term ritual (Bradley 2003; Williams 2003; Yates 2004).

As well as providing the basis for more explicit agricultural production, the replacement of Neolithic and earlier Bronze Age landscapes dominated by monuments with a landscape of fields, trackways and domestic structures also created a new forum for structuring social life. Edmonds (1995, 187) notes the increasing importance that the metaphorical properties of settlements and field-systems would have played in shaping communal identity, and Chadwick (1999) observes that the creation and maintenance of boundaries, fields and trackways must have been a complex operation, involving a major communal effort. The work entailed would have been hard but no doubt imbued with social discourse, creating, maintaining and renegotiating social identity; they were "more than functional blocks of space" (ibid., 164). In this sense, the development from a monumental to an agricultural landscape may not necessarily have been as abrupt as it often appears in the archaeological record. As Bradley (1998, 147) suggests, important themes do continue across this divide, and principles which governed the creation of the new landscape may have drawn heavily upon a symbolic code of considerable antiquity (ibid., 158).

The deposition of the Middle Bronze Age palstave within a Late Bronze Age ditch may have been part of this process (see below). If it had been deliberately deposited it may have functioned in legitimising the newly established field-systems by referencing the past, possibly by claiming tenurial

continuity or, alternatively, refuting past tenure by consciously 'burying the past'. The recovery of a bronze spearhead at Shrubsoles Hill, of unequivocal Middle Bronze Age type but containing traces of a wooden shaft radiocarbon dated to the Late Bronze Age, provides compelling evidence that in some instances objects could be kept for hundreds of years before being finally deposited, possibly amidst much ceremony (Coles et al. 2003, 53). Interestingly, one of the complete bucket urns recovered at Iwade had been repaired; an often-noted phenomenon of Deverel-Rimbury pottery and suggesting it too may have been curated and deliberately deposited some time after its manufacture.

In addition, some of the excavated sections of the field and trackway ditches produced relatively high quantities of pottery. These were often located towards the entranceways into the fields and appeared to represent localized dumps of material, although as the ditches were only partially excavated it is difficult to be certain of the spatial distribution of artefacts within them. Other acts of embellishment may include a quern fragment deposited into the gullies found to the north of the trackway, and the pond or watering hole located within the trackway also contained a quern fragment as well as quantities of pottery. Many of the pits found scattered throughout the field-system contained high quantities of pottery, sometimes including near complete vessels or large freshly broken sherds, and a few also contained the debris from discrete flint knapping episodes.

The presence of high quantities of unabraded pottery, as well as selected items from individual flint knapping events indicates that certain points in the landscape continued to be singled out as important in some way, creating or adding to the significance of particular places (Brück 1999c), and that rituals involving actual acts of deposition continue to feature in ceremonial life. This does not necessarily mean that these practices were highly specialized procedures, set apart from daily life and directly referencing religious beliefs or the supernatural. Rather they may have been part of daily life, a way of acting that reinforced the concerns of the farmers and emphasized certain significant aspects of their lives, and which may have ranged from purely personal performances to communal ceremonies (Bradley 2003).

A note on the history of the palstave MARTYN BARBER

It has become increasingly evident in recent years that metalwork deposition in the Bronze Age is far less straightforward than once presumed. Objects previously considered to have been lost, or concealed for reasons of safety or security, are now more commonly seen as representing deliberate, placed deposits. A major reason for the longstanding acceptance of ideas such as casual loss or deliberate concealment in troubled times is the shortage of metalwork objects from excavated contexts, particularly nonfunerary ones. The growing number of hoards recovered through careful archaeological excavation are tending to confirm, through features such as the arrangement of objects in the ground, that they entered the ground with some degree of formality or ceremony. Clearly this is harder to identify with single, unassociated objects, particularly away from the watery or boggy contexts for which votive deposition has been a favoured explanation for some time. On some occasions where Bronze Age metalwork has been recovered from more domestic contexts, such as enclosure ditches, it is possible to suggest on the basis of their stratigraphic context and location that some ceremonial or votive intent may have lain behind the act of deposition (eg Barber 2003, 66-67).

Contexts for dry-land deposition vary considerably across time and space, but boundary features (eg enclosure ditches or field ditches), natural features, and an association with foundation or abandonment are all attested. More speculative are suggestions that deposition of such objects may have been linked with rites associated with key stages in the lives of individuals or communities. As regards the Iwade palstave, an interesting comparison can be made with the discovery of a bronze spearhead within a similar ditch at Fengate. The site is now better known for the timber structures and associated votive deposits at the adjacent Flag Fen (Pryor 2001), but these structures and, one presumes, the practices associated with them were linked to an extensive ditched enclosure system on the higher ground regarded by Pryor as 'community stockyards':

"...the scene of regular gatherings of livestock and people, they might also have provided an important social focus. When animals are culled or exchanged in non-industrial societies, it is rarely a simple economic process, as in modern livestock markets. The exchange of livestock would probably have been closely bound up with wider social ties and obligations. If the (Fengate) enclosures were the scene of regular large social gatherings, it is not surprising that they produced a broken bronze spearhead..." (ibid., 416).

The lack of a firm and detailed chronological framework for bronzes makes it difficult to evaluate the likelihood that the Iwade palstave may have been deposited some considerable time after it was cast. The palstave was recovered from the uppermost fill of a ditch that appears to have defined one side of a northeast-southwest trackway, adjacent to a northwest-southeast orientated ditched

enclosure. The majority of the potsherds recovered from various places along the ditch belong to the post Deverel-Rimbury tradition, which even at the most generous estimates possesses a date range beginning comfortably later than the latest likely casting date of the palstave. The depth from which the palstave was recovered suggests a date of deposition late in the silting history of the ditch.

Although far from common, unequivocal evidence that items of Bronze Age metalwork could be deposited some considerable time after manufacture is by no means unknown. Perhaps the most spectacular example is the socalled 'Salisbury Hoard' (Stead 1998), which featured material ranging in date from the Early Bronze Age to the Middle Iron Age. Less spectacular, but more typical, are example such as the Danebury hoard (Cunliffe 1984, 335-340), a much smaller collection of material which included Early, Middle and Late Bronze Age types but whose latest components comprised items belonging to the Llyn Fawr metalworking stage, generally attributed to the Early Iron Age (post-800BC). The hoard found at Yattendon, Berkshire (Burgess et al. 1972, 236) was dominated by items which would place it comfortably in the Late Bronze Age but also included a few Early and Middle Bronze Age pieces, while an Early Bronze Age flanged axe may have been associated with the Late Bronze Age assemblage dredged from the Thames at Broadness in 1892 (ibid., 237–239). A Late Bronze Age hoard from Rayne, Essex, contained two palstaves probably several centuries older than the remainder of the associated bronzes (Davies 1979). Further Kent and Essex occurrences of Middle Bronze Age palstaves in Late Bronze Age hoards are noted by Turner (1998, 105-106).

This is not a phenomenon unique to bronzes. Animal remains from the middle Neolithic Stonehenge Phase 1 (Cleal et al. 1995) and from Middle Bronze Age Ram's Hill, Berkshire (Needham and Ambers 1994) have been shown to pre-date the contexts within which they were found by some time. At Cladh Hallan, South Uist, Outer Hebrides (Parker Pearson et al. n.d.), foundation deposits of human remains were several centuries older than the Late Bronze Age houses whose construction they appear to have commemorated, while round barrows at Raunds, Northants, covered graves containing items up to 1000 years older than the interments they accompanied (Healy and Harding 2003). Clearly, it was possible for particular items, of whatever material or origin, to circulate for some considerable time before they were deposited. Indeed, many may never have entered the ground, and in the case of metalwork, recycling rather than deposition may have been their eventual fate.

Identifying a reason for such behaviour clearly places us comfortably within the realms of speculation. Moreover,

given the wide range of objects, contexts, time-periods and geographical locations mentioned in the above examples there is unlikely to have been a single explanation. The term 'heirloom' has occasionally been used to describe objects clearly older than the context in which they were found, usually graves, but as it has a quite specific meaning covering only one of what must be many possibilities, it is somewhat unsatisfactory term.

Presumably the significance of objects found in 'later' contexts lay to a considerable extent in their individual historical connections – with people, places, events etc – that significance depending "on their individual histories: on the people who had used them and the situations in which these artefacts were obtained' (Bradley 2002, 54). That significance would have been drawn on, and added value to, any ceremony including or culminating in the objects' deposition. An alternative scenario would see objects deposited by previous generations being re-discovered by later activity, such as ditch-digging or ploughing, though again the decision to return the object to the ground would have involved recognition of its historical and/or mythical origins and connotations. In any cases, any such significance may have been further enhanced if the object was of an obviously archaic form.

How long items of material culture, including bronzes,

remained in use or circulation during later prehistory is very much open to debate. Deposition was by no means the typical end to an object's use-life. Metal analysis makes it clear that recycling of metal was the norm during the Bronze Age (Rohl and Needham 1998), while deposition itself was a product of social or cultural practices that varied considerably across the British Isles and throughout the Bronze Age (Barber 2003). Moreover, the overwhelming majority of bronzes have been recovered by means other than archaeological excavation.



Fig. 53 Replica hafted palstave

Chapter 4 The Late Iron Age Farmstead



Following the abandonment of the Late Bronze Age fieldsystem there is a notable dearth of archaeologically recognizable activity at the site for c. 400-500 years until the creation of an enclosed settlement during Late Iron Age. This was established during the early 1st century BC and can be broadly divided into two phases, based on the pottery recovered. Features belonging to the earliest phase (Late Iron Age Phase 1) represented settlement activity comprising two circular structures located within the southwest corner of a ditched enclosure (Enclosure 1). The recovery of predominantly calcined flint-tempered wares from these features suggested that the settlement was established around c. 100/75BC. During Late Iron Age Phase 2 this enclosure continued in use but was divided by a ditch, with two circular structures, holloways, fencelines, and several four and five post structures constructed in the enclosure's eastern half, but with little archaeologically recognizable activity occurring in the western part. In addition, a further enclosure and a flanking ditch were constructed to the southeast of the original enclosure (Fig. 54). These features contained pottery assemblages of predominantly 'Belgic' grog-tempered and sand-tempered wares dateable to c. 25 BC – AD 50. Other than some evidence for ephemeral activity during the 2nd century AD, the entire site appears to have been abandoned around the time of the Roman invasion.

LATE IRON AGE PHASE 1: c. 100/75BC - 25BC

Enclosure 1

Enclosure 1 consisted of ditches that formed a northwest-southeast aligned rectilinear enclosure, its southern side cutting through several of the Late Bronze Age field ditches (Fig. 55). The enclosure ditch was up to 6m wide along its southern side, where excavation revealed a 1.10m deep, steep sided 'V' shaped profile along its internal edge, and a shallow (0.30m deep) gradual slope along its external edge. At its western side the enclosure ditch was much broader, up to 12m wide but only 0.50m deep, with gradual sloping sides and base. The eastern side of the enclosure was heavily truncated by a Medieval droveway,

and just the bottom 0.20m of the ditch survived. The ditch forming the northern side was much narrower, attaining only 1.66m in width, and although its junction with the rest of the enclosure ditch was located beyond the limits of excavation and therefore not proved, its interpretation as the enclosure's boundary is suggested by its alignment, the similarities of their pottery assemblages and the almost complete absence of archaeological features to the north. Nevertheless, the possibility that the northern ditch merely represented an internal sub-division to a much larger enclosure, perhaps with different activities occurring on each side, cannot be entirely dismissed. The ditches as exposed formed a roughly 'D' shaped rectilinear area measuring a 110m by 64m, enclosing an area of around 7000m².

Although there was no evidence for an associated bank, the possibility remains that one could have existed but was levelled by later agricultural activity; after all, the spoil from constructing the ditch must have gone somewhere. Nevertheless any such bank must have been low, and no evidence was recovered for any attempts at revetting the mound. The proximity of internal features such as the Circular Structures (see below) to the ditch, means that at least along the southern side it could not have been more than one or two metres wide, although it is possible that a hedge or shallow fenceline could have followed its summit. Neither was there any evidence for bridges or entranceways into the enclosure, and it is possible that the ditches were backfilled or allowed to substantially silt-up quite quickly. The pottery recovered from the enclosure ditches' primary fills was dominated by calcined and flint-tempered wares suggesting the enclosure was constructed during the early 1st century BC, though the presence of some grog-tempered types suggests it had not been completely levelled until the middle of the 1st century AD.

Enclosure 1's ditches were extremely variable in size and shape and, in places, excessively wide compared to its depth. Even allowing for a great degree of horizontal truncation it is unlikely that it was primarily constructed for defence or for the controlling of the movement of animals. No traces of palisades or any substantial revetments were identified and, although the sides of the ditches may have been hedged, thus aiding the control of animals, there is no clear

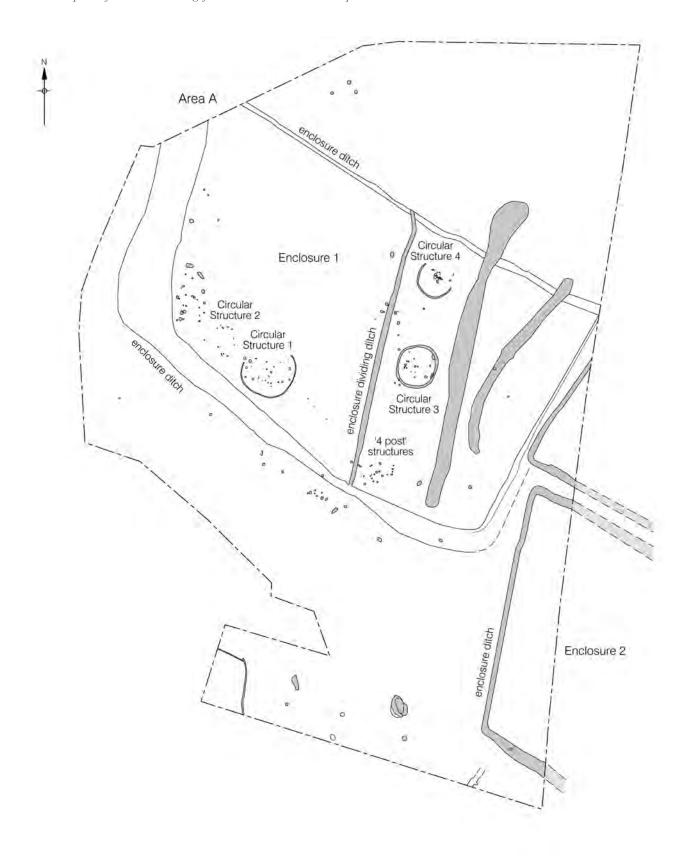
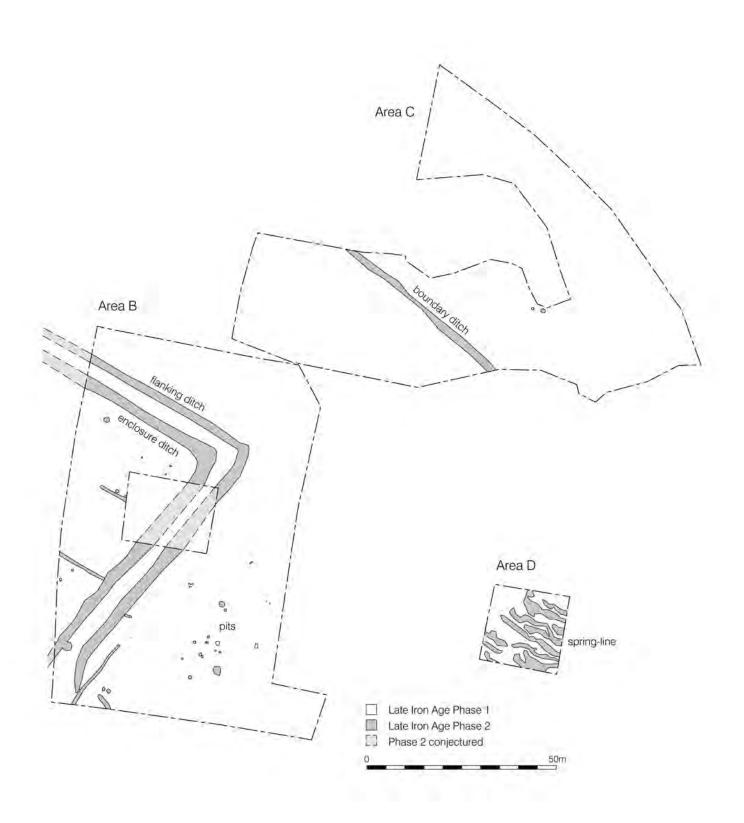


Fig. 54 Plan of all Iron Age features (scale 1:1000)



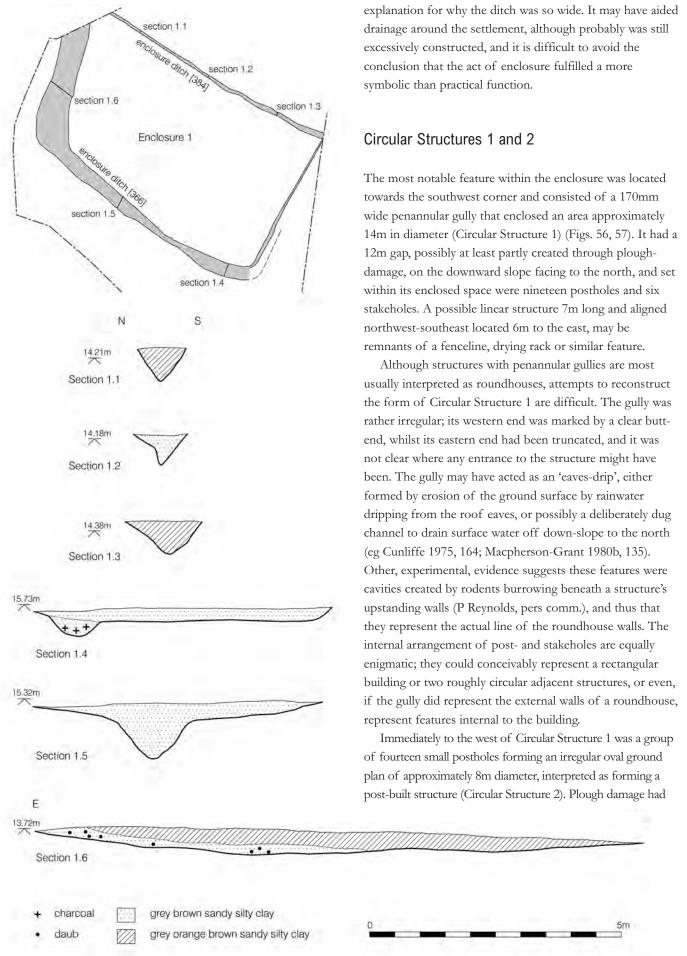


Fig. 55 Sections through the boundary ditch of Enclosure 1 (scale 1:75)

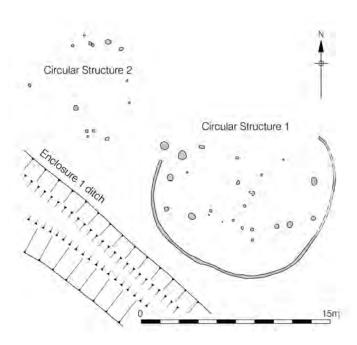


Fig. 56 Circular Structures 1 and 2 (scale 1:300)

resulted in only the very bottoms (0.20m-0.30m) of the postholes surviving, and no traces of occupation surfaces or hearths preserved, nor was any gully associated with the structure present, though it may have been lost due to later truncation. No obvious entrances could be postulated and only one feature was present within its perimeter, a small pit or posthole. If the latter, it could have had a structural function, although it was not located in the centre of the building. This structure was similar to one at Tollard Royal (Wainwright 1968, 109) interpreted as a roundhouse and, although large, its insubstantial construction and irregular shape may suggest that it may have had an alternative function, possibly an animal pen, store or other ancillary building.

Features Internal to the Enclosure

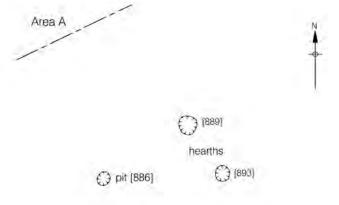
Other than the circular structures described above, few other features within the enclosure could be ascribed with certainty to this phase. The dating of the pottery indicated a great deal of continuity between the phases and as many of the Late Iron Age features only contained minimal quantities of dateable pottery, and some may have been periodically cleaned out, it is possible that many of the activities identified as occurring later on may have had their origins during this earlier phase.



Photograph of Circular Structure 1 during excavation, looking north

Features North of the Enclosure

To the north of Enclosure 1 was a group of three pits of similar size and shape, located approximately 5m apart (Fig. 58). Two of these contained evidence of burning and were interpreted as hearths or bonfire sites, but none contained



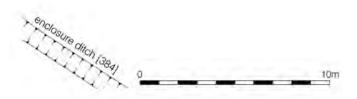


Fig. 58 Pits to the north of Enclosure 1 (scale 1:200)

any datable finds and can only be very tentatively included within this phase, on the basis of their proximity to the enclosure ditch.

LATE IRON AGE PHASE 2: c. 25 BC - AD 50

Modifications to Enclosure 1

A 75m long north-south aligned ditch was constructed within Enclosure 1, dividing it into two parts, the western covering ι . 4000m² and the eastern ι . 3000m² (Fig. 59). The dividing ditch did not extend beyond the enclosure's boundaries, suggesting the ditches were still prominent when it was dug. Its northern end angled towards the northwest where it joined the enclosure ditch, possibly to facilitate water to drain down-slope and away from the settlement.

The ditch functioned to divide the land within Enclosure 1 into two areas, with settlement activity contained in the eastern half, but with only a thin scattering of pits, mostly concentrated towards the southwest corner, identified in the western half.

The reasons for this apparent shift are uncertain, although the dividing ditch clearly acted to demarcate very different zones of activity. The eastern side would appear to act as the domestic focus, where people lived and carried out their routine activities, whilst the western side was apparently largely empty and could easily have been used for purposes such as the corralling of livestock, or even put under arable cultivation, although there is little evidence that arable cultivation played an important part of the economy at Iwade.

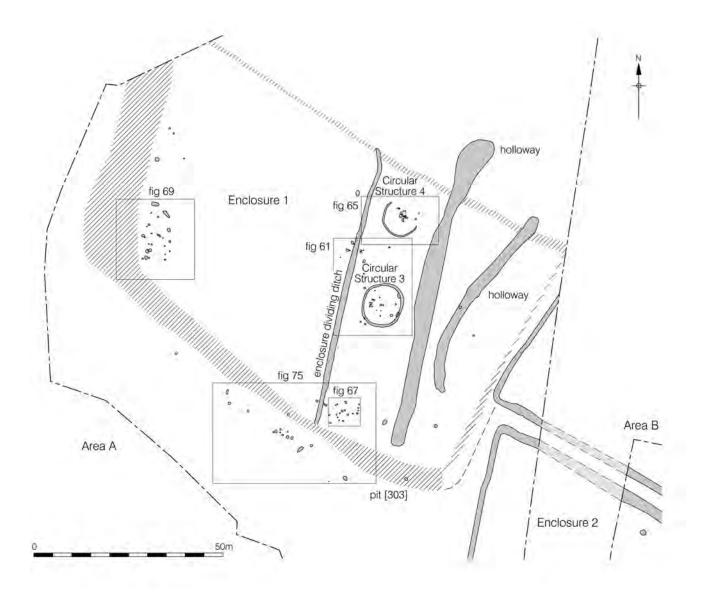


Fig. 59 Modifications to Enclosure 1 (scale 1:1,000)



Fig. 60 A reconstruction of the Late Iron Age farmstead, by Trevor Bishop

Circular Structures 3 and 4

Circular Structure 3 comprised a continuous oval ring-ditch that enclosed a number of stake- and postholes, hearths and pits (Figs. 61, 62). The ring-ditch varied between 0.35m and 0.77m wide, and was up to 0.40m deep, enclosing an internal space of 11m by 12m.

Fifteen stakeholes and postholes within its enclosed space may have represented the partial remains of a structure, perhaps in the range of 6-7m in diameter, but they were too sparse to identify a convincing building plan. Two hearths were identified within the ring-ditch. Hearth [623] was located at the centre of the structure and contained patches of burnt clay and large quantities of burnt flint within its fill, possibly indicating that it was used for cooking. The other hearth [652] was located in the southeast part of the ringditch and contained layers of charcoal and silty clay. The bases of both were compacted and heavily scorched brownish-red, indicating intensive in situ fires. Two pits [626] and [648], approximately 5m apart and adjoining the inside of the ring-ditch in the east, also contained significant quantities of burnt material. In the base of the northern pit

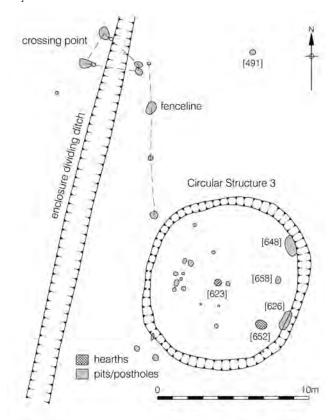


Fig. 61 Circular Structure 3 and associated features (scale 1:250)



Fig. 62 Circular Structure 3 during excavation, looking north was the impression of a post, and the southern pit contained burnt post impressions as well as a spread of burning (Fig. 63). It was unclear whether these represented the remnants of posts that had burned in situ or pits that had contained fires prior to posts being set within them. Either way, the posts could possibly represent an east facing entrance into the structure. Between these, but set back within the structure slightly, was a large posthole [658]. Perhaps significantly this contained 25 sherds of pottery, representing over half of the pottery recovered from the internal features, the only other feature to produce sizeable quantities being the northern pit adjacent to the ring-ditch. The majority of other features within the ring-ditch, including pits and postholes, were set behind the central hearth in the western quadrant, although it was uncertain what these may have represented. Two postholes and a stakehole located close to the southwestern external edge of the ring ditch may be associated with the structure, although again it was not clear what these might have represented, unless they actually marked an entranceway.

Daub fragments weighing nearly 1kg were recovered from the postholes and gullies. Some had withy impressions, indicating they may be the remnants of the daub rendering from wattle walls. Whilst a few showed evidence of being exposed to direct heat, most appeared to have been air dried/sun baked.



Fig. 63 Posthole [626] during excavation, showing burning, looking west



Circular Structure 3 ring-ditch during excavation, Fig. 64 showing spread of pottery and spindle whorl (in section), looking north

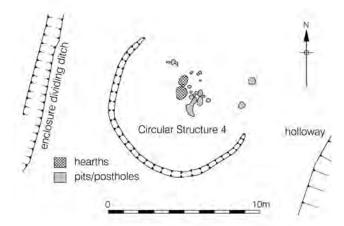


Fig. 65 Circular Structure 4 (scale 1:250)



Circular Structure 4 after excavation, looking north

Late Iron Age 'Belgic' grog-tempered and sand-tempered wares formed the majority of the pottery assemblage from this structure, suggesting activity continued there until the advent of the Roman conquest. Over 5kg of pottery was recovered from the ring-ditch, nearly half of which formed a 1m long scatter of large unabraded sherds dumped along its base on its southeastern side. A ceramic spindle whorl and the fragmentary remains of a spring from a copper alloy brooch were also recovered from this section (Fig. 64). Large quantities of burnt flint were found dumped throughout the ring-ditch, and several pieces of iron slag, including a piece of tap slag from a posthole near the centre of the structure, suggest that metalworking may have occurred in the vicinity.

A series of four postholes, leading northwestwards from the ring-ditch, may have represented a substantial 11m long fenceline. It led to a series of post- and stakeholes, located either side of the dividing ditch, and which could conceivably represent a bridging structure giving access across the dividing ditch (see Fig. 61).

Circular Structure 4 was located 13m to the north of Circular Structure 3 and was represented by a penannular gully just under 10m in diameter (Figs. 65, 66), the gully's eastern end became very shallow and eventually disappeared. As excavated it appeared to open to the northeast, although as with Circular Structure 2 it had been at least partially truncated by later ploughing, and an opening could potentially have been present facing at any angle from the north to the east. The gully was also possibly an eaves-drip, similar in form to that of Circular Structure 2, and enclosed a group of 27 stake- and postholes, which with the exception of two on the eastern side were all located towards the centre. Also near the centre were three intercutting pits that contained substantial quantities of charcoal and had scorched reddish brown bases, evidently representing a succession of hearths. Again, no obvious building plan was evident, although the two postholes on the eastern side could conceivably represent an entranceway into the structure.

A small pit [491] located between Circular Structures 3 and 4 contained high quantities of burnt material and its base and sides were completely lined with 50 pottery sherds, representing a number of vessels (see Fig, 61). The function of this was unclear; it also contained large quantities of burnt flint and may have been used as a specialist hearth or cooking device, although it was also possible that it may have had some sort of ceremonial connotation.

Holloways

Immediately to the east of the circular structures were two wide and amorphous linear features, running north-south through Enclosure 1 and continuing for a short distance beyond to the north, where they formed large shallow hollows before petering out (see Fig. 59). They varied between 2.70m and 8m wide, 0.15m to 0.50 in depth and had ephemeral, meandering edges. Their morphologies suggest they were hollows worn into the natural brickearth through repeated use. A layer of well-worn and compacted rounded pebbles revealed at the base of the western holloway probably represents attempts consolidate it and keep it free draining, facilitating movement along it. The western holloway may have pre-dated the eastern and, although little pottery was recovered, it may have begun to form during Phase 1. Pottery recovered in larger quantities from the eastern holloway indicated that it was in use during the first half of the 1st century AD, possibly replacing the eastern holloway. The relationships between the holloways and the enclosure ditches could not be ascertained and no bridging structures were seen at the junctions. The eastern, and presumed later, holloway apparently continued in use after the ditches had substantially silted up. A pit containing two successive fills of hearth debris cut through the eastern holloway, although this was devoid of pottery and could only be dated to later than the filling of the holloway.

Other Features

A group of postholes located 20m to the south of Circular Structure 3 possibly represent a series of superimposed four- and five-post structures of a type frequently interpreted as granaries (Figs. 67, 68). Probably too small for human habitation, they are thought to represent granary buildings, raised storage platforms, sheds or livestock pens (Rodwell 1978). Although it is uncertain in which order they were built or what functions they fulfilled, they suggest this area may have been used in succession for the same activity. No obvious grain storage pits were observed at the site, possibly because of the water-retentive properties of the underlying geology, increasing the likelihood that these structures were used as granaries (Gent 1983). Simple postbuilt structures may have had a wide variety of functions, and ethnographic evidence suggests uses including: storage of other foodstuffs, clothes, weapons or tools; fighting platforms; watch towers; shrines; places for sleeping, or platforms for laying out the dead (Ellison and Drewett 1971).

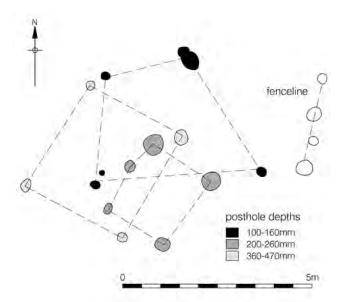


Fig. 67 Four- and five-post structures showing possible associations between the postholes based on their depths (scale 1:100)



The four- and five-post structures after excavation, looking south

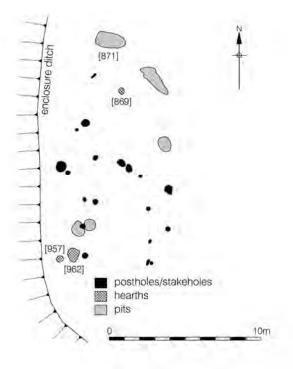
Immediately to the east of four- and five-post structures, a line of four postholes may have represented a 2.8m long north-south aligned fenceline or windbreak, and to their west were three large postholes straddling the dividing ditch, perhaps representing a crossing point over the ditch (see Fig.

The only notable focus of activity dating to this period in the western half of Enclosure 1 comprised a group of features located close to its southwest corner. Altogether 28 features were recorded (Fig. 69). Most were shallow, probably heavily plough damaged, and only eight contained any dating evidence. The lack of dating material in most meant that they may have represented more than one phase of activity, some were possibly even associated with the nearby Late Bronze Age features. Twenty-one were

interpreted as postholes and, although no building plans were discernible, some of them appear to form linear alignments possibly representing windbreaks or fencelines. Three small cuts [869], [957] and [962] contained high quantities of charcoal, burnt flint and other evidence of burning and may have acted as hearths, although it is possible that they represented burnt-out posts. The remaining features were interpreted as pits; these may have been for rubbish disposal although, with the exception of [871] which contained 108 potsherds, 100 from a single vessel, the rest produced only small quantities of cultural debris.

Enclosure 2

Around the time that Enclosure 1 was sub-divided, a further enclosure (Enclosure 2) was constructed adjacent to its southeast corner (Fig. 70). This was trapezoidal in shape and enclosed an area of approximately 3,600m², which, with the now divided Enclosure 1, formed the third enclosed area, all of approximately similar sizes. Its eastern side was observed directly beneath the stripped topsoil horizon and its western side, although heavily truncated, could be seen beneath the excavated sections of the Medieval holloway (see Chapter 5). Running through the enclosure's middle was Sheppey Way, the road that separated Site A from Site B. Much of the internal area therefore could not be excavated, and only ten features were recorded within the enclosure (Fig. 71). The enclosure's ditches were of a more uniform construction



Features in the southwest corner of Enclosure 1 (scale

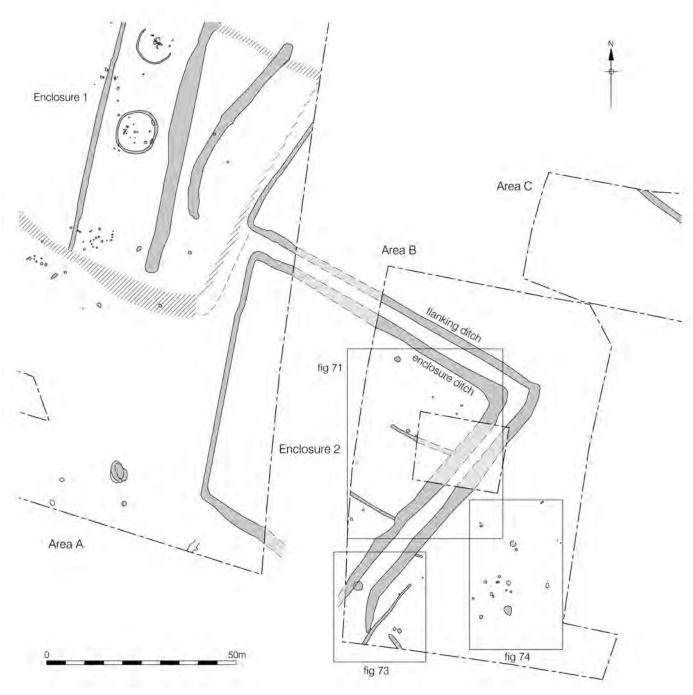


Fig. 70 Enclosure 2 and the flanking ditch (scale 1:1,000)

than those of Enclosure 1. Where not truncated by the later holloway they measured an average of 3m across and 1m deep and were generally steep sided with narrow, flattish bases. Sections excavated across them showed marked variations in their infilling. The southern and eastern stretches contained up to five successive fills, consisting of dark grey silt-clays, and were richer in bone, oyster shell, daub and charcoal than most of the other features at the site (Fig. 72). Discarded pottery, dominated by 'Belgic' wares, was also concentrated along these sides, which also produced a piece of copper wire and a

triangular loomweight fragment. By contrast, the other stretches of the enclosure's ditch, as well as its flanking ditch, were filled with homogenous sandy clays with very few inclusions. This suggests that activity, possibly including the deliberate dumping of domestic waste, including pottery and food, was focused towards the enclosure's southeast corner.

The most notable internal features consisted of two eastwest orientated ditches constructed perpendicular to the enclosure's eastern ditch, dividing its eastern side into three sections (Fig. 71). One terminated to the west but probably

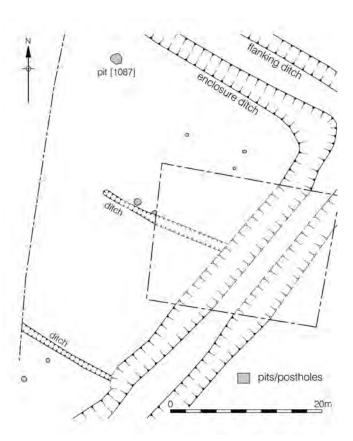


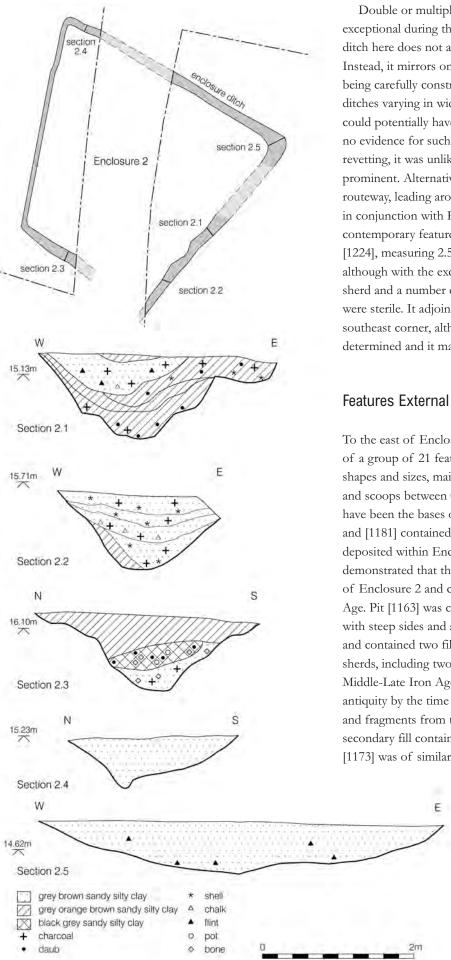
Fig. 71 Internal features within Enclosure 2 (scale 1:500)

extended towards the enclosure ditch. Pottery from their fills was dominated by 'Belgic' grog- and sand-tempered wares, and included a c. AD 10-50 butt-beaker copy, suggesting this division dated to the very end of the Late Iron Age. Other features included a large pit and five smaller pits or postholes located in the north of the enclosure. The large pit [1087] measured 1.50m in diameter and its primary fills produced several large nodules of chalky flint as well as 22 pot sherds, seven of which were bead-rim pieces dated to AD 15-50. Two other small pits, located to the south of the southern dividing ditch contained smaller quantities of similarly dated pottery, and two further pits, adjacent to the northern dividing ditch, contained no dating evidence but were likely to belong to this phase.

The reasons for the addition of Enclosure 2 are not clear. There is good evidence that Enclosure 2 formed an addition to the settlement, rather than a replacement for Enclosure 1. The main focus of activity, as defined by the two circular structures, was still located within the old enclosure, and the upper fills of its ditches produced pottery dated up to the Roman invasion. There are some indications, however, that the old enclosure was not maintained. Its lower fills contained earlier pottery and there was no evidence of any attempt to recut it. The lack of obvious bridging structures across it, and the holloways which appear to largely ignore it, also suggest that it may have been more of an earthwork feature than an obstacle, although there is little evidence that it remained a very prominent feature. Although no obvious residential structures were found inside Enclosure 2, other evidence suggests it may have been occupied. The large unexcavated area of the enclosure beneath the road allows sufficient space for residential buildings. Alternatively any structures may have been built using shallow set sleeper beams, a technique that has been suggested to account for a dearth of Late Iron Age structures in the London region and which have been found in similar sized and shaped enclosures in the east of England (Mackreth 1988, 65; Toller 1980). The southeast corner of its internal ditch contained a relatively large finds assemblage including large amounts of pottery and animal bone and, unusually, several stratified fills, suggesting that this area formed the most significant focus of the enclosure, possibly where any settlement was located. Such a suggestion is supported by environmental evidence, which showed that some grain and food processing might have been conducted towards the southwestern corner, whilst the northeastern corner produced the greatest variety of wild plant species, indicative of an environment marginal to settlement.

Flanking Ditch

The north and east sides of the new enclosure were flanked by an outer ditch which ran from its southeast corner, followed its eastern and northern sides, before continuing northwards parallel to Enclosure 1's eastern ditch, and then onwards beyond the limits of excavation. The southern part of this ditch splayed out slightly and terminated close to the southeast corner of Enclosure 2, giving the impression that the enclosure and the flanking ditches jointly formed an entranceway leading to the gap between the ditches (Fig. 73). This possibility is given some support by the location of two gullies, one perpendicular and the other parallel to the flanking ditch terminal, which may have combined to form and accentuate the entrance. The northern terminus of the eastern gully [1036] was filled with 48 pottery sherds, including bead-rim jar and Butt-beaker forms dated to the first half of the 1st century AD. To the north of the western gully, and adjacent and perpendicular to the flanking ditch was a further short stretch of gully [1040]. Unfortunately, the enclosure ditch opposite the putative entranceway was beyond the limits of excavation and its form remains unknown. Immediately north of the eastern gully there was a spread of burnt clay and daub [1158], and close to that a vertically sided pit 0.87m deep with evidence of burning at its base [1147]. This would appear to represent a substantial posthole containing a burnt-out post, possibly marking the entranceway between the gullies.



Double or multiple ditched enclosures are not exceptional during the Late Iron Age, although the flanking ditch here does not appear to act as an additional boundary. Instead, it mirrors only two of the enclosure ditches sides, being carefully constructed to define a gap between the ditches varying in width from about 3m to 5m. The gap could potentially have contained an up-cast bank, although no evidence for such a bank was identified, and without revetting, it was unlikely that it could have been very prominent. Alternatively, the gap may have acted as a routeway, leading around Enclosure 2 and then northwards in conjunction with Enclosure 1's eastern ditch. The only contemporary feature within the gap consisted of a large pit [1224], measuring 2.50m by 1.50m and 0.60m deep, although with the exception of one Late Iron Age pottery sherd and a number of quern fragments, the fills of this were sterile. It adjoined the enclosure ditch near its southeast corner, although its relationship to it could not be determined and it may have even pre-dated the enclosure.

Features External to the Enclosures

To the east of Enclosure 2 was a zone of pitting, consisting of a group of 21 features (Fig. 74). These were of various shapes and sizes, mainly circular or sub-circular shallow pits and scoops between 0.20m - 0.30m deep, and some may have been the bases of postholes. Three pits [1163], [1173] and [1181] contained pottery of a similar nature to that deposited within Enclosure 1's ditches and clearly demonstrated that the pitting began before the construction of Enclosure 2 and continued throughout the Late Iron Age. Pit [1163] was circular, measuring c. 1.10m in diameter with steep sides and a concave base. It was nearly 0.5m deep and contained two fills. Its primary fill produced 133 pottery sherds, including two globular jar sherds dated to the Middle-Late Iron Age, which may have been of some antiquity by the time they were deposited, a worked cattle rib and fragments from two quernstones. Conversely, the secondary fill contained only three fragments of pottery. Pit [1173] was of similar size, although oval in plan with a

Fig. 72 Sections through the boundary ditch of Enclosure 2 (scale 1:50)

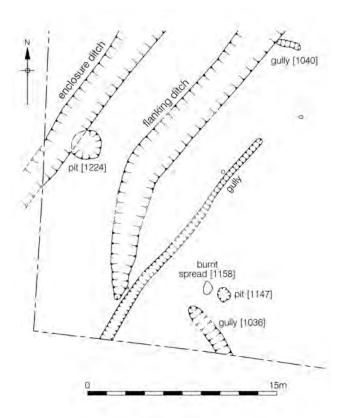


Fig. 73 Features adjacent the southeast corner of Enclosure 2 and the flanking ditch (scale 1:300)

sloping base, and contained only 10 sherds of pottery. Pit [1181] was much smaller, measuring less than 0.50m in diameter and was only 0.26m deep. Nevertheless, it contained 43 large sherds of pottery, representing only three different vessels. Of the features that were likely to be contemporary with Enclosure 2, only one [1149] contained substantial quantities of material, consisting of 144 Iron Age pottery sherds along with animal bone, burnt flint and charcoal. It would appear that the well or shaft [1145], originally constructed during the Middle Bronze Age, was finally infilled and levelled during this time. As well as producing Late Iron Age pottery, its uppermost fills contained an unusual assemblage of flintwork, including leaf and barbed and tanged arrowheads, the manufacture of which clearly substantially pre-dated the final infilling of the feature.

The reason why this area was selected for pitting and perhaps special deposition over such a long period of time was not clear, although it was the closest part of the excavated area to the springline revealed in Area D (see below), which could potentially have had special significance for the Late Iron Age inhabitants. The area between the pitting and the springline, however, remains unexcavated.

A group of sixteen features were located immediately to the south of Enclosure 1, close to the narrowest part of the southern enclosure ditch, the junction of the dividing ditch and the location of the possible granaries. This suggested

that this area was an important focus for activity and perhaps a possible bridging point into the enclosure, although with the exception of a single posthole [340] located just inside the enclosure ditch, no evidence of an actual bridging structure could be identified (Fig. 75). The most northwesterly of these features were three undated, shallow, concave cuts which, as they contained quantities of burnt daub and charcoal, were interpreted as hearths. Seven postholes may have represented an 11m long fenceline, the others consisted of shallow pits and isolated postholes, and the remainder was probably a tree-throw hollow. Further to the east, a single pit containing high quantities of charcoal and burnt flint [303] was interpreted as a hearth (see Fig. 59). This feature was somewhat enigmatic; it was cut into the ditch fills of Enclosure 1 and therefore must have been dug after the ditch had substantially silted-up, presumably towards the end of the Late Iron Age or after. However, the pottery recovered predominantly came from a single Late Bronze Age shouldered jar, although a few sherds of early Late Iron Age pottery were also present. All of the pottery had been burnt, presumably as part of the hearth, although it all clearly pre-dated the use of the hearth, and it must be

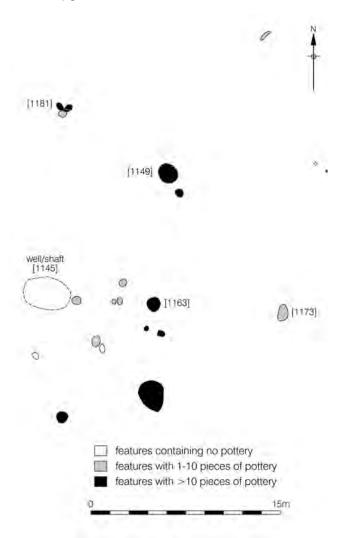


Fig. 74 Pitting to the east of Enclosure 2 (scale 1:300)

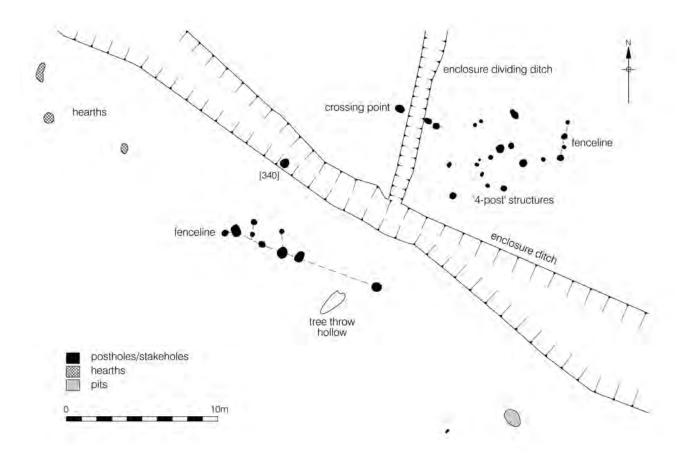


Fig. 75 Features to the south of Enclosure 1 (scale 1:250)

assumed that earlier pottery had been deliberately collected and burnt within the pit. The reasons for this are obscure; the pottery may have been 'accidentally' found and opportunistically used to line the hearth or to aid cooking. A less prosaic possibility it that it represents some form of closing ritual, marking the demise of the enclosure's ditches by the burning and deposition of antique vessels into the top of what was by then a defunct ditch.

The only evidence of possible agricultural practices consisted of a north-south aligned ditch [118], recorded to the south of Enclosure 2, and two gullies [254] and [214], forming what may have been a corner of a rectangular plot further to the west of this (Fig. 76). A pitting cluster and several other scattered pits were located within this area, although few provided any dating evidence. Further features recorded during the evaluation to the south of the excavated areas indicated that activity associated with the enclosure extended further to the south of the site.

To the northeast of, and on a similar alignment to, Enclosure 2 was a large ditch measuring over 2m wide, which may have represented a substantial part of a fieldsystem or, perhaps more probably, an important landscape boundary. The only features to the north of this consisted of two hearths, both of which showed evidence of intense burning, and a cluster of three intercutting pits. Although

the pottery recovered from these was predominantly of Bronze Age date (see above), a few Late Iron Age sherds were also recovered, suggesting that an Iron Age feature may have disturbed an earlier one.

A possibly significant feature of the Late Iron Age landscape was a series of meandering stream channels located in Area D around 75m east of Enclosure 2 (Fig. 76). These appeared to represent a springline, situated some 3m lower in elevation to Enclosure 2 at the junction of the London Clay and overlying brickearth. Further downhill to the east this develops into Coldharbour Fleet, a small active stream flowing into the Swale. The dating of the spring is unclear; although possibly active over a long period, the only dating evidence from it consisted of a few abraded Late Iron Age pottery sherds.



Fig. 76 Area D, looking east, showing water eroded channels

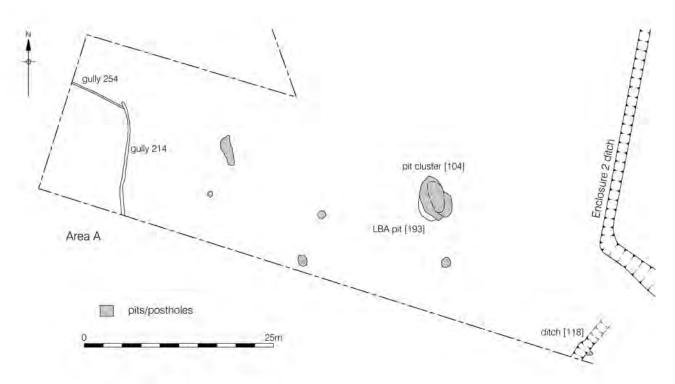


Fig. 77 Features in the south of Area A (scale 1:500)

Late Iron Age Finds **Assemblages**

LATE IRON AGE POTTERY

MALCOLM LYNE

One hundred and ninety nine Late Iron Age contexts produced a total 3,795 sherds (38,243g) of pottery, including residual Bronze Age fragments, and indicated at least two sub-phases of Late Iron Age occupation as well as some ephemeral Roman activity.

Methodology

All of the resultant assemblages were quantified by numbers of sherds and their weights per fabric. Fabrics were determined based on macroscopic examination. 'Belgic' grog-tempered, sand-tempered and shell-tempered fabrics were classified using the system formulated by the Canterbury Archaeological Trust for use in East Kent (Macpherson-Grant et al. 1995). This system is unsuitable for classifying the Late Iron Age calcined-flint-tempered fabrics, so an additional numbered fabric coding system with the prefix IA has been created for this publication.

Fabric descriptions

Iron Age fabrics:

- IA.1 Handmade with sparse to moderate ill-sorted 0.2 to 3mm calcined-flint filler protruding through surfaces. Late Iron
- IA.1B Handmade with profuse ill-sorted 0.1 to 2mm calcined-flint filler. Late Iron Age.
- IA.1C Handmade smooth black/reddish-brown fabric with sparse up to 2mm calcined-flint filler.
- IA.2 Handmade with profuse up to 1mm ill-sorted calcined-flint filler.
- Handmade with profuse finely crushed up to 0.2mm calcined-flint filler with polished surfaces. Occasional up to **IA.3** 1.00mm flint. Middle-Late Iron Age fineware sometimes used for 'Belgic' forms.
- Crumbly handmade black fabric with sparse ill-sorted up to 2mm crushed calcite and silt-sized quartz. IA.4
- **IA.5** Soft black fabric with profuse ill-sorted up to 1mm calcite filler.
- Lumpy handmade brown-black fabric with no obvious added filler. Middle Iron Age. IA.6
- IA.7 Handmade chaff-tempered ware.
- IA.8 Handmade with profuse silt-sized quartz filler and sparse ill-sorted up to 2mm calcined-flint and up to 5mm red grog. Late Iron Age.
- Handmade with profuse silt-sized to 0.1mm quartz and sparse up to 2mm calcined-flint filler. Late Iron Age. IA.9
- IA.10 Handmade soapy black fabric with very sparse up to 2mm calcined-flint and sparse reddish-brown grog. Late Iron Age.

Belgic Late Iron Age fabrics:

- Late Iron Age fabric with profuse fine grog filler. Sometimes wheel-turned.
- B2 Late Iron Age 'Belgic' fabric with profuse coarse grog filler.
- **B**3 Late Iron Age 'Belgic' fabric with profuse coarse grog and sparse calcined-flint filler.
- Late Iron Age 'Belgic' fabric with profuse grog and a little quartz sand filler. **B**5
- B6 Handmade 'Belgic' shell-tempered ware from North Kent.
- В8 Handmade 'Belgic' fabric with profuse very fine quartz sand filler. Usually soot soaked but sometimes oxidized. Made in the Folkestone area of Kent. Late Iron Age-c. AD 120.
- B9.1 Very fine brown fabric with profuse up to 0.20mm glauconite and quartz sand filler, fired black. Made in the upper Medway Valley on the Gault Clay/Upper Greensand outcrop between Maidstone and Thurnham. Late Iron Age-a.
- B9.2 Very fine black fabric with profuse up to 0.20mm glauconite and quartz sand filler and sparse to moderate up to 1.00mm calcined flint. A Late Iron Age variant of B9.1.
- BER15 Chaff-tempered salt container fabric (Macpherson-Grant 1980a). The largest amounts of salt container fragments in this fabric come from the Dolland's Moor site at Folkestone (Lyne forthcoming) and it is also present in most Late Iron Age and pre-Flavian pottery assemblages from elsewhere in East Kent.

The assemblages

Two separate Late Iron Age assemblages can be distinguished: those with a predominance of calcined-flinttempered sherds and those where 'Belgic' grog-tempered and sand-tempered fabrics are more significant.

The problems encountered in constructing a Late Iron Age ceramic sequence for Kent have been discussed

elsewhere (Macpherson-Grant 1992a, 294) but it is generally agreed that grog-tempered 'Belgic' wares largely replaced calcined-flint-tempered ones during the latter part of the first century BC. The forms associated with the two groupings from Iwade support this belief in indicating that the first belongs to the earlier part of the Late Iron Age before the period of importation of Gallo-Belgic wares and the second to the first half of the 1st century AD.

LATE IRON AGE POTTERY GROUPS c. 100/75BC-25BC

Assemblage 1: the fills of the ring-gully, Circular Structure 1

This assemblage is really rather small for any form of meaningful quantification; a problem compounded by the presence of appreciable numbers of residual Late Bronze Age sherds. Nevertheless, the assemblage shows a clear preponderance of calcined-flint-tempered sherds over 'Belgic' grog-tempered fragments (Fig. 78).

The various 'Belgic' grog-tempered fabrics make up only 11% of this assemblage and are totally absent in constructional pottery assemblages from the postholes (63 sherds; 401g).

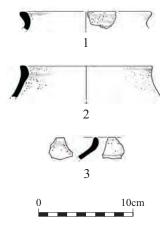


Fig. 78 Late Iron Age pottery from the ring-gully of Circular Structure 1 (scale 1:4)

Assemblage 1: pottery from the ring-gully of Circular Structure 1 (Fig. 78)

- 1 Small everted jar rim fragment in polished black Fabric IA.3. External rim diameter 140mm.
- 2 Small jar with weak everted rim in handmade reddishbrown Fabric IA.3 with polished surfaces. External rim diameter 140mm.
- Slack-profiled jar rim in buff-grey Fabric IA.2. Possibly Middle Iron Age.

Table 3 Pottery from the ring-gully of Circular Structure 1

Fabric	Sherds (No)	Sherds (%)	Weight (g)	Weight (%)
Bronze Age	12	22.6	82	31.7
IA 1	22	41.5	66	25.6
IA 1C	2	3.8	4	1.6
IA 2	5	9.4	38	14.7
IA 3	3	5.7	24	9.3
IA 7	1	1.9	2	0.8
IA 9	2	3.8	10	3.9
B 1	2	3.8	2	0.8
В 3	4	7.5	30	11.6
Total	53	100	258	100

Assemblage 2: the ditch fills of Enclosure 1

Table 4 Pottery from the ditch fills of Enclosure 1

Fabric	Sherds (No)	Sherds (%)	Weight (g)	Weight (%)
Bronze Age	9	3.9	156	7.9
IA 1	80	34.5	318	16.0
IA 1B	70	30.2	798	40.4
IA 3	9	3.9	12	0.6
IA 6	6	2.6	38	1.9
B 1	43	18.5	448	22.6
B 2	2	0.9	26	1.3
B 3	4	1.7	96	4.8
B 9.1	1	0.4	8	0.4
B 9.2	8	3.4	82	4.1
Total	232	100	1982	100

Pottery from the various sections across this feature constitutes a somewhat more reliable assemblage for quantification than that from Circular Structure 1. The various 'Belgic' grog-tempered fabrics make up a somewhat greater 21% of the sherds from this feature but are still very subordinate to the calcined-flint-tempered wares. Of particular interest are nine sherds in glauconitic sandtempered Fabrics B9.1 and 9.2 from the Medway Valley (4%). Recent work by the author on Channel Tunnel Rail Link sites indicates a source for these wares between Maidstone and Thurnham, 17 kilometres to the southwest of Iwade and on the other side of the North Downs. Some of the pottery in this assemblage, including the glauconitic wares, may belong to the period c. AD 0 - AD 50, as there is no reason to believe that the ditch went out of use much before the Roman invasion (Fig. 79).

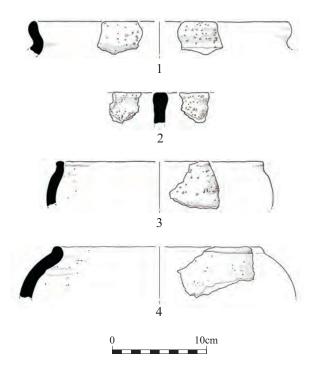


Fig. 79 Late Iron Age pottery from the boundary ditch of Enclosure 1 (scale 1:4)

Assemblage 2: pottery from ditch fills of Enclosure 1 (Fig. 79)

- 1 Everted-rim jar in oxidized orange Fabric IA.1.
- 2 Handmade bead-rim storage jar in black Fabric IA.1B with body furrowing.
- 3 Small slack-profiled bead-rim jar in irregular surfaced black Fabric B3.
- 4 Handmade bead-rim jar in rough black Fabric B3.

Assemblage 3: the fill of pit [1163]

This pit produced 136 sherds (1620g). These are unsuitable for any form of meaningful quantification, as they appear to be from a limited number of vessels. What can be said, however, is that there are no fragments in any 'Belgic' grogtempered ware fabric variant (Fig. 80).

Assemblage 4: the fill of pit [1181]

This pit, within the same cluster as [1163], produced 43 sherds (890g) of pottery, which are also unsuitable for any form of quantification, as they appear to be from a limited number of vessels (Fig. 81).

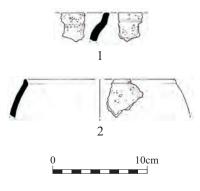


Fig. 80 Late Iron Age pottery from pit [1163] (scale 1:4)

Assemblage 3: pottery from the fill of pit [1163] (Fig. 80)

- 1 Rather wobbly handmade jar with stubby everted-rim in very coarse Fabric IA.8 fired patchy brown/buff/black. Diameter uncertain but large.
- 2 Small bead-rimmed globular jar in polished black Fabric IA.3.

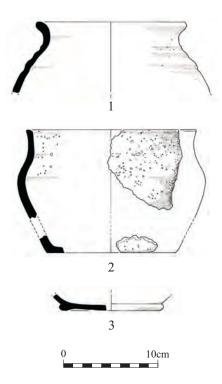


Fig. 81 Late Iron Age pottery from Pit [1181] (scale 1:4)

Assemblage 4: pottery from the fill of pit [1181] (Fig. 81)

- 1 Everted-rim jar with rippled shoulder of Thompson Type B2-1 (1982) in patchy brown/black Fabric B3. External rim diameter 140mm. c. 75BC - AD 50.
- 2 Slack-profiled jar in patchy brown/black/orange Fabric IA.8. External rim diameter 170mm. Paralleled in both fabric and form in the Period 1 Marlowe Theatre Hut B3 occupation assemblage at Canterbury (Thompson and Green 1995, figs. 282 - 206). c. 75BC - 0BC.
- 3 Pedestal base from jar in polished black Fabric B1.

Late Iron Age Pottery Groups – c. 25 BC - AD 50

The overwhelming bulk of the Late Iron Age features on the site produced pottery assemblages dominated by 'Belgic' grog-tempered wares.

Assemblage 5: the fills of the ring-gully, Circular Structure 3

Table 5 Pottery from the ring-gully of Circular Structure 3

Fabric	Sherds (No)	Sherds (%)	Weight (g)	Weight (%)
D A	22	2 5	220	4.2
Bronze Age	22	3.5	220	4.2
IA 1	134	21.0	1698	32.6
IA 1B	50	7.8	492	9.4
IA 1C	7	1.1	114	2.2
IA 9	19	3.0	142	2.7
B 1	231	36.3	1470	28.1
B 2	9	1.4	28	0.5
B 3	109	17.1	728	13.9
B 8	17	2.7	98	1.9
B 9.1	12	1.9	60	1.1
B 9.2	16	2.5	154	2.9
Misc	11	1.7	24	0.5
Total	637	100	5228	100

There were a much higher percentage of 'Belgic' grogtempered wares recovered from Circular Structure 3 (55%) than from the ring-gully of Circular Structure 1 (Assemblage 1). Small amounts (4%) of glauconitic wares in Fabrics B9.1 and 9.2 from the Medway Valley were also present; a few (3%) soot soaked quartz sand-tempered sherds may originate from the Folkestone area and have been acquired through coastal trade (Fig. 82).

Forty five sherds of pottery (378g) were recovered from the internal features of Circular Structure 3, three of which (17g) were Bronze Age or Early Iron Age in date and presumably residual. The remainder were all 'Belgic' grog or grog and calcined-flint-tempered wares. Perhaps significantly, 39 of the 42 Late Iron Age sherds came from only two features; twenty-four (218g) from posthole [658] and 15 (134g) from pit [648] adjacent to the ring-ditch.

Assemblage 5: pottery from the ring-gully of Circular Structure 3 (Fig. 82)

- 1 Slack-profiled jar in handmade grey-black Fabric IA.1 fired black. External rim diameter 180mm. Similar to examples from Ebbsfleet Site 9 dated to the1st century BC (Macpherson-Grant 1992a, figs. 9-33) and Bigberry (Macpherson-Grant 1980b, figs 6.28 - 6.30).
- 2 Handmade bead-rim jar in lumpy black Fabric IA.1 with body furrowing. External rim diameter 140mm.
- 3 Another example but with clubbed bead-rim and body combing in handmade lumpy brown/black Fabric IA.1B. External rim diameter 140mm. Paralleled in Phases 1 and 2 at the Marlowe Theatre site in Canterbury (Pollard 1995, figs. 270-37: 277-149). c. 75BC-AD 50.
- 4 Another similar jar in handmade black Fabric IA.IB with vertical body combing below a horizontal band. External rim diameter 160mm.
- 5 Crude bead-rim jar in deeply furrowed Fabric IA.1 fired patchy orange/grey/black. External rim diameter 240mm.
- 6 Small bead-rim jar in handmade black Fabric IA.1 with lumpy but smoothed surfaces. One of two.
- 7 Handmade bead-rim jar in Fabric IA.1B fired rough black with flint protruding through its surfaces.
- 8 Handmade jar of Thompson Type B2.4 in rough black Fabric IA.1B. External rim diameter 120mm. c. 75BC -0BC
- 9 Furrowed bead-rim jar of Thompson Type C1-4 in patchy black/brown Fabric IA.9.
- 10 Jar with weak everted rim and body combing in brownblack Fabric B3. Paralleled at Faversham (Thompson 1982, fig. 35-82).
- 11 Jar with weak everted rim in smooth grey-black Fabric
- 12 Everted-rim jar in polished soapy black Fabric B3.
- 13 Bead-rim jar in grey-black Fabric B1.
- 14 Jar of Thompson Type B2.1 with rippled shoulder in black Fabric B1. c. 75BC-AD 50.
- **15** Upper part of (?)Pedestal urn in grey-black Fabric B1. External rim diameter 150mm.
- 16 Necked and cordoned jar in smooth grey-black Fabric B1.
- 17 Bead-rim jar in wheel-turned black Fabric B8. External rim diameter 150mm.
- 18 Jar of Thompson Type B2-1 in black Fabric B9.2. c. 75BC-0BC.

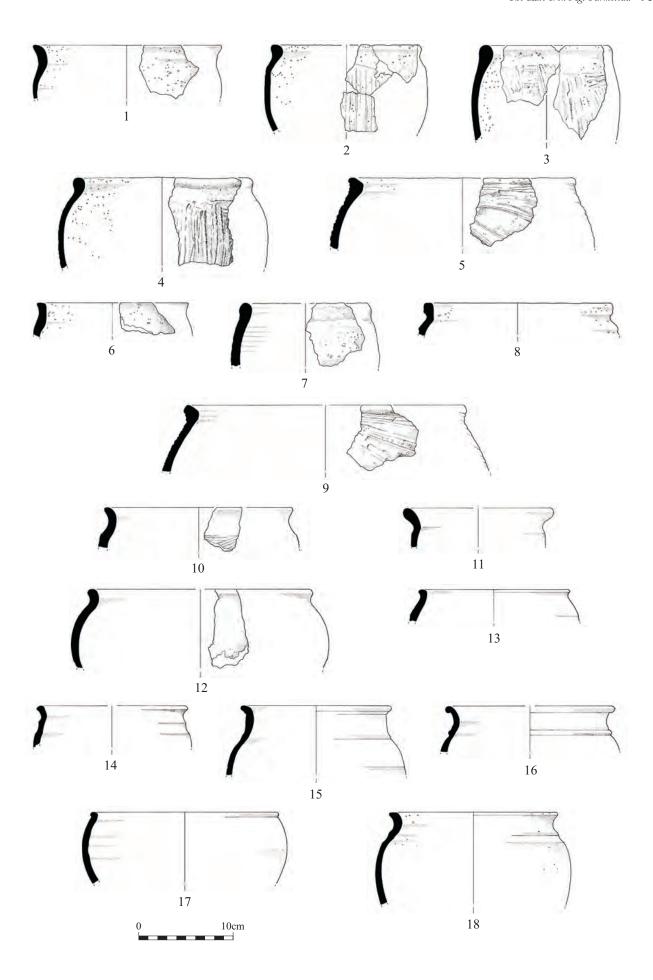


Fig. 82 Late Iron Age pottery from the ring-gully of Circular Structure 3 (scale 1:4)

Assemblage 6: the fills of the ring-gully, Circular Structure 4

Circular Structure 4 yielded 55 sherds (280g) of pottery from its ring-gully. 'Belgic' wares make up 42% of this rather small assemblage, which unfortunately is entirely lacking in rim or other diagnostic sherds. The fairly high percentage of grog-tempered sherds from the gully, coupled with their presence in associated structural postholes may indicate that this structure belongs to Phase 2 of Late Iron Age occupation, but, as with Circular Structure 1, the paucity of material makes precise dating impossible.

Assemblage 7: the lower ditch fills of Enclosure 2

Table 6 Pottery from the lower ditch fills of Enclosure 2	Table 6	<i>Pottery</i>	from	the	lower	ditch	fills	of	Encl	losure	2
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Fabric	Sherds (no)	Sherds (%)	Weight (g)	Weight (%)
Bronze Age	1	0.5	6	0.2
IA 1	13	6.0	230	7.7
IA 1B	1	0.5	4	0.1
IA 1C	9	4.0	156	5.3
IA 2	6	2.8	102	3.4
IA 8	3	1.4	22	0.7
B 1	27	12.4	660	22.2
B 2	21	9.6	312	10.5
B 3	122	56.0	1380	46.6
B 8	10	4.6	64	2.2
B 9	1	0.5	6	0.2
B 9.1	1	0.5	22	0.7
Misc.	3	1.4	6	0.2
Total	218	100.2	2970	100

Assemblage 7: pottery from the lower ditch fills of Enclosure 2 (Fig. 83)

- 1 Bead-rim jar with ill-formed bead in handmade Fabric IA.10 fired lumpy brown-grey with curvilinear body furrowing. External rim diameter 100mm. Looped furrowing is solely pre-Conquest at Canterbury (Pollard 1995).
- **2** Bead-rim jar of Thompson Type C3 in handmade black Fabric IA.3 with rough surface smoothing. *c.* 75BC AD 50.
- 3 Near complete jar of Thompson Type B2-3 in black Fabric B3. External rim diameter 140mm. c. 75BC -0BC+.
- 4 Bead-rim jar in reddish-brown Fabric B3 with wide neck cordon and diagonal body combing. External rim diameter 180mm.
- **5** Bead-rim jar of Thompson Type C3 in oxidized Fabric B3. *c*. 75BC AD 50.
- **6** Near-complete pedestal base of Thompson Type A1 in black Fabric B1. *c.* 75BC AD 50.
- 7 Body-sherd from jar in polished brown Fabric B1 with scored spiral decoration on the shoulder.

The southeast corner of Enclosure 2 yielded 218 sherds of pottery from its lower silts. There is an overwhelming preponderance of 'Belgic' grog-tempered ware fragments in this assemblage (78%) and nominal amounts of sandy 'Belgic' wares from both the Folkestone area and the Medway Valley (Fig. 83). Fragments from a necked and cordoned jar or bowl in Fabric B1 are also present.

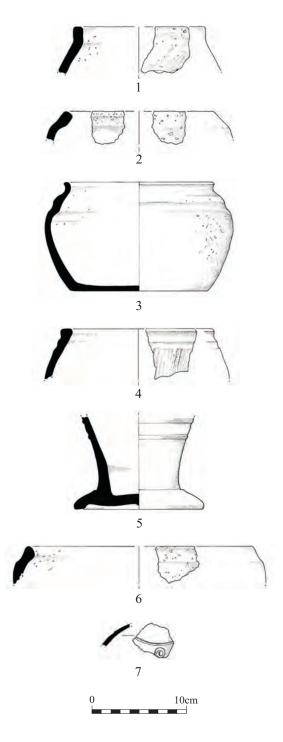


Fig. 83 Late Iron Age pottery from the lower fills of the boundary ditch of Enclosure 2 (scale 1:4)

Assemblage 8: the flanking ditch of Enclosure 2

The 63 sherds (660g) of pottery from the flanking ditch is too small an assemblage for any form of meaningful quantification. This assemblage is also dominated by 'Belgic' grog-tempered wares (Fig. 84).

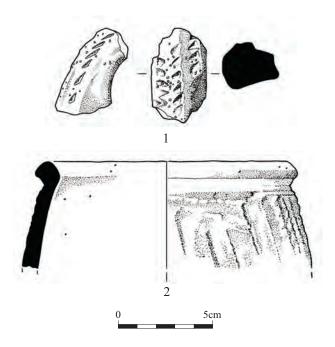


Fig. 84 Late Iron Age pottery from the flanking ditch (scale 1:2)

Assemblage 8: pottery from the flanking ditch (Fig. 84)

- 1 Handle from vessel of uncertain form, in black Fabric IA.1B with stabbed decoration.
- 2 Bead-rim jar in brown-black handmade Fabric B3 with diagonal body combing. External rim diameter 140mm.

Assemblage 9: the fill of gully [1036], southeast of Enclosure 2

The 48 sherds (681g) of pottery from this ditch terminal on the southern edge of Area B is too small an assemblage for any kind of meaningful quantification, but is entirely made up of 'Belgic' grog-tempered and sand-tempered sherds, except for a single abraded pellet in calcined-flint-tempered Fabric IA.1C. A rim sherd from a necked jar of uncertain type in oxidized Fabric B1 is also present (Fig. 85).

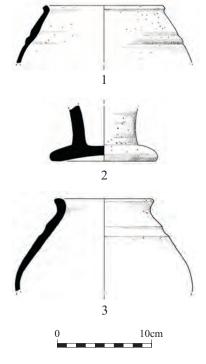


Fig. 85 Late Iron Age pottery from gully [1036], to the southeast of Enclosure 2 (scale 1:4)

Assemblage 9: pottery from gully [10360 (Fig. 84)

- 1 Plain barrel-shaped jar of Thompson Type G5-1 in polished black Fabric B3. External rim diameter 100mm. c. AD 0 - AD 50.
- 2 Pedestal-urn base of Thompson Type A4 in similar fabric. c. 75BC - AD 50.
- 3 Narrow-necked jar with rippled neck of Thompson Type B3-2 in black Fabric B3. External rim diameter 100mm. c. AD 0 - AD 50.

Assemblage 10: the upper ditch fills of Enclosure

Table 7 Pottery from the upper ditch fills of Enclosure 2

Fabric	Sherds (No)	%	Weight (g)	Weight (%)
Bronze Age	1	0.2	24	0.6
IA 1	10	2.3	146	3.1
IA 1B	11	2.6	34	0.7
IA 1C	6	1.4	182	3.8
IA 2	10	2.3	120	2.5
IA 3	34	7.9	190	4.0
IA 8	10	2.3	116	2.4
IA 9	17	4.0	234	4.9
B 1	131	30.7	2016	42.4
B 2	44	10.4	784	16.3
B 2.1	44	10.4	308	6.5
B 3	94	22.1	500	10.5
B 6	3	0.8	28	0.6

The fabric breakdown of this material is very similar to that from the lower fills of the ditch, with 'Belgic' grog-tempered wares accounting for 70% and sandy 'Belgic' wares for less than 1% (Fig. 86).

Discussion

The earlier part of the Late Iron Age, between c. 100BC and 25BC, saw most of the pottery supplied to the site being calcined-flint-tempered wares of uncertain but probable local origin. Small amounts of 'Belgic' grog-tempered ware may have come from the Canterbury area but this is uncertain.

The period after c. 25BC saw a considerable increase in the variety of pottery supplied to the site. 'Belgic' grogtempered wares from the Canterbury area largely supplanted the calcined-flint-tempered pottery, although at least one grog-tempered vessel, a plain barrel-shaped jar (Fig. 84.5), may have been brought in by sea across the Thames Estuary from an Essex source such as Camulodunum.

Small amounts of sandy soot-soaked pottery from the Folkestone area present in Assemblage 8 were probably supplied as salt containers by coastal trade, and glauconitic wares in equally small amounts came in from sources on the edge of the Weald in the upper Medway Valley.

There is no evidence for ceramic trade with the Roman world; the absence of Gallo-Belgic imports and amphora fragments may indicate either a low social status for the site or termination of occupation by c. AD 30.

Assemblage 10: pottery from the upper fills of the boundary ditch of Enclosure 2 (Fig. 86)

- 1 Bead-rim jar of Thompson Type C3 in rough black Fabric IA.1 with diagonal body furrowing. c. 75BC - AD
- 2 Simple handmade bead-rim jar in polished black Fabric IA.1C.
- 3 Wheel-turned cordoned jar in polished Fabric IA.2 with finely crushed flint, fired brown-black. External rim diameter c. 180mm.
- 4 Bead-rim jar with combed body and flattened bead in orange-brown Fabric IA.2.
- 5 Tall plain-barrel jar with small bead-rim of Thompson Type B5-1 in polished black Fabric IA.3. External rim diameter 100mm. This type is not normally found in Kent but is common in Essex and Hertfordshire.
- 6 Crude bead-rim jar with corrugated shoulder in black Fabric IA.8. External rim diameter 200mm.
- Bead-rim jar with combed body and upright bead in oxidized Fabric B3. External rim diameter 180mm.
- Bead-rim jar with body combing in similar fabric but fired black. One of two.
- 9 Simple hole-mouthed jar of Thompson Type C3 (Canterbury Type 14) in coarse black Fabric B3. c. 75BC - AD 50. Paralleled in Marlowe Theatre Period 2 assemblages (Pollard 1995, figs. 277 - 145).
- 10 Similar vessel in rough black Fabric IA.1 with diagonal body combing below hemispherical boss. External rim diameter 140mm.
- 11 Wheel-turned cordoned jar in oxidized Fabric B1.
- 12 Bead-rim jar of Thompson Type C4 in similar fabric. c. AD 30 - AD 100.
- 13 Jar of Thompson Type B2.2 with corrugated shoulder in patchy buff/grey Fabric B1. External rim diameter 130mm. A common Kent form dated c. 75BC - 0BC and paralleled at Rose Lane, Canterbury (Wilson 1995, fig. 299-F45) and Sturry (Thompson 1982, figs. 73 -103).
- 14 Jar with squared-off bead-rim in brown-black Fabric B2.1 with diagonal body combing. External rim diameter
- 15 Pedestal base from jar of Thompson Type A3 in black Fabric B1 and converted into strainer by having six holes drilled through it after firing. c. 75BC - AD 50.
- 16 Fragment from squat wide-mouthed cup of Thompson Type E2-2 in polished black/buff Fabric B1. This form is characteristic of East Kent and is dated c. 30BC - AD 50.
- 17 Small jar with corrugated neck in black wheel-turned Fabric B9.3 with glauconitic sand and buff grog. External rim diameter 150mm.

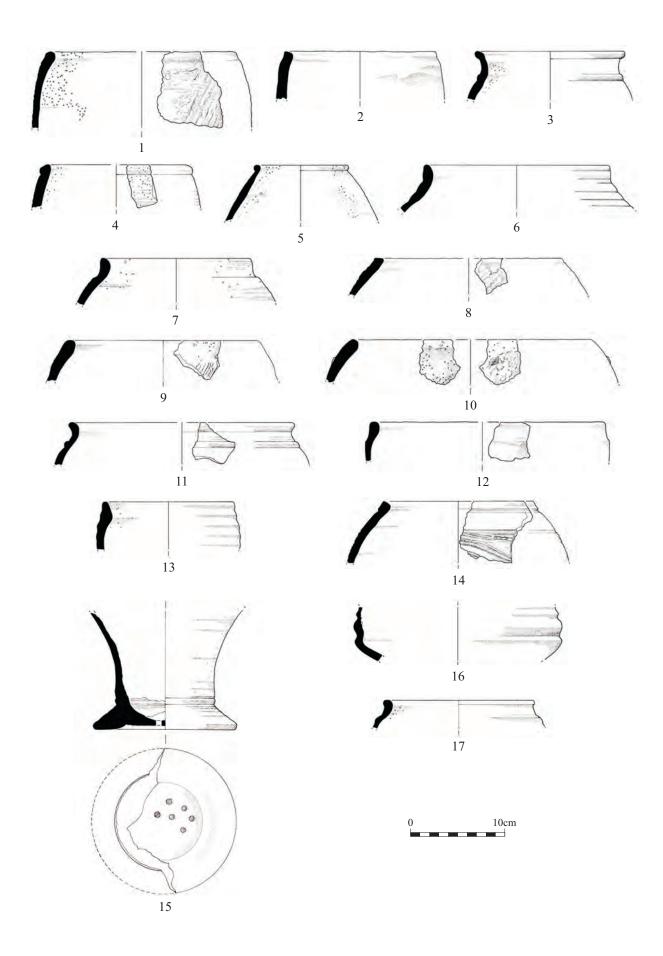


Fig. 86 Late Iron Age pottery from the upper fills of the boundary ditch of Enclosure 2 (scale 1:4)

LATE IRON AGE BRICK FRAGMENTS

JOHN BROWN

Three daub-like fragments, most likely representing bricks of Iron Age (pre-Roman) date, were recovered, two from Enclosure 2's ditch and one from the ring-gully of Circular Structure 4. None of the fragments showed quantifiable dimensions, although the largest fragment had three surfaces and two edges measuring at least 93mm by 76mm by 56mm and weighed 232g. The fabric is similar to the daub fragments, although the largest brick fragment appears to have bone and shell fragments added as a temper. The fragments are poorly and unevenly fired, although it has not been possible to determine whether the bricks were fired during manufacture or if they became accidentally burnt during or after use.

Complete examples of Late Iron Age brick were recovered from a triple-ditched enclosure at Moor Hall Farm, Rainham, Essex. They are described as fired clay bricks or 'Belgic' bricks, but their fabric and function is not discussed (Greenwood 1982, 191; 1997, 159). Other examples of pre-Conquest or mid 1st century native brick and tile come from Colchester (Hawkes and Hull 1947, 347). Possible pre-Roman poorly fired and hand-smoothed brick fragments were found at the 'Belgic' site at Prae Wood near Verulamium (Wheeler and Wheeler 1936, 178 and pl.1vi). In terms of function, the current opinion is that they were not used for large-scale building, but as architectural elements, such as hearth furniture (K Sabel, pers comm.).

LATE IRON AGE SMALL FINDS

IAN RIDDLER AND ALAN VINCE

Ceramic Objects

Two ceramic objects, comprising a loomweight and a spindle whorl, were recovered. Only a small fragment of the loomweight, recovered from Enclosure 2's ditch, survives, including part of the outer surface along one edge. There are no traces of any perforations (Fig. 87.1). It has been produced from a relatively pure clay with sparse inclusions of white quartz of 1mm or less, and occasional larger fragments extending to 6mm in width. Sufficient survives to allow it to be identified as part of a triangular loomweight, but it cannot be assigned to any of the three principal types within that object category. Triangular loomweights were used throughout the Iron Age and also occur in contexts of early Roman date (Wild 1970, 63). Within Kent they have been recovered from a variety of sites, including Canterbury,

Dollands Moor, Dumpton Gap, Ebbsfleet, Higham's Hill, Keston and West Wickham (Bulleid and Gray 1917, 577-578; Riddler forthcoming a).

The ceramic spindle whorl was recovered from the ringgully of Circular Structure 3. It is biconical in form and weighs 31g (Fig. 87.2). It is made in a sandy fabric with moderate white, red and black quartz inclusions of 1mm or less, and occasional larger fragments up to 4mm. The form is a common one for the Iron Age in southern England and it can be seen at Micheldever and Danebury, amongst other sites (Cunliffe 1984, 401; Fasham 1987, 41 and fig 34 C2). There have been few examples from excavations in Kent (where other forms have also been noted) but one example has come from Highstead and another is known from Whitstable (Macpherson-Grant forthcoming). The weight of the whorl slightly exceeds that of the lighter group of spindle whorls from Danebury, whose weights varied between 18g and 28g (Cunliffe 1984, 401). The perforation is cylindrical and does not taper to either end; this is a common characteristic of Iron Age spindle whorls (Cunliffe 1984, 372).

Stone Objects

Small quern fragments of basalt lava were recovered although they were too fragmented to obtain dimensions. Sixteen pieces, weighing 165g, came from two separate contexts, pit [1224] located between Enclosure 2's ditch and the outer flanking ditch, and from a possible remnant of prehistoric ploughsoil recorded to the north of Enclosure 1. These two contexts were assumed to have been of Late Iron Age date on the basis of their associated pottery, although due the small quantities present and the possibility of residuality, a Medieval date cannot be entirely dismissed. Basalt lava querns do occur within apparently secure Late Iron Age contexts in Kent, at Oldbury amongst others (Ward Perkins 1939, 181), and therefore the possibility remains that they are of Late Iron Age date.

The basalt lava almost certainly comes from the Mayen quarries in the Rhineland, although other sources are possible (Röder 1953; Biddle 1990, 881). A related form of lava is known from southern France, but recent studies suggest that this was not transported far into northern Europe (Reille 1995; 1998). The types can only be distinguished by petrological analysis, which has not been undertaken here.

Five small fragments of carstone, weighing 57g, were recovered from three separate contexts: a posthole and a hearth located in the southwestern corner of Enclosure 1, and the upper fill of the Middle Bronze Age well or shaft [1145]. The largest fragment, from the posthole, stems from

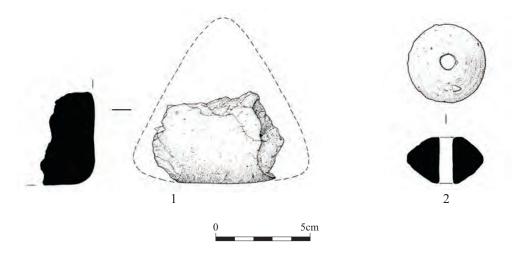


Fig. 87 Late Iron Age ceramic objects: 1. loomweight 2. spindle whorl

a quern of rotary type, but its original form is not clear. Carstone is a dark red or purple ferruginous sandstone, which forms as veins and doggers in the Folkestone Beds in the Lower Greensand. Fragments of querns of a similar stone type are known from a Romano-British site at Joyden's Wood, near Bexley (Tester and Caiger 1954, 182). A fragment of grey sandstone and two fragments of Lower Greensand were recovered from pit [1163] to the east of Enclosure 2, which also contained significant quantities of pottery. Both of these stone types were identified as being used for querns during the Late Bronze Age occupation.

IRON AGE FLINTWORKING?

BARRY BISHOP

Nearly 400 pieces of struck flint were recovered from Late Iron Age features, mostly in small quantities and scattered widely across the settlement. Given the current debates concerning the survival of flintworking traditions into the Iron Age (eg Young and Humphries 1999) a short consideration of this happening at Iwade is warranted.

Metrically, technologically and typologically worked flint recovered from Iron Age features was indistinguishable from that recovered from Late Bronze Age features, and no evidence to indicate in situ working, such as refittable flakes, was forthcoming. The condition of the assemblage from Late Iron Age contexts would suggest that these pieces had experienced higher degrees of post-depositional damage than those from earlier features. At best, this would suggest that the evidence for the continuation of flintworking into the Middle-Late Iron Age at Iwade was inconclusive. If any pieces were contemporary, they would appear to have represented a very small and insignificant aspect of the material culture, and without such evidence it would appear more likely that the regular working of flint had ceased sometime between the 9th

and the end of the 2nd century BC.

Some ad hoc use of flint may have continued; casually encountered sharp flints may have been utilized, cores and larger flakes may have been reused as pounders, hammers or as post-packing and one large cobble, recovered from Enclosure 2's ditch had been used as an anvil, judging by the multitude of incipient Hertzian cones on its flat surface.

One pit [871] in the southwest corner of Enclosure 1 and another [1087] in the north of Enclosure 2 produced large fragments of nodules fresh from the chalk, some of which weighed over 2kg each. Interestingly, both pits also produced high quantities of pottery. Although large, one of the nodules from pit [1087] had a narrow and easily breakable constriction and must have been carried to the site with great care (Fig. 88). It would seem unlikely that these would have been incorporated into the features accidentally and they had presumably been deliberately deposited. The purpose of this was unclear, the nodules were of good flaking quality although had only been minimally prepared, and it was possible that this dressing was not primarily designed to produce flakes; the nodules had therefore apparently been selected for some other purpose.



Flint nodule placed within pit [1087]

A further unusual use of flint may be discerned from the assemblage recovered from the upper fill of well or shaft [1145]. Although it was constructed during the Middle Bronze Age, its upper fill contained Late Iron Age pottery, suggesting that it was only finally infilled, or perhaps partially recut, during this later period. Its upper fill produced an assemblage of 22 struck pieces, including core rejuvenation flakes, leaf shaped and barbed and tanged arrowheads, a competently manufactured end scraper (see Figs. 38.5, 41.2 -41.3) and a further scraper fragment, a crude pick or chopping type core-tool (see Fig. 42.4) as well as one or two

possibly utilized pieces. With the exception of the core-tool, the assemblage would be most characteristic of industries spanning the Neolithic and Early Bronze Age. The arrowheads were unlikely to have been manufactured contemporaneously, and must have substantially pre-dated both the construction and final infilling of the feature. It is barely conceivable that this assemblage formed as a result of incidental redeposition within the feature by earlier material, and it is more likely that it represented an intentional collection of unusual or interesting products, possibly used to 'seal' what may have been recognized as an 'ancestral' feature.

Discussion of the Iron Age Period

The excavations at Iwade have revealed the presence of an enclosed settlement established during the 1st century BC. At least two broad phases of occupation were identified. The earliest consisted of a large enclosure within which at least two circular structures were positioned. By the beginning of the 1st century AD the enclosure had been sub-divided and two further circular structures, possibly replacing the earlier ones, established. The focus for these had shifted from the southwest corner of the enclosure to the eastern side of the newly divided enclosure. In addition, a further enclosure was constructed adjacent to the first, with a flanking ditch partially encircling it. Occupation at the site continued until the advent of the Roman invasion, around which time the site was abandoned.

The Subsistence Base

One of the more obvious and pertinent questions posed about the findings from the excavations concerns the economy practised at the settlement. From an agricultural point of view, the farmstead at Iwade was favourably located, being situated on the high ground in an area of good soil fertility, overlooking the Swale floodplain and within easy reach of a number of different ecological zones.

Cereals

Several carstone quern fragments provide some evidence that cereal was consumed at the site. However, no 'classic' storage pits were present, and although the '4-post structures' may well have been used for grain storage, their rarity at the site suggests grain storage was not an important aspect of the settlement's economy. There was very little other evidence for cereal cultivation, the environmental samples produced only a very few charred Triticum grain seeds, though this may be attributed to poor survival rather than a genuine absence.

Despite the paucity of evidence for cereal cultivation, plants are likely to have been important, not just for food but also as animal fodder and fuel, and an increase throughout the Iron Age in the management of field, woodland and coastal resources has been noted (Jones 1996). Jones also suggests that the analysis of Late Iron Age flora remains show patterns most consistent with "neighbourhood groups of agrarian sites engaged in a common network of plant production and exchange" (ibid., 35). It is possible that such systems of local specialization could have included other products, possibly explaining the evidence for at least

limited cereal consumption but the almost total absence of evidence for its actual production.

Livestock

The animal bone assemblage indicates a reliance on domestic animals with cattle as the main food source, followed by sheep and horses. All stages in the butchery/animal carcass processing sequence were represented, suggesting that in the main animals were produced and slaughtered locally, with little evidence for any extensive importation or exportation of processed meat. Cattle were clearly the main contributors to the meat supply, much of which was in the form of mature beef, indicating that these animals were being kept for purposes of draught in addition to their ultimate role as meat producers. The importance of cattle rearing is evident from many other sites in the southeast, where typically cereal grain is found but not in large quantities (Drewett et al. 1988). Such reliance in other parts of Britain was noted by Caesar, who stated that "most of the inland inhabitants do not sow corn, but live on milk and flesh" (De Bello Gallico 5.14). Some evidence for the processing of dairy products is suggested by the perforated base of a pottery jar, which may have functioned as a butter or cheese strainer (Fig. 89 and see 84.15). Further support for a mainly pastoral economy at the settlement is suggested by the layout of the settlement itself, Ramm (1980, 31: quoted in Chadwick 1997) suggests that:



Fig. 89 The base of a Late Iron Age jar converted into a strainer

"The archaeological patterns of a pastoral area should be different from those produced by much more mixed farming. In the latter case the need to separate crops and animals produces more complicated and nucleated patterns with stock enclosures around central huts from which droveways lead through an area of fields to pastures beyond. In a pastoral area we can expect not only sparser settlement but simpler patterns; one or two buts in a simple enclosure, isolated stock enclosures, and ranch boundaries."

The pastoral economy practised seems to have been selfcontained with only limited evidence for the use of supplementary resources, such as fish, wildfowl, or game, as suggested by the absence of wild species in the bone assemblage. It is possible that cattle and ponies may have also been used for traction, and the sheep for wool as suggested by the spindle whorl and loomweight, although the evidence is not extensive and wool production unlikely to be for anything other than local use. Sheep were probably primarily reared for meat, as indicated by the jawbones of lambs. Horses and dogs were also kept, possibly employed in controlling livestock if on the move. The faunal assemblages are favourably comparable with the general trends noted from southeast Britain, with the major domesticates, especially cattle and sheep dominating (see Chapter 6).

It is generally assumed that the internal area of many enclosures may have been used for the keeping of livestock as well as other activities (Drewett et al. 1988, 131). In the earlier phase there would have been large open areas within Enclosure 1, to the northeast of the circular structures, that may have been open ground suitable for this purpose, and in the following phase the enclosure appears to have been formally divided into two areas by a ditch, with one side explicitly used as a living and working area, whilst the other was kept as open ground and could have been for corralling animals.

If the enclosures acted at least partly as animal stockades, then the movement of animals to outlying fields, either on a daily or weekly basis, was likely to have been an important routine of life. The holloways may have facilitated this, not only as routes leading to outlying field-systems, but also to potential lowland grazing sites by the marshes. There is no reason to believe that some form of lowland transhumance, as suggested for the Late Bronze Age phase, where livestock were seasonally moved from higher pasture in the south to the lower-lying marsh and coastal belt to the north, was not practiced during the Late Iron Age. If so, the settlement at Iwade may have acted as the focus for a 'ranch' style system of livestock farming. Similar systems have long been argued for the chalklands of southern and eastern Britain, and may have extended at least as far as northwestern France (Courbot-Dewerdt 2003, 71). The identification of

droveways, often bounded by ditches, in the North Kent region, such as at Wises Lane, c. 4km to the south of Iwade (Hammond et al. 2003) may also demonstrate the importance of moving animals around the landscape. Interestingly, many of these droveways are also orientated north-south, possibly reflecting the importance of seasonal movement between higher and lower ground.

Marsh/coastal resources

Somewhat surprisingly, given the proximity of the Swale floodplain and Chetney marshes and their likely role in pasturage, very little evidence for the exploitation of their natural and mineral resources was identified. This mainly consisted of limited quantities of marine molluscs, recovered from Enclosure 2's ditch. Historically the coast to east of Iwade has been known as 'oyster coast' (Allen, 2000, 169) and evidence for the use of oyster, whelk, cockle and mussel during the Late Iron Age has been identified at Borden (Worsfold 1948, 152), and for oyster further along the coast at Oare (Gidlow 1970). There was even less evidence for the exploitation of fish or wildfowl, which would both presumably have been found in abundance on the marshes. In contrast, prehistoric sites excavated higher up the Thames Valley show that a wide range of wild species were exploited (eg Bramwell 1978; Done 1980, 79). The use of plant resources, such as reeds etc, is much harder to quantify, as these are unlikely to survive into the archaeological record although some seeds from rushes were identified in environmental samples. The industrial exploitation of the local marshlands increases during the Roman period, with the development of the pottery and tile industry on the Upchurch Marshes (Monaghan 1987) and salt panning sites around Funton Creek and Bedlam's Bottom (Miles 1965; Detsicas 1984); industries which may have had their origin in the Late Iron Age if not earlier (Chaplin and Coy 1962; Allen and Willson 2001; Detsicas 1984, 168; Monaghan 1983, 29; Williams and Brown 1999, 17). A single fragment of briquetage from a salt container was recovered, which by itself does not indicate an important role for salt at the site. However, although salt was undoubtedly transported in briquetage vessels in some instances, it is also possible that other containers that do not survive so well in the archaeological record may have been employed; in the Medieval period, for example, salt was commonly transported in wicker containers. Given the suggested importance of animal rearing at the site, the role of salt in preserving meat and the proximity of easily exploitable supplies of salt to the site, salt may have been used more extensively than the quantities of recovered briquetage suggest.

The Settlement

"Theirs was a subjective world, one which was conceptualised and inhabited through people's identities, histories and understandings (Bender et al. n.d.). This was not a secular landscape separated from the sacred realm, but one invested with myth and spirituality, with identity and with power. The extensive systems of boundaries and enclosures were physical manifestations of how people lived and thought through the land." (Chadwick 1997)

Iron Age studies have traditionally concentrated on the more functional aspects of Iron Age life: establishing settlement plans, working out chronologies, describing the environment, economy and so on, leading to criticism that these merely reflect contemporary concerns and do not appreciate the experiences of the individuals under discussion or the "otherness of the past" (Hill 1993).

In order to try to 're-populate' the past, recent work has recognized that individuals experience their surroundings on different levels and in different ways, from the immediate, such as within the roundhouse, to that within the settlement and then into the wider landscape beyond. Equally, social contact will differ from the intimacy of the family, to that with neighbouring groups who may be familiar and more distantly related, to the less frequent contact with strangers, possibly from far away (Bevan 1999a, 15). There has also been an appreciation that so many aspects of existence, such as attitudes to dirt and refuse-maintenance strategies; construction and use of space; procurement, production and exchange of objects; preparation and consumption of food; perception and classification of the natural world, time etc, are not universal constants but are closely bound up with specific social constructions of reality and differ considerably between historically and culturally contexts (eg Hill 1993; Brück 1999c).

Enclosures

The most notable defining aspect of the Late Iron Age settlement was the effort taken to demarcate it from its surroundings, achieved by the creation of substantial enclosure ditches. The creation of these enclosures would have required the expenditure of a great deal of resources, possibly involving the effort of more than just the inhabitants of the settlement.

In the last two decades there has been a fundamental shift in the way boundaries and enclosures have been interpreted. Traditionally seen as defensive structures or practical elements of a functioning agricultural system, such systems of land demarcation are now routinely interpreted in terms of the expression of relationship with the land, establishing and enforcing tenurial relationships, and a means of creating

social identity (eg Bowden and McOmish 1987; Hingley 1990; Thomas 1997). The appearance, in this case quite suddenly, of enclosed farmsteads within a landscape predominantly characterized during the previous two to three millennia by open, unfocussed and frequently ephemeral settlement, may indicate a change in the social and tenurial relationships of local communities. The degree of agricultural intensification seen during the latter parts of the first millennium BC was likely to result in land becoming an increasingly valued commodity, leading to the need for its greater demarcation and possibly indicating a shift away from communally organized production towards tighter-knit and independent family units working what had become private landed property (Thomas 1997). The inflexibility of such boundaries would make it difficult to move or contend them, and Hingley has suggested for the upper Thames region that enclosed settlements were an expression of family land holding and, as such, they represent the emergence of a more fragmented society (1984a; 1984b; 1990).

Despite the substantial form of the enclosure ditches, there was no evidence of any further elaboration. Any accompanying banks must have been low and, as no evidence for recutting was seen, it is possible they silted-up quite quickly after initial construction, possibly explaining the lack of any obvious bridging structures or entrances. It may therefore have been the actual digging of the ditch that was seen as important; the physical manifestation of 'marking' the land and the effort put into its construction (cf Bowden and McOmish 1987).

It has been difficult to view the enclosures at Iwade purely in terms of defence or animal management, although the wide ditches of the first enclosure and the possible low banks that may have accompanied them could, initially at least, have acted to mirror and embellish their natural topographical setting and, in the low undulating countryside that Iwade is set, may have been seen as more appropriate than more dramatic or imposing boundaries (Willis 1999). It was unlikely that these were outstanding features or could have served to conceal the activities occurring within. Nevertheless, their setting, on the ridge of a low hill overlooking marshland, may have made them seem prominent in their relative location, embellishing the settlement as seen from outside and making an explicit statement about the relationship of the inhabitants with the land.

The creation of such enclosures would entail a degree of communal effort, possibly drawing on disparate, perhaps economically or socially related, neighbouring groups. Over time, the boundaries become 'natural' features of the settlement, binding this landscape to everyday social and economic routines. At Iwade as many as six generations lived in the settlement, most of which grew up with the boundaries already firmly fixed. The material reality of these, combined with traditions of their creation handed down by the ancestors, would all have acted to reinforce a particular way of life as well as the tenurial security of the site (cf Bevan 1999b; Chadwick 1999). Such concerns may have been especially pertinent at Iwade, as it is possible that at least part of the population was away from the settlement during certain times of the year, engaged with the movement of livestock. It is possible, even, that the settlement was not permanently occupied. Nevertheless, the effort expended on creating the settlement, combined with the impressive quantities of material culture recovered (bearing in mind only small percentages of the total deposits were excavated) would suggest that it represented an important base and a significant focus within any cycle of movement.

The flanking ditch

The presence of the flanking ditch, partially surrounding Enclosure 2, is also intriguing. It does not appear to act to 'enclose' anything, and the possibility that it actually delimited a routeway should be considered. Such a routeway, although rather tortuous, would have enabled the control of any north-south movement without entailing actually entering the enclosures. The purposes of such a routeway are less clear; rather excessively constructed purely to control the movement of animals, it could conceivably have been used as a processional way, winding its way around, and in full view of, both enclosures. It was also notable that the part of the enclosure ditch adjacent to the southern 'opening' or entrance into the space between the enclosure and the flanking ditch contained the most complex and artefact rich fills, and it can be argued that this area was the scene of conspicuous consumption, possibly of a ceremonial nature and consistent with practices identified at other entrances (eg Hill 1993, 66), possibly signifying the importance of crossing the threshold from the outside to the inside. Few parallels to routeways that actually encircle enclosures have been found, although elaborate routeways leading up to enclosures are more common, most notably the 'Banjo' enclosures of central southern England, which typically have long ditch-cut approaches up to 90m long, leading to a central enclosure. Their ditches are also frequently artefact-rich with evidence of ceremonial activity identified in and around them.

Residential buildings

The basic assumption is that the four circular structures identified represent residential domestic dwellings of the form commonly referred to as roundhouses. However, all four of the examples here varied considerably in their construction, and none can be easily reconstructed. It is widely recognized that the role of all Iron Age buildings remain poorly understood, and it is only by tradition that these are so readily identifiable as roundhouses, with the implicit assumption that they represent residential dwellings. However, assuming the enclosures were inhabited, these structures provide the best evidence for the location of dwellings, although it is readily admitted that 'roundhouses' are not an exactly homogeneous phenomenon, and that the function and status of such structures was probably highly variable (cf Humphrey with Claxton 2003, xii). It is also possible that other residential structures were present at the site but for various reasons, if they were constructed using ground beams for example, were not recoverable archaeologically. Indeed, although no obvious structures were recorded within Enclosure 2, the nature of the fills of the enclosure ditch's southeast corner could be interpreted as resulting from domestic activity in this area.

Of the four identified structures, Circular Structure 2 produced no evidence of an encircling gully, although a shallow gully may have existed but been lost to later truncation, whilst Circular Structures 1 and 4 had 'traditional' eaves-drip gullies. Circular Structure 3 had a more substantial ditch surrounding it. None produced any clear evidence of walls, either in the form of unequivocal circles of postholes, or ground-beam impressions, although it is unlikely that the latter would have survived ploughing or erosion. It is possible, at least for Circular Structures 1 and 4, that the gullies themselves may have indicated the remnants of walls although this is not a particularly convincing explanation. The postholes of the circular structures at Iwade made no obvious circular patterns, so the forms of the buildings cannot be confidently estimated and, considering that most of them were shallow, it is probable that others had not survived or they were not as deep. This is not an uncommon phenomenon, as roundhouses, particularly in the south and east of Britain, frequently exhibit few internal features, and with those that do, they are often irregular in design with arrangements that make reconstructing the original building design problematic (eg Rodwell 1978, 25).

Recent work has emphasized the importance of the orientation of roundhouses and the internal structuring of activities within them, with the realization that these may have had metaphorical qualities, being organized according to traditional cosmological concerns reflecting the routines of daily life (eg Fitzpatrick 1994; Parker Pearson and Richards 1994; Parker Pearson 1996; Oswald 1997; Giles and Parker-Pearson 1999). Unfortunately, very little could be reconstructed of these aspects of the structures at Iwade.

The entrances of Iron Age roundhouses almost universally face east/southeast but the gaps within the gullies of Circular Structures 1 and 4 both faced northwards, although in the case of the latter an east-facing opening could be possible. Possibly the most convincing evidence of such patterning could be seen in the best-preserved example, Circular Structure 3. This was surrounded by a continuous and relatively substantial ring-ditch, with two adjacent postholes, possibly demarcating an opening c. 4m wide facing due east, and with a further substantial posthole lying between these, but set back a little. These were apparently significant as the posthole forming the northern 'entrance' and the set-back posthole produced over half of the pottery recovered from the internal features. Large dumps of burnt flint were recovered from the ring-ditch, and a substantial deposit of large and unabraded pottery sherds filled its southeast quadrant, immediately to the south of the putative entrance, the dump also including a spindle whorl and fragments of a spring from a Late Iron Age brooch. In addition to a centrally placed hearth, a further hearth was located towards the southeast. This may suggest that the focus for activities conducted in the ring-ditch was within the southeast quadrant, although there was also a cluster of features towards the western side. This activity may have been domestically orientated, reflecting the traditional role assigned to roundhouses as residences.

Another interpretation of this structure acknowledges that such features and artefact patterning may be more analogous to the hengiform and ring-ditch monuments of the Bronze Age. For example, in addition to the relative richness and variety of the deposits recovered from the ringditch, the arrangement of some of the internal features may have marked important celestial events. As seen from the centre of the structure the two 'entrance' posts would have lain just within an arc defining the changing position of the

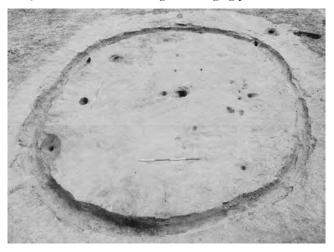
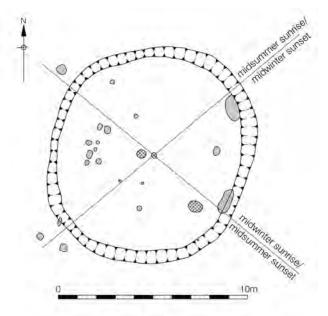


Fig. 90 Circular Structure 3, looking south, the two burnt postholes to the left (east) of the picture, adjacent to ring

rising sun as it progressed through its annual cycle, the setback post being in line with sunrise during the spring and autumn equinoxes. Other pits and postholes within the ringditch could have been used to mark specific points or events during the sun's annual cycle (Figs. 90, 91). Such an interpretation is necessarily very speculative and it is difficult to assess how predetermined any such alignments might have been, and, if they did genuinely mark significant celestial alignments, whether the structure was intended primarily to have an overtly ceremonial role or whether it was used as a residence whose architecture incorporated the essences of the annual cycle that would have been so important to its inhabitants.

Pits and Rubbish

Many pits dating to the Iron Age were also found, mostly in clusters, but with others scattered more randomly across the site. Pits are ubiquitous to later prehistoric settlements, and probably fulfilled a variety of functions. Some, but far from all, of the pits contained quantities of pottery and other apparent 'rubbish'. Traditionally regarded as simply representing a means of disposing of unwanted refuse, it is now routinely argued that the placing such 'debris' can be imbued with significance, reflecting ceremonial and ritual concerns (Hill 1995). Many of the pits at Iwade may have been used for rubbish disposal, although often they showed characteristics that suggest this was not always a simple affair. One intriguing aspect of the pitting is they were commonly in clusters, and these clusters were often located



Solar alignments within Circular Structure 3 showing the position of the rising and setting sun at the summer and winter solstices (scale 1:200)

in areas where earlier, Bronze Age pitting had occurred. Notable examples include the group to the east of Enclosure 2, surrounding a series of Bronze Age pits (Fig. 92); pitting cluster [104] that truncated Late Bronze Age pit [193]; the cluster in the southwest corner of Enclosure 1 which was also in the vicinity of a number of Bronze Age pits (see Figs. 76, 69). Although it would seem unlikely that many of these earlier features, some more than a thousand years old by the Late Iron Age, were still visible, the possibility that later pitting accidentally uncovered cultural material recognized as antique or exotic, prompting further pitting in the area, should not be dismissed. One feature, the Middle Bronze Age well or shaft [1145], did contained Iron Age sherds in its uppermost fills, indicating that it was either finally infilled or possibly recut long after its initial construction. Interestingly, the deposit that finally sealed it, as well as containing Late Iron Age pottery and a small fragment of quernstone, contained a relatively large and unusual assemblage of struck flint, including pieces such as arrowheads, all of which considerably pre-dated it. It was unlikely that all of these struck flints could have been accidentally incorporated into the deposit, rather it would suggest that a range of 'antique' items, perhaps collected from the surrounding fields, was used to seal a feature that may have been recognized as being 'antique' in itself.

Some of the pits contained whole or substantially complete pottery vessels, and as with the earlier periods, these may actually represent symbolic or ceremonial acts, perhaps marking significant places or events at the

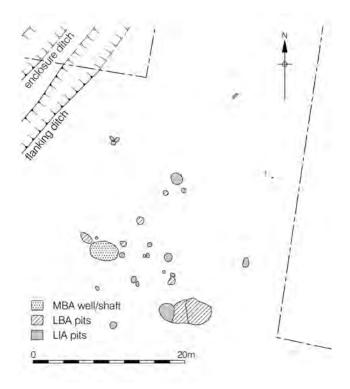


Fig. 92 Pits to the southeast of Enclosure 2, showing relationship to earlier pitting (scale 1:500)

settlement. Two pits contained what can only be described as unusual deposits. In addition to a nearly complete but underfired pot, pit [871] in the southwest of Enclosure 1 produced a flint nodule weighing over 600g, alongside over 300g of burnt flint fragments. Pit [1087] located in the north of Enclosure 2 contained two flint nodules, weighing 2.7kg and 2.4kg, placed on its base. This pit also contained 22 sherds from at least nine different vessels, the latest dated to between AD 15-50. The interpretation of these deposits is difficult. All of the nodules had a chalky cortex, and evidently were obtained directly from the chalk. They had been struck although their shape was inherently unsuitable for serious reduction, one being so fragile that it must have been carefully transported to the site and deposited. Although deliberate deposition for ritual or ceremonial reasons is routinely used as an explanation for unusual deposits on Iron Age sites, there are few parallels for 'raw' flint being employed, although some flint nodules were deposited in Early Neolithic ritual pits at Sittingbourne (Payne 1880).

Trade, Exchange and Communication

It is apparent that there was a shift towards more centralized systems of production and exchange in southern Britain throughout the Iron Age. By the 1st century BC, coin evidence suggests that a market economy may have emerged in Kent (Van Arsdell 1989), and by the end of the Iron Age parts of southern Britain, including Kent, was engaged in the exchange of both goods and culture with the Roman world.

However, evidence for such influences at Iwade was virtually non-existent. In many regards this may appear somewhat surprising, Iwade was to a certain degree undoubtedly part of a much wider social, political and economic arrangement of allegiance. It lay on a major northsouth route linking the mainland with the Isle of Sheppey, was close to the route of Watling Street, often regarded as having a prehistoric antecedant, and had easy access to the Swale, and from there, the Thames estuary and beyond. However, beyond localized networks of exchange, and perhaps the occasional supply of tribute to social elites, the machinations of long distance trade, with all of its connotations of prestige and aristocratic control, may have been largely irrelevant to the inhabitants of Iwade.

The resource base of the settlement appears to have been primarily centred on cattle and sheep, and although these and their products were probably the main exportable commodities, it appears that in the main they were reared, killed and consumed within the settlement, rather than being raised for market. Nevertheless, some of the artefactual

evidence does show contact and exchange with the outside world

Several pieces of iron slag, including a piece of tap slag, represent the only evidence for metalworking at the site (see Keys, Chapter 6 below). The slag came from rubbish pits and ditches, rather than in situ within hearths, and may have been introduced to the site, examination of all hearths for slag and hammerscale proved negative. Only limited evidence for bone working was identified, consisting of two smoothed cattle ribs and a chopped horn core, probably waste from horn-working (see Armitage, Chapter 6, below). There was no evidence for pottery production at the site, although there is little to suggest that most of the fairly wide repertoire of pottery types utilized were not made locally, especially considering the suitability of the local marshlands for pottery production, as evidenced by their importance during the Roman period. A few pieces did however originate from further afield, including pottery from the Maidstone and Folkestone areas and a barrel jar most commonly found in Essex or Hertfordshire.

A few fragments of lava quern that probably originated from Germany were imported to the site. The carstone quern fragments originate from the Lower Greensand, the nearest outcrops of which can be found some 15km to the southwest in the Maidstone area.

There is no conclusive evidence for flintworking during the Iron Age at Iwade, although some use of local gravel flint, such as for pounders, may have occurred. The complete nodules, found deposited within pits [871] and [1087], must have been imported as they were extracted directly from the chalk, the nearest outcrops of which were some 4km to the south.

Celtica and 'Belgic' affiliations

At Iwade the exact number of residential structures is difficult to elucidate, but there was no evidence that more than one or two were standing at any one time, and this can only suggest that relatively small community occupied the enclosures, possibly an extended family or single farming unit.

Extensive research has been undertaken in the attempt to define hierarchical structures of Iron Age societies, usually based on making assumptions about the social classes inhabiting, and the nature and role of, the larger settlements, especially hillforts or emerging oppida-type settlements.

Traditionally, Late Iron Age society was viewed as 'Celtic' and based on strong warrior and religious ethics; and the warlike nature of the times reflected in warrior burials, hillforts and defended (enclosed) settlements. However, it is unlikely that the enclosures at Iwade were primarily designed for defensive purposes, except perhaps in a very symbolic manner. The hierarchical, even aggressive nature of Late Iron Age society has been recently down played, (eg Hingley 1984a; Hill 1996a), and new models regard society as being predominantly composed of relatively independent household units (Hill 1996b) based on simple agricultural production. Despite this autonomy, independent household groups would have existed within an intricate web of social and economic relationships, as evidenced by a degree of shared ideology and social and economic practices that can be documented throughout much of Britain during the Late Iron Age. Specific and direct traits of political control, ideology and affiliation may have by-passed or have been largely irrelevant to the day to day life of smaller settlements, such as that at Iwade, although no doubt such settlements were susceptible to the broader, often virtually unconscious influences, such as the gradual adoption of 'Belgic' pottery fashions.

From the 2nd century BC the Thames Valley resumes an important role in developing contacts between Britain and its adjacent Continental areas, most obviously manifested in the uptake of the 'Belgic cultural package', including the wider use in some areas of wheel-thrown pottery, urned cremation and greater use of coinage (Cunliffe 1982, 44). Although not now thought to necessarily imply a substantial invasion, these influences do seem to indicate strong contact between southeast Britain and parts of northeast France, possibly encouraged by closer relationships between ruling elites. Such influence can perhaps best be seen in the richest burials of the period, exemplified by the Aylesford/Swarling culture, although the more lavish elements of these can be seen more of as an expression of aristocratic fashion, rather than evidence of the emergence of a new culture. There is an increased use of 'Belgic' pottery types at Iwade from the latter parts of the 1st century BC and until the Roman conquest, although no clear transition event is evident. The settlement, although continually changing, appears to have evolved and expanded rather than been completely reorganized, and a gradual adoption of new fashions would seem to better fit the evidence rather than an abrupt changeover from one type of material culture to another.

Chapter 5 The Roman and Medieval Periods

ROMAN PASTORALISTS?

There was an abrupt abandonment of the settlement around the time of the Roman Conquest. The only evidence of activity at the site until the Medieval period were a few Roman pottery fragments recovered from the upper fills of Enclosure 2's ditch. These suggest it may have still appeared as a partially infilled earthwork and indicating that it may have been reused as a temporary camp, possibly associated with pastoral activities, during the 2nd and 3rd centuries AD, before becoming completely backfilled.

THE MEDIEVAL PERIOD

Other than a few, apparently residual, sherds of Saxo-Norman pottery there is no further evidence of activity at the site until the Medieval period. This phase of activity, dated by pottery and stratigraphic evidence, begins during the 12th century (Fig. 93), coinciding with the establishment of the Medieval settlement of Iwade to the north of the site, and the draining of the Swale floodplain for pastoral use.

The archaeological evidence comprises the digging of a long ditch [1231], which cut through the Iron Age ditches of Enclosure 2. It was aligned north-south, was approximately 1m wide with a maximum depth of 0.60m, and extended for over 100m, traversing Area B and continuing in both directions beyond the limits of excavation. To its west were three apparently associated smaller north-south aligned ditches (Fig. 94). The function of these is difficult to elucidate; they may represent elements of an agricultural field-system, or given their elongated nature, possible represent a precursor to the holloway that developed slightly to the west a century later (see below). These features were all truncated by later Medieval features and must have gone out of use sometime during the 12th century, although pottery recovered in the northern stretch of ditch [1231] was of 14th century date, suggesting that this part of the boundary had been renewed later.

The next phase of activity was more settlement orientated and, although the dating evidence is somewhat

imprecise, the pottery and stratigraphic evidence suggests it commenced by the early 13th century and continued into the 14th. Perhaps the most notable feature belonging to this phase consisted of a wide ditch [1234] located in the southeast of Area B, which, although rarely exceeding over 1m in depth, was over 5m in width (Fig. 95). Only a short length of it was observed, curving from the south to the west and continuing in both directions beyond the limits of excavation; consequently its function was unclear. Nevertheless, its size would indicate it was a major undertaking, and therefore it presumably enclosed a relatively important structure. Its shape in plan may tentatively suggest an enclosure of rectilinear form and, although the evidence is limited, it could possibly have represented the defences, or 'moat', of a relatively highstatus building. In addition to an iron claw hammer head (see Fig. 108.2), settlement within the vicinity may be indicated by quantities of pottery, tile, animal bone, oyster shell, quern fragments and burnt flint and charcoal recovered from the fill of this ditch.

Immediately to its north were two pits, one continued beyond the limits of excavation but the other was clearly large and amorphous, measuring over 11m long by up to 2.20m wide, but only a maximum of 0.60m deep [1072]. Its fills contained pottery, animal bone, quern fragments and high quantities of charcoal and burnt daub, and like ditch [1234], suggests the presence of settlement close by. It is likely that these initially represented quarry pits, possibly to procure brickearth for construction purposes. If ditch [1234] did represent an enclosure for a residence, it would be very tempting to equate the digging of these pits with the construction of that dwelling.

Several other pits were found to the northwest of the putative dwelling (Fig. 95). Two [128], [166] contained quantities of burnt daub and charcoal, indicating possible hearths, perhaps with industrial functions, whilst [264] and [275] contained further oyster shell and pottery.

To the west of these features, further activity belonging to this phase was apparent in the south and east of Area A. A trackway running approximately north-south was constructed, its eastern ditch turning towards the southeast just before the southern limits of excavation (Fig. 96). Although no traces of its original surface remained, it was

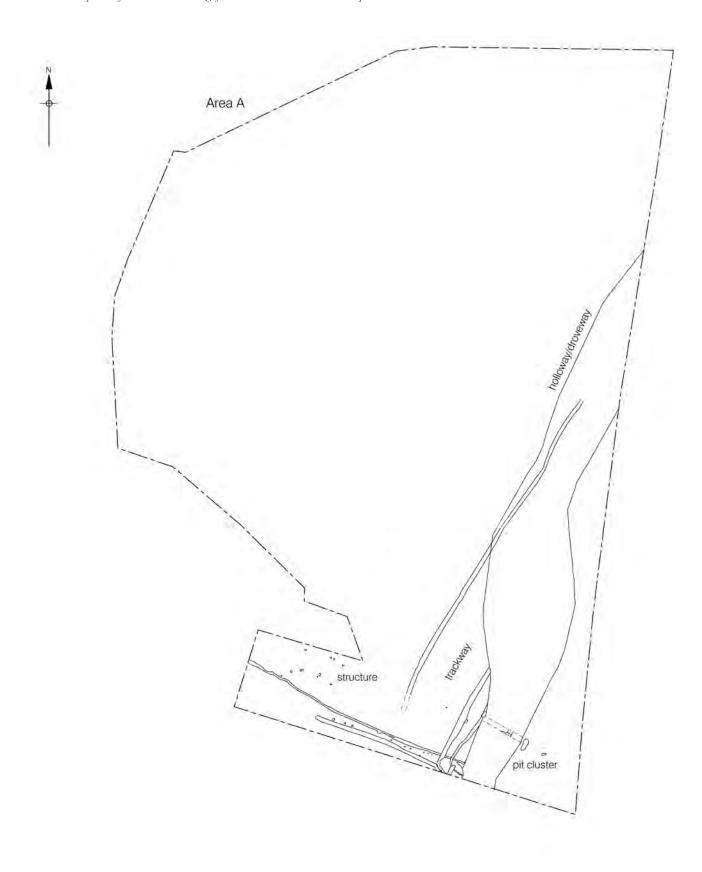
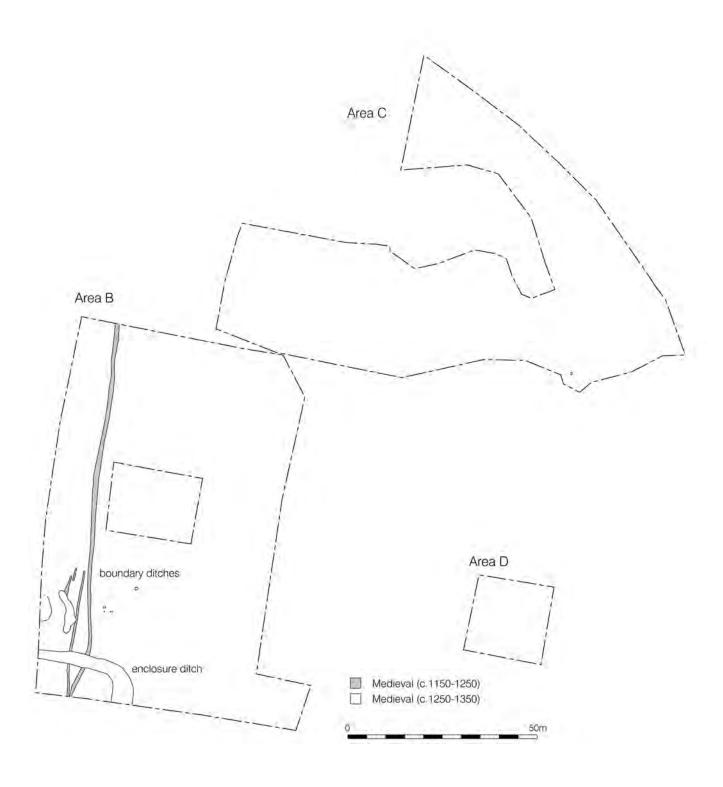


Fig. 93 Plan of all Medieval features (scale 1:1,000)



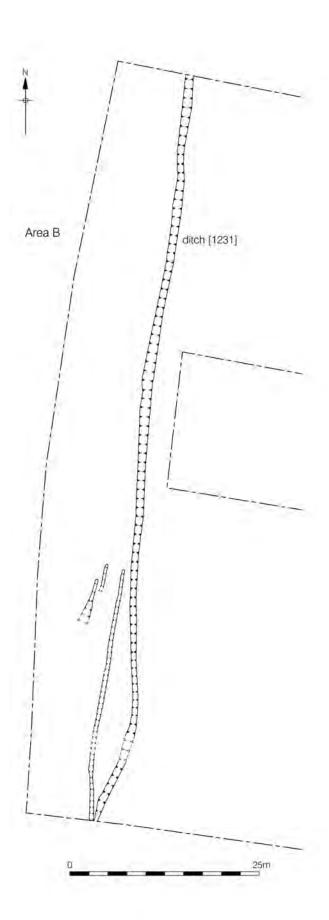


Fig. 94 Medieval boundary ditch (scale 1:500)

defined by parallel drainage ditches set 15m apart. They had been partially eroded after the trackway developed into a holloway (see below), but were still traceable northwards for a distance of up to 120m, heading towards the historic core of Iwade. Running parallel to the eastern trackway ditch and located immediately to its east was a further ditch; this also followed the trackway ditch as it turned towards the southeast. This may also have been part of the trackway, although its dimensions were more similar to the possible field boundaries described below.

Shortly after the trackway was constructed it was bisected and blocked-off by a substantial double-ditched boundary. Situated between the double ditches was a line of seven postholes and four stakeholes, representing a 36m long fenceline. The southern ditch element of this boundary mirrored the eastern trackway ditch as it turned towards the southeast (Fig. 97).

Located 4m to the north of the boundary on the same alignment as the ditch was a group of eleven postholes and one stakehole forming a rectangular pattern approximately 10m east-west by 6m north-south (Fig. 97). Although no dating evidence was recovered from them, they may represent a building; its alignment suggests it may have been contemporary with the boundary. The size and depths of the postholes suggested posts that would not have supported a substantial structure, but could have formed a small barn, shed or insubstantial dwelling.

Despite of the blocking-off of the trackway, it continued in use during the 13th and early 14th centuries AD, with traffic skirting around to the east, and eventually developed into a holloway formed through erosion into the natural brickearth. This was defined by a 0.50m deep amorphous hollow varying between 12m to 24m wide and traced for a distance of 150m. Both the trackway and holloway were likely to have been the precursor to the present-day Sheppey Way, located immediately to the east, which likewise heads down the slope towards the historic core of Iwade village, and indicates strong continuity from the Medieval period till the present-day in the use of this route (Fig. 98). The holloway produced pottery as well as objects assumed to have been dropped by its Medieval travellers, including a buckle, a silver button and a cut Henry III silver penny (farthing) dated to 1247–1272 (see Figs. 109.1; 109.3; 110.2).

The latest Medieval feature was an isolated burial of a small dog laid on its side, located 20m northeast of the large enclosure [1133]. The dog had been buried with great consideration as indicated by the presence of a large piece of pottery dated to c. 1350–1450 which appeared to have been intentionally placed under its pelvis (Fig. 99), and an unidentifiable iron object that was placed by its side. The grave had a very regular circular shape, dug to dimensions to

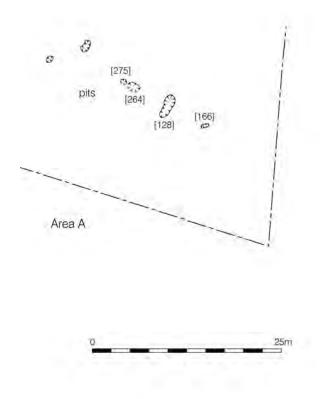
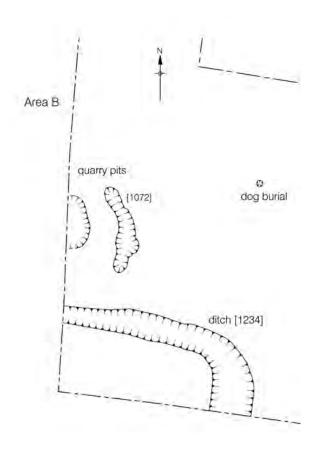


Fig. 95 Settlement features (scale 1:500)



The pottery found in the dog burial

fit the dog, with vertical sides and flat base. The dog was old but had been injured in its youth and would have experienced osteological back pain, rendering it useless as a working animal, thus it had presumably been looked after as a pet.



Historical Development of Iwade CHRISTOPHER PHILLPOTTS AND DUNCAN HAWKINS

No estate named Iwade appears in the Domesday Book survey of 1086. The nucleated settlement of Iwade was probably formed in the 12th or 13th centuries, almost certainly as a secondary settlement from Milton to the south, extending the cultivated area into marshland reclaimed from the Swale by a system of embankments and ditches. The excavated sites straddle the parish boundary between Milton and Iwade, on the slope that overlooks the marshland to the north. As this boundary consists of straight sections here, it may represent a later rationalization of a previous irregular boundary.

It appears that Iwade was a hamlet consisting of a cluster of farmsteads along 'the Street', the continuation of the Medieval trackway and holloway, now established as Sheppey Way. All Saints church at Iwade was built in the 13th century and has undergone few alterations since, the chancel, nave and tower all being 13th century in origin. The small size of the settlement throughout its history can be judged by the fact that the tiny All Saint's Church has received only minor alterations since its construction in the 13th century and even by the 19th century Iwade still only consisted of a small cluster of dwellings.

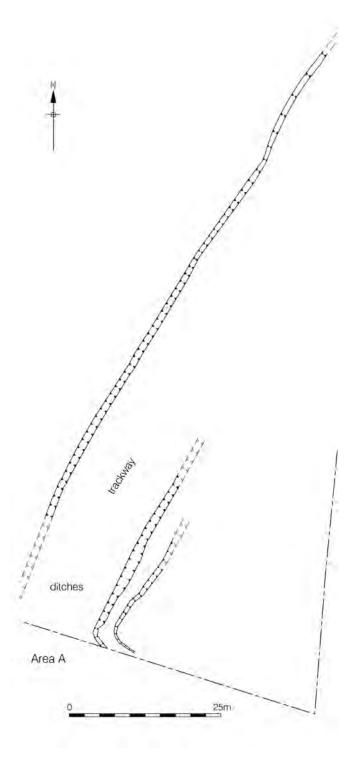


Fig. 97 Trackway (scale 1:625)

The land on either side of the road was probably divided between different estates as they developed in the Medieval and early Modern periods. This involved not only the main manors of Iwade and Milton, but also probably some of the sub-manors of Hersing Marsh, Holmes or Soames, Upper Toes, Morris Court, Wormshill, Newborough, Binbury, Chasteners, Chilton, Barksore, Grovehurst, Coulshall or Colesland, and Northwood Sheppey.

Parishes in the North Kent marshes were arranged so that they each contained marshland and higher ground. Settlements, such as Iwade, developed at the junction between the two (Whittaker 1991). This would have allowed the use of both the marshland, which was ideal pasturage, and the higher ground's fertile soils for arable crops.

The development of the settlement at Iwade coincided with the reclamation of large areas of the marshland bordering the Swale, for pasture. This required large amounts of capital investment particularly as the climate worsened and the area experienced frequent incidents of exceptionally high floods in the late 12th and early 13th centuries (Whittaker, 1991, after Bowler 1968). Between 1550 and 1560, water overwhelmed the flood defences. This prompted a new phase of reclamation between 1570 and 1630. The sea walls built during this period still form the basis of today's flood defences. 'Cottage industries' on the marshes, such as salt making, continued throughout the Medieval period and developed on a commercial scale during the 17th century.

Hasted's contemporary account describes the village as having only sixteen dwellings at the end of the 18th century, housing 60 or 70 people, a low population which he explained as follows:

"Its low and moist situation close to so large a tract of marshes and the waters of the Swale, which are its northern boundary, render it hardly ever free from fog and noisome vapours, and in summer in dry weather, the stench of the mud in the ponds and ditches, and the badness of the water, contribute so much to its unwholesomeness, that almost every one is terrified from attempting to live in it, and it is consequently but very thinly inhabited". (Hasted 1972, 203-204)

The 'unwholesomeness' of this marshy coastal zone might, in part, be attributable to the weakening effects of malaria. The historical presence of 'ague', or malaria, around the southeast coast of Britain, in particular the Essex and North Kent marshes bordering the Thames estuary, is well established (Dobson, 1980). The localized endemic nature of the disease during the late 19th century has recently been demonstrated, on the north side of the estuary, at Tilbury Fort (Moore 2000, 87).

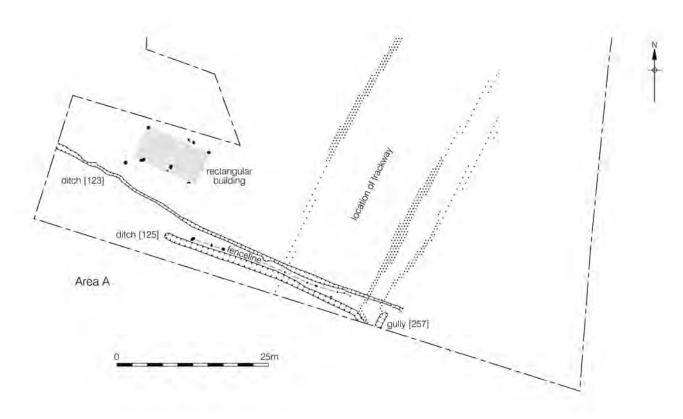


Fig. 98 Boundary and rectangular structure (scale 1:625)

There is no enclosure map for Iwade parish, but there are late 18th-century estate maps for the land on the east side of the road and just to the north, belonging to the Geary and Sheldon estates respectively. In 1780 the land on the east side belonged to William Geary. It was in the manor of Upper Toes and was called Newland Lane Field, a name suggestive of its origin, and perhaps referring to the precursor to Sheppey Way. Across Grovehurst Road to its north, the house called Frogs was built after the 1780s. The tithe maps and apportionments for Iwade and Milton parishes in 1841 -1842 indicate that the land to the west of

the road, which include Area A, belonged to Lord William Harris and formed part of Coulshall Farm; whilst the land to the east of the road, including Area B, belonged to Sir William Geary. The latter area had been renamed Way Post Field after the signpost at its northwest corner. Both fields were under arable cultivation, although part of the land on the west was called Little Profit Field, suggesting that yields were low. More recently, both fields have been used as apple orchards in the 20th century. A section in the northwest part of Way Post Field was transferred to the vicar of Iwade as glebe land in 1883. It later formed the site of the Vicarage.

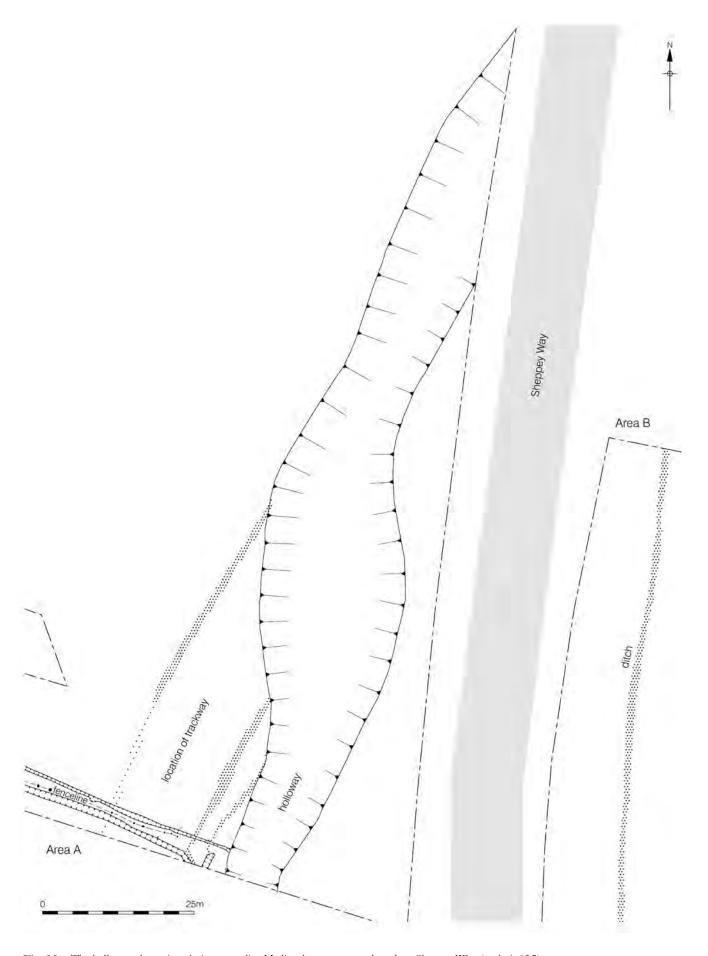


Fig. 99 The holloway shown in relation to earlier Medieval routeways and modern Sheppey Way (scale 1:625)

Roman and Medieval Finds **Assemblages**

ROMAN AND MEDIEVAL POTTERY

MALCOLM LYNE

Methodology

The methodology applied was the same as that used for the Iron Age pottery assemblages. The Roman fabrics were classified using the system formulated by the Canterbury Archaeological Trust for use in East Kent (Macpherson-Grant et al. 1995). A coding system with the prefix M was created for the range of Medieval fabrics recognized at Iwade.

Roman fabrics:

R16 Grey wheel-turned Upchurch ware. c. AD 50 - 250+

R73 Miscellaneous greywares

Medieval Fabrics:

Cooking-pot fabric with shell and quartz-sand filler. c. 1250 - 1350

M2A Cooking-pot fabric fired reddish-brown to black with profuse up to 0.3 mm multi-coloured quartz-sand filler. c. 1250 - 1350

M2B Cooking-pot fabric fired rough brown with profuse up to 0.5 mm multi-coloured quartz filler. c. 1250 -

M3 Cooking-pot fabric fired black with profuse up to 1 mm alluvial flint and brown grog. Saxo-Norman

M4 Reddish-brown to black fabric with profuse shelltemper. c. 1100 - 1250

M5 Very-fine-sanded fabric with ill-sorted up-to 0.50 mm. quartz (mostly 0.1 mm or less) and very occasional flint. c. 1250 - 1350.

Roman

Only 25 sherds of Roman pottery were recovered from the excavations, 24 (weighing 48g) from the upper fills of Enclosure 2 and one from its flanking ditch.

Upper fills of Enclosure 2

Sixteen sherds from a late 2nd century beaker in Upchurch fineware Fabric R16, a single small sherd of greyware in Fabric R73 and a fragment from a c. 180-300 cooking-pot in

'scorched' sandy fabric LR2 were present in otherwise Late Iron Age assemblages from Enclosure 2's ditch in Area A. This suggests that this enclosure may have remained in use as a livestock pen after occupation had otherwise ceased on the site and was perhaps visited sporadically, possibly by transient herdsmen.

Fills of the flanking ditch

The neck of a Roman oxidized Canterbury flagon of Pollard (1995) Type 167 dated to c. 150-250) was also present, in the flanking ditch, indicating that small amounts of rubbish were being deposited in the top of this ditch as well as Enclosure 2's ditch into the Roman period.

Discussion

A complete absence of mid-late 1st century Romanised wares from a coastal site situated in close proximity to the Upchurch kilns strongly suggests that this site was largely abandoned by the time of the Roman invasion. There is, however, some ceramic evidence that Enclosure 2 and its attendant flanking ditch continued in use for the corralling of animals until the 3rd century but with only sporadic visits from herdsmen dropping the occasional pot and throwing the fragments into the tops of the mostly silted-up enclosure ditches.

Medieval

The Medieval pottery (360 sherds; 4205g) comes from 41 contexts, mainly field-ditches but also occupational activities on the edge of the village. The assemblages from the site can be divided into earlier (c. 1150-1250) and later (c. 1250-1350) dated Medieval groups. The earlier assemblages are confined to Area B.

Assemblage 1: the fills of quarry pit [1072]

The largest assemblage from the site consisted of 77 sherds (756g) of pottery from a quarry pit, including five residual Late Iron Age sherds. Shell-tempered ware is the predominant Medieval fabric but shell and sand gritted, sandy and sand- and flint-empered wares are also present (Fig. 100):

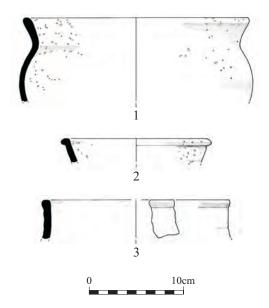


Fig. 100 Medieval pottery from quarry pit [1072] (scale 1:4)

Assemblage 1: pottery from the fills of quarry pit [1072]

- 1 Slack-profiled cooking-pot in tournetted black Fabric M.4 with profuse up-to 2.00mm, fossil shell and siltsized quartz filler. Large but uncertain diameter. One of at least three examples
- 2 Another example with undercut rim edge beading in similar fabric
- 3 Cooking-pot rim with rim-edge beading in grey Fabric M.2B with profuse up-to 0.50mm. Ill-sorted multicoloured quartz filler, fired buff-brown

Assemblage 2: the fill of boundary ditch [1231]

This feature produced a further 39 sherds (364g) of pottery with a similar date-range to Assemblage 11 (Fig. 101).

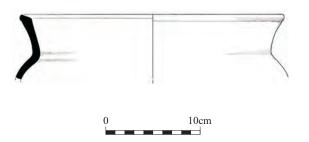


Fig. 101 Medieval pottery from boundary ditch [1231] (scale 1:4)

Assemblage 2: pottery from the fill of boundary ditch [1231]

Fig. 101.1 Cooking-pot with flaring, lid-seated rim in grey Fabric M.2B fired patchy orange/brown/grey



Fig. 102 Medieval shelly wares



Fig. 103 Medieval sandy wares



Fig. 104 Medieval green glaze wares



Fig. 105 The copper alloy buckle (SF39) from the holloway

Miscellaneous later medieval assemblages

The Medieval pottery from Area A is slightly later in date and consists of a number of very small assemblages from a variety of field-ditches, pits etc. The ditch parallel to and east of the trackway produced seven shell-tempered sherds from a c. 1250-1350 dated cooking pot with developed horizontal rim. Pit [128], to the east of the trackway, produced thirteen Medieval sherds, including fragments from another shelltempered cooking pot with lid-seated rim and a fragment from a sand-tempered jug or pitcher with splashed green-glaze.

NON-CERAMIC MEDIEVAL AND POST MEDIEVAL FINDS

MÄRIT GAIMSTER AND GEOFF EGAN

A small assemblage of Medieval and Post-Medieval metal artefacts was recovered from Iwade. The more significant objects will be discussed in this report, focusing on the Medieval period; all have been previously identified and briefly described (Egan and Keys 2001). Although small, the assemblage is interesting as it includes items of a higher status than normally expected of a rural site. At Iwade two major Medieval features are of significance for the finds: the holloway, possibly part of the route linking the mainland with the Isle of Sheppey, and a substantial ditch [1234] which may be associated with a moated manor house on the site in the early 13th century.

Two of the most interesting objects are the gilded copper-alloy buckle and the silver button SF22 and SF39 (Figs. 105, 106, 110.1, 110.3). Both were retrieved from the Medieval holloway, along with a cut silver coin of Henry III (Fig. 107). The silver button has no parallel of Medieval date in England, but silver buttons feature in a number of Danish hoards from the 14th century (eg Lindahl and Jensen 1985, 140-141: fig. 22). The form is broadly comparable with that of the earliest known English button, which is cast in lead/tin (Egan and Pritchard 1991, 274-275 fig. 178 no. 1376). It may have been a relatively unusual accessory in precious metal in its own time. Also the finely worked and gilded buckle SF39 is difficult to parallel. However, a similar buckle, with a sheet- rather than solid frame, was retrieved from the Medieval manor complex at Faccombe Netherton in Hampshire (Goodall 1990, 427 fig. 9.13 no. 37). The latter is decorated with a traced scroll decoration, and belonged to a phase dated *c.*1180-1280 (Fairbrother 1990, 69-73). The high-quality finds from the droveway may confirm its significance as a major route to the Isle of Sheppey, and reflect the status of some travellers. From the Norman period, Barons were installed on Sheppey, and the abbey church and priory at Minster were rebuilt and flourishing by the 13th century; in the 14th century, Queenborough Castle was built by Edward III.



Fig. 106 The silver button



Fig. 107 The coins

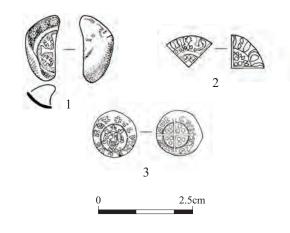


Fig. 108 Medieval coins: 1. silver cut penny (halfpenny) 2. silver cut penny (farthing) 3. silver farthing (scale 1:1)

Coins

- 1 Unstratified Site B SF68: Cut penny (halfpenny): Henry II cross crosslet (Tealby) issue; worn and dished; issued 1158 -1180
- 2 Holloway SF36: Cut penny (farthing): Henry III; moneyer NIC (? Nicholas;) some wear; issued 1247 -
- 3 Unstratified Site B SF72: Farthing: Edward III, third coinage, London; 1344 - 1351

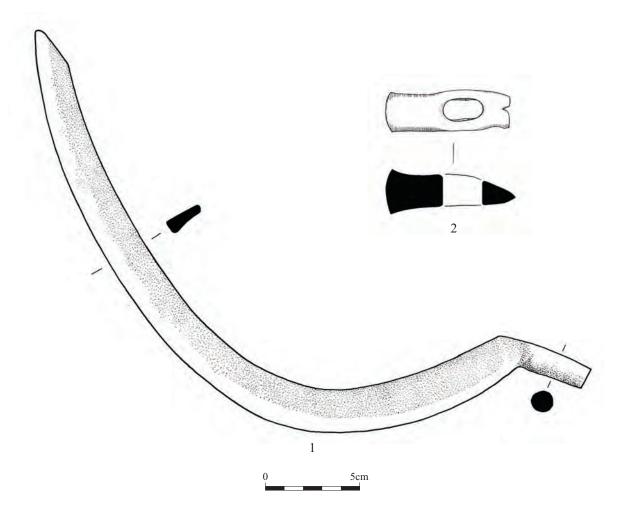


Fig. 109 Medieval tools: 1. iron sickle 2. iron hammer head (scale 1:2)

Medieval tools

- 1 Unstratified Site A SF44: Iron sickle; triangular-section blade 300m long by 19mm wide and with a 40mm long surviving whittle tang
- 2 Ditch [1234] SF52: Iron hammer: corroded (described from x-ray plate); surviving to c. 70mm long and 23mm wide. Its flat end was burred with sustained use whilst the other appears to be a damaged claw, the prongs being curtailed by corrosion.

A further unstratified forked-spacer buckle SF59 is late Medieval (Fig. 110.2) it is of a form that represents the best quality of the mass-produced buckles from the early 15th century (cf Egan and Pritchard 1991, 80-81: fig. 49 nos. 327-330). Together with two unstratified Medieval coins, SF68 and SF72, this buckle too may represent losses by travellers along the road to Sheppey. However, the indication of a possible moated manor at Iwade, in the form of a substantial enclosure ditch [1234], could provide a further context for high-quality objects. Only a small section of the ditch was excavated; the head of an iron claw hammer was

retrieved from this, along with pottery dating from the 13th - 14th centuries (Fig. 109.2). Claw hammers are not unusual in Medieval contexts, with finds dating from as early as the 12th century; most likely they were the tools of carpenters as well as farriers (Steane 1984, 220: fig. 7.1:8; Ottaway and Rogers 2002, 2718–2719).

In spite of its rural character, few objects from Iwade could be identified as agricultural tools. One reason for this could be that tools, like other iron objects, were melted down and reworked when broken or worn out. A further problem with tools is that they often represent forms that change little throughout time. The unstratified sickle SF44 (fig 109.1) is a good example of this with similarities, both in form and in size, to a sickle from a 15th-16th-century context in York (Ottaway and Rogers 2002, 2747: fig. 1351). Both tanged and socketed sickles are known from Medieval finds; however, the broken-off remains of a whittle tang on the Iwade sickle is far more substantial than published Medieval examples (cf Steane 1984, 155: fig. 5.4: 6-7).

A similar problem is reflected in the unstratified horseharness buckle SF163 (fig 110.4); the form was in use from the Middle Ages and into more recent times (cf Egan and Pritchard 1991, 89-94; Margeson 1993, 32).

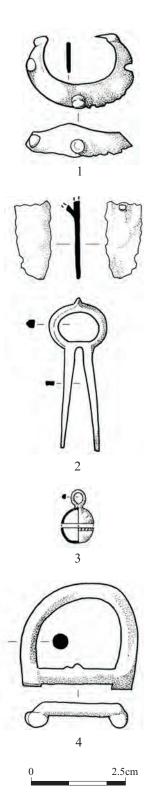


Fig. 110 Medieval dress accessories and horse equipment: 1-2. copper-alloy buckles 3. silver button 4. copper-alloy horse harness (scale 1:1)

Dress accessories

- 1 Holloway SF39: Copper-alloy buckle: incomplete and corroded sheet-like oval frame, 18mm by 25mm; set at oblique angle along surviving outside edge and sides (bar missing); two of original three prominent, decorative rivets survive; traces of gilding with hints of tooling; possibly Norman
- 2 Unstratified Site B SF59: Copper- alloy buckle: oval with forked spacer (the latter is asymmetrical), 15mm by 15mm (9mm by 22mm); angled lip; one corroded sheet (with the sides missing) survives, with ?concave inside edge
- 3 Holloway SF22: Silver biconvex button: two thin sheeting hemispheres, the upper with most of beaded border surviving along overlap the lower one; D-section wire loop set through hole; diameter. 10mm, height 12mm

Horse equipment

4 Unstratified Site A SF163: Copper-alloy horse harness: slightly distorted; D-shaped frame, 25mm by 30mm, with bar offset below remainder; pin (possibly iron) missing; Possibly late 18th - 19th century

EARLY MEDIEVAL STONE OBJECTS

IAN RIDDLER AND ALAN VINCE

The only stone type to occur within the early Medieval deposits is basalt lava. Thirty-six fragments, weighing a total of 535g, came from six separate contexts all in Area B: the fills of the two quarry pits, the boundary ditch [1231] and fills of the enclosure ditch [1234]. As noted above, basalt lava is first seen in Kent in the Late Iron Age, and it continued to be widely imported during the Roman period. Recently, some doubts have been raised about its continuing importation into the Thames Valley area, if not Kent, during the late Roman period (Symonds 1999, 331). However, basalt lava querns and millstones are found in some abundance in late Roman contexts within east Kent, including at Canterbury and Ickham (Riddler forthcoming b).

Its importation ceased thereafter for some time, but it recurs in contexts of Middle and Late Saxon date and it may have been reintroduced to Kent from as early as the seventh century. A basalt lava quern fragment from the Marlowe Theatre at Canterbury came from a context of c. AD 650-700 (Blockley et al. 1995). It continued in use up to and beyond the Norman Conquest as the dominant stone type for querns, although by the 12th to 13th centuries the increasing number of water mills had almost certainly led to a reduction in the number of hand mills in active use (Margeson 1993, 202). Forms of quern also changed at this

time. Where basalt lava querns are found in 12th century contexts, as here, it is possible that they were being used for the grinding either of hops for beer, or for the milling of malt (Riddler and Walton Rogers forthcoming).

No original dimensions could be recovered from any of the surviving fragments and it is not clear, therefore, whether they were used as querns or millstones. Several millstones of this period have been recovered from Dover and Islington (Riddler and Walton Rogers forthcoming; Riddler 2000). Equally, the fragments cannot be assigned to upper or lower stones. It has been noted that basalt lava upper stones are found more frequently than lower stones in contexts of 10th to 12th century date (Rahtz 1979, 234; Pritchard 1991, 162). A workshop for the finishing of basalt lava querns imported as blanks has been identified in London (Freshwater 1996). It is unlikely that the Iwade examples were traded down the line from London, however. The presence of unfinished quern stones in the Graveney boat suggests perhaps that further quern workshops await discovery in Kent (Fenwick 1978, 131 and 173).

Discussion of the Roman and **Medieval Periods**

Evidence relating to the Roman period was surprising sparse, given the region's evident agricultural and industrial importance during this period. It would appear that the extensive Iron Age occupation came to an abrupt halt around the Conquest period and it is certainly interesting to speculate that the turmoil caused by the invasion and the resultant political re-organization was responsible for this. The evidence that was forthcoming was suggestive of shortterm transient activity, possibly by pastoralists, who may have made a temporary camp within Enclosure 2, the ditches of which would have been still visible as earthworks.

No evidence of Saxon occupation was identified during the excavations, and Iwade was not mentioned in the Domesday Book, although it had become a settlement of sufficient importance to build a church by the 13th century. The excavation produced evidence for a return to quite intensive settlement-orientated activity around the southern extents of the site around this time, despite its position south of the village of Iwade, which presumably formed the main focus for settlement in the vicinity. The earliest evidence of renewed activity at the site, dating to the end of the 12th century, consisted of the construction of a series of linear ditches, one of which was over 100m long, and which may represent either field boundaries or possibly a precursor to the later trackway (see below).

These were truncated by perhaps the most notable Medieval feature recorded, which consisted of the rightangled corner of a wide ditch, constructed during the early 13th century. This ditch was thought to have been too substantial to represent a simple field boundary and it is suggested that it may have formed the northeast corner of an enclosure, perhaps for a 'moated', and therefore relatively wealthy, dwelling. Unfortunately, only a small part lay within the excavated areas and no structural elements were found inside it. Nevertheless, settlement close by was indicated by the domestic nature of many of the finds from the ditch, such as the hammer and quern fragments, and relatively high quantities of oyster shells and animal bone, including veal. Clusters of pits to the northwest of the enclosure also suggested settlement in the vicinity, including further quern fragments, pottery and animal bone, as well as quantities of burnt daub and charcoal. Without direct evidence of structures, the suggestion of a moated dwelling must remain speculative. However, the evidence does point to settlement in the vicinity, possibly of relatively high status, perhaps a farmhouse or sub-manorial dwelling owned by a wealthy farmer and coordinating agricultural production in this area south of Iwade village. Historical evidence may support such a proposition, as this indicates that the parishes of Milton and Iwade had been divided into several estates by the Medieval period, and several other archaeological investigations in the vicinity have revealed evidence of scattered Medieval activity and settlement around Iwade (Pratt 1997; Canterbury Archaeological Trust 2002a), suggesting that in its earliest form, during the 12th and 13th centuries, settlement in the parish may have been relatively dispersed.

Around the same time as the postulated moat was constructed, a wide, ditched trackway was laid out to its west, which interestingly curves southeastwards, towards what could have been the western side of the postulated moat. It was relatively short-lived, however, and, probably around the second half of the 13th century, was 'blocked off' by the construction of a substantial double-ditched and post-built boundary, which cut straight across it. The purposes of this are unclear. It would certainly have been imposing, although whether it was constructed for prestigious reasons, as a simple attempt to control movement along the route, or was part of more extensive defences occasioned by general unrest, remain unknown. Regardless of this, use of the old trackway persisted, albeit by-passing the obstacle, and by the early 14th century the ditched trackway had developed into a holloway. The persistence of these suggests the route was of some importance, and ultimately they appear to develop into what is now Sheppey Way. Originating from Watling Street, this route heads towards the historic centre of Iwade, becoming

the 'The Street', the main thoroughfare through Iwade, which continues towards the crossing point of the Swale and ultimately to Queenborough and Minster Abbey on the Isle of Sheppey, both important centres during the Medieval

The latest directly dated Medieval activity recorded consisted of the burial of a dog to the northeast of the postulated moat. Its careful interment with the inclusion of 'grave goods' suggests it was a much loved pet, a suggestion

reinforced by the fact that it developed vertebral osteophytosis in its youth, which would have caused it some difficulty in movement and precluded it from being used as a working animal. Although perhaps not very unusual, the presence of a well-looked after pet does suggest its owners were of reasonable status, perhaps inhabiting the manor to the south of the dog's grave. If so, this would suggest that it continued to be occupied until at least the late 14th century and possibly into the 15th.



Fig. 111 Reconstruction of the dog burial scene, by Jake Lunt

Chapter 6 Environment and Economy



The aim of this chapter is to present the results of various sampling programs, undertaken with the intention of reconstructing both the local environmental conditions present at the site during its long history of habitation, and to provide an understanding of the subsistence economy and other craft activities that may have taken place there.

Environmental Analysis

A total of 136 environmental soil samples varying from between 10 and 50 litres were taken from features belonging to the Bronze Age, Iron Age and Medieval periods from a cross section of feature types including pits, postholes, wells and ditches. The environmental sampling strategy was devised on-site following the advice of the environmental consultant, Dominique de Moulins. It principally aimed at obtaining samples from a cross section of feature types from across the range of periods represented and from different areas of the site, so that a large 'bank' of samples were available for post-excavation analysis. Specifically, samples were taken from fills perceived to have the greatest potential for yielding ecofacts eg fills that contained charcoal, mollusc shells, and those with a greater proportion of domestic rubbish, particularly where the fills had a higher organic content. Following initial assessment, several contexts were recommended for full analysis with the aim of reconstructing local environmental conditions and the nature of domestic occupation at the site, particularly during the Iron Age.

PLANT MACRO-FOSSILS

DAVID KEEN, ROB SCAIFE AND NICK BRANCH

Bulk samples of between 10–20 litres were processed using flotation tank procedures. Flots were recovered on nested sieves at 0.3 mm and 1.0 mm. The residues were also examined for non/less buoyant material such as pulses (none were found). There were also a small number of seeds preserved by waterlogging. The recovered material was

sorted, examined and identified using a Wild M3c low-power binocular microscope at magnification of x16 - 40. The data obtained are presented in Tables 8, 9, 10. In the case of small *Juncus* seeds, relative abundance is indicated by * to *****.

Overall, the quantity of informative material recovered was surprisingly small. The ecofacts included few seed remains, small quantities of charcoal pieces, infrequent charred seeds including cereal grain, minimal cereal chaff debris and some waterlogged, autochthonous seeds.

Bronze Age

From Middle Bronze Age contexts the most abundant seed taxon was *Chenopodium* (Goosefoot), from sample 108, a Middle Bronze Age clay-lined pit. A small number of charred weed seeds was recovered including *Plantago lanceolata* (ribwort plantain) and occasional *Polygonum aviculare* (knotgrass).

Samples taken from the Late Bronze Age features produced very little botanical evidence (Table 8). *Chenopodium* (Goosefoot) and *Epilobium* (Willowherb) were present, both often found on waste/disturbed ground associated with agricultural activities. This would support the archaeological interpretation that the features represented a field-system. Only very small quantities of cereals were present, which included *Triticum* (Emmer or Spelt) grains from sample 237.

Iron Age

Nine samples of Iron Age date were examined from the fills of pits, ditches, circular structure gullies and a holloway (Table 9). Overall, the quantity of informative material recovered was small. Ecofacts present included a small quantity of waterlogged seeds but primarily comprised charcoal, charred cereal remains, largely grain, and some small fragments of bone. As noted, there were only small numbers of charred seeds present.

Charred grain was recovered from samples 10, 45, 105, 211 and 245. *Triticum spelta* type, which comprises both

Table 8 Plant macrofossil analysis of Bronze Age contexts

Sample Context (cut) Type	108 941 Middle Bronze Age pit	242 1145 Middle Bronze Age well /shaft	24 317 Late Bronze Age Posthole	43 417 Late Bronze Age trackway ditch	237 1198 Late Bronze Age pit
Charred Cereal Grain					
Triticum cf aestivum type					1
cf. Triticum					1
Grain Whole Unident.			2		
Grain fragments			1		1
Charred Seeds					
Corylus avellana nut frag.		*			
Chenopodium		*			7
Polygonum cf aviculare		1			
Plantago lanceolata		1			
Polygonum aviculare	1		1		
Epilobium				1	
Unidentified	1				
Seeds Waterlogged					
Ranunculus a/r/b		1			
Chenopodium	13		5		
cf Lycopus europaeus					1
<i>Juncus</i>	*				*
Carex (lenticular)	1		1		
Carex (trigonal)	5		6		

emmer and spelt, was present in samples 10, 211 and 245, all from Enclosure 2's ditch, with possible *Hordeum vulgare* (barley) and *Avena* (oat) from sample 10. Single wheat glume bases were found in samples 10 and 105. These were tentatively identified as *Triticum dicoccum* (Schubl.). On the basis of these single glume bases, the grains, although from a different context, of *Triticum dicoccum/spelta* type (emmer and spelt wheat) may all be emmer wheat. *Triticum aestivum* type (*T. aestivum/T. compactum*; hexaploid bread and club wheat) and *Avena* (oat) and were found in sample 211.

The low concentration of cereal chaff or grain is also mirrored by the paucity of charred seeds of plants of cultivation (segetals and ruderals). Charred seeds that do occur comprise small numbers of typical segetals, which includes *Polygonum aviculare*, *Epilobium* and *Chenopodium*, and clearly demonstrate a minor representation of waste/disturbed (arable) ground. *Prunus* sp. was found in sample 211 and probably related to the wood charcoal present.

Waterlogged seeds are also present and the assemblages comprise typical wet ground plants growing in valley bottoms or in stabilized wet ditches, pits or gullies. These include typically *Polygonum lapathifolium/hydropiper* type (eg

pale persicaria), *Vicia/Lathyrus* (vetch and wild peas), Cyperaceae and associated root (monocotyledonous) debris, and the most abundant seed taxon was *Chenopodium*. Sample 239 from the flanking ditch contained the most waterlogged seeds including primarily *Rubus* (cf *fruticosus*; bramble), *Ranunculus* (a/r/b), possibly coming from pasture, *Rumex* sp. (docks) and *Urtica dioica* (nettle). *Juncus* (rushes) was notable in sample 238.

Discussion of the Late Iron Age deposits

Overall, there were disappointingly few plant remains preserved. Given the date ranges for occupation of the site and the wide range of context types sampled, substantially greater quantities of charred cereal remains and associated weed seeds might have been expected. The lack of grain recovered from the samples of all periods may mean that arable agriculture was not practised or that conditions within features did not allow it to survive. The latter may be more likely, since the preservation of charred plant remains was largely by chance with glume wheats, such as emmer and spelt, typically accidentally burnt during the parching process

Table 9 Plant macrofossil analysis of Iron Age contexts

Sample Context (cut)	10	23	45	105	238 1194	239 1207	222 1149	211 1051	245 1170
Туре	Enclosure 2 South side	Enclosure 1 South side	Ring-gully CS 1	Holloway	Pit	Flanking ditch North east corner	Pit	Enclosure 2 ditch	Enclosure 2 ditch South east side
Charred Cereal Grain									
Triticum spelta type	2							9	5
Triticum cf. spelta type	1								
Triticum aestivum type								2	
Triticum indet.	1			2					
cf Triticum								5	2
Triticum of dicoccum (glus	me)		1	1					
cf. Hordeum vulgare	2								
Avena	1							3	
Avena/Bromus									1
Grain Whole Unident.				1				10	1
Grain frags									
Charred Seeds							6	4	
Corylus avellana nut frag				1					
Prunus sp.	5 •			1				1	
Chenopodium				1	*	*		1	8
Vicia/Lathyrus				1				1	0
Polygonum (two sided)	2							1	3
Polygonum aviculare	2	1						1	1
Polygonum aviculare Polygonum convolvulus		1						1	1
Poaceae									1
Unidentified	1								1
Unidentified	1								
Seeds Waterlogged									
Ranunculus a/r/b						4			
Rubus fruticosus						1	1		
Chenopodium			2		6	*	7		
cf Lycopus europaeus					1				
Potentilla sp.			1						
Rumex sp.						2			
Urtica dioica						2	1		
Juncus				1	***	1	*		
Carex (lenticular)			1						
Carex (trigonal)			6						
Poaceae						1			

(heating to release the grain from the husks). Deliberate burning of waste grain, crop processing waste and domestic waste may also occur. Both of these components may be present on occupation (consumer) sites even though the economies of the Later Bronze Age and Late Iron Age periods may have been pastoral based. It seems likely, therefore, that contexts where accidentally or deliberately burnt crop waste was disposed of were not found, or that the on-site activities just did not involve activities that would have provided such charred material. The small quantities of non-charred material present in some contexts demonstrates that the features contained water, or became wet, and supported a damp meadow type flora preserved due to the on-site water-logged conditions.

It can, however, be seen that the data obtained (albeit small) are typical of Iron Age contexts in showing a predominance of the glume wheats, emmer and/or spelt. Although the former (Triticum spelta L.) seems to have been the predominant wheat type of this period, emmer (T. dicoccum Schubl.) was also of importance. It is not possible to separate these taxa on the basis of grain morphology alone, although the two glume bases from samples 45 and 105 (which are diagnostic) appear to be of emmer. Whilst this shows that emmer was being used this does not preclude the use of spelt. Occasional bread wheat (T. aestivum type) is commonplace for these periods and became of greater importance during the later Roman phase. Barley (Hordeum vulgare) and oat (Avena sativa) are also typical of the Iron Age and Roman periods but unusual here because of their paucity.

Of the samples from the Late Iron Age contexts, the most productive were those from the ditch fills of Enclosure 2 and the holloway. The eastern part of Enclosure 2's ditch produced sixteen charred Triticum grain seeds from three samples processed, as well as wild seed species and molluscs. The northeastern corner of the enclosure's outer flanking ditch (sample 239) produced the most diverse range of wild plant species while cultivated types were absent. The flora was dominated by perrenials including Rubus (cf fruticosus; bramble), Ranunculus (buttercups), Urtica dioica (Stinging Nettles), and Rumex (docks). These species are often found on cultivated or disturbed ground, indicating that it was most likely to have formed part of a field-system on the margins of the Late Iron Age settlement. This is in contrast to the eastern part of the enclosure where cultivated seed species (charred grain) were found which indicates grain and food processing. This supports the finds distribution pattern also: the blacker/siltier fills of the southeastern part of the inner ditch were of a more domestic nature and probably deliberately filled. It produced a large pottery assemblage as well as a loomweight fragment and slots excavated here contained four or five fills as opposed to one homogenous fill in the north (where the ditch is likely to have undergone colonization by wild plant species and subsequent natural silting).

Enclosure 1's ditch produced very little botanical evidence, and neither did the six samples processed from the gullies around the circular structures. Just one *Triticum* glume was recovered from Circular Structure 2's ring-gully (sample 45) along with wild species and charcoal. Sample 105 located in the north of the holloway produced two charred *Triticum* grains and one *Triticum* glume, possibly indicating some grain processing in the vicinity of Circular Structure 4.

Medieval

Medieval deposits examined produced some charred remains, including charcoal in small quantities, but no waterlogged remains were recovered. *Triticum spelta* type (emmer and spelt wheat) was the most common cereal (Table 10). The quarry pit produced six cereal grains, including one *Triticum* (Emmer or Spelt) grain and *Hordeum vulgare* although the long Medieval boundary ditch produced only a single *Triticum* grain (sample 205).

Table 10 Plant macrofossil analysis of Medieval contexts

Sample	205	213	
Context	1041	1070	
Туре	Boundary Ditch	Quarry pit	
Charred Cereal Grain			
Triticum spelta type	1	2	
cf Hordeum vulgare		1	
Grain Whole Unident.		2	
Grain fragments		1	
Charred Seeds			
Chenopodium	3		

MOLLUSCAN REMAINS

Two samples, one from the fill of a posthole of a Late Iron Age 4-post structure (sample 67), and the other from the primary fill of Enclosure 2 (sample 244) were provided, ready sieved through a 500µm mesh. The residues were sorted dry under a x10–60 binocular microscope. All identifiable shells and parts of shells were separated from the sediment following the conventions of Sparks (1961). All gastropod shells and apices count as one individual. Bivalve hinge plates count as half an individual. The opercula of *Bithynia* spp. were counted but not added to the mollusc totals. The taxonomy used in Table 11 follows Kerney (1999).

Sample 67 contains 15 freshwater taxa in total, dominated by species of freshwater, weed-rich, still or slowing moving water, the environment of Bithynia tentaculata, which alone makes up 56% of the assemblage. Land species are almost entirely absent from this assemblage, being represented by only eight shells of four species. The large number of shells and small number of opercula present of this species indicates that the fauna was drifted post mortem leaving the less buoyant opercula behind as the shells floated away. The occurrence of Valvata piscinalis might be thought to indicate faster flowing water as this species is characteristic of the main channel of rivers, but the shells in sample 67 were almost entirely of small juveniles easily washed from the main channel to quieter water at the point of deposition. Other numerous species such as Theodoxus fluviatilis are also indicative of slowly flowing well-oxygenated water with areas of hard sub strate (pebbles, submerged wood etc) necessary for this species to graze on algae. The occurrence of numerous shells of Lymnaea peregra suggests that there were patches of open mud, and the presence of Lymnaea truncatula and Aplexa hypnorum suggests that areas of swamp bordered the water body. Land conditions cannot be reconstructed

Table 11 Freshwater and land molluscs

Sample	67	244
Context	[438]	[1169]
Theodoxus fluviatilis (Linné 1758)	38	-
Valvata piscinalis (Müller 1774)	44	_
Bithynia tentaculata (Linné 1758)	327	-
opercula	5	-
Bithynia leachi (Sheppard 1823)	3	_
Aplexa hypnorum (Linné 1758)	1	_
Lymnaea truncatula (Müller 1774)	24	-
Lymnaea stagnalis (Linné 1758)	2	-
Lymnaea peregra (Müller 1774)	117	128
Planorbis carinatus (Müller 1774)	3	_
Anisus leucostoma (Millet 1813)	-	312
Gyraulus laevis (Alder 1838)	2	-
Gyraulus crista (Linné 1758)	-	75
Planorbidae undet.	6	-
Sphaerium corneum (Linné 1758)	1	-
Pisidium amnicum (Müller 1774)	2	-
Pisidium casertanum (Poli 1791)	-	3
Pisidium subtruncatum (Malm 1855)	2	_
Pisidium henslowanum (Sheppard 1823)	1	-
Pisidium nitidum (Jenyns 1832)	3	_
Carychium minimum (Müller 1774)	-	1
Succineidae undet	1	-
Cochlicopa lubrica (Müller 1774)	-	3
Vallonia pulchella (Müller 1774)	-	3
Vallonia excentrica (Sterki 1892)	-	1
Vallonia spp	-	2
Ena obscura (Müller 1774)	-	1
Discus rotundatus (Müller 1774)	1	52
Vitrea contracta (Westerlund 1871)	-	1
Aegopinella nitidula (Draparnaud 1805)	1	9
Trichia hispida (Linné 1758)	5	41
Cepaea nemoralis (Linné 1758)	-	1
Cepaea sp	-	8

with much certainty given the small numbers of Mollusca present, but scrub or leaf litter environments are indicated by Discus rotundatus and Aegopinella nitidula.

Sample 67 was obtained from the fill of a posthole. However, it is difficult to imagine how an aquatic assemblage could be formed in such a context unless an open posthole was covered by a flood, which filled it with sediment. This seems an unlikely occurrence. More probably, the sediment in which the posthole was cut was fluviatile and the fill reflects slumping or back fill into the hole. The age of the sediments, whether in situ or as fill, is post 6650 BP as this is the earliest date for the appearance of T. fluviatilis in southeast England (Preece and Robinson 1982; Chambers et al. 1996).

Sample 244 was also deposited in water although only four aquatic species are present, with three, Lymnaea peregra, Anisus leucostoma and Gyraulus crista, being numerous, and L. peregra and A. leucostoma, making up 74% of the total. In contrast to sample 67, sample 244 contains eleven land

species of which two, Discus rotundatus and Trichia hispida, are present with numbers over 40 individuals.

The habitat represented by the freshwater species is poorly oxygenated and organic debris-rich open water. Although A. leucostoma is a member of Sparks' (1961) slum assemblage, the occurrence of numbers of Gyraulus crista which is intolerant of the worst conditions of low oxygenation, indicates that conditions in the water were not at the limit of molluscan existence. The land fauna is dominated by D. rotundatus and T. hispida. These two species occupy different habitats, with D. rotundatus being found in woodland and scrub and leaf-litter around woodland edges, and T. hispida occurring in a wide range of grassland and open country and disturbed habitats (Kerney and Cameron, 1979). However, the requirements of these two species may overlap in swampy conditions with large quantities of plant debris. Such conditions would also suit Vallonia pulchella, A. nitidula and Carychium minimum. Environments of deeper shade such as woods are indicated by the single shell of Ena obscura, although some of the D. rotundatus may also have originated in such conditions.

There is a taphonomic puzzle in the exact mode of deposition of sample 244. Standing water in a ditch does not usually recruit diverse land faunas such as that represented in this sample unless they have an inflowing stream. There is no indication of any flowing water in the molluscan assemblage here, so it is difficult to account for the number and diversity of land shells in the sample. It is possible that the land shells were swept into the ditch by some sheet wash event such as would be caused by storm water flowing across open ground, or there could be some anthropogenic cause allowing disturbance of leaf litter and snails to be moved into the water.

Mammal and Bird Bones

PHILIP ARMITAGE

A total of 788 hand-collected animal bone elements/fragments were submitted for study (see Table 12). Employing standard archaeozoological methodological procedures, 368 bones, representing 46.7% of the total number of identified species (NISP) are identified to species and part of skeleton; 420 (53.3%) fragments remain unidentified (though all of these are recognized as mammalian). The identified portion comprises 366 (99.5% of the total) mammal and two (0.5%) bird bone elements. The number of bird bones at Iwade appears remarkably low and the absence of any fish bone equally noteworthy.

The seven species (all domesticates) represented in the Iwade bone assemblages are listed as follows: horse Equus

Table 12 Total numbers of mammal and bird bones retrieved from Iwade

	Neolithic	Middle- Late Bronze Age	Late Iron Age Phase 1	Late Iron Age Phase 2	Medieval Phase 1 AD 1150-1250	Medieval Phase 2 AD 1250-1350	Totals
Horse			6	7	2		15
Cattle		15	4	115	19	11	164
Sheep/goat	1	8	1	39	15	5	69
Pig		1	1	12	1		15
Dog				2		101	103
SAR		6		56	18	3	83
LAR		58		130			188
Mammal (unidentified)	5	65		47	23	9	149
Domestic fowl					1		1
Grey-lag/domestic goose						1	1
Totals	6	153	12	408	79	130	788

Summary counts (NISP) by species/taxon and period

caballus (domestic); cattle Bos (domestic); sheep/goat Ovis/Capra (domestic); pig Sus (domestic); dog Canis (domestic); domestic fowl Gallus gallus; domestic goose Anser anser. No wild species are represented.

DEPOSITION AND PRESERVATION

Intra-site analysis of the three largest bone assemblages from Iwade (representing the Middle-Late Bronze Age, Late Iron Age Phase 2 and Medieval Phase 2), reveals the more recent assemblage (Medieval Phase 2) is comprised of the

better-preserved faunal remains. In the two earlier assemblages, preservation is assessed as generally poor. This difference in preservation between the assemblages is reflected in their respective relative proportions of unidentified bone fragments (expressed as %/total NISP by phase): Late Bronze Age = 84.3%; Late Iron Age = 57.1%; Medieval = 9.2%. As perhaps would be expected, those bones that had been discarded into ditches, deposited into postholes, or scattered in droveways, exhibited especially high frequencies of attritional damage or abrasion as well as being significantly affected by weathering, leaching, and

Table 13 Preservation and condition of modified bones (NISP) from Iron Age contexts

Category 1: Weathered/leached/biologically degraded bones

Species/context group	Pits	Postholes	Ditches	Gully*	Holloway	Totals	
Horse			2			2	
Cattle	5	4	11			20	
Sheep/goat			2			2	
Pig			1			1	
LAR			29			29	
Totals	5	4	45	0	0	54	

Category 2: Burnt (charred/blackened/calcined) bones

Species/context group	Pits	Postholes	Ditches	Gully*	Holloway	Totals	
Cattle			3			3	
Sheep/goat			1			1	
Pig	2					2	
SAR	4		1			5	
LAR	6					6	
Mammal	1					1	
Totals	13	0	5	0	0	18	

Category 3: Bones gnawed by dog

Species/context group	Pits	Postholes	Ditches	Gully*	Holloway	Totals	
Horse	2		2			4	
Cattle	1		3			4	
Sheep/goat			1			1	
Totals	3	0	6	0	0	9	

^{*}Circular Structure 3

Summary of modified bones (NISP) by context group/feature

biotic degradation which is all evidence of prolonged subaerial exposure before burial (see Table 13).

Particularly high levels of fragmentation caused by attritional damage are noticeable in bones from the Late Iron Age ditch fills, as evidenced by the frequency (13% of total NISP) of isolated teeth derived from broken or pulverized horse, cattle, sheep and pig skulls and lower jawbones. Isolated teeth also occurred in the Late Iron Age pit fills but at a slightly lower frequency (5.5%). These same pit features however, did contain the highest incidence of burnt bone for the site (6% of total NISP compared with 2.7% for the Late Iron Age ditch fills).

It was in the Late Iron Age ditch fills that the highest concentrations of dog gnawed bones occurred: 2.8%/total NISP (cf 1.6% for the pit fills). Viewed overall however the incidence of dog-gnawed bone in the assemblages from the combined context groups or features of the Late Iron Age phase, was relatively low (at 2.1%/total NISP for this phase). The Iwade value is directly comparable to the lowest frequency in the range 2 to 5% recorded by Wilson (1978, 111) in the Bronze Age/Iron Age assemblages from Ashville Trading Estate, Abingdon, Oxfordshire. No burnt or doggnawed bones were recovered from the Late Bronze Age context groups. From Medieval Phase 2 there is a single bone element, a first phalanx of horse, which shows evidence of dog gnawing. No bones from either Medieval Phase 1 or Medieval Phase 2 exhibit evidence of having been burnt or charred.

Mention should be made of the root-etching present in the three cattle bone elements from the Late Iron Age Enclosure 2's ditch as further evidence of prolonged subaerial exposure of food debris prior to complete burial or incorporation into the archaeological strata, further emphasising the role of the ditch as a repository for waste.

DESCRIPTIONS OF THE SPECIES REPRESENTED AT IWADE

Horses

Late Iron Age

One of the Iwade Late Iron Age horses (from the northeast corner of Enclosure 2) is represented by a complete tibia, and from the lateral length (276mm) of this bone, the withers height of this animal when it was living is calculated to have been 1.20m (using the method of Kiesewalter, see von den Driesch and Boessneck 1974). This Iwade horse falls exactly at the lowest end of the stature-range of 1.20 to 1.42m documented by Wilson (1978, 117) for the Iron Age equids at Ashville, Oxfordshire, but is somewhat taller than

the very smallest horse identified at Iron Age Gussage All Saints, Dorset (height-range 1.02-1.45m) (Harcourt 1979, 153). According to modern standards, the Iwade animal, under 12 hands, would be considered pony-sized, and based on the measurements taken on the other equid bones from Iwade Late Iron Age Phase 2 (see Table 14) all of the animals represented fall into this category. In comparison with modern equids, those present at Iwade during the Late Iron Age period would have been of similar stature to New Forest ponies of today (cf withers height of 1.22m calculated for the modern female New Forest pony reg. H37 in the collections of the Natural History Museum, London, see Armitage 1977, 174). It is interesting to note that in comparison to the small horses at Late Iron Age Iwade, those animals from an earlier (Middle-Late Bronze Age) lowland pastoral settlement site at Runnymede Bridge, Surrey, documented by Done (1980) were apparently much taller, including one individual with a withers height of 1.38m.

Medieval

Small pony-sized horses reminiscent of their Iron Age predecessors continued to be included among the farmstock kept at Iwade well into the Medieval Period, as evidenced by the presence of an equid first phalanx found in the quarry pit. The dimensions of this Iwade bone element compare favourably with its counterpart in the articulated horse skeleton found at Miles Lane, City of London, whose withers height was estimated at 1.25m (Armitage 1981):

Iwade (Medieval) GL: 73.2mm Bp: 51.8mm SD: 31.8mm Bd: 42.4mm

Miles Lane (Romano-British) GL: 73.7mm Bp: 50.7mm SD: 32.7mm Bd: 43mm

Cattle

Late Bronze Age

Metrical data obtained from two metapodial bones from a Late Bronze Age pit in Area B indicate that both small and dwarf-sized cattle were present at the Iwade site during this period, as reviewed below:

The animal represented by the proximal metatarsus (Bp 50.1mm) compares in size with its Late Neolithic predecessors and in comparison with modern breeds, falls into the lower size-range for Friesian cattle (metatarsus Bp range 47 – 64mm, mean 57.5mm, N=37; (B Noddle, pers comm.).

Table 14 Measurements of horse, cattle, sheep and dog from Late Iron Age Phase 2

Element	Species							
Horn core	_	LOC	BC					
	Sheep		172			old adult, castrate	2	
Skull		15						
	Dog	65.6						
Scapula		GLP	LG	BG	SLC			
	Horse	80.3	52.5		55.5			
	Horse		48.5	36.5	57			
	Cattle	52.9	45.6		40.8			
Humerus						Bd	ВТ	
	Cattle					66.1	63.8	
	Cattle					76.8	72.5	
	Cattle					69.2	64.5	
Innominate	2	LA						
	Cattle	60.8				female		
Femur						Bd		
	Horse					68.4		
Tibia		GL	Ll	Вр	SD	Bd		
	Horse	297	276	70.9	30.4	58		
	Cattle			41.7				
	Cattle					53.9		
	Cattle					56.5		
	Cattle					56.6		
	Cattle					59.2		
	Cattle					61.4		
Talus		GLl				Bd		
	Cattle	53.8				37.2		

The metarcarpus from the same context is from a very much smaller and more gracile animal. Breakage of this bone element into several pieces during excavation precludes estimation of the withers height (based on bone length) but from the measurements available, the animal represented may be shown to have been even smaller than the average-sized Dexter cattle of today. This is demonstrated below with reference to the data relating to a modern Dexter steer (castrate) of withers height 0.98m documented by Noddle (1988).

Iwade (Late Bronze Age) Bp: 49.5mm SD: 25.9mm Bd: 50mm

Dexter Steer (Modern) Bp: 55mm SD: 30mm Bd: 55mm

The diminutive size of the Iwade animal is further illustrated with reference to data relating to modern Chillingham Park cattle (N=7) whose skeletons are held in the collections of the Natural History Museum, London (see Armitage 1977):

Table 15 Metacarpal bones of modern Chillingham Park Cattle

Measurement	Вр	SD	Bd
Range	50.5 – 58.9mm	28.0 – 35.5mm	52.5 – 61.3mm
Mean	53.8mm	30.7mm	55.4mm

(cows and bulls withers heights 1.07 to 1.13m)

From the metrical analysis above, it is concluded that the smaller of the two Iwade cattle is an example of the so-called Celtic short horned ox that first made its appearance in Britain by the Middle to Late Bronze Age (as discussed by Grigson 1982: 48). Similar dwarf cattle are recorded from other Middle-Late Bronze Age sites in southern England, including Runnymede Bridge, Surrey (Done 1980, 74) and Black Patch, East Sussex (O'Connor 1982, 379).

Late Iron Age

During the Late Iron Age Period, dwarf cattle continued to predominate at Iwade, as indicated by the metrical data obtained from their skeletal remains (*see* Table 14). The smallest of these animals, represented by an astragalus (GLI 53.8mm) from a Late Iron Age gully to the southeast of Enclosure 2, lies just at the lower end of the size-range documented by Harcourt (1979, 151) for the cattle at the Iron Age site of Gussage All Saints, Dorset (GL 54 - 62mm, mean 57mm, N=54) and also matches the smallest animal at the Iron Age site of Ashville, Oxfordshire, identified by Wilson (1978, 117) (GL 53–64mm, mean 58.5mm N=18).

Medieval

Diminutive cattle (resembling their Bronze Age and Iron Age predecessors) were present at the Iwade site during the Medieval period, as evidenced by the horn cores from two such beasts (1 female and 1 male or castrate) recovered from a quarry pit. Although both horn cores derive from juveniles, it is possible to establish from visual appraisal of their overall morphology that these are examples of the dwarf, short horned type of cattle (see classification system of Armitage and Clutton-Brock 1976). As discussed by Armitage (1980 and 1982) these inferior (scrub) cattle were commonplace throughout western Europe (including Britain) during the Medieval period.

Sheep

Late Iron Age

A single horn core of an adult sheep, recovered from a Late Iron Age pit in the cluster to the east of Enclosure 2, is identified as male (using the criteria of Armitage 1977, 82-88 and Hatting 1983) and is of the size and morphological type seen in mature rams of the modern (primitive) Soay breed.

Pig

Medieval

A large lower canine tooth from a Medieval gully in Area B is identified as male using the morphological criteria of Mayer and Brisbin (1988). The size of this tooth indicates it derives from a domestic pig rather than from a wild boar.

Dogs

Late Iron Age (Phase 2)

Two dogs (both adults) are represented in Late Iron Age contexts by two bone elements: a humerus (shaft only) from Enclosure 2 and a left maxilla (described below) from pit [1149] east of Enclosure 2.

As discussed by Clutton-Brock (1971, 304-305) the skulls of domestic dogs may be distinguished from those of wolves by means of the carnassial index (length P4 relative to combined lengths M1 + M2) and by the compact arrangement of the upper premolar and molar teeth. Applying these criteria in the study of the canid maxilla from the pit, this specimen is identified as domestic dog rather than wolf. Measurement of its upper cheektooth row length (65.6mm) (measurement 15 system of von den Driesch 1976 or XI method of Harcourt 1974) indicates an animal of average size for that period, according to the data documented by Harcourt (1974, 160) based on a study of fifteen dog skulls from British Iron Age sites, showing maxillary toothrow lengths from 57 to 71 mm, with a calculated mean of 65.7mm.

Medieval

The Medieval dog burial produced 101 bone elements derived from what had been an articulated skeleton. From the descriptions of the grave cut and manner of placement of the body, it appears this particular dog had probably once been a favourite, much loved pet. This interpretation was further supported by the findings of the osteological study of the remains, which are summarized as follows:

Breed type: Post-depositional disturbance had virtually destroyed the skull that was recovered from the site as pulverized fragments/pieces. Owing to the extremely poor preservation of the skull, it is not possible to determine the breed type (terrier or spaniel) represented.

Sex: In the absence of an intact skull it is also not possible to ascertain the sex of this dog using as a guide the basioccipital markings. The absence of a penis bone with the skeletal remains may however indicate this animal was female but this negative evidence is perhaps highly unreliable given that other bone elements are also missing in the excavated assemblage (most notably the scapulae).

Age at time of death: Based on the fusion in the limb bones (in which all elements have both the proximal and distal epiphyses fused) and the fully erupted dentition, the Iwade dog is recognized as being fully grown (adult) at the time of its death. There is however no excessive wear in any of the teeth that is sometimes seen in dogs of advanced age.

Stature: From length measurements obtained from the humerus, radius, femur and tibia (all left) the shoulder height is estimated to have been 34.5 cm (based on the regression equations of Harcourt 1974) (see Table 16). In comparison with modern dog breeds, the Iwade animal would have been intermediate in size to the King Charles Spaniel (shoulder heights between 25 to 33 cm) and the English Cocker Spaniel (max. ht. 36-39 cm) and not as tall as the Fox Terrier (ht. 40-42 cm). Its relatively small size suggests the Iwade dog may have been a household pet kept for entertainment or pleasure (a child's or lady's companion perhaps?) rather than as a working dog kept for the purposes of either guarding/herding livestock or for hunting game.

Table 16 Medieval dog burial, principle measurements

	GL	Вр	Dρ	SD	Bd
Humerus	107.4	20.8	30	10.2	23.9
Radius	100.7	13.9		10.6	19.1
Femur	118.7	29		10.7	24.6
Tibia	112.8	25.9		8.8	17.1
Mandible: ((8) (P1-M3)	63.5-(13).1	9 0. 14 (18	5)	

All measurements are given in mm and follow the system of von den Driesch (1976)

Pathologies: Of special interest are two pathological conditions exhibited in this animal, reviewed below:

While the left ulna is completely normal and has its olecranon, the right ulna lacks this anatomical part, possibly indicating a traumatic injury to the right elbow joint sustained whilst the animal was still relatively young. In time, the affected bone surface above the trochlear notch completely healed over and apart from the missing (detached) olecranon the only long-term effect seems to have been some slight bony lipping (exostoses) of the articular surface.

Three out of the seven lumbar vertebrae have been affected by spondylosis deformans (vertebral osteophytosis) which according to the classification system for this condition devised by Morgan (Baker and Brothwell 1980, 131) had reached stage four characterized by erosion and pitting in the cranial and caudal epiphyseal articular surfaces and by the formation of bony projections (bridges) at the outer margins of the centra on the ventral sides. Although not life threatening, this pathological condition may have impeded normal locomotion as well as possibly causing some distress (back pain) in the animal. While any resulting difficulty experienced in moving would have been considered a serious liability in a working dog, such a defect in a pampered household pet perhaps would not have been viewed in the same manner by its owner or as a reason for getting rid of the animal.

Domestic birds

Domestic fowl is represented by an isolated coracoid from Medieval quarry pit [1072] and domestic goose by a single piece of sternum from a Medieval pit.

INTERPRETATION AND DISCUSSION

Sources of the Bone at Iwade

The bulk of the bone recovered from all three major periods at Iwade (Middle-Late Bronze Age, Iron Age and Medieval) is identified as discarded food debris from all stages of meat preparation (slaughtering/primary and secondary butchering) and consumption. In certain deposits, intermixed with this material are the skeletal remains of household or working dogs, together with bones from dismembered horse carcasses (apparently fed to dogs).

Diet, Foodways and Livestock Husbandry at Iwade

Given the proximity of marshlands (in the Swale floodplain) and the Thames estuary to the settlement, there is a surprising absence in any of the periods of evidence for the exploitation of wildfowl or of fishing activity for river/estuarine fish species. This situation may be contrasted with the food procurement strategies (foodways) of the inhabitants of the Iron Age settlement at Ashville, Oxfordshire, in the upper Thames Valley, which included exploitation of the wildfowl in the nearby marshy meadows and muddy riverbanks, as evidenced by the presence in their food refuse of bones of heron, mallard and redshank (Bramwell 1978). Bones of pike and chub from the Ashville Iron Age refuse deposits also testified to the contribution of fish to the diet. Pike is also recorded among the food debris at the Middle-Late Bronze Age riverside community at Runnymede Bridge, Surrey, where also there is evidence for the hunting of wild game (wild boar and red deer) in woodlands "within easy reach of the settlement" (Done 1980, 79). At Iwade, the narrow animal resource-base of the succession of human communities apparently did not encompass any comparable wild species and instead was heavily (entirely?) dependant on locally raised domestic livestock. The strong pastoral economy established as early as the Middle-Late Bronze Age which then continued through the Late Iron Age Period and into the Medieval Period, seems to have provided sufficient meat for the inhabitants that there was no necessity for them to seek/hunt alternative animals (in the wild) as supplementary food sources.

Analysis of the Iwade bone-weight data provides the means for assessing the relative contributions made by the different species to the overall diet of the inhabitants in each of the phases/periods represented (Table 17). For all phases/periods, cattle are clearly the main contributors to the meat supply, much of which was in the form of mature beef, indicating that these animals were being kept for purposes of draught in addition to their ultimate role as

meat producers. Evidence for veal consumption at Iwade is confined to the Medieval Period and comprises an isolated calf jawbone from the Medieval enclosure ditch and two juvenile horn cores from Medieval quarry pit [1072]. Data presented in Table 17 also shows that sheep were more important than pigs in all phases/periods as secondary contributors to the meat consumed in the diet. The exact status of pigs in the local agricultural economy is however somewhat confused as the proportional representations of each species based on NISP data apparently indicates a rise in the numerical importance of pigs during the Late Iron Age but which is not matched by the associated bone-weight data!

Table 17 Frequencies of the principal meat-yielding species, by period

By NISP

Period	Cattle	Sheep	Pig	NISP
Middle-Late Bronze Age	62.5%	33.3%	4.2%	24
Late Iron Age	69.2%	23.2%	7.6%	172
Medieval	58.8%	39.2%	2.0%	51

By bone-weight (g)

Period	Cattle	Sheep	Pig	Wt. (g)
Middle-Late Bronze Age	87.4%	7.7%	4.9%	405g
Late Iron Age	91.3%	4.8%	3.9%	5116g
Medieval	82.7%	14.6%	2.7%	925g

From the slaughter patterns in the Iwade Medieval sheep (based on dental attrition in mandibular premolar and molar teeth: Table 18) it is suggested that the Medieval flock comprised animals kept primarily for their wool (their meat providing a useful secondary by-product when they were eventually culled aged three years and above). The Iron Age sheep flocks however apparently comprised dual-purpose animals valued as meat (lamb) producers and for their fleece. A spindle whorl and loomweight from the Iron Age deposits provide supporting artefactual evidence for their role as wool producers while the kill-off pattern based on the analysis of the jawbones (Table 18) includes lambs showing that the flocks were also maintained for meat production.

During the Iron Age, horses formed part of the farm livestock kept by the Iwade community. It is interesting to speculate on the role of these animals in the local farming economy, with particular reference to their small stature. As pointed out by Luff (1982, 136) in the context of Romano-British villa and farmstead sites, livestock herders/ranchers "gained a considerable advantage from being seated on tall horses" when rounding up and moving cattle and sheep. The horses associated with the Iron Age farmstead at Iwade were however pony-sized and therefore at first seem unsuited for such tasks. However, two factors may have determined otherwise:

Table 18 Comparison of Iron Age with Medieval age at death in the sheep, based on patterns of eruption and wear in the mandibular cheekteeth represented

Sheep Mandibles

		Iron	ı Age	Medieval Age	
	Wear stage	No.	%	No.	%
0 - 2 months	A				
2 - 6 months	В				
6 - 12 months	С	2	28.6%		
1 - 2 years	D	1	14.3%	1	16.7%
2 - 3 years	E	4	57.1%		
3 - 4 years	F			4	66.6%
4 - 6 years	G			1	16.7%
6 - 8 years	Н				

Based on criteria of Payne 1973

Small horses may have proved more sure-footed than their larger counterparts when assisting in the rounding up of cattle in the marshland pastures;

Their size also meant they were more agile than their larger contemporaries and therefore more suitable choices for riding horses used in driving the dwarf cattle that formed the herds at Iwade.

From the author's own experiences of handling various breeds of cattle (Herefords, Friesians, Jerseys and Dairy Shorthorns) whilst working on modern farms in Herefordshire and Hertfordshire, it is suggested that just as in their modern counterparts, the small Iron Age cattle in comparison with their larger Romano-British descendants, would have proved the more difficult to control: smaller cattle have a tendency to be more frisky and excitable compared with the generally more even tempered and quieter, more placid larger animals. In order to match the temperamental behaviour and wayward movements in their small/dwarf-sized cattle, it is suggested that the Iwade Iron Age farmers may well have purposely chosen the more nimble pony-sized horses in preference to the more ponderous larger horses of that period. An alternative explanation for the presence of small horses at the Iwade settlement may be suggested from points raised in an article on Medieval equids written by Serjeantson et al. (1992, 10); if it is assumed such animals had served as pack animals rather than for riding, then their small size would have been an advantage, making them easier to load and unload than taller horses. Small horses also probably consumed less fodder.

From an inter-site comparative review aimed at assessing the Iwade farming economies in the context of contemporary Middle-Late Bronze Age and Later Iron Age sites in southern England (Tables 19 and 20) it seems the factors governing the distribution and relative proportions of the different farm animals on all of the sites examined are complex, involving social, ecological and topographical influences and determinants. Local ecological factors for

example presumably accounted for the unusual relative abundance of pigs at the Middle-Late Bronze Age settlement at Runnymede Bridge, Surrey; a reflection of the availability of woodland habitat for these animals (see Done 1980). However, for the Iron Age farming community at Ashville, Oxfordshire, the local situation was apparently more complicated, with socio-economic as well as environmental factors determining the livestock husbandry system – reflected in the high sheep to cattle ratio that is nowhere matched by the other neighbouring river terrace sites (see Wilson 1978, 136). The difficulty of making any meaningful inter-site comparison is further shown by the apparent general similarities in livestock profiles (notably in the cattle/sheep ratios) between the lowland and downland Middle-Late Bronze Age pastoral economies.

Worked Bone

Craft activities carried out at the Iwade settlement using animal products as raw material, appear on the available archaeological evidence to have been limited to the Late Iron Age. These are indicated by two cut and smoothed pieces of cattle ribs from the primary fill of pit [1163], and by an isolated, chopped horn core of an adult ram (waste from horn-working) from the fill of pit [1149].

Metalworking Waste

LYNNE KEYS

The excavations at Iwade produced a very small quantity (just over 1.5kg) of material identified as iron slag. It was found in fills of ditches, gullies and postholes ranging in date from the Late Iron Age to Medieval periods.

Most of the slag was recovered by hand but 31 soil samples from hearths were also taken in order to locate any ironworking activity. These were visually examined and a magnet was run amongst the contents to locate any hammerscale. The hand-retrieved slag was examined and categorized on the basis of morphology and colour. All slag was weighed and recorded, and additionally the smithing hearth bottom was measured to obtain maximum dimensions (see Table 21).

Undiagnostic slag can be generated by either smelting or smithing of iron, but the small amount of tap slag (diagnostic of smelting) is unlikely to have been produced on the site. Only one smithing hearth bottom was recovered and no hammerscale was found amongst any of the hearth samples. A very small amount of copper-alloy was also present in the assemblage.

Table 19: Frequencies of the main domesticates from Middle to Late Bronze contexts in comparison with other Middle-Late Bronze Age sites in southern England

Site	Horse	Cattle	Sheep/goat	Pig	NISP
wade, Kent	0%	63%	33%	$4^{0}/_{0}$	24
Runnymede Bridge, Surrey (Done 1980)	2%	57%	27%	14%	2778
lams Hill, Oxfordshire (Carter 1975)	0%	63%	32%	5%	40
lack Patch, Sussex (O'Connor 1982)	0%	74%	25%	1%	248
hundersbarrow Hill, Sussex (Armitage 1985)) 1%	48%	47%	4%	71

Percentages based on NISP data.

Table 20 Frequencies of the main domesticates from Late Iron Age contexts in comparison with Iron Age sites in the Upper Thames Valley (Oxfordshire) and Cotswold Hills (Gloucestershire)

Site	Horse	Cattle	Sheep/goat	Pig	NISP
Iwade, Kent	7%	64%	22%	7%	185
Oxfordshire sites (Wilson 1978):					
Ashville	4%	32%	54%	10%	3383
Appleford	13%	50%	25%	11%	393
Farmoor	17%	42%	32%	9%	213
Gloucestershire site (Wilson 1978):					
Guiting Power	6%	28%	64%	2%	253

Percentages based on NISP data.

Table 21 Late Iron Age and Medieval metalworking, evidence by context

Sample	Context	Identification	Wt(g).	Length (mm)	Breadth (mm)	Thickness (mm)	Comment
Late Iron	n Age Conte	kts					
	295	Smithing hearth bottom	140	50	50	40	
14	366	Cu-alloy	2				
15	366	Iron lump	110				
	609	Undiagnostic	120				
32	615	Cu-alloy	10				
	617	Undiagnostic	52				
	617	Undiagnostic	284				very heavy and magnetic
40	627	Tap slag	210				_
40	627	Undiagnostic	21				
42	822	Undiagnostic	4				Broken smithing slag?
45	918	Undiagnostic	26				
67	1001	Undiagnostic	128				
	1035	Non-iron slag	40				Glassy and cinder
75	1051	Iron lump	218				
54	1051	Undiagnostic	44				Iron rich
2	2039	Undiagnostic	84				Possible smithing slag
4	2045	Undiagnostic	12				Possible smithing slag
Medieval	Contexts						
	313	Cu-alloy	12				Leaded lump
77	1071	Undiagnostic	22				-

Interpretation and Importance of the Assemblage

Although small amounts of both smelting and smithing slags were present, most of the assemblage was undiagnostic. It is probable the undiagnostic slags were generated by small scale smithing activity since smelting slag was represented by a tiny amount in only one context.

Small amounts of iron slag, usually generated by secondary iron smithing, are encountered on most sites. At Iwade the amount, considering the periods it covers, is very small and its distribution does not pinpoint a particular focus for the activity in any period.

Discussion

The environmental analyses demonstrated few plant remains were present, possibly partly due to poor survival conditions. Nevertheless, the quantities of cereal remains from all periods were surprising low, and it would appear that arable farming never played a significant role at Iwade. Cereals were used in small quantities during the Middle to Late Bronze Age, Late Iron Age and the Medieval periods however, with emmer and spelt wheat dominating the record throughout. These provided the only cereals recognized from the Middle to Late Bronze Age, although some evidence of the use of oats and barley was found for the Late Iron Age, and barley was present in small quantities during the Medieval period.

The presence of weed species indicated that during the Middle/Late Bronze Age the site was located within an area of waste or disturbed ground, compatible with the interpretation that the major features from this period represent a field-system. Weed species from the Late Iron Age also suggest that the site was located within cultivated or disturbed ground, as well as reflecting the fact that many of the features, ditches in particular, contained water prior to eventual backfilling, suggesting the site was frequently damp, and given the water-retentive properties of the underlying geology, presumably boggy. Molluscan evidence taken from Enclosure 2's ditch suggests this contained swampy water and that it may have been used as a dump for general organic waste and detritus. Other molluscan evidence suggests that parts of the site may have retained ponds or

streams during earlier stages of its occupation and, if so, it is possible that these acted as a focus for the Mesolithic or Neolithic activity recorded scattered around the site. A possible springline was recorded to the east of the excavations and, although no evidence for fluviatile conditions were recorded in the main areas of excavation, it is possible that the molluscan evidence reflects a period of flooding caused by exceptional or prolonged precipitation.

The evidence from the animal bone suggests that, at least from the Middle Late Bronze Age onwards, the exploitation of wild species was not important. This may seem somewhat surprising given the rich and varied resources available in the vicinity of the site, although if, as suggested, a form of transhumance was being practiced, it may be that these resources were of more importance when the communities were amongst them, but were not brought back to the settlement. Only a single bone, from a sheep, was identifiable from the Neolithic features. The Middle/Late Bronze Age animal bone assemblage was dominated by cattle, with some sheep and a single pig bone present. This pattern is continued during the Late Iron Age, although by then horses also seem to have been important, and dogs also make an appearance. The presence of these latter two animals raises the intriguing possibility that they were used for herding

animals from one location to another, further enhancing the suggestion that some form of transhumance was undertaken, and that the settlement at Iwade may have acted as a focus within a 'ranch-style' pastoral economy.

Very little evidence for craft working was identified. It is probable that industries such as pottery and salt manufacture were occurring locally during the Late Iron Age, but no evidence for the on-site manufacture of these commodities was forthcoming from any period, although some salt was being imported. Evidence for bone working consisted of three pieces of Late Iron Age date, and despite the number of hearths recorded from Late Iron Age and Medieval periods that may have had an industrial function, very little corroborative evidence of metalworking, other than occasional smithing activity, was identified.

This would suggest that the majority of commodities were imported to the site rather than manufactured in situ, although as with food resources, it is possible that, at least during some periods, many craft activities could have been undertaken off-site. Local traditions of pottery and salt manufacture, for example, were, by necessity, concentrated on the marshlands during the Iron Age and Roman periods, and it is possible that these industries were part of a much larger cycle of seasonal movement and resource acquisition.

Chapter 7 The Archaeology of Iwade in its Broader Context

This chapter attempts to put the findings from the excavations into a wider regional pattern of occupation that is beginning to emerge from a recent upsurge of archaeological investigations conducted within North Kent. Since the publication of several papers concerning the prehistory of Kent (Leach 1982), there has been a dramatic increase in the scale of archaeological excavation, mostly conducted through PPG 16 led development interventions, resulting in the transformation of existing knowledge. Most are too recent to have undergone full analysis and publication, and much of the information that the following is based on comprises unpublished or interim reports. No doubt many of the findings will be modified or superseded when more thorough analysis is undertaken, although it is still worthwhile to consider their basic findings in order to put those of Iwade into a meaningful context.

The evidence from Iwade is generally consistent with the broader picture of prehistoric occupation across southern Britain. It demonstrates sporadic but persistent activity from the Later Mesolithic until the Late Bronze Age. By the Late Bronze Age Iwade appears to have been subsumed into a more intensively settled and formally laid out agricultural system, although this newly established landscape disappears during the Early Iron Age, only to reappear in the form of an enclosed agricultural farmstead during the Late Iron Age. Significantly, the Late Iron Age settlement is abandoned around the time of the Roman conquest and, despite extensive evidence for Roman settlement in the area, at Iwade only sporadic and transient visiting of the site is attested. No further activity was identified at the site until the Medieval period, when during the late 12th and 13th centuries a possible relatively high-status dwelling was constructed adjacent to a substantial routeway. Activity again declines during the 14th century, and the site appears to remain in peripheral agricultural use until being subsumed by the residential expansion of Iwade that occasioned the excavations reported here.

MESOLITHIC

The earliest identified evidence of human activity at the site occurs during the later Mesolithic, when a tree-throw hollow may have been temporarily used as a shelter for working flint and repairing hunting equipment. Some residual flintwork may indicate further activity across the site, although this was unlikely to have been extensive, and it is clear that Iwade was merely an occasionally visited spot in a much wider landscape of habitation.

Mesolithic settlement patterns within the North Kent region are still largely poorly understood, especially when compared to such areas as the Weald to the south, with its plethora of middle Mesolithic 'Horsham' industry and other sites. Nevertheless, there is an abundance of evidence from North Kent, mostly recovered from riverine locations and the coastal margins, although much of this consists of poorly-dated and provenanced chance finds, often only consisting of individual or small groups of implements (Wymer 1977; Allen 2000). In addition, the exploration of riverine and coastal settlement and exploitation presents difficulties due to the extreme physiographic changes that have occurred throughout the Holocene, most dramatically perhaps during the Mesolithic period, which witnessed a rapidly encroaching coastline, resulting in either the erosion of potential landsurfaces or their submergence under often substantial deposits of alluvium.

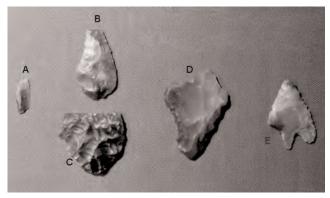


Fig. 112 Projectile points from Iwade spanning the Mesolithic to the Bronze Age: A. Mesolithic microlith B - C. Earlier Neolithic leaf-shaped arrowheads D. Later Neolithic transverse arrowhead E. Early Bronze Age barbed and tanged arrowhead

Despite these challenges, the area was influential in the early development of Mesolithic studies, Lower Halstow, some 4km to the west of Iwade (Fig. 113.6), was regarded as a virtual 'type-site' for the Later Mesolithic (Jacobi 1982, 16), as were the sites at Springhead in the Ebbsfleet Valley (Fig. 113.2; Burchell 1938). More recently, other significant Mesolithic sites have been identified along the North Kent coastal areas, such as the tranchet axe manufacturing site at Cliffe on the Hoo peninsula (Fig. 113.4; Ashton 1988), and to the east important lithic assemblages have been recovered from Perry Woods near Selling (Fig. 113.16; Woodcock 1975), Hillborough (Fig. 113.18; Bishop forthcoming) and Faversham (Fig. 113.15; Allen and Scott 2000).

North Kent has also produced important evidence suggesting a certain degree of continuity, at least in site location, across the Mesolithic/Neolithic transition, such as the 'upper floor' at Springhead (Fig. 113.2; Sieveking 1960), or from the peat filled lake at Darenth (Fig. 113.1), where axes were deposited from the Mesolithic through to the Early Neolithic (Philp et al. 1998). Continuity of site use can also be seen at Chestnuts Megalithic Tomb (Fig. 113.3; Alexander 1961), which Ashbee (1999) suggests reflect an expression of the contact between indigenous huntergatherers and incoming farming groups. Kent's proximity to the Continent will undoubtedly ensure its importance in understanding this still very contentious subject.

NEOLITHIC

Continued visiting of the site into the Neolithic is evidenced by the recovery of two leaf-shaped arrowheads (see Fig. 112) and possibly a scattering of other flintwork, although this again would only amount to indications of transient activity. Considering Iwade's position close to the main access route leading to the Isle of Sheppey, the recent discovery of a causewayed enclosure at Eastchurch on the island is of interest (Fig. 113.14; Dyson et al. 2000). The function of these monuments is still open to speculation although most authorities agree that they served widely dispersed communities, possibly acting as centres for periodic population aggregation, and no doubt many people would have passed through the Iwade area going to and from this monument.

The closest evidence of Neolithic settlement to Iwade consists of an important group of large pits found to the east on the Grovehurst Estate (Fig. 113.9; Payne 1880). These were interpreted as a village of sunken huts by their excavator and as a pit-complex site comparable to Hurst Fen in Suffolk by Clarke (1982). Given the impressive range of quality implements, including many polished axes, some of

exotic origin, it would appear that a degree of selective deposition was occurring, presumably associated with ceremonial activity. Similar pits are recorded at various sites throughout north and east Kent, including at Wingham (Fig. 113.19), Ramsgate on the Isle of Thanet and Deal (Figs. 114.22, 114.21; Dunning 1966; Barber 1997), and are a recognized phenomenon of the Neolithic throughout Britain (Thomas 1999). Although their often unusual contents may be indicative of ritual practices, they may nevertheless reflect concerns such as site 'remembrance' (Pollard 1999) or landscape demarcation and, alongside flintwork scatters, may offer some of the best evidence for where people actually resided, if only on a temporary basis.

These types of unusual depositional practices continue into the Later Neolithic, and may be reflected in the earliest Neolithic structural evidence identified at Iwade. This consists of two pits containing Middle to Later Neolithic Ebbsfleet type Peterborough Ware pottery, as well as selected groups of worked flint. Sporadic ritual activity is common in the Iwade area during these periods. Neolithic and Bronze Age cremation burials have been recorded just to the north, at The Street (Fig. 113.7), as well as immediately to the east of the site (Hawkins 1999). Other examples of special deposition in North Kent may include the Peterborough and Grooved Ware filled pits at the earlier ceremonial site of White Horse Stone (Fig. 113.5; Oxford Archaeological Unit 2000), and the pits at Eddington Farm near Herne Bay (Fig. 113.17), one of which contained a complete polished stone axe (Canterbury Archaeological Trust 2002b). Closer by, Later Neolithic activity is represented by an arrowhead, axe and some pottery recovered from Kemsley Fields (Fig. 113.10; Willson 2001), and this pattern of scattered artefacts, only occasionally associated with any structural evidence, continues across the region. Indeed, throughout the Neolithic there is a dearth of obvious domestic structures or settlement sites in North Kent, or elsewhere in southern Britain (Thomas 1996).

EARLY BRONZE AGE

The recovery of barbed and tanged arrowheads at the site, plus another found c. 400m to the north adjacent to The Street (Boyer 2001), testifies to continued visiting of the area during the Early Bronze Age but, as with preceding periods, the nature of that activity continues to be enigmatic and almost certainly low-key.

If anything, the evidence of Early Bronze Age activity across the whole region is even more elusive than for the preceding periods, and still mostly confined to funerary practices, notably barrows, and as at Iwade, stray finds. In 1982 the Bronze Age was described as having suffered the worst in the neglect of Prehistory in Kent, having "no major field monuments, no important ceremonial centres, little pottery, and no settlements" (Champion 1982, 31), metalwork has been recovered in some quantity but is poorly published (ibid.). Recent work has identified a few possible settlement sites in the region, such as the enclosure at Minster in Thanet (Fig. 113.20; Boast and Gibson 2000), and other possible locations have been identified at Deal (Fig. 113.23; Parfitt and Corke 2001) and possibly at Eddington (Fig. 113.17; Shand 2000). The nearest indications of Early Bronze Age activity to Iwade consist of a richly furnished inhumation burial, found at Sittingbourne (Fig. 113.8; Payne 1883), although there are some indications that the settlement complex at Kemsley Fields may have had its origins in the latter parts of the Early Bronze Age (Fig. 113.10; Willson 2001). Funerary monuments such as barrows have been increasingly recognized in Kent although in the Swale and Medway area they are particularly scarce, the most notable perhaps being the ring-ditch excavated at Shrubsoles Hill on the Isle of Sheppey (Fig. 113.13), which remained a focus for cremation activity until the end of the Bronze Age (Coles et al. 2003).

MIDDLE BRONZE AGE

Middle Bronze Age activity at the site was represented by four pits and a well or shaft, and two unurned 'token' cremations dated to the Middle-Late Bronze Age were also recorded. Two of the pits and the well or shaft contained near complete pottery vessels, which, along with the cremations, may indicate a resurgence of ceremonial activity at the site. No evidence was identified for contemporary buildings or agricultural activity, such as field ditches. It is possible that the associated settlement was located at Kemsley Fields, less than 2km away (Fig. 113.10). Here, excavations identified a surprisingly extensive series of enclosures, associated settlement evidence and accompanying field-systems, interpreted as representing a series of livestock corrals and emphasising the importance of livestock husbandry to the local community (Hutchins and Willson 2001; Willson 2001). Just to the north of Kemsley Fields (Fig. 113.11) further settlement evidence has been identified, probably an extension of that recorded to the south, including a cremation burial dateable to the Middle or Late Bronze Age (T Allen, pers comm.). These

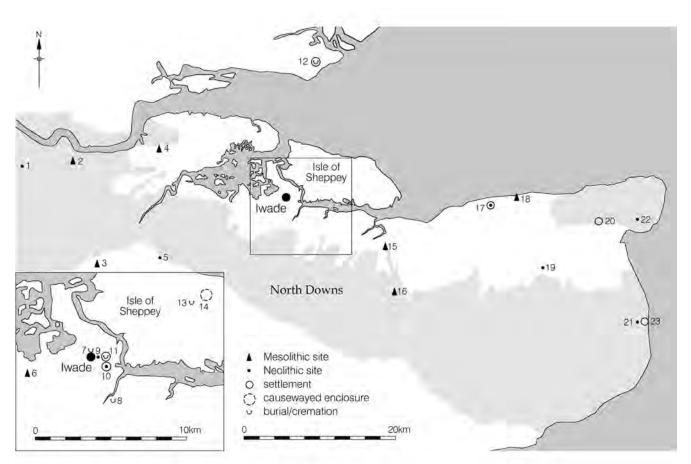


Fig. 113 Settlement in North Kent: Mesolithic to Middle Bronze Age sites mentioned in the text 1. Darenth 2. Springhead 3. Chestnuts Megalithic Tomb 4. Cliffe 5. White Horse Stone 6. Lower Halstow 7. The Street, Iwade 8. Sittingbourne 9. Grovehurst Estate 10. Kemsley Fields 11. Kemsley North 12. North Shoebury 13. Shrubsoles Hill 14. Eastchurch 15. Faversham 16. Perry Woods 17. Eddington Farm 18. Hillborough 19. Wingham 20. Minster-in-Thanet 21. Deal 22. Ramsgate 23. Deal (scale 1:500,000, inset 1:250,000)

findings present a significant development for studies of Middle Bronze Age settlement patterns and organization as, although Middle Bronze Age agricultural activity is increasingly being recognized, much of the evidence still consists of funerary or ceremonial practices, such as barrows or deposits of metalwork, which tend to concentrate around the major rivers and within the North Kent coastal region, notably in and around the Isle of Thanet (eg Canterbury Archaeological Trust 1995). Here, the impressive funerary monuments and vast quantities of metalwork recovered has led it to be described as a 'gateway island' and a specialist maritime haven, associated with the bronze trade (Perkins 1991; Perkins et al. 1994).

During this period there is evidence for an emerging concern with demarcating the landscape by the imposition of large-scale land divisions, reflecting a new interest in land tenure. Such land divisions, often associated with fields and other enclosures, have long been documented on Dartmoor (Fleming 1988) and the chalklands in central southern England (Bowen 1978; Ford 1982; Bradley et al. 1994) and, although still not common, this type of landscape reorganization has increasingly been recognized within the estuarine reaches of North Kent, such as on the Hoo peninsula and the Isle of Thanet (Yates 2001). These patterns are matched across the estuary in Essex, (Jones and Bond 1980; Wymer and Brown 1995; Yates 2001, 73), and similar patterns are also increasingly being recognized further west in the London region (Brown and Cotton 2000, 90; Barrett et al. 2001).

These settlements are frequently characterized by a rich array of deliberately placed objects and other indications of ceremony, including near complete pots, animal remains and cremations, indicating that the settlements and their associated agricultural landscapes were founded on and inhabited through strong ritualised principles (eg Brück 1999b; 1999c). At Shrubsoles Hill on the Isle of Sheppey (Fig. 113.13), a major ditch has recently been identified dividing the landscape, perhaps into strips running upslope away from the Swale (Coles et al. 2003, 13). Here, important themes identified by the excavations included dividing-up the land and establishing and maintaining dynastic lineages, although little overtly 'domestic' activity was identified (ibid.). Across the estuary at North Shoebury (Fig. 113.12) a series of linked rectilinear enclosures dotted with pits were excavated, alongside plentiful evidence for ritual practices, including two unurned cremations located on the periphery of the settlement. No residential buildings were identified although it was thought that these could have been built on ground beams and had not survived into the archaeological record. It was suggested that there, mixed farming was practiced, including the use of marshland pasture (Wymer and Brown 1995).

Transient Settlement: the first 3000 years

From the Mesolithic to the Middle Bronze Age there is evidence for sustained, if intermittent, low-key and transient activity at Iwade. It would appear that throughout this time Iwade was not a major focus for settlement, but rather a place that people occasionally visited, performing taskspecific activities but then continuing on, and only occasionally leaving traces of their presence. Iwade's location close to the Swale floodplain and a major crossing point to the Isle of Sheppey guaranteed the area a sustained importance, especially for those communities retaining a marked degree of routine mobility in their lifestyle. That an importance was attached to the area may also be discerned in the considered deposition of the Peterborough Ware and the Middle Bronze Age pottery at the site. These may indicate that the site was maintained as a focus for ceremonial activity, possibly retaining this status throughout these periods of transient activity. These two examples of obvious acts of ritual may have been separated by two millennia, but the lithic evidence suggests a degree of continuity between these periods, and evidence from other areas indicates that certain places, presumably regarded as 'significant' in some way, could receive special depositions over a long period. Similar examples include Franks' Sandpit, at Betchworth in Surrey, which appears to have acted as a focus for special depositional activities for perhaps as much as three millennia (Williams 2004), and Bow in East London, where complete Peterborough Ware and complete Deverel-Rimbury vessels were deposited in close proximity (Bishop in prep.).

LATE BRONZE AGE

At Iwade a series of fields, pits and a trackway were constructed by the Late Bronze Age, possibly delimited by the two 'token' cremation burials of Middle to Late Bronze Age date, located on the eastern edges of the site. These represent, for the first time at Iwade, the establishment of a recognizable system of agricultural production, in this case probably primarily based on livestock farming. Recovered from the features of this period were animal bone, quern fragments and quantities of pottery suggestive of 'domestic' activities, indicating that the location of the settlement utilizing the fields was close by. The presence of both Deverel-Rimbury and post Deverel-Rimbury pottery suggests a degree of continuity from the Middle Bronze Age, blurring the distinction of exactly when the overtly agricultural features were constructed. Nevertheless, all of the agricultural features produced post Deverel-Rimbury pottery, indicating that they were becoming filled in sometime during the last two centuries of the second

millennium BC. The nature of some of the deposits also suggests a degree of continuity between these periods, such as the burial of substantially complete pots, indicating that certain ceremonial practices may have been maintained. Nevertheless, there is little indication of agricultural or settlement activities during the Middle Bronze Age and it may be that the immediate area around Iwade changed during these periods from one suitable only for ceremonial activities to one where such practices were incorporated into the very fabric of the agricultural regime. The nature of this is evidently obscure, although it might involve concerns to symbolically legitimize the new agricultural system or ensure its productivity; the Middle Bronze Age palstave axe deposited into a later field ditch may have, for example, represented an attempt to reference the past or draw the symbolic wealth of earlier communities into the newly transformed landscape.

At least two major themes arguably dominate current studies of the Late Bronze Age in southeastern Britain. The first concerns an apparently substantial increase in the intensity of trade and/or exchange with the Continent, especially that relating to metal artefacts. Along the Thames estuary, the quantity of bronze objects recovered from along its coastal areas and tributary rivers increases throughout the Bronze Age (Champion 1982, fig. 14; Turner 1998; Yates 2004, fig. 2.1), and whilst general patterns of distribution are maintained, metalwork deposition increasing becomes concentrated within these particular areas. The seeming wealth of the region is also reflected in the "remarkable number of gold objects" found around the Medway and along the coastal regions (Champion 1982, 38). These developments may indicate that this region assumed a new importance, possibly manifested in an increase in population, and connected to systems of exchange operating along the Thames to the Continent (Sherratt 1996). Yates suggests that these patterns demonstrate the Thames estuary's "participation in an increasingly cosmopolitan world' (2004, 11), and that the greater emphasis on the circulation of prestige weaponry and deposition of ostentatious objects suggests the development by the Late Bronze Age of social elites (ibid.).

Probably linked with these developments is the appearance for the first time in the archaeological record of a fully occupied and systematically laid out agricultural landscape, consisting of small-scale dispersed settlements, set within extensive field-systems defined by ditches and/or hedges, connected by trackways, and geared towards explicit agricultural production (Yates 1999; Yates 2001). The precise origin of this new form of land tenure is uncertain; within the lower Thames Valley there is little evidence for it prior to the Middle Bronze Age (Richmond 1999, 85-87), yet it reaches its zenith during the Late Bronze Age (Yates 2004).

Although far from fully understood, these tracts of agriculturally transformed lands frequently appear to be arranged around larger earthworks, or 'aggrandized' enclosures, which may have exerted some form of social, economic or political control over their affiliated lands. 'Aggrandized' enclosures have now been recognized in many areas in southeast England; they nearly always command positions overlooking fertile tracts of land and/or maritime or riverine approaches to these areas (Yates 2004), and it is hard not to surmise that their position was intended to somehow control or administer these lands or the approaches to them. In some cases, a further role for these enclosures may include the production of bronze, this clearly required access to an organized and extensive exchange network, and moulds for bronze casting have been found at the particularly large and impressive enclosures at Chislet (Fig. 114.12) and at Deal (Fig. 114.14).

Work by Yates (2001; 2004), based mostly on unpublished 'client reports', has identified a series of such agricultural landscapes throughout the London region and along both the Essex and Kent sides of the Thames estuary. Those on the southern side include the areas around Gravesend (Fig. 114.1–114.2), the Hoo peninsula (Fig. 114.4), the coastal areas east of Faversham, such as around Whitstable (Fig. 114.10) and Herne Bay (Fig. 114.11), and on the Isle of Thanet (Fig. 114.13; Yates 2001, 75-78, figs. 7.5 and 7.6; Yates 2004, fig. 2.3). Yates' survey revealed little evidence of such an agricultural landscape around the area of the Swale, although he does note the large Late Bronze Age earthwork at Eastchurch on the Isle of Sheppey (Fig. 114.9), and a similar enclosure has been identified close by, beneath Minster Abbey (Fig. 114.7; Philp and Chenery 1998; D Yates, pers comm.). Recent work in the Iwade area has started to fill this gap, revealing vestiges of Late Bronze Age or Early Iron Age field-systems and traces of settlement, suggesting this area too was subsumed into the emerging agricultural landscape. Ditches, possibly representing fields, were recorded during evaluation work 400m north of the site, and although these were poorly dated, a prehistoric date for at least some was suspected (Boyer 2001). Possibly the most notable site was the extensive settlement and field-system recorded around Kemsley (Fig. 114.6) and occupied from the Middle Bronze Age to the Early Iron Age (Willson 2001; T Allen, pers comm.). In addition, field-systems associated with settlements have been identified at Bobbing, about 1.5km to the southeast of Iwade (Fig. 114.5; Pine 2000a; 2000b).

There are fewer recorded traces of field-systems on the Isle of Sheppey, although at Shrubsoles Hill the Middle Bronze Age boundary ditch (see above) was succeeded by a Late Bronze Age enclosure, possibly used for stock control

(Fig. 114.8; Coles et al. 2003, 52-53). The most notable Late Bronze Age remains are the potential 'aggrandized' enclosures at Eastchurch and Minster, which occupy the highest points on the island, overlooking the Swale, and may be comparable with the 'twinned' enclosures recorded across the estuary at Mucking (Fig. 114.3; Jones and Bond 1988). They may be associated with a more widespread agricultural system hinted at by the Shrubsoles Hill evidence, and perhaps provided a focus for the communities occupying the island. Any such influence could have stretched to the Iwade area, although it is also entirely possible that the island was a self-contained entity. If so, other, as yet unidentified, focal points may exist on the mainland in the Swale area.

Although an apparently extensive agricultural landscape had been created by the Late Bronze Age, the nature of the agricultural system is less well understood. The excavations at Iwade have produced good evidence of field-systems and their associated routeways. Droveways and a possible pond suggest the importance of animal rearing, and that movement was an important aspect of their husbandry. Animal management appears to have been important at Kemsley Fields (Fig. 114.6; Hutchins and Willson 2001), and at Coldharbour Road, Gravesend (Fig. 114.2) similar evidence to

that of Iwade was found, consisting of fields and trackways, interpreted as representing possible transhumantic practices (Mudd 1994). This may have involved the seasonal movement of livestock from the higher elevated regions of the North Downs to the low-lying coastal margins (ibid.), possibly comparable to the agricultural systems identified at Fengate (Pryor 2001). Evidence of the importance of marshland during the later Bronze Age has also been provided by the discovery of numerous trackways traversing the marshes of east and south London (Philp and Garrod 1994; Meddens 1996; Thomas and Rackham 1996), interpreted as a means of exploiting the marshes, including their use for seasonal pasturage (Meddens 1996).

EARLY-MIDDLE IRON AGE

During the Early Iron Age, activity at the site appears to cease. Some of the pottery recovered suggests continuity from the Late Bronze Age into the initial stages of the Iron Age, but the field-systems and traces of associated settlement disappear soon after. This scenario seems to be a recurring phenomenon throughout the lower Thames Valley.

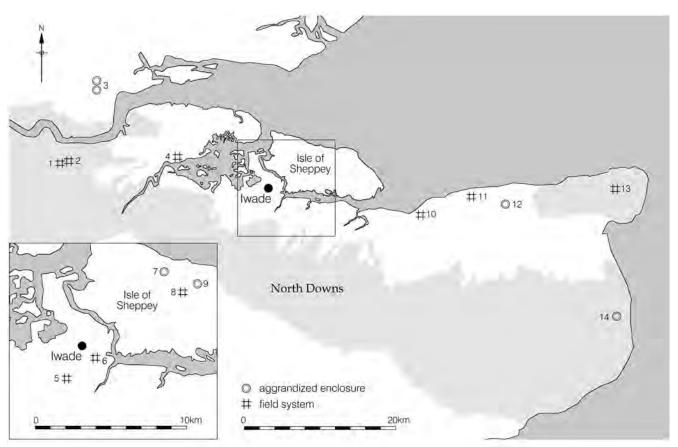


Fig. 114 Late Bronze Age agricultural activity in North Kent sites mentioned in the text: 1. Gravesend area 2. Coldharbour Road, Gravesend 3. Mucking 4. Hoo area 5. Bobbing 6. Kemsley Fields 7. Minster Abbey 8. Shrubsoles Hill 9. Eastchurch 10. Whitstable area 11. Herne Bay area 12. Chislet 13. Thanet area 14. Deal (scale 1:500,000, inset 1:250,000)

It has been noted that within the London region, (eg Greenwood 1997), and along the North Kent coast a hiatus in the dense pattern of settlement and agricultural organization established during the Late Bronze Age is apparent from approximately 600BC until the first century BC. Indications of Early Iron Age activity are not completely absent, however, a possible 'farm-sized' Early Iron Age settlement represented by pits and postholes at Barton Drive near Minster on the Isle of Sheppey has been reported (Pratt 2001), and indications of Early and Middle Iron Age activity have been reported further east along the North Kent coastal region (eg Allen and Willson 2001; Crank 2000) and in and around the Isle of Thanet, such as at Margate (Perkins 1999), Eastry (Macpherson-Grant 1999) and Hersden (Canterbury Archaeological Trust 2002c). An analysis of the large collection of multi-period ceramics recovered from along the Seasalter area coastline indicates some activity during the Early Iron Age although, as usual, markedly less so than during the Late Bronze Age or Late Iron Age (Allen 2000). Across the estuary on the Southend peninsula, settlement and agricultural activity continued throughout the Iron Age, such as evidenced at North Shoebury, although on the whole it was at a much reduced scale, and possibly involved a greater degree of self sufficiency, than that of the Late Bronze Age (Wymer and Brown 1995, 157-158).

The precise reasons for this decline in archaeologically visible activity are not readily apparent. Factors such as increased wetter conditions, climatic deterioration and rising sea levels have been postulated, and must have had profound effects on the agricultural basis of Late Bronze Age prosperity, including the potential loss of productive lowlying areas around the Thames estuary (Devoy 1979; 1980). At Farmoor in Oxfordshire, higher up in the Thames Valley, Early and Middle Iron Age settlement concentrated on the floodplains but increased wetter conditions, combined with renewed rates of alluviation, forced settlement higher up on the valley sides (Lambrick and Robinson 1979). A loss of pasturage in the Iwade area could have led to dislocation both economically and in settlement patterns, and any lowerlying settlement evidence may have been either eroded or obscured beneath alluvium. The relatively mobile natures of settlement combined with a potential loss of sites through marine and alluvial processes would have made these periods difficult to recognize archaeologically.

Other factors include wider European disruption (Yates 2004), possibly resulting in the collapse of long distance communication, along with its associated political organization. Later Bronze Age politics were perhaps underpinned by the exchange of bronze, and may have been closely related to the ability to create and control agricultural

surplus, a surplus evidenced by the 'new' densely settled agricultural landscape. A collapse of one would no doubt have far reaching implications for the other.

LATE IRON AGE

At Iwade, the hiatus in archaeologically visible activity from the end of the Late Bronze Age/Early Iron Age continues until the establishment of an enclosed farmstead during the Late Iron Age, around 100BC, a break in occupation of some 400-500 years.

Settlement: the agricultural basis

Numerous finds of Late Iron Age metalwork, most notably coins, have been recorded within the North Kent region, but it is only in the last few decades that any detailed information concerning settlement patterns has emerged. In Cunliffe's survey of Iron Age Kent (1982), only a handful of Iron Age non-hillfort settlements could be suggested, the nearest to Iwade being at Borden (Fig. 115.5). Since then, and at least partly due to more comprehensive coverage enabled through development-led archaeological investigation, it has become increasing clear that the low hills sandwiched between the North Downs and the coast witnessed extensive settlement during the latter parts of the Iron Age. Historically, the North Kent coastal belt has been relatively densely settled, although until recent infilling this had been by mostly small, poorly nucleated settlements; this very broad picture may also have been apparent during the Late Iron Age.

Echoing Caesar's oft-quoted description of a highly populated and densely settled Kent in the 1st century BC (De Bello Gallico 5.12), numerous potential 'farmstead' type settlements have indeed been identified throughout North Kent, including around Swale area. Just over 1km from Iwade, and in a very similar elevation and aspect, a substantial Late Iron Age settlement has recently been revealed at Kemsley North, close to the west bank of Milton Creek (Fig. 115.11; T Allen, pers comm.). On its east bank, clay and timber buildings and other indications of settlement have been found at Castle Road, just north of Murston (Fig. 115.12; Canterbury Archaeological Trust 2002d). Approximately 4km southwest of Iwade and just to the west of Bobbing, large quantities of 'Belgic' pottery have been recovered at Keycol Hill (Fig. 115.4), suggesting a settlement may have existed nearby (P Wilkinson, pers comm.), with further pottery being recovered to the east of Bobbing (Fig. 115.8; Greatorex 1999). Settlement evidence, field-systems

and a substantial droveway have been recorded immediately to the west of Sittingbourne in the Borden area (Fig. 115.5; 115.7; Worsfold 1948; Hammond et al. 2003). Aerial photographs (National Monuments Record number 1333174) indicate an enclosure of possible Iron Age date at Highstead, to the south of Sittingbourne (Fig. 115.9), possibly associated with a 'Belgic' cemetery recorded at Highstead Gravel pit (Fig.115.10; Anon 1979), and pottery and a potin coin were found at Radfield, to the east of Sittingbourne (Fig. 115.13; Baxter and Mills 1979). Slightly further away, settlements of Late Iron Age date have been recorded 8km to the west at Rainham (Fig. 115.3; Cunliffe 1982), whilst to the east, at Abbey Fields near Faversham, a Belgic sub-rectangular enclosure has been recorded (Fig. 115.14; Philp 1968). Closely comparable to Iwade, this was located on brickearth adjacent to an inlet of the Swale. It appears to have been established shortly after the middle decades of 1st century BC and associated with an adjacent field-system laid out around c. AD 10-20. The enclosure was abandoned and the field ditches had silted up by the middle of 1st century AD, but continued use is indicated as the enclosure was overlain by an early Romano-British villa. It is difficult to establish whether this development represented attempts at Romanization by the natives or appropriation of the land by the new authorities. Either way, the villa may have been based on the same land allotment as the preceding Late Iron Age enclosure, interpreted as an estate of c. 300 acres, extending from the coast to Watling Street (Philp 1968).

This apparently densely occupied landscape continues further eastwards, with recent excavations producing abundant evidence of the settlements and field-systems of these Late Iron Age farming communities along the Blean uplands, particularly the Whitstable (Fig. 115.15), Chestfield (Fig. 115.16) and Herne areas (Fig. 115.18; Allen 2001a; Allen 2001b; Allen and Willson 2001; Boyer and Hounsell 2000; Canterbury Archaeological Trust 2002e; Canterbury Archaeological Trust 2003; Shand 2000).

In many cases, the evidence from these investigations is strikingly similar to that from Iwade, including the nature of the settlement, the use of enclosures, the presence of substantial trackways and their topographical location, which was usually on relatively elevated areas overlooking the coast. Many of these sites demonstrate a recurring pattern, with Late Bronze Age fields and/or settlements being abandoned during the earlier parts of the Iron Age, being re-established during the Late Iron Age, only to be abandoned again around the time of the Roman Conquest. The location of these settlements also provided easy access to the Thames estuary and beyond, with some, such as Kemsley, Murston and the Abbey Fields enclosure at Faversham, actually

adjacent to inlets into the Swale. The inlets were likely to be navigable and suggest the importance of communication, enabling easy contact with other parts of coastal North Kent and the southern Essex coasts, as well as their hinterlands via tributary rivers, and beyond the estuary to other parts of Britain and the Continent. Iwade itself was located not far from Coldharbour Fleet, which may have been substantially larger and navigable during the Iron Age and Roman periods (P Wilkinson, pers comm.).

Settlement: larger conglomerations

This pattern of scattered farmsteads is likely to have been incorporated into a wider structure of settlement hierarchy comprising a variety of settlement forms, itself reflecting an increasingly complex regional social structure emerging throughout the Iron Age.

Eastern Kent is generally regarded as lying outside of the Kent hillfort zone, with none identified east of the Medway (Cunliffe 1982, 44), although recent excavations at the aptly named Fort Hill, near Margate on the Isle of Thanet (Fig. 115.19), have uncovered a substantial and densely occupied settlement and trading centre described as a hillfort (Denison 2003; P Wilkinson, pers comm.). The recognition of such a settlement invites the possibility that other centres may be located in similar locations along the North Kent

What have been described as proto-urban settlements have also been identified. At Rochester, traces of a possible mint (Harrison 1991), as well as numerous other indications of occupation may reflect a politically important regional centre (Fig. 115.1), and Canterbury was clearly an important proto-urbanized settlement in the Late Iron Age period, succeeded by the later Romano-British civitas capital of Durovernum Cantiacorum (Fig. 115.17). Here an extensive pre-Roman settlement covered a wide area on both sides of the River Stour, apparently established shortly after 30BC (Wacher 1975, 178-179). At Quarry Wood, near Loose, a large defended enclosure of c. 30 acres was possibly associated with a complex of linear earthworks (Fig. 115.2; Kelly 1972), and evidence of metalworking was found close by at Boughton Lane (Connell 1999). A great deal of settlement evidence has been found in the area but the precise nature of this enclosure remains enigmatic. It may represent a large proto-urban centre or oppidum, located on, and no doubt controlling, an important crossing point of the Medway. However, little excavation has been attempted and the actual defensive structures themselves have only produced evidence that they were constructed immediately before the Roman invasion, and it is possible that their

construction was prompted by fears of such an event.

The necessity of such centres servicing the needs of the rural community has been suggested by the absence of many craft industries, such as pottery production and metalworking, from the smaller rural sites such as Iwade. However, even if these large-scale settlements of emerging urban character could be shown to provide specialist social, political, religious or industrial functions, the smaller settlements were not necessarily entirely dependent upon them. Craft-based products may have originated from taskspecific sites, for example pottery production was likely to have been occurring at specialized industrial sites within the marshes, as seems to have been the case during the Roman period. The manufacture and exchange of a range of products may have occurred at smaller dedicated distribution and service centres. The 'small town' identified at Elms Farm in Essex has been provisionally interpreted as a ritual centre that developed into a regional manufacturing and service centre, catering for the needs of the local agricultural community (Atkinson and Preston 1998). A possible candidate for such a place in North Kent may be the multiphased settlement at Grain, which appeared to cover over 10 hectares and where at least 23 roundhouses were identified (Fig. 115.6; Philp 1982).

The Political Background

With regard to the political wrangling that the Iron Age communities in Iwade would have lived through, the evidence is almost entirely limited to the classical accounts, such as Caesar's Gallic Wars and Cassius Dio's Roman History, and the evidence provided by coin finds. Between them, it is clear that whatever the situation before, by the time of Caesar's incursion to Britain in 55BC and 54BC communities in southern Britain had organized themselves into tribal groupings with their own identities and ruled by what they and the Romans called 'kings'. It is not possible to define the tribal territories on a map, and in any case, their boundaries were probably fairly fluid. Iwade would have lain within Cantium, the territory of the tribe Cantii. Caesar notes that Cantium was ruled by four kings who, during his incursion, combined with Cassivellaunus to launch an attack on his naval camp (De Bello Gallico 5.22). From coin evidence, a number of kings of Cantium are known, although neither the coins, nor Caesar's account, indicate where these minor territories lay.

Caesar's incursion must have precipitated a change in the tribal balance of power that had long reaching effects once he had departed. The political situation in Kent, as with the

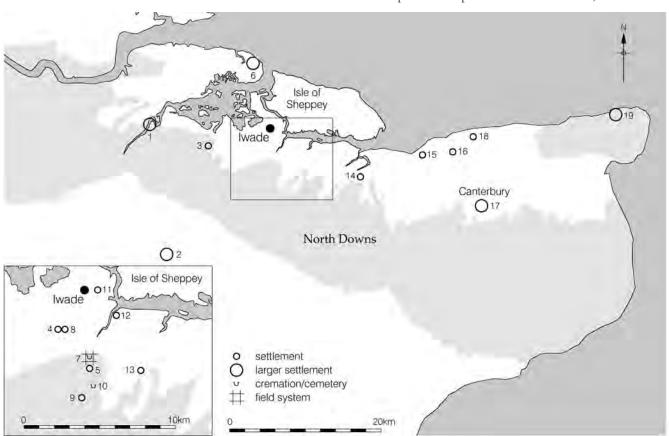


Fig. 115 Late Iron Age settlement in North Kent sites mentioned in the text: 1. Rochester 2. Loose 3. Rainham 4. Keycol Hill 5. Borden 6. Grain 7. Wises Lane, Borden 8. Bobbing 9. Highstead 10. Highstead gravel pit 11. Kemsley North 12. Murston 13. Radfield 14. Abbey Fields, Faversham 15. Whitstable area 16. Chestfield area 17. Canterbury 18. Herne Bay area 19. Fort Hill, Margate (scale 1:500,000 Inset 1:250,000)

rest of southeast Britain, is far from understood and no doubt very complex. There is evidence of a dynastic coinage in Kent until around the end of the 1st century BC, after which first Eppilus of the Atrebates, and then Cunobelin of the Catuvellauni appear to rule in Kent, the latter apparently extending his power over much of southeast Britain during the early 1st century AD. After Cunobelin's death in AD 40 this unity breaks down and the coin evidence suggests a brief rule by a ruler called 'Amminius', possibly a son of Cunobelin, inheriting the former territory of Cantium until the Romans arrive.

The End of Iron Age Iwade

Pottery evidence indicates that settlement at Iwade ceased during the middle of the 1st century AD, around the time of the Roman Conquest. Many other Late Iron Age sites in the region were also abandoned during this period, and the possibility of 'native displacement' has been suggested for the Swale area (Denison 2000). Some continuity across the transition can be detected; Romano-British field-systems often overlie earlier ones, such at Wises Lane, Borden, where the Late Iron Age field plots were merely sub-divided without any apparent major re-organization during the early Roman period (Fig. 115.7; Hammond et al. 2003), and it is probable that similar agricultural practices were maintained across the transition. Continuity in certain industrial activities is also indicated, such as the production of salt and pottery in the marshlands (Evans 1954; Miles 1965; Detsicas 1984). Nevertheless, continuity in landuse is not necessarily good evidence for continuity in tenure and, although the relationship between the pre- and post-Conquest settlements and their inhabitants is difficult to elucidate precisely (see below), it is easy to get the impression that in this area the consequences of the Roman Conquest were traumatic, and may have been disastrous for the Iron Age communities involved.

ROMAN

The only evidence of activity at the site during the Roman period was the casual reuse of one of its enclosures during the 2nd century AD, possibly as a short-stop camp by pastoralists or other passers-by. Nevertheless, evidence of Roman activity is plentiful in the area, and further remains were recorded just north of the site, adjacent to Ferry Road (Fig. 116.7; Ward 1999).

The general area's continued importance was guaranteed by the construction of Watling Street, shortly after the

invasion, probably following an earlier routeway. This would have allowed easy communication between London and Canterbury and thence on to the rest of the country. It would no doubt have spawned a multitude of industries and associated settlements servicing those passing along it, probably including a small town in the Sittingbourne area. Ample evidence of agricultural and industrial activity, such at Radfield (Fig. 116.11; Baxter and Mills 1979), and numerous burials, including at Bobbing and Sittingbourne (Fig. 116.5-116.6; Greatorex 1999; Hammond et al. 2003) have been recorded along the road's corridor.

The marshes became, or more probably continued as, an important centre for the industrial production of pottery and salt, such as documented at Upchurch (Fig. 116.2) and around Funton Creek (Fig. 116.4; Miles 1965; Detsicas 1984; Monaghan 1987), and it is evident that the area's capacity for agricultural production remained important. The industrial and agricultural productivity of the area is reflected in the centrally laid out system of villas, dated to the 1st century AD, that have recently been identified in the Swale region (Denison 2000). These include at least five villas postulated for the Iwade area, mostly identified through recent field walking projects and during 19th century construction or brickearth extraction (P Wilkinson, pers comm.). The nearest was situated alongside Coldharbour Fleet, only seven hundred metres to the east of the site (Fig. 116.8), and others have been identified at Milton Church on the west bank of Milton Creek (Fig. 116.9; Baxter 1977) and at Murston on the east bank (Fig. 116.10; Frere et al. 1992; Canterbury Archaeological Trust 2002d). To the southwest, other villas have been identified at Bobbing (Fig. 116.3) and at Boxted (Fig. 116.1). All were close to Watling Street and adjacent to watercourses that could facilitate easy access to the Swale or Medway and thence to the Thames estuary. The spacing of the villas suggest that they possessed small estates of approximately 1000 hectares, each retaining access to Watling Street as well as the coast, and encompassing a mix of marshland and higher ground (P Wilkinson, pers comm.).

Interestingly, at least three of the postulated villas, Coldharbour Fleet, Milton and Murston, can be shown to have been situated within a few hundred metres of Late Iron Age settlements, and large quantities of 'Belgic' pottery indicative of a substantial settlement were recovered during field walking at Keycol Hill, close to the villa at Bobbing (P Wilkinson, pers comm.). It is therefore very tempting to suggest that the villas simply succeeded and replaced the old Iron Age settlements and their lands, presumably taking over their role in local agricultural production. The exact nature of this re-structuring is difficult to elucidate, but the apparent complete re-ordering of the landscape and its subsequent parcelling out suggests centralized planning and

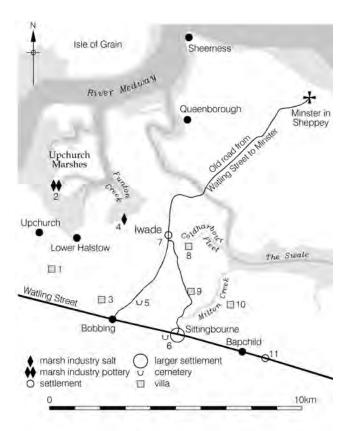


Fig. 116 Roman Activity in the Swale Area sites mentioned in the text: 1. Boxted 2. Upchurch Marshes 3. Bobbing 4. Funton Creek 5. Bobbing 6. Sittingbourne 7. Ferry Road, Iwade 8. Coldharbour Fleet 9. Milton Church 10. Murston 11. Radfield (scale 1:150,000)

the interference of a powerful, politically motivated administration, rather than merely reflecting localized responses to the imposition of Roman rule by individual indigenous farmer/landowners.

MEDIEVAL

After a hiatus of over a thousand years of directly attested settlement, the development of Iwade as a Medieval village coincides with the "inning" of large areas of the Swale marshes for pasture. Necessitated by worsening climate and exceptionally severe flooding, especially during the late 12th and early 13th centuries, this would have required substantial capital investment into the Iwade area (Evans 1954; Whittaker 1991, after Bowler 1968). The archaeological

evidence also supports an upsurge of interest in the area at this time. A possible moated dwelling in the south of the site was identified, and other archaeological investigations in the vicinity have revealed evidence of a series of dispersed manors, some of which may have been moated, scattered within the parish (P Wilkinson, pers comm.). These suggest that the parish may have been sub-divided into a number of estates, each occupied by a farmer wealthy or status-driven enough to want to construct an enclosure or moat around their residence. In some respects this dispersed pattern of land holding by communities wealthy enough to elaborate their settlements can be compared to the imposed villas of the Roman period, which in turn may have reflected the pattern of previous enclosed land holding seen during the Late Iron Age.

The persistence of the Medieval routeways is also of interest. Their importance is that they may have linked Watling Street and the mainland with the Isle of Sheppey, on which was sited the Abbey of The Blessed Virgin Mary and Saint Sexburgha, at Minster, as well as a castle built by Edward III at the strategic location of Queenborough (see Fig. 116). A diverse range of Medieval finds were recovered during the excavations, several being beyond average quality and surprising from a rural context, the silver button for example is unparalleled even among assemblages found in the City of London. It is entirely possible that these higher quality items were lost by travellers to the Isle of Sheppey, who had few direct associations with the settlement. These routeways seemingly developed into Sheppey Way, which has recently been replaced by the A249, the current Iwade bypass carrying traffic from the A2, the old Watling Street, to the Isle of Sheppey.

Other roads of Medieval ancestry have also been found to the west, running between the Medway and the high ground connecting Cliffe to Rochester and Higham to Watling Street (Whittacker 1991). Similar north-south aligned routeways linking the coastal plain to the north Downs and beyond are commonly recorded, reflecting the importance of highland – lowland movement both before and after the Norman Conquest (eg Everitt 1976). Such importance is also reflected in the physical arrangement of North Kent parishes, which frequently contain both marshland and higher ground (Whittaker 1991).

Concluding Remarks

The excavations have provided an insight into the human interaction with part of the area latterly known as Iwade over a period of several millennia. Archaeologically visible activity began at the site during the Later Mesolithic, and indications of activity have been recovered from most periods from then onwards, with significant data relating to the Late Bronze Age, Late Iron Age and Medieval occupation.

Throughout the periods when human activity was prominent at the site, several overarching themes recur. A largely pastoral based economy is suggested for the Late Bronze Age and Late Iron Ages, and similar policies are likely to have continued in the Medieval period, as suggested by the considerable effort and expense undertaken to 'inn' the marshes for pasture. However, with the exception of some oyster, very little evidence for the exploitation of marsh or coastal areas per se was identified during any period, although this is not to deny that they were not an important element in any pastoral economies.

As well as reflecting the site's location close to the crossing point to Sheppey, the persistence of routeways at the site from the Late Bronze Age to the present testifies to the continued importance of moving livestock to and from the Swale floodplain on a seasonal basis. The quality of pastureland in the marsh has been well established since at least the late 12th and early 13th centuries when draining began; itself probably a causal factor in the establishment of Iwade as a village. The higher land bordering the marshes was also a vital economic asset. Much of this area is blanketed by brickearths; fine grained permeable soils, which are fertile, easily cleared and ideally suited to agricultural production (Bogucki 1988). This, in combination with the excellent communications afforded by the proximity of the Thames estuary and, from the Roman period onwards, Wating Street, has enabled a degree of rural prosperity throughout the past.

Almost certainly as a consequence of these economic realities, a repetitive pattern of settlement organization can be discerned. This consists of scattered but reasonably wealthy settlements, elements of which can be identified in the area during the later Bronze Age, Late Iron Age, Roman and Medieval periods. This itself may attest to the rather specialist and evidently successful nature of the pastoral economy practised. It may be said that these settlements

were probably not inhabited by the nobility, few truly prestigious items were recovered for example, but rather the settlements appear to represent the residences of local farmers, who in their own ways, be it by the use of enclosure, the uptake of Romanized building styles or by the construction of moats, used their wealth to make statements about themselves, their land and their good fortune.

Throughout this report many instances of ritualised behaviour have been suggested, ranging from the burial of pottery and selected flintwork during the Neolithic to the burial of a dog in the Medieval period. Due to the nature of the surviving archaeological evidence, the rituals we can identify nearly always involve the deposition of certain items within the ground, the precise circumstances and meanings of which are impossible for us to elucidate. The term 'ritual' is often regarded as problematic, having many meanings for many people, but often regarded as embodying nonfunctional and irrational behaviour. Here, the various acts are considered to have commemorated or defined noteworthy moments within the lives of the various communities inhabiting the area, whether it be signifying a brief visit to the site during the Neolithic, the establishment of a new system of land allotment and habitation during the Late Bronze Age, or more intimate moments, such as the burial of a much loved pet during the Medieval period. As such, and rather than representing esoteric spiritual practices, these rituals would have been perceived as perfectly rational by those undertaking them, and present a more human face to the earlier inhabitants of Iwade.

The fact that so much information concerning so many periods was recovered from what cannot be regarded as particularly large excavations demonstrates the area's continued importance, reflecting both its topography, retaining within its hinterland a diverse set of environmental and physiographic zones, and its location close to so many communication routes. The information gleaned was made so much more meaningful by the fact that numerous other investigations have contributed to the picture of human activity in North Kent, predominantly through developer led investigations under the auspices of PPG 16. It demonstrates the desirability for continued exploration of even apparently unpromising sites, as well as highlighting the need for updated regional syntheses, which are even more urgently needed both to facilitate present understanding and to address new issues generated by future archaeological exploration.

Résumé

By Agnès Shepherd

Ce volume retrace environ 6.000 ans d'histoire des habitants d'une petite région du Kent du Nord, telle qu'elle nous a été révélée par des fouilles archéologiques menées au sud du village d'Iwade.

L'histoire commence pendant le Mésolithique Tardif, quand les chasseurs-cueilleurs utilisèrent un creux créé par un arbre tombé pour réparer leurs outils microlithiques.

Pendant les 3.500 ans suivants le site fut fréquenté à plusieurs reprises. De temps en temps, les visiteurs laissèrent tomber des objets mais prèsque rien d'autre comme témoignage de leur présence. Toutefois une exception est arrivée autour du milieu du Néolithique, quand deux fosses furent creusées et remplies de poteries et de silex taillés.

Pendant l'Âge du Bronze Moyen, les preuves d'un mode de vie plus 'sédentaire' se multiplient jusqu'à l'Âge du Bronze Tardif où l'on voit alors apparaitre un sentier et des champs aménagés à travers le site. Ces aménagements signalent un nouveau rapport avec la terre, une nouvelle forme de propriété et les débuts marqués d'une production agricole sur le site. Ce nouveau paysage fut fondé et peuplé suivant des principes ritualisés et forts dont il reste des preuves tel que de nombreux objets délibérément placés, y compris des poteries, des restes humains incinérés et même une hache à talon en bronze.

Les terres agricoles semblent avoir été abandonnées peu de temps après la fin de l'Âge du Bronze, vers 600 av. JC. Les preuves d'occupation sur le site nous manquent jusqu'à ce qu'apparaissent à l'Âge du Fer Tardif, vers 100 av. JC,

l'édification d'une nouvelle ferme cloturée. Les habitations non seulement indiquent le renouveau d'une production agricole mais aussi semblent avoir été structurées selon des principes d'organisation sociale et des façons de percevoir le monde communs à l'époque. Le site fut abandonné environ lors de la Conquête romaine, résultant peut-être directement de celle-ci. Il n'y eut que quelques visites occasionnelles, peut-être de pâtres, pendant l'occupation romaine.

Bien que des activités Saxones et Vikings aient été enregistrées dans le voisinage, il n'y a que très peu de preuves supplémentaires d'occupation du site jusqu'à l'époque Médiévale où un nouvel habitat se développa, peut-être lié à de nouvelles tentatives d'utiliser les marais. Cela coïncide avec l'aménagement d'une route traversant le site qui semble subsister encore aujourd'hui. Ceci affirme l'importance du site en ce qui concerne les communications avec l'Île de Sheppey.

Les études des vestiges archéologiques, des types d'objets et des macrorestes sont présentées et illustrées en grand détail dans ce volume. Ce dernier interprète ces études en termes d'économies pratiquées, de systèmes d'organisation sociale et d'emplacement physique du site, notamment l'importance du marécage adjacent et essaie de saisir les vies des habitants à travers une perspective "plus humaine". Les découvertes sont placées dans un contexte géographique plus étendu, avec une discussion brève de l'état actuel des connaissances de l'archéologie du Kent du Nord.

Zusammenfassung

By Sylvia Butler

Diese Ausgabe erzählt die Geschichte der Bewohner eines kleinen Gebietes im nördlichen Kent über einen Zeitraum von 6000 Jahren, wie von archäologischen Ausgrabungen enthüllt, die im Süden des Dorfes Iwade stattgefunden haben.

Die Geschichte beginnt während der späteren mesolithischen Zeit als Jäger und Sammler einen aus einem gefällten Baum entstanden Hohlraum benutzten, um ihre mikrolitischen Werkzeuge zu reparieren. Für etwa die nächsten 3500 Jahre wurde diese Stätte wiederholt besucht. Die Besucher verloren hier gelegentlich Gegenstände, hinterliessen uns aber ansonsten nur wenige andere Beweismittel ihrer Gegenwart. Eine Ausnahme hierzu geschah um die Mitte der Neolithischen Zeit, als von den Besuchern der Stätte zwei Gruben gegraben und mit Töpferwaren und Feuersteinarbeiten gefüllt wurden.

Während der Mittleren Bronzezeit mehren sich die Anzeichen für einen mehr "niedergelassenen" Lebensstil und bei der Späten Bronzezeit waren ein Pfad und Felder angelegt worden, die die Stätte durchquerten. Diese Entwicklungen zeigen eine Beziehung mit dem Land an eine neue Form der Landbeanspruchung und der Anfang von deutlicher landwirtschaftlicher Produktion an der Stätte. Zahlreiche absichtlich positionierte Objekte, einschliesslich Töpferwaren, verbrannter menschlicher Überreste und sogar einer bronzenen Palstave weisen darauf hin, dass dieses neue Landschaftsbild auf starke rituelle Prinzipien gegründet und bewohnt worden war.

Die agrarwirtschaftliche Landschaft scheint kurz nach dem Ende der Späten Bronzezeit um 600 BC verlassen worden zu sein und es entstand bis zur späten Eisenzeit um 100 BC eine Lücke in den Anzeichen, dass die Stätte bewohnt war. Um diese Zeit wurde dann ein neues umschlossenes Gehöft etabliert. Die Ansiedlung zeigt eine Rückkehr zur landwirtschaftlichen Produktion an und scheint ebenso nach weit verbreiteten Prinzipien der sozialen Organisation und "Wegen die Welt zu sehen" strukturiert worden zu sein. Die Stätte wurde um die Zeit der römischen Eroberung verlassen - vielleicht als direktes resultat hierauf - mit gelegentlichen Besuchern während der römischen Belagerung, bei den es sich vielleicht um Pastoralisten handelte.

Obwohl sächsische und Wikingische Aktivitäten in der Umgebung verzeichnet sind, gibt es wenig Anzeichen dafür, dass die Stätte bis zur mittelalterlichen Periode bewohnt war, zu welcher Zeit dann ein neuer Siedlungsschwerpunkt entstand. Dies geschah vielleicht in Verbindung mit neuen Versuchen die Marsche nutzbar zu machen und fällt zeitlich zusammen mit der Etablierung einer Reisestrecke, die die Stätte durchquert - eine Reisetrecke welche bis zum heutigen Tage existiert und die Wichtigkeit der Stätte in der Kommunikation mit der Isle of Sheppey bestätigt.

Diese Ausgabe zeigt detailliert und reichhaltig illustrierte Darstellungen der archäologischen Merkmale, Artefaktarten und landwirtschaftlichen Befunde. Sie interpretiert diese in Beziehung auf die angewandten Ökonomien, Systeme der sozialen Organisation und der physischen Lokalität der Stätte mit Bedeutung auf die Wichtigkeit des anliegenden Marschlandes und den Versuch das Leben der Anwohner in eine "menschlichere" Perspektive zu rücken. Die Funde wurden in einen ausgedehnteren geographischen Kontext gestellt mit einer kurzen Untersuchung des derzeitigen Wissenstandes der Archäologie im nördlichen Kent.

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Iwade is a remarkable site. Although not a particularly large excavation, the thoroughness of investigations at this entry point to the Isle of Sheppey makes a significant contribution to our understanding of prehistoric and subsequent developments in Kent. It also extends our understanding of such developments within the Greater Thames Estuary. The report includes a number of narratives; times of intense activity and times of neglect. And that is the point. Iwade charts periods of social transformation including the negatives: those periods of decline or abandonment in the archaeological record that are just as vital to our understanding as any showy discoveries. The authors and specialist writers are able to portray Iwade as a microcosm of wider social changes. This is a determined and successful attempt to integrate the site into a wider regional context.

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MONOGRAPH 3







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