With a grant from the Heritage Lottery Fund, the Northmoor Trust asked Oxford Archaeology to undertake a varied programme of archaeological research in and around Castle Hill hillfort, Little Wittenham. This was carried out with the help of local volunteer support, and revealed one of the most significant later prehistoric settlements in the region. Aspects of this story, including some key finds, are now displayed in Project Timescape at the Northmoor Trust’s HQ at Hill Farm.

Around 1000 BC a late Bronze Age defensive enclosure was constructed on Castle Hill, while outside of this was a small settlement and a large midden. In the early Iron Age, the hilltop enclosure was replaced by the hillfort that still survives, and the settlement outside grew substantially. The interior of the hillfort was never densely settled, and instead the excavations suggest a focus on feasting and burial. In the Roman period a stone building, probably a villa, was built outside of the hillfort, while towards the end of the Roman period the hillfort itself was reoccupied and the defences renewed. The site was abandoned sometime in the Saxon period, though elements of a mid-Saxon settlement were found further west at Long Wittenham.
Castle Hill and its Landscape; Archaeological Investigations at the Wittenhams, Oxfordshire

by Tim Allen, Kate Cramp, Hugo Lamdin-Whymark and Leo Webley

with contributions by
Leigh Allen, Alister Bartlett, Paul Blinkhorn, Paul Booth, Ceridwen Boston, Hilary Cool, Gill Cox, Emily Edwards, Emma-Jayne Evans, Rosemary Grant, Peter Hacking, Ben Harrold, Lynne Keys, Jennifer Kitch, Rebecca Nicholson, Adrian G Parker, Andy Payne, Ruth Pelling, Marta Perez, Cynthia Poole, Amy Reynolds, Mark Robinson, Fiona Roe, Ian Scott, Wendy Smith, Elizabeth Stafford, Annsofie Witkin, Fay Worley

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Front Cover: Aerial photograph showing excavations at Castle Hill, Wittenhams, looking north-east towards Dorchester-on-Thames (courtesy of Time Team, copyright Videotext Communications Ltd).


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Summary

This volume describes the results of archaeological investigations carried out between 2003 and 2006 on behalf of the Northmoor Trust in the parishes of Little Wittenham and Long Wittenham, Oxfordshire. The work included examination of cropmarks, large-scale geophysical surveys, fieldwalking and excavations.

Geophysical survey was concentrated in and around the scheduled hillfort at Castle Hill, Little Wittenham (Oxfordshire SAM No. 208), and revealed a smaller enclosure within the hillfort dated by excavation to the late Bronze Age. The survey also suggested that otherwise archaeological features within the hillfort were relatively sparse. A section across the hillfort ditch and rampart did not produce a clear construction date, though in the interior both early and middle Iron Age pits were found, some containing human burials or bones. The hillfort ditch appears to have been cleaned out throughout the Iron Age, the spoil probably used to enhance the outer bank.

The hillfort was also used in the late Roman period (4th century AD), when very large rectangular pits were dug, and midden material was piled up behind and over the Iron Age rampart. People were also buried in the interior at this time. Saxon finds were very few, but a medieval pit and a quarry indicate occupation in the 12th/13th centuries AD. Coring of peat deposits beside the Thames north of Castle Hill provided evidence of the environmental succession from the early Iron Age onwards.

On the plateau below the hillfort cropmarks and geophysical survey revealed a dense settlement stretching west, to Hill Farm and beyond. This included a late Bronze Age and early Iron Age midden some 50 m across, a middle Iron Age curving boundary ditch down the middle with smaller sub-rectangular enclosures either side, and early and middle Iron Age penannular enclosures, four-post structures and pits. Settlement seems to have shifted southwards and westwards in the middle Iron Age, and late Iron Age or early Roman ditches were also found near to Hill Farm.

The Roman settlement was mainly 2nd–3rd century AD, and probably consisted of four enclosures, one of which contained a masonry building (now largely destroyed) with a tiled roof, decorated with mosaic tesserae and painted wall plaster. This enclosure was approached by a ditched trackway, with a second larger enclosure alongside. A third enclosure was partly revealed north of Hill Farm, and a fourth enclosure (not investigated) lay alongside Roman field boundaries west of Hill Farm. Despite earlier finds at Hill Farm, no Saxon evidence was found in these excavations.

The project has revealed a unique combination of late Bronze Age hilltop enclosure, external settlement and an adjacent midden. In the early Iron Age the hilltop enclosure was replaced by the hillfort, where feasting occurred, while the adjacent settlement around the midden grew to be one of the largest in the region. The midden was abandoned in the middle Iron Age, and a long boundary ditch may have divided this ancestral area off from settlement to the south and west. There was also more middle Iron Age activity within the hillfort, including a number of human burials.

In the Roman period the settlement probably included a small villa, while the hillfort itself was probably reoccupied in the later 4th century AD. Intriguingly both Roman cremations and inhumations were buried around and within the hillfort, suggesting a continuity of burial location spanning 1000 years.

Geophysical survey and evaluation trenches were also dug across a cropmark complex at Neptune Wood east of Long Wittenham, revealing an early Iron Age enclosure ditch, a Roman trackway and associated fields, and a pair of large middle Saxon pits or waterholes.
The work was funded by the Heritage Lottery Fund and by the Northmoor Trust, to both of whom Oxford Archaeology is grateful for the opportunity to carry out the work. The project was the brainchild of Steve Head, formerly Director of the Northmoor Trust, to whose inspiration we are greatly indebted. Tim Allen would like to thank Lesley Best, who managed the project for the Trust, for her pragmatic and intelligent approach, and John Sargent, Farm Manager, for his patience and cooperation. The co-operation of Tony Bell of Benfield & Loxley during the rebuilding works at Hill Farm was also much appreciated.

Curatorial advice for the hillfort was provided by Chris Welch of English Heritage, and for the redevelopment of Hill Farm and the wider landscape by Paul Smith, Oxfordshire County Archaeologist. Other landowners who kindly allowed us access for investigation were Sir Martin Wood, Miss Anne Bowditch, Mr Nick Moseley and the Messrs Emmett.

We are very grateful to Time Team, who undertook one of their 3-day digs on the site in 2003, and in doing so provided a magnificent geophysical survey and information from additional excavated trenches. They also took a series of excellent aerial photographs of the site, some showing the best cropmark evidence to date, which we are grateful for permission to reproduce. Wessex Archaeology wrote up the assessment report of their work, and gave us access to the archive.

Oxford Archaeology is grateful for the collaboration of several universities. Glasgow University sent a team of students for the first season, several of whom returned in 2004, while Reading University also brought teams for field trips to sample deposits, and two students, Chris Speed and Marta Perez, provided useful soil analyses of the midden deposit that are summarised in this report. Dr Adrian Parker from Oxford Brookes University and Professor Mark Robinson from Oxford University involved their students in the environmental work, taking and analysing peat samples and identifying charred plant remains and snails. We would particularly like to thank Ash Parton, Gareth Tye, Amy Reynolds and Ben Harrold for their work on pollen, waterlogged plant remains, snails and charred plant remains.

Within Oxford Archaeology Tim would like to thank all of those who took part and supervised volunteers, and particularly Hugo Lamdin-Whymark, who shared with him the winter fieldwalking, and was second-in-command on the summer seasons of excavation. Thanks are also due to Paul Murray for sharing this responsibility in the 2004 excavation season, to Emily Glass who ran the Hill Farm excavations in 2005, and to Wayne Perkins and Mary Saunders for the 2005–6 work on Castle Hill.

The project would not have been possible without the support of a host of other volunteers, to all of whom we are very grateful, and who made the project much more rewarding for us all. Members of the Oxford Archaeological and Historical Society (OUAS) and the Abingdon Area Archaeological and Historical Society (AAHS) supported the fieldwalking in 2002–3, and students in the Oxford University Archaeological Society (OUAS) provided stalwart support in 2003–4. A small team of volunteers deserve special mention for their continuing support: Richard Bailey, Ivan Stipala and Jill Eyers for geophysical survey, Jane Gordon-Cumming and Edwin Osborn, Chris Morling and Cynthia Graham-Kerr in post-excavation.

We thank Geophysical Surveys of Bradford, Time Team, English Heritage and Roger Ainslie for providing survey plots that have been reproduced in this report. We are particularly grateful to Roger Ainslie, who carried out a range of geophysical surveys using his own magnetometer and resistivity equipment without charge. All of the resistivity surveys in this volume are his work, and represent a significant
addition to the geophysical results. The comments on resistivity findings are based in part on notes supplied by Roger Ainslie.

Special thanks are due to Bill Horsfield, who organised the volunteer geophysical survey team and carried out much of the work, and who was subsequently employed by the Trust to liaise between Oxford Archaeology and the designers of Project Timescape, a task in which he displayed considerable patience and good humour.

Oxford Archaeology would like to thank all of the contributors to the report, and in particular Alister Bartlett, who not only trained the volunteers in geophysical survey, but also carried out some additional survey without cost. The site illustrations were mainly by Lucy Martin, who also photographed some of the finds, while the finds drawings and other photographs were by Magdalena Wachnik.

Tim Allen would also like to thank four students on the In-Service training scheme, Guy Salkeld, Adam Partington, Susan Westlake and Rebecca Briscoe, all of whom spent considerable time creating the digital archive and assisting in the creation of the GIS for the project.

Fiona Roe would like to thank Philip Jackson, of the Department of Earth Sciences, University of Oxford, for making the thin sections of the possible mould from Castle Hill and also another piece from Aldermaston Wharf, Berkshire. She is also very grateful to Leslie Cram, then at Reading Museum, for permission to thin section the Aldermaston Wharf artefact. In addition it was possible to make direct comparisons between the Castle Hill object and other moulds thanks to the assistance of Jill Greenaway at Reading Museum, Peter Saunders at Salisbury Museum and Paul Robinson at Devizes Museum and their help has been much appreciated. Thanks are due also to Gillian Varndell for looking through records at the British Museum in search of information about the saddle querns from Long Wittenham said to have been deposited there.

Tim Allen would also like to thank Chris Hayden, who had the unenviable task of summarising the report submitted to the HLF in 2006 to create this monograph, and in doing so rationalised the description of the 2004 trenches and the 2005 Hill Farm excavations around the hillfort into a single narrative. Julia Moxham carried out the consequent figure alterations, prepared the interpretative figures and designed the cover.
INTRODUCTION
The archaeological work described in this report was carried out on behalf of the Northmoor Trust, an environmental charity that owns and manages an estate largely situated in the parish of Little Wittenham, Oxfordshire (Fig. 1.1). The Northmoor Trust obtained Heritage Lottery (HLF) support for a three-year project to examine change in the local Oxfordshire landscape and to present the results to the public via Project Timescape, a new type of museum, at Hill Farm, Little Wittenham.

Oxford Archaeology (OA) was responsible for putting together the programme of archaeological research for the past history of the area, for supervising the archaeological investigations and for bringing the results to publication. Central to the ethos of the HLF is the involvement of the local community, and so the bulk of the work was carried out by interested amateur archaeologists, students and other volunteers, with OA providing only a supervisory team (Plate 1.1).

THE BACKGROUND AND SCOPE OF THE PROJECT
Dominating the Northmoor Trust’s own land in Little Wittenham are the Wittenham Clumps, landmark features of 18th century origin planted on twin hills at the end of a chalk ridge south of the Thames (Frontispiece). On the lower of these two hills sits the Iron Age hillfort of Sinodun Camp or Castle Hill, which as well as being a Scheduled Ancient Monument (SAM 208) is also part of a Site of Special Scientific Interest (SSSI). Within sight of Hill Farm, this was inevitably a major focus for archaeological investigation, especially as no excavation by trained archaeologists had ever been carried out upon it. The Trust wished to increase understanding of Castle Hill, both as the proposed centrepiece of its landscape reconstructions and for improved management of the site for the future. Within Castle Hill (and on

Plate 1.1 Some of the first volunteers on the 2003 excavation, Castle Hill
neighbouring Round Hill) the mature beech trees of the wooded clumps were nearing the end of their lives. Archaeological investigation of the wooded area was intended to supplement the Historical Restoration Management Plan commissioned from Scott Wilson (Scott Wilson 2002) to consider options for replanting.

On the plateau outside the hillfort earlier excavations by Rhodes (1948) had located the remains of a Roman building, an Iron Age occupation layer and Beaker pottery (Fig. 1.2). Excavations for the car park below Castle Hill (Hingley 1980) had found a late Bronze Age and early Iron Age settlement, while fieldwalking across
the road had picked up more Iron Age and Roman pottery. Some cropmarks were also visible south of the road, and limited areas of geophysical survey had also been undertaken (Price 1995), although neither were easy to interpret. These were clearly key areas to investigate.

A set of Aims and Objectives following the guidelines laid down by English Heritage (EH 1991) were prepared (OA 2002a and b). For the immediate vicinity of Castle Hill, the aims can be summarised as follows:

**Aim 1** To establish the history of enclosure on the hilltop
**Aim 2** To investigate the environmental history of the hilltop and of its surroundings
**Aim 3** To investigate how the use of the hillfort and the surrounding area has affected the preservation of its history
**Aim 4** To investigate the role that Castle Hill played in the wider landscape, and to examine how this changed over time.

The original area chosen for investigation (the Study Area; see Figs 1.1 and 1.3) was much larger, including all of Little Wittenham parish and much of Long Wittenham as well, though it stopped short of the modern village. This area, bounded by a large bow of the river Thames, contained an important multi-period cropmark complex at Northfield Farm (Oxfordshire SAM 180), including the ring ditches of ploughed-out barrows, a prehistoric field system cut across by a Roman trackway with settlements alongside and a long Iron Age pit alignment, none of which are followed by the modern field boundaries. This in itself was striking evidence of landscape change, and had also been studied and provisionally phased (Miles 1977; Baker 2002).

Steve Head, then Director of the Trust, intended that the project should continue beyond the 3 years of the HLF grant, and that the teams of volunteers trained during...
this time would continue the research begun by the project. The original Research Aims were therefore framed to include these ambitious longer-term aims, as well as the shorter-term objectives of the 3 year project. Key to the wider aims of the project was the purchase of geophysical survey kit by the Northmoor Trust, which it was hoped would examine large areas and fill in the gaps in the cropmark evidence.

A geophysical survey of the interior of Castle Hill was carried out by English Heritage in summer 2002, providing the first evidence of buried features within the hillfort (Payne 2002; see Fig. 2.1). These included a smaller enclosure enclosing the top of the hill, scattered pits and a line of large sub-rectangular pits of unknown purpose. In the light of this the scale of planned archaeological investigation in the hillfort in 2003 was increased. Six trenches were dug in total during a summer excavation which ran for six days a week to allow students, schoolchildren and local societies working at weekends to take part.

Fieldwalking began on Northmoor Trust land in the fields around Hill Farm in autumn 2002, and continued again in autumn and winter 2004. In 2003 further
limited geophysical survey using resistivity was carried out by Roger Ainslie, the
largest area being around the area of Rhodes’ excavation, and a second area to inves-
tigate a possible building in the north-west interior of the hillfort.

The Time Team was invited to conduct a documentary following the project, but
instead came for a 3-day dig (Plate 1.2). The opportune involvement of Time Team
also allowed trenches to be dug on Round Hill and on the plateau below, where resis-
tivity survey (see Fig. 1.2) had revealed a square enclosure surrounding the Roman
building found by Rhodes. The involvement of Time Team and its well-known
personalities (Plate 1.3) brought heightened interest in the project, and was partic-
ularly exciting for the Young Archaeologists Club, who came to wash pottery for
Time Team (Plate 1.4). The most important contribution made by Time Team was
the high-resolution geophysical survey covering 8 hectares carried out by GSB
prospecting, which revealed further small square enclosures, a multitude of pits, a
curving ditch and another enclosure north of Hill Farm (see Fig. 5.1). By great good
fortune Stewart Ainsworth of Time Team was also airborne when the crops in the
field to the south were turning, and his photographs (eg Plate 1.5) gave the first
indication of dense archaeological features continuing south as far west as Hill
Farm.

By Christmas 2003 the Northmoor Trust had bought its own geophysical survey
kit, and, under the overall supervision of Alister Bartlett, began to survey the field
south of the road (Plate 1.6). The results were very clear, and ultimately another 15
hectares of dense buried features were added to the GSB survey north of the road
(see Figs 5.2-3) Surveying west of the farm was less successful, suggesting that the
settlement ended at Hill Farm, although long field boundaries and a square enclo-
sure were revealed (see Fig. 5.4).

The original strategy had called for geophysical surveys spread over a much
wider area, followed by fieldwalking and augering of significant features that might
yield waterlogged enviromental evidence, leading to selective targeted test-trenching
(OA 2002b). Access was kindly given by Miss Bowditch for fieldwalking and
geophysical survey west of Northfield Farm, but the window of opportunity within
the scheduled area itself was very limited, and only geophysical survey was achieved.
Trenching was thus only possible north of the Scheduled Area in land owned by the
Trust at Clifton Meadow (Fig. 1.3), necessitating a change of strategy.

In the light of the new evidence for extensive settlement below Castle Hill and
around Hill Farm, augering and trenching in the wider landscape was abandoned in
favour of additional trenches within this settlement (see Fig. 5.3). The Research
Aims of the project were therefore revised (OA 2004). The new objectives of this
work were to investigate whether the settlement was really as large as it appeared, or
was the result of ‘settlement drift’, a smaller settlement moving gradually westwards
over time. To this end the following excavations were carried out:

Plate 1.4 Young Archaeologists Club (YAC)
washing finds for Time Team
A penannular enclosure in the westernmost part of the settlement revealed by geophysical survey was investigated (see Chapter 5, Trench 15).

A long curving ditch that possibly acted as the settlement boundary at one time was investigated at its intersection with a rectangular enclosure at the very north-west end of the settlement (see Chapter 5, Trench 13).

Midway along the south side of the settlement, a circular feature revealed by the geophysical survey, and on the line of the long curving ditch through the settlement, was investigated (Chapter 5, Trench 19). This was to test whether this was a Bronze Age ring ditch or another Iron Age enclosure.

In addition, a further trench was opened adjacent to trench T5 to complete the investigation of the Iron Age midden first found by Rhodes, and a buried soil beneath in which he had found early Bronze Age (Beaker) pottery. Time Team had reopened his trench, but had not had time to complete this.
Lastly, a trench was opened across a possible ditch or bank around Round Hill, to test whether these were further defenses, and also to check the negative results of Time Team’s trenches T1-T3 on the top of Round Hill (see Chapter 5, Trench 18).

These trenches, together with the work in Clifton Meadow, were excavated in summer 2004, again by an OA team supervising local society archaeologists, students and other volunteers. Further geophysical survey, including an area of resistivity survey by Roger Ainslie, was carried out in Clifton Meadow. As in 2003, Open Days were held towards the end of the season, attracting a large number of visitors (Plates 1.7-8).

Due to a change of design in the refurbishment of Hill Farm, additional and larger excavations were carried out in 2005 in advance of the construction of a large car park and a new office building (see Fig. 5.4) This showed that the settlement continued west of Hill Farm, and as a result a watching brief was carried out on other renovation work (see Fig. 5.5). The 2005 excavations were undertaken solely by professional archaeologists from OA, as the work was carried out as part of the demolition and rebuilding programme.

An unexpected further opportunity for investigations came with the planting of Neptune Wood as part of the bi-centennial Trafalgar celebrations in 2005. The wood was to cover about 5 ha straddling three fields 200 m east of College Farm, Long Wittenham (NGR SU 5520 9365; Fig. 1.3), and was to be added to the north side of the existing Paradise Wood, which lay south of the road connecting Long Wittenham and Little Wittenham.

Parallel linear cropmarks thought to represent a Roman trackway and a rectangular enclosure with a circle inside thought to be Iron Age were partly overlain by the footprint of the new wood (Figs 1.3 and 8.1), and because of this Oxfordshire County Archaeological Services asked that archaeological investigation be carried out prior to planting. A geophysical survey did not add significantly to the cropmark evidence, and a series of trenches was dug to target the cropmarks and geophysical anomalies, while the excavation of a pond was made the subject of a watching brief (see Chapter 8). A small number of volunteers assisted OA with this work.

In late 2005 and May 2006 limited trenching was carried out upon Castle Hill in advance of a fence erected around the wooded area (see Figs 2.1 and 2.3), and in 2006 limited machine stripping and hand excavation was carried out during the re-surfacing of the south-west entrance (see Fig. 2.8).

The excavations were also supported by environmental analyses carried out by Brookes University and Reading University. Of particular value was the pollen analysis carried out upon cores extracted from peat layers within Little Wittenham Wood on the north side of Castle Hill, which have provided useful environmental background for much of the last thousand years BC and for parts of the historic period (see Chapter 4).
Figure 1.3 Plan of the wider Study Area showing the known archaeological cropmarks at the start of the project
LOCATION AND TOPOGRAPHY OF THE SITE (Fig. 1.3)

The Study Area (centred NGR SU 560 940) comprised a block of land some 9 sq. km in area south of the Thames, bounded on the west and north by the river itself, on the east and south by the parish boundary of Little Wittenham, and on the south-west running from White Lees via Woodside Farm to Long Wittenham. The village of Long Wittenham itself was not included. The area is just across the river from Dorchester-on-Thames, and is the focus of a nationally important concentration of prehistoric, Roman and Saxon archaeological sites.

Most of the area is low-lying and relatively flat, and consists of first gravel terrace deposits (BGS Sheet 254). These are divided into 1b deposits on the south-west and 1a deposits on the north-east. Terrace 1b being slightly higher than 1a (and approximately delimited by the 50 m contour). Around the edge of the gravel terrace the river is fringed by an alluvial floodplain of varying width. Neptune Wood, the only site in this report on the gravel terraces, lies at around 51 m above O.D., some 300 m south-east of the floodplain where the river Thames bends north towards Clifton Hampden (see Chapter 8). To the south-east the ground rises across Gault Clay and Upper Greensand strata to the Lower Chalk ridge of the Sinodun Hills, which separates the current river valley from an abandoned meander. The highest points are Round Hill (at around 120 m above O.D.) and Castle Hill (107 m above O.D.). Small deposits of glacial plateau sands and gravels cap both hills. South of the Sinodun Hills the ground falls again onto the Gault Clay (British Geological Survey, 1: 50,000 Solid and Drift series, Sheet 254; Corser 1981).

A few streams, mostly now ditched, formerly crossed the gravel terraces; the boundary between the western and middle fields at Neptune Wood, for example, is sinuous, suggesting that this was formerly the line of a stream. The eastern end of the middle field, and the western end of the eastern field, are liable to flooding.

Castle Hill (centred NGR SU 5695 9262) is part of a range known as the Sinodun Hills running south-eastwards. It is one of two adjacent hills, the most prominent of the range, that form a local landmark known as Wittenham Clumps because of the beech clumps on their crests. There is a small saddle between Castle Hill and Round Hill, whose crests are only 350 m apart. To the east the ground shelves away, the next hill in the range being some 900 m away, topped by the Brightwell Barrow (see Plate 2.2). On the north side the ground drops steeply to the river Thames, but on the south it levels out below the 110 m contour above OD, sloping more gently southwards and westwards down to the Gault Clay. Hill Farm (and the ancient settlement between it and the hillfort) lies upon this gentle slope on the chalk and the greensand in the lee of the Sinodun Hills. Below the 100 m contour the slope increases again, and the ground to the south at the bottom of this slope is described as ‘liable to flooding’.

The vast majority of the Study Area is agricultural land, including until very recently the area of Paradise Wood and Neptune Wood. These now form a new woodland between Long and Little Wittenham. Round Hill and Castle Hill were formerly ploughed for arable (1843 Tithe Map; Rhodes 1948), but have now been taken out of cultivation, and are maintained as grassland used for public recreation and seasonal grazing.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Previous investigation of Castle Hill

No formal archaeological excavation has ever been undertaken upon the interior or the defences of the hillfort, although a number of trenches were dug by a local amateur Harry Watts in the late 1920s (letter to Mr. Hutchinson dated 8th May 1929, in Wallingford Museum archives). An extract from his letter is given below.

"The ridges amongst the trees tempted me to dig in order to ascertain the truth, or otherwise, of the local tradition that they were the graves of soldiers......

I worked in all directions among the trees, in fact, every place where the roots did not prevent me, some 15 trenches in all I expect. The same debris was found everywhere some 16 or 24 inches beneath the surface. Broken sherds from cinerary urns, charcoal, a few burnt human bones, many human teeth, and any amount of the bones of various animals. In as much, as where a large piece of pottery was found and nothing could be
found nearby to fit it to, I concluded, it had all either been already looted by Roman soldiers (a considerable number of pieces of Samian ware were also found); or else everything became smashed and scattered when the trees were planted. Nothing like a perfect urn has been found.

Rhodes carried out fieldwalking of the interior after ploughing in 1947, and recovered sherds of Roman and Iron Age pottery (Rhodes 1948, 18). Subsequently potsherds were recovered from rabbit holes in the ramparts (Rhodes 1948, Jope 1949; Harding 1972, 1151 plate 44E), and these were judged to be Iron Age A (now known as early Iron Age). In 1950 a bronze bracelet was recovered from the centre of the clump (Fig. 1.2 No. 11; SMR 3163). A brief summary of what little was known about the site was published in the Archaeological Journal (Wade and McGavin 1978), including a profile across the defences and the hilltop. This account mentioned occasional Iron Age pottery sherds and a Roman bracelet found as a result of ploughing.

No cropmarks were observed within the interior of Castle Hill up until 1992 (RCHME National Mapping Project). Oblique aerial photographs flown since 1992 were scanned at the NMR for this project, and several potential circular features were tentatively noted, none however convincing.

A detailed topographic survey of the hillfort had however been carried out by Adam Welfare in the early 1990s, a version of which is shown in Figure 1.4. This identified a bank running east-west across the wooded area in the interior, and a series of narrow parallel ridges at right angles to this on the north and south sides, covering much of the wooded area. These ridges were tentatively identified as preparation for the planting of the Clump in the mid-18th century (C.Welch pers comm; Scott Wilson 2002). In addition, a small quarry lay in the south-east corner of the wooded area.

Outside the hillfort

Cropmarks included a sub-rectangular enclosure on the north-east side of Round Hill (Fig. 1.2 No. 20), but two sides of this correspond to boundaries visible on the 1843 Tithe Map, and this cropmark feature is probably post-medieval. Two approximately parallel linear features were plotted in the field immediately east of the hillfort, running NNE towards one of the entrances to the hillfort (Fig. 1.2 No. 7; SMR 15364), and may indicate a former trackway. In addition, the cropmarks of two probable Bronze Age ring ditches are known south-west of Brightwell Barrow, some 500 m south-east of Castle Hill (SMR 8576).

Another pair of parallel ditches some 15 m apart were recorded south-west of the hillfort running on a north-west alignment (Fig. 1.2 No. 103; SMR 15361). These were not confirmed by the Time Team geophysical survey. Further cropmarks are known south of Hill Farm, comprising ditches at right angles (Fig. 1.2 No. 14; SMR 15360) and a sub-rectangular enclosure (Fig. 1.2 No. 93; NMR 1076707), all confirmed by geophysical survey in 2003-4.

In the 19th century human remains were found immediately north and west of the Castle Hill defences (Fig. 1.2 No. 9), and are marked on the 1st edn O.S. map of 1877. Wade and McGavin’s (1978, 291) account also mentions Roman coins, a bracelet (Fig. 1.2 No. 10), a bronze awl (Fig. 1.2 No. 19), and Bronze Age and Saxon pottery (Fig. 1.2 No. 17). Peake gives more details, mentioning coins of Domitian, Gratian and Arcadius, and two urns in Wallingford Museum, but his information may cover a wider area (Peake 1931, 110). It is likely that most of the Roman finds described above derive from burials. In 1984 further burials were found and excavated outside the north-east entrance (Fig. 1.2 No. 8; Chambers 1986). These were judged to be of late Roman date, although there were no finds. Human bones were mentioned by the antiquarian Thomas Hearne in 1716 as having been found on the ‘Welsh Harp’ (PRN nos 3156-7), which the VCH says was another name for Round Hill (Page 1972, 381 note 14), though the shape suggests Castle Hill.

A Roman building

Some 200 m west of the south-west entrance to the hillfort, building debris including tegulae, tesserae and painted wall plaster covering an area around 30 m square was found and investigated (Fig. 1.2 No. 18; Rhodes 1948). The excavations
Figure 1.4 Contour survey of Castle Hill by Adam Welfare
found no *in situ* remains, but Rhodes interpreted this as the site of a small Roman building (Rhodes 1948, 29). Earlier reports indicated a Roman settlement in the field south of Hill Farm, and this was subsequently confirmed by fieldwalking in advance of a British Gas pipeline, Roman activity being concentrated towards Hill Farm itself (Brooks 1992). Further Roman and Saxon finds spots are marked on the O.S. map of 1912 west of Hill Farm (Fig. 1.2 Nos 15 & 16), indicating a sizeable settlement. The Roman finds appear to have been ‘large worked stones, two small Roman cups and a lampstand’ (Wade and McGavin 1978, 291).

### Early Iron Age occupation

Beneath the Roman building debris Rhodes found a dark occupation layer between 0.3 m and 0.5 m thick, within which he uncovered part of a rectangular chalk platform (Rhodes 1948, 21 figure 8). The layer was associated with large quantities of early Iron Age pottery and animal bones.

Rhodes also found a pit containing similar early Iron Age pottery in what is now the Car Park just south of Castle Hill. Rutland subsequently excavated a number of test pits and a small area to investigate this, and found similar occupation deposits beneath a field boundary along the west edge of the Car Park, but no trace of this more than a few metres to the east (Fig. 1.2 No. 4; Hingley 1980). The character of the pottery suggested that the lowest grey clay was late Bronze Age, with the overlying black occupation deposits early Iron Age but including some late Bronze Age elements. Hingley (1980) interpreted the black soil as a preserved occupation deposit, not a midden, but speculated that the occupation deposit might extend over the full 200 m from Rhodes’ excavation to the Car Park.

East of the car park Rutland excavated a semicircular gully and a number of pits, all of early Iron Age date (Hingley 1980), demonstrating that the occupation area was extensive.

### Earlier prehistoric remains

Beneath the Iron Age occupation that underlay the Roman building debris was a possible buried turf line, and below it a grey clay containing occasional sherds including Beaker pottery and a struck flint (Fig. 1.2 No. 6). Rhodes also found part of a middle Bronze Age cinerary urn (Rhodes 1948, 24). The small bronze awl found on Round Hill may also have been Bronze Age (Fig. 1.2. No. 19).

### Geophysical survey south of the hillfort

An area of just over 1 ha. lying south-east of the site of Rhodes’ 1947 excavation was surveyed by fluxgate gradiometer (Price 1995). The survey revealed the north-west corner of a rectilinear enclosure aligned north-south and east-west (the same as that more fully plotted by resistivity by Roger Ainslie in 2003).

### Fieldwalking, geophysical survey and excavation south of the car park

Pottery of unspecified date was found east of Hill Farm in 1931 (Fig. 1.2 Nos 12 and 13). In advance of the construction of a British Gas pipeline fieldwalking was carried out over the fields south of the road and east of Hill Farm (Brooks 1992; Lingard and Wilson 1995). This demonstrated the presence of considerable prehistoric and Roman activity, with a concentration of prehistoric finds extending for over 200 m south from the site of Rutland’s excavations in the Car Park. This included worked flint dating from the early Neolithic to the late Bronze Age, most dating to the early-middle Bronze Age. Roman material was spread widely across the area, but was concentrated further west close to Hill Farm. Further limited fieldwalking at the north end of the field east of Hill Farm took place in 1999, recovering additional Roman pottery.

A geophysical survey covering some 2 hectares east and south-east of Hill Farm was carried out using a fluxgate gradiometer (Price 1995), and located what was interpreted as a roughly north-south linear boundary of several phases, probably cut across by the south-east corner of a triple ditched enclosure with internal pits and a possible small enclosure. This enclosure was oriented south-west to north-east.
A further geophysical scan was carried out along the proposed line of the gas pipeline further south in this field, but did not reveal any significant anomalies (Lingard and Wilson 1995, 52).

Some 200 m south of Castle Hill and just east of Wittenham Lane, the gas pipeline cut across a probable large ditch (Fig. 1.2). This feature was 9.5 m wide and 2.1 m deep, and contained body sherds of prehistoric (possibly Iron Age) pottery, pig bones and a struck flint (Lingard and Wilson 1995, 50). The orientation of this feature was not stated, but was possibly north-south. This feature was interpreted as a linear boundary of significant function, possibly associated with Castle Hill.

Further prehistoric pottery, including a late Bronze Age/early Iron Age decorated sherd, and also Roman and medieval pottery, was found to the east by fieldwalking in an area north of Brightwell Barrow (Lingard and Wilson 1995, 47).

**Finds from Little Wittenham village**

Bronze Age finds have come from the village at the foot of Round Hill. Roman pottery and coins were found in the garden of the manor, and Roman paving thought to belong to a stretch of Roman road leading down towards the Thames was found to the east of the church. The church itself has a 14th century tower, but is otherwise rebuilt; both church and manor house presumably overlie earlier medieval remains. An Iron Age sword was found in a pond at the foot of Round Hill (see also below).

**Metalwork and other finds from the Thames and other watery deposits**

Significant numbers of Bronze Age and Iron Age metal objects have been dredged from the river Thames immediately below the site, including two Iron Age swords and a bronze scabbard from the construction of Day's Lock (Peake 1931, 54; York 2002, 83-4), and a bronze shield (Cook and Rowley 1985). Several skeletons were found on the island just below the lock. Pottery, two medieval iron swords, an iron dagger, a loom weight and skulls came from the river immediately north of Castle Hill. Six iron spearheads were dredged from the river at the junction of the Thames and Thame (Peake 1931, 75). Two Iron Age swords from Little Wittenham, one from the village just north of Round Hill, are illustrated in Harding (Harding 1972, 173 and plate 78, A and B), and also the decorated late Iron Age chape (Harding 1972, plate 79 D).

**The surrounding landscape**

Just east of Long Wittenham is a cropmark complex (SMR 15311) with elements of several different periods (Fig. 1.3). Parallel ditches running south-west (NMR 1089349) almost certainly represent the continuation of the Roman trackway meeting that from Northfield Farm at a junction, and continuing east-north-east towards the river Thames (Miles 1977; Baker 2002). North of this trackway is a rectangular enclosure with a circle inside (SMR 8519), thought to be Iron Age, while to the south are several sinuous ditches (some meeting at right angles) that probably represent a field system (NMR 1089371), and a group of large individual marks probably representing pits or wells. Seven Saxon sunken-featured buildings are recorded further north-west in this field (SMR 8522). A C-shaped enclosure is evident in the adjacent field at the north end of this complex. Fieldwalking carried out over this field, just east of Long Wittenham and just south of College Farm (Hinchcliffe 1998), revealed Roman pottery concentrated towards the south, and medieval and post-medieval pottery predominantly on the north closer to the village. A scatter of struck flints was also recovered. The Roman material was suggested to be associated with the cropmarks of an east-west trackway and a small enclosure in the same area.

Further west are ditches running at right angles to the trackway, some ending in partial enclosures, which probably represent Roman settlement, and beyond these is a second pit alignment, presumably Iron Age, and several large rectangular halls of middle or late Saxon type (Booth et al 2007, 91 and 99-100).

Just across the river from Castle Hill, and overlooked by it, lies Dyke Hills, a valley fort of 45 hectares at the junction of the rivers Thames and Thame, and surrounded...
by them on three sides. A wide ditch flanked by two ramparts encloses the fourth side (on the north and north-east). This is not securely dated, but is believed to be late Iron Age from the coins ploughed up in the interior, the cropmarks of penannular enclosures and pit groups, and the late Roman burials dug into the northern rampart (Cook and Rowley 1985; Benson and Miles 1974; Kirk and Leeds 1953).

Further north is the Roman small town of Dorchester on Thames, later Saxon abbey and episcopal see, with Roman roads radiating to the north and south-east, and surrounded by several large cemeteries, of which two (Wally Corner and Queensford Farm) have been excavated (Boyle et al. 1995; Chambers 1987). North of this was a Neolithic ceremonial monument complex including a cursus, the 'Big Rings' (a major double henge monument) and many other burial and ceremonial monuments (Atkinson et al. 1951). A range of undated cropmarks east and south-east of Dorchester includes further probable Neolithic, Iron Age and Saxon or Viking enclosures.

In a recent article Loveday (1999) has linked the existence of the Neolithic ceremonial complex just north of Dorchester-on-Thames (and that at Overy just south-east of Dorchester) with the twin peaks of Round and Castle Hill, arguing that they were both visual markers for those visiting the complex. He also suggested that the natural features were themselves associated with female anatomy and may have given rise to the emergence of the complex (ibid.). Loveday does not speculate as to what use (if any) was made of the hilltops themselves at this time, but his hypotheses emphasise both the clear visual importance of these landmarks in the Neolithic, and of their potential significance as viewing points looking over the ceremonial complex.

About 3 km north of Castle Hill are the early Iron Age sites of Allen’s Pit and Mount Farm, Dorchester (Bradford 1942; Myres 1937), the former an enclosed settlement with a ditch of defensive proportions, and probably of high status.

Documentary references

The Abingdon Chronicle (written in the 12th century) states that Offa of Mercia established a frontier on the Berkshire Downs in the 8th century, and from this it has been suggested that Castle Hill was taken and refortified as part of this frontier (Parker 1885). A charter of 862 (BL. Cotton Claudius C.ix.108v; Kelly 2000, 15) lists the estate of Little Wittenham as 10 hides and gives the bounds, but does not mention the hillfort. By 1048 the manor of Little Wittenham was owned by Abingdon Abbey, and is listed in the Domesday survey of 1086. There is no mention of any settlement or occupation of the hilltop at this time. The manor of Little Wittenham, or Wittenham Abbots, continued to be held by Abingdon Abbey until the Dissolution, and there are occasional references in the abbey documents. A vertical aerial photograph of Castle Hill and its surroundings shows the former extensive scale of ridge-and-furrow cultivation, presumably of medieval or early post-medieval date (Plate 1.9).

The first reference to Sinodun Hills is in 1542 by Leland, cf. Vol. 120, who describes the castle and mentions barley and wheat growing within it, and Roman coins found by ploughing (Gelling 1974, 428). Camden also calls the place Sinodun in 1600. Following the Dissolution the village soon came to be owned by the Dunch family, who retained possession for more than 200 years. Documents relating to their occupation are scattered widely, and although a great deal of significant research has been carried out by Pete Annels, who kindly made this available to the project, this has not been drawn together or published.

Prior to the Ordnance Survey maps the only historic map of the area is Rocque’s map of Berkshire 1761, but from the early 19th century there is good coverage of both Long and Little Wittenham. Rocque’s map shows both Round Hill and Castle Hill hilltops as bare, and the Tithe Map of 1843 indicates that the interior of the hillfort was still ploughed for arable, except for the clump.

STRUCTURE OF THE REPORT

The background to the archaeological project has been set out within this chapter. The excavations and the finds and environmental evidence obtained from them are then described chronologically in three parts: Castle Hill, the adjacent settlement and Neptune Wood. An account of the archaeology trench by trench can be found in the detailed report provided to the Oxfordshire Sites and Monuments Record in
2006, as can the more limited and scattered investigations in the wider landscape (Allen et al. 2006, chapters 13 and 14). This report is also available on-line, and these are not repeated here.

Information from the assessment report produced by Wessex Archaeology for the Time Team trenches (Wessex Archaeology 2004) is included in this book, together with selected plans and sections. Regrettably their report did not include full finds or environmental analysis or illustrations, so the results of this work cannot be fully published, or compared in detail with those from the other investigations.

Finds and environmental reports follow the archaeological descriptions for each of the three parts, and then the evidence for each period is discussed and set in the wider archaeological context in Chapter 9. Comparisons between evidence from successive periods, for instance between the animal bones from the early and middle Iron Age, are dealt with in the discussion of the later period. At the end of the report the themes that span several time periods are discussed further where appropriate.

Conventions used in this report

Pottery is described by period or, where closer dating is possible, by sub-period, e.g. Bronze Age, late Bronze Age or Iron Age, early Iron Age etc. Where described simply by period this means that potsherds could not be classified more closely. In the case of Iron Age pottery, this designation refers to material that may be either early or middle Iron Age in date; late Iron Age pottery mostly uses distinctively different fabrics and forms that are readily recognisable even from small sherds. Chronological date ranges are expressed in conventional years BC or AD.

Radiocarbon dating was carried out using accelerator mass spectrometry (AMS) dating at the Poznan Radiocarbon Laboratory, Poland. Additional δ13c measurements
were obtained on some of the samples from the Oxford Radiocarbon Laboratory. The determinations have been calibrated using OxCal v3.10 and atmospheric data from Reimer et al. (2004). All radiocarbon dates are quoted in years cal. BC or cal. AD at two $\delta$ (95%) confidence range, and are followed in brackets by the laboratory number.

AUTHORSHIP

The archaeological project was initially designed by George Lambrick of OA, and was later substantially modified by Tim Allen, who subsequently directed the fieldwork and post-excavation work. Hugo Lamdin-Whymark wrote the detailed narratives for the 2003 and 2004 post-excavation assessment under the supervision of Tim Allen, but after he left Oxford Archaeology the writing of the 2006 report was taken up by Leo Webley for Castle Hill and by Kate Cramp for the Castle Hill environs. Kate Cramp’s narratives were subsequently merged together, and the data reorganised chronologically, by Chris Hayden when creating a precis of the 2006 report for this volume. Chris also summarised the narratives of other work on the project, with the exception of the section on Neptune Wood and the information relating to the Time Team trenches, which were written by Tim Allen. The discussion of Castle Hill was originally written by Leo Webley, and of the remainder of the site by Tim Allen, who also edited the whole report. In preparing the monograph Tim Allen took the opportunity to revise and expand the discussion, including aspects concerning the hillfort.

ARCHIVE

The archive, comprising the finds, paper archive and digital archive, has been deposited with the Oxfordshire County Museums Service. The archive includes a context database including sections, plans and digital photographs of the features and of key finds. Selected finds from the project are on display at Project Timescape, the museum at the Northmoor Trust, Hill Farm, Little Wittenham.
THE GEOPHYSICAL SURVEYS by Andy Payne

With the aim of assessing the character and density of occupation inside the hillfort, a fluxgate magnetometer survey of the hillfort interior (Fig. 2.1) was carried out in June 2002 by the English Heritage Centre for Archaeology, assisted by volunteers and staff of the Northmoor Trust. The methodology is specified in Payne (2002).

Although the magnetic variation across the hillfort is very limited, the majority of anomalies detected in the hillfort are likely to be of archaeological significance. There is little sign of stronger disturbance from modern activity. Most obvious is a wide anomaly—a substantial ditch—detected on the southern and eastern sides of the wooded clump enclosing the highest part of the hillfort. To the north and west, the circuit disappears into the area of tree cover. Two very limited areas of magnetometer survey in the wood provide only slight evidence for the course of this ditch. The width and shape of the ditch is highly variable, swelling and becoming more irregular at several points, suggesting re-cutting or quarrying. There are also suggestions of causeways interrupting its course in several places, although the weakness of the magnetic response makes identification of entrances particularly difficult. The possible entrance on the eastern side of the tree clump is in a similar position to the north-eastern entrance to the main hillfort. A further possible ditch or trackway extends to the north-east from the possible eastern entrance of the enclosure.

Within and to the south-west of the inner enclosure, a series of large rectangular and more irregular anomalies were detected that may represent occupation sites, or quarry or pit complexes containing occupation material.

Numerous smaller anomalies scattered across the hillfort interior are likely to represent pits, in a similar pattern to that at Uffington Castle, Oxfordshire (Miles et al. 2003). Two possible pits near the south-eastern side of the fort are particularly pronounced suggesting that they contain significant amounts of burnt material. Near the eastern perimeter of the inner enclosure there are faint traces that could represent two roundhouses.

On the lower slopes of the enclosed area further very weakly defined anomalies may represent yet more phases of enclosure of the site, quarries for the ramparts or simply soil build-up against the rampart.

THE EXCAVATIONS

Largely on the basis of the geophysical survey, six trenches were excavated between 13th July and 31st August 2003 (Fig. 2.1). As Castle Hill was not only a SAM (Scheduled Ancient Monument) but also an SSSI (Site of Special Scientific Interest), largely due to the presence of Great Crested Newts, excavation of these trenches involved particular measures not routinely encountered. Permission from English Nature had to be obtained before work could begin, and was in fact only obtained a few days before work was due to start. Spoil heaps had to be surrounded with newt fencing (Plate 2.1). Access to the hillfort interior by machine was limited, so de-turfing was carried out by hand, except on the slopes of the hillfort ditch (Plate 2.2), and even here spoil had to be managed very carefully. At the conclusion of the ditch excavation, due to the steepness of the ditch sides and depth of soil, backfilling had to involve a series of revetted steps (Plate 2.3).

Trenches 1 to 3 formed a single continuous intervention, running for 95 m from close to the edge of the beech clump at the top of the hill to the counterscarp bank. It was positioned to include a pair of pits close to the clump, to section the hilltop enclosure ditch, and to cut across two of the line of large subrectangular features (see Fig. 2.2 and Plate 2.4).
Figure 2.1 Fluxgate magnetometer survey and interpretation with trenches
Plate 2.1 Newt fencing alongside Trench 4, looking east along the Sinodun Hills to Brightwell Barrow

Plate 2.2 Machine de-turfing the side of the hillfort ditch
Figure 2.2  Schematic section of Trenches 1, 2 and 3 with phasing

Plate 2.3  Reinstatement of the rampart

Plate 2.4  Composite view of Trenches 1–3, looking south
Trench 4, 30 m long, was targeted upon the eastern side of the hilltop enclosure, several pits and one of the possible circular gullies.

Trench 5, eventually 27 m long, was positioned to locate the north side of the hilltop enclosure and to determine whether a significant change in level was of geological or human origin.

Trench 6, 12.5 m long, was positioned in the only open area within the clump, where the geophysical survey had tentatively identified a continuation of the hilltop enclosure ditch.

In 2005 three small trenches (2.0 m x 0.3 m x 0.5 m), where the gates of a deer fence were to be constructed, were excavated by hand to depths of 0.70–0.90 m (Trench 7: eastern gate; Trench 8: northern gate; Trench 9: south-western gate).

A long thin strip (Trench 10) was excavated in May 2006 for footpath improvements, where the modern footpath passes between the ramparts of the hillfort on the south-west. This was carried out by hand and machine to a depth of only c.0.20 m, with the sides battered back.

As anticipated, ploughing had resulted in erosion of the soil downslope (colluvium up to 1.3 m deep) and truncation of the chalk bedrock towards the top of the hill, where the soil was only 0.15 m deep (Fig. 2.2). The archaeology was best preserved where sealed by the colluvium. Preservation within the beech plantation was similar to that on the adjacent open hilltop. No postholes were found, other than a few within ditch fills or the rampart core, possibly indicating that truncation was severe over much of the hillfort interior.

EARLIER PREHISTORIC PERIOD

The only evidence of earlier prehistoric activity on Castle Hill was stray finds, including a Mesolithic microlith from the topsoil in Trench 5, an earlier Neolithic leaf-shaped arrowhead from Trench 2, and single residual early Bronze Age sherds from early Iron Age pit 3006 (Trench 3) and post-medieval ditch 5017 (Trench 5).

A buried soil (5062) in Trench 7, perhaps preserved in a localised hollow, may also have been early (Fig. 2.3). It was cut by a late Bronze Age or early Iron Age pit (5069), and contained two worked flint flakes.

![Figure 2.3 Plan and sections of Trench 7](image-url)
LATE BRONZE AGE

A large enclosure ditch was uncovered in Trenches 3, 4, 5a and 6. The only possibly contemporary feature was a late Bronze Age or early Iron Age pit (5069) in Trench 7 (Fig. 2.3).

The late Bronze Age enclosure ditch

Although it was exposed in four trenches, the late Bronze Age ditch was only fully excavated in Trenches 3 and 6 (Fig. 2.1). In Trench 4 only the top 0.40 m of the ditch was excavated, and in Trench 5a only part of its surface was exposed.

The ditch varied slightly in width, from 3.9 m in Trench 6 to 4.5 m in Trench 3, and in depth from 2.0 m in Trench 6 to 2.5 m in Trench 3. Its profile also varied slightly. In both Trenches 3 and 6 it had steep sides, but the base was flat in Trench 3 and rounded in Trench 6. The upper part of the ditch exposed in Trench 4 had gently sloping sides, but this is consistent with the erosion of the upper edges of the ditch also seen in Trenches 3 and 6.

Only the lower fills of the ditch appear to have formed in the late Bronze Age. The subsequent infilling occurred in the early Iron Age and is described in the next section.
In Trench 3 (Fig. 2.4; Plate 2.5), the thin primary silt (3082) contained two sherds of late Bronze Age pottery and a small amount of animal bone. This was overlain by a thin lens of charcoal (3099), and by a second silting deposit (3121) that contained a further late Bronze Age sherd. The next fills were layers (3063, 3081 and 3118) containing numerous large pieces of chalk and lumps of red-brown clay. Fill 3081 contained small amounts of pottery and a fragment of a human radius.

The late Bronze Age fills give no firm indication of an upcast bank, although a subsequent thick deposit from the northern side (3050/3072) probably indicates a bank. Two middle Iron Age pits immediately north of the ditch were shallower than other such pits to the south, possibly because they were cut into a residual earthwork.

In Trench 6 (Fig. 2.5; Plate 2.6), the initial fill (6036) consisted largely of redeposited chalk, with burnt stone and animal bone. This was followed by four deposits of sandy clay (6027, 6034, 6035 and 6037), most of which entered the ditch from the east (the inside), and of which 6037 and 6027 contained animal bone and late Bronze Age pottery. This included a discrete dump (6031) in layer 6027 that comprised a large, semi-complete globular jar with an applied neck cordon (Plates 2.7 and 2.8; see Fig. 3.2.9).
Figure 2.5 Plan and section of Trench 6
Bayesian modelling of three radiocarbon determinations indicate that layer 3099 in Trench 3 was deposited c. 1010–870 cal BC and layer 3081 c. 970–830 cal BC (see Figs 4.7–8). A radiocarbon determination of 905–805 cal BC (Poz-14319) from charred wheat in layer 6027 in Trench 6 is consistent with these results.

**Pit 5069**

The only other possibly contemporary feature was a probable pit (5069) partially uncovered at the eastern edge of Trench 7. It was excavated to a depth of only 0.40 m (Fig. 2.3), revealing three fills. The lowest (5068) contained a few sherds of late Bronze Age or early Iron Age pottery.

**EARLY IRON AGE**

Excavation of the rampart, ditch and counterscarp bank of the hillfort in Trenches 1–2 failed to produce conclusive evidence for the date of their construction. However, a few sherds of early Iron Age pottery from the lower fills of the ditch and from the core of the counterscarp bank suggest an early Iron Age date. The excavation at the south-western entrance of the hillfort was too shallow to reach the original rampart. Contemporary features within the hillfort were few, consisting only of a very large pit at the northern end of Trench 3, two postholes in Trench 6 and a possible smaller pit in Trench 4. Much early Iron Age material was, however, also recovered from the upper fills of the late Bronze Age enclosure ditch.
The upper fills of the late Bronze Age enclosure ditch

The middle and upper fills of the late Bronze Age enclosure ditch contained early Iron Age pottery. In Trench 3 (Fig. 2.4), the first of these deposits (chalky silts 3050 and 3072) probably represent episodes of erosion, largely from the northern side of the ditch, perhaps indicating an earthwork bank on this side. The ditch was then filled by a series of dark silting deposits (3018, 3024, 3035, 3046, 3065 and 3080) that contained substantial quantities of finds including over 3.8 kg of pottery (see Fig. 3.2) and 2800 pieces of animal bone. A chalk spindle whorl was recovered from fill 3024 (see Fig. 3.11.1). A few fragments of Roman and medieval pottery and two iron nails from the uppermost fill (3018) are probably intrusive. Molluscs from fill 3024 suggest open grassland conditions (see also Fig. 4.2).

In Trench 6 (Fig. 2.5) the sandy silt upper fills (6021, 6004 and 6017) of the ditch were also dark (Plate 2.6), and also contained substantial quantities of finds, including 2.8 kg of pottery, 1.8 kg of animal bone, and some burnt stone. Layer 6017 sealed two shallow postholes 2 m apart (6026 and 6028, 0.28–0.38 m wide and 0.12–0.24 m deep), which could represent a fence or post line redefining part of the enclosure (Plate 2.9). A few sherds of early Iron Age pottery and some fragments of animal bone were recovered from both postholes.

In Trench 4 (see Fig. 2.14), the upper fills (4007) consisted of a series of naturally-formed silting deposits, the lowest of which (4013) contained two sherds of early Iron Age pottery and a piece of animal bone.

In Trench 5 (Fig. 2.6) the ditch was only partially uncovered and was not excavated, but early Iron Age pottery and a stone syenite fragment, possibly from a mould, were recovered from the surface of the ditch.
on the outer side at an angle of c 30°. The core of the bank was formed of three layers, probably deposited during the initial construction of the earthwork: a layer of chalk (1012) overlain by clay (1008), which was capped by further chalk (1007/1032). One sherd of late Bronze Age pottery was recovered from layer 1012, and one early Iron Age sherd from layer 1008. Small amounts of animal bone were also found in all three layers. The upper layers of the counterscarp bank were made up of a series of thin deposits of chalk (1025, 1027 and 1033–1035) interleaved with bands of silt (1026, 1028 and 1029), possibly representing the formation of turf lines (Plate 2.11; see also Chapter 4). These layers may have formed as the ditch was cleaned out.
Figure 2.7 Plan and section of Trenches 1 and 2
Interpretation of the stratigraphy of the rampart is problematic due to the limited exposure and animal burrowing (Fig. 2.7; Plate 2.12). An early stage of construction may be represented by a linear slot (2034) running parallel to the ditch, 0.50 m wide and 0.24 m deep. This feature could not, however, be discerned in the southeast facing section, and as it lay in an area of intense animal burrowing may not have been man-made. It had a lower fill of chalky silt (2056) and an upper fill of chalk rubble (2035), indistinguishable from overlying rampart layer (2023).

The main body of the rampart was 7 m wide and 1.40 m high. It was made up of dumped deposits of chalk rubble (2023 and 2046) or chalky silt (2044, 2045, 2048, 2052, 2054, 2055, 2066 and 2073), and one layer of orange-brown clay (2047). These layers dipped towards the hillfort interior even close to the edge of the ditch, showing that there was no gap between the rampart and the edge of the ditch. This indicates either that there was a revetment at the front of the rampart or that the ditch was originally narrower, and has eroded back some distance. No trace of any revetment could be seen at the front of the rampart nor was any collapsed stone facing recovered.

The rear of the rampart appears to have been marked by a linear slot, 2040, 1.20 m wide and 0.50 m deep, with steep sides and a flat base (Plate 2.13). This may have held a revetment or kerb since the rampart (2028 and 2052–2054) does not extend beyond it. Layers 2028 and 2052–2054 may have butted up to this revetment.
or represent slumping from the original rampart core after a revetment placed more centrally within 2040 had decayed or been removed.

The rear of the rampart appears to have been remodelled. A second probable revetment slot (2032), 1.25 m wide and 1.00 m deep, with a U-shaped profile, was cut through rampart layers 2052 and 2054. It contained a lower fill of mid grey clay silt (2033) and an upper fill of chalky silt (2063). A posthole, 0.30 m in diameter and 0.36 m deep (2065), was visible in the north-west facing section, extending below the main cut of the slot, perhaps suggesting that the slot held a timber revetment.

A single sherd of late Bronze Age or early Iron Age pottery from the lower fill (2033) of slot 2032 was the only dateable artefact from the rampart.

**Deposits at the hillfort entrance**

The lowest deposit in Trench 10, at a depth of 0.40 m below the ground surface, was a layer of chalk (22002) that ran for 17 m along the entrance (see Fig. 2.1). This may represent either the undisturbed bedrock or a layer of ‘clean’ upcast. The western end of the chalk layer appeared to be overlain by a ‘tongue’ of soil filling a hollow (22006) formed in the chalk by wear at the entrance. The width of the hollow suggests that it was formed by animals or by humans on foot.

**Pits**

The only internal pit found (3006) was located 62 m to the north of the rampart in Trench 3 (Fig. 2.8). This was sub-circular, 3.50 m in diameter and 0.75 m deep, with vertical sides and a flat base (Fig. 2.9; Plate 2.14). The lower fills of the pit consisted of thin chalk-rich lenses (3060, 3090 and 3092) alternating with sandy silt or clay silt deposits (3038, 3086–3089, 3091, 3093, 3095). These fills contained 164 g of pottery and 187 g of animal bone.

The middle and upper fills of the pit were dumped deposits containing large quantities of finds, including pottery that was often in a fresh condition. The first of these, a brown-grey clay silt (3061), contained 1.7 kg of pottery, 2.7 kg of animal bone, including a partially articulated raven skeleton, a fired clay sling-shot, a worked bone needle (see Fig. 3.10.1), a bone gouge (see Fig. 3.10.3), and a rich charred plant assemblage. Layer 3061 was overlain by a sterile lens of chalk (3094), five further clay silt deposits (3036, 3059, 3007, 3034 and 3040), and a deposit of silty chalk (3039). The deposits from 3059 upwards contained 9.4 kg of pottery and 9.7 kg of animal bone (see Figs 3.3–4). A worked bone gouge (see Fig. 3.10.2) was recovered from layer 3039 and an antler object, possibly a handle (see Fig. 3.10.4), from layer 3034. The pit also contained 3.5 kg of burnt stone. A sample from layer 3040 produced a modest charred plant assemblage.
There is evidence for more widespread occupation within the hillfort during the middle Iron Age than is apparent in the early Iron Age, with thirteen pits in Trench 3 (Fig. 2.8; Plate 2.15), mostly concentrated halfway down the slope, and one in Trench 6. Of the pits, six contained articulated, partially articulated or fragmentary human remains. The pits were all relatively shallow, particularly 3002 and 3004 at the top end of Trench 3, and were probably severely truncated by ploughing (Fig. 2.10).

**Pits containing human remains**

**Pit 3152**

Pit 3152, 1.30 m in diameter and 0.85 m in depth, contained a remarkable sequence of human burials (Figs 2.8 and 2.11). At the base lay an adult male (3160), crouched on his right side with his head to the south (Plate 2.16). A patch of charred material lay close to the feet (3166), and a sheep/goat humerus and a rib lay under the left arm. He has been dated to 370–160 cal BC (Poz-12525; see Fig. 4.6).
The burial was covered by a deposit of silty clay (3159) containing small amounts of pottery and animal bone. This was overlain by a further deposit of silty clay (3145/3146) containing four partially articulated sections of an adult female skeleton (3143): the left femur and pelvis, the left tibia, the sacrum and lower spine and a medial section of the spine and ribs (see Plate 4.1). Cut marks were present at the distal end of the femur and proximal end of the tibia, probably from the dismemberment or defleshing of the body (Plate 2.16). A cattle skull lay close to the skeleton, and a sheep/goat skull slightly higher in the backfill. The pit was then back-filled with two sterile layers of silty clay (3144 and 3153/3154).

During the late Iron Age or early Roman period a human neonate was buried in the top of the pit (Plate 2.16; see below).

**Pit 3116**

Feature 3116, a shallow, sub-circular pit, 0.10 m deep, with a flat base, had a single clay fill, largely taken up by a tightly crouched, probably originally
bound, adult human skeleton (3113), lying on its right side and facing west (Figs 2.8 and 2.12; Plate 2.17). Three sherds of a middle Iron Age vessel and a few fragments of animal bone were also recovered. Staining on one of the animal bones suggests that there had originally been a copper alloy object in the grave. A radiocarbon determination of 400–200 cal BC (Poz-12522; see Fig. 4.6) was obtained from the skeleton.

**Pit 3155**

Pit 3155 was only partly uncovered at the western edge of excavation, and was cut away on the south by Roman feature 3157 (Figs 2.8 and 2.12; Plate 2.18). It appeared to be sub-rectangular, at least 1.30 m long and 0.30 m deep, with
bowl-shaped profile. Above a shallow deposit of sterile chalky silt (3165), the body of an adult female (3183) was interred in a supine position, with her head to the west. A radiocarbon determination of 360–100 cal BC (Poz-12523; see Fig. 4.6) was obtained from the skeleton. The body was overlain by a clay silt backfill deposit (3164), containing a few fragments of middle Iron Age pottery and animal bone.

**Pit 3098**

The upper dark brown clay silt (3020) fill of pit 3098 contained a crouched human neonate skeleton (3048) on its right side, facing east, close to the eastern edge of the pit (Figs 2.8, 2.10 and 2.12), as well as 372 g of middle Iron Age pottery, 532 g of
animal bone and a sparse charred plant assemblage. Below the burial (Fig. 2.10) were an initial fill of sterile sandy clay (3097) overlain by a chalky silt deposit containing a few sherds of middle Iron Age pottery (3101) and two further clay silt deposits containing small amounts of animal bone (3054 and 3100).

**Pit 3015**
A group of three intercutting pits lay to the north of the late Bronze Age enclosure ditch (Fig. 2.8). The earliest of these (3015), oval in form, measuring 2.90 m long and 0.20 m deep, with steep sides and a flat base (see Fig. 2.4), was filled by a pale, chalky silt deposit (3016), which contained fragments of the left pelvis and the left and right femurs from an adult male as well as small quantities of middle Iron Age pottery and animal bone and a small iron strip (SF 3017).

**Pit 6022**
A bowl-shaped pit, 6022, 0.60 m deep, lay at the eastern end of Trench 6 (see Fig. 2.5). Its sandy silt fill contained Iron Age pottery, animal bone, burnt stone and
disarticulated adult human bones, including fragments of a femur, tibia, skull and finger bones which may have belonged to an articulated burial, disturbed by a medieval pit (6011), which also contained numerous human bones. A human femur gave a radiocarbon determination of 360–50 cal BC (Poz-12526).

Other pits
A total of eight other pits were found, all in Trench 3 (Fig. 2.8). They were of various forms and sizes, but the range did not differ much from those which did contain human remains. One (3057) was irregular, two (3029 and 3025) were bowl shaped, and another (3019) had gently sloping sides with a flat base, but the others all had vertical or near vertical sides and flat bases. Their size was quite consistent. Several were 1.4–1.5 m across and 0.20–0.40 m deep. Only one of the vertical sided pits and the bowl-shaped features were much smaller (0.9–1.1 m across and 0.18–0.20 m deep), and only two pits—3029 and 3109—were much deeper (0.5 m). The number of fills varied, but they were all similar deposits to those in the pits which contained burials. The range of artefacts, too, was similar, consisting largely of small number of pottery sherds and fragments of animal bone, occasionally associated with charred plant remains, burnt stone and, in the case of pit 3013, two fragments of copper alloy.

LATE IRON AGE AND EARLY ROMAN
Activity was much reduced during the late Iron Age and early Roman period. However, the first significant deposits in the hillfort ditch (1006 and 1016) formed during the 1st century AD, suggesting that this feature was no longer being maintained (see Fig. 2.7).

Neonate burial in pit 3152
There was little evidence for contemporary activity within the hillfort. However, the neonate in pit 3152 (see Middle Iron Age above; Fig. 2.11) was buried during this period either in a bowl-shaped recut (3042), 1.15 m in diameter and 0.29 m deep, or in a hollow produced as the bodies in the pit below decomposed.

The neonate lay at the north-eastern edge of the pit, and appeared to be crouched, with its head to the north. A radiocarbon determination from the skeleton of 20 cal BC–130 cal AD (Poz-12518), demonstrates that the neonate was buried was over a century later than the adult burial at the base of the pit. The recut or hollow had a very stony lower fill (3052) and an upper fill of dark brown silty clay (3041) which contained the neonate (3074). Both layers contained a few fragments of animal bone and possibly residual middle Iron Age pottery. Pottery of middle Iron Age character has, however, been found locally at Mount Farm, Berinsfield (Lambrick forthcoming) associated with radiocarbon dates spanning the later 1st century BC to early 1st century AD.

Pit or posthole 5065
The only other indication of activity in this phase was a small subcircular pit or posthole (5065) with steep sides, 0.36 m wide, cut through late Bronze Age feature 5069 and the buried soil layer in Trench 7 (see Fig. 2.3). It was only excavated to a depth of 0.40 m which revealed a single brown-grey clay silt fill (5064) which contained early Iron Age pottery, one small sherd of Roman pottery, some animal bone, struck flint, charred plant remains and charcoal.

LATE ROMAN
Occupation returned in the late Roman period, focussing on the late 4th century AD. Much midden material was deposited at the back of the rampart, and a partial dog skeleton accompanied by burnt limestone, pottery, tile and disarticulated human bones was deposited in the hillfort ditch. Three large rectangular pits of uncertain function, two in Trench 3 and one in Trench 4, and an inhumation burial from Trench 3 were also late Roman.
Deposits in the hillfort ditch and associated with the rampart

During the late Roman period further deposits accumulated in the hillfort ditch (Fig. 2.7). A layer of clay (1011) contained the articulated spine of a dog (1014) with a group of disarticulated human bones (1013), probably from a single adult (Plate 2.19), a scatter of burnt limestone fragments, Roman pottery and fired clay. Further pottery, tile, fired clay and animal bone was found in the chalky clay erosion deposit (1004) and silt (1010) which overlay this layer.

A series of brown-grey clay silts, rich in debris (2005, 2006, 2008 and 2017), up to 1 m deep, were dumped on the rampart, creating a false crest, and extended 3 m behind it. They contained late Roman pottery, animal bone, and iron nails, and, in layer 2017, fragments of vessel glass, an iron door stud, and an iron penannular brooch (see Plate 3.5). These deposits sealed a pair of small, undated, pits (Fig. 2.7: 2020 and 2064), and also filled and overlay the palisade slot 2032.

In the south-east facing section the southern edge of the palisade cut may have continued up through layer 2053, and the relationship of the upper fill of the slot to layer 2017 north of it was uncertain, as the layers were disturbed by a tree-throw hole that also contained Roman material. On the north-west side the southern edge of the palisade slot also appeared to continue upwards, though here it was less steep, and even on the north it was visible above the base of layer 2017, though was covered by the upper part of this deposit. This might suggest that the palisade was constructed in the late Roman period, either soon after the start of the accumulation of midden material, or (more likely), that the midden material was dumped behind it. When the palisade was later removed, the midden material slumped or was spread over the top, some material eroding into the ditch below.

An extensive layer of silty colluvial soil (3122/3123/3150) also formed behind the rampart during this period, butting up to dumped deposit 2017 and extending for 17 m to the north, filling a slight hollow within the natural chalk (see section on Fig. 2.2). As the prehistoric buried soil beneath the hillfort rampart did not continue into this area, nor did the hollow contain any Iron Age finds, this hollow was probably an artificial feature (such as a shallow quarry) created in the Roman period. At its base there was a small area of probable metalling (3149), consisting of small pebbles in a shallow lens of clay (Fig. 2.8; Plate 2.13). The colluvial layers above this contained pottery, animal bone, two worn 3rd-4th century coins, two fragments of late 4th-5th century vessel glass, a rotary quern fragment and a chalk spindle whorl (see Fig. 3.11.2).

Rectangular pits

The three rectangular pits (3067 and 3157 in Trench 3 (Plate 2.20) and 4009 in Trench 4) varied in size. Pit 3067 was not fully exposed within the trench but
measured over 8 m by 4 m and was over 1 m deep (Figs 2.8 and 2.13; Plate 2.21). Geophysical survey suggested that it was twice as wide (see Fig. 2.1). It had vertical sides at its southern end, but sloping upper sides at its northern end, probably from weathering. The small area of the base that was exposed was flat, and if level throughout, the pit would have been at least 1.75 m deep at the north. The fills consisted of clay silts (3049, 3070, 3085, 3119 and 3126–3129), probably formed naturally, interleaved with chalky erosion deposits (3055 and 3073). Modest amounts of late Roman pottery and animal bone were recovered, along with a small copper alloy ring (layer 3085; SF 3039). Fragments of human bone were also recovered (layers 3049 and 3085), although these could have been incorporated from one of the adjacent Iron Age pits.

Geophysical survey showed that the other rectangular pit (3157) in Trench 3 was also large, but due to the depth of the overlying soils this was not fully exposed, and was not excavated to the bottom (Fig. 2.8; Plate 2.20). An upper clay silt fill (3161) produced a few fragments of animal bone and a human cranium (SF 3072). The latter find could have derived from middle Iron Age pit 3155, which contained a partial human skeleton and was cut by 3157.
A rectangular pit (4009), 2.9 m by 2.0 m, and 1.0 m deep, with sheer sides and a flat base, was located at the eastern end of the trench (Fig. 2.14; Plate 2.22). The lower fills were eroded clay or silt deposits containing varying proportions of chalk (4012, 4015, 4016, 4046–4051, 4056, 4043 and 4045). Clay layers (4011 and 4042) may have been dumped deliberately. The uppermost fills were sandy clays (4010 and 4052). Small quantities of pottery and animal bone, including a cock spur, iron nails (4016 and 4042) and a worn 3rd-4th century AD coin (from 4011), were recovered.

Grave 3010

A shallow grave (3010) was found in Trench 3 cut into Iron Age pit 3015, and contained a supine adult male skeleton (3012) with its head to the south-west (Fig. 2.8; Plate 2.23). The grave had been truncated by ploughing, removing the skull and much of the lower mandible. It contained several large pottery sherds, one from an Oxford Ware colour-coated bowl found on the pelvis, and three from local Compton vessels, dating the burial to the 4th century.
Figure 2.14  Plan of Trench 4 and sections of pits 4003 and 4009
The only evidence for Anglo-Saxon activity on Castle Hill was two residual pottery sherds from colluvial ploughsoils in Trench 3. Small-scale occupation on the hilltop took place at some time during the 11th–13th centuries, however, represented by one pit in each of Trenches 4 and 6, and material from colluvial layers that built up behind the hillfort rampart. In the later medieval period the hilltop appears to have been cultivated, as shown by a plough soil over the pit in Trench 6.

**Pits**

Pit 4003, found in the centre of Trench 4 (Fig. 2.14), was square, 1.80 by 1.80 m and 1.00 m deep, with sheer sides and a flat base. It contained various silting (4037) and erosion (4019, 4035 and 4039) deposits containing chalk, animal bone and residual pottery. There was also a dark brown organic silty sand lens (4040) that contained animal bone, large fragments of 11th–13th century Wallingford Ware pottery (see Fig. 3.7.2), an iron spoon-bit auger and a rich assemblage of charred plant remains. An iron padlock bolt was recovered from layer 4024.

The second pit (6011) was only partly within Trench 6 (Fig. 2.5). It was a sub-circular feature, 2.0 m in diameter and 1.35 m deep, with near-vertical sides.
Although not bottomed, the lowest exposed fill (6039) consisted of sterile sand. This was overlain by a dump of ashy material (6024), containing animal bone, a sherd of 11th–13th century Wallingford Ware pottery, two iron knife blades, a horseshoe fragment, charred plant remains, and disarticulated human bone, probably redeposited from pit 6022. The upper fills consisted of three sandy clay deposits (6012, 6030 and 6033), containing animal bone, residual prehistoric and Roman pottery, much burnt stone and further human remains.

Colluvial deposits
A series of colluvial layers (3027, 3028, 3062, 3096, 3105 and 3120) overlay the late Roman deposits and extended for 28 m to the north of the rampart in Trench 3 (Fig. 2.13). They contained later Roman pottery, ten 11–13th century sherds and one early to mid Saxon sherd, presumably as a result of mixing through ploughing. Disarticulated human bone, probably redeposited from an earlier feature, was also recovered from layer 3028.

These deposits were covered by a further group of colluvial layers, 0.5 m deep, which extended from the north edge of the hillfort ditch over the rampart and for 30 m into the interior. These layers (1005, 1021, 3022, 3043–3045 and 3075–3077) can be more securely dated to the medieval period (see Fig. 2.2). Finds included several large, refitting fragments of an 11th–13th century Wallingford Ware vessel (see Fig. 3.7.1), burnt stone and animal bone, as well as nails, a decorative hinge or door strap (see Fig. 3.9.2), a handle mount (see Fig. 3.9.3) and two socketed points, possibly arrowheads (see Fig. 3.9.4–5).

Deposits at the entrance to the hillfort (Trench 10)
To the east of the hollow (22006) at the entrance to the hillfort (see Fig. 2.1), the chalk was overlain by a clay deposit 0.25 m thick, probably a ploughsoil or colluvial deposit of post-Roman date, which contained small amounts of later prehistoric and Roman pottery, and one small post-medieval sherd.

In the middle of the entrance were patches of a horizon (22005) containing pebbles like those in the plateau gravel that capped the chalk on Castle Hill and in the clay subsoil overlying the chalk and Greensand in places below the hill. The pebbles in 22005 were, however, more restricted in size range than those occurring naturally, and, given the patchiness and unevenness of this deposit, it seems likely to represent metalling, with the pebbles subsequently worn away by trampling or natural weathering.

Layers 22001 and 22005 had an ambiguous relationship to a narrow, unexcavated gully (22004) which may have been a post-Roman drainage ditch.

Possible lynchet
A shallow linear feature (4001), 3.10 m wide and 0.20 m deep with a pale silty fill crossed the western end of Trench 4 on a north-south alignment (Fig. 2.14). It contained three small sherds of early Iron Age pottery. Although corresponding to a faint penannular geophysical anomaly interpreted as a subcircular early Iron Age enclosure, the feature has the appearance of a lynchet or boundary associated with the medieval to post-medieval agricultural use of the hilltop.

POST-MEDIEVAL
The finds from the uppermost silting deposits within the hillfort ditch in Trench 1 show that these were laid down during the post-medieval period (1001–1003 and 1018; Fig. 2.7). Surviving ridges within the woodland appear to relate to the 18th century planting of the clumps.

Three parallel linear features, 1.5–2.0 m apart, up to 1.0 m wide and 0.15 m deep, with U-shaped profiles, on a NNW-SSE alignment, in Trench 5 probably represent planting trenches associated with the 18th century beech plantation (Fig. 2.6). They ended just inside the boundary bank around the clump. A similar series of planting trenches (6002), around 0.90 m wide, 0.15 m deep and around 2 m apart, extended across most of the excavated area, in Trench 6 (Fig. 2.5 section).
In Trench 7 (Fig. 2.3), the earlier features were overlain by the wood bank associated with the 18th century beech plantation (5061) and similar wood bank material overlay the buried soil in Trenches 8 and 9 (5053 and 5071). This was overlain by modern topsoil which, in Trench 8 (5050), contained five disarticulated human bones, all probably derived from a single individual, suggesting disturbance of earlier burials.

In Trench 10, layer 22001 was overlain by a clayey soil (22000) 0.30 m thick, which if interpreted as a lynchet derived from post-medieval ploughing. It contained post-medieval pottery and bottle glass, a fragment of clay pipe, and residual late Bronze Age and Roman pottery. It was directly overlain by the modern topsoil.
Chapter 3

Castle Hill Artefacts

FLINT

by Kate Cramp and Hugo Lamdin-Whymark

A total of 478 struck flints (Fig. 3.1 and Table 3.1), including 217 chips, and 300 pieces (13.884 kg) of burnt unworked flint and stone were recovered from Castle Hill. The assemblage includes material of Mesolithic, Neolithic and Bronze Age date, plus some possibly early Iron Age flintwork.

The flint forms a fairly low density spread, with most contexts producing only one or two pieces. The few deposits containing larger assemblages that may have been in situ include 76 struck flints from an early Iron Age pit (3006) and 126 flints from the late Bronze Age and early Iron Age fills of two cuts into the hilltop enclosure ditch (3017 and 6003). Burnt stone was excavated from sections through the late Bronze Age enclosure ditch and many of the pits.

Many of the flints from topsoil and ploughsoil deposits are heavily damaged. Those from late Bronze Age and early Iron Age features have survived in a relatively fresh condition. Although a small number exhibit an incipient cortication, the majority of flints are uncorticated.

The main source of flint was the small, abraded pebbles contained within the gravels capping Castle Hill. A few blades were manufactured from a good quality black flint with a thick, white, unweathered cortex probably derived from the Berkshire Downs.

A single flake from Trench 3 (pit 3013) had been manufactured from bullhead flint, which occurs at the base of the Reading beds in the south-east of the country (eg Dewey and Bromehead 1915; Shepherd 1972, 114; Rayner 1981, 357) and in the Kennet gravels (Healy et al. 1992).

Table 3.1 Summary of flint assemblage

<table>
<thead>
<tr>
<th>Category</th>
<th>Trench 1</th>
<th>Trench 2</th>
<th>Trench 3</th>
<th>Trench 4</th>
<th>Trench 5</th>
<th>Trench 6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flake</td>
<td>6</td>
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<td>119</td>
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<td>Bladelet</td>
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<td>Blade-like flake</td>
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<td>Unclassifiable waste</td>
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<tr>
<td>Sieved chip (10-4 mm)</td>
<td>5</td>
<td>3</td>
<td>97</td>
<td>16</td>
<td>88</td>
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<td>209</td>
</tr>
<tr>
<td>Core on a flake</td>
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<td>Partially-worked nodule</td>
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<tr>
<td>End-and-side scraper</td>
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<td>Leaf-shaped arrowhead</td>
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<tr>
<td>Unclassifiable retouch</td>
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<td>Total</td>
<td>14</td>
<td>33</td>
<td>253</td>
<td>33</td>
<td>9</td>
<td>136</td>
<td>478</td>
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<table>
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<tr>
<th>Category</th>
<th>Trench 1</th>
<th>Trench 2</th>
<th>Trench 3</th>
<th>Trench 4</th>
<th>Trench 5</th>
<th>Trench 6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of burnt struck flints</td>
<td>9</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>No. of broken struck flints</td>
<td>2</td>
<td>4</td>
<td>22</td>
<td>6</td>
<td>1</td>
<td></td>
<td>46</td>
</tr>
<tr>
<td>No. of burnt unworked flint/stone</td>
<td>1</td>
<td>4</td>
<td>167</td>
<td>18</td>
<td>1</td>
<td>109</td>
<td>300</td>
</tr>
<tr>
<td>Weight (g) of burnt unworked flint/stone</td>
<td>22</td>
<td>77</td>
<td>5336</td>
<td>1128</td>
<td>12</td>
<td>7309</td>
<td>13884</td>
</tr>
</tbody>
</table>
Most of the burnt unworked material consists of sandstone and limestone cobbles from the gravels capping the hill. A few nodules of flint are also present and probably come from the same source.

**Mesolithic and Neolithic**

The only certain Mesolithic flints were an obliquely blunted microlith compared to Jacobi’s class 1a (1978, 16, fig. 6; Fig. 3.1.1) from the topsoil in Trench 5, and a fine tertiary blade, which had been snapped distally using the microburin technique from the uppermost deposit (3042) within middle Iron Age pit 3152 which possibly represents an attempt at microlith manufacture.

A leaf-shaped arrowhead (Fig. 3.1.2; Plate 3.1) from a layer of medieval colluvium in Trench 3 (3043) provides evidence of early Neolithic occupation. A few narrow parallel-sided blades, carefully struck flakes, a serrated flake and a finely retouched scraper (3049; Fig. 3.1.3) may also date from the Mesolithic or Neolithic.

**Late Bronze Age and possibly early Iron Age**

A total of 126 struck flints and 73 pieces (4.18 kg) of burnt unworked flint and stone came from the late Bronze Age enclosure ditch (interventions 3017 and 6003), and was probably contemporary. This material was distributed thinly throughout the various fills, although most came from the upper ones.

The assemblage is dominated by flakes, many in exceptionally fresh condition, which tend to be thick and irregular. They show little evidence of platform preparation and platform edge abrasion is entirely absent. Bulb morphology suggests that hard, stone hammers were used to strike the flakes (eg Onhuma and Bergman 1982). The 76 flints from early Iron Age pit 3006 are also mostly thick, irregular flakes.

A small number of chips may indicate the presence of knapping debris. Recent research suggests that flintworking probably continued into the Iron Age, but was of a poor standard with few tool types (eg Young and Humphrey 1999). The character of the material from pit 3006 and from the upper fills of the enclosure ditch, both of which are early Iron Age in date, are consistent with this, and may represent the continued use of flint for tools into the Iron Age.

**Catalogue of illustrated flint**

1. Microlith. Simple obliquely blunted point, comparable to Jacobi’s class 1a (1978, 16, fig. 6). Mesolithic. Trench 5, topsoil, ctx 5000. SP 5000
2. Leaf-shaped arrowhead. Slightly irregular outline. Recent damage to tip and base; otherwise in relatively fresh condition. Early Neolithic. Trench 3, colluvial layer, ctx 3043. SF 3032. Plate 3.1

PREHISTORIC POTTERY based on the report by Emily Edwards

The assemblage, totalling 3372 sherds (27 kg), dated from the late Bronze Age through to the middle Iron Age, apart from two sherds of early Bronze Age pottery (Table 3.2). Early Iron Age pottery formed the largest element, and some of this could be more specifically ascribed to the earlier (EIA1; c 900–500 BC) or later (EIA2; c 500–300 BC) parts of the period.

Table 3.2 Composition of prehistoric pottery assemblage by date

<table>
<thead>
<tr>
<th>Date</th>
<th>Sherd count</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Bronze Age</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Late Bronze Age</td>
<td>1061</td>
<td>7233</td>
</tr>
<tr>
<td>Late Bronze Age or early Iron Age</td>
<td>170</td>
<td>1349</td>
</tr>
<tr>
<td>Late Bronze Age or middle Iron Age</td>
<td>8</td>
<td>44</td>
</tr>
<tr>
<td>Early Iron Age</td>
<td>1608</td>
<td>12,041</td>
</tr>
<tr>
<td>Early Iron Age 1</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
<td>Early Iron Age 2</td>
<td>288</td>
<td>4688</td>
</tr>
<tr>
<td>Early or middle Iron Age</td>
<td>8</td>
<td>157</td>
</tr>
<tr>
<td>Middle Iron Age</td>
<td>215</td>
<td>1435</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3372</td>
<td>27,031</td>
</tr>
</tbody>
</table>

Table 3.3 Prehistoric pottery from Castle Hill and external settlement: fabric groups

<table>
<thead>
<tr>
<th>Fabric group</th>
<th>Fabric name</th>
<th>Fabric description</th>
<th>% of Castle Hill assemblage by sherd count</th>
<th>% of external settlement assemblage by sherd count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sand</td>
<td>20–30% very fine, sometimes micaceous sand</td>
<td>34.9</td>
<td>61.16</td>
<td></td>
</tr>
<tr>
<td>2 Sand and sandstone</td>
<td>10–30% fine micaceous sand; ferruginous pellets; lumps of fine grained, glauconitic sandstone, up to 10 mm; 10–20% sand, up to 1 mm; 1% ironstone and pebbles</td>
<td>4.1</td>
<td>7.35</td>
<td></td>
</tr>
<tr>
<td>3 Sand and calcareous</td>
<td>10% chalk/limestone, up to 10 mm; 10–20% sand, up to 1 mm; 1% ironstone and pebbles</td>
<td>&lt;0.1</td>
<td>1.60</td>
<td></td>
</tr>
<tr>
<td>4 Sand and flint</td>
<td>5% fine micaceous sand; 1–2% ill-sorted flint, 1–3 mm</td>
<td>3.9</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>5 Sand and quartzite</td>
<td>10% fine micaceous sand; 2% quartzite, mostly &gt;1 mm; 1–2% pebbles</td>
<td>18.7</td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>6 Sand and ferruginous pellets</td>
<td>10% fine micaceous sand; 1–3% ferruginous pellets; 1–2% pebbles</td>
<td>1.3</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td>7 Sand and shell</td>
<td>10% fine micaceous sand; 5% shell, up to 3 mm; 1–2% ferruginous pellets</td>
<td>4.1</td>
<td>4.21</td>
<td></td>
</tr>
<tr>
<td>8 Sand and organic</td>
<td>10% fine micaceous sand; 5% organic inclusions</td>
<td>0.2</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>9 Fine-grained sandstone  (glauconitic)</td>
<td>5–10% fine grained, glauconitic sandstone, up to 20 mm; 1% ferruginous pellets and pebbles</td>
<td>0.1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10 Calcareous and sand</td>
<td>20% chalk/limestone, up to 10 mm; 5% sand, up to 1 mm; 1% ferruginous pellets and pebbles</td>
<td>&lt;0.1</td>
<td>7.36</td>
<td></td>
</tr>
<tr>
<td>11 Greensand</td>
<td>10% fine greensand</td>
<td>4.8</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>12 Organic</td>
<td>5% organic inclusions</td>
<td>0.1</td>
<td>1.77</td>
<td></td>
</tr>
<tr>
<td>13 Flint/flint and sand</td>
<td>3–10% ill-sorted flint, 1–3 mm; sometimes 5–10% fine sand</td>
<td>2.3</td>
<td>1.52</td>
<td></td>
</tr>
<tr>
<td>14 Flint, sand and quartzite</td>
<td>10% sand, &lt;1mm; 1% flint, &lt;3 mm; 2% quartzite, &lt;2 mm.</td>
<td>2.3</td>
<td>1.52</td>
<td></td>
</tr>
<tr>
<td>15 Quartzite and some sand</td>
<td>5–20% angular quartzite, 1–6 mm; sometimes 5% sand</td>
<td>11.0</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>16 Grog</td>
<td>3% grog or argillaceous inclusions, up to 1 mm; 10–20% black ferruginous pellets, up to 3 mm; Hackly unwedged matrix</td>
<td>0.1</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>17 Ferruginous pellets</td>
<td>5% ferruginous pellets, &lt;1 mm</td>
<td>&lt;0.1</td>
<td>1.19</td>
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</tr>
<tr>
<td>18 No visible inclusions</td>
<td>&lt;0.1</td>
<td>&lt;0.1</td>
<td>3.03</td>
<td></td>
</tr>
<tr>
<td>19 Shell</td>
<td>7–20% poorly-sorted fossil shell, up to 5 mm</td>
<td>6.0</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>20 Shell and sand</td>
<td>7–20% poorly-sorted fossil shell, up to 5 mm; 15% fine sand</td>
<td>7.2</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>21 Indeterminate</td>
<td>1.2</td>
<td>1.2</td>
<td>1.28</td>
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</tbody>
</table>
The assemblage had a mean sherd weight of only 8.0 g, but its condition varied significantly. Much of the assemblage has clearly been redeposited, and only twelve contexts produced more than 250 g of pottery.

An enormous variety of fabrics (116) was used, most of which contained shell, quartzite or sand. These fall into 20 ‘fabric groups’ according to the main inclusion types present (Tables 3.3 and 3.4). A full methodology is outlined in the digital report.

**Procurement of resources**

**Clays**

The clay matrix often contains small amounts of sand, small pebbles, small ferruginous pellets and other detritus consistent with a gravel clay source, perhaps resulting from the use of the clays within the gravels on the hilltops. A small proportion of the assemblage was in a calcareous clay that may derive from the chalk marl deposits. A third clay type containing coarse fossil shell had been used exclusively for T-rimmed jars. This could be derived from river bed clays, the parent source of which are Jurassic, or from non-local Jurassic clay beds.

As these geological strata are widespread across central southern England, however, non-local manufacture is also possible.

**Inclusions**

The fabrics containing lumps of fine-grained sandstone are characteristic of the locality and derive from the Upper Greensand. It is very likely that the quartzite fabrics were manufactured from crushed and added quartzite Terrace Gravel pebbles, but it is not necessarily the case that these all derived from local sources, as quartzite fabrics are ubiquitous at late Bronze Age sites in the Upper Thames Valley. The flint-tempered sherds may have been imported, as flints are not common in the local gravels. The sands (both quartzitic and glauconitic) are present within the local geology and may either be naturally occurring or added.

**Forms**

A total of 136 vessels could be allocated a form type (Table 3.5). Forms follow the classification developed for the pottery from Ashville, Abingdon (DeRoche 1978), with additions. The principal types were A – large jars with expanded rims (23.6% of vessels), B – slack-profiled jars (37.5%) and C – angular vessels (33.8%), C1 (4.4%) being jars and C2 (27.2%) bowls. Rounded or globular bowls—type D (4.4%)—are generally middle Iron Age. Suffix 0 denotes a form which cannot be assigned to a subdivision.

The finer fabrics dominate the assemblage. The B1 jars were manufactured from flint, quartzite and sand fabrics, whilst the bowls were made predominantly from sandy fabrics. There is a close association between coarse shell fabrics and A3 jars.

### Table 3.4 Prehistoric pottery: fabric groups by phase (quantified by sherd count)

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<tr>
<th>Date</th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<td>24</td>
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<td>11</td>
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<td>202</td>
<td>242</td>
<td>41</td>
<td>3372</td>
<td></td>
</tr>
</tbody>
</table>

The assemblage had a mean sherd weight of only 8.0 g, but its condition varied significantly. Much of the assemblage has clearly been redeposited, and only twelve contexts produced more than 250 g of pottery.

An enormous variety of fabrics (116) was used, most of which contained shell, quartzite or sand. These fall into 20 ‘fabric groups’ according to the main inclusion types present (Tables 3.3 and 3.4). A full methodology is outlined in the digital report.
Surface treatment

Some 12% of sherds (405) showed surface treatment. Of the seven different types of surface treatment recorded, smoothing was most common. Only 197 sherds could be classified by surface treatment and form. Smoothing and rough smoothing was generally restricted to B2 and A3 jars, whilst burnished and red-coated surfaces were most common amongst globular bowls with flared rims (pit 3006; Plate 3.2). Burnishing was associated with few other forms.

Decoration

Only 5.4% of the assemblage by sherd count was decorated. Fingertip impressions on rims and shoulders were most common, but occurred on B1 type jars only. Early Iron Age decoration included ‘pie crust’ decoration (eg Fig. 3.3.25–27), small cordons on the necks of C2A type bowls (eg Fig. 3.4.38) and combinations of incised and impressed motifs on angular C2C bowls. Middle Iron Age decoration included panels of incised lines placed underneath the rim (Fig. 3.5.48, 49 and 53), deep dots (Fig. 3.7.47) and circular stamps at the ends of pendant swags (not illustrated). The similarity of the early and middle Iron Age decoration sometimes made precise dating difficult.

Evidence for vessel function

Seven vessels, mostly early Iron Age, but with single late Bronze Age and middle Bronze Age examples, had charred residues. The vessels included one T-rimmed vessel (A3), one slack-shouldered jar (B1) and one angular bowl.

Discussion of ceramics by phase

Early Bronze Age

Two residual early Bronze Age sherds (7 g) were recovered from contexts 3034 and 5006 (Fig. 3.2.1). Both are decorated with twisted cord impressions and are manufactured from typical Beaker or Collared Urn grog-tempered fabrics.
Late Bronze Age

Of the total of 1062 (7241 g) late Bronze Age sherds, 431 sherds (3696 g) were recovered from the hilltop enclosure ditch, the rest being residual. On the basis of evidence from other sites it has been assumed that quartzite fabrics are late Bronze Age (Barclay 2001).

The commonest vessel form is the slack-shouldered jar (nine examples). Other forms include T-rim jars (A3), carinated jars (C1), angular bowls (C2C), one globular bowl (C2D) and one flared rim bowl (C2E). Decoration included two incidences of fingertip impressed cordons (P52), 14 incidences of fingertip decorated shoulders or rims and five incidences of shoulders or rims decorated with incised decoration. Most sherds had received no surface treatment, although smoothing, rough smoothing and burnishing were noted.

Significant assemblages were recovered from two interventions into the late Bronze Age enclosure ditch: 172 sherds (1525 g) from 3017 and 259 sherds (2171 g) from 6003. In cut 3017, the lowest fills (3082, 3099 and 3121) contained a small number of relatively large late Bronze Age sherds, although the only recognisable form was a B1 jar. Radiocarbon determinations of 1010–840 cal BC and 1000–820 cal BC came from fill 3099 (Poz-14317, Poz-12521). The fill above, 3081, was also radiocarbon-dated to the 11th–9th centuries cal BC (Poz-12519), but contained a small, mixed group of body sherds dated to the late Bronze Age and early Iron Age.

Figure 3.2  Prehistoric pottery, nos 1–16
This mixing continues in the remaining fills, with early Iron Age pottery forming a slight majority. Forms of vessels ascribed to the late Bronze Age comprise A3, B1 (three examples), C0, C1 and C2C (two examples). One late Bronze Age or early Iron Age type C2F bowl (Fig. 3.2.5) is also present.

The lower fills of cut 6003 (6027, 6037 and 6021) produced mainly small fragments of late Bronze Age pottery. Substantial conjoining fragments of a flared rim bowl (form C2E) with an applied fingertip-impressed cordon around the neck (Fig. 3.2.9) were recovered from fill 6027. Associated charred grain was radiocarbon-dated to 905–805 cal BC (Poz-14319: 2700±30 BP). A few early Iron Age sherds also occurred in each of these fills. In upper fills 6017, 6020 and 6004, however, early Iron Age pottery was in the majority. Forms ascribed to the late Bronze Age comprise B0, B1, C2C and C2D.

The only vessel forms from 'secure' late Bronze Age contexts in the lower part of the ditch are one B1 jar and one C2E bowl. The late Bronze Age pottery from the upper layers of the ditch shows a wider variety of forms. This material has been ascribed to the late Bronze Age largely on the basis of fabric, although some of the forms such as angular jars and bowls are also common during the early Iron Age. The mix of late Bronze Age and early Iron Age traits may indicate that these deposits date from the transition between these two periods.

Parallels suggest that the late Bronze Age pottery from Castle Hill belongs to the later, ‘decorated’ phase of the post-Deverel-Rimbury pottery tradition. Although it was made from a fabric containing locally available materials, the flared rim bowl (C2E; Fig. 3.2.9) from ditch 6003 has no local parallels. Instead, it has eastern parallels from the ditched enclosures at Monkton, Kent (Macpherson-Grant 1994, fig. 6.12), Mucking South Rings, Essex (Jones and Bond 1980, figs 13 and 14), and Scarborough, North Yorkshire (Smith 1928, fig. 1). Meanwhile, the high-shouldered bipartite bowl (C2F; Fig. 3.2.5) from ditch 3017 is similar to bowl type 3.2 at Potterne, where it has been dated from the 10th/9th to early 6th centuries BC (Gingell and Morris 2000).

**Early Iron Age**

Of the total of 1907 sherds (16,806 g) of early Iron Age pottery, 540 sherds came from the upper fills of the late Bronze Age hilltop enclosure ditch and 791 sherds from a single large early Iron Age pit (3006). The remainder was residual. The material is largely in sand and shell fabrics.

There appeared to be two ceramic phases in the early Iron Age, the earlier (c 800–500 BC) characterised by angular bowls with incised decoration and white inlaid jars (Plate 3.3), the later (c 500–300 BC) by T-rim jars and globular, red-coated bowls (Plate 3.2). Much of the material, however, (eg forms A2, B0, B1 and C1) is only broadly datable to the early Iron Age.

**Early Iron Age 1 (c 800–500 cal BC)**

A total of 23 small and possibly redeposited sherds of earliest Iron Age date were identified on the basis of form and the presence of All Cannings Cross type incised motifs (Plate 3.3). However, the ubiquity of some incised and stamped motifs within the Iron Age often makes precise dating difficult. The fabrics contained fine...
Figure 3.3 Prehistoric pottery, nos 17–36
quartzitic sand. Burnished finishes were present on five sherds, smoothing on four and a red coating on two.

Layer 3024 in ditch 3017 contained refitting sherds of a late 8th to early 6th century carinated furrowed bowl (Fig. 3.2.13) which has parallels at Potterne (Gingell and Morris 2000, 156, fig. 47) and Budbury (Wainwright 1970, fig. 14, 74–8). A rim fragment from another furrowed bowl (Fig. 3.3.23), similar to Potterne Type 3.4 (Gingell and Morris 2000, fig. 49.34), was found in the uppermost fill of pit 3006.

**Early Iron Age 2 (c 500–300 cal BC)**

A total of 288 sherds (4688 g), mostly from pit 3006, could be placed in this phase. Diagnostic forms include T-rim jars with expanded, pie crust rims (Fig. 3.3.25–27 and 3.4.37), round-bodied red-coated bowls (Figs 3.3.34; 3.4.38 and 40; Plate 3.2) and a decorated, flanged lid (Plate 3.4). Coarse shell fabrics, used only for the expanded rim forms (A3), formed the majority of the assemblage.

The most unusual piece is the flanged lid (Plate 3.4) decorated with punched curvilinear decoration and a fragment of a small flanged lid with incised curvilinear decoration was found in an early or middle Iron Age context at Watchfield, Shrivenham (Laidlaw 2001, fig. 14.19) and, more locally, part of an oxidised lid with rows of stamped circles with white inlay from Abingdon Vineyard (Allen pers. comm.).

The A3 jar type was also found in Trench 15, as well as in Rhodes’s investigations of the early Iron Age midden (Rhodes 1948, fig. 9.1–5), and has been recovered from sites such as Allen’s Pit (Bradford 1942), Mount Farm (Myres 1937), Blewburton (Harding 1972, pl. 44–5), Gravelly Guy (Duncan et al. 2004) and Segsbury (Brown 2005, fig. 3.2). Red-coated round-bodied bowls with flared rims, manufactured from very fine sand containing rare ferruginous pellets and other pebbles, were recovered in some numbers (Plate 3.2). This vessel type has also been recovered from Faringdon (Timby 2004; Bryan et al. 2004), Blewburton (Harding 1972, pl. 58) and Segsbury (Brown 2005). Gingell and Morris (2000, 165) argue that in Berkshire and
Oxfordshire round-bodied bowl forms are generally later within the early Iron Age than the biconical and angular forms. Examples are now also common within Wiltshire and Hampshire, where the bowls were manufactured using a very clean, fine clay for which heavy mineral analysis has found a single common source at Compton Chamberlain on Salisbury Plain (Williams and Wandibba 1984).

### Discussion of key groups

There appears to be a chronological distinction between the key groups of early Iron Age pottery, with the material from pit 3006 apparently later in emphasis than that from the upper fills of the late Bronze Age hilltop enclosure ditch.

Pit 3006 contained a remarkable assemblage of 11.5 kg of pottery (Table 3.6). The majority is dated to EIA2. Forms from the pit are dominated by T-rim jars (A3) and round-bodied, flared rim bowls (C2). Rhodes’ earlier investigations of the early Iron Age midden south-west of Castle Hill also showed that haematite-coated round-bodied vessels were found ‘in association with vessels with swollen flat topped rims’ (Rhodes 1948, 24).

The early Iron Age pottery from the late Bronze Age hilltop enclosure ditch was in poorer condition than that from the pit. In contrast to the pit, forms were dominated by slack-shouldered jars, with only small numbers of bowls and T-rim jars (Table 3.7). Generally speaking, material ascribed to Early Iron Age 2—such as the two A3 T-rim jars—was restricted to the uppermost two fills of the ditch (3024 and 3046; 6004 and 6017). The exception to this was a fragment of a red-coated bowl from fill 3081, fairly low down the sequence.

The differences between the pit and ditch assemblages are likely to be at least partly chronological. The bulk of the infilling of the ditch probably predated the deposit within the pit, although the uppermost two fills of the ditch may have been chronologically closer to it. It is also worth noting, however, that a pit deposit of this size is unusual, and may have constituted a ‘special’ deposit, containing a selected range of pottery differing from the material in contemporary ‘refuse’ deposits.
Middle Iron Age (300–100 cal BC)

Just 215 sherds (1435 g) of middle Iron Age pottery was recovered. Most of this material came from pits, all of which also contained residual late Bronze Age and Iron Age material. The vessels were all manufactured from fabrics containing fine sand and other inclusions, such as fine shell or glauconitic sandstone. Forms comprised globular bowls, globular jars and barrel-shaped jars (Fig. 3.5.47–54). A variety of decorative motifs were present on globular bowls. The decoration on vessels Fig. 3.5.48–49 can be paralleled at Blewburt on (Harding 1972, pl. 68H and J; plate 66F), and that on vessel Fig. 3.5.53 at Gravelly Guy (Duncan et al. 2004, fig. 7.5 and 7.6).

Catalogue of illustrated pottery (Figs 3.2–3.5)

1. Fabric group 17. EBA. Ctx 5006, post-medieval wood bank
2. Fabric group 5. Form B1. LBA. Ctx 3034, EIA pit 3006
3. Fabric group 16. Form B1. LBA. Ctx 3026, MIA pit 3025
4. Fabric group 5. A3. LBA. Ctx 3035, LBA enclosure ditch 3017
5. Fabric group 1. Form C2F. LBA. Ctx 3046, LBA enclosure ditch 3017
6. Fabric group 5. Form B1. LBA. Ctx 4004, medieval pit 4003
7. Fabric group 16. Form B1. LBA. Ctx 6017, LBA enclosure ditch 6003
9. Fabric group 5. Form C2E. LBA. Ctx 6031, LBA enclosure ditch 6003
10. Fabric group 14. Form C0, or cup? LBA or EIA. Ctx 6004, LBA enclosure ditch 6003
11. Fabric group 14. Form C0. LBA or EIA. Ctx 6004, LBA enclosure ditch 6003
14. Fabric group 1. Form C2. EIA. Ctx 3024, LBA enclosure ditch 3017
15. Fabric group 20. Form B1. Ctx 3024, LBA enclosure ditch 3017
16. Fabric group 1. Form B1. EIA. Ctx 3024, LBA enclosure ditch 3017
17. Fabric group 1. Form C2C. EIA1. Ctx 3040, EIA pit 3006
18. Fabric group 1. Form C2C. EIA1. Ctx 3059, EIA pit 3006
22. Fabric group 7. Form B1. EIA. Ctx 3034, EIA pit 3006
23. Fabric group 1. Form C2B. EIA1. Ctx 3007, EIA pit 3006
25. Fabric group 20. Form A3. EIA2. Ctx 3034, EIA pit 3006
27. Fabric group 20. Form A3. EIA2. Ctx 3034, EIA pit 3006
29. (see Plate 3.4) Fabric group 1. Lid. EIA2. Ctx 3036, EIA pit 3006
30. Fabric group 1. Form B1. EIA. Ctx 3038, EIA pit 3006
31. Fabric group 2. Form B1. EIA. Ctx 3040, EIA pit 3006
32. Fabric group 20. Form A3. EIA. Ctx 3040, EIA pit 3006
33. Fabric group 1. Form C2D. EIA. Ctx 3040, EIA pit 3006
34. Fabric group 1. Form C2. EIA2. Ctx 3040, EIA pit 3006
35. Fabric group 5. Form B1. EIA2. Ctx 3040, EIA pit 3006
36. Fabric group 1. Form C0. EIA. Ctx 3061, EIA pit 3006
37. Fabric group 21. Form A2. EIA2. Ctx 3061, EIA pit 3006
38. Fabric group 2. Form C2. EIA2. Ctx 3061, EIA pit 3006
40. Fabric group 1. Form C2. EIA2. Ctx 3061, EIA pit 3006
41. Fabric group 14. Form B1. EIA. Ctx 3020, MIA pit 3019
42. Fabric group 1. Form B1. EIA. Ctx 3020, MIA pit 3019
43. Fabric group 21. Form C1. EIA. Ctx 4017, medieval pit 4003
44. Fabric group 21. Form B1. EIA. Ctx 4008, LBA enclosure ditch 4007
45. Fabric group 1. Form B1. EIA. Ctx 4008, LBA enclosure ditch 4007
46. Fabric group 1. Form C2C. EIA. Ctx 6004, LBA enclosure ditch 6003
47. Fabric group 1. Form D0. MIA. Ctx 3003, MIA pit 3002
LATE IRON AGE AND ROMAN POTTERY by Paul Booth

The 2003 and 2006 excavations at Castle Hill produced 2532 sherds (21,422 g) of late Iron Age and Roman pottery, the majority of which was of late Roman date. The pottery was recorded using the standard OA codes for material of this date, with each context group divided in relation to fabric and form types and other characteristics as appropriate. Quantification was by sherd count and weight, and rim equivalents (REs) as well as a count of rim sherds were used to quantify vessel types. The pottery was in moderate condition at best—surfaces were usually relatively well-preserved but the material was fragmented, as the average sherd weight (only 8.5 g) shows. The fragments of Oxford colour-coated ware were particularly small.

Firing is described as reduced (ie fired grey or black because starved of oxygen) or oxidised (fired red or orange due to exposure to oxygen). Wares are divided between fine wares (thin-walled vessels with only small inclusions visible in the clay, generally table wares), coarse wares (larger inclusions and generally storage or cooking vessels) and specialist wares eg mortaria for grinding, amphorae for transporting wine.

Fabrics

The fabrics identified are listed and quantified below (Table 3.8) with summary descriptions including cross-reference to the national Roman fabric reference collection codes (Tomber and Dore 1998), where appropriate.

The fabrics are listed in the sequence of ware groups used for comparative analysis of a number of assemblages from the region (eg Booth 2004a; 2007). Overall, the assemblage was dominated by reduced coarse wares and by Oxford colour-coated ware (fabric F51, eg Fig. 3.6.2–5). The latter was the most important of the 'fine and specialist ware' fabrics (see below), along with Oxford mortaria. F51 constituted 28.7% of the total sherds from the site (but only 17.7% by weight) and formed the great majority of the fine (F) ware category. Sherds recorded as fabric OF are also probable/possible examples of F51, but with all traces of the colour-coated surface missing. Other fine wares were from the Nene Valley (F52) and there was one sherd from the New Forest industry (F53).

Oxford industries accounted for all but one of the mortarium sherds. White mortaria were entirely absent from the Castle Hill assemblage, but the white-slipped fabric M31 (Young 1977 fabric WC; eg Fig. 3.6.6, 19 and 20) was dominant, being twice as common as the red colour-coated fabric M41. The same pattern is seen in other ware groups—only a single white ware sherd (in fabric W12) was present, and Oxford parchment ware (fabric W11) was, remarkably, absent, but the Oxford oxidised white-slipped fabric Q21 (eg Fig. 3.6.7 and 21) was well-represented in comparison with other late-Roman groups in the region. Sherds of samian ware and amphora were tiny and undiagnostic, so the attribution of samian ware sherds to South and Central Gaulish sources should be regarded as tentative.

A small group of late Iron Age/early Roman pottery was present, concentrated in the hillfort ditch in Trench 1. The pottery was mostly in sand- and grog-tempered fabrics (E30 and E80) in a late Iron Age ‘Belgic’ tradition (sensu Thompson 1982, 4). Oxidised wares amounted to 5.1% of sherds but only 2.5% in weight. Sherds in the fine fabric O10 had an average weight of only just over 3 g, and some of these could instead have been very abraded fragments of fabric F51. The only distinctive non-local fabric in this group was O81 (pink grogged ware) from Stowe in Buckinghamshire (Booth 1999), represented by a single sherd.

The dominant reduced wares (53% of sherds, 64.9% by weight) had fabrics without diagnostic inclusions, and so are not easily assigned to specific production centres. Most were assigned to moderately sandy reduced ware group R30, usually
associated with the Oxford industry. Some sherds, however, were recorded as fabric R36, characterised by above-average numbers of quartz sand grains, typically appearing in the sherd surfaces (eg Fig. 3.6.11, 12, 14, 26 and 27). This fabric is tentatively assigned to the poorly-understood late-Roman production site at Castle Hill Artefacts.

### Table 3.8 Roman pottery fabrics

<table>
<thead>
<tr>
<th>Ware</th>
<th>Summary description</th>
<th>Nosh</th>
<th>%</th>
<th>Wt (g)</th>
<th>%</th>
<th>RE</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Samian ware undifferentiated</td>
<td>4</td>
<td>0.2</td>
<td>3</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S20</td>
<td>South Gaulish samian ware (including La Graufesenque - LGF SA)</td>
<td>4</td>
<td>0.2</td>
<td>4</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S30</td>
<td>Central Gaulish samian ware (including Lezoux - LEZ SA 2)</td>
<td>1</td>
<td>+</td>
<td>4</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>Samian wares subtotal</td>
<td>9</td>
<td>0.4</td>
<td>11</td>
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<td></td>
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<tr>
<td>F50</td>
<td>?Local brown colour-coated ware</td>
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<td>0.1</td>
<td>5</td>
<td>+</td>
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<td></td>
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<tr>
<td>F51</td>
<td>Oxford red/brown colour-coated ware (OXF RS)</td>
<td>726</td>
<td>28.7</td>
<td>3797</td>
<td>17.7</td>
<td>5.25</td>
<td>23.7</td>
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<tr>
<td>OF</td>
<td>?Oxford red/brown colour coated ware, surfaces missing</td>
<td>11</td>
<td>0.4</td>
<td>45</td>
<td>0.2</td>
<td>0.03</td>
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<td>F52</td>
<td>Nene Valley colour-coated ware (LNV CC)</td>
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<td>F53</td>
<td>New Forest colour-coated ware (NFO RS2)</td>
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<td>+</td>
<td>4</td>
<td>+</td>
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<tr>
<td>F</td>
<td>Fine wares subtotal</td>
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<td>29.7</td>
<td>3966</td>
<td>18.5</td>
<td>5.42</td>
<td>24.4</td>
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<td>A10</td>
<td>Unassigned amphora, buff, sandy</td>
<td>1</td>
<td>+</td>
<td>6</td>
<td>+</td>
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<tr>
<td>A</td>
<td>Amphorae subtotal</td>
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<td>6</td>
<td>+</td>
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<td>M30</td>
<td>Unassigned oxidised mortarium fabric</td>
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<td>+</td>
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<td>M31</td>
<td>Oxford white-slipped mortaria (OXF WS)</td>
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<td>3.0</td>
<td>1308</td>
<td>6.1</td>
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<td>5.8</td>
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<td>Oxford red/brown colour-coated mortaria (OXF RS)</td>
<td>36</td>
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<td>M</td>
<td>Mortaria subtotal</td>
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<td>1589</td>
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<td>1.90</td>
<td>8.6</td>
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<td>W12</td>
<td>Fine Oxford white ware (OXF WH)</td>
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<td>2</td>
<td>+</td>
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<td></td>
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<tr>
<td>W</td>
<td>White wares subtotal</td>
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<td>+</td>
<td>2</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10</td>
<td>Fine oxidised white-slipped wares undifferentiated</td>
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<td>+</td>
<td>3</td>
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<td>Q20</td>
<td>Moderately fine oxidised white-slipped wares undifferentiated</td>
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<td>4</td>
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<td>Q21</td>
<td>Oxford white-slipped oxidised ware (OXF WS)</td>
<td>25</td>
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<td>124</td>
<td>0.6</td>
<td>0.33</td>
<td>1.5</td>
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<td>Q</td>
<td>White-slipped wares subtotal</td>
<td>28</td>
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<td>131</td>
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<td>0.33</td>
<td>1.5</td>
</tr>
<tr>
<td>F &amp; S</td>
<td>Fine and Specialist wares subtotal</td>
<td>906</td>
<td>35.8</td>
<td>5705</td>
<td>26.6</td>
<td>7.65</td>
<td>34.5</td>
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<tr>
<td>E20</td>
<td>Fine sand-tempered ‘Belgic type’ wares undifferentiated</td>
<td>1</td>
<td>+</td>
<td>1</td>
<td>+</td>
<td></td>
<td></td>
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<tr>
<td>E30</td>
<td>Medium to coarse sand-tempered ‘Belgic type’ wares undifferentiated</td>
<td>13</td>
<td>0.5</td>
<td>140</td>
<td>0.7</td>
<td>0.06</td>
<td>0.3</td>
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<td>Flint-tempered ‘Belgic type’ wares undifferentiated</td>
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<td>0.2</td>
<td>0.03</td>
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<td>E80</td>
<td>Grog-tempered ‘Belgic type’ wares undifferentiated (includes SOB GT)</td>
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<td>0.6</td>
<td>148</td>
<td>0.7</td>
<td>0.04</td>
<td>0.2</td>
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<tr>
<td>E</td>
<td>‘Belgic type’ wares subtotal</td>
<td>31</td>
<td>1.2</td>
<td>331</td>
<td>1.5</td>
<td>0.13</td>
<td>0.6</td>
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<td>O</td>
<td>Oxidised ‘coarse’ wares undifferentiated</td>
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<td>+</td>
<td>1</td>
<td>+</td>
<td></td>
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<tr>
<td>O10</td>
<td>Fine Oxford oxidised ‘coarse’ ware</td>
<td>104</td>
<td>4.1</td>
<td>343</td>
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<td>0.48</td>
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<td>O20</td>
<td>Coarse sand Oxidised wares undifferentiated</td>
<td>15</td>
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<td>93</td>
<td>0.4</td>
<td>0.05</td>
<td>0.2</td>
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<tr>
<td>O80</td>
<td>Coarse (usually grog-tempered) oxidised wares undifferentiated</td>
<td>8</td>
<td>0.3</td>
<td>81</td>
<td>0.4</td>
<td>0.08</td>
<td>0.4</td>
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<tr>
<td>O81</td>
<td>Pink grogged ware (PNK GT)</td>
<td>1</td>
<td>+</td>
<td>26</td>
<td>0.1</td>
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<td></td>
</tr>
<tr>
<td>O</td>
<td>Oxidised wares subtotal</td>
<td>129</td>
<td>5.1</td>
<td>544</td>
<td>2.5</td>
<td>0.61</td>
<td>2.7</td>
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<tr>
<td>R10</td>
<td>Fine reduced ‘coarse’ wares undifferentiated</td>
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<td>681</td>
<td>3.2</td>
<td>0.72</td>
<td>3.2</td>
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<td>532</td>
<td>2.5</td>
<td>0.24</td>
<td>1.1</td>
</tr>
<tr>
<td>R23</td>
<td>Coarse sandy reduced ware, possible Compton product</td>
<td>5</td>
<td>0.2</td>
<td>139</td>
<td>0.7</td>
<td>0.02</td>
<td>0.1</td>
</tr>
<tr>
<td>R30</td>
<td>Moderately fine sandy reduced wares undifferentiated</td>
<td>804</td>
<td>31.8</td>
<td>7467</td>
<td>34.8</td>
<td>6.66</td>
<td>30.0</td>
</tr>
<tr>
<td>R36</td>
<td>Moderately fine sandy reduced ware, probable Compton product</td>
<td>369</td>
<td>14.5</td>
<td>3662</td>
<td>17.0</td>
<td>4.30</td>
<td>19.3</td>
</tr>
<tr>
<td>R39</td>
<td>Alice Holt sandy reduced coarse ware (ALH RE)</td>
<td>38</td>
<td>1.5</td>
<td>1174</td>
<td>5.5</td>
<td>0.28</td>
<td>1.3</td>
</tr>
<tr>
<td>R90</td>
<td>Coarse (usually grog-tempered) reduced wares undifferentiated. Includes Young 1977, 202, fabric 1</td>
<td>27</td>
<td>1.0</td>
<td>262</td>
<td>1.2</td>
<td>0.14</td>
<td>0.6</td>
</tr>
<tr>
<td>R</td>
<td>Reduced coarse wares subtotal</td>
<td>1344</td>
<td>53.1</td>
<td>13908</td>
<td>64.9</td>
<td>12.36</td>
<td>55.7</td>
</tr>
<tr>
<td>C10</td>
<td>Shell-tempered ware undifferentiated</td>
<td>1</td>
<td>+</td>
<td>21</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C11</td>
<td>‘Harrold’ late Roman shell-tempered ware (HAR SH)</td>
<td>119</td>
<td>4.7</td>
<td>890</td>
<td>4.2</td>
<td>1.41</td>
<td>6.4</td>
</tr>
<tr>
<td>C20</td>
<td>Limestone-tempered fabrics undifferentiated</td>
<td>1</td>
<td>+</td>
<td>14</td>
<td>0.1</td>
<td>0.03</td>
<td>0.1</td>
</tr>
<tr>
<td>C</td>
<td>Calcareous-tempered wares subtotal</td>
<td>121</td>
<td>4.8</td>
<td>925</td>
<td>4.3</td>
<td>1.44</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**TOTAL**

| 2532 | 21422 | 22.19 |
Figure 3.6 Roman pottery
Compton in Berkshire less than 15 km south of Castle Hill (Harris 1935; Harding 1937). The products of this industry have not been fully published, but the writer inspected the pottery from this site held in Newbury Museum in 1998. Separation of fabric R36 from other R30 material has probably not been achieved consistently, but it is more likely that R36 (recorded as 27.5% of all reduced ware sherds), was still under- rather than over-represented in recording. A few sherds in a coarser sandy fabric, R23, are also assigned (more tentatively) to the Compton kilns.

The only identifiable non-local reduced ware was R39, from the Alice Holt industry, a consistent (low-level) component of late-Roman assemblages in the region but best-represented at the present site and in recent (unpublished) excavations at Dorchester on Thames. Most sherds in fabric groups R10 and R20 are likely to have derived from the Oxford industry but cannot be linked with individual production sites within that industry. It is possible that some of the sherds in fabric R20 were of early Roman date, but this cannot be demonstrated from the minimal evidence of vessel forms. An early date is also possible for sherds in the coarse grog-tempered fabric R90, but this fabric remained in use for much of the Roman period, specifically for large jars (Young 1977, 203).

The only other significant ware group, calcareous-tempered fabrics, consisted almost entirely of fabric C11, late shell-tempered ware (eg Fig. 3.6.1, 28 and 29), assigned to the production site at Harrold, Bedfordshire (Brown 1994).

**Vessel types**

Vessel types were recorded in terms of fairly broad subdivisions of major functional categories. The degree of fragmentation of the material meant that in many cases identification beyond the level of major vessel class (eg type C, jars) was not possible. Quantification of vessel types by Rim Equivalents (REs) with a (less reliable) estimate of numbers based on rim count, is presented in Table 3.9.

As usual, jars were the principal component of the assemblage, but did not completely dominate here. Regionally (and in broad terms, nationally) the representation of jars, at first as much as 90% of assemblages, decreases steadily.
throughout the Roman period (see further below). Bowls and dishes correspondingly increase in importance, but in the Castle Hill assemblage these are complemented by flagons/jugs and mortaria, both of which are present at levels well above the average for the Oxford area. In contrast, cups and beakers were of minimal importance (the former class was represented by a single vessel but without a rim) and types such as lids were completely absent. A tiny fragment in fabric O10 was from a miniature vessel of uncertain function.

Jars occurred in the widest range of fabrics. Reduced fabrics R30 (Fig. 3.6.10, 23 and 24) and R36 (Fig. 3.6.11 and 12) accounted for the majority, but they were also well-represented in fabric C11 (Fig. 3.6.1, 28 and 29; all but one example of the specific 'cooking pot type' jar CK were in this fabric) and occurred in O20, O80, Q21 and F51. Jars were the only vessels in the early E wares; the single example of the high shouldered type CE, a distinctive late Iron Age-early Roman form, was in fabric E80. Bowls were also found in a wide range of fabrics, although Oxford colour-coated products dominated most of the sub types except the straight-sided (type HB) category; these were in reduced Compton fabrics (4 examples) and shell-tempered fabric C11 (2 examples) with single examples in fabrics O20 and R10.

Straight-sided dishes (type JA) were likewise in reduced coarse ware fabrics except for single examples in C11 and typical Nene Valley (fabric F52) colour-coated ware. Compton products were again important, but there were four examples in Alice Holt fabric R39 and two in a coarse grog-tempered R90 fabric. Type JA vessels include several examples of a very distinctive group of dishes typically with slightly incurving sides and with external and internal burnished line decoration (Fig. 3.6.14–16 and 25–27). Some examples (Fig. 3.6.14 and 27) have small bosses on the external wall, a feature which appears to have very localised distributions, as observed by Lyne (1999, 285). The general type occurs in a number of fabrics and is clearly related to an Alice Holt form (Lyne and Jefferies 1979, 48, types 6A.8–6A.11) with particular parallels at Overwey (eg Clark 1949, 49, nos 59–69), though without the bosses. Several examples of the type, including two with bosses, have been recently recorded from an Oxford production site at Blackbird Leys but were subsumed under Young type R53 in the summary publication of the site (Booth and Edgeley Long 2003, 249; see now Westlake and Booth 2007). The detailed chronology of Blackbird Leys is not very clear, and the sequential relationship between the occurrence of these dishes there and at Overwey (assuming that such a relationship exists, which seems likely) is therefore uncertain. The bossed examples of the type from Castle Hill are, however, both in 'Compton' fabric R36 and Lyne (1999, 285) has also noted this form/fabric combination. Other evidence, particularly the occurrence of reduced ware copies of Oxford colour-coated ware forms amongst the Compton material in Newbury Museum, suggests a close connection between the two industries. The origin of other examples of the dish type (eg Fig. 3.6.16), in quite different fabrics such as R90, remains unclear, although an association with one or the other industry seems most likely.

The remaining vessel types are also of interest. A majority of the flagons and jugs, often difficult to assign to well-defined types, were in colour-coated fabric F51 but there were also five reduced ware examples, four in R30 (eg Fig. 3.6.9) and one in R36 (eg Fig. 3.6.8). The colour-coated examples, however (Fig. 3.6.2 and 3), are of types not easily paralleled in detail in Young's corpus. It is unclear if these were spouted types, although this is quite possible. As already noted, identifiable mortarium forms are all in Oxford fabrics, the types represented being C97 and WC4 (Fig. 3.6.6) and, particularly, WC7, of which there were 13 possible examples (eg Fig. 3.6.19 and 20).

Chronology
Only two context groups, 1006 and 1016, were clearly dated to the late Iron Age/early Roman period. Apart from a single intrusive sherd of R30 and four sherds of the coarse oxidised O80 these groups consisted entirely of sherds in fabrics E30 and E80. This small but distinct component was in marked contrast to the remainder of the assemblage, which was of late Roman date. Oxford colour-coated ware and associated fabrics were ubiquitous and thus indicate a terminus post quem of at least AD 240 for most context groups. Many of these, however, may have been entirely of 4th century date, rather than earlier. This is most easily assessed in
relation to the dating of the individual Oxford colour-coated ware vessel types present. These are shown in Table 3.10.

Of the 13 vessel types represented, including the mortarium C97, only four (including type C45, for which see Booth et al. 1993, 167) have date ranges starting c AD 240, the remainder being thought to appear no earlier than AD 300. Quantified (more reliably) by REs the vessels divide almost evenly between those with an AD 240–400 date range and those dated AD 300 or later. This suggests that some of the vessels with the wider date range were in fact 4th century examples of their types. For example, while C51 is dated AD 240–400 by Young (1977, 160) recent analysis of a number of production site assemblages suggests that it was relatively rare on later 3rd century sites (eg Booth et al. 1993, 139; Booth and Edgeley Long 2003, 249). Correspondingly, the almost total absence of C45 (usually the most common late 3rd century bowl form produced in the industry) is notable here, while the occurrence of C46 tends to support Young’s later dating of this type. The lack of Oxford white wares, including mortaria and parchment ware, is also striking, and may be chronologically determined. Late Roman production in the southern part of the Oxford industries seems to have exploited the local iron-rich clays to the exclusion of the white firing clay which had to be transported from Shotover, whereas in the 2nd and 3rd centuries white wares were manufactured across the industry alongside other products. The absence of white wares at Castle Hill might indicate that pottery was only reaching the site after this change in resource exploitation. In this late period white-slipped wares may have been used increasingly in lieu of white wares proper, both for mortaria and also for small jars in fabric Q21 (eg Fig. 3.6.7 and 21), these perhaps serving as a substitute for the Oxford parchement ware forms P7–P9. It has also been suggested (S Green pers. comm.) that white-slipped Oxford mortaria were particularly characteristic of the unusually well-preserved very latest phases at Bath; the published data (Green and Young 1985) do not distinguish between probable residual and non-residual Oxford mortaria in the phase groups.

Other late Roman indicators in the Castle Hill assemblage include fabrics F52, C11 and R39, for all of which a date range entirely within the 4th century is likely. On present evidence the Compton industry is also dated largely if not entirely to the 4th century and the bossed dishes discussed above are considered by Lyne (1999, 285–6) to date to the very end of the Roman period in Britain. The evidence already reviewed makes it clear that at least some context groups at Castle Hill must belong to the second half of the 4th century. Indeed a majority of groups could be of this date. The total absence of black-burnished ware may support this idea, as this would normally be expected on any site in the region occupied in the late 3rd–early 4th century. It is possible therefore that its absence here indicates that the bulk of activity took place after c AD 360, when Oxfordshire ceased to be within the main area to which black-burnished ware was exported.

<table>
<thead>
<tr>
<th>Young type</th>
<th>OA type</th>
<th>Rims</th>
<th>RE</th>
<th>Date range (Young 1977)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C38</td>
<td>FD</td>
<td>-</td>
<td>0.04</td>
<td>AD 340-400</td>
</tr>
<tr>
<td>C45</td>
<td>HC</td>
<td>1</td>
<td>0.04</td>
<td>AD 270-400 *</td>
</tr>
<tr>
<td>C46</td>
<td>HC</td>
<td>8</td>
<td>0.45</td>
<td>AD 340-400 **</td>
</tr>
<tr>
<td>C49</td>
<td>HC</td>
<td>1</td>
<td>0.03</td>
<td>AD 240-400</td>
</tr>
<tr>
<td>C51</td>
<td>HC</td>
<td>12</td>
<td>0.78</td>
<td>AD 240-400</td>
</tr>
<tr>
<td>C52</td>
<td>HC</td>
<td>1</td>
<td>0.08</td>
<td>AD 350-400</td>
</tr>
<tr>
<td>C68</td>
<td>HC</td>
<td>2</td>
<td>0.14</td>
<td>AD 300-400</td>
</tr>
<tr>
<td>C75</td>
<td>HD</td>
<td>12</td>
<td>0.78</td>
<td>AD 325-400</td>
</tr>
<tr>
<td>C76</td>
<td>HD</td>
<td>-</td>
<td></td>
<td>AD 340-400</td>
</tr>
<tr>
<td>C77</td>
<td>HD</td>
<td>-</td>
<td></td>
<td>AD 340-400</td>
</tr>
<tr>
<td>C82</td>
<td>HA</td>
<td>1</td>
<td>0.03</td>
<td>AD 325-400</td>
</tr>
<tr>
<td>C94</td>
<td>JA</td>
<td>1</td>
<td>0.09</td>
<td>AD 300-400</td>
</tr>
<tr>
<td>C97</td>
<td>KD</td>
<td>13</td>
<td>0.62</td>
<td>AD 240-400</td>
</tr>
</tbody>
</table>

Total 52 3.04

* Date range almost certainly AD 240-400
** An earlier start date is suggested at Lower Farm, Nuneham Courtenay
The most distinctive characteristic of the assemblage is its generally late Roman date. Small groups of material from the hillfort ditch in Trench 1 indicate activity in the 1st century AD, though whether before or after the conquest period is impossible to tell. A number of tiny fragments of samian ware and a single small amphora sherd may represent low level ‘background noise’ from an early to middle Roman component in the assemblage, but the quantities are very small. These were the only imported fabrics in the entire assemblage. It is notable that the most common extra-regional Romano-British coarse ware, black-burnished ware, was completely absent. The remaining pottery was dominated by local production based on the Oxford and Compton industries. Extra-regional fabrics were from sources characteristic of late Roman assemblages in the area; the lower Nene Valley, Harrold in Bedfordshire and Alice Holt, with single sherds from the New Forest (F53) and the Stowe area of Buckinghamshire (O81). Of these only the Harrold material was numerically significant, but the quantity of Alice Holt material is notable in terms of regional comparisons and is probably another indicator of a very late Roman emphasis in the assemblage.

The chronological range of the Castle Hill material contrasts with that from areas immediately west of the hillfort, including Hill Farm and the intervening area in the vicinity of the site examined by Rhodes (1948) and subsequently by Time Team (Wessex Archaeology 2004) and in Trenches 13–15. The material from the Time Team work was thought to be mainly of mid 3rd–4th century date (ibid., 21) but it certainly included earlier pottery. Equally, while some late Roman material was present in Rhodes’ excavation (Rhodes 1948, 30), this was clearly associated with 2nd and 3rd century pottery in some quantity and the pottery from OA Trenches 13–15 was mostly of 1st–2nd century date.

Close comparison with other late Roman site assemblages in the area is difficult because of the lack of detailed publication of the Compton industry. It may also be the case that the distribution of the products of this industry was in some way restricted to the area south of the Thames and that these products were perhaps significantly less important in Dorchester than at Castle Hill, despite the proximity of the two places. New excavation of the late Roman sequence in Dorchester is ongoing, but has not yet generated data that would allow this proposition to be tested, however. The assemblage from Beech House Hotel (Rowley and Brown 1981) appears to have a roughly comparable level of fine and specialist wares (a minimum of 30.3% of sherd count) to that seen at Castle Hill, and is similarly dominated by Oxford colour-coated ware, but the data are incomplete (Booth 2004a, 47). This is nevertheless the most closely comparable (approximately) quantified later Roman assemblage from the region. The higher levels of Oxford colour-coated wares at Castle Hill arguably reflect a more restricted late Roman date range in the second half of the 4th century (see Going 1992, 101–2), at a time when colour-coated ware production was at its peak (at least as a proportion of total Oxford industry output). Locally this trend can be demonstrated in the northern extramural settlement at Alchester, where the percentage of fabric F51 was noticeably higher in the second half of the 4th century than in the preceding early 4th century phase (Booth et al. 2001, 458–9), although the quantities were still considerably less than at Dorchester and Castle Hill. High representation of colour-coated wares is indicated in the unquantified reports on material from other sites within Dorchester (eg Frere 1962, 143–5; group D) and immediately outside; Examples include Bishop’s Court (May 1977, 62–70, eg fig. 8 (on which may be noted no. 1—a bossed dish, whose fabric description is consistent with a Compton product)) and Wally Corner, Berinsfield (Sutton 1963, 14–18), though not a smaller fieldwalking assemblage from just east of Dorchester at a site known as CD92 (Booth 2004a, 44, 48).

Slightly further afield there is good evidence for Roman reuse of the hillfort at Uffington, which produced an assemblage of very similar size to that from Castle Hill (2644 sherds, 22,456 g, 26.6 REs; Brown 2003). Uffington was comparable to Castle Hill in that the most distinctive component of the pottery was late Roman and included Compton and shell-tempered wares as well as other reduced coarse wares. (See particularly Brown 2003, 177, fig. 9.7, nos 3 and 4 and 6 respectively, the first of these quite closely comparable to Castle Hill No. 11). There were, however, notable differences, including a much higher representation of oxidised coarse wares at Uffington (24.5% of sherds, as opposed to only 5.1% at Castle Hill) and much smaller quantities of Oxford colour-coated ware, which only amounted
to 3.8% of sherds at Uffington (but 6.6% of REs; ibid., CDROM table 9.11). The relationship between jars and bowls was therefore rather different, these comprised 73% and 12.1% respectively of REs at Uffington. These figures may reflect a wider date range for the assemblage there than at Castle Hill. Mortaria were almost entirely from the Oxford kilns, but were less common than at Castle Hill (comprising 2.8% of sherds and 4.1% of REs) and consisted almost entirely of white slipped forms WC5 and WC7, plus two examples of C97. Again a chronological factor may explain the absence of white Oxford mortaria. This characteristic is also seen at another reoccupied hillfort, Madmarston Camp, close to the Roman roadside settlement at Swalcliffe in north Oxfordshire (Fowler 1960). The unquantified illustrated pottery from there suggests an essentially late Roman group (ibid., 34), amongst which the four mortaria shown (ibid., fig. 16 no. 9, fig. 17 nos 1, 15 and 23) are all most likely to be Oxford white-slipped ware vessels.

The Castle Hill assemblage can therefore be seen as demonstrating characteristics shared with a number of other late Roman sites in the region, although the closest comparanda seem, unsurprisingly, to lie in the immediate vicinity of Dorchester. For the most part these do not show any clear cut distinction of character between intra-mural and extra-mural Dorchester sites, but in the absence of quantified data such a judgement can only be subjective. In a comparative review of assemblage status it was suggested that the Beech House Hotel site, with its high level of fine and specialist wares, reflected the status difference between contemporary urban and rural sites, although it was admitted that proximity to the production sites would have served to boost the quantities of Oxford fine and specialist ware products (Booth 2004a, 48). The latter factor was presumably very important in the immediate vicinity of Dorchester but it may also be that social factors such as control of distribution networks played a part in determining the quantities of colour-coated wares reaching individual sites, otherwise the contrast between Beech House Hotel and a site such as CD92 (ibid., 44, 48) should not have been as marked as it was. In view of the possibility that the great majority of the Castle Hill assemblage was exclusively of very late Roman date (at least after AD 350), however, it is difficult to determine whether the high fine and specialist ware percentage there should be seen as simply reflecting this factor, or whether it can be taken as an indicator of relatively high status for this site. If Castle Hill was a high status site in the late 4th century this was presumably within the framework of social and economic structures based upon Dorchester itself.

Either way, the assemblage provides some insight into and confirmation of certain characteristics of the latest Roman assemblages in the Dorchester area. The aspects of this that relate to the Oxford industry—high levels of colour-coated ware vessels and of white-slipped vessels, including jars, and an absence of white mortaria and other white wares—have already been discussed. The high percentage of mortaria raises questions about the use of these vessels. Were they numerous simply because they were readily available, or was there a functional aspect to this as well? A similar situation was seen at Mansfield College, Oxford, where mortaria (principally white wares) comprised 12.5% of the assemblage in terms of REs, but again the interpretation of this highly atypical figure was uncertain (Booth 2000, 313). It seems unlikely, however, that such large quantities of these vessels would have been in use simply for grinding and mixing, and use for a wider range of functions may be suspected. The relative frequency and variety of liquid containers (flagons/flasks) does seem to be a real feature of some late Roman assemblages, but at Castle Hill was not matched by similar numbers of drinking vessels. The poor representation of beakers here is notable and not easily explained.

Finally, what was the significance of the most distinctive component of the Castle Hill pottery, the bossed dishes? Lyne (1999, 285–6) sees them as representing potential sub-Roman activity and closely linked to areas of early Germanic settlement, a case supported by the presence of broadly comparable bossed vessels in ‘Anglo-Saxon’ fabrics at Barton Court Farm Miles 1986, fiche 7:G2–3 no. 5) and Dorchester (Frere 1962, 147–8, no. 20; 1984, 169, no. 146). This may be so, and superficially fits the evidence from the Dorchester area well, but the origins of the type in a regional context clearly lie within mainstream pottery production in the Oxford industry, as seen at Blackbird Leys, although it is particularly unfortunate that close dating was not possible there. It is presumed, but not demonstrable at present, that the type became part of the Compton repertoire through the connec-
tions of potters there with the Oxford industry. Other examples of the bow-sided dish form, both with and without bosses, occur in a variety of fabrics, both at Castle Hill and at other sites in the area. The distribution of the bossed vessels is notably restricted, however, extending from Frilford in the west (Bradford and Goodchild 1939, 60, fig. 13 no. 11) to Blackbird Leys, Dorchester and Castle Hill and as far south as Lowbury Hill (Atkinson 1916, 60, 62, fig. 16 no. 18). Given that Compton was one source of these vessels, however, the distribution should include sites in the vicinity of the production centre, but with the exception of Lowbury Hill there are no data for this area.

Catalogue of illustrated Roman pottery (Fig. 3.6)

**Late Roman fill of hillfort ditch**


**Colluvial and dumping layers behind rampart**

2. Fabric F51. Flagon or jug with angled beaded rim and three or four-ribbed handle. The form is not in Young’s corpus. Context 2017.
3. Fabric F51. Flagon or jug of Young type C12 but the everted bead rim is different. Context 2028.
10. Fabric R30. Medium grey. Narrow mouthed jar with frilled thickened everted rim and cordon at base of neck with impressed decoration. The top of the rim is burnished and there are multiple horizontal burnished lines on the neck and below the shoulder cordon. Contexts 3112 and 3122.
11. Fabric R36. Mid grey. Medium mouthed jar with thickened everted rim. A broad cordon at the base of the neck is defined by grooves and marked with closely-spaced oblique slashes and there is a band of combed wavy line decoration between two girth grooves. Roughly executed overall burnishing on the top of the rim, the shoulder and the lower body and burnished lines on the neck. Sooted on exterior and on top of rim. Contexts 2017, 3075 and 3130.

**Miscellaneous later contexts etc**

20. Fabric M31. Mortarium of Young type WC7. Slight sooting at one point on

21 Fabric Q21. Small everted rim jar. The form is not closely paralleled in Young, who identifies a single jar type in his white colour-coated series (form WC2). Context 3076. Medieval colluvial layer.


POST-ROMAN POTTERY by Paul Blinkhorn

The post-Roman pottery assemblage comprised 123 sherds (2136 g). The estimated vessel equivalent (EVE) by summation of surviving rim-sherd circumference was 1.27. All the post-Roman pottery consisted of early medieval unglazed wares except for a single sherd of late medieval Cistercian ware, two modern sherds and four small sherds of early-middle Saxon handmade pottery, one of which had faint traces of decoration, suggesting a date of the 5th–6th century.

Early to middle Saxon pottery

Four small sherds (10 g) of early to middle Saxon pottery were recovered from Trench 3. One was intrusive in the upper fill of a middle Iron Age pit (ctx 3030), one was from a colluvial layer containing mixed Roman and medieval finds (ctx 3028) and two were residual in a medieval ploughsoil layer (ctx 3044). The fabric (F1) contained moderate to dense chaff voids up to 3 mm and sparse to moderate oolitic limestone up to 1 mm. Such fabrics are typical of early-middle Saxon pottery from this area of Oxfordshire, and can be paralleled at Neptune Wood (this vol.) and at the Oxford Science Park, Littlemore (Blinkhorn 2001, 189–97). The sherd from context 3030 is somewhat abraded, but has faint combed lines on the outer surface, indicating a date of the 5th- or 6th century.

Late Saxon and later pottery

The late Saxon and later pottery was recorded utilising the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

OXAC: Cotswold-type ware, AD 975-1350. EVE = 1.18
WA38: Wallingford ware, AD 1050-1250. EVE = 0.09
OXAG: Ashampstead ware, mid-late 11th–13th century. EVE = 0
OXCL: Cistercian ware, AD 1475–1700. EVE = 0
WHEW: Mass-produced white earthenwares, mid 19th–20th century. EVE = 0
Refitting large sherds from a single Wallingford Ware jar (Fig. 3.7.1; Plate 3.5) were found in a series of contexts within the colluvial layers behind the hillfort rampart in Trenches 2 and 3 (ctx 2004, 2017, 3075, 3076 and 3077). Sherds from contexts 2006, 3022 and 3130 also appear likely to be from this vessel. A large fragment of a further Wallingford Ware jar was found in medieval pit 4003 (Fig. 3.7.2).

PREHISTORIC FIRED CLAY by Cynthia Poole
The assemblage of prehistoric fired clay from Castle Hill comprised 31 fragments weighing 166 g. The fired clay was found predominantly in the fill of early Iron Age pit 3006 and middle Iron Age pit 3019, with small quantities from the late Bronze Age ditch 3017, a middle Iron Age grave (3116) and pit (3109), and a Roman gully (1000) and quarry pit (3067). It is likely to be mostly derived from oven or hearth structures and utilized the same fabrics as used in the other areas excavated.

The single object was a slingshot, largely complete, but slightly damaged at one end, found in pit 3006. It was made in fabric A and fired. It was in the typical pointed ovoid form, but with noticeable flattened facets. It measured c. 44 mm long by 26 mm by 27 mm wide and weighed 24 g. The size is comparable to slingshots.
from middle Iron Age contexts at Danebury Hampshire (Poole 1991, 370–1) though it is somewhat lighter and comparable to those found at All Cannings Cross and the Meare and Glastonbury Lake villages (Bulleid and Gray 1911). It has been suggested, on account of their light weight, that clay slingshots were used for hunting small game or birds rather than warfare. Another use may have been herding, where the intention was to move animals, not injure them.

**ROMAN AND POST-ROMAN FIRED CLAY AND CERAMIC BUILDING MATERIAL by Paul Booth**

Some 33 fragments of fired clay (1190 g) and 98 fragments of ceramic building material (4391 g) were recovered, including six fragments (34 g) of amorphous, undiagnostic fired clay. They are discussed under three major headings: fired clay ‘blocks’ (of Roman date, see further below), tile certainly or probably of Roman date and post-medieval ceramic building material.

**Fired clay ‘blocks’**

This distinctive material, generally characteristic of early Roman sites in the region (see further below), occurred consistently in fabrics with abundant fine sand tempering supplemented with organic inclusions indicated by voids in the fabric. The firing was usually irregular (ie patchy, unlike the consistent oxidised appearance of ceramic building material) and generally considerably less hard than ceramic building material. The material was used largely for flat block-like objects. These range from c 13 mm to 27 mm in thickness, but are characteristically in the middle of this range. It included a number of examples of blocks with a straight edge, which could be either slightly tapered or thickened. The largest surviving fragment (from context 2017) was 195 mm long and 117 mm wide and ranged in thickness from 14 mm (at the edge) to 20 mm. Both surfaces of this piece were quite smooth, but a number of other pieces (eg from contexts 1006/1016, 2016 and 3075/6) had one surface smoothed or burnished and the other (?lower) surface rougher with organic impressions.

Comparable material is increasingly widely recognised in the region, in two main forms. Circular discs are more widespread, occurring for example at Old Shifford (Barclay et al. 1995), Watkins Farm (Allen 1990), Gravelly Guy (Barclay and Wait 2004), Farmoor (Lambrick and Robinson 1979, 53–4), Alchester (Booth 2001) and the Chemistry Research Laboratory, Oxford (Biddulph 2005). However, they are sometimes found together with probable rectangular blocks of the general type present at Castle Hill, as at sites evaluated in the area of the potential Abingdon Reservoir (Hearne 2000; OAU 1998, 37), at Hatford (Booth 2004b) and at Appleford (Booth and Simmonds 2009, 85–7), where again both discs and rectangular blocks were present. The latter appeared to be consistently thicker than the discs but in terms of fabric there was no clear distinction.

Both types of object occur quite consistently in late Iron Age and/or early Roman contexts. Their function remains uncertain; that they were related to food preparation and/or cooking seems most likely, but remains to be demonstrated conclusively. In view of the general absence of evidence of burning, either on the examples from Castle Hill or elsewhere, an association with food preparation may be preferred.

Fragments of fired clay blocks occurred in Trenches 1–3, with the majority of the material (by weight) in Trench 2 (Table 3.11).

<table>
<thead>
<tr>
<th>Trench</th>
<th>Fired clay block</th>
<th>CBM (RB/ probable RB)</th>
<th>CBM (post-med)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>Wt (g)</td>
<td>No.</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>250</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>680</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>13</td>
<td>226</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>92</td>
<td>3</td>
</tr>
<tr>
<td>Unstratified</td>
<td>1</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>1156</td>
<td>72</td>
</tr>
</tbody>
</table>
Ceramic building material: Roman

Roman ceramic building material occurred across the site but some 70% (by weight) was found in Trench 1, the hillfort ditch (Table 3.11). Fabrics were all sand-tempered to varying degrees, and thus prefixed A following the OA Iron Age and Roman pottery recording system. The principal fabric (A1) had sparse-moderate rounded quartz sand grains, some quite large, and occasional flint, chalk and iron oxide inclusions. Fabric A3, with moderate-abundant sand grains, was probably a variant of this. Fabric A2 had sparse-moderate fine quartz sand grains and occasional fine white (chalk?) inclusions. Five joining fragments (846 g) of a tegula from context 1004 were the only pieces assigned to this fabric. This tile had a broad flange and was the only piece to carry a signature, consisting of three well-defined concentric grooves formed with the fingertips and describing slightly more than a semicircle (Fig. 3.8). Six pieces of tile (114 g) had grog or clay pellet inclusions as well as sand (fabric A4), but none of these pieces occurred as typologically identifiable fragments. They included a very small fragment from context 2003 which was notable for having lumps of grog on one surface, clearly a substitute for the sand more usually found on the underside of tiles.

All the certainly identifiable tile fragments were from tegulae. A single small fragment from 3043, too thin (14 mm) to be a tegula may perhaps have been from a box-flue tile. The pieces recorded as tegulae were generally quite thin (less than 25 mm), a typical thickness for tegulae, and only one piece (from 1011) was more than 25 mm thick. The absence of imbrices, which should normally occur in a roughly 1:1 ratio with tegulae, suggests that the material derived from a building located nearby but not actually on the present site and was collected for secondary use.

Ceramic building material: post-medieval

Some 26 fragments (651 g) of ceramic building material were of post-medieval date (Table 3.11). A single brick fragment occurred in context 1001 and a probable floor tile, partly glazed, in context 1005. The remaining fragments were roof tile.

Discussion

The material provides confirmation of the presence of a Romanised building in the vicinity, but probably not within the present site. The building examined by Rhodes in 1948 is a plausible candidate. Material from this building was probably salvaged for secondary use in the late Roman period. Fired clay ‘blocks’ provide an insight into other activities on the site, particularly (most probably) food preparation in the early Roman period.

METALWORK by Ian Scott

The metalwork assemblages comprise 134 iron objects and 4 copper alloy objects (Table 3.12). Whilst the ironwork, and the later copper alloy objects are generally

<table>
<thead>
<tr>
<th>Phase</th>
<th>Tools</th>
<th>Transport</th>
<th>Personal</th>
<th>Household</th>
<th>Door</th>
<th>Security</th>
<th>Structural</th>
<th>Nails</th>
<th>Binding</th>
<th>Misc</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Iron Age</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Middle Iron Age</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Late Iron Age/</td>
<td>3</td>
<td>1</td>
<td>30</td>
<td>9</td>
<td>3</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>78</td>
</tr>
<tr>
<td>early Roman</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Late Roman</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>30</td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>Roman/medieval</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>30</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>3</td>
<td>76</td>
</tr>
<tr>
<td>Medieval</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>30</td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>Post-medieval</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>30</td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>Unstratified</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>30</td>
<td>27</td>
<td>7</td>
<td>9</td>
<td>17</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>70</td>
<td>2</td>
<td>23</td>
<td>18</td>
<td>138</td>
</tr>
</tbody>
</table>
in good condition, the copper alloy objects from Iron Age contexts are poorly preserved. The metalwork assemblage is dominated by nails (70) and miscellaneous or unidentifiable pieces (41). The small number of identifiable objects include a possible door stud (context 2017) and a penannular brooch (context 2017; Plate 3.6) from Roman contexts.

Provenance of the assemblage

The small number of finds from Iron Age contexts—two iron nails from an early Iron Age context (context 3018), and three iron nails (contexts 3004 and 3012) and two miscellaneous iron fragments (contexts 3012 and 3016) from middle Iron Age contexts—are almost certainly intrusive. There are, however, two copper alloy fragments from context 3014 that probably are of Iron Age date (Cat. No.1; Fig. 3.9.1).

The bulk of the metal finds are from Roman and medieval contexts. The Roman finds are numerous (47), but comprise predominantly nails and miscellaneous fragments (40). There are also two hobnails, a small penannular brooch (Cat. no. 2; Plate 3.6), a door stud (Cat. no. 3), and three objects of uncertain function—a pin or nail (Cat. no. 4), a possible clamp (Cat. no. 5) and an object with an oval blade (Cat. no. 6). The penannular brooch is of a late Iron Age/early Roman form, but was found in a late Roman context, so may have been an heirloom.

Many of the finds are from colluvial deposits with mixed Roman and medieval finds (16). The finds from these contexts comprise seven nails, a hobnail, a horseshoe nail, and seven miscellaneous or unidentified fragments.

The largest part of the metalwork assemblage (61) is from medieval contexts including colluvial deposits. The identifiable objects include a spoon bit (Cat. no. 9; Plate 3.7); a horseshoe fragment of medieval form (context 6024); three knives (Cat. nos 10–12), one of which is of a distinctive early medieval form; and a possible handle mount from a vessel or bucket (Cat. no. 15; Fig. 3.9.3). There is also a decorative door hinge fragment (Cat. no. 14; Fig. 3.9.2) and a barb spring padlock bolt (Cat. no. 13), both of medieval form. Amongst the uncertain items are two socketed objects, which may be arrow-, or bolt-heads (Cat. nos 16 and 17; Fig. 3.9.4–5).

Catalogue of notable objects

Middle Iron Age

1 Two cast fragments (Fig. 3.9.1). Cu alloy. Two fragments from objects of hollow curved cross section. Possibly parts of hollow cast rings? The longer fragment has a deposit, possibly some sort of filler on the inner hollow curved surface. Uncertain function. Middle Iron Age pit 3013, ctx 3014.

Late Iron Age and Roman

2 Penannular brooch. Fe. A small brooch with rolled terminals. Late Roman ‘midden’ layer 2017. Plate 3.6. Simple penannular brooch related to Fowler type C, which was originally dated broadly to the period from the 1st century BC to the Anglo-Saxon period (Fowler 1960, 151–52, 165–66, 171). This dating has been refined with the recognition of a plain earlier form dating to the late Iron Age, to which the present example belongs, and a much later form often of flat cross-section and decorated (Fowler in Crummy 1983, 18–19). See examples from Dragonby (Olivier 1996, 261–63, figs 11.11 and 11.12).

3 Door stud. Fe. Stud with a large, almost flat, circular head. Square section stem, with battered flattened end. L: 45 mm; D: 57 mm. Late Roman ‘midden’ layer 2017. SF 3060.

4 Nail or pin. Fe. Almost conical head and broken stem of circular section. L: 46 mm. Late Roman ‘midden’ layer 2017.

5 Possible clamp. Fe. Broad back, slightly curved in section, curving to a thin point at one end, broken at the other end. L: 33 mm. Late Roman ‘quarry’ pit 3067, ctx 3055. SF 3022.
6 Oval blade or plate. Fe. Thinning for stem of rectangular section at one end. Part of a tool? L: 65 mm; W: 40 mm. Late Roman layer 3130. SF 3157.

7 Socketed awl. Fe. Parallel-sided socket and tapering point of square/diamond section. The point is offset to one side of the socket. L: 89 mm. Medieval colluvial layer, ctx 3076. SF 3059. Socketed awls are not common. There is a Romano-British example from the Walbrook, London (Manning 1985, 41 and pl.16, E28). This is probably a residual piece of Roman date.

8 Possible punch. Fe. Comprises tapering spike with stepped head. The tip is eroded. L: 97 mm. Medieval ploughsoil layer 5013.

9 Spoon bit. Fe. Complete, with diamond-shaped tang. The stem is roughly circular in section. The blade of the bit, of hollow section is heavily encrusted with corrosion products. Medieval pit 4003, ctx 4040. SF 4005. Plate 3.7. Compare examples from Anglo-Scandinavian York (Ottaway 1992, 532–35 and fig. 208, nos 2262–64) and medieval York (Ottaway and Rogers 2002, 2726–7 and fig.1335, nos 8189–91, 11487 and 13690).


11 Whittle tang knife. Fe. Narrow blade with slightly curved back. Strongly triangular blade. Ottaway Type C1. L: 130 mm. Medieval pit 6011, ctx 6024. SF 6001. A good Saxon form (see Ottaway 1992, 568–70 and fig. 231, no 2837; fig.233, no 2877).

12 Whittle tang knife blade. Fe. Tapering blade of triangular section. Tip missing. Angled choil. L: 87 mm. Medieval pit 6011, ctx 6024. SF 6002. The form of the blade is not diagnostic. There are a few Romano-British examples with this blade form (Type 16: Manning 1985, 116, fig. 28), but also medieval examples (Cowgill et al. 1987, 8–2, fig. 55, nos 28, 30 and 32).

13 Double barb-spring padlock bolt. Fe. Bolt from a cylindrical padlock. The circular plate has two barb-springs, one with a single spring, the other with the...
two springs. L: 73mm. Medieval pit 4003, ctx 4024. SF 4001. Cylindrical, or barrel-, padlocks with barb-springs are a distinctive medieval form. See the examples from York (Ottaway and Rogers 2002, 2861–67, figs 1442–48) and from London (Egan 1998, 91–99).

14 Probable hinge or door strap (Fig. 3.9.2). Fe. One end has a tightly rolled scroll. There is a single clear nail hole and another possible with a fragment of nail in situ. L: 150 mm. Medieval colluvial layer 3077. SF 3045. Possibly part of C-hinge or associated strap work from an exterior door (see Geddes 1999).

15 Possible handle mount (Fig. 3.9.3). Fe. Loop terminal at one end. This is thicker than the strip and broken. The strip is shaped and has two nail holes. Decorative and slightly curved mount. Roman-medieval colluvial layer 3028. SF 3012.

16 Socketed point (Fig. 3.9.4). Fe. Point possibly with small diamond-shaped head. The point was originally heavily encrusted with corrosion products and the x-ray plate does not provide evidence for the form of the point. Because the object is mineralised careful cleaning has not given conclusive evidence for the form of the point. Probably an arrowhead. L: 63 mm. Medieval colluvial layer 3077.

17 Socketed point (Fig. 3.9.5). Fe. Encrusted around head. Probably an arrow or bolt head with a tapering square section point. L: 65 mm. Medieval colluvial layer 3077. SF 3044.

18 Strip or binding. Fe. Plano-convex cross-section, wide in the middle and tapering to each end. One end bent back over the centre. No clear nail holes show on x-ray. One end has a notch that may be a broken nail hole. L: 175 mm. Medieval colluvial layer 3043.

ROMAN COINS by Paul Booth

Five small late Roman coins were recovered, equivalent to AE4 (ie 13 mm diameter and less) in size. All are in relatively poor condition. One of the coins was found within late Roman pit 4009, two within late Roman colluvial layer 3122, and two within medieval colluvial deposits (Table 3.13).

All the coins are late 3rd to 4th century in date. One bears traces of a radiate crown of late 3rd century date and another is attributable to the House of Valentinian (AD 364–378). The other three are completely illegible. The coins are intrinsically unremarkable and typical of Roman settlement site finds.

Table 3.13 Roman coins

<table>
<thead>
<tr>
<th>Feature</th>
<th>Context</th>
<th>Small find no.</th>
<th>Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medieval colluvium</td>
<td>3043</td>
<td>3031</td>
<td>?Gloria Romanorum (emperor and captive)</td>
<td>364-378</td>
</tr>
<tr>
<td>Medieval colluvium</td>
<td>3076</td>
<td>3048</td>
<td>uncertain</td>
<td></td>
</tr>
<tr>
<td>Late Roman colluvium</td>
<td>3122</td>
<td>3055</td>
<td>uncertain</td>
<td></td>
</tr>
<tr>
<td>Late Roman colluvium</td>
<td>3122</td>
<td>3056</td>
<td>Radiate</td>
<td>late 3C</td>
</tr>
<tr>
<td>Late Roman pit 4009</td>
<td>4011</td>
<td>4000</td>
<td>uncertain</td>
<td></td>
</tr>
</tbody>
</table>

ROMAN GLASS based on comments from Hilary Cool

Four fragments (122 g) of Roman glass were recovered. Post-medieval layer 1002 produced a single fragment (4 g), probably a chip from a blue/green prismatic bottle of 1st to 3rd century AD date. Late Roman colluvial layer 3122 contained two fragments (117 g) of a vessel handle (SF 3053 and 3054), probably of late 4th to 5th century AD date. A small fragment (1 g) of a pale blue bead recovered from an environmental sample from late Roman layer 3130 is also consistent with a late 4th century date.

WORKED BONE by Leigh Allen

Three worked bone objects and one worked antler object were recovered, all from early Iron Age pit 3006. The artefacts comprise a needle, two possible gouges and a possible handle.
Figure 3.10  Worked bone
Catalogue of illustrated artefacts (Fig. 3.10)

1 Needle. A needle with a circular cross section that flattens to an oval cross section just below the eye. The needle has broken across the eye (a common form of break); only the very bottom section of the eye can be seen and it was probably originally oval in form. The shaft has an upward curve towards the tip. The whole object is highly polished. Similar examples have been recovered from Danebury (Sellwood 1984, 380–382, fig. 7.32, nos 3.87–3.39). Pit 3006, context 3061. SF 3064.

2 Possible gouge. An incomplete sheep radius (right) with a small, crudely made perforation through the proximal end. The beginnings of a second perforation (or possible a tooth mark) can be seen just above this. There are areas of light polish on the shaft. It is possibly a fragment from a gouge. Pit 3006, context 3039.

3 Possible gouge. An incomplete sheep metatarsal (left) with a longitudinal perforation down through the proximal end. There are areas of polish along the shaft. It is possibly a fragment from a gouge, but the functional end of the object has broken off, making this identification uncertain. Pit 3006, context 3061.

4 Possible handle. An incomplete worked antler tine with areas of high polish on the curved end of the tine and along the back edge. The broken end shows possible traces of a drilled hole. It is possibly a fragment from a handle. Pit 3006, context 3034.

WORKED STONE by Fiona Roe

Seven objects of worked stone were recovered (see catalogue in digital report). They comprise part of a possible stone mould, two spindlewhorls and four quern or rubber fragments (Table 3.14), while a little burnt stone was also collected. The different varieties of stone were identified by examination with a x8 hand lens. Most were found to be of local origin, although the igneous rock used for the mould and the Upper Old Red Sandstone used for a later rotary quern were both imported from some distance away. Only two pieces, the possible mould and a spindlewhorl, came from prehistoric contexts that could be linked with the hillfort.

Possible mould

A piece of igneous rock with a flat worked surface, more smooth than might be expected on a quern or rubber, is possibly part of a mould. It was recovered from the early Iron Age uppermost fill (5011) of the late Bronze Age hilltop enclosure ditch, but both the variety of stone and its possible use suggest a later Bronze Age date for the object.

The stone is a coarse-grained igneous rock and mainly light pink in colour although grey where it has been burnt. The pink colouration comes from pink alkali feldspar, while there are darker inclusions of a ferro-magnesian mineral, which is now altered in places so that it appears bronzed. This is clearly an imported piece and one that is without parallels locally. A discussion of the geology and parallels are presented in the digital report.

Table 3.14: Summary of stone objects from Castle Hill

<table>
<thead>
<tr>
<th>Mould?</th>
<th>Rubber</th>
<th>Saddle quern</th>
<th>Saddle quern reused as rubber</th>
<th>Rotary quern</th>
<th>Spindle-whorl</th>
<th>Phasing Information</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syenite check</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>LBA/EIA</td>
<td>1</td>
</tr>
<tr>
<td>Chalky greensand</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>EIA</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Culham Greensand</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>Unstratified</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Lower Calcareous Grit</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>Unstratified</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Quartzite</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>Unstratified</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Chalky greensand</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>Late Roman</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Upper Old Red Sandstone</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>Late Roman</td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Totals | 1 | 1 | 1 | 1 | 2 | | 7 |
Querns
The saddle querns consist of two fragments, one of which appears to have been re-used after breakage as a rubber, together with another rubber fragment. These three fragments were all unstratified, but both the types of quern and the materials used for them are typically prehistoric. The rotary quern fragment is clearly of later date and consists of a piece of rim from a quern of Roman disc type, found in a late Roman colluvial layer (ctx 3122).

One saddle quern was made from Lower Calcareous Grit, which came from the Corallian ridge 16 km to the north-west (Arkell 1947, 78). A second saddle quern was made from Lower Greensand found around Culham only 7 km north-west of the site (ibid., 160). A third fragment, a rubber probably re-using a broken fragment of saddle quern, was made from a cobble of quartzite, which could have been collected either from the local Plateau Gravel-Jukes Brown and Osbourne White 1908, 84) or the local Thames gravels.

These unstratified saddle quern fragments could well be either late Bronze Age or Iron Age in date. Lower Calcareous Grit is known, for instance, from a late Bronze Age context at Wallingford (Roe and Barclay 2006, 71), while Culham greensand was found at Appleford (Hinchcliffe and Thomas 1980, 60 & fig 24, 4) and at the late Bronze Age site at Reading Business Park (Roe 2004, 95). Abundant evidence for the Iron Age utilisation of these two quern materials comes from the settlement site outside Castle Hill. Saddle querns made from both Lower Calcareous Grit and Culham greensand were found in mainly early Iron Age contexts in the trenches around the hillfort, while further finds of middle Iron Age date came from Hill Farm.

By contrast, the Roman rotary quern was made from Upper Old Red Sandstone, which had been transported some 105 km from the Forest of Dean/Wye Valley area (Welch and Trotter 1961, 49). Rotary querns made from upper Old Red Sandstone are known from virtually all the Roman sites in the area (Shaffrey 2006).

Spindlewhorls
The spindlewhorls are both of the disc variety and made from the local chalky greensand. The Sinodun Hills consist mainly of a variety of Upper Greensand which has been termed malmstone (Jukes-Brown and Osbourne White 1908, 11), and this
includes calcareous stone with the appearance of chalk. It was also used to make
loomweights. One spindlewhorl was recovered from an early Iron Age fill in the top
of the late Bronze Age hilltop enclosure ditch (ctx 3024, Fig 3.11.1). The other came
from a colluvial layer containing both Roman and medieval finds, along with some
residual Iron Age pottery (ctx 3122, Fig 3.11.2).
HUMAN BONE by Peter Hacking, Annsofie Witkin and Ceridwen Boston

The assemblage comprised disarticulated human bone from the late Bronze Age enclosure ditch; five articulated burials and three deposits of disarticulated human bone from middle Iron Age pits; one newborn, dating to the late Iron Age to early Roman period, inserted into the top of a middle Iron Age pit; one adult inhumation dating to the late Roman period; and numerous disarticulated bone deposits recovered from late Roman, medieval and post-medieval contexts. Of particular interest is rare evidence of dismemberment of a middle Iron Age burial (3143), with cut marks clearly visible on the left femoral condyle of the knee joint (see Plate 4.1).

Although the state of preservation varied, the articulated skeletons were generally in a fair condition with little erosion to the cortical surface. The middle Iron Age disarticulated bone was in good condition, but that from late Iron Age and Roman contexts were generally in a poor condition and displayed numerous old post-mortem fractures suggestive of disturbance and redeposition.

Details of the methodology can be found in the digital report.

Late Bronze Age

Fill 3081 of enclosure ditch 3017 contained a single fragment of left radial shaft of an adult individual of unknown sex. The bone was radiocarbon dated to 1050–890 cal BC/880–840 cal BC (Poz-12519).

Middle Iron Age

The articulated remains of four adults (3113, 3143, 3160 and 3163) and one neonate (3048) were recovered from pits dating to the middle Iron Age (Table 4.1). The articulation of body parts suggests that they had been buried in a fleshed state, probably not long after death. With the exception of skeletons 3143 and 3160, all skeletons were single inhumations placed within partly filled pits.

The preservation of neonatal skeleton 304, estimated to have been 39–40 weeks in utero was fair, and much of the skeleton was represented, with the exception of a number of the long bones.

Skeleton 3113, an adult female, aged 25–35 years, had suffered damage from ploughing and machining. Although fragmentary, most elements were present with the exception of the cranium. Only fragments of the mandible remained.

Skeleton 3163, of an adult of indeterminate age, was not retrieved in full as most of the skeleton lay beyond the eastern limit of excavation and hence was left in situ. Only the right humerus, radius and ulna were recovered.

Pit 3152 contained the articulated remains of three individuals. The near complete crouched skeleton of an adult male 3160, aged 40–50 years, lay at the base...
of the pit. Bone from the skeleton was radiocarbon dated to 370–160 cal BC (Poz-12525). He was overlaid by the partial remains of a possibly female adult aged 20–25 years, (3143). Her remains occurred as four separate articulated units: (1) thoracic vertebrae 4–11 and fragments of the left and right ribs; (2) thoracic vertebra 12, lumbar vertebrae L1–5 and the sacrum; (3) the left pelvis and femur; and (4) the left tibia. The two skeletons were separated by a thin deposit of clean soil, and are assumed to have been placed within the pit in one episode. In the late Iron Age-early Roman period, the last two fills were deposited in order to bury neonate 3074 (radiocarbon dated 20 cal BC–130 cal AD; Poz-12518). It is uncertain whether this later burial was made with remembrance of the earlier ones, or whether the choice of pit 3152 was coincidental.

Disarticulated human remains were present in the fills of three middle Iron Age pits. The primary fill (3016) of pit 3015 contained part of the left pelvis and proximal femora of an adult male and a worn second permanent incisor, while the uppermost fill (3058) of pit 3057 contained cranial fragments and two hand bones of an adult of unknown sex. Fill 6023 of pit 6022 contained the distal femur and proximal tibia of the left knee joint of an adult possible male.

**Stature**

The stature of all four adult inhumations is given in Table 4.1, and is close to the average stature in the British Iron Age, calculated as 1.68 m (5’6”) for males and 1.62 m (5’3”) for females (Roberts and Cox 2003, 396).

**Dental pathology**

The dentition of young adult 3113 showed one small carious lesion (1/17). Both the left and right mandible showed bony resorption consistent with moderate periodontal disease. The crowns of the two upper central incisors each displayed one groove indicative of dental enamel hypoplasia (2/17). Skeleton 3160 had multiple caries (9/28), considerable periodontal disease, and calculus deposits. Six teeth (6/32) had been lost ante-mortem. All of the dental diseases mentioned here are inter-related. Although genetic predisposition does play a role in the development of dental disease, behavioural factors, such as a diet rich in carbohydrates and poor oral hygiene, are most responsible.

Dental enamel hypoplasia (DEH) was noted on the dentition of skeletons 3113 and 3160. The unerupted deciduous dentition of neonate 3048 showed no DEH, indicating a lack of stress in utero.

**Skeletal pathology**

Skeleton 3160 displayed osteophytosis and porosity of cervical vertebra 6 and thoracic vertebra 10, and osteophytosis of T11–T12 and L3–L5. The former is consistent with osteoarthritis. Skeleton 3143 also showed slight osteocyte formation on lumbar vertebral bodies L1 and 2. Slight Schmorl's nodes were observed in T11 and 12, and L2 and 3. The defect was severe in L1. These degenerative changes are associated with advancing age, but in such a young individual, they may also have formed in response to stress placed on the spine by repeated strenuous activity.

A small enthesophyte was present at the insertion point of infraspinatus muscle to the right humerus of skeleton 3143. This muscle assists in raising and lateral rotation of the arm. The injury was healed and of long standing.

One rib fragment of skeleton 3143 displayed a smoothed raised well-healed plaque of new bone on the visceral surface. Such lesions are associated with chronic pulmonary disease, particularly infection (Roberts and Manchester 1995).

**Peri-mortem modification**

A number of parallel cut marks were clearly seen on the joint surface of the condyles of the left distal femur of skeleton 3143 (Plate 4.1). Macroscopically these appeared as narrow, V-shaped grooves consistent with those made with a sharp blade. Faint cut marks were also seen on the left tibial plateau, but these have not been confirmed microscopically and may well prove to be taphonomic in nature. No cut marks were observed on the other bones of this skeleton.
The cut marks on the femur suggest dismemberment at the left knee joint. The separation of skeleton 3143 into four parts might suggest that the corpse had been allowed to partially decompose prior to burial. The presence of cut marks on the femoral condyle, and the articulation of body parts, however, are not consistent with the normal sequence of decomposition of soft tissue, in which joints separate in a specific order, according to the relative strength of muscle and ligament attachments. The large joints of the shoulder, elbow, hip and knee are first to separate, followed by the joints between the sacrum and pelvis, the hand, the lower leg and foot, the radius and ulna, the sacrum and fifth lumbar vertebra, the skull and axis, the lumbar segments, the first and second vertebrae, the skull and mandible, and the C3 to C7. Last to disarticulate are the thoracic vertebrae, the tibia and fibula, and the feet (Ubelaker 1974, 28). Whilst the femur and tibia of the left knee of skeleton 3143 were separated (apparently dismembered), the left hip was still articulated. The spinal column had been separated between T11 and 12, but otherwise remained intact. The skull and vertebrae of the neck and upper chest, however, were missing. The evidence suggests that decomposition was not advanced and that certain body parts had been deliberately selected whilst the corpse was still fairly fresh.

Discussion

The insertion of complete articulated individuals, articulated but incomplete body parts, and isolated, presumably skeletonised human bones into pits and other settlement features is a well-recognised characteristic of the Iron Age (Whimster 1981; Wilson 1981; Wait 1985; Hill 1995a). The variation in the treatment of human remains suggests a range of burial practices, which appears to include the careful placement of the complete corpse within empty or partially filled features soon after death; dismemberment of fleshed cadavers and the selection of body parts for interment or possible curation elsewhere amongst the living; and the deliberate or accidental incorporation of skeletonised bones within settlement features, possibly as a burial rite secondary to excarnation (Carr and Knüsel 1997).

Six pits at Castle Hill contained articulated skeletons or disarticulated human bone. Other Oxfordshire examples of Iron Age ‘pit burials’ include Queen Street, Abingdon (Parrington 1975), Ashville, Abingdon (Parrington 1978), Cassington Mill (Chambers 1977), Allen’s Pit, Dorchester (Whimster 1981), Gravelly Guy (Lambrick and Allen 2004) and possibly Watkins Farm, Northmoor (Allen 1990).

The presence of clear cut marks on the femur of skeleton 3143 at Castle Hill is particularly significant. Although dismemberment has often been associated with the presence of partially articulated body parts in features of this period (eg Carr and Knüsel 1997; Cunliffe and Poole 1991, 424), osteological evidence of cut marks consistent with dismemberment is extremely rare.

Late Iron Age and Roman period

Two articulated skeletons (3012 and 3074) and 11 deposits of disarticulated bone dated to this period. Neonatal skeleton 3074 had died either as a late foetus or shortly after birth (39–40 weeks). It was radiocarbon dated to 20 cal BC–cal AD 130 (Poz-12518) but was inserted into the top of middle Iron Age pit 3152 (see above). The legs were flexed at the hip and knee, with the lower legs and feet folded beneath the torso, which had been laid prone. The arms were elevated and flexed at the elbows, so that the lower arms and hands were folded beneath the head. The head was turned to the right side. This body position would have been achieved by initially positioning the infant upright and flexing the legs (a normal sitting position for an older infant), and then laying the body forward, and tucking the arms beneath the head. Considerable care appeared to have been taken in laying out this infant. The burial was orientated north-south.

The adult male skeleton 3012, aged 35–45 years, had been placed within a shallow, purpose-built trapezoidal grave cut into the upper fills of Iron Age pit 3015. It was near complete, but lacked most of his cranium and both feet. The body was supine in an extended position with the feet together and the hands overlying the pelvis. It was orientated SW-NE. Truncation by ploughing had removed of much of the skull, leaving the right zygoma and the mandible. The size and shape of the grave
cut indicated that there was no coffin. Sherds of three late Roman pots overlay the pelvis, but due to disturbance, it is unclear whether these were residual or had been grave goods.

The majority of the disarticulated human remains, all from adults, were found in fills of the hillfort ditch and quarry pits 3047 and 3157. The rest lay within colluvial layers (2006, 2007 and 3062), pit fills (3085 and 3161) and midden 2017. It is probable that they were redeposited within these contexts, having originated from disturbed Iron Age deposits, such as pit fills. None, however, were scientifically dated. Only one of these bones, a mandible (1013) could be sexed: it came from a mature adult, probably male.

**Stature**

At 1.59 m (5' 2''), male skeleton 3012 was considerably below average height of 1.69 m (5' 5'') for the period (Roberts and Cox 2003).

**Dental pathology**

The partial mandible of skeleton 3012 displayed considerable periodontal disease and calculus (7/8), but no caries. The dentition of the disarticulated mandible from fill 1013 showed calculus deposits. Six teeth (6/16) had been lost ante-mortem.

**Skeletal pathology**

The dens of the axis found within fill 1013 displayed considerable osteophyte formation consistent with spinal degenerative joint disease. A healed and longstanding fracture was present on the proximal end of the left first metacarpal of skeleton 3012.

**Discussion**

One late Iron Age-early Roman neonatal pit burial and one late Roman adult male inhumation within a purpose-cut grave were excavated within the hillfort. A number of deposits dating to the late Roman period also contained disarticulated human bone, although in many cases it was uncertain if these were deliberately included or were inadvertently redeposited from disturbed burials. Given the limited scale of excavation, it is unclear whether the two burials were isolated features, or parts of larger burial groups. Possible evidence for the latter is provided by four inhumation burials excavated just outside the eastern entrance to the hillfort in the 1980s. These burials were unaccompanied, but the burial rite would be consistent with a date in the late Roman period (Chambers 1986).

**Disarticulated skeletal remains in medieval and post-medieval contexts**

Disarticulated human remains were present in six medieval (3022, 3028, 6012, 6024, 6030 and 6033) and four post-medieval contexts (1002, 2000, 2001 and 5050). Bone was also recovered from layer 3096, which contained artefacts of both Roman and medieval date. All these human remains were redeposited, possibly the disturbed remains of Iron Age or Roman burials.

Human remains within 1002, 3028, 3096, 6033 were identified as adult. The greater sciatic notch of the pelvis within 3028 was definitely male. The bones from 5050 were from an adult aged over 32 years, as indicated by a partial fused eocrotbral suture. Two bones within the buried plough soil 3022 were those of a subadult aged 8–10 years. No pathology was noted on these bones.

**ANIMAL BONE** by Fay Worley and Jennifer Kitch with Gill Cox and Emma-Jayne Evans, fish bones by Rebecca Nicholson

The excavations produced a total of 23,726 animal bone fragments (refitted count) weighing 72.025 kg, of which 10,561 (45%) were identified to taxon. The largest proportion of the animal bone assemblage was recovered from the early Iron Age and late Roman phases (Table 4.2).
Details of the methodology can be found in the digital report. Bones were analysed by chronological period. Some colluvial layers containing substantial numbers could only be dated as ‘Roman to medieval’; these were included in the analysis in case they showed significant differences to the more securely dated Roman or medieval groups.

**Condition of assemblage**

The condition of the assemblage varied from excellent to very poor, but the majority was recorded as good to poor. Bone from the earlier phases of activity was generally in better condition than that from the later phases (Figure 4.1). The ‘Roman to medieval’ bone assemblage from colluvial layers overlying late Roman midden deposits was, unsurprisingly, in particularly bad condition.

Gnawing, generally carnivore tooth marks, was identified on low numbers of fragments from most phases. Burnt bones were recovered from all closely dated periods except the late Iron Age/early Roman period.

**Species identified**

The animal bone assemblage was found to contain cattle (*Bos taurus*), sheep (*Ovis aries*), sheep or goat (*Ovis aries* or *Capra hircus*), pig (*Sus scrofa*), horse (*Equis caballus*), dog (*Canis familiaris*), red deer (*Cervus elaphus*), roe deer (*Capreolus capreolus*), fox (*Vulpes vulpes*), badger (*Meles meles*), rabbit (*Oryctolagus cuniculus*), hare (*Lepus sp.*), weasel (*Mustela nivalis*), field vole (*Microtus agrestis*), water vole (*Arvicola terrestris*), domestic fowl (*Gallus gallus*), raven (*Corvus corax*), blackbird (*Turdus merula*), teal (*Anas crecca*), herring (*Clupea harengus*), eel (*Anguila anguilla*), pike (*Esox lucius*) and dace (*Leuciscus leuciscus*). Further fragments were identified as large, medium or small mammal, frog or toad, mouse, duck, finch, bird, and fish.
Wild mammals and disturbance to archaeological contexts

The archaeological deposits had been disturbed by animal burrows, especially in the hillfort rampart, which also introduced intrusive animal bones. A complete badger skeleton was recovered from a burrow in the hillfort rampart (2022) and rabbit bones were recovered from the late Roman midden (2017). Current consensus holds that rabbits were not present in Britain between the last Ice Age and subsequent re-introduction by the Normans (Yaldon 1999, 158–61). The presence of small numbers of badger bones in the late Roman fills of the ditch, however, may suggest that badgers became established at the hillfort during the Roman period, which would suggest a period of relatively low use of the hillfort at some stage.

Small mammal and microfaunal bones were recovered from some contexts. The presence of voles and weasel bones indicates a grassland or deciduous woodland habitat nearby. The water voles from the Iron Age and Roman periods and anura from the Iron Age and medieval periods indicate proximity to slow moving water or ponds, although water voles may also exploit grassland habitats.

Metric analysis

Although 328 bone fragments from the assemblage were measured, too few measurements are available for any one phase to provide meaningful interpretations of sex classes or stock improvement. Withers heights could be calculated for 22 cattle, sheep, sheep or goat and dog specimens (Fock 1966; Matolsci 1970; Teichert 1975; Clark 1995).

Five early Iron Age cattle stood at between 1.05 m and 1.18 m at the shoulder. These heights are within the general range found at other Iron Age sites (Wilson 1978, 116). The largest two individuals are within the range suggested for bulls from Ashville, Abingdon (ibid.). A single Roman to medieval individual stood at 1.02 m.

The withers height of nine early Iron Age, two middle Iron Age, two late Roman and one medieval sheep or goat specimen could also be calculated. These animals were all found to fall within the same height range: early Iron Age individuals ranged from 0.48 m to 0.59 m, middle Iron Age individuals from 0.49 m to 0.59 m, late Roman individuals from 0.56 m to 0.58 m and the medieval individual stood 0.55 m tall at the shoulder. The size range of Iron Age sheep/goats from Castle Hill is slightly shorter than that recorded at some other Iron Age and Roman sites (Wilson 1978, 117). The sizes of the Roman and medieval sheep/goats are comparable to those found elsewhere (eg Maltby 1979, 51).

The withers height of two late Roman dogs could be calculated. A metacarpal from the partial dog skeleton found in Roman fills of the hillfort ditch (context 1011) indicated that the animal stood at approximately 0.54 m, only slightly smaller than the late Roman sheep. A dog metatarsal from Roman layers overlying the rampart indicated that a second animal was slightly smaller, standing at a withers height of 0.42 m. Roman dogs are known to have stood at a range of sizes from 0.24 to 0.80 m tall at the shoulder, but with very few animals over 0.58 m (Harcourt 1974; Clark 1995). The larger of the Castle Hill dogs falls towards the top of the range for most larger dogs of the period (following Clark 1995), which Harcourt (1974) suggests may have been used as hunting dogs, guard dogs and fighting dogs.

Evidence for pathology

Eight bones had evidence of pathological change. Of these, a large mammal sacrum (context 3020) from the middle Iron Age had slight eburnation on the spinous process at the point of articulation with the last lumbar vertebra. The aetiology of this joint disease is unclear but it may have been caused by pressures on the hips from heavy work, or related to other joint disease elsewhere in the skeleton.

The assemblage by phase

Late Bronze Age

A small late Bronze Age animal bone assemblage was recovered from the lower fills of the hilltop enclosure ditch (378 fragments). The assemblage included domestic taxa (cattle, sheep or goat and pig) but the majority could only be identified to large,
medium and small mammal categories. Four vole molars were also recovered from late Bronze Age deposits. Very few bones had butchery marks and no evidence of pathology was noted.

Taken as a proportion of all late Bronze Age domestic mammal bones (n=45), cattle and sheep or goat bones were the most frequent (44% and 36% of the assemblage respectively). Pig bones were less frequent representing only 20% of the assemblage.

A cattle tibia had cut marks at its proximal end and chop marks were identified on a large mammal scapula.

Sixteen sheep or goat elements were identified, including all regions of the skeleton. Nine pig bone fragments comprised mandible, tooth, innominate and metapodial fragments. Forty-six further fragments were identified as medium mammal and may be pig or sheep/goat.

**Early Iron Age**

The early Iron Age provided the largest assemblage of animal bone (8034 fragments) much of which was from pit 3006. The remainder mostly came from the upper fills of the late Bronze Age enclosure ditch, the hillfort ramparts and counter-scarp bank.

Overall, sheep or goat (45%) was the most common taxon, followed by cattle (34%) and pig (21%). Excluding the material from pit 3006, however, cattle was the most frequently represented taxon (45%), followed by sheep or goat (31%) and then pig (25%).

**Pit 3006**

Over a third of all early Iron Age animal bone fragments came from pit 3006 (Table 4.3). It included cattle, sheep, sheep or goat, pig, horse, dog, roe deer, weasel, raven and fish bone, with further fragments identified to mammal size classes and as bird. The fish bone (ctx 3061) could not be identified.

Only cattle, sheep (including sheep/goat specimens), pig and raven were represented by more than one or two fragments of bone. As a proportion of their sum (n=621), 64% were sheep or goat, 20% cattle, and 16% pig. The roe deer, horse and fish are noteworthy. The roe deer metacarpal suggests that this animal was hunted in the early Iron Age. A butchered horse tibia had several cuts on the anterior side and a chop across the posterior mid-shaft indicating division of the carcass and

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**Table 4.3 Minimum number of elements and minimum number of individuals (MNI) for cattle, sheep (including sheep/goat) and pig in pit 3006. Calculated using bone zone, epiphyseal fusion and tooth attrition data. Numbers in brackets include large mammal fragments**

<table>
<thead>
<tr>
<th></th>
<th>Cattle</th>
<th></th>
<th>Sheep</th>
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<th>Pig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>N/A</td>
<td>R</td>
<td>L</td>
<td>N/A</td>
</tr>
<tr>
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<td></td>
<td></td>
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<tr>
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<td>9 19</td>
<td>5 7</td>
<td></td>
<td></td>
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<td></td>
<td>2 3</td>
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<td></td>
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<tr>
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<td></td>
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<td>2 2</td>
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<td>2 2</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2 2</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>5 10 4</td>
<td>1 1</td>
<td></td>
<td></td>
</tr>
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<td>4 7 2</td>
<td>1 1</td>
<td></td>
<td></td>
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<td>3 11 1</td>
<td>2 2</td>
<td></td>
<td></td>
</tr>
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<td>1 1</td>
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<td>2 2</td>
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<td>2 6</td>
<td>5 3</td>
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<td></td>
</tr>
<tr>
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<td>1 1</td>
<td>4 9</td>
<td>10 2</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>1 1</td>
<td>4 2</td>
<td>7 2</td>
<td>1 1</td>
<td></td>
</tr>
<tr>
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<td>1 1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>MNI</td>
<td>4 19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
possibly removal of meat. The fish bone is of note due to their scarcity at British Iron Age sites.

The raven bones comprised an articulated skeleton. No evidence of butchery or burning was noted on the skeleton. Skeletons of ravens are relatively common at hillforts in southern Britain, for example at Danebury and Winklebury in Hampshire (Grant 1984; Hill 1995a), and are also known from early Iron Age storage pits in the Upper Thames Valley at Coxwell Road, Faringdon (Weaver and Ford 2004, 167). They are frequently found on Roman sites, and may have been husbanded during that period (Parker 1988).

Cattle bones comprised a minimum of four individuals (126 fragments). Bone fusion suggests that at least one individual was over the age of 3.5–4 years old at death with a second at least 2–2.5 years old, and a third under 1–1.5 years. Mandibular tooth attrition indicates that one animal was adult or senile. A withers height of 1.18 m could be calculated for one individual. This animal was large for the time and may have been a bull (see above).

Butchery marks on twelve cattle bones indicate that the animals had been divided into portions using both cleavers and knives. A calcaneum chopped longitudinally may have been processed for bone marrow.

Pig bones comprised 100 fragments from a minimum of eight individuals. Mandibular tooth attrition indicates that one animal was foetal or neonatal, one immature, three sub-adult and three adult. Pig canine teeth indicate that at least four individuals were male and at least one was female. The presence of a foetal or neonatal individual suggests that they were domestic pigs rather than wild boar. The pigs seem to have been included as carcass portions rather than complete animals. Mandibles and forelimb long bones are over-represented in the assemblage compared to other regions of the skeleton. Butchery mark evidence also suggested the portioning of carcasses using knives and cleavers.

The sheep goat bones (395 fragments) represent a minimum of 19 individuals. There is a bias towards certain elements, particularly mandibles, scapulae, radii and tibiae, but also with many metapodials, humeri, ulnae and innominates represented. Femora are underrepresented among the long bones. Butchery marks were identified on 21 sheep or goat bones and indicate that, like the cattle, pigs and horse, sheep or goats were included as portions rather than complete individuals. The majority of butchery marks were identified on the hind limb.

Tooth attrition from sheep or goat mandibles indicated that the assemblage included six neonates (found in contexts 3034, 3036, 3059 and 3061). In the British Iron Age sheep most likely lambed in March and April (O’Connor 1998), so the presence of these individuals could perhaps suggest that the pit was filled in spring.

**Early Iron Age animal bone excluding pit 3006**

Of the total of 5168 bones, 47 came from the hillfort ditch, 48 from the counterscarp bank, 72 from the rampart and the remainder (5001) from the upper fills of the hilltop enclosure ditch.

Bones of cattle were commonest (370 fragments; MNI = 7), and all regions of the skeleton were present. Humeri, radii, metapodials, tibiae and crania are the most frequent elements. Butchery marks were identified on 21 cattle bones, 18 of which were recovered from ditch fills. The butchery marks indicate the use of knife cuts and cleaver chops to prepare cattle carcasses.

Sheep or goat bones were the second most common (254 fragments, MNI = 6). These included a metatarsal from ditch 3017 and a horn core from counterscarp bank layer 1008 positively identified as sheep. There was a prevalence of proximal forelimb elements, mandibles and tibiae. Loose teeth are also over-represented. Vertebral elements are underrepresented, but may be accounted for in the medium mammal assemblage. Butchery marks were only identified on six elements. They indicate that the hind limb was portioned using knife cuts and heavier cleaver chops.

The pig bones (207 fragments, MNI = 10) exhibit an overrepresentation of proximal forelimbs and loose teeth. Vertebral elements are underrepresented, but may be accounted for in the medium mammal assemblage. Butchery marks were identified on seven pig bones.

Four horse teeth, a first phalanx and third metacarpal, were recovered from the fills of ditch 3017. Attrition of a maxillary cheek tooth indicated that the animal was
11–15.5 years old at death (following Levine 1982). One metacarpal and one innominate fragment were recovered from other contexts.

Ten early Iron Age loose dog teeth and two mandible fragments were recovered from ditch 3017. Almost all of these may have come from a single individual. Tooth eruption (following Silver 1969) indicates that this individual was more than 5–6 months old.

A metapodial fragment and two pieces of red deer antler were recovered from ditch 3017. Unspeciated deer antler was found in the same ditch.

In addition to the raven skeleton recovered from pit 3006, four bird bones were identified from early Iron Age deposits. Bird long bones were recovered from layer 2018 and ditch 3017 and a bird phalanx was recovered from ditch 3017. The only bird bone which could be identified to species was a blackbird tarsometatarsus recovered from ditch 6003.

Of microfauna, mouse, field vole, vole sp. and frog or toad were identified in ditch 3017. Ditch 6003 also contained a frog or toad humerus and a water vole mandible.

**Middle Iron Age**

A total of 2305 fragments of bone came from middle Iron Age pit fills. The assemblage included domestic mammals (cattle, sheep and sheep or goat, pig, horse), wild mammals (red deer and badger, although the single badger tooth may be intrusive), a single bird phalanx, microfauna (water vole, vole sp., frog or toad) and fish bones. Taken as a proportion of the sum of all fragments (n=210), sheep or goats represented 55%, cattle 29% and pigs 15%.

Cattle (62 fragments; MNI = 2) was found in nine pits. All regions of cattle skeletons are present. Mandibles, loose teeth and tibia were the most frequently represented elements. Mandibular tooth attrition indicates that one animal was eight to eighteen months old. Butchery marks included knife cuts on the gonal angle of a mandible perhaps inflicted during preparation of the head meat or decapitiation.

Sheep or goat bones (116 fragments, MNI = 5) were recovered from 13 pits. All regions of the skeleton were represented. A skull fragment from pit 3098, a horn core from pit 3152 and a metatarsal from pit 3029 were identified as sheep. Mandibular tooth wear indicated an age-at-death for four sheep or goats ranging from three to ten months old to five to eight years old-at-death. Most regions of the pig skeleton (32 fragments; MNI = 2) were represented but loose teeth are the most common element. At least one pig was female.

A limited range of horse elements (8 fragments; MNI = 1) were present, comprising four loose teeth from pit 3052, an ulna fragment from pit 3002, a metatarsal fragment from pit 3004, a fragment of burnt metapodial from pit 3013 and a tibia fragment from pit 3098.

A red deer radius fragment was recovered from pit 3002 and a red deer metatarsal fragment was recovered from pit 3152, suggesting that red deer were hunted in the middle Iron Age. A single badger tooth was also recovered from pit 3015, and a bird phalanx was recovered from pit 3025. Two fish bones were identified: an eel vertebra from pit 3029 and unidentified fragments from pit 3002. Vole teeth were identified in the fills of pits 3029, 3152 and 3098. A vole femur was recovered from pit 3029, and a water vole femur from the fill of pit 3057.

**Animal bone from middle Iron Age pits containing human burials**

No certain evidence of the deliberate inclusion of animals, or of meat joints, in human burials was identified. Pit (3117), which contained a crouched burial of an adult woman, contained 61 diverse fragments of animal bone.

Pit 3152 contained three human burials: a crouched adult male, a dismembered adult female and a new-born infant. The pit also contained 218 fragments of animal bone, of which a sheep or goat humerus and a rib were found below the adult male’s left arm and a cattle skull was placed at the same level as the adult female. The other bones were fragments. The top fill of pit 3098, layer 3020, contained a new-born infant and 385 fragments of animal bone, 100 of which (including large and medium mammal long bones and vertebrae) were charred. Unburnt animal bone from this pit included cattle, horse, sheep, sheep or goat, pig, large mammal, medium mammal and vole fragments, all probably general refuse.
Late Iron Age/early Roman period

Amongst the 106 fragments of animal bone from late Iron Age/early Roman deposits within the hillfort ditch, cattle, pig, sheep or goat and deer were identified, along with large, medium and small mammal fragments. Pig bones were most common (13 fragments), followed by sheep/goat and cattle (nine and eight fragments respectively). There were 21 fragments of deer antler, perhaps originally from a single antler.

Cattle were represented only by forelimb elements from a minimum of two individuals, pig by hind limb and foot elements from a minimum of two individuals, and sheep or goat by the skull and elements of a fore limb, hind limb and foot.

Late Roman period

Amongst the late Roman bone (6454 fragments) were domestic mammals (cattle, sheep, sheep or goat, pig, horse), wild mammals (red deer, badger, fox, hare, rabbit), birds (domestic fowl, including a tarsometatarsus from a male individual (ie a cockspur; Plate 4.2), duck (including teal), corvid and finch), microfauna (field and water vole, vole sp., frog or toad) and fish. Further specimens were identified as large, medium and small mammal sized. Taken as a proportion of their sum (n=702), sheep or goats (47%) were most common, followed by cattle (37%) and pig (16%).

Few late Roman mandibles provided evidence of age-at-death. Two late Roman sheep or goat mandibles indicate that the animals died at between five and eight years old. Tooth attrition of a late Roman cattle mandible suggests that the individual died in adulthood. Three late Roman pigs were immature (c 4–13 months), one was sub-adult (c 7–22 months) and a fifth was sub-adult to adult at death (> 7 months).

Only nine fragments of bone from the midden had butchery marks. The butchery marks were primarily chops and related to portioning the carcasses. Cuts on the rib fragments may indicate removal of meat. Pit 4009 contained thirteen butchered bone fragments, and feature 3067 contained fifteen butchered bones. The fish bones comprised single vertebrae from herring, eel and pike as well as a single lower pharyngeal bone from a tiny dace. These bones indicate the occasional consumption of freshwater fish (pike, dace) as well as eel (probably also from a freshwater source) and herring (a marine taxon, probably imported salted or pickled).

A large number of dog bones were recovered from a partial skeleton. Deposit (1014) contained a partially articulated skeleton including cervical, thoracic, lumbar and caudal vertebrae, sacrum, ribs, right radius and right ulna. Epiphyseal fusion of the radius indicates that the animal was aged over 11–12 months when it died. Although no measurable bones could indicate the withers height of the animal, comparison of metric data from the ADS Animal Bone Metrical Archive Project suggests that it was a large individual. The partially articulated skeleton was generally in a good condition, with no evidence of gnawing by scavengers, suggesting that it was buried relatively quickly after deposition while it still had some soft tissue covering. The layer also contained a dog right pelvis, right metacarpals, two further metapodials and a left and right first phalanx. Although these bones were separate from the main concentration of bones, these elements could have come from the same skeleton. The length of the metacarpal can be used to suggest that the animal stood at a withers height of 0.5 m. Ditch fills 1004 and 1010 lying above layer 1011 included further bones probably disturbed from the same partially decayed dog skeleton deposited in the ditch in the late Roman period. Deposit 1014 also contained some partial articulated human remains.

Further dog elements—a tooth, a metatarsal from a dog 0.42 m tall, and a tibia fragment—were found in late Roman deposits above and behind the hillfort rampart.

The only red deer specimen was an antler fragment. This may have been a traded or collected raw material and does not indicate that deer were hunted or venison consumed. The fox bones (a humerus and a radius from hillfort ditch fills 1004 and 1010) and badger bones may derive from material eroded from the ramparts and counterscarp bank (see above).

Medieval period

The medieval assemblage (4447 fragments) included cattle, horse, red deer, sheep/goat, pig, domestic fowl, bird and microfauna. Four rabbit bones may be
intrusive. A single eel vertebra was recovered from pit 6011. Domestic mammals were the most frequent taxa. Taken as a proportion of their sum (n=556), sheep or goat (54%) were most common, followed by cattle (31%) and pig (15%).

The majority of the cattle elements (175 frags; MNI = 4) were loose teeth but bones from all regions of the skeleton were recovered. Butchery marks were identified on two bones, probably resulting from the portioning or dismemberment of the carcass.

All regions of the sheep/goat skeleton (299 fragments; MNI = 6) were represented but again teeth were the most common element. Tooth attrition could be used to indicate an age-at-death for 21 mandibles. Although one individual died aged one to three months old and four five to eight year old sheep or goats were identified, the majority (15 mandibles) died between the ages of 20 and 34 months. This may suggest that the sheep were primarily utilised for meat, although secondary products may have been utilised during life. Butchery marks were identified on 16 bones.

Loose teeth and foot elements dominate the assemblage of pig bones (82 fragments; MNI = 4). Long bones are also represented, but few from the hind limb. Two pig atlas fragments, both from juveniles, from pit 6011 had cut marks suggesting that the animals had been decapitated.

An innominate fragment and six loose teeth were the only horse elements identified, all possibly from a single individual. No butchery marks were identified. A single dog scapula fragment was recovered. Antler fragments (including three from pit 6011) comprised the only evidence for medieval utilisation of deer, including three fragments of red deer antler from pit 6011. A total of nine bird bones including four domestic fowl bones were identified. The bones come from a minimum of two fowl (from two right femora).

Microfauna included six frog or toad bones, nineteen mouse bones, one field vole skull and seven vole sp. bones, recovered from pit 4003. A rodent femur was also recovered from medieval colluvium.

The faunal economy at Castle Hill

The minimum sample size required for reliable comparisons of relative proportions of species is 30 individuals (MNI) or 300 identified specimens (NISP) (Hambleton 1999). Only the early Iron Age, late Roman and medieval periods have a large enough NISP, and only the early Iron Age (including the remains from pit 3006) had a large enough MNI for comparisons with other sites (Table 4.4).

Late Bronze Age

The late Bronze Age was characterised by the utilisation of domestic mammals including cattle, sheep or goat and pig. The sheep or goat and cattle bones included elements from all regions of the skeleton indicating that the complete carcass had been present on site. Pig bones included only cranial and metapodial fragments. These may represent discarded primary butchery waste, although pig heads and
feet might also have been butchering units for consumption. The late Bronze Age assemblage suggests that cattle and sheep or goat were of roughly equal importance to the economy, although cattle may have contributed more meat. Pigs were of a lesser importance but still constitute 20% of the total for these species.

**Early Iron Age**

The early Iron Age faunal economy was dominated by the utilisation of domestic mammals occasionally supplemented by hunting wild game. Red and roe deer metapodials indicate that these species were probably hunted, although these bones may also have been brought to the site attached to deerskins. Early Iron Age activity on the hillfort included the deposition of a very large number of animal remains in pit 3006. Excluding the remains from the pit, cattle were the most well represented taxon (45% NISP), followed by sheep or goat (30%) and then pig (25%). This is very similar to the late Bronze Age species ratios from the site. When the contents of the pit are included, the relative dominance of cattle and sheep or goat switch, sheep or goat remains constitute 45% (NISP), cattle remains constitute 34% (NISP) and pig remains constitute 21%. If these ratios are compared with those at other early Iron Age sites in England, the proportion of sheep or goats is approximately average, the proportion of cattle bones falls into the lower end of the known range and pig bones are more frequent than at most other sites. This is also the case if the assemblage is compared to other Iron Age sites in the Upper Thames Valley (Hambleton 1999). The high proportions of pig remains suggest a relatively high status diet, as pigs provide very few secondary products and can therefore be perceived as a ‘luxury’ meat (Grant 2002).

The animal bone in pit 3006 included butchered portions of cattle, sheep and pigs. The cattle bones were from at least four individuals of varying ages, probably including the remains of a bull. The sheep and sheep or goat remains were from at least 19 individuals, a third of which were neonatal. The pig bones were from at least eight individuals of varying ages from neonatal to adult. The pig bones also included both males and females. The bones represent a huge quantity of meat possibly deposited over a short period of time. McCormick (2002, 25) suggests that a single early cow might provide approximately 176 kg of edible meat. The volume of meat represented, the butchery evidence and the age-at-death of the animals in pit 3006 suggest that it might be the product of feasting activity in springtime. The pit also contained a single, butchered horse tibia, suggesting that horseflesh may also have been eaten. The presence of a near complete raven skeleton in the pit may be interpreted as indicating a ritual aspect to the deposition of the bones or feasting, although the raven could also have a more mundane interpretation as the disposal of a predator of lambs which were being bred in the vicinity of the site.

The mortality profile of the early Iron Age herds and flocks is weighted by the bones recovered from pit 3006. However, it does suggest that sheep or goats may primarily have been kept for milk or meat (high proportions of young individuals killed) and that some cattle were allowed to reach adulthood and old age, suggesting that they were used for traction or milk production. Butchery evidence on a cattle horncore suggests that horn was utilised. All skeletal regions of cattle, pigs and sheep or goats were present on site, indicating that the animals were husbanded nearby and brought in on the hoof.

**Middle Iron Age**

The middle Iron Age faunal economy continued to be dominated by cattle, sheep or goats and pigs, although pigs and to lesser extent cattle were less common than in the early Iron Age. Pigs are still more frequent on Castle Hill than in the surrounding settlement (see Chapter 7). Again, all parts of the domestic mammal skeletons were present on site, suggesting that the animals were husbanded in the area or brought in on the hoof. There is some evidence for the supplementation of the middle Iron Age diet on Castle Hill with wild mammals and fish. A red deer radius and metatarsal were recovered, and although these are not particularly meat-rich elements, their presence does indicate the presence of deer carcasses and not just traded antler. Similarly, eel and indeterminate fish were utilised. The final possible aspect of animal utilisation concerns structured deposits. Although animal deposits
in Iron Age pit burials have been found elsewhere (Whimster 1981; Wait in Lambrick and Allen 2004), no comparable examples with cattle skulls are known.

**Late Iron Age and Roman period**

Only a small late Iron Age/early Roman bone assemblage was recovered, which may not be representative of the faunal economy. The assemblage was dominated by domestic mammals, the only evidence for wild species being the utilisation of antler.

In the large late Roman bone assemblage domestic mammals were present in proportions similar to those of earlier periods, although pigs were less significant than in the early Iron Age. There is no evidence that hunting contributed to the late Roman economy, although fishing contributed occasional freshwater fish to the diet and marine fish were imported. Chickens and ducks were also used, and may have contributed eggs and meat to the diet. Cattle, sheep or goats and pigs were husbanded at the site or brought in on the hoof, as shown by bones from all regions of the skeletons. There is little evidence for the mortality profiles of the herds and flocks but some cattle and sheep or goats were kept into maturity, suggesting that they may have been used for functions other than just meat.

**Medieval period**

Cattle, sheep or goat, pig, domestic fowl, dogs and horses are the main species, with additional limited evidence for the catching of eels and the use of red deer antler. Sheep or goats were the best-represented taxa (54% NISP) followed by cattle (31%) and then pigs (15%). All regions of the sheep or goat, pig and cattle skeletons were present on site indicating that they were husbanded or traded on the hoof. The medieval faunal economy appears to differ little from that of the Iron Age and Roman period. Although secondary products were probably utilised, the mortality profile for sheep or goats indicates that they may primarily have been kept for meat. However, the sheep were killed at an older age than earlier periods. The prevalence of mutton over beef suggested by the assemblage at Castle Hill is a general trend in medieval rural assemblages which has been attributed to the preferential export of beef into urban economies (Sykes 2006).

**OYSTER SHELL** by Leo Wibley

A total of 23 fragments (186 g) of oyster shell, indicating the importation and consumption of marine shellfish, was recovered from Roman and medieval contexts. Five small fragments (5 g) of unidentified bivalve shell were recovered from early Iron Age contexts, but as most of the fragments are from the upper fills of features they could be intrusive.

**LAND SNAILS** by Amy Reynolds

A total of 39 samples from late Bronze Age enclosure hilltop ditches 3017 and 6003, and from the Iron Age hillfort ditch were examined for molluscan remains in order to provide information on the local environment of Castle Hill (see summary Tables 4.5–6). A methodology and detailed tables can be found in the digital report.

**Ecological interpretation and environmental reconstruction**

**Ditch 3017** (Fig. 4.2 and Table 4.5)

The lowest samples from ditch 3017 (samples 318 and 319) were too small to give reliable indications, but appear to show a shift from shade-loving species to intermediate/open-country species. The next sample in the sequence (321) consists of shade-loving species such as *Carychium tridentatum*, which is usually a reflection of tall, herbaceous vegetation and woodland, and intermediate species such as *Pomatias elegans*, which burrows into leaf litter and loose soil, and also more open-country species such as *Vallonia cf. excentrica* and *Pupilla muscorum*.

The sample above this (320) shows a decline in the number of open-country species and a marked increase in shade-loving species such as *Oxychilus* and
Aegopinella, Discus rotundatus and in particular Carychium tridentatum, which is characteristic of woodland conditions. However, as demonstrated by the open-country species and intermediate species such as Punctum pygmaeum, Pomatias elegans and Trichia hispida there may have been some open areas nearby.

Table 4.5 Snails from late Bronze Age enclosure ditches 3017 and 6003.
Key to habitats: W: woodland; O: open country; I: intermediate; B: burrowing.
Abundance of C. Acicula shown as +: present; ++: common

<table>
<thead>
<tr>
<th>Habitat</th>
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<th>LBA 6003</th>
<th>EIA 3017</th>
<th>EIA 6003</th>
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<td>3</td>
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<td>0</td>
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<td>+/-</td>
<td>+/-</td>
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</table>

Total excluding C. acicula | 42 | 1058 | 1165 | 195 |

Figure 4.2 Location of mollusc samples from late Bronze Age ditch 3017
The samples from 322 upward are dated to the early Iron Age. Sample 322 shows the persistence of the woodland/shade-loving species as well as intermediate and characteristically open-country species, but the general lack of open-country species in the next sample (338) more clearly demonstrates shaded conditions, either through woodland regeneration or the growth of long grass.

The next few samples (323, 325, 327 and 329) indicate that such conditions persisted for some time, with greater numbers of shade-loving and intermediate than open-country species.

In the early Iron Age fills towards the end of the sequence there appears to be a gradual transition towards more open conditions, perhaps demonstrating a drawn-out phase of clearance by the occupants of the hillfort (samples 331, 332, 333, 334, 335 and 336). This is demonstrated by a reduction in the relative abundance of shade-loving species in tandem with a gradual increase in the percentage of intermediate species and—towards the top of the sequence—a marked increase in the abundance of open-country species.

**Ditch 6003** (Fig. 4.3 and Table 4.5)

Basal sample 614 contained only a single specimen of an intermediate species and another specimen of a shade-loving species such as *Oxychilus* and *Aegopinella*. This is followed (sample 615) by a decline in the shade-loving species and the appearance of a single specimen of another intermediate species, *Trichia hispida*. These lower samples contain too few snails to say much about the prevailing environmental conditions. However, markedly increased numbers of shade-loving species such as *Oxychilus* and *Aegopinella* and a substantial increase of *Carychium tridentatum*, which also populates shaded areas, occur in sample 616. The sample also yielded several intermediate species as well as *Vallonia* cf. costata, an open-country species, but this only makes up 0.6% of the assemblage. The results from this and later samples indicate that conditions at the site were becoming increasingly shaded, probably initially through the growth of long grass and then through the establishment of woodland. Such conditions appear to persist as indicated by the large samples 617 and 619. Predominant in both of these samples are woodland species including *Oxychilus*, *Aegopinella* and *Discus rotundatus* as well as huge numbers of *Carychium tridentatum*. Intermediate species such as *Punctum*, *Vitrina*, *Vitrea*, *Nesovitrea*, *Pomatias elegans* and *Trichia hispida* were also obtained from these samples as well as very small numbers of open-country species of *Vallonia* cf. costata, *Vallonia* cf. excentrica and *Helicella itala*. The final two samples, 621 and 611, are from fills dated to the early Iron Age. Although sample 621 was smaller, the snails are still indicative of a predominantly woodland environment, with shade-loving and intermediate species dominating, and a marked absence of open-country species. This is in complete contrast to the latest sample 611, which although smaller, demonstrates a change of conditions at the site. No shade-loving species were found, and open-country species including *Vallonia* cf. costata, *Vallonia* cf. excentrica, *Pupilla muscorum* as well as a few numbers of intermediate species make up the entire assemblage.
**Hillfort ditch** (Fig. 4.4 and Table 4.6)

Although woodland species, *Oxychilus*, *Aegopinella* and *Carychi um tridentatum* are present, the first sample from the sequence in the early Iron Age hillfort ditch (103) is strongly indicative of open conditions. Open-country species such as *Vallonia cf. costata*, *Val lonia cf. excentrica*, *Vertigo pygmaea* and *Truncatellina cylindrica* dominate, as well as huge numbers of *Pupilla muscorum*. Such open conditions persisted for some time, as indicated by early Iron Age samples 109 and 104–108, although the presence of shade-loving species may indicate that there were some areas of patchy tussocks sufficient to support such populations. However, the presence of *Helicella itala* (an open-country xerophile species) as well as the marked increase in the numbers of *Pupilla muscorum* was probably a reflection of bare unstable conditions in the ditch bottom. From sample 111 upward, dated to the late Iron Age/early Roman period, a rise in the number of snails suggests more stable conditions. There was also a more diverse fauna. The presence of *Carychi um tridentatum* in small numbers indicates some shade, perhaps from tall grass in the ditch. The balanced fauna of open country species from sample 112 upwards suggests the ditch was set amidst open grassland. Predominantly open grassland conditions appear to have persisted throughout the Roman period (samples 112, 113, 114, 115, 116 and 117). The colonisation and establishment of greater numbers of shade-loving species, as well as the persistence of both intermediate and open-country species, indicates mixed areas of long grassland or scrub and cleared areas. Towards the end of the sequence, beginning with sample 118, there was another shift in the habitat as shown by an increase in open-country species such as *Val lonia cf. costata*, *Pupilla muscorum* and *Helicella itala*, and a marked decline in shade-loving species. This could thus indicate the beginning of another clearance episode.

**Table 4.6 Snails from the hillfort ditch.** Key to habitats as Table 4.5. ER: late Iron Age/early Roman; LR: late Roman; PM: post-medieval

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<th>PM</th>
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<tr>
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<td>I</td>
<td>1</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Nesovitrea hammonis</td>
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<td>17</td>
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</tr>
<tr>
<td>Limax or Deroceras sp.</td>
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<td>0</td>
<td>48</td>
<td>88</td>
</tr>
<tr>
<td>Helicella itala</td>
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<td>0</td>
<td>332</td>
<td>164</td>
</tr>
<tr>
<td>Arianta arbustorum</td>
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<td>0</td>
</tr>
<tr>
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<td>1</td>
<td>0</td>
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<tr>
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<td>0</td>
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<tr>
<td>Arianta or Cepaea sp.</td>
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<td>0</td>
<td>9</td>
<td>8</td>
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<tr>
<td>Helix aspersa</td>
<td>I</td>
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<td>0</td>
<td>1</td>
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<tr>
<td>Truncatellina cylindrica</td>
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<td>0</td>
<td>36</td>
<td>56</td>
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<td>66</td>
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<td>3</td>
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<td>Vallonia costata</td>
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<td>23</td>
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<td>13</td>
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<td>262</td>
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<td>Cecelioidea acicula</td>
<td>B</td>
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</table>

Total excluding *C. acicula* 103 2005 1313 129
Discussion

The three molluscan sequences provide a useful contribution to the environmental history of the site. It is presumed that the construction of the late Bronze Age hilltop enclosure would have taken place within a cleared local environment, and this is reflected by the corresponding open-country molluscan assemblages. The assemblage demonstrates the subsequent growth of tall grass or herbaceous vegetation, which eventually led to scrub or woodland regeneration. However, a second phase of woodland clearance then took place during the early Iron Age, probably preceding the construction of the hillfort. This period would have been characterised by grazed, short-turfed grassland. The assemblage from the hillfort ditch suggests that predominantly open conditions persisted into the late Roman period.

CHARRED PLANT REMAINS by Wendy Smith, Mark Robinson and Ben Harrold

A total of 38 samples for charred plant remains were collected from Trenches 3, 4 and 6, eight of which were considered suitably rich to merit further analysis (Robinson 2005). This report presents the results for the six samples which derive from late Bronze Age through to middle Iron Age features as well as two medieval pits. The majority of Iron Age samples are from pits, but the enclosure ditch (sample 606) and a posthole (sample 604) have also been sampled. The methodology is presented in the digital report.

Results

The samples analysed comprised a mixture of cereal grain, cereal chaff and weed/wild plants (Tables 4.7–8; Fig. 4.5). These types of remain are typical of most charred archaeobotanical assemblages and most likely represent crop processing activities (eg Jones 1988, 44). The assemblages are primarily dominated by cereal grain, except for sample 304 which has a fairly even mixture of cereal grain and weed/wild taxa, but is a relatively small sample (N = 36 identifications).

Hulled barley (Hordeum spp.) and spelt wheat (Triticum spelta L.) appear to be the main cereals cultivated in the Iron Age, although small quantities of possible emmer grain (Triticum cf. dicoccum Schübl.) and/or chaff fragments have been identified. In the medieval period free-threshing wheat (either bread wheat – Triticum aestivum L. – or rivet wheat – Triticum turgidum L.) and hulled barley (Hordeum spp.) were cultivated. Small quantities of spelt and indeterminate glume wheat (either emmer or spelt) glume bases (the woody sheaths which hold the grain within the spikelet) were recovered in the Iron Age samples; however, cereal chaff was not observed in either medieval sample. The majority of weed/wild plants recovered from both Iron Age and medieval samples typically occur as weeds of arable field and/or cultivation; however, there are some taxa present which suggest damp or even wet conditions. In addition, there is limited evidence for hedges or scrub,
### Table 4.7 Charred plant remains from prehistoric and medieval features in Trenches 3, 4 and 6

<table>
<thead>
<tr>
<th>Sample</th>
<th>Habitat Code</th>
<th>606</th>
<th>317</th>
<th>414</th>
<th>604</th>
<th>304†</th>
<th>301</th>
<th>405</th>
<th>603</th>
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<tr>
<td>Context</td>
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<td>3061</td>
<td>3040</td>
<td>6029</td>
<td>3020</td>
<td>3003</td>
<td>4040</td>
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<td>Feature</td>
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<td>3006</td>
<td>3006</td>
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<td>3019</td>
<td>3002</td>
<td>4003</td>
<td>6011</td>
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<tr>
<td>Feature type</td>
<td>Ditch</td>
<td>Pit</td>
<td>Pit</td>
<td>Pit</td>
<td>Pit</td>
<td>Posthole</td>
<td>Pit</td>
<td>Pit</td>
<td></td>
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<tr>
<td>Period</td>
<td>LBA</td>
<td>EIA</td>
<td>EIA</td>
<td>EIA</td>
<td>EIA/MIA</td>
<td>MIA</td>
<td>Med</td>
<td>Med</td>
<td></td>
</tr>
<tr>
<td>Sample Volume (litres)</td>
<td>40</td>
<td>30</td>
<td>40</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Seeds per litre</td>
<td>4.9</td>
<td>14.2</td>
<td>6.0</td>
<td>3.6</td>
<td>3.3</td>
<td>2.4</td>
<td>87.8</td>
<td>16.9</td>
<td></td>
</tr>
</tbody>
</table>

**Latin Binomial** | **English Common name**
--- | ---
CEREAL CHAFF  |  |
Triticum cf. dicoccum Schübl. | Emmer wheat | C | 3 | - | - | - | - | - | - |
- glume base* |  |
Triticum spelta L. - glume base* | Spelt wheat | C | 2 | 12 | 10 | - | 1 | - | - |
Triticum dicoccum Schübl./ spelta L. - glume base | Emmer or spelt | C | 2 | 13 | 19 | - | 1 | - | - |

OTHER FOOD PLANTS  |  |
Vicia faba L. ssp. minor/ Pisum sativum L. | Broad or horse bean/ garden pea | C/2 | - | - | - | - | - | - | 2 | 3 |
Corylus avellana L. - nutshell fragments | Hazel | H S W | - | 2 | - | - | - | - | 32 | - |

WEED/ WILD PLANTS  |  |
Fumaria spp. | Fumitory | A/Wa | 1 | - | - | - | - | - | - |
Atriplex spp. | Orache | c/d | - | - | 1 | - | - | - | - |
Montia fontana L. | Blinks | M | - | 10 | 1 | - | - | - | - |
Stellaria media (L.) Vill. s.l. | Common chickweed | A | 5 | - | - | - | - | - | - |
Polygonum aviculare L. | Knotgrass | A | 4 | 2 | - | - | - | - | - |
Rumex spp. | Dock | - | - | 2 | 7 | - | - | 2 | - |
Vicia spp/ Lathyrus spp. | Vetch/ vetchling | - | - | 12 | 11 | - | 1 | 1 | 1 | 11† |
FABACEAE – unidentified | Pea Family | - | - | 1 | - | - | - | - | - | - |
Bupleurum rotundifolium L. | Thorow-wax | A | - | - | - | - | - | - | 1 | - |
Lithospermum arvense L. | Corn gromwell | A | - | 11 | - | - | - | - | - | - |
Galium aparine L. | Cleaver or goosegrass | A | - | 2 | - | - | - | - | 2 | - |
Tripleurospermum inodorum (L.) Sch. Bip. | Scentless mayweed | A c/d | - | 1 | - | - | - | - | - | - |
Carduus spp./ Cirsium spp. | Thistle | - | - | 1 | - | - | - | - | - | - |
Eleocharis spp. | Spite rush | M | - | 1 | - | - | - | - | - | - |
Schoenoplectus lacustris (L.) Palla | Bulrush | M We | - | 1 | - | - | - | - | - | - |
Carex spp. – 3-sided | Sedge | M | - | - | - | 1 | - | - | - | - |
Bromus sp.** | Brome grass | - | - | 38 | 12 | - | 8 | 3 | - | - |
cf. Bromus sp. | Brome grass | - | - | 39 | 12 | - | 8 | 6 | - | 1 |
Avena sp. | Wild or cultivated oats | A | - | 3 | - | - | 3 | - | 158 | 16 |
POACEAE – indeterminate | Grass Family | - | - | 3 | - | - | 2 | - | 1 | - |
Indeterminate | - | - | - | 1 | - | - | - | - | - | - |

** TOTAL IDENTIFICATIONS ** | 197 | 427 | 238 | 50 | 36 | 36 | 1053 | 321 |     |

* glume can indicate glume/ glume base or spikelet fork - however 2 glumes per spikelet fork are counted (pers. comm. M. Robinson).
† Sample contains mineralised items.
† Harrold noted that some of the Vicia spp./ Lathyrus spp. seeds were large, but did not indicate quantity.
** Bromus sp. = Bromus Section Eubromus, but reflects nomenclature changes in Stace (1997)
Table 4.8 The relative proportion of charred plant remains from late Bronze Age – middle Iron Age deposits in Trench 6

<table>
<thead>
<tr>
<th>TRENCH 6 SAMPLES</th>
<th>Sample</th>
<th>Context</th>
<th>Feature</th>
<th>Feature Type</th>
<th>Period</th>
<th>Sample Vol (L)</th>
<th>Seeds/ litre of sediment sampled</th>
<th>TOTAL COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>606</td>
<td>6027</td>
<td>6003</td>
<td>ditch</td>
<td>LBA</td>
<td>40</td>
<td>4.9</td>
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<td>EIA</td>
<td>30</td>
<td>14.2</td>
<td>274</td>
<td>497</td>
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<tr>
<td>414</td>
<td>3040</td>
<td>3006</td>
<td>pit</td>
<td>EIA</td>
<td>40</td>
<td>6.0</td>
<td>164</td>
<td>238</td>
</tr>
<tr>
<td>604</td>
<td>6029</td>
<td>6028</td>
<td>pit</td>
<td>EIA</td>
<td>10</td>
<td>3.6</td>
<td>26</td>
<td>36</td>
</tr>
<tr>
<td>304</td>
<td>3020</td>
<td>3019</td>
<td>pit</td>
<td>EIA/MIA</td>
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<td>3.3</td>
<td>21</td>
<td>50</td>
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<td>301</td>
<td>3003</td>
<td>3002</td>
<td>pit</td>
<td>MIA</td>
<td>15</td>
<td>2.4</td>
<td>26</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPORTION</th>
</tr>
</thead>
</table>

| Cereal Grain | 95.9% | 64.2% | 68.9% | 72.2% | 42.0% | 72.2% |
| Cereal Chaff | 3.6%  | 5.9%  | 12.2% | 0.0%  | 4.0%  | 0.0%  |
| Other Food Plants | 0.0% | 0.5%  | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| Weed/ Wild Plants | 0.5% | 29.5% | 18.5% | 27.8% | 54.0% | 27.8% |
| Indeterminate | 0.0%  | 0.0%  | 0.4%  | 0.0%  | 0.0%  | 0.0%  |

Proportions given in italics = dominant plant category.

Figure 4.5 The relative proportion of charred plant remains recovered in late Bronze Age through middle Iron Age features and two early medieval pits from Trenches 3, 4 and 6.
with the recovery of hazel (Corylus avellana L.) nutshell, although this could easily be imported onto site as nuts can be easily transported.

A comparative discussion of the charred plant remains from Castle Hill (Trenches 3, 4 and 6) and Castle Hill Environs (Trench 15) can be found in Chapter 7.

POLLEN AND PHYTOLITHS by Adrian G. Parker

A total of seven column samples for pollen and phytolith analysis were evaluated from a variety of deposition contexts of late Bronze Age, early Iron Age and Romano-British date (Tables 4.9–10). A detailed methodology and results are contained within the digital report.

Although pollen preservation is generally poor, three samples did yield pollen, two coming from late Bronze Age buried soil layers, and one from a late Iron Age/early Roman fill of the hillfort ditch. Within these samples the grains showed signs of deterioration, and selective preservation was evident. Resistant taxa such as Liguliflorae (Compositae) were dominant within the three samples. However, other less resistant taxa including Gramineae and Corylus were also identified. Although these samples provide some information, because of the effects of selective preservation, the results should be viewed with caution.

A number of samples contained phytoliths, particularly from Roman deposits. The chalk-rich samples from the lower part of the hillfort ditch tended to be devoid of phytoliths. In general, the phytoliths suggest open grassland conditions. However, it is notable that some samples from the late Bronze Age enclosure ditch (ctxs 3065) and the buried soil sealed by the hillfort ramparts (ctxs 1015 and 2031) suggest a non-grassland component to the vegetation derived from woody taxa. These may be derived either directly from trees and shrubs in the surrounding landscape, or indirectly from burning or from the decomposition of wooden structures on the site itself. Samples from late Roman contexts 3126, 3127 and 3129 contained dendri-

<table>
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<th>Sample no.</th>
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<th>Context</th>
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<th>Tilia</th>
<th>Corylus</th>
<th>Gramineae</th>
<th>Cerealia</th>
<th>Plantago</th>
<th>C.Lig</th>
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</tbody>
</table>

+++ abundant, ++ common, + present, - nil
form long cell Poaceae morphotypes which are derived from the inflorescence bract of cereals, implying that these contexts contained the residue of threshed cereals.

**RADIOCARBON DATING by Leo Wibley**

Nine samples were submitted to the Poznan Radiocarbon Laboratory for accelerator mass spectrometry (AMS) dating (Table 4.11 and Fig. 4.6). The determinations have been calibrated using OxCal v3.10 and atmospheric data from Reimer et al. (2004).

Four determinations were obtained from the late Bronze Age enclosure ditch. One was taken from charred grain from a middle fill (6027) of the ditch in Trench

---

### Table 4.10 Phytolith assessment

<table>
<thead>
<tr>
<th>Sample no.</th>
<th>Context type</th>
<th>Context</th>
<th>Short-cell Poaceae distinguishable into tribes</th>
<th>Short-cell Poaceae undistinguishable into tribes</th>
<th>Non-grass Poaceae morphotypes - ligneous dicots</th>
<th>Long-cell Poaceae</th>
<th>Other vascular long-cells</th>
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+++ abundant, ++ common, + present, - nil

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### Figure 4.6 Probability distributions of radiocarbon dates from Castle Hill

Atmospheric data from Reimer et al. (2004); OxCal v3.10, Bronk Ramsey (2005); cal r: 5 cal 12 prep. asp (chron)
The other three were obtained from the ditch in Trench 3 (3017). Two of these came from a distinct layer of charred material close to the base of the ditch (3099), one deriving from charcoal (Poz-14317) and the other from a disarticulated animal bone (Poz-12521). The third determination came from a disarticulated human bone fragment from stratigraphically higher fill 3081 (Poz-14319). All three determinations produced similar date ranges, suggesting that the two deposits could have been laid down within a short space of time. OxCal has been used to produce a Bayesian model for this sequence of dates which is specified in Figure 4.7. The model suggests a refined date of 1010–870 cal BC for 3099 and 970–830 cal BC for 3081, at the 95.4% probability level (Fig. 4.8). The possibility that the human bone fragment from 3081 was curated for a period prior to deposition cannot however be ruled out.

The remaining five determinations were obtained from pits containing middle Iron Age ceramics, and all are considered reliable as they were taken from articulated material close to the base of the ditch (3099), one deriving from charcoal (Poz-14317) and the other from a disarticulated animal bone (Poz-12521). The third determination came from a disarticulated human bone fragment from stratigraphically higher fill 3081 (Poz-12519). All three determinations produced similar date ranges, suggesting that the two deposits could have been laid down within a short space of time. OxCal has been used to produce a Bayesian model for this sequence of dates which is specified in Figure 4.7. The model suggests a refined date of 1010–870 cal BC for 3099 and 970–830 cal BC for 3081, at the 95.4% probability level (Fig. 4.8). The possibility that the human bone fragment from 3081 was curated for a period prior to deposition cannot however be ruled out.

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lated human bone. All of the calibrated date ranges fall squarely within the middle Iron Age, except for that from the uppermost burial in pit 3152 (Poz-12518), which produced a date range in the late Iron Age and early Roman period (20 cal BC–cal AD 130). While this could imply that the middle Iron Age pottery associated with this burial is residual, continuity in the use of middle Iron Age-type ceramics into the earlier part of the late Iron Age is attested at other sites in the Upper Thames Valley (eg Lambrick forthcoming).
Chapter 5

Excavations around Castle Hill

THE GEOPHYSICAL SURVEYS

The time team geophysical survey by GSB Prospection Ltd

In 2003, GSB Prospection undertook an extensive magnetometer and resistivity survey on behalf of Wessex Archaeology during the three-day Time Team excavation on the summit and lower slopes of Round Hill (GSB 2003; Wessex Archaeology 2004; Plate 5.1; Fig. 5.1).

Two areas—Area 1, from the lower western slopes of Castle Hill to the north of Hill Farm, and Area 2, to the south of Castle Hill, were surveyed with two Bartington Grad 601–2 instruments, with readings logged at 0.25 m intervals along traverses 1 m apart. Area 1b, a small area measuring c. 60 m by 20 m on the site of a suspected building, corresponding to the distribution of Roman building debris recorded by Rhodes (1948), was surveyed using a Geoscan RM15 with a 0.5 m twin-probe configuration.

Area 1

A series of rectilinear anomalies, perhaps part of an enclosure, accompanied by numerous smaller, sub-circular anomalies likely to represent pits, were revealed in the western part of the survey area. Numerous mostly isolated larger pits were encountered elsewhere.

Traces of a rectilinear enclosure with an entrance on the eastern side were visible in the centre of Area 1. A high resistance anomaly coincided with the position of the Roman building investigated by Rhodes (see digital report for details).

Within and immediately outside the enclosure were a series of smaller, mostly circular anomalies, including three pits in the north-western corner of the enclosure. The southernmost of these pits was sampled in Trench T6 (Wessex Archaeology 2004). A possible semi-circular anomaly or interconnecting group of pits was detected immediately north of the enclosure.

Two sub-rectangular anomalies, representing enclosures less than 20 m across and both containing internal features, were encountered in the south-east corner of Area 1. A strong magnetic anomaly between the two enclosures may represent intercutting pits.
Figure 5.1 Results of GSB geophysical survey (2003) with the location of Time Team trenches (after Wessex Archaeology 2004)
In the north-east, two parallel anomalies represent a modern track. Immediately to the west of these, three curvilinear features probably relate to the defensive ditches of Castle Hill.

A large area of magnetic response on the higher slopes of Round Hill, although possibly representing ploughed-out defences, was thought more likely to reflect the thinner, plough-damaged nature of the soils on the upper slopes. This was later tested by Trench 18 (see below).

A series of parallel anomalies, probably ridge and furrow, were found across the entire survey area.

**Area 2**

A dense concentration of probable pits with a clear eastern boundary was found across most of Area 2 (Fig. 5.1). Two curvilinear features were also detected. The one in the centre, approximately 12 m across with a possible south-eastern entrance, may be a round house or ploughed-out barrow. The interpretation of the other is uncertain.

Beyond the main concentration of pits lay two magnetic linear anomalies that may represent outworks to the main defences of the hillfort with a hollow way leading to the entrance.

**Oxford Archaeology geophysical survey by A. D. H. Bartlett**

The 2004 magnetometer survey, largely carried out by volunteers using a pair of Geoscan FM256 magnetometers, followed standard procedures, with the magnetometers mounted on a carrying frame, and readings collected at 0.25 m intervals along a pair of lines 1 m apart for each transect (Fig. 5.2; see also Chapter 1 Plate 1.6). Transects were usually 30 m in length, but were shortened in some parts of the survey to 26 m.

The first area to be surveyed was the field south-east of the buildings at Hill Farm (Fig. 5.2; Plate 5.2). The results indicate a complex superimposition of features, some indicating a continuation of the Roman and Iron Age occupation activity seen across the road on the southern slope of Round Hill.

The more conspicuous findings include a parallel linear feature probably representing a ditched trackway (A on Fig. 5.2) and a curving linear ditch or boundary (B and L) extending across much of the site. North of the trackway a third linear anomaly may belong to a large sub-rectangular enclosure.

A scatter of small magnetic anomalies across much of the field, although perhaps more concentrated around Hill Farm, probably represent settlement features. Various rectilinear enclosures have been detected (eg at C, D, E). Circular ditched enclosures can be conjectured at several locations, but are particularly distinct at F and G, where they were tested by Trenches 15 and 19 (Figs 5.2 and 5.3).

The southern extension of the survey coverage in 2005 showed a continuation of the enclosures and linear markings visible in the earlier results. There is a small and sub-square enclosure at M, with a dense cluster of magnetic anomalies to its north and east. Archaeological features appear to diminish towards the south-east.

The survey of the field south-west of Hill Farm revealed a continuation of trackway A, though this died out partway across. Part of a rectilinear enclosure was detected at H, possibly abutting a linear boundary on the west. This boundary was also visible at I in the field to the north. Faint traces of parallel curving ditches running south from the enclosure may indicate another trackway leading down to the join trackway A (Fig. 5.2). A scatter of magnetic anomalies in the north-east corner of the survey (J) appears to indicate a continuation of the archaeological activity in the adjacent fields to the south of Hill Farm. The plot appears to show three ditch-like north-south linear features, one of which could represent the west side of a large enclosure north of A. There are also two possible circular outlines, one some 14 m in diameter just west of (J), the other to the NE.

The survey of West Field produced few findings (Fig. 5.2). A strong linear disturbance (K) in the centre of the field could well be recent (possibly a land drain). The only other magnetic anomalies of clear archaeological significance were linear boundaries on a NNE alignment at I and north of J.
Figure 5.2  Castle Hill environs: results of the geophysical survey (after Bartlett 2005) with key elements indicated by letters.
THE EXCAVATIONS

The trenches

In July 2003 Time Team excavated 11 trenches west and south-west of Castle Hill (Figs 5.1 and 5.3). Three small trenches (T1–T3) were dug by machine within the woodland on Round Hill, but found no archaeological features other than a bank probably belonging to the 18th century plantation. Trenches T4 and T6 were placed to cross the east and west sides of a trapezoidal enclosure that surrounded the site of Rhodes’ 1947 excavation and Roman building. The enclosure proved to be Roman. An early Iron Age pit was also found west of the enclosure in Trench T6 (see Plate 5.12), and layers containing early Iron Age pottery were found east of the enclosure in T4. Trench T5 was laid out to reopen Rhodes’ excavation and reexamine the Roman levels and the Iron Age chalk and pebble building. Trenches T7, T8 and T10 to the north-west were dug to investigate a geophysical anomaly interpreted as the apsidal end of a building, but although one robber trench and much Roman tile were found, no clear building plan was obtained. East of the enclosure Trench T9 investigated one of a group of pits, which proved to be early Iron Age, while Trench T11 (see Plate 5.11) was dug across a small square ditched enclosure with a possible central pit, thought to be an Iron Age square barrow. An early Iron Age pit was found within the enclosure, and similar sherds in the ditch, but not sufficient to date it with confidence.

In 2004 further trenches were dug by OA and local volunteers. Trench 13 investigated the intersection of a rectangular enclosure ditch north of Hill Farm with a curving boundary ditch that appeared to run right through the settlement (Figs 5.2, L and 5.3).

Trench 14 (Figs 5.3 and 5.7, Section 1419) was excavated to investigate the early Iron Age occupation deposit found by Rhodes in 1947 and further investigated, though not bottomed, by Time Team Trench T5 in 2003 (Rhodes 1948; Wessex Archaeology 2004). It was also hoped to investigate the buried Bronze Age soil below. The trench was extended at the south-east corner to investigate a concentration of pebbles, in case this was another pebble and chalk surface like that found by Rhodes (Rhodes 1948, figure 8; Plates 5.3–4). Trench 14 overlapped at the north
5: Excavations around Castle Hill
end with the southern edge of the trench (T5) excavated by Time Team in 2003 (Fig. 5.3; Wessex Archaeology 2004).

Trench 15, some 50 m south of Hill Farm, targeted a penannular enclosure and annexe identified during the geophysical survey (Figs 5.2, F and Fig. 5.3).

Trench 18, on the south-eastern edge of Round Hill, towards the top of the slope (Fig. 5.3), was located to confirm the apparent absence of archaeological features on the hilltop, and to investigate an area of erratic geophysical readings that suggested a possible change in the underlying geology. The trench found weathered chalk bedrock beneath 0.26 m of topsoil and colluvium. While the area investigated on Round Hill is very small, none of the trenches (T1–T3 and Trench 18) has provided any evidence of significant prehistoric settlement activity on the hilltop (Wessex Archaeology 2004).

Trench 19, located some 300 m south-west of Castle Hill, was positioned to examine a circular ditch, thought possibly to represent a barrow, and to test whether the curving Iron Age boundary examined in Trench 13 (see above) stopped short of the circle as the survey suggested (Fig. 5.2, G and Fig. 5.3).

Figure 5.3 (facing page)
Location plan of Trenches 13–15, 18 and 19 and Time Team trenches T1–T11

Plate 5.3 Matt Williams excavating on Rhodes’ chalk and pebble floor in Trench 14

Plate 5.4 Further pebbles found at north end of Trench 14
Around Hill Farm (Figs 5.4–5)
The Visitors’ Car Park (Figs 5.4–5, 5.20 and 5.23) is situated directly to the west of Hill Farm on a mixed area of greensand lumps and very sandy clay. The excavations undertaken in advance of the construction of the new Boiler House and New Office Building (see Plate 5.21) lay south-east of the Visitors’ Car Park, on the site of the Victorian farmhouse that formerly occupied the southern part of Hill Farm (Figs 5.4 and 5.23). The excavations comprised the approximately square area of the Office Building, and a rectangular extension to the west where the Boiler House and accompanying services would be constructed. The topsoil and subsoil were removed by machine to reveal archaeological features cutting into the Upper Greensand natural.

Three irregularly-shaped ponds were excavated to the west of Hill Farm (Figs 5.5 and 5.31). The ponds were orientated along a north-south axis, with Pond 1 at the southern end of the site, Pond 2 at the centre, and Pond 3 to the north. The ponds varied in size from approximately 100 m$^2$ to 170 m$^2$ (total area 392 m$^2$).

The Staff Car Park to the south-east of Hill Farm covers a rectangular area of c. 480 m$^2$ (Fig. 5.5 and 5.18). The impact depth of the car park was 0.3 m. The topsoil strip was continuously monitored to the impact level, which coincided with the depth of the topsoil; archaeological features were therefore not excavated.

Watching Brief Areas
In addition to the main works, the watching brief monitored various areas of ground disturbance in and around Hill Farm. This included: drainage works and foundation trenches within the existing Hill Farm buildings, drainage and pipe trenches to the west of Hill Farm, and a narrow cable trench running from the south of Hill Farm to new garages east of the Hill Farm Cottages (Fig. 5.4).

The Earlier Prehistoric Period
A small, bowl-shaped pit (135; Plate 5.5; see Figs 5.20–1, Section 125), 0.70 m wide and 0.23 m deep, was found close to the western perimeter of the Visitors’ Car Park. The lower fill (179) contained a small number of local greensand fragments and a high proportion of charcoal (c. 25%), and appears to have been deposited in a single episode, probably shortly after the pit was cut. A total of sixty sherds of Plain Bowl pottery (236 g) and 37 flints were spread throughout the fill. A radiocarbon date of between 3770–3630 cal BC (Poz-14321: 4890±40BP) was provided by some Corylus avellana (hazel) charcoal fragments in the same deposit (see Chapter 7).

The upper fill (134) contained a small amount of charcoal (c. 5%) and occasional burnt stones, with notably fewer finds than the lower fill, yielding only 21 sherds (69 g) of Plain Bowl pottery and five flints, including two chips.

Late Bronze Age Activity
A few postholes in Trench 14 and two gullies in Trench 15 were the only features which could be attributed to the late Bronze Age (Fig. 5.6). Activity in this period
was, however, also evident in the earliest layers in a midden, and the soil buried below them, in Trench 14.

**The buried soil and midden**

A sequence composed of seven principal layers was found in Trench 14 (Fig. 5.7, Section 1419; Plates 5.6–7), of which the lowest three (1457=1409, 1456=1407 and 1455=1406) may date from the late Bronze Age. The upper layers date from the early Iron Age and are described in the next section. At the base of the sequence was a tenacious yellow-green clay with chalk inclusions (1410) formed by weathering of the natural chalk. This is probably the chalky clay found by Rhodes towards the base of his trench. This was overlain by the buried soil (1457=1409) into which the postholes described below were probably cut. This is equivalent to layers T811 and T709 (see Fig. 5.28 trenches T7 and T8), and probably to Rhodes’ layer 4 (Rhodes 1948, fig. 8). Above this were two greyish brown silty clay layers (1456=1407=1438=1431 and 1455=1406=1432=1435) both flecked with charcoal. The lower deposit (1456) was characterised by two concentrations of pebbles, perhaps derived from the Plateau gravels at the top of Round Hill. This deposit corresponds to layers T810 and T1004 (Fig. 5.28 trenches T8 and T10). The upper deposit (1455) was cleaner, but both layers may have been worm-sorted colluvial soils. They probably correspond to Rhodes’ layer 3.

The lower of these two deposits (1456) contained a single late Bronze Age sherd, 47 fragments of animal bone, an iron swan’s neck pin (Fig. 6.11.1) and a piece of copper wire (1431).

The upper deposit (1455) was richer, containing 89 pottery sherds (844 g) and 336 fragments of animal bone. Much of the pottery consisted of plain body sherds dated to the late Bronze Age on the basis of their fabric, but there were also two rims, one fingertip-decorated sherd and one sherd decorated with incised lines, that date from the early Iron Age (Fig. 6.2). The animal bone includes a wolf bone...
Figure 5.7 Plan and phased section drawing of Trench 14
which gave a radiocarbon date of 900–790 cal BC (Poz-12517: 2680±35BP; see Chapter 7).

**Postholes**

Six small shallow features (1439 (not visible on plan), 1444, 1446, 1448, 1450 and 1452), possibly postholes, were cut into layer 1457 (Fig. 5.7). Although they appeared to be sealed by layer 1456, it is possible that some of them were actually cut through it since their fills were more or less similar to the layer itself. Given the limited size of the trench, it is not surprising that these features do not define any recognisable structure.

The postholes were similar in size, the diameter ranging from 0.18–0.23 m and the depth from 0.14–0.28 m. They were filled by silt clay deposits, sometimes containing appreciable quantities of charcoal. The finds consist of a fragment of human skull and a small early Iron Age sherd in posthole 1444, four calcined bones in posthole 1439, three late Bronze Age sherds and a sheep/goat bone (astragalus) in posthole 1450, and a further sheep/goat astragalus in posthole 1446.

**Gullies**

Two short stretches of gully (15038 and 15335) provide the only evidence for late Bronze Age activity in Trench 15 (see Fig. 5.10). Gully 15335 contained one small late Bronze Age sherd and a cattle premolar; gully 15038 contained no finds. Both gullies were, however, cut by early Iron Age features. Gully 15335 was 0.5 m wide and 0.15 m deep; gully 15038 0.35 m by 0.1 m.

**Sword chape**

A bag-shaped sword chap was recovered from the top soil in Trench 15 (Fig. 6.11.2). Although unstratified, it provides further evidence for late Bronze Age activity in this area.

**THE EARLY IRON AGE**

A much larger number of more varied structures provide evidence for activity in the early Iron Age (Fig. 5.8). Further midden deposits were found in trenches T4,T5 (Fig.
5.9) and Trench 14, within the last of which various postholes were found at roughly the same level as Rhodes' chalk platform. Gullies were found in Trenches 15 (see Plate 5.18) and 19 (see Plate 5.19) and in the Staff Car Park and the Visitors Car Park at Hill Farm. In only a few cases was sufficient of these gullies preserved or exposed to be sure of their form, but it seems likely that many of them were originally semicircular or penannular. In some cases they can be related to posthole-built structures including four-posters and roundhouses. Some of the ditches, however, seem to have been related to enclosures. Pits and other postholes were also found in Trenches T6, T9, T11, 14, 15, 19, the Visitor’s Car Park, the Staff Car Park, the Boiler House and New Office Building trenches and possibly in T4. In Trench 19 some of these postholes formed groups which may have been related to roundhouses. Together, these finds demonstrate the existence of an extensive Iron Age settlement around the hillfort.

The midden deposits

The late Bronze Age deposits in Trench 14 described above (Fig. 5.7: 1455–7) were overlain by two further principal midden layers (1454=1413=1405 and 1458) that date from the early Iron Age, as well as by a number of more localised deposits (1462 = 1428, 1420, 1422 and 1424).

The lowest early Iron Age layers (1454 and 1462) were cut by a number of pits and shallow scoops (eg 1414, 1465, 1469 and 1470) as well as post- and stakeholes (eg 1463, 1460 and 1473; Plate 5.8). These features were overlain by a charcoal rich, clay silt (1458) which corresponds to Rhodes’ layer 1. A concentration of burnt pebbles and other stones less than 1 m across was found within this layer in the south-eastern corner of the trench. The trench was extended to see if this represented another pebble platform, but no further stones were found. Pit 1414 contained discrete lumps of grey-brown silty clay, perhaps the remains of two clay balls (Plate 5.9) which may have been stored as raw clay for making pottery objects or for repairing daub walls (Lambrick and Allen 2004, 115).
Figure 5.9  Plan and sections of Trench T5

View of Trench 5 looking north
The uppermost layer in the sequence was the modern ploughsoil (1459). The Roman rubble spread encountered by Rhodes between the topsoil and midden (1948) did not extend into Trench 14, although the ploughsoil did contain a number of Roman finds. In trenches T8 and T10 layers T809 and T1004 (see Fig. 5.28), which contained early Iron Age finds and were sealed by a layer of Roman chalk, were presumably part of the midden, although to which layer they corresponded is unclear.

Considerable assemblages of finds were recovered from both of the principal early Iron Age layers. Layers 1454=1413=1405 contained large quantities of pottery, some clustered in distinct groups, much animal bone—including foetal or neo-natal pig remains—burnt stone and a small range of other artefacts. These comprised a bone awl, two bone points (SFs 5199 and 5726; Plate 5.10), a worked piece of antler (SF 4754) and two sawn and chopped fragments of antler. The pottery included 162 sherds (1928 g) of early Iron Age pottery, 429 sherds (3836 g) of undifferentiated early/middle Iron Age pottery, 18 pieces (144 g) of late Bronze Age/early Iron Age pottery and two sherds (20 g) of diagnostically late Bronze Age pottery. Nine refitting sherds from a Chinnor-Wandlebury style bowl (Fig. 6.2.60) and a fragment of a red-coated, globular bowl were recovered from layer 1413.
The upper layer (1458) also contained much early Iron Age pottery, including refitting clusters of sherds. The animal bones included, alongside the more usual species, more foetal pig bones, and bird, fish and rabbit bones. There were also fragments of quern stone, spindle whorls, a metal pin, a bone gouge and needle (Fig. 6.9 SF 1400 and SF 2387) and a concentration of flintwork. The pottery included small numbers of middle Iron Age and Roman sherds probably incorporated by ploughing, since there is little other indication that deposition continued beyond the early Iron Age.

Very few finds were recovered from the more localised deposits: sixteen sherds, including one diagnostically early Iron Age from one of the clay lenses (1420) and a single Iron Age sherd from one of the others (1424).

An augur survey around Trench 14, was carried out to establish the extent of the midden deposits. This survey established that dark occupation deposits continued west, north and east for at least 30 m (the limits of the survey), and south for at least 5 m beyond the trench, thinning in all directions. A deposit of dark sandy silt some 0.2 m deep underlay the topsoil all along Trench T4, and was removed in two spits (see Fig. 5.30 layers 402 and 404). This was cut by the Roman enclosure ditch and contained much early Iron Age pottery (171 sherds weighing 1921g). No such soil was encountered in Trench T11, which lay 65 m from Trench 14. Some 50 m to the north-west a thinner dark soil (6005) that overlay a thin buried soil (6020) was found extending as far as the Roman enclosure ditch. This soil, which contained a mixture of early Iron Age and Roman finds, and was cut by Roman pit 6006, may have been more of the midden soil, though disturbed and mixed by Roman activity.

Pits

A total of 29 early Iron Age pits were found, of which 15 were in Trench 15 (Figs 5.10–5.11). There were five pits in Trench 14 (see above), but only one or two pits were found in the other trenches. Most of the pits were more or less circular and their size varied quite markedly. For the purposes of this report, the pits have been divided into four groups (Fig. 5.12). It should be stressed, however, that the variation was more or less continuous and the definition of the groups is thus rather arbitrary.

The largest pits were quite widely dispersed. The very largest (882, 2.6 m wide by 1.3 m deep) was in the Visitors' Car Park (see Fig. 5.23). Otherwise, depth was as important as diameter. The next widest, pit 742 (2.4 m wide by 0.7 m deep) in the Offices and Boiler House trench (see Fig. 5.23), had a very similar volume to pits T904 (Fig. 5.13) and T1103 (Fig. 5.14; Plate 5.11), both of which were of greater volume than pit 15021 (2.1 m wide by 0.6 m deep) in Trench 15 (Figs 5.10 and 5.11). All of these pits had steep sides (pit T1103 was undercut on one edge) and flat bases.
Figure 5.10  Phased plan of Trench 15
Figure 5.11 Trench 15: section drawings
Figure 5.12  Graph showing dimensions of early Iron Age pits

Figure 5.13  Plan and section of Trench T9
Figure 5.14 Plan and sections of Trench T11
The majority of the pits, including almost all of those in Trench 15, fell into two groups with quite consistent dimensions (Fig. 5.12). One group, consisting of twelve medium sized pits, had widths between 1.20 m and 1.51 m (eg Plate 5.12) and, although their depths varied from 0.23 m to 0.82 m, they were mostly between 0.45 and 0.60 m deep. These generally had steep sides, pit T904 being undercut on the west (Fig. 5.13). The other groups consisted of six slightly narrower pits, with widths of between 0.40 m and 0.80 m, but which were of similar depths to the wider group (0.30 m to 0.52 m). These pits were widespread (see also Fig. 5.26). Most of these pits again had steep sides and more or less flat or slightly concave bases, although there were some examples with more gently sloping sides (eg pits 15003, 15010 and 15125; Figs 5.10–11). The remaining pits consisted of much shallower, small, bowl-shaped features, with depth of 0.20 m to 0.10 m and widths between 0.42 m and 0.72 m.

There was little indication that the fills of the pits or the finds they contained were related consistently to differences in size. The number of fills varied roughly according to the size of the pits, the largest pits having up to 15 fills, the medium-sized pits from two to six, and the bowl-shaped features just one. Possible pit T409 was truncated by the Roman enclosure ditch (see Fig. 5.30), and only one fill was present. Most of the fills consisted of greyish or yellowish brown silty clays, some being notably darker than others and varying in the proportion of greensand. One of the few really distinctive fills comprised a deposit of fuel ash slag in pit 15105, a bowl-shaped pit in Trench 15 (Fig. 5.10).

Although the larger pits tended to contain the largest quantities of finds the correlation was far from precise. For example, the largest pit (742) contained 112 pottery sherds (including one residual Peterborough Ware sherd) as well as animal bone, some with butchery marks. However, one of the other large pits (882) contained only 27 sherds, while some of the medium-sized pits contained more, for example pit 15010, which contained 103 pottery sherds, animal bone including two horse mandibles and a rich assemblage of charred plant remains and charcoal (Plate 5.13). Fewer finds were, however, more typical (eg pit 15231: 18 sherds with animal bone) and some pits contained very little. The smaller pits generally had smaller assemblages or lacked finds altogether.

The more exceptional finds include a possibly articulated duck wing in pit 15305, bird bone in pit 15021 and freshwater mussel shell in pit 15301. A complete saddle quern came from pit 15069 (Plate 5.14), a possible smoother in Lower Calcareous grit in pit 742, and a large lump of quartz conglomerate, possibly from a quern, from pit T6016. Much of a single pottery vessel was also recovered from pit T6016, while in pit 15018 part of a black burnished bowl with a tooled lattice motif, a pedestal base and the ‘T’rim of a jar were all overlain by a deposit of burnt quartz pebbles (Plates 5.15–16).
Plate 5.13 Animal jaw and pebbles in pit in Trench 15

Plate 5.14 Quern stone in pit 15069 in Trench 15

Plate 5.15 Pit 15018 with pebbles mounded over potsherds in Trench 15
Plate 5.16  Detail of the pot from pit T6016

Figure 5.15  Plan of skeletons in pit 15003 (SK 15005) and 15155 (SK 15131)

Plate 5.17  Adult and child skeletons in pits 15003 and 15155 in Trench 15
Two of the pits also contained human remains (Plate 5.17). The first, pit 15003 in Trench 15, lay between the termini of gullies 15335 and 15038, cutting both features (Fig. 5.10). The lower fill contained the crouched skeleton of a young adult male (SK 15005; Fig. 5.15). Cut into the western edge of this fill and the surrounding natural was the second, a smaller pit (15155) which contained the skeleton of a new-born baby (SK 15131; Fig. 5.15). The skeletons were both buried in crouched positions lying on their left hand side, facing north (Plate 5.17). The animal bone assemblage (225 fragments) included cattle, horse, sheep, sheep or goat, pig and frog or toad.

Gullies and associated structures

Early Iron Age gullies and ditches were found in Trench T11, in Trenches 15 and 19 and in the Visitor's Car Park and Staff Car Park at Hill Farm. Because of the limited scale of excavation and the presence of later features, the full extent of these gullies was revealed in only one case: a semicircular gully (19183) perhaps associated with a four-poster in Trench 19 (Fig. 5.16–7). Arcs of gully in Trench 15 (Fig. 5.10: 15330, 15332, 15333), in Trench 19 (Fig. 5.16: 19184, 19189 and possibly 19011), in the Visitors’ Car Park (Figs 5.20 and 5.23: 534 and 400) and the Staff Car Park (Fig. 5.18: 6) also probably belonged to semicircular, penannular or circular structures. These structures appear to have fallen into two groups: small structures with diameters of around 7–9 m and larger structures with diameters of around 13 m.

Geophysical survey showed that the ditch (T1113) sectioned in Trench T11 was part of a square enclosure (Figs 5.1 and 5.14). Some ditches and gullies in Trench 15 (Fig. 5.10: 15342 and 15334) and possibly in the Visitors’ Car Park (Fig. 5.20: 395) may have formed parts of larger enclosures. Others (Fig. 5.10: 15331 and 15111 in Trench 15) were revealed on such a limited scale that their interpretation remains unclear.

Square enclosure T1113

A small square enclosure approximately 16 m across was identified by the GSB magnetometer survey (Fig. 5.1), and was investigated by trench T11, which cut across the north-east side and into the centre. The enclosure ditch T1113 was 1 m wide and 0.5 m deep, with sloping sides and a narrow concave base (Fig. 5.14). A thin primary clay fill contained two sherds of early Iron Age pottery.

Pit T1103 and smaller pit T1110, both of which contained early Iron Age pottery, lay within the area enclosed by this enclosure (Fig. 5.14). Pit T1110 was cut by ditch T1106, which also contained a lens of charcoal and six early Iron Age sherds. Its relationship to T1113 is unknown. There were also two undated postholes in this area.

The dating of this small square enclosure is not secure, given that there were other early Iron Age features in close proximity from which the sherds in the enclosure ditch could have derived.
Figure 5.17 Trench 19: section drawings
Semicircular gully 19183 and other small structures

A semicircular gully (19183) in Trench 19 had an internal diameter of 7.5 m and a gap 6 m wide on its south-western side (Fig. 5.16). The gully had a U-shaped profile and was up to 0.5 m wide and 0.18 m deep.

Two other gullies in Trench 19 defined arcs suggesting circles of around 7.5 m diameter (Fig. 5.16: 19184 and 19189). At least one of them (19184) did not define a complete circle since it did not continue beyond the point where it was truncated by a middle Iron Age gully (19015). Both of these gullies were shallow (0.17 m and 0.19 m deep), but the width varied (up to 0.78 m for 19184 and up to 0.36 m for 19189).

All three of the gullies contained pottery and animal bone. The largest quantity (39 sherds, including two from the late Bronze Age or earliest Iron Age, and 325 fragments of animal bone) were recovered from gully 19183, but gullies 19184 and 19189 also contained appreciable quantities (19184: 26 sherds, including seven late Bronze Age or earliest Iron Age, and 34 fragments of animal bone; 19189: 15 sherds, including one earliest Iron Age, and 55 fragments of animal bone).

Gully 19183 may have been related to a four-post structure. Three large postholes (19002, 19128 and 19095), up to 0.30 m deep and up to 0.93 m wide, defined three corners of this structure. The fourth posthole may have been removed by a medieval furrow, and if so the structure would have been a square, 2.75 m wide. Several other postholes may have been related to this structure; posthole 19134, 0.42 m wide and 0.18 m deep, lay at the centre of the structure, and pairs of postholes (19136 and 19138: 0.24–0.25 m wide and up to 0.22 m deep, and 19130 and 19132: 0.20–0.34 m wide and up to 0.13 m deep) lay along its sides. The three larger postholes all contained pottery, including diagnostically late Bronze Age or early Iron Age sherds, and two of them also animal bone. The only find from the smaller postholes was an Iron Age sherd in posthole 19138.

Two postholes (19086 and 19013) and a shallow oval pit (19004: 0.72 m by 0.53 m across and 0.20 m deep) were found within gully 19184. While it is possible that the two postholes were related to a four-poster similar to that within gully 19183, they were considerably smaller (0.41–0.43 m across and 0.18–0.30 m deep) than those of the structure inside gully 19183. Posthole 19013 contained four Iron Age sherds and 20 fragments of animal bone; the pit just one small Iron Age sherd. No postholes were found in the small area excavated within gully 19189.

At the western edge of Trench 19, about 1 m of a further curved gully (19011) was revealed. This might have belonged to a structure similar to the other Trench 19 gullies. The gully was up to 0.29 m wide and 0.12 m deep. A shallow depression (19035), 0.03 m deep and 0.40 m wide, was found at the very end of the gully. A fired clay object, possibly a loomweight, and late Bronze Age and Iron Age pottery were recovered from this depression. The gully itself contained an almost complete horse skull (SF 19000) as well as similar kinds of pottery, reinforcing the impression that the end of the gully was a focus for special deposition.

A further gully (6), which probably formed part of a semicircular or circular structure of similar size to those in Trench 19, was found in the Staff Car Park excavation at Hill Farm (Fig. 5.18). A length corresponding to a quarter of a circle of this gully was exposed. It had a diameter of 8.6 m, slightly larger than the gullies in Trench 19, and was up to 0.60 m wide. It contained one early Iron Age sherd and seven early/middle Iron Age sherds.

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Figure 5.18 Phased plan of the Staff Car Park excavation
Penannular gully 15330 and other possibly larger structures

The remains of a possible penannular gully (15330) with a diameter appreciably larger that those of the gullies in Trench 19 was found in Trench 15, alongside two other stretches of gully which might have formed parts of similar structures (Fig. 5.10).

Gully 15330 consisted of two arcs (north and south), defining a circle 13 m across. A later north-south early Iron Age ditch (15334) cut both gullies on the east, but what may have been the end of the southern gully (15326) survived just beyond it, possibly marking an entrance on this side. North of this possible terminus two postholes (15030 and 15031) also lay upon the line of the circle defined by the gullies.

The gullies were 0.45 m wide and 0.25 m deep, and contained 28 sherds of Iron Age pottery and 44 fragments of animal bone, including some with cut marks.

The gullies belong to a secondary phase of early Iron Age activity in Trench 15, as it can be defined on the basis of stratigraphic relationships: they cut one earlier ditch (15331; see below) and pit 15231, but were themselves cut by two later ditches (15334 and 15342).

Two further stretches of gully (15333 and 15332) were found in the southern part of Trench 15, and might have formed parts of similar structures. The inner, earlier gully (15332) was up to 0.70 m wide and 0.67 m deep. It contained 27 Iron Age sherds, including two early Iron Age sherds, and 240 fragments of animal bone, including some foetal or neonatal pig remains. The later gully (15333) curved more gently than gully 15332 and cut its outer edge. It was 0.09 m wide and 0.40 m deep. It contained 26 sherds, including two early Iron Age examples, and two fragments of animal bone. Both of these gullies, like 15330, were cut by early Iron Age ditch 15334.

Curved gullies in the Visitors’ Car Park

In the Visitors’ Car Park trench at Hill Farm two short stretches of gully (see Fig. 5.20: 400 and 534), forming opposing arcs, might have been related to the first phase of a penannular enclosure (the other elements of which date from the middle Iron Age). Although the gullies formed a roughly symmetrical arrangement, they varied in size, the northern gully (534) being 3.0 m long and just 0.20 m wide and 0.1 m deep whilst the southern gully (400) was 4.6 m long and up to 1.2 m wide and 0.22 m deep. The southern gully (400) contained 92 Iron Age sherds, including one diagnostically early Iron Age, and animal bone.

Ditches associated with larger enclosures

As well as gullies defining semicircular or circular structures, there were a small number of early Iron Age ditches of other kinds, some of which may have defined larger enclosures. This may have been the case for two ditches (15342 and 15334) in Trench 15 (Fig. 5.10). The earlier of these ditches (15342) ran east-south-east across the centre of the trench. It was up to 0.72 m wide and 0.34 m deep and contained 63 Iron Age sherds, including 13 dated early Iron Age, and 107 fragments of animal bone including one from a large bird.

The later of these ditches cut the earlier at right angles, and ran up the eastern side of the trench, ending where it was cut by an early Iron Age pit (15010). The ditch was irregular, changing orientation slightly after each short straight length. It varied in width from 0.35 to 0.90 m and was up to 0.81 m deep. There were three fills containing a total of 108 sherds, including one late Bronze Age/earliest Iron Age sherd and seven early Iron Age sherds. A concentration of middle Iron Age sherds from intervention 15238 may derive from a later ditch (15340/15341) which cut it at this point.

The two early Iron Age enclosure ditches (15342 and 15334) cut the probable penannular gullies (15330, 15333 and 15332) described above, and thus belong to a later phase of early Iron Age activity, possibly related to the creation of larger rectilinear enclosures (Fig. 5.10).

A further possible enclosure ditch was exposed in the Visitors’ Car Park (see Fig. 5.20: 395). The slightly curved ditch was 0.80 m wide and 0.50 m deep, and contained early Iron Age sherds and animal bone.
Postholes

Postholes were found in Trenches 14, 15 and 19, and in the Boiler House and New Office Building excavations. In addition to the four-post structure described above (perhaps related to gully 19183), only two groups of postholes in Trench 19 (group 19190 and a group between gullies 19184 and 19189; Fig. 5.16) can plausibly be related to structures. The other postholes occurred either as dispersed scatters or as isolated features.

Group 19190 in the northern part of Trench 19 comprised six postholes in a roughly circular arrangement, with a diameter of around 5 m which might have been related to a small roundhouse. A further posthole (19047) lay just off centre within this partial ring. A further four postholes in this area (19097 recut as 19081, 19093 and 19085) cannot be related to this possible structure. The postholes varied in size, from 0.17 m to 0.39 m wide and from 0.12 m to 0.36 m deep. Iron Age sherds, including early Iron Age and residual late Bronze Age sherds, were found in five of the postholes (19041, 19042, 19045, 19047 and 19077).

In the southern part of the same trench, between gullies 19184 and 19189, a further group of postholes, of which only three were excavated (19140, 19146 and 19171), defined a circle with a diameter of around 7.2 m (Fig. 5.16). Again, a further posthole (19177) was found off-centre within this ring. The dimensions of the postholes again varied, from 0.23 m to 0.40 m wide and from 0.08 m to 0.26 m deep.

THE MIDDLE IRON AGE

Ditches and gullies

Middle Iron Age ditches and gullies were found in Trenches 13, 15 (Plate 5.18) and 19 (Plate 5.19) and the Visitors’ Car Park (Plate 5.20), Staff Car Park and Offices (Plate 5.21) and Boilers House excavations (Fig. 5.19). Some of these belonged to circular or penannular enclosures. A contrast similar to that made for the early Iron Age between larger enclosures with diameters of between 10 m and 14 m and smaller structures with diameters of around 8 m can again be made, although, in contrast to the early Iron Age, only one of the smaller structures was found. There
Plate 5.19 Small enclosures and pits in Trench 19 before excavation looking north

Plate 5.20 Roundhouse enclosure under excavation in the Visitors’ Car Park excavation

Plate 5.21 Offices excavation in progress
were also ditches which formed larger enclosures, at least one of which was attached to a penannular enclosure, whilst others formed part of a much larger system of boundaries. There were marked contrasts in the scale of the ditches defining these enclosures. In contrast to those of the early Iron Age, most middle Iron Age ditches were more substantial, and many of the ditches, both those related to circular and penannular enclosures and those related to larger enclosures, had been recut.

Large penannular gullies

The most completely excavated of the penannular gullies were a concentric pair (Fig. 5.20–2: 174 and 175) found in the Visitors’ Car Park, which were associated with a roundhouse (structure 532; Fig. 5.22) and a larger enclosure (80 and 100; Plate 5.20). It is possible that one of the gullies replaced the other, although there were no stratigraphic relationships to prove this. The inner of the gullies (174) was cut at the entrance to the enclosure by an east-west aligned ditch (533), but unfortunately the relationship of this ditch with the outer gully (175) was obscured by a Roman burial (333). It seems likely, nonetheless, that one of the ditches was a replacement for the other.

Both gullies were approximately circular, and there were gaps in both to the east measuring around 4.0 m in the case of the inner gully and 4.5 m for the outer gully. The inner gully had a diameter of around 11.5 m, the outer gully 12.0–12.6 m.

The maximum dimensions of the gullies were similar—up to 0.60 m wide and 0.4 m deep—although the inner gully was generally slightly smaller. The outer gully had a V-shaped profile, whilst the inner ditch was more U-profiled. Longitudinal cuts were made along the inner ditch to look for evidence of posts, but none were found. The only finds were probably both intrusive: a small machine-rolled modern object in the outer gully and a hobnail, possibly Roman, in the inner.
Figure 5.20  Phased plan of the Visitors' Car Park excavation (northern part)
Arcs of ditch probably belonging to similar enclosures were found in the southern part of the Visitors’ Car Park and in the Boiler House trench (Figs 5.23–4). In the Visitors’ Car Park geophysical survey had not picked up the buried features (see Figs 5.2 and 5.3), probably because the depth of overburden was at least 0.6 m. At the southern end of the Visitors’ Car Park, a gully (60), and its recut (70) defined two phases of an enclosure with diameters of 10.4 m and 11.1 m respectively (Fig. 5.23). Both ditches terminated on the east, but a deep pit (53) lay immediately adjacent, blocking any entrance. There was also an opening 1 m wide on the north across the earlier cut, which was blocked by the later cut. Possibly the pit belonged to the earlier, discontinuous enclosure circuit, although its position better matches the later ditch cut.

The initial cut (60) was over 0.65 m wide and 0.20 m deep, whilst the recut was 1.10 m wide and 0.46 m deep. The later cut contained 181 sherds, mostly from the terminals, including 85 distinctively middle Iron Age sherds.

A further pair of concentric gullies (690 and its recut 700) was exposed 25 m to the south-east in the Boiler House excavation. The outer of these (690) was the earlier and had a diameter of around 13 m; the inner, later gully had a diameter of around 12.1 m. The only entrance exposed within the trench was 2.5 m wide and lay towards the north-west of the later, inner gully (700). The earlier gully had no corresponding break.
The later gully (700) seems to have been of comparable size to the others elsewhere, measuring around 1.0 m wide and 0.40 m deep. Where not cut by the later gully, the earlier outer gully (690) was slighter, measuring only 0.4 m across and 0.35 m deep. Both had more or less U-shaped profiles, with up to six distinct fills in the case of gully 700, but just a single fill for gully 690. The only find associated with these gullies was a roughly triangular block of iron.

A total of nine postholes and two pits were found within these gullies. It is not, however, clear that any of them were related to a structure associated with the gullies. Indeed, two of the postholes formed part of a four-post structure (546) that spanned the gullies and obstructed the western entrance.

There were two further sets of curving gullies, in Trench 19, which belonged to penannular enclosures of similar scale (Fig. 5.16: 19187/8 and 19185/6). Although neither was fully exposed, the former was clear as a geophysical anomaly, and following excavation the fainter outline of the latter can also be discerned on the geophysical survey plan (Fig. 5.3).

Like gullies 690 and 700, the first of these, gullies 19188 and its recut 19187, had an entrance to the west, 3 m wide, in only one of the gullies. In this case, however, it was in the earlier gully (19188) and the later recut was continuous. In contrast to gullies 690 and 700, the earlier gully (19188) was also the smaller, with a diameter of 12.5 m, whilst the later gully (19187) had a diameter of around 13.6 m.

The gullies were of similar sizes, and slightly larger than those elsewhere, the earlier (19187) being at least 1.48 wide and 0.70 m deep, and the later (19188), 1.24 m wide and 0.67 m deep (Fig. 5.17). Both contained appreciable quantities of pottery (38 sherds, including some residual pieces, in gully 19187 and 90 sherds in gully 19188). The later gully (19188) also contained a small irregular block of iron, a foetal pig humerus and the mandibular canine of a cat. Most of the features within these gullies could not be assigned to a phase, and only one pit can be attributed to the middle Iron Age.

Just one ‘corner’ of the last set of gullies (19185 and 19186) was exposed in the north-east corner of Trench 19. In this case there was a clear contrast between the larger outer gully (19185) which was 0.85 m wide and 0.33 m deep, and the inner gully, which was only 0.26 m wide and 0.06 m deep. This inner gully may have been a wall foundation slot. Both of the gullies defined far from perfect arcs, both having almost straight sections as they ran northwards. Nevertheless, the exposed arc and the geophysical survey suggest a diameter of around 13.5 m for the outer gully, the ‘house’ being 9–10 m across.

The fill of the larger gully (19185) contained charcoal and burnt stone, as well as an appreciable quantity of pottery (101 sherds, including some residual late Bronze Age and early Iron Age pieces) and animal bone including what is probably a hare cranium. The inner gully contained just three sherds. The only features in the area enclosed by these gullies were some stakeholes, which were found on both sides of the inner gully.

**Smaller penannular gullies**

Two lengths of gully (group 12066), interpreted as a smaller penannular gully with a diameter of 8.0 m, were found in the Offices and Boiler House trench (Fig. 5.23). The eastern entrance was between 3 and 4 m wide. The gully itself was 0.6 m wide and 0.3 m deep and contained pottery from the upper fill, including sherds from a middle Iron Age jar.

**Ditches associated with enclosures**

In addition to the penannular gullies, a number of ditches were exposed which seem to have defined other sorts of enclosures. Some of these seem to have been annexes to roundhouses, but the geophysical survey shows that the site was also divided on a much larger scale by a central dividing ditch, with rectilinear enclosures of various sorts to the north and west (Fig. 5.2). Some of these rectilinear enclosures may have been early Iron Age (see for instance Trench 15: 15342 and 15334 above). The curving boundary ditch that ran for around 800 m from west of Round Hill to south of Castle Hill, however, was excavated in Trench 13, and here it was middle Iron Age.
Figure 5.22 Visitors' Car Park excavation: section drawings of postholes from Structure 532
*The long boundary ditch*

The width of the original cut of this long boundary ditch (Fig. 5.25: 1348=1321 and 1341; Plate 5.22) was obscured by a recut (1349=1317 and 1345), but it was at least 1 m deep. The finds consist of three sherds and a cattle mandible giving a radiocarbon date of 400–340 cal BC (Poz-12516: 2275±30 BP).

The recut (1349) was 2.2–3.0 m wide. Alongside a little pottery, including one intrusive Roman sherd, a group of at least six cattle mandibles, some with cut marks, was found in the upper fills. A radiocarbon date of 330–200 cal BC (Poz-12515: 2235±30 BP) was obtained from one of these mandibles.

*Smaller enclosures associated with penannular gullies*

The clearest example of an enclosure associated with a set of penannular gullies and a roundhouse was found in the Visitors' Car Park (Fig. 5.20). The gully (80 and its recut 100) defined an elliptical area, 235 m², to the west of roundhouse 532, the ditch beginning just to the north of the associated penannular gullies (175 and 174) and ending to the south to form an entrance with the penannular gullies around 7 m wide. The recut appears to have followed the line of the initial cut very closely.

The two cuts were similar in size, the first (80) measuring 0.80 m wide and 0.50 m deep, and the second (100) 0.75 m wide and 0.40 m deep (Fig. 5.22). Both cuts had steep sides. The base of the later cut was flat; that of the earlier concave. They were filled with grey brown slay silts, containing varying proportions of greensand. Such greensand was particularly common on the inner side of the first cut, perhaps indicating an upcast bank on that side. The largest group of finds, including sherds from middle Iron Age B2 jars and D1 bowls, was recovered from the upper fills of the second cut. A pair of narrower gullies (90 and 110) appear to have formed a sub-division within this enclosure.

Trench 15 was laid out to investigate what the geophysical survey (Fig. 5.3) suggested was a penannular gully with an attached annexe on the north. This may be represented by ditch 15340, recut as 15341, which followed a sinuous course, just off north-south, before curving to the east at the northern end of the trench (Fig. 5.10). The ditch was up to 3.1 m wide and 1.0 m deep, with a U-shaped profile. It was filled with up to six layers of yellow or grey brown silty clay and blackened layers perhaps due to burning. It contained 87 sherds (including 46 middle Iron Age), animal bone, including a goose femur, a weasel femur and a fragment from a fish cranium, and charred plant remains. A fragment of human bone was recovered from one of the middle fills (15272).

A ditch (Fig. 5.23: 610=871), which appears to have defined a polygonal enclosure, spanned the Visitors' Car Park and Office and Boiler House trenches, measuring around 14 m east-west and over 12 m north-south. It measured 2.0 m...
Figure 5.23 Phased plan of the Offices and Boiler House excavation and the southern end of the Visitors’ Car Park excavation
across and was 1.0 m deep and contained pottery, including some middle Iron Age sherds, animal bone and four irregular flat iron fragments. Given the absence of clear continuations in the Visitors’ Car Park to the north-west, or of a return in the Service trenches to the north, it seems most likely that this was not associated directly with a pennannular gully. Instead it was U-shaped and open on one side, like enclosure 436–442 at Watkins Farm (Allen 1990, fig. 4) and enclosures B2 and B3 at Gravelly Guy (Lambbrick and Allen 2004, fig. 3.2).

The final examples of ditches on this scale were in the Staff Car Park (Fig. 5.18). Two narrow ditches (535 and 16) were at right angles, although both were cut by later ditches (535 by ditch 12 and ditch 16 by ditch 18) before they met. Ditch 18, which was 2.8 m wide, continued the line of ditch 535, and may have been a later recut. It was itself cut at right angles by ditch 12, which was from 2.8 to nearly 4 m wide.

The smaller ditches measured just 0.36 m across. A large saddle quern and three sherds, including one middle Iron Age example, were recovered from ditch 535; a single middle Iron Age sherd from ditch 16. Six middle Iron Age sherds were recovered from ditch 18, making these rectilinear enclosures securely middle Iron Age, despite residual early Iron Age sherds from ditch 12.

**Roundhouses**

In the space enclosed by gullies 174 and 175 in the Visitors’ Car Park trench, a ring of postholes with additional small and large postholes to the east define structure 532 (Figs 5.20 and 5.22).

The ring contained nine postholes (Fig. 5.22), although there may have been others removed by a later furrow, and had a diameter of around 5 m. The postholes themselves were up to 0.7 m wide but less that 0.20 m deep (Fig. 5.22). A few Iron Age sherds were recovered from postholes 380 and 398, and a small piece of iron plate with two possible rivets from postholes 337.

To the east of the ring were two small postholes, and beyond them two much larger postholes or pits (516 and 528). Postholes 516 measured 1.05 m across and was 0.40 m deep; posthole 528, 1.15 m wide and 0.48 m deep. There were other groups and short lines of postholes outside the ring on the south-east side, but there was no trace of an outer ring of posts elsewhere (Fig. 5.20).

This posthole arrangement could be interpreted as a 5 m diameter roundhouse with an external porch to the east, or as a larger roundhouse with an internal ring of postholes, the line of the wall only evident from the door postholes and the few surviving post-holes on the south-east. Houses 5 m across are not unknown in the middle Iron Age of the region, but are rare, and examples with external porches are even rarer. Numerous examples of houses with internal rings of posts are, however, known, for instance at Gravelly Guy (Lambbrick and Allen 2004, fig. 3.12), and the survival of the Iron Age ground surface at Mingies Ditch gave good evidence for outer mass walls or stake walls without substantial postholes (Allen and Robinson 1993).

Further postholes were found within several of the other penannular gullies, but in no case did they clearly belong to a roundhouse. Within penannular gullies 690 and 700 in the Offices and Boiler House trench, nine postholes were found (Fig. 5.23). They do not, however, form any clear structure, with the exception of postholes 795 and 797 that form part of a four-post structure (546). This spans the gullies and obstructs the west entrance, and is thus unlikely to have been contemporaneous. Some of these postholes may have belonged to other four-post structures: postholes 791, 815 and 817, for example, could have formed three corners, the fourth posthole being truncated by pit 759. The only finds from these postholes were four crumbs of pottery from posthole 793.

A few other postholes (44, 171 and 234) and a stakehole (47) were found within the space enclosed by gullies 60 and 70 in the Visitors’ Car Park trench (Fig. 5.23), but the area exposed was too small for any related structures to be apparent. Posthole 44 contained 18 Iron Age sherds. A further posthole (171) cut the outer edge of gully 60.

A pair of small postholes (19165 and 19167) within the space defined by gullies 19187 and 19188 in Trench 19 could be assigned to the middle Iron Age (Fig. 5.16).
Postholes possibly related to other kinds of enclosures

A number of postholes were also found within the enclosure (80 and 100) associated with penannular gullies 174 and 175 in the Visitors’ Car Park Trench (Fig. 5.20). Of these postholes, three (63, 58, 61) were set at 4 m intervals in an east-west row, dividing the enclosure into two. Posthole 61 contained a piece of copper strip. A similar fragment was found in posthole 67 which cuts gully 90, also within the enclosure. A further five postholes (297, 65, 301, 285, and 299) were found within the enclosure, and one (120) outside.

A pair of postholes (602 and 584) was found cutting the edge of enclosure 610 in the Offices and Boiler House trench (Fig. 5.23), and cannot, therefore, have been directly related to the primary use of the enclosure. They measured 0.50–0.74 m across and 0.20–0.24 m deep.

Square and rectangular structures

The only other posthole structures were four, perhaps five, square and rectangular structures clustered together in the Offices and Boiler House trench (Fig. 5.23; Plate 5.23). The size and number of postholes associated with these structures varied.

The simplest was structure 546, which was a square, 2.5 m across, defined by four small postholes, between 0.20 and 0.36 m wide and 0.11 to 0.24 m deep.

The remaining structures all included appreciably wider, if not necessarily deeper postholes. Structure 548, for example, was only slightly larger than structure 546, measuring 3.0 m by 2.8 m, but was defined by four postholes measuring 0.50–0.68 m across and 0.08 to 0.30 m deep. A further two postholes (686 and 688, one replacing the other) which lay midway along its eastern side may have been associated with this structure.

The remaining two structures had even larger postholes, many of which were distinctively oval in plan. Structure 549 was no larger than structure 548, measuring 3.0 m by 2.5 m, but its postholes measured 0.84–1.20 m across and 0.25–0.44 m deep. A further three postholes (707, 771 and 789) which lay midway along the sides of this structure, were probably also part of it. These postholes were smaller, measuring 0.32–0.52 m across and 0.18–0.29 m deep.

It is possible that two pairs of postholes just north of structure 549 (713 and 716, and 783 and 786) might have belonged to another similar structure, around 2.75 m wide, but if so the remaining postholes must have lain outside the excavated area. Alternatively, this could have been part of structure 549, which could then have had an annex added on the north side, or could have been a larger rectangular building of two rooms. The postholes on the east side are all in line, but those on the west are not, so perhaps a rebuild with an addition is more likely.
The final four-post structure, 547, was appreciably larger than the others, measuring 4.0 m x 3.5 m, but had postholes similar in size to those associated with structure 549, measuring 0.67–1.2 m across and 0.22–0.30 m deep.

Although there was some variation, all of these structures shared a roughly NW-SE orientation. Most of the postholes had more or less steep sides and flattish bases. Post-pipes, varying in width from 0.15 m to 0.44 m, were noted in several of them.

The only finds associated with these postholes were a fragment of animal bone in posthole 695, charcoal in posthole 691, a flint hammerstone in posthole 713 and a chert blade in posthole 783.

Pits

A total of 30 middle Iron Age pits were found. The largest groups were twelve in the Visitors' Car Park (Fig. 5.20) and seven in the Offices and Boiler House trench (Fig. 5.23). Five were also found in Trench 19 (Fig. 5.16), three in Trench 15 (Fig. 5.10), two in the Staff Car Park (Fig. 5.18), and a single example in the Drainage Works (see Fig. 5.5). No middle Iron Age pits were found in the Time Team trenches. Apart from three outlying pits, appreciably larger than the others, the variation in the size of these pits was continuous, and the divisions between the four other categories discussed below are thus rather arbitrary.

Although all large, the four outlying pits were of varied forms. One example (19055) in Trench 19 was both exceptionally wide (2.72 m) and deep (1.00 m) in comparison to the other pits; another (808), in the Offices and Boiler House trench, was exceptionally wide (2.40 m) but shallow (0.26 m), whilst the last two (559 in the Drainage Works and 53 in the Visitors’ Car Park were deep (1.10 m and 1.30 m)
but not exceptionally wide (1.60 m and 1.5 m). Pit 559 was bell-shaped, but the others had steep sides and flat bases.

Apart from the outliers, the largest pits measured from 1.64 to 1.80 m wide and from 0.40 to 0.78 m deep (Fig. 5.26). They generally had steep sides and flat bases. The distinction between this group of pits and the next is arbitrary. The medium-sized pits all measured between 1.20 and 1.30 m wide and from 0.39 to 0.69 m deep. Again they had more or less vertical sides and flattish bases. The small pits were from 0.60 to 1.00 m wide and from 0.15 to 0.48 m deep. Although most of these pits, even the shallowest example 759, had steep sides and flat bases, there were some with bowl- and U-shaped profiles. A pair of pits, similar in width (0.68 m to 0.85 m) to the small pits, has been singled out because these were appreciably deeper (0.64 m to 0.85 m) than the others. Both had vertical sides and flat bases.

There was no very clear systematic variation in the nature of the fills in relation to the size or form of the pits. Most of the fills consisted of grey- or yellow-brown silty clays, although several of the pits were also characterised by darker grey or black layers, often associated with charcoal. There were other traces of fire associated with several of the pits. Pit 41 in the Visitors’ Car Park Trench (Fig. 5.20–1) contained a layer of burnt clay produced by in situ burning which was associated
Figure 5.26  Graph of middle Iron Age pits

Plate 5.24  Pit 41 in the Visitors’ Car Park excavation, half-dug

Plate 5.25  Human skull top in base of pit 149 in the Visitors’ Car Park excavation, and a detail of same
also with deposits of charcoal and other charred plant remains (Plate 5.24). Further charcoal rich layers were found in pits 559, 808 and 258 and flecks of charcoal were noted in a number of the other pits. A deposit of burnt stone was found in pit 486.

Although the largest pits tended to have the largest quantities of finds, there were exceptions. Pit 19055 in Trench 19 (Fig. 5.16) contained 245 sherds of pottery, mostly middle Iron Age but including residual late Bronze Age and Iron Age pieces as well as charred plant remains and a bone gouge. The large pit 149 in the Visitors’ Car Park (Fig. 5.20) also contained a large assemblage consisting of pottery, animal bone (including fish bone and a worked sheep/goat metatarsal), charred plant remains, an iron blade (Fig. 6.11.5) and an adult male frontal bone (Plate 5.25). This bone was found in the centre of the base of the pit, associated with pottery, animal bone and charred plant remains, including oats from which a radiocarbon date of AD cal 250–410 (Poz-14322: 1715±30 BP) was obtained. Given the character and date of the other finds, the oats are considered likely to be intrusive. A number of smaller pits also contained substantial quantities of finds: the medium sized pit 15006 in Trench 15 (Fig. 5.10) contained pottery and a rich assemblage of charred plant remains, the small deep pit 19019 (Fig. 5.16–17) contained a large deposit of animal bone and stones (Plate 5.26), and the small pit 769 (Fig. 5.23) in the Boiler House and New Office Building contained a total of 698 fragments of animal bone, as well as pottery, slag and a saddle quern.

Most of the pits which contained few or no finds were relatively small. There were, however, also large pits that contained small quantities, such as outlying pit 559 (Fig. 5.5), which contained just eight sherds.

Pottery and animal bone were the most common finds, and charred plant remains were also quite well represented. Of the more exceptional finds it is worth noting the human frontal bone and iron blade mentioned above, a rotary quern with shaped and polished metapodials in pit 41 (Fig. 6.8), slag, a saddle quern and a rubber in pit 769 (Fig. 6.7.4), and a bone toggle in pit 94 (Fig. 6.10).

There was no evident pattern in the distribution of pits of different sizes, all of the types occurring in several trenches, nor in the distribution of finds. Although it is impossible to associate pits directly with other kinds of structures, it is perhaps worth noting that most of the pits in the Visitors’ Car Park trench lay within enclosure 80, although there were a also two pits (486 and 484) within the area of structure 532 and one (53) within penannular enclosure 60. Elsewhere, three pits (759, 769 and 889) lay within penannular enclosure 690 in the Boiler House trench, and two (19148 and 19154) within penannular enclosure 19188 in Trench 19.

**EARLY OR MIDDLE IRON AGE FEATURES**

A small number of the features excavated in the area around Castle Hill (mostly pits but including also a few postholes) can be attributed only to the early or middle Iron Age, due to the absence of diagnostic finds.
Pits

The pits that cannot be more precisely dated include two large examples (315 and 349) in the Visitors’ Car Park (Fig. 5.20), which would have been classed if they were middle Iron Age as outliers. They measured 2.3 m wide by 1.4 m deep (315) and 2.1 m wide by 0.5 m deep (349).

Most of the pits, however, fell into the medium-sized categories. These included pits in the Boiler House and Offices trench (Fig. 5.23), in the Staff Car Park (Fig. 5.18) and in the Visitors’ Car Park (Fig. 5.20).

A few small and shallow pits (19089, 19160, 19173 and 19163) were found in Trench 19 (Fig. 5.16), as well as one example in a Pipe trench (555). All were between 0.29 and 0.83 m wide and from 0.13 to 0.40 m deep.

All of these imprecisely dated pits contained few or no finds, usually no more than a few sherds of Iron Age pottery and a few fragments of animal bone. Charcoal was noted in a number of them.

Postholes

A number of post- and stake holes (19101, 19142, 19144, 19162, 19175, 19180 and 19182) within penannular enclosure 19188 and near to a possible roundhouse in Trench 19 could be not be assigned with certainty to either the early or the middle Iron Age (Fig. 5.16). There were no clear indications of order in their arrangement, although it is possible that some of them formed part of a structure related to the penannular gullies or to the possible roundhouse. Most were small, measuring round 0.25 m wide, although the largest was 0.66 m wide. Depths ranged from 0.04 m to 0.37 m.

LATE IRON AGE AND ROMAN

The principal discovery belonging to this phase was the confirmation of a trapezoidal enclosure of Roman date surrounding the Roman building debris previously...
found by Rhodes (Rhodes 1948) (Fig. 5.27). Also important was the greater definition given to the building by the resistivity survey carried out by Roger Ainslie, and the discovery of one robber trench belonging to the building. Otherwise, only a small number of features, mostly consisting of ditches, can be dated to the late Iron Age and Roman periods, although an inhumation burial and a small number of pits and postholes may also belong to this period (Fig. 5.27).

The Roman building

Rhodes’ 1947 trench had discovered a layer of Roman demolition debris below topsoil. In Trench T5 (see Fig. 5.9) a similar layer (T505), including small tesserae and painted wall-plaster, overlay a thin white chalk surface (T506) that overlay the Iron Age midden deposits. This same chalk surface was seen in trenches T8 and T10 (Fig. 5.28 layers T808 and T1008), and abutted a flat yellow mortar surface (T807).
Figure 5.29 Plan and sections of Trench T6

Section 1 (before excavation of pit 6016)

Section 2
at the end of Trench T8. The chalk was presumably a make-up layer, and the mortar may represent either another make-up layer or the only patch of surviving floor within the trenches.

These layers were directly overlain by demolition layers, which included a patchy layer of limestone slates (T1007, T806 and possibly T706), flint nodules (T803 and T1005) and roof tile (T1002) interleaved with thin soil layers (T1006 and T804). In Trench T7 the main demolition deposits (T705 and T702) were mixed within a dark grey silt. Much Roman roof tile was recovered from these deposits. A similar soil (T6005) was found in Trench T6 to the north-west (Fig. 5.29).

In Trench 7 the demolition deposits were cut by a steep-sided and flat-bottomed trench T708 on a WNW-ESE alignment (Fig. 5.28). This trench was cut 0.35 m into the mottled grey-green clay T709 (=811 and 1457/1409), and is interpreted as a robber trench, particularly as it divided the demolition deposits to the north from a dark grey-brown soil (T704) to the south, interpreted as a plough or garden soil.

The scale of investigation of the building was small, and the results unfortunately inconclusive. From the combined evidence of Trenches T5, T7, T8, T10 and Rhodes’ 1947 trench, the area covered by demolition debris was in excess of 25 m long, but only one probable wall-trench was located (Trench T7), and the apse tentatively suggested by the geophysical survey was not substantiated by excavation. Further demolition material was found in Trench T6, but the gap between this and the other trenches is too large to be confident that this was part of the same demolition spread. It may belong to a separate building, or have been dumped from elsewhere to fill in open features.

The robber trench in Trench T7 would suggest that the interior of the building lay to the north, and that any floors were largely robbed out. This would also fit with the evidence of mosaic tesserae and opus signinum fragments found in Trench T5. Patches of mortar surface in Trenches T5 and T8 are unlikely to represent undamaged flooring, and were more likely make-up deposits for walls or floors during construction.

Enclosure ditches

The ditches of the trapezoidal Roman enclosure were sectioned in the Time Team trenches T4 and T6 (Figs 5.29–30). Roman ditches possibly belonging to a second enclosure were revealed in the Visitors’ Car Park (Fig. 5.20), the Boiler House and Offices trench (Fig. 5.23) and the Staff Car Park (Fig. 5.18), although the sections exposed were too short to be certain. Two ditches meeting at right angles, and possibly belonging to enclosures, were found in Trench 15 (Fig. 5.10), while a field boundary was sectioned west of Hill Farm in the Ponds excavations (Figs 5.31–32).

Trench T6 cut across the west side of the trapezoidal enclosure (Fig. 5.29). Here the ditch (T6015) was c. 2.8 m wide and just over 1 m deep, with a sloping V-profile. It silted up naturally, until the top was filled with a dump (T6009) of Roman demolition rubble comprising flint nodules, chalk and roof tile. Trench 4 (Fig. 5.30) was meant to section the terminus on the eastern side of the enclosure, but ditch T406, which was c. 2 m wide and 0.7 m deep with a sloping V-profile and a narrow flat base, was continuous. As with the ditch in Trench T6, the lower ditch fills were relatively clean silts, while the final fill (T403) contained much Roman pottery, bone, tile, flint and metal. A deeper feature (T409) on the south side was tentatively interpreted as the terminus, but may have been an earlier pit (see early Iron Age pits above). The demolition rubble found in T6015 was also seen in the top of pit T6006 inside the enclosure, and was presumably allied to the spread found in Rhodes’ excavation in 1947, and called layer T505 in Trench T5. The character of the demolition material suggests a well appointed Roman building, perhaps even a villa.

Much less extensive sections of what may have been parts of a single ditch were found in the Boiler House and Offices trench and the Staff Car Park. In the Boiler House and Offices trench (Fig. 5.23) the east-west aligned ditch (T800) had a V-shaped profile and was 1.20 m wide and 0.40 m wide. Its single fill contained pottery, animal bone and charcoal. In the Staff Car Park (Fig. 5.18), the ditch (T20) curved, and was 1.80 m wide. Charcoal and four 2nd-century AD sherds were recovered from its single fill.

A further section of what may have been the same ditch was found in a pipe trench. The geophysical survey suggests that together, these three sections of ditch...
5: Excavations around Castle Hill

Figure 5.30  Plan and sections of Trench T4
may have belonged to the north side of a large trapezoidal enclosure with a wide entrance on the east, lying alongside the trackway that ran north-east towards the enclosure containing the villa building (Figs 5.5 and 5.27).

A pair of ditches (15337, which was recut twice as 15339 and 15338, and 15336), which meet at right angles in Trench 15 (Fig. 5.10), may have formed the corner of an enclosure, or else may have been subdivisions of the large enclosure just described. Although there are indications that the layout of the Roman ditches may have been influenced by the positions of early Iron Age features, there is also evidence for a sequence of modifications, which cannot be clearly disentangled from the limited area excavated. The east-west Roman ditch (15337) followed the same alignment as an early Iron Age ditch (15342). The north-south ditch (15336) also roughly followed part of the alignment of an early Iron Age ditch (15334), but turned to the east or ended where it met the east-west Roman ditch (15337). Furthermore, the north-south Roman ditch (15336) was cut after the second recut (15338) of the east-west ditch, although it was in turn cut by the latest recut (15336) of the east-west ditch.

The earliest east-west ditch (15337) was 1.12 m wide and 0.88 m deep. It contained two fills from which Roman pottery, including six sherds from a butt beaker as well as Iron Age pottery and animal bone was recovered (Plates 5.27–8). The first recut of this ditch (15339; 1.10 m wide and 0.53 m deep) contained a similar range of finds. The last recut (15337) was 0.83 m wide and 0.48 m deep. The north-south ditch (15336) was 1.38 m wide and 0.27 m deep.

A long boundary ditch was revealed in the Ponds excavation running north-south (Figs 5.31–2). It had sloping sides and a flat base, and was 1.35–2.30 m wide. A step in the side of the ditch was noted in Pond 2, perhaps resulting from recutting. The ditch contained three fills which contained charcoal and Roman building materials including tegulae and imbrices, as well as Roman pottery.

A further section (177) of what may have been the same ditch was found in the Visitors’ Car Park (Figs 5.5 and 5.20). This ditch was not excavated, but animal bones including a crow radius and a small spherical ball of marcasite were recovered from its surface. To the south a probable continuation was recorded in a pipe trench (see Fig. 5.5). A parallel ditch was revealed by geophysical survey some 70 m to the west (Fig. 5.4).

In Pond 2, two further ditches (16054 and 16057) running parallel to ditch 16090 were sectioned (Figs 5.31–2). The earlier, 16054, was 1.22 m wide and 0.44 m deep, and was bowl-shaped in profile. The later ditch, 16057, which cut the edge of ditch 16054, was 1.40 m wide and 0.44 m deep. Both ditches contained two grey fills from which Roman building materials including tegulae, imbrices and a possible flue tile were recovered.

In Pond 1 was a section of a narrower ditch (16078), 0.70 m wide and 0.70 m deep, which ran at right angles, eastwards from ditch 16090. It must have been cut at the same time as ditch 16090 since its two fills were continuous with those in ditch 16090.
Figure 5.31 Phased plan of the Ponds excavation
Grave 333

The inhumation burial was found in a subrectangular grave (333), with vertical sides and a flat base, measuring 2.05 m long, 0.75 m wide and 0.20 m deep, in the Visitors’ Car Park Trench (Fig. 5.33; Plate 5.29). The grave was aligned roughly NE-SW, and the skeleton, of a probably female adult, lay on its left side, with the head to the north-east, facing south-east. No grave goods or indications of a coffin were found. A few sherds of middle Iron Age pottery and some animal bone were recovered, but these probably derive from one of the Iron Age gullies (174, 175 and 533). The date of the burial is uncertain, but the form of the grave and the burial rite suggest that it was Roman or possibly Anglo-Saxon.
Pits and postholes

Just three pits can be dated to the Roman period. One (15176), found in Trench 15, was oval, measuring 1.30 m by 0.90 m wide and 0.35 m deep (Fig. 5.10). Its two fills contained Roman and residual early Iron Age pottery and a few fragments of animal bone. A second (16066) was found in Pond 2 (Figs 5.31–2). It was 1.10 m wide and 0.30 m deep and contained two Roman tegulae. A pair of postholes (16060 and 16063) nearby may have been contemporary. The third pit (T6006) lay within the trapezoidal enclosure and was partly exposed in Time Team trench T6 (Fig. 5.29). This was at least 2.35 m wide and 0.8 m deep, with near vertical sides and a slightly rounded base. An assemblage of charred plant remains came from layer 6007, including many vetch seeds and open country snails (Wessex Archaeology 2004, 28–9). The top of the pit was filled with spreads of chalk rubble (6003–4) like those in the top of the enclosure ditch T6015 to the west.

Residual finds

Residual Roman finds including two tesserae were recovered from later features, redeposited layers and the topsoil in Trench 15. North-east of this trench a concentration of Roman tile was recovered during fieldwalking. Together these may indicate the presence of a second Roman building, although the quantities of material are not large.

THE MEDIEVAL PERIOD

The only medieval features were plough furrows in Trench 19 (Fig. 5.16), the Visitors’ Car Park (Fig. 5.20) and the Ponds (Fig. 5.31). The furrow in Trench 19 (19105) was removed by machine and was not fully recorded. It ran north-south and was up to 4 m wide. West of Hill Farm furrows were aligned NE-SW and appeared to be arranged in pairs, 1 m to 2 m apart, with intervals of 8 m between pairs. The furrows themselves varied in width from 1.5 m to 2.8 m.
Chapter 6
Artefacts from Castle Hill Environs

PREHISTORIC POTTERY by Emily Edwards

A total of 6955 sherds (56 kg) was recovered (Table 6.1). Condition was varied but much of the assemblage had been affected by redeposition or disturbance. The pottery was recorded using the system recommended by the PCRG (1997) and the codes specified in Chapter 3.

Fabrics

As at Castle Hill, large number of fabric types, all locally available, were used to manufacture the pottery, the majority of which contained shell, quartzite or sand. Small pebbles, ferralugous pellets and other detritus consistent with a gravel clay source were common (Table 6.2; see also Chapter 3 Table 3.3 for fabric groups by % of assemblage). Many of the fabrics contained very mixed combinations of fine and coarse inclusions.

Some of the inclusions in the fabrics are common throughout central southern England. It does not necessarily follow, therefore, that the pottery is all locally made. The early Iron Age red-coated, globular bowls found at Castle Hill (see Chapter 3), for example, have a visually very similar fabric to that of those found in Hampshire and Wiltshire, which heavy mineral analysis has shown come from a single common source at Compton Chamberlain on Salisbury Plain (Williams and Wandibba 1984). No heavy mineral analysis has been carried out on the Wittenhams examples.

The major difference between these sites and Castle Hill relates to the larger quantities of middle Iron Age fine ware found outside the hillfort. This was manufactured from a clean clay containing moderate finely sorted sand. These fine fabrics probably derived from the local Gault, which consists of a compact, grey-brown silty clay, often containing lumps of fine grained sandstone.

Table 6.1 Composition of the prehistoric pottery assemblage by date

<table>
<thead>
<tr>
<th>Phase</th>
<th>Trench 13</th>
<th>Trench 14</th>
<th>Trench 15</th>
<th>Trench 19</th>
<th>Drainage</th>
<th>Offices</th>
<th>Visitor Car Park</th>
<th>Total</th>
<th>Weight (g)</th>
</tr>
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<td>Early Neolithic</td>
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<td></td>
<td></td>
<td></td>
<td>78</td>
<td>78</td>
<td>293</td>
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<tr>
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<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td>44</td>
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<td></td>
<td>19</td>
<td>21</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Late Bronze Age</td>
<td>4</td>
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<td>32</td>
<td>14</td>
<td>3</td>
<td>12</td>
<td>133</td>
<td>1218</td>
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<td></td>
<td></td>
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<td>Early or middle Iron Age</td>
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<td>963</td>
<td>640</td>
<td>68</td>
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<td>732</td>
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<td>51</td>
<td>324</td>
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<td>3</td>
<td>4</td>
<td>9</td>
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<td></td>
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<td></td>
<td>1</td>
<td>15</td>
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<td></td>
<td></td>
<td></td>
<td>2</td>
<td>15</td>
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<tr>
<td>Total</td>
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<td>1740</td>
<td>824</td>
<td>128</td>
<td>404</td>
<td>1253</td>
<td>6955</td>
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</table>
6: Artefacts from Castle Hill Environs

**Forms**

As with the pottery from Castle Hill, the form series follows the vessel classification from Ashville, Abingdon (DeRoche 1978) (Table 6.3). Finer fabrics dominate the assemblage. Early Neolithic rim sherds (Fig. 6.1.55–7) were recovered from one pit; these have not been included in the tables, to better enable an understanding of later ceramic distributions. Form in this case is discussed in the discussion of ceramics by phase. Middle Bronze Age sherds included a fragment of Bucket Urn (Pit 91, Hill Farm). Late Bronze Age forms comprised six vessels, which were dated according to fabric. These included an ovoid jar fragment (Fig. 6.2.58), an expanded rim fragment and angular bowl fragments.

Globular jars (Fig. 6.3.71) and bowls (Fig. 6.3.72) were typically manufactured from fine sand fabrics, while many of the barrel-shaped jars (Fig. 6.3.75)

---

**Table 6.2 Prehistoric pottery: fabric groups by phase (quantified by sherd count)**

<table>
<thead>
<tr>
<th>Date</th>
<th>1</th>
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<td></td>
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<td>43</td>
<td>8</td>
<td>81</td>
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<td>1</td>
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<td>138</td>
</tr>
<tr>
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<td>10</td>
<td>10</td>
<td>23</td>
<td>8</td>
<td>81</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>10</td>
<td>69</td>
<td>21</td>
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Early Iron Age: 495 104 13 65 43 2 5 1 3 10 69 21 7 838
Early Iron Age?: 39 39
Early Iron Age 1: 23 4 3 1
Early Iron Age 2: 5 19 24
Early or middle Iron Age: 3142 834 70 2 222 169 17 69 13 3 10 52 4 4607
Middle Iron Age: 520 72 25 12 38 1 3 2 676
Iron Age: 16 1 1 18
Iron Age?: 3
Later prehistoric: 4
Iron Age or Saxon?: 1
Indeterminate: 22 7 1 1 1 285 317
Total: 4252 1022 108 57 10 299 254 20 75 20 3 219 8 89 65 1 74 81 298 6955

**Table 6.3 Prehistoric pottery form types**

<table>
<thead>
<tr>
<th>Form</th>
<th>Form description (with catalogue references)</th>
<th>Sherd count</th>
<th>Weight (g)</th>
<th>Vessel count</th>
<th>% by vessel count</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0</td>
<td>Vessels with expanded rims</td>
<td>1</td>
<td>10</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>A2</td>
<td>Rims expanded towards exterior. MIA examples as in Roche 1978, Fig. 222, p59. (Fig. 6.3.79)</td>
<td>2</td>
<td>36</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>A3</td>
<td>T-shaped rim jars/bowls (Fig. 6.2.63 and 67)</td>
<td>24</td>
<td>906</td>
<td>9</td>
<td>4.6</td>
</tr>
<tr>
<td>B1</td>
<td>Slack-shouldered jars (Fig. 6.3.78)</td>
<td>72</td>
<td>1101</td>
<td>31</td>
<td>15.9</td>
</tr>
<tr>
<td>B2</td>
<td>Globular jars with rounded or baggy profiles, and short, upright or everted rims (Fig. 6.3.69, 71, 77, Fig. 6.4.87, 89, 90, 93 and 94)</td>
<td>136</td>
<td>2089</td>
<td>66</td>
<td>33.8</td>
</tr>
<tr>
<td>B3</td>
<td>Barrel jars with continuous profiles, regularly convex incurving at rim, including straight sided jars. (Fig. 6.2.58 and Fig. 6.3.75, Fig. 6.4.91)</td>
<td>49</td>
<td>2070</td>
<td>18</td>
<td>9.2</td>
</tr>
<tr>
<td>C0</td>
<td>Angular vessels (Fig. 6.2.57, 6.3.74)</td>
<td>10</td>
<td>49</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>C2A</td>
<td>Bowls with a long flared rim, low globular body and sharp angle at neck. Red coated. The width of the body at its widest is less than or equal to the rim diameter.</td>
<td>23</td>
<td>238</td>
<td>18</td>
<td>9.2</td>
</tr>
<tr>
<td>C2B</td>
<td>Furrowed bowls</td>
<td>2</td>
<td>23</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>C2C</td>
<td>Bowls with sharp angular shoulder and neck carination, with flared rim. Usually decorated with incised lines. (Fig. 6.2.59-62, Fig. 6.2.65-66)</td>
<td>40</td>
<td>388</td>
<td>23</td>
<td>11.8</td>
</tr>
<tr>
<td>C2E</td>
<td>Bowls with a rounded shoulder and long, flared rim. Applied cordon. (Fig. 6.2.64)</td>
<td>19</td>
<td>238</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>D0</td>
<td>Fine globular or rounded vessels with carefully smoothed or burnished surfaces (Fig. 6.3.76)</td>
<td>3</td>
<td>34</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>D1</td>
<td>Middle Iron Age rounded bowls (Fig. 6.3.72, Fig. 6.4.82, 83, 86, 88, 92)</td>
<td>35</td>
<td>640</td>
<td>17</td>
<td>8.7</td>
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</tbody>
</table>

Total: 416 7822 195
Figure 6.1 Neolithic pottery: catalogue nos 55–57

Figure 6.2 Late Bronze Age–early Iron Age pottery: catalogue nos 58–67
were manufactured from an intermediate sand and calcareous fabric. The B1 jars (Fig. 6.3.78) were manufactured from flint, quartzite and sand fabrics, whilst the bowls were made from a much more restricted range of fabrics. The angular late Bronze Age and early Iron Age forms were also manufactured from various fine sand fabrics. Few vessels were manufactured from coarse fabrics. As on Castle Hill, a close association between coarse shell fabrics and the A3 jars is evident.

Surface treatment

Seven different types of surface treatment were observed, with rough smoothing practised most often (Table 6.4). More of the assemblage was either smoothed or burnished than in the assemblage from Castle Hill, due to higher numbers of highly decorated earliest Iron Age bowls and middle Iron Age fine ware vessels. One late Bronze Age angular bowl sherd was roughly smoothed. The early Iron Age
furrowed bowl sherd and early All Cannings Cross sherds forms were burnished. Red-coated sherds accounted for only a small proportion of the assemblage and only a small proportion could be attributed to form, namely C2A type bowls. The B2 jars were largely either roughly smoothed or burnished. The B3 barrel shaped jars were generally roughly smoothed whilst the majority of the D1 bowls were burnished.

Decoration
Decoration was rare (73 vessels), but included a finger-impressed early Neolithic bowl (Fig. 6.1.56), a possible middle Neolithic bowl decorated with whipped cord, and a middle Bronze Age vessel with an applied cordon (Table 6.5). High counts for incised and grooved designs (Fig. 6.2.61–2) indicate a prevalence of earliest Iron Age bowls decorated in the All Cannings style. Other techniques typical of early Iron Age coarse wares were also noted. Seven middle Iron Age vessels were decorated (Fig. 6.3.73–4; and 76; Fig. 6.4.83–5 and 92). These had a variety of motifs created by grooved lines, dots, and stamp or tool impressions. The similarity of early and middle Iron Age decoration sometimes made precise dating difficult. In addition, certain motifs are shared by the earliest Iron Age All Cannings Cross and early Iron Age Chinnor/Wandlebury styles.

Evidence for vessel function
Almost all of this was charred residues from cooking (mostly on the inside faces of body sherds). Calcareous deposits were also occasionally noted, for instance on the inside of a hole drilled through a base sherd from context 15137. Such a residue can

<table>
<thead>
<tr>
<th>Surface treatment</th>
<th>Sherd count Castle Hill</th>
<th>Sherd count settlement</th>
<th>Weight (g) Castle Hill</th>
<th>Weight (g) for settlement</th>
<th>% by sherd count for Castle Hill</th>
<th>% by sherd count for settlement</th>
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<td>0 None</td>
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<td>2913</td>
<td>21,235</td>
<td>18448</td>
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<td>1 Smoothed</td>
<td>207</td>
<td>714</td>
<td>2285</td>
<td>5981</td>
<td>6.1</td>
<td>10.4</td>
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<tr>
<td>2 Roughly smoothed</td>
<td>65</td>
<td>1835</td>
<td>2171</td>
<td>17090</td>
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<td>26.8</td>
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<td>3 Burnished</td>
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<td>245</td>
<td>10099</td>
<td>0.5</td>
<td>18.4</td>
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<td>18</td>
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<td>0.5</td>
<td>0.6</td>
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<tr>
<td>5 Wiped</td>
<td>-</td>
<td>23</td>
<td>-</td>
<td>522</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6 Red-coated and</td>
<td>25</td>
<td>59</td>
<td>242</td>
<td>431</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>7 Dragged</td>
<td>89</td>
<td>2</td>
<td>835</td>
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<td>Total</td>
<td>6849</td>
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Table 6.5 Quantification of decoration from Hill Farm and Castle Hill

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<th>Decoration Type</th>
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</tr>
<tr>
<td>2 Finger impressed</td>
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<td></td>
</tr>
<tr>
<td>3 Slashed/incised row/panel</td>
<td>5</td>
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</tr>
<tr>
<td>4 Grooved panel/panel</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5 Finger nail incised</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6 Finger pits (tips of finger)</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7 Early All Cannings designs</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>8 Dots</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9 Incised design/pattern</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>10 Grooved design/pattern</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>11 Cordon</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>13 Designs comprising marks made by impressed objects</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td></td>
</tr>
</tbody>
</table>
be caused when hard water is heated. One sherd, from feature 53 (Hill Farm), was covered with a layer of charred residue and calcareous residue, one overlaying the other. The distribution of sherds bearing such evidence of use was relatively even within each trench.

Discussion of ceramics by phase

**Early Neolithic**

A total of 78 (293 g) sherds of early Neolithic ‘plain bowl’ pottery was recovered, 76 of them from early Neolithic pit 135 (contexts 134 and 179). The remaining two sherds were residual finds from ditch 100 (context 232). A minimum of five vessels is represented. This includes the rim and flared neck of a large (300 mm rim diameter) ‘baggy’ or carinated bowl with a thickened rim, one slightly thickened rim decorated with incised lines, one small squared rim, two simple rounded and upright rims and one simple rounded and flared rim (see Fig. 6.1). Fabrics were typical of pottery of this date, including fine to medium flint and sand, quartzite and sand. A radiocarbon determination of 3770–3630 cal BC (Poz-14321: 4890 ± 40BP) was obtained on charcoal from layer 179. The pottery from this pit is comparable to the assemblage from the Abingdon causewayed enclosure (Avery 1982).
**Middle Neolithic**

One residual untempered sherd (3 g) from pit 742 was decorated with a single whipped cord impression, and may be a fragment of middle Neolithic Peterborough Ware.

**Middle Bronze Age**

A total of 21 sherds (252 g) of middle Bronze Age ‘Bucket Urn’ type pottery was recovered as residual material from eight later features (ditches 85, 88, 109, 228 and 15016; pits 88, 149 and 882). The assemblage consisted of thick, densely flint-tempered body sherds. Part of a Bucket Urn comprised one cordoned sherd (Pit 91, Hill Farm), the remainder were plain.

**Late Bronze Age**

A total of 133 sherds (1221 g) of late Bronze Age pottery was recovered. Most came from Trench 14 (Table 6.6), with smaller amounts from Trenches 13, 15, 19 and the Visitors’ Car Park. The material consisted largely of plain body sherds, but observable forms included angular bowls and an ovoid jar (P58). Fabrics contained sand, flint or quartzite (Table 6.2), as typical for the region in this period (Barclay 2001).

Most of the pottery was residual in later contexts. Some material potentially in contemporary deposits was, however, found in Trench 14. This included three quartzite-tempered body sherds from posthole 1450. A buried soil layer (1435/1455) overlying this posthole and underlying the early Iron Age midden contained 49 late Bronze Age sherds, although 13 sherds ascribed to the early Iron Age were also recovered; an associated wolf bone produced a radiocarbon determination of 900–790 cal BC (Poz-12517: 2680 ± 35 BP). Most of the late Bronze Age pottery from this deposit consisted of plain body fragments, but there were also two small rim sherds, one fingertip decorated sherd and one sherd decorated with incised lines. These were largely in quartzite fabrics, with only a few flint-tempered sherds, which may have represented a later phase.

**Early Iron Age**

A total of 932 sherds (8780 g) can be dated to the early Iron Age (Plates 6.1–2; Fig. 6.2), most of which was recovered from the midden in Trench 14 (Table 6.6) and from settlement features in Trenches 15 and 19. There appeared to be two ceramic phases present. The earlier phase (EIA1) was characterised by angular bowls with incised decoration and white inlay jars, and the later phase (EIA2) by one Chinnor-Wandlebury style bowl and a limited number of T-shaped rims and round-bodied, red-coated bowls. The bulk of the material, however, can be dated no more closely than to the early Iron Age as a whole. In particular, it was not possible to assign many of the slack-shouldered jars to a specific early Iron Age phase. Although sandy fabrics dominated the assemblage, shelly fabrics also form a significant component, these being almost unique to the early Iron Age (Table 6.2).

The largest group of early Iron Age pottery was recovered from the midden in Trench 14. Aside from a few sherds of residual late Bronze Age pottery, and seven sherds of middle Iron Age pottery from the uppermost fill (see below), all of the chronologically diagnostic material from the midden dates to the early Iron Age. It is thus likely that the substantial amounts of pottery that have been more broadly dated ‘early or middle Iron Age’ are also early Iron Age. A few sherds of All Cannings Cross type pottery dating to EIA1 occurred in both the upper and lower layers of the midden, while material from EIA2—comprising fragments of a single ‘Chinnor-Wandlebury’ type bowl—occurred only in lower layer 1454. Generic early Iron Age material from the midden largely comprised slack-shouldered jars. A dominance of early Iron Age material can also be seen in the material from the earlier excavations of the midden by Rhodes, and also from the occupation layer to the east dug by Rutland (Rhodes 1948; Hingley 1980). Rutland’s finds included material from both the earlier and later parts of the early Iron Age. The former is represented by a furrowed bowl, and the latter by fragments of a Chinnor-Wandlebury type vessel (Hingley 1980, 45–6).

### Table 6.6 Prehistoric pottery from the midden in Trench 14

<table>
<thead>
<tr>
<th>Date</th>
<th>Sherd count</th>
<th>Weight (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBA</td>
<td>15</td>
<td>118</td>
</tr>
<tr>
<td>LBA or EIA</td>
<td>57</td>
<td>488</td>
</tr>
<tr>
<td>EIA</td>
<td>385</td>
<td>3533</td>
</tr>
<tr>
<td>EIA7</td>
<td>10</td>
<td>104</td>
</tr>
<tr>
<td>EIA1</td>
<td>15</td>
<td>181</td>
</tr>
<tr>
<td>EIA2</td>
<td>9</td>
<td>90</td>
</tr>
<tr>
<td>EIA or MIA</td>
<td>1804</td>
<td>15,704</td>
</tr>
<tr>
<td>MIA</td>
<td>7</td>
<td>88</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>68</td>
<td>173</td>
</tr>
<tr>
<td>Total</td>
<td>2370</td>
<td>20,479</td>
</tr>
</tbody>
</table>
Early Iron Age 1 (c 800–500 cal BC)
The small number of early Iron Age 1 sherds from Trenches 14, 15 and 19 largely comprise fragments of decorated bowls in the early All Canning Cross tradition. There is also one red-coated sherd that is possibly a fragment of furrowed bowl (Fig. 6.2.59), and several fragments of expanded rim forms. Fabrics consisted of fine sand, fine shell and a calcareous fabric. All Cannings Cross type pottery is present elsewhere in the region at Uffington Castle, Liddington Castle and Rams Hill (Brown 2005, 11).

Early Iron Age 2 (c 500–300 cal BC)
Forms from the early Iron Age 2 phase from Trench 14 and 15 comprised four A3 jars, three red-coated C2A bowls and two angular Chinnor-Wandlebury type bowls. The red-coated bowls were in fine sandy fabrics, while the A3 jars were in coarse shelly fabrics.

The material from the midden in Trench 14 consists of two vessels. Nine refitting sherds from a Chinnor-Wandlebury style bowl (Figure 6.2.62) were recovered from different locations within layer 1413, and a fragment of a red-coated, globular bowl was found in the same context.

The material from Trench 15 formed a slightly larger group (Table 6.1), including three A3 T-rim jars. A large refitting fragment of a T-rim jar (Figure 6.2.67) was discovered in pit 15018 (ctx 15019), associated with a black burnished, rounded bowl with a long flared rim (Figure 6.2.64). This bowl had tooled decoration, creating a lattice motif on the belly of the vessel. This deposit reflects the association between T-rim jar and burnished bowl also present in pit 3006 at Castle Hill. The feature also contained some plain body sherds and a refitting pedestal base.

The A3 jars and the globular bowls have already been discussed in relation to Castle Hill (see Chapter 3). It is, however, worth commenting on the Chinnor-Wandlebury style vessels. These appear to be uncommon locally; examples are widespread, however, including Bampton (Harding 1972, pl. 46A), Roughground Farm (Hingley 1993, 42), Yarnton (Booth in Hey forthcoming) and Abingdon Vineyard (T Allen pers. comm.). The main distribution of this style is in the...
Chilterns, at least 20 km to the east of the site, although it extends up to the Fens in the north and to the Thames Valley and Berkshire Downs in the south (Cunliffe 2005, 98 and 101).

Early Iron Age (general)
This phase is represented by 837 sherds (7215 g) from Trenches 13, 14, 15, 19 and the Offices and Boiler House trench. Forms attributed to this phase were those ubiquitous in both the earlier and later early Iron Age. This mainly comprised B1 slack-shouldered jars (minimum of 25 vessels), which were common over the entire site. Other forms included one C0 vessel, some C2 bowls and A2 jars. One sherd had a red coating. Fabrics were mainly sandy.

Middle Iron Age (300–100 cal BC)
A total of 676 sherds (8805 g) of middle Iron Age pottery (Plates 6.3–4) was recovered, mostly from contemporary deposits. The majority came from the Visitors’ Car Park area, but there were also significant amounts from the Offices, Trenches 15 and 19 and the drainage trenches. Seven possibly intrusive middle Iron Age sherds (88 g) were also recovered from the uppermost layer of the early Iron Age midden in Trench 14 (context 1401) (Table 6.6). The middle Iron Age pottery was dominated by sandy fabrics. Forms largely comprised B2 and B3 jars and D1 bowls. The two largest groups of middle Iron Age pottery were recovered from ditches 100 (117 sherds) and 70 (85 sherds) in the Visitors’ Car Park area. Identified forms from the former included B2 jars and D1 bowls, while the latter contained B2 and B3 jars only. Two possible special deposits were found in the Offices area, comprising virtually complete jars from pit 625 (Fig. 6.3.78) and terminal 617 in ring-gully 12066 (Fig. 6.3.79).

As discussed above, the B2 jars and D1 bowls are finer vessels than the B3 jars. This could be a chronological difference rather than one of status, however, as the rims of many of the vessels from ditch group 100 were slightly expanded upright rims, in contrast to the simple everted rims from many of the vessels from ditch group 70.

Decoration on D1 bowls included grooves beneath rims and on bellies (Fig. 6.4.83, 86 and 88); filled horizontal banding (Fig. 6.4.84); geometric designs
including circular impressions (Fig. 6.4.85); and geometric design comprising grooves and impressions (Fig. 6.4.92). Similar decoration can be seen at contemporary sites elsewhere in the region at Blewburton (Collins 1947, fig. 13.1; Collins and Collins 1959, fig. 6.17), Abingdon Vineyard (Tim Allen pers. comm.) and Yarnton (Hey and Timby forthcoming).

Discussion of the midden deposits

Within the midden (2370 sherds, 20479 g), pottery represented continual activity stretching from the late Bronze Age to the middle Iron Age. There was evidence of two late Bronze Age phases and of an occupation layer underneath the midden (see Chapter 5); the quantity (60,523 g) of late Bronze Age/early Iron Age flint tempered sherds within the midden was greater than that of the late Bronze Age quartzite tempered fabrics (12,830 g). Within the clay layer below the midden, however, the proportion was reversed (40 quartzite tempered sherds, 13 sand tempered sherds and 4 flint tempered sherds). The early Iron Age phase within the feature comprised largely slack shouldered jars, the EIA1 phase constituted sherds of All Cannings Cross bowls, whilst the Chinnor/Wandlebury bowl (P56) was dated to the later early Iron Age. The middle Iron Age sherds were not as attributable to form. It did seem to be the case that the pottery from this feature included more diagnostic late early Iron Age forms and, indeed, the sherd size was marginally higher than that from Trench 19; this suggests, if nothing else, that the middened pottery was removed from the occupation areas before it became as trampled.

Catalogue of illustrated prehistoric pottery (Figs 6.1–6.4)

55 Hill Farm, Visitors’ Car Park, feature 135, Pit fill, 179, -, 14, E Neo
56 Hill Farm, Visitors’ Car Park, feature 228, Ditch fill, 232, -, 1, E Neo
57 Hill Farm, Visitors’ Car Park, feature 88, Ditch fill, 179, C0, 14, E Neo
58 LWNT’04, 14, feature 1407, Pebble layer, 1407, B3, 16, LBA
59 Hill Farm, Offices, 582, Ditch fill, 585, C2C, 1, EIA1
60 LWNT’04, 14, feature 1401, Midden/occupation layer, 1401, C2C, 1, EIA
61 LWNT’04, 14, feature 1413, Midden/occupation layer, 1413, C2C, 1, EIA
62 LWNT’04, 14, feature 1413, Midden/occupation layer, 1413, C2C, 1, EIA
63 LWNT’04, 14, feature 1413, Midden/occupation layer, 1413, A3, 7, EIA1
64 LWNT’04, 15, feature 15018, Pit fill, 15019, C2E, 1, EIA
65 LWNT’04, 15, feature 15150, Ditch fill, 15149, C2C, 1, EIA
66 LWNT’04, 19, feature 19055, Pit fill, 19114, C2C, 2, EIA1
67 LWNT’04, 15, feature 15018, Pit fill, 15019, A3, 21, EIA2
68 Hill Farm, Offices, feature 605, Pit fill, 607, -, 1, EIA or MIA
69 LWNT’04, 14, feature 1401, Midden/occupation layer, 1401, B2, 1, MIA
70 LWNT’04, 15, feature 15010, Pit fill, 15035, -, 1, MIA
71 LWNT’04, 15, feature 15143, Gully fill, 15142, B2, 1, MIA
72 LWNT’04, 15, feature 15306, Ditch fill, 15272, D1, 1, MIA
73 LWNT’04, 19, feature 19006, Gully fill, 19007, -, 8, MIA
74 LWNT’04, 19, feature 19037, Gully fill, 19025, C0, 1, MIA
75 LWNT’04, 19, feature 19055, Pit fill, 19056, B3, 12, MIA
76 Hill Farm, Drainage, feature 559, Pit fill, 561, D0, 1, MIA
77 Hill Farm, Drainage, feature 895, Ditch fill, 890, B2, 1, MIA
78 Hill Farm, Offices, feature 625, Pit fill, 628, B1, 1, MIA
79 Hill Farm, Offices, feature 12066, Ditch fill, 619, A2, 3, MIA
80 Hill Farm, Staff Car Park, feature 12, Furrow fill, 13, -, 1, MIA
81 Hill Farm, Visitors’ Car Park, feature 24, Pit fill, 21, -, 1, MIA
82 Hill Farm, Visitors’ Car Park, feature 109, Ditch fill, 230, D1, 1, MIA
83 Hill Farm, Visitors’ Car Park, feature 135, Pit fill, 108, D1, 1, MIA
84 Hill Farm, Visitors’ Car Park, feature 149, Pit fill, 38, -, 1, MIA
85 Hill Farm, Visitors’ Car Park, feature 228, Ditch fill, 57, -, 1, MIA
86 Hill Farm, Visitors’ Car Park, feature 239, Ditch fill, 341, D1, 1, MIA
87 Hill Farm, Visitors’ Car Park, feature 262, Ditch fill, 265, B2, 1, MIA
88 Hill Farm, Visitors’ Car Park, feature 333, Grave fill, 332, D1, 1, MIA
89 Hill Farm, Visitors’ Car Park, feature 340, Ditch fill, 346, B2, 1, MIA
90 Hill Farm, Visitors’ Car Park, feature 340, Ditch fill, 346, B2, 1, MIA
LATE IRON AGE AND ROMAN POTTERY by Paul Booth

The excavations produced 193 sherds (2755 g) of late Iron Age and Roman pottery, the majority of which was of late Iron Age and early Roman date (Table 6.7). The pottery came from Trench 13 (6 sherds, 332 g), Trench 14 (21 sherds, 99 g) and Trench 15 (155 sherds, 2210 g). The pottery was in very variable condition—surfaces were relatively well-preserved in most cases but some the material was well-fragmented. The average sherd weight of 14 g was boosted by fragments of a single (incomplete) vessel in fabric E80 from context 15194 (see Plate 5.27), which also accounted for 40% of the RE total for the site. Discounting this vessel, the average sherd weight was 11 g.

Fabrics/wares

The assemblage was dominated by ‘Belgic type’ (E) and reduced (R) coarse wares, which together accounted for 80% of the sherd numbers and weight. The range of E wares was quite wide, including both fine and coarse tempered sandy fabrics and

Table 6.7 Quantification of Roman pottery fabrics

<table>
<thead>
<tr>
<th>Ware</th>
<th>Summary description</th>
<th>Nash</th>
<th>%</th>
<th>Wt (g)</th>
<th>%</th>
<th>RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>S20</td>
<td>South Gaulish samian ware (including La Graufesenque - LGF SA)</td>
<td>2</td>
<td>1.0</td>
<td>2</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td>F30</td>
<td>?Local oxidised mica coated ware</td>
<td>1</td>
<td>0.5</td>
<td>12</td>
<td>0.4</td>
<td>-</td>
</tr>
<tr>
<td>F51</td>
<td>Oxford red/brown colour-coated ware (OXF RS)</td>
<td>8</td>
<td>4.1</td>
<td>24</td>
<td>0.9</td>
<td>0.2</td>
</tr>
<tr>
<td>F</td>
<td>Fine wares subtotal (including samian ware)</td>
<td>11</td>
<td>5.7</td>
<td>38</td>
<td>1.4</td>
<td>0.2</td>
</tr>
<tr>
<td>M22</td>
<td>Oxford white mortaria (OXF WH)</td>
<td>3</td>
<td>1.6</td>
<td>28</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>M41</td>
<td>Oxford red/brown colour-coated mortaria (OXF RS)</td>
<td>1</td>
<td>0.5</td>
<td>14</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>M</td>
<td>Mortaria subtotal</td>
<td>4</td>
<td>2.1</td>
<td>42</td>
<td>1.5</td>
<td>0.1</td>
</tr>
<tr>
<td>W10</td>
<td>Fine (including Oxford) white ware</td>
<td>2</td>
<td>1.0</td>
<td>4</td>
<td>0.1</td>
<td>-</td>
</tr>
<tr>
<td>W20</td>
<td>Sandy white wares</td>
<td>1</td>
<td>0.5</td>
<td>9</td>
<td>0.3</td>
<td>-</td>
</tr>
<tr>
<td>W23</td>
<td>?Oxford ‘burnt white’ ware</td>
<td>1</td>
<td>0.5</td>
<td>6</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td>W</td>
<td>White wares subtotal</td>
<td>4</td>
<td>2.1</td>
<td>19</td>
<td>0.7</td>
<td>-</td>
</tr>
<tr>
<td>F &amp; S</td>
<td>Fine and Specialist wares subtotal</td>
<td>19</td>
<td>9.8</td>
<td>99</td>
<td>3.6</td>
<td>0.3</td>
</tr>
</tbody>
</table>

| E20                | Fine sand-tempered ‘Belgic type’ wares undifferentiated  | 14   | 7.3 | 117    | 4.3 | -  |
| E30                | Medium to coarse sand-tempered ‘Belgic type’ wares undifferentiated | 17   | 8.8 | 214    | 7.8 | -  |
| E50                | Limestone-tempered ‘Belgic type’ wares undifferentiated  | 1    | 0.5 | 40     | 1.5 | -  |
| E60                | Flint-tempered ‘Belgic type’ wares undifferentiated      | 7    | 3.6 | 186    | 6.8 | 0.3|
| E80                | Grog-tempered ‘Belgic type’ wares undifferentiated (includes SOB GT) | 32   | 16.6| 912    | 33.2| 1.0|
| E                 | ‘Belgic type’ wares subtotal                             | 71   | 36.8| 1469   | 53.5| 1.3|
| O10                | Fine, probably Oxford oxidised ‘coarse’ ware             | 12   | 6.2 | 75     | 2.7 | 0.2|
| O11                | Fine, Oxford oxidised ‘coarse’ ware                      | 5    | 2.6 | 227    | 8.3 | -  |
| O19                | Fine sandy local fabric                                  | 2    | 1.0 | 6      | 0.2 | -  |
| O20                | Coarse sandy oxidised wares                              | 1    | 0.5 | 2      | 0.1 | -  |
| O30                | Moderately fine sandy oxidised wares undifferentiated    | 1    | 0.5 | 4      | 0.1 | -  |
| O80                | Coarse (usually grog-tempered) oxidised wares undifferentiated | 1    | 0.5 | 4      | 0.1 | -  |
| O                 | Oxidised wares subtotal                                  | 22   | 11.4| 318    | 11.6| 0.2|
| R10                | Fine reduced ‘coarse’ wares undifferentiated             | 16   | 8.3 | 76     | 2.8 | 0.1|
| R11                | Fine reduced Oxford ‘coarse’ ware                        | 7    | 3.6 | 54     | 2.0 | 0.3|
| R20                | Coarse sandy reduced wares undifferentiated              | 26   | 13.5| 180    | 6.6 | 0.2|
| R30                | Moderately fine sandy reduced wares undifferentiated     | 18   | 9.3 | 166    | 6.0 | 0.3|
| R50                | Black surfaced moderately fine sandy reduced wares       | 1    | 0.5 | 29     | 1.1 | 0.1|
| R90                | Coarse (usually grog-tempered) reduced wares undifferentiated. | 11   | 5.7 | 309    | 11.3| 0.2|
| Includes Young 1977, 202, fabric 1                        |     |     |       |      |    |
| R95                | Savernake ware                                           | 2    | 1.0 | 44     | 1.6 | -  |
| R                 | Reduced coarse wares subtotal                            | 81   | 42.0| 858    | 31.3| 1.1|

Total 193 2744 2.83
a few flint-tempered sherds (E60) as well as the more common grog-tempered (E80) material. The most common reduced ware groups, fine fabrics (R10) and coarse sandy fabrics (R20), indicate the generally early Roman emphasis of the assemblage, later assemblages being more usually dominated by the medium sandy fabrics of the R30 group, as at nearby Castle Hill (see Chapter 3). Fabrics R90 and R95 are also consistent with a predominantly 1st–2nd century date range. Fine and specialist wares were scarce and consisted largely of very small fragments of Oxford colour-coated ware (fabric F51), and Oxford mortarium and other white ware sherds. A single sherd in a probable mica-coated fabric (F30) was notable, but could not be assigned to a known source (such as Lower Farm, Nuneham Courtenay; Booth et al. 1993, 138) and the single sherd of samian ware was a tiny fragment probably of South Gaulish origin.

The dominant reduced and ‘Belgic type’ wares are likely to have been drawn mostly from quite local sources. The same is true of a minor but distinctive component of the assemblage, the oxidised wares. These were notable for their diversity despite the relatively small number of sherds present. Two sherds were assigned to fabric O19, one of a group of early Roman fine oxidised fabrics used for beakers and other fine ware forms (Timby et al. 1997). The fabrics were first isolated at Abingdon, and production in the Abingdon/Dorchester area is likely on distribution grounds. A further six sherds from context 15136 were from a single butt beaker recorded as fabric O10 (see Plate 5.28); this is clearly related to the ‘Abingdon type’ fabrics (O15-O19), but is not exactly matched amongst them. Fabric O11 is a certain Oxford product, and most common in the late 1st–2nd centuries.

Forms and chronology
Twenty-three vessels were represented by rim sherds, of which 14 were certainly or probably from jars, totalling 82.4% of REs. The other forms were beakers (3, including the butt beaker mentioned above), bowls (1), uncertain bowls/dishes (3) and mortaria (2). These last were vessels of Young (1977) types M12 and C97, the former dated AD 180–240, the latter after AD 240. The Oxford colour-coated ware component of the assemblage (fabrics F51 and M41) is the only element that will necessarily date after the middle of the 3rd century AD but most of these sherds were very small. Three fragments from midden contexts 1408 and 1412, for example, all weighed 1 g or less and must have been intrusive in these contexts.

Discussion
The late Iron Age-early Roman emphasis of the assemblage is clear, except perhaps in Trench 14 where the assemblage is too small for certainty. Some later Roman activity would be anticipated here in view of the other evidence from immediately adjacent areas recorded by Rhodes (1948) and in the Time Team work. Occasional late Roman sherds also reflect the presence of activity of that date in the general vicinity of Trench 15 and elsewhere around Hill Farm, but the early emphasis of the great majority of material here is clear, and it is possible that occupation in the vicinity of Trenches 15 and 14 was sequential. Much of the material is unremarkable, but the presence of fine oxidised wares, particularly the butt beaker in 15136, is noteworthy, as is the probable mica-coated sherd, unstratified in Trench 15. The quantities of pottery are inadequate to provide a reliable indication of status, but the fine and specialist ware representation in Trench 15 is 5.2% (of the sherd total), which is comparable with the upper end of the range of values reported for lower status rural settlements in the region (Booth 2004a, 45, 50).

PREHISTORIC FIRED CLAY by Cynthia Poole
Relatively small quantities of fired clay, amounting in total to around 400 fragments weighing 7.5 kg, were recovered from the excavations at Castle Hill, Hill Farm and from Trenches 13–15 and 19. The overall character of the assemblages is comparable to Iron Age material from other hillfort sites such as Danebury, Hampshire. The same limited range of fabrics was used in all the assemblages.

Fabric A: Buff, light brown, grey, rarely red. Fine silty micaceous clay with rare fine quartz sand.
A1: a variant of A, which also contains small grits of black sandstone c 1 mm.

A2: a variant of A mixed with high density of chaff temper.

Fabric B:
B1: Grey. Sandy clay: frequent poorly sorted medium-coarse quartz sand (rounded-angular) up to 2 mm.
B2: Fine sandy clay: low density of fine quartz sand.

Fabric C: White, cream, grey, black. Calcareous clay matrix containing chalk grits up to 20 mm, flint and marcasite c 6 mm.

The fired clay is likely to have utilised readily available clay sources. Fabric C was possibly made from the glauconitic marl, whilst Gault clay was readily sourced in the vicinity and may have been the base for fabric A.

Hill Farm

The assemblage from Hill Farm (Visitors’ Car Park and Offices excavations) comprised a total of 242 fragments weighing 4611 g. Fabrics A, B and C had been used, of which fabric C was the most common, being used for all the larger groups of diagnostic material.

Diagnostic forms were limited to two types together with a small quantity of unidentified (amorphous) and utilised (one surface) fragments. Oven wall was the commonest type, and was characterised by interwoven wattle impressions on one side and a smoothed surface on the other, sometimes with grooves and depressions from moulding. The largest block had a distinctly concave surface partly fired grey, with a curvature suggesting an internal diameter of c 0.8 m. One fragment with a rounded curving rim may have been part of the stokehole arch or a vent. Wall thickness ranged from 20 to 75 mm. A total of 61 roundwood wattles were identified, of which four were positively identified as vertical sails, the remainder being interwoven horizontal rods. The wattles have a typical size range of 8–20 mm for the rods and 20–35 mm for the sails (Fig. 6.5). Two wattle impressions measuring 27 and 30 mm grouped by default with the rods, could not be positively identified as rods or sails, but from their size are likely to be vertical sails.

The second diagnostic type was a small irregular cake. Two types were found: one formed a thin flat plate with parallel surfaces and measured over 70 mm long by 15 mm thick. Their function is uncertain, but most of the pieces were found in association with oven wall and they are similar in form to spacers used in pottery

![Figure 6.5 Wattle impressions size range from Trenches 14, 15 and 19 and from the Visitors’ Car Park and Offices excavations](image-url)
kilns. The other was a suboval cake with a lentoidal cross-section and the surface covered in organic impressions. The two examples of this were almost identical in size measuring 43 mm by 32 mm or more by 15 mm thick. They may be repairs to oven lining.

**Trenches 13, 14, 15 and 19**

The assemblage comprised a total of 169 fragments weighing 1908 g. Fabrics A, B and C had been used, of which fabric A was the most common, being used for a wide range of forms and all the larger groups of diagnostic material. The fired clay was found in four separate trenches and unsurprisingly the largest groups were associated with early and middle Iron Age occupation and structures in Trenches 15 and 19.

**Oven Structure**

The structural elements represented generally have a smooth surface sometimes with finger grooves from moulding and smoothing the clay surface. Some pieces may be lining for a sub-surface base or floor, but a few with interwoven wattles on the reverse are likely to be part of upper oven wall supported on a light framework of withies. The wattle impressions indicate a range of sizes from small stems of 6 mm up to 19 mm diameter (Fig. 6.5).

**Portable Oven Furniture**

Several pieces of oven plates or discs were found in Trenches 15 and 19 representing a variety of forms. Two pieces appear to derive from a typical Iron Age type of perforated oven plate with frequent organic impressions on the surfaces and pierced vertically by a perforation 27 mm in diameter. Such plates could either be built integrally with the oven structure or be formed as a portable item. A fragment of rectangular plate 27 mm thick and pieces of circular discs, one with a plain rounded rim and one with a shallow raised flange, were also found. The large perforated oven plates are well known from Iron Age sites in southern England and appear to be commonly used in oven-type structures. The discs were probably smaller and thinner than the plates, and are a typical element found on Iron Age sites in Oxfordshire and the east Midlands.

Several fragments of triangular oven bricks (often called loomweights) were identified by the perforations piercing the side surface at an angle. Another brick 84 mm wide with a perforation may have been rectangular or part of a large triangular brick. Such objects were probably used as pedestals or flue lining within ovens. A brick 33 mm thick appears to be of Roman date from its general characteristics and is similar to the ‘fired clay blocks’ identified from Trenches 1–3 on Castle Hill (see Booth Chapter 3). Such ‘Belgic bricks’ are also likely to have been supports in ovens.

Two small irregular sub-oval cakes with lentoidal or wedge shaped cross sections and occasional organic impressions on the surface had been roughly moulded. Both were of similar size; the complete one measured 56x46x23 mm. Such objects, generally of a size that might be moulded in the palm of the hand, were possibly used in ovens as spacers. They have frequently been found in association with structural oven daub at Danebury and nearby sites in Hampshire (Cunliffe and Poole 1991, 149).

**Furnace structure and furniture**

Evidence of industrial activity was limited. From a late Iron Age-early Roman ditch (15337) came fragments of furnace wall or lining. The largest fragment has an undulating surface lightly vitrified and cindered, whilst other pieces, possibly derived from areas of the structure where heat was less intense, have a very smooth flat surface without evidence of high temperatures. The fabric contained coarse organic inclusions of chaff or chopped straw. This is not a common addition for furnace structure and may imply that these are fragments from a non-industrial structure, which was overfired accidentally.

A broken object from a middle Iron Age storage pit (19154) appeared to represent half of a funnel with a sub-rectangular cross-section, perforated by a narrow circular hole (Plate 6.5). It measured 70 mm wide and 55 mm from the top to the
break across the hole, suggesting that it was originally 110 by 70 mm, with a hole 16–18 mm in diameter. Its length was in excess of 65 mm. The surviving end of the object was heavily vitrified, and the clay progressively less highly fired along the surviving length, which supports the common interpretation that these objects were bellow’s guards. The nozzle of the tuyère would fit into the circular hole. Similar objects have been found at Little Woodbury, Wiltshire (Brailsford 1949, 160, fig.4) and the upper parts only at Danebury, Hampshire (Poole 1984a, 406–7) and at Glastonbury, Somerset (Bulleid and Grey 1911, XLIX, D30).

**Briquetage**

Four small fragments of briquetage were found in Trench 15. All were body sherds probably from cylindrical vessels for transporting salt. Three were made in a similar chaff tempered fabric fired red with a black core to that found at Danebury, Hants (Poole 1984b, 426–9) and may derive from production sites on the coast of Hampshire or Dorset. A single sherd of light brown chaff tempered briquetage may come from the Droitwich production area.

Plate 6.5 Bellow’s guard
Spindlewhorls
Two fragmentary spindlewhorls were identified. One was biconical measuring 35 mm in diameter by >25 mm high and was found in the early Iron Age midden in Trench 14. The second from a pit in Trench 15 was spherical with flattened ends and measured 50 mm in diameter by 25 mm high.

Discussion
The fired clay from these sites forms a typical assemblage of early to middle Iron Age date. The majority of the material is structural clay derived from oven type structures, which probably include both surface and partly sub-surface features. Most of the structural material is well fired, but, with the exception of the bellow’s guard and some possible furnace or hearth lining, which may indicate metalworking, is not indicative of high temperature industrial activity. Most of the structural fired clay is likely to derive from domestic structures for baking or cooking. The fired clay does not enable us to say whether these were covered, domed structures such as bread ovens or more open-topped structures for cooking in pots. The portable items suggest that some derive from cooking hearths. The use of woven wattle supports for the superstructure of some ovens, and the blocks of oven wall from Hill Farm, suggest these were substantial structures. They may indicate that some structures were communal rather than for a single household.

FLINT by Kate Cramp and Hugo Lamdin-Whymark
A total of 216 struck flints were recovered. The assemblage includes a number of Neolithic flints, including 42 pieces from a small pit near the western perimeter of the Visitors’ Car Park which also contained Plain Bowl pottery, but the majority are from a flake-based industry of middle or later Bronze Age date. A post-medieval gun flint was also recovered.

Most of the flint material came from Trench 14 (64 pieces), the Visitors’ Car Park (60 pieces) and Trench 15 (52 pieces), with smaller groups from Trenches 13 and 19 and the Offices and Boiler House trench. A single backed blade was found in the Drainage Trenches.

The assemblage was recovered from 90 contexts including early Neolithic pit 135 (contexts 134 and 179), but consisting largely of features dating from the late Bronze Age to the Roman period. The flintwork formed a fairly low density spread, with most contexts producing only one or two flints.

The condition of the flintwork is variable and largely determined by context. Thus, the collection from pit 135 is in exceptionally fresh condition, while many of the residual flints from Iron Age features display post-depositional edge damage. Many of the flints from topsoil and ploughsoil deposits are heavily damaged. Other pieces, however, including those from the early Iron Age midden, have survived in a relatively fresh condition with minimal edge damage. While the vast majority of flints are uncorticated, a small number exhibit an incipient cortication that appears as a light speckling on the surface of the flint.

With the exception of a single chert blade, all the artefacts in the assemblage have been manufactured from flint nodules. For the most part, these took the form of small pebbles with an abraded cortex and a brown, grey or yellow interior. Thermal fractures were occasionally noted, but in general the raw material was probably of a reasonable knapping quality. A likely source of this flint is the river gravels south of the Goring Gap; it is also possible that the small, abraded flint pebbles contained within the gravels capping Castle Hill were used for knapping and burning purposes.

The chert blade was recovered from the fill (782) of a middle Iron Age posthole (783) exposed during the Offices excavation. This piece is a distinctive, dark greenish-grey colour with a light white speckling, although the original colour of the flint may have been altered by post-knapping burning. The fine-grained, homogeneous composition of the chert suggests that it would have been of a good knapping quality. A small area of cortex indicates that the pebble comes from a derived source, perhaps the local river gravels. While the original source of the chert cannot be confirmed, chert nodules are occasionally found in the Upper Greensand.
The assemblage

**Pit 135**

Pit 135 contained a total of 42 struck flints and a single fragment (1 g) of burnt unworked flint (Table 6.8). Most of the flintwork was recovered from the primary deposit (179); only five flints, including two chips, were retrieved from the upper fill (134).

The flint assemblage mainly consists of unretouched flakes; a single blade is represented. The scars of previous blade removals are, however, present on the dorsal surface of several flakes. The flakes had been removed using both hard hammers (eg quartzite pebbles) and soft hammers (eg antler). A certain amount of care had been exercised in the reduction strategy, with numerous flakes exhibiting platform edge abrasion. The type of technology employed is consistent with the early Neolithic date for the pit suggested by the Plain Bowl pottery.

No cores were recovered from the pit and only three chips were present in the sieved residues. A brief refitting exercise failed to identify any refits, while a visual inspection of flint type suggests that the flakes derive from several different nodules. The flints may therefore have been brought to this location as individual components of a toolkit.

The collection includes five retouched flints, consisting of three serrated flakes/blades (two with silica gloss) and two edge-retouched flakes. Evidence of use in the form of micro-scarring was also noted on numerous unretouched edges.

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**Other possibly Neolithic flint**

A total of 37 struck flints, recovered from various Iron Age deposits in the trenches around Hill Farm, as well as a few flakes and one blade from Trenches 13, 14 and 15, share the same general technological characteristics as the flintwork from pit 135 and may, therefore, be broadly contemporary. The overall composition of the residual flint assemblage is also comparable to the collection from pit 135. The proportion of retouched tools—three scrapers, one notched flake and one backed knife fragment—is high, and, with the exception of a single flake core, there is little evidence for on-site flint knapping.

**The other flint**

The assemblage from the other trenches is largely composed of unretouched flakes. These are generally of thick and squat proportions, produced with minimal core preparation and the use of direct, hard-hammer percussion. This simple reduction strategy is typical of middle and later Bronze Age industries (eg Ford et al. 1984), and was apparently still used for the crude assemblages of probable early Iron Age date on Castle Hill (see Chapter 3, Struck Flint).

The assemblage contains four flake cores and two partially-worked nodules, which reflect irregular, uncontrolled flake removal with little core preparation. As such, these cores probably belong to the same industry as the majority of the flakes.

Six retouched tools, including two end-and-side scrapers, two denticulates and one simple edge-retouched flake, may also date from the middle or late Bronze Age.
A concentration of flintwork was recovered from a series of early Iron Age midden layers (1401, 1408 and 1413) in Trench 14. These layers sealed a buried late Bronze Age soil, which contained very small amounts of flintwork. While it is conceivable that some of the flintwork has been reworked from the late Bronze Age layers, it is also possible that the upper midden layers contained contemporary early Iron Age flintwork.

**WORKED STONE by Fiona Roe**

Amongst the 47 stone objects (Table 6.9) quern fragments predominate but there is a good range of other artefact types, almost all made from local materials. One notable innovation was the use of imported Lodsworth stone for an Iron Age rotary quern. A rotary quern fragment of Upper Old Red Sandstone, which is probably Roman, was also imported. The other worked stone has mainly been assigned to the early Iron Age, but there are also finds from middle Iron Age contexts. A number of pieces were retrieved from the midden/occupation layer 1401 and are not well preserved. The majority of the other finds were from pits and ditches and again are almost all fragmentary. Burnt stone amounted to 1289 fragments. A description of selected objects is outlined below, while full descriptions may be found in the digital report.

### Table 6.9 Summary of stone objects

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**Querns**

Quern fragments were the most frequently found stone objects, all but two being pieces of saddle querns from Iron Age contexts (eg Fig. 6.6.1). These are not on the whole well preserved, although one large block with a worn surface (15068) came from a middle Iron Age pit (see Plate 5.14). Fragments from some contexts, recorded as querns, now lack working traces, although they are pieces of local quern materials, either Culham greensand or Lower Calcareous Grit which would have been deliberately brought to the site to be used for corn grinding.

The numerous pieces of saddle quern are all made from local materials. Culham greensand (Plate 6.6), with the nearest source area, was especially favoured (also used for a rubber: Fig. 6.6.2), but a number of saddle querns were also made of Lower Calcareous Grit from the Corallian ridge (Table 6.9), while the Corallian limestone was used for a possible rubber. The quern fragments from dateable contexts are all either from the midden/occupation layer (1401) or from various pits.

The choice of the main two quern materials shows a consistent pattern at the Wittenhams, since both Culham greensand and Lower Calcareous Grit were in use at Castle Hill (see Chapter 3). An earlier excavation at Long Wittenham (Savory 1937) produced saddle querns said to be in the British Museum (Oakley et al., 1939, 192, fn), but enquiries have failed to trace any information about them. There are, however, many further sites where these two main quern materials were utilised. Local sites with some early Iron Age occupation include the Ashville Trading Estate...
and Wyndyke Furlong at Abingdon (Roe 1999(a), 44) and Gravelly Guy, Stanton Harcourt (Bradley et al. 2004, 368). In addition a fragment of worked Culham greensand came from an early Iron Age pit at Mount Farm, Berinsfield (Roe, in prep (a)).

At some stage during the Iron Age occupation at Hill Farm, rotary querns began to come into use. Traces of this changeover are often of a fragmentary nature and the
evidence from Hill Farm was no exception. Some 15 burnt fragments from both the upper and lower stones of a rotary quern came from layer 68 within Iron Age pit (41) in the Visitors’ Car Park. The pieces include three refitting rim fragments (Fig. 6.7.3), which give an approximate diameter of 320 mm and show the tooling work used to shape the quern. This quern was made from Lodsworth stone, a variety of the Lower Greensand which was brought to Little Wittenham from Sussex, from known quern quarries situated between Midhurst and Petworth. These quarries and their products have been described in some detail in a valuable paper by David Peacock (1987).
Rotary querns made from Lodsworth stone are found occasionally from Iron Age sites in Oxfordshire. The first querns from Sussex may have been saddle querns. At Gravelly Guy, Stanton Harcourt part of a reused saddle quern of Lodsworth stone was found in the topmost layer of a middle Iron Age pit, while fragments of the same stone were also found in the topmost layers of two early Iron Age pits (Bradley et al. 2004, 368 & fig 8.10). At Appleford a saddle quern which is now missing may also have been made from Lodsworth stone (the geological description is the same as for two Lodsworth rotary querns from Roman contexts here) (Hinchcliffe and Thomas 1980, 60 & fig 24 no 5). At Abingdon Vineyard, fragments of a number of Lodsworth rotary querns came from two middle Iron Age pits (Allen, in prep). The proximity of the river Thames to all four of these sites could account for the distribution of this particular quern material.

The pit (41) that contained the Lodsworth rotary quern has been radiocarbon dated to the later part of the middle Iron Age, 200 BC to 1 AD at 95 % confidence (see Chapter 7). This date seems unlikely to relate to the first use of either a rotary quern or Lodsworth stone at the site. Elsewhere, for instance at Fairfield Park, Stotfold, Bedfordshire, rotary querns were found in an Iron Age settlement that has been dated to the 5th–4th centuries BC (Webley et al. 2007, 89–90).

A second rotary quern fragment was found in topsoil 50 m west of trench 19, in an area of known Roman activity. It is made from Upper Old Red Sandstone from the Forest of Dean/Wye Valley area, a well known source area for Roman querns (Shaffrey 2006). Other rotary quern fragments made from this particular variety of stone came from Castle Hill (see Chapter 3).

Other stone objects

**Hammerstones**

There are seven hammerstones, four of quartzite and three of flint, all pebbles that could have been collected from the Plateau Gravel that occurs on the top of the Sinodun Hills. Five of them are from early Iron Age contexts, four of these coming from the midden/occupation layer 1401 and one from a pit. One was used as packing in a middle Iron Age posthole, while the seventh example came from an undated posthole. All are typical of Iron Age sites where usable pebbles were readily available.

**Loomweights**

Fragments from two loomweights (SF 19011 and 19013) were found in the fill of middle Iron Age pit 19019 (Fig 6.8.4–5), and a third came from the fill of middle Iron Age pit 97. All three were made from local chalky greensand, similar to that used for spindlewhorls found both on Castle Hill (see Chapter 3) and at the settlement. This greensand has the appearance of chalk but is in fact speckled with minute grains of dark coloured glauconite. The loomweights from pit 19019 are of the pyramidal variety, a term used to describe examples that are often somewhat informally shaped but narrower at the end with the hole. They are known mainly from later Bronze Age or earlier Iron Age sites and some similar loomweights, although made from chalk, were found at White Horse Hill, Uffington, Oxfordshire (Roe 2003, 184 & fig 9.10).

The example from pit 97, in contrast, is triangular. Triangular loomweights are common on later Iron Age sites, but it is unusual for them to be made from stone, even from chalk which could be shaped easily enough. Instead fired clay was the preferred material (for examples see Poole, above). Triangular loomweights of fired clay were found in some number at Gravelly Guy, Stanton Harcourt, Oxfordshire (Barclay and Wait 2004, 377 & fig 8.12) while closer to the Wittenhams they are known from Wyndythe Furlong at Abingdon (Barclay 1999, 42) and from Appleford (Hinchcliffe and Thomas 1980, 26 & fig 8.5).

**Polisher/whetstone**

A pebble of quartzitic sandstone (SF 15013) with a smoothly worn, shiny surface may have been used to burnish pottery, while the edges of the long sides seem
additionally to have been used for whetting. This artefact came from early Iron Age pit 15021. Similar pebbles with surfaces worn to a glossy polish were found at Gravelly Guy, Stanton Harcourt, Oxfordshire (Bradley et al. 2004, 376).

**Paving stone or smoothers**

Six pieces of stone with worn surfaces may have been used or reused as paving stones. Three such pieces (SF 2480, 15011 and 19021) from the settlement below Castle Hill consisted of worn chalky greensand and a similar fragment (138) came from gully 174. A worn cobble of Lower Calcareous Grit (754) was found in pit 742 and a worn fragment of Corallian limestone (631) came from ditch 620.

It was suggested that similarly worn small slabs found at Gravelly Guy, Stanton Harcourt might have been used as smoothers (Bradley et al. 2004, 375). However at Beckford in Worcestershire similar pieces of limestone seemed best interpreted as slabs used as flooring in Iron Age houses (Roe in prep (b)).

**Spindlewhorls**

The three spindlewhorls from the settlement are fragmentary. One of these (SF 2481) is part of a bun-shaped spindlewhorl, which came from the midden/occupation layer, while another small, perforated fragment, probably part of a spindlewhorl of the disc variety, was unstratified. The third was a bun-shaped spindlewhorl (SF 39) perhaps broken before the hole was completed.

All three are made from chalky greensand, as were the two spindlewhorls from Castle Hill (see Chapter 3). Iron Age spindlewhorls tend to vary in shape (Bellamy 2000, 181) and it would seem that morphological differences are not of any particular significance. A chalk spindlewhorl from White Horse Hill, Uffington, Oxfordshire was unevenly shaped (Roe 2003, 184 & fig 9.10.2), as were two from Segsbury Camp, Oxfordshire (Roe 2005, 122 & fig 3.60).

**Whetstones**

Whetstones from Iron Age sites are not always obvious, but there are two or three possible candidates from the settlement area. A quartzite pebble with worn patches
(1401) from the midden/occupation layer may have been used for whetting. Another possible whetstone is a slab of Lower Calcareous Grit with a worn edge (SF 15005), which was found in early Iron Age pit 15012. In addition, the polisher described above (SF 15013) has worn edges and appears also to have been used as a whetstone.

**Burnt stone**

The burnt stone is of local origin with quartzite and flint predominating amongst other materials such as chert and vein quartz, all of which could have come from the Plateau Drift, while the local greensand was also quite widely utilised.

**Catalogue of illustrated objects** (Figs 6.6–8)

1. Saddle quern, Culham Greensand. From upper fill of pit 318 (context 316; sf. 41),
2. Rubber, Culham Greensand. From upper fill of pit 769 (context 760)
3. Three refitting rim fragments of a Lodsworth rotary quern, from secondary fill of Iron Age pit 41 (context 69)
4–5. Loomweight fragments, chalky greensand. Both from primary fill of middle Iron Age pit 19019 (context 19021)

**WORKED BONE by Rosemary Grant**

A total of eleven worked bone objects were recovered from the excavated areas around Castle Hill. The collection includes a fragmentary needle, a complete bone gouge and the tip of a second example, an awl, two points, a toggle, and four unclassifiable pieces. Six of the objects came from early Iron Age midden deposits in Trench 14, one each from features in Trench 15 and Trench 19, and three from the Visitors’ Car Park.

The gouge (SF 1400; Fig. 6.9.1) is made from the end of sheep/goat metatarsal with slight degradation at the head (Sellwood 1984, 384, fig. 7.34, no. 3.123). The needle (SF 2387; Fig. 6.9.2) is incomplete and manufactured from unidentifiable bone (Sellwood 1984, 381, fig. 7.32, no. 3.93). The gouge and the needle were both recovered from context 1401, an early Iron Age occupation layer within Trench 14.

A bone awl came from an early Iron Age midden deposit (context 1413) sealed by layer 1401. This piece has been made from a length of cattle ulna, worked into a point and slightly polished. An object of worked red deer antler (SF 4754; Fig. 6.9.3), which has been burnt and subsequently sawn at one end, was recovered from the same deposit. This midden layer (1413) also contained two bone points. The first of these (SF 5199; Fig. 6.9.4) was manufactured from an unidentifiable bone and is slightly eroded (possibly reworked), but is otherwise complete. The second point (SF 5726) is a fragment of sheep/goat ulna, which has been polished along the length (Sellwood 1984, fig. 7.36, no. 3.154).
The gouge tip was recovered from the fill (19056) of a middle Iron Age pit (19055) exposed in Trench 19. It has been made from a medium-sized mammal long bone, with an obliquely cut tip and highly polished surface (Sellwood 1984, 384, fig. 7.34 no. 3.124).

The toggle (Fig. 6.10) was recovered from the fill (76) of a middle Iron Age pit (94), and is very similar to one found at the excavations at Danebury (Sellwood 1984, 378–80, fig. 7.32, no. 3.57). It is generally assumed that toggles were used as fasteners.

Catalogue of illustrated objects (Figs 6.9–10)

1 Gouge (Fig. 6.9.1). Complete. Proximal end of sheep/goat metatarsal with slight degradation at head. The butt is perforated by a round hole, 3 mm in diameter. The hole is roughly aligned with an oblique cut on the shaft, which begins 47 mm from the point. The shaft above the oblique cut is sub-square in section. The point is rounded and incorporates the central hollow of the bone. Length = 74 mm. Trench 14. Layer 1401 (sf. 1400).

2 Needle (Fig. 6.9.2). Incomplete needle made from unidentifiable bone. The head of the needle and part of the shaft below the eye remains. The needle has a sub-rectangular cross-section, which widens around the oval-shaped eye. Above the eye, the needle tapers to a point, aligned with the centre of the shaft. The object is polished with some wear along the shaft around the eye. Length = 41 mm. Trench 14. Layer 1401 (sf. 2387).

3 Antler object (Fig. 6.9.3). Piece of worked red deer antler. Burnt and subsequently sawn at one end. The length is polished, possibly through use. Length = 45 mm. Trench 14. Layer 1413 (sf. 4754).

4 Point (Fig. 6.9.4). Unidentifiable bone. Slightly eroded point, possibly reworked, but otherwise complete. Worked on all sides into point with a round section that diminishes to the tip. The butt-end of the point is worked into a tang 4 mm long, aligned off centre to the shaft. Length = Trench 14. Layer 1413 (sf. 5199).

5 Toggle (Fig. 6.10). Cylindrical shape with ovoid section and hollow through centre, with a single perforation through one wall. Decoration consists of a single incised groove around each end. Middle Iron Age. Length = 32 mm. Visitors’ Car Park. Pit 94 (context 76).

METALWORK by Ian Scott

The assemblage comprises 62 pieces (excluding coins), most of which are nails and miscellaneous fragments. A probable iron swan’s neck pin (Fig. 6.11.1) and a piece
of a copper alloy pin came from early Iron Age context 1431 in Trench 14. The other finds from early Iron Age contexts could all be intrusive. Contexts 1437 and 1468 contained a small modern machine-rolled object and a nail respectively. Context 15079 (Trench 15) produced a short tapering iron spike, and context 15300 a very small tapering strip of iron. Context 15013 produced a small strip of copper alloy.

The swan’s neck pin (Fig. 6.11.1) is a very early Iron Age type associated with imported Hallstatt material. It therefore dates to a slightly later period than the sword chape (see below). Good parallels for the Wittenham piece were found at Woodeaton (Dunning 1934, 270 & 288, and fig. 2, no.5; see also Kirk 1949, 15). The Woodeaton examples are copper alloy, but an example of an iron swan’s-neck pin was found at All Cannings Cross (Dunning 1934, fig. 2, no.1). This particular form of pin with upright head is found in north Germany and the Rhineland. Only a small number of swan’s neck pins have been found in Britain.

These pins are usually interpreted as clothes fasteners, although a coral-decorated example of the later, ring-headed type of pin, from Danes Grave, Kilham, Yorkshire,
was found next to a woman’s skull, suggesting that it might have been used as a hair pin (Dunning 1934, 276 and no. 3). The notched end found on examples like the one from Little Wittenham does not appear to be decorative yet is clearly intentional, and may have served some practical purpose, perhaps as a nail-cleaner.

Middle Iron Age finds include twelve pieces of copper alloy edge binding, rolled from thin sheet (Fig. 6.11.3) from context 68 (posthole 67). The longest fragment is curved and measures 52 mm long; the next two longest both measure 32 mm long and are slightly curved. The remaining nine pieces all measure less than 14 mm in length. There is little evidence as to what these fragments bound. The longer fragments are slightly curved, and there are no nails or pins to secure the bindings; they may have been glued.

A piece of copper alloy strip rounded at one end and folded (Fig. 6.11.4) was recovered from context 62 (posthole 61). Again, its function is uncertain. A roughly triangular block of iron came from ring ditch 700 (context 829). Perhaps the most interesting stratified object was the fragment of a small iron blade (Fig. 6.11.5) from the secondary fill (144) of a middle Iron Age pit (recut 146). Whether this was a weapon or a tool is not clear. The blade fragment is slim, straight and double-edged. Most knives and tools of Iron Age and Roman date have blades of triangular cross-section with a single cutting edge. The Wittenham blade cannot be precisely paralleled.

Other finds from middle Iron Age contexts include two small irregular iron fragments and a small piece of iron plate with two possible rivets from posthole 337 (context 338), along with four irregular flat iron fragments from enclosure ditch 817 (context 890). A length of iron wire (context 15144) and a small irregular triangular block of iron (context 19018) were also recovered from middle Iron Age contexts, although the wire is almost certainly intrusive.

There is a single nail from a late Iron Age/early Romano-British context (1308). A hobnail, which is probably Roman in date, was recovered from ring gully 174 (context 490).

There were also two significant metal finds from the topsoil. A well-preserved bag-shaped sword chape (Fig. 6.11.2) dating from the late Bronze Age, was found close to Trench 15. This is an imported type that is diagnostic of the late Bronze Age Carp’s Tongue Sword Complex (Burgess 1968, 38–9, and fig. 13, 24 and fig. 14). Carp’s Tongue swords and a small range of associated objects—swords, socketed axes, tanged chisels, triangular or hog’s back knives, spearheads, ‘bugle-shaped’ objects, bag-shaped chapes and decorative attachments (Burgess 1968, fig. 13, nos 1, 7, 9–11, 18, 20–22, 24 and 26)—form a suite of objects that are found widely distributed on the Atlantic coast of Iberia and France and in the south-east of Britain. The distribution of the distinctive Carp’s Tongue swords and associated objects can be taken to be a marker showing trading contacts, and—it has been argued—points to the existence of an ‘Atlantic Bronze Age’ (Briard 1979, 201–4), although its precise nature is uncertain (see Coombs 1998, and Oliveira-Jorge 1998, passim). The swords and other objects are found in association with objects of more local provenance. In Britain the Carp’s Tongue Sword complex forms part of the Ewart Park phase of the late Bronze Age. In 1995 there were 26 Carp’s Tongue swords and 412 Ewart Park swords recorded from Britain (Coombs 1998, 152). In Britain, metalwork of the Carp’s Tongue complex is very much concentrated in East Anglia, the Thames Valley and along the south coast (Burgess 1968, fig. 14). The Wittenham chape lies at the very edge of the main distribution of this suite of imported material.

Other Bronze Age metalwork has been found in the area. Aside from the material from the excavated settlement at Wallingford (Thomas 1984) most of the metalwork has been recovered from the river Thames itself (see also York 2002; Northover 2006). Amongst this material are items assigned to the Ewart Park phase (Northover 2006, table 3.1). River deposits have been taken to show the importance of metalwork in the ritual life of communities (Bradley 1998).

The other interesting piece is a fragment of a so-called ‘Nauheim derivative’ brooch (Fig. 6.11.6) from a topsoil layer (context 2). This form of brooch, although found in pre-conquest contexts, becomes more common around the middle of the 1st century AD and continues in use until the Flavian period (Olivier 1988, 38; also Bayley and Butcher 2004, 147).

6: Artefacts from Castle Hill Environs
Catalogue of illustrated objects (Fig. 6.11)

1 Probable swan’s neck pin. Formed from thin rid, with a cranked stem and upright head. The head appears to have been flattened and splayed and probably notched (cf. examples from Woodeaton illustrated in Harding 1972, pl. 73 nos 1 and 2). Poorly preserved. Fe. Length = 51 mm. LWNT 04. Trench 14. Early Iron Age midden layer 1431 (SF. 5913).

2 Bag-shaped chape. Well-preserved. There are two small opposed holes just below the curved mouth. These served to secure the chape to the scabbard. The only damage is a hole at the bottom of the chape. Copper alloy. Width = 46 mm, height = 40 mm and depth = 16 mm. LWNT 04. Trench 15. Topsoil 15000.

3. Edge binding. Twelve fragments. Formed from rolled thin sheet. There are no clear joins between the fragments. Some of the longer fragments are slightly curved. There is no evidence for pins or nails to secure the bindings, which may have been glued or simply by being pinched in. Copper alloy. Length = 52 mm, 32 mm (x 2), & under 14 mm (x 9). Visitors’ Car Park. Middle Iron Age posthole 67 (context 68). Sfs 11–15.


5 Blade fragment. With lenticular cross-section, and possibly a slight mid rib on one face. The blade is slightly asymmetrical in outline, with a rounded point. Function uncertain. Iron. Length = 84 mm. Visitors’ Car Park. Middle Iron Age pit 146 (recut of pit 149; context 144). Sf 42. Compared examples from ‘Nauheim Derivatives’. Originally it would have had a four-coil spring and internal chord and plain catch plate. Comprises broad upper portion of bow with zig-zag chasing down the centre. Catch plate and pin lost. Copper alloy. Length = 38 mm. Staff Car Park. Unphased subsoil (context 2). Sf 2.

ROMAN COINS by Paul Booth

Five late Roman copper alloy coins were recovered (Table 6.10). All were unstrati- and in poor condition, to the extent that none could be precisely identified. Although none is closely identifiable, three of the coins can be assigned to the later 3rd century. The other two coins are of 4th century date, assignable to the major period of minting of the House of Constantine, from AD 330–46. The reverse types, Urbs Roma and Victoriae DD Augg q NN, are very common in this period. The identification of the latter is, however, quite speculative, although entirely consistent with the obverse, which is probably of Constans.

Table 6.10 Catalogue of Roman coins

<table>
<thead>
<tr>
<th>SF</th>
<th>Context</th>
<th>Date</th>
<th>Denomination</th>
<th>Reverse</th>
<th>Mint</th>
<th>Obverse</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>Metal detecting SE of Hill Farm</td>
<td>MD 698</td>
<td>c 260-295</td>
<td>Antoninianus 17x15</td>
<td>Standing figure</td>
<td>Radiate head right</td>
<td>Worn, no legends visible. Irregular?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MD 756</td>
<td>330-335</td>
<td>AE4 13</td>
<td>Wolf and twins</td>
<td>mm illegible</td>
<td>Urbs Roma head left</td>
<td>Worn and battered</td>
</tr>
<tr>
<td>Trench 15</td>
<td>15000</td>
<td>c 260-295</td>
<td>Antoninianus 20x17</td>
<td>?</td>
<td>Radiate head right</td>
<td>Worn</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15011</td>
<td>c 260-295</td>
<td>Antoninianus 17x16</td>
<td>?</td>
<td>Radiate head right</td>
<td>Very corroded</td>
<td></td>
</tr>
<tr>
<td>Neptune Wood Trench 9</td>
<td>25003 US ?? 341-346</td>
<td>AE3 15</td>
<td>?Victoriae DD Augg q NN (based on shape of corroded out area)</td>
<td>?</td>
<td>Head left. Legend poss [CONS]AUG</td>
<td>Corroded and encrusted</td>
<td></td>
</tr>
</tbody>
</table>
IRON SLAG AND OTHER DEBRIS by Lynne Keys

A very small quantity of slag (315 g) was recovered. The slag was visually examined and categorised on the basis of morphology alone. Each slag type in each context was weighed but the smithing hearth bottom was weighed separately and measured to obtain its dimensions for statistical purposes. Additionally a magnet was run through the soil in bags to detect micro-slags such as hammerscale.

The smithing hearth bottom is the most characteristic bulk slag of smithing. It formed during smithing activity as a result of high temperature reactions between the iron, iron-scale and silica from either a clay furnace lining or the silica flux used by the smith. The iron silicate material from this reaction slag dripped down into the hearth base forming slag which, if not cleared out, developed into the smithing hearth bottom. One example came from middle Iron Age ditch 70 on the Visitors’ Car Park, but on its own it is unlikely to be of much significance and may even be re-deposited.

Fuel ash slag is a very lightweight, highly porous, light coloured (grey-brown) residue produced by a high temperature reaction between alkaline fuel ash and siliceous material such as a clay lining or surface. It can be produced by any high temperature activity where these two constituents are present including domestic hearths, accidental fires, and even cremations (Bayley 1985, 41: and Henderson, Jannoway and Richards 1987a and 1987b). The fuel ash slag from this site is typical of that often found on Iron Age sites and probably represents the burning down of houses.
Chapter 7

Environmental Evidence from Castle Hill Environs

**HUMAN REMAINS by Peter Hacking and Ceridwen Boston**

The human remains from the Castle Hill Environs comprise two inhumations in early Iron Age pits in Trench 15, three fragments in the midden in Trench 14, an undated inhumation in a grave and the frontal bone of an adult on the base of a middle Iron Age pit in the Visitors’ Car Park, and unstratified skull fragments from a Watching Brief at Hill Farm. Osteological methodology and catalogue are detailed in the digital volume.

**Early Iron Age**

The two skeletons, a late adolescent male (15005) and a 36–38 week old foetus (15131) were discovered within circular pit (15003) in Trench 15. Skeleton 15131 lay immediately to the south of the feet and lower legs of skeleton 15005 (see Plate 5.17), and was apparently inserted soon after the burial of skeleton 15005. Both lay on their right sides. In contrast to the normal north-south orientation of Iron Age pit burials (including those within Castle Hill), both skeletons were orientated east-west, facing north (Whimster 1991). Skeleton 15003 was loosely flexed, whilst the foetus (15131) was crouched.

The left side of the skull and both feet of skeleton 15005 had been truncated by ploughing, but most other elements were well represented. The pelvis and long bones, except for the left pubis and distal ends of the tibiae, were in fair to good condition, as were the hand bones. The mandible, maxillae and most of the teeth were present. The 3rd molars were not visible, due either to delayed eruption or to absence. Many vertebrae were missing. The preservation of extant vertebrae and ribs was poor.

Foetal skeleton 15131 was represented by numerous small skull fragments, the mandible (lacking the teeth), the vertebrae, ribs, pelvis and most of the long bones of the limbs. Preservation of the skeleton was fair.

The pelvic features of skeleton 15005 indicated a male individual. He was aged 18–20 years, on the basis of epiphyseal fusion and dental attrition. All the measurable diaphyseal lengths of skeleton 15131 correspond to those of a 36–37 week foetus.

The early Iron Age midden deposits in Trench 14 contained three fragments of human bone amongst a quantity of other debris. Two fragments came from the uppermost midden deposit, an incomplete head of humerus (from spit 2 of deposit 1401) and a left maxillary 1st molar with broken roots (from spit 1 of deposit 1401). The third, a supraorbital portion of an adult right frontal bone, came from 1445, the fill of a posthole sealed by the midden and cut into layer 1409. Although these bones had suffered post-depositional damage and were incomplete they were in a fair condition.

The three fragments represent three individuals. The incomplete head of a humerus (SF 2240) found within deposit 1401 was unfused, indicating an adolescent younger than 16–20 years. The dental attrition of the left maxillary 1st molar from deposit 1401 suggested a younger adult, probably aged 22–28 years. The supraorbital fragment of a right frontal bone was adult in size, but was sexually indeterminate.

**Middle Iron Age**

Just two human bones can be dated to the middle Iron Age. A near complete frontal bone (319), missing only small portions of the orbital plates, was placed on the base of middle Iron Age pit (149) in the Visitors’ Car Park (see Plate 5.25), and an
isolated fragment of an adult femoral shaft in fair condition (15272) from the fill of a middle Iron Age ditch (15341). The frontal bone was well preserved, with the outer table intact except a small area of erosion on the posterior aspect of the left side. The cranial sutures were unfused and the bone had been detached along this natural division (probably after the skull had lost all flesh). It was of adult size. The prominence of the supraorbital ridges suggests that this individual was male.

Roman

One articulated skeleton (320) was discovered within a sub-rectangular grave (333) in the Visitors' Car Park. The grave cut two perannular Iron Age gullies. There were no associated grave goods, but the stratigraphy and burial practices suggest a Roman date. The skeleton was orientated NE-SW, and was laid on his left side, with the head facing south-east. The legs were loosely flexed and both arms were extended in front of the torso. There was no evidence of iron nails or staining of the grave fill to suggest the presence of a coffin.

Bone survival was limited to the most dense bone of the skull, long bone shafts and the right acetabulum (see Plate 5.29). Fragments of the left ilium and the bodies of all the cervical vertebrae and T1 and 2 had also survived. The extant bone was very fragmented, and this, in addition to the destruction of the epiphyses of all long bones, meant stature estimation was not possible.

The severe dental attrition of the 1st and 2nd molars indicates a mature adult, approximately 40 years old. The 3rd molars are relatively unworn, which may suggest a younger adult, but this is more probably due to delayed eruption of these teeth (the age of eruption being subject to considerable individual variation). Although few sexually diagnostic traits had survived, the prominence of the mastoid processes and the external occipital protuberance suggests a male. No pelvic features are available for sexing and the diameter of the right femoral head (45 mm) is unhelpful in the metrical determination of sex.

Undated

Three fragments, broken post-mortem, of a single adult occipital bone in good condition (SF 1) were retrieved from the spoil from garage foundations, and cannot be associated with a specific feature. The occipital protuberance was prominent, suggesting that the individual was male. The diaphysis of a left late foetal to neonatal clavicle (44 mm long) in good condition was recovered from an unstratified context within Trench 15.

Stature

Early Iron Age skeleton 15005 was the only one to have complete long bones with which to estimate stature, which was 1.69 ± 0.02 m or 5'6". This is approximately 1 cm taller than the average male stature for the British Iron Age, calculated by Roberts and Cox (2003, 396).

Skeletal pathology

Active osteochondritis dissecans was observed on the articular surface of the left medial femoral condyle of skeleton 15005. A smaller, well-healed lesion was also present on the medial right femoral condyle. Osteochondritis dissecans is a fairly common osteological disorder found on the joint surfaces of the major long bones, commonly on the femoral condyle of the knee joint. The disease is due to a localised obliteration of the blood supply, causing necrosis of small areas of joint tissue (Roberts and Manchester 1995, 87; Auferheide and Rodriguez-Martin 1998). Repeated, low-grade, chronic trauma or micro-trauma is thought to play a role in this injury. Physically active young males are most often affected, indicating that this young male led a physically strenuous existence.

The superior and inferior bodies of T10–L5 showed slight to moderate irregular and crescentic depressions. Lesions were more marked in the thoracic and upper
lumbar vertebrae becoming progressively less severe lower down. The irregular rugose appearance of the lesions is characteristic of intervertebral osteochondrosis (Kelley 1982, 272), a disorder which affects the spine of individuals in the second and third decade of life, and occurs in response to severe and/or everyday stress. Its presence suggests again that this individual lived a short but physically strenuous existence.

The right orbit of the fragment of adult skull within early Iron Age context 1445 showed evidence of cribra orbitalia Grade 2 (Stuart-Macadam 1991, 109). Cribra orbitalia is widely thought to occur in response to a deficiency of iron during childhood, most commonly as a result of inadequate dietary intake of iron, and/or as a result of severe intestinal parasite infestation (ibid.).

**Dental pathology**

Dental pathology was present in skeleton 15005 as moderate dental enamel hypoplasia (DEH) and calculus. In the case of skeleton 320 it could be identified on only four of five crowns (up to three marked lines being noted in the left mandibular canine and right upper central incisor), largely due to the high degree of dental attrition. DEH is the interruption or slowing of normal enamel formation during tooth crown development in the first six or seven years of life as a result of a prolonged episode of illness or malnutrition during childhood. The clear lines on the dentition of skeleton 15005 indicate exposure to moderate stress episodes, such as childhood infections and/or seasonal food shortages. The teeth of both skeletons displayed 1–3 lines, indicating multiple episodes in the first 8 years of life.

No caries were present in the dentition of skeleton 15005 but slight calculus was noted on 22 of 24 tooth crowns. Three caries were present in the dentition of skeleton 320, and calculus was observed on three of the five teeth with intact or slightly worn crowns. Compared to later historical periods, the prevalence of dental disease in prehistory and in rural Roman Britain is generally low. An average of 2.9% is cited for caries in Iron Age Britain (Roberts and Cox 2003, 101). This probably reflects the relatively low intake of carbohydrates, particularly in the form of refined sugar, and the fairly young overall age of the population.

**Discussion**

The insertion of human remains into ditches, grain-storage pits and postholes is a well recognised practice in the treatment of the dead in Iron Age Britain (see Human Remains discussion in Chapter 4). Previous investigations of occupation layers of the late Bronze Age to early Iron Age occupation outside the hillfort produced three human skull fragments and a tooth (Hingley 1980).

The selection of whole or partial skulls may refer to the veneration of the head as the seat of the ‘soul’ or persona in Iron Age Celtic society, suggested by accounts of Gallic traditions by Roman writers, such as Diodorus Siculus, and from indigenous British literary works, such as the story of Bran in the Welsh Mabinogion. Most skulls found in British Iron Age contexts appear to have lost all flesh prior to deposition, rather than decapitated prior to or soon after death (in the manner of some later Roman burials). For skull 319 the frontal bone had separated naturally along the coronal suture, and shows no evidence of cut marks to suggest defleshing or dismemberment. Its placement on the base of the pit was clearly a deliberate secondary funerary rite. The general lack of weathering on this bone suggests that it was not exposed to the elements prior to or after deposition within the pit. A whole skull (minus the jawbone) was found on the base of an Iron Age pit at Abingdon Vineyard (Allen pers. comm.), and occasionally human skull parts are found with animal skulls, as at Watchfield (Lambrick with Robinson 2009, 315).

Inhumation 320 was not closely dated, and although it shows characteristics consistent with Roman burial practices, a later date should not be ruled out. As it lay close to the edge of the excavation, it is uncertain whether it was isolated, or whether there were more burials to the east. Booth (2001) comments on the prevalence of small ‘family’ burial plots dating to the late Roman period in Oxfordshire and the Upper Thames Valley, a tradition to which this burial may have belonged. However, isolated single burials within purpose-cut graves are also found in rural settings in this period, indeed a lone mature to older adult male was found buried within a sub-rectangular grave at Northfield Farm, Long Wittenham (Gray 1977, 1–29).
Iron nails within the backfill indicate that the individual had been interred within a plain wooden coffin, and was accompanied by a 4th-century AD bowl.

Although the conventional body position was supine and extended, there are numerous examples of late Roman interments laid out on their sides (such as burials from Lankhills, Winchester, Hants., and Cotswold Community, Gloucester (Powell et al. 2010), and this may reflect a continuity or renewal of earlier Iron Age practice.

**ANIMAL BONE** by Fay Worley with Jennifer Kitch and Rebecca Nicholson

The animal bone assemblage from the excavations comprised 12,336 fragments (refitted count) weighing 61,725 g (Table 7.1). It was analysed by the author at Oxford Archaeology with fish bones examined by R. Nicholson. The largest assemblages were from early Iron Age and middle Iron Age contexts, the assemblages from other periods being much smaller.

A wolf bone recovered from a clay layer in Trench 14 is of particular interest within the assemblage. Wolves are not often identified in British archaeofaunal assemblages. The Little Wittenham specimen has been radiocarbon dated to the late Bronze Age (900–790 cal BC; Poz-12517).

### Condition of the assemblage

The condition of the assemblage varied from excellent to poor but the overall majority of fragments were in good condition. If the large middle Iron Age assemblage is considered by feature type, bone from pit and posthole fills was in the best condition, bone from the ditch fills is in slightly poorer condition and animal bone from the shallow gully fills is in the poorest condition. Generally, only small proportions of the bone in each phase showed evidence of burning or gnawing. The gnawing was due to carnivores, dogs, foxes or wolves, and also to rodents. Carnivore gnawed bones indicate that bones were either purposely fed to dogs or left lying on the surface before being covered.

### Species identified

The species represented by animal bones present in each period of use of the site are shown in Table 7.2. They include domestic: cattle (*Bos taurus*), sheep (*Ovis aries*), goat (*Capra hircus*), pig (*Sus scrofa*), horse (*Equus caballus*), cat (*Felis domesticus*), and wild animals: red deer (*Cervus elaphus*), wolf (*Canis lupus*), rabbit (*Oryctolagus cuniculus*), weasel (*Mustela nivalis*) and mole (*Talpa europaea*). There were also small mammals: black rat (*Rattus rattus*), water vole (*Arvicola terrestris*), birds: goose (*Anser* sp.), mallard (*Anas platyrhynchos*), and crow (*Corvus corone*) and eel (*Anguilla anguilla*). Further fragments were identified as large, medium or small mammal, rabbit or hare, frog or toad, vole, bird, probable snake and fish.

### Wild mammals and disturbance to archaeological contexts

Small mammal and microfauna bones came from a range of contexts. Rabbit bones were recovered from an early Iron Age pit fill (15079) and from a midden layer (1401). A fragment of rabbit or hare cranium was recovered from the lower fill of a...
middle Iron Age ditch (19070). As stated in Chapter 4, rabbits are believed to be a medieval introduction, so these bones are probably intrusive due to burrowing. Hares are, however, native species and bones are occasionally recovered from Iron Age or Roman sites (Wilson 1978, 111). A mole radius recovered from middle Iron Age ditch fill 15015 may also be intrusive.

Vole bones were amongst the early Iron Age, middle Iron Age and Roman bones, and water vole bones from the early Iron Age assemblage. Voles indicate an open grassland environment; water voles have historically exploited grassland habitats, as they still do in continental Europe. The frog or toad bones from early and middle Iron Age and Roman contexts reflect the proximity of the site to water. A weasel femur was recovered from middle Iron Age ditch 15340, and a rat mandible from middle Iron Age ditch fill 15017. The size of the mandible suggests that it was a black rat. Current academic belief holds that black rats were introduced to Britain in the Roman period (Yaldon 1999, 125), and the rat mandible is therefore probably intrusive in this context.

Although eel remains may be found inland without human intervention, the eel vertebra suggests that fishing was practised in the middle Iron Age, presumably in the adjacent River Thames.

<table>
<thead>
<tr>
<th>Species</th>
<th>Late Bronze Age</th>
<th>Early Iron Age</th>
<th>Middle Iron Age</th>
<th>Iron Age</th>
<th>Late IA/ Early Roman</th>
<th>Roman</th>
<th>Med</th>
<th>Un-phased</th>
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<td>111</td>
<td>722</td>
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Metric analysis

A total of 110 animal bone fragments in the assemblage were measured (see digital report for details). These included cattle, sheep/goat, pig, dog, horse, wolf and mallard specimens, and bones dating to the late Bronze Age, early and middle Iron Ages, Roman, post-medieval and modern periods. Five of the measured bones were unphased. Unfortunately, once divided into phase, species and element categories, there were too few measurements to draw any conclusions regarding sex classes or stock improvement within the excavated assemblage. Using published indices (Fock 1966, Teichert 1975 and Clark 1995), withers heights could be calculated for two cattle, one horse, one sheep, one sheep or goat and one dog.

A middle Iron Age and a Roman cattle specimen produced withers heights of 1.10 m and 1.08 m respectively. The Iron Age individual is within the size range of Iron Age cattle at the adjacent site of Castle Hill (see Chapter 4) and the general range found at other Iron Age sites.

A Roman equid tibia from the fill of ditch 800 had a greatest length of 331.5 mm which equates to a withers height of just under 14 hands (1.31 m) (following May 1985). An early Iron Age sheep or goat and a middle Iron Age sheep both had a withers height of 0.55 m. This is within the height range for early Iron Age sheep at Castle Hill (see Chapter 4).

A middle Iron Age dog stood at a withers height of 0.47 m. This is within the standard range of 0.3–0.6 m heights suggested for Iron Age dogs (Harcourt 1974, Clark 1995).

Although fragmentary, a large Roman dog humerus from ditch 800 in the Offices area was measured. The depth of the proximal end (Dp) was greater than 40.8 mm. When compared to 23 Roman dog humeri Dp measurements recorded in the Animal Bone Metric Archive (ABMAP), the Hill Farm bone is larger than 83 % of these. If the Hill Farm bone is compared to a scatter plot of 24 late Iron Age to medieval dog humeri measurements from ABMAP (Fig. 7.1), it falls into a group of late Roman and medieval animals with a humerus greatest lengths (GL) of 158 mm to 208 mm, equating to withers heights of 0.51 m to 0.69 m (following Harcourt 1974). This suggests that the dog was amongst the largest dogs of the period.

![Figure 7.1 Dog humerus measurements from ABMAP. Hill Farm humerus Dp was greater than 40.8 mm, it would therefore fall to the right of the gridline marked](image-url)
Evidence for pathology and non-metric traits in the animal bone assemblage

A total of 44 pathological lesions and non-metric traits were recorded on cattle, horse sheep/goat, pig, large and medium mammal fragments dating to the late Bronze Age, early Iron Age, middle Iron Age and unphased periods.

Pathologies and non-metric traits in cattle bones

Pathological lesions and non-metric traits were identified on 21 cattle bones. A late Bronze Age/earliest Iron Age proximal phalanx from context 1407 had severe pathological eburnation and lipping on the distal articulation. Associated bone remodelling (bone destruction and bone growth) extended up the medial and lateral faces of the bone but did not affect the proximal articulation. These pathological changes can be classed as osteoarthritis (Baker and Brothwell 1980, 114–6) and may indicate that the animal had been used for heavy traction (following de Cupere et al. 2000). A cattle second phalanx from late Bronze Age/early Iron Age clay layer 1435 had pathological bone growth on its lateral aspect.

Two early Iron Age cattle bones, an astragalus from midden layer 1413 and a first phalanx from midden layer 1401, had creases or lesions, which are common in cattle (Baker and Brothwell 1980, 41).

The remaining seven early Iron Age specimens had pathological lesions. These comprised two further first phalanges, a second phalanx and a metacarpal from midden layer 1401, an ulna and a scapula from midden layer 1413, and a mandible from gully fill 19012. The pathological lesions included arthropies (lesions associated with joint diseases), traumatic injuries and oral pathologies.

A first and second phalanx from 1401 had extension of the proximal articular surface and associated bone growth on the proximal diaphysis. These changes may possibly have been caused by osteoarthritis, and they may relate to a traction role. A metacarpal from the same context had splayed condyles and some swelling of the mid diaphysis. The splayed condyles may indicate heavy traction work but the cause of the swelling is unclear.

Traumatic injury was noted on an early Iron Age cattle scapula from context 1413. The spina scapulae had a linear crack on its lateral face running for most of its length (Fig. 7.2.1). A small band of woven bone followed and overlaid the crack, indicating that the trauma occurred in life and had begun to heal. This fracture may have been caused by a sudden blow, jolt or fall or could be the result of stress to the forelimb, again possibly due to traction. The injury may also have made the animal lame and ended its use-life, as it was chosen for slaughter shortly after the event.

Seven middle Iron Age cattle bones had pathological lesions and non-metric traits. The second phalanx (pit fill 19021) had extension of the proximal articular surface and associated bone growth on the proximal diaphysis, and the humerus (ditch fill 15048) had a patch of woven bone on its distal diaphysis. A cattle anterior first phalanx (ditch 582) exhibited slight lipping of its abaxial proximal articulation. Very slight lipping was also noted on a metacarpal from ditch 50. These arthropathies may have developed due to stresses on the joints. A cattle metacarpal from pit 484 had splayed condyles suggesting that the animal may have been used for traction (Baker 1984). Both mandibles (pit fill 15106 and ditch fill 15230) displayed non-metric traits.

Pathologies and non-metric traits in horse bones

Pathological lesions or non-metric traits were identified on three horse bones. An early Iron Age humerus from pit fill 15013 and a middle Iron Age humerus from ditch fill 15048 both had patches of very thin cortical bone on their distal articulations which may be non-metric or pathological. A Roman cervical vertebra from ditch fill 1306 had lipping of the caudal articular facet.

Pathologies and non-metric traits in sheep or goat bones

Three early Iron Age and two middle Iron Age sheep or goat bones had pathological change or non-metric traits associated with their jaws. A maxilla from early Iron Age midden layer 1401 had woven bone on the palate region and a mandible
Figure 7.2 Fractures identified on an early Iron Age cattle scapula (1) and sheep or goat femur (2)
from the same context had a congenitally missing second premolar. A lower second premolar from middle Iron Age pit fill 19021 had a massive build up of calculus.

A middle Iron Age tibia from ditch fill 1309 had woven bone, either from injury or infection. An early Iron Age femur from pit fill 15209 had suffered a severe traumatic injury. The femur had fractured towards the midpoint, the ends of the fractured bone had passed across each other due to the strength of the hind limb muscles, and healed in this position, significantly shortening the hindlimb. This femur is illustrated in Figure 7.2.2. The animal would have been lame. The fracture was well-healed by the time the animal was slaughtered, suggesting that either the animal was not found until the fracture had healed, or was cared for.

**Pathologies and non-metric traits in pig bones**

Two pig bones exhibited pathologies. An early Iron Age radius from pit fill 15037 had woven bone on its diaphysis and a middle Iron Age scapula from pit fill 15067 had slight bone growth on the lateral margin of the neck.

**Butchery**

There are many indications of butchery within the main domesticate species in all the major phases of occupation, although instances were much more prevalent in some periods than in others. A detailed account of butchery practices can be found in the digital report.

**The late Bronze Age/earliest Iron Age animal bone assemblage**

The late Bronze Age animal bone assemblage comprised 452 fragments of animal bone recovered from eleven contexts in Trench 14 and two probably late Bronze Age contexts in Trench 15. The late Bronze Age animal bone assemblage is summarised in Table 7.2. Cattle, sheep or goat and pigs are most common taxa identified (number of fragments). Taken as a proportion their sum, cattle bone fragments are the most prevalent (51%) followed by sheep or goat (40%) and then pig (9%). Only three horse bone fragments and two canid bones were identified: one dog and one wolf (Fig. 7.3).

No age-at-death data was obtained from late Bronze Age sheep, goat or cattle mandibular teeth, but least one pig was adult at death. Bone fusion indicates that most ageable late Bronze Age cattle elements were over 3.5 years old at death. The sheep or goat bones include individuals less than 1.3 years old. No foetal or neonatal bone elements were recorded.

The only identifiable bones from the postholes in Trench 14 were sheep or goat astragali (in postholes 1446 and 1450). This may be due to their robustness, or perhaps because they were deliberately placed deposits. Astragali are known to have been curated as gaming or divining pieces in Roman and Greek cultures on the continent and in later British cultures. Sets of astragali were, for example, recovered from Anglo-Saxon cremation burials such as those at Castor-by-Norwich (Wells 1973).

**The early Iron Age animal bone assemblage**

A total of 5310 fragments of animal bone were recovered, predominantly from early Iron Age contexts in Trenches 14, 15 and 19, with smaller quantities from the Visitor’s Car Park, the Offices and the Drainage trenches.

The species in the early Iron Age animal bone assemblage are summarised in Table 7.2. Rabbit bones from early Iron Age contexts may be intrusive, though one of these bones may be from a hare. Cattle, sheep or goat and pig were the most common taxa identified.

Age-at-death could be estimated for 38 sheep or goat, 11 cattle and six pig mandibles or mandibular teeth. The sheep and sheep or goat bones included animals that died at a range of ages from neonatal to greater than eight years old. The majority (at least 22 specimens) were from individuals less than 20 months old, fifteen of which died between three and twenty months old. Some sheep or
goats did survive into maturity, however, with at least nine specimens more than 5 years old at death. Sheep or goat bone fusion evidence also suggests that these animals died at a range of ages. This mortality data suggests that sheep or goats were probably valued for their meat in the early Iron Age (following Payne 1973), but that older animals were also kept as breeding stock, milk or wool producers. The presence of neonates in the assemblage suggests that breeding took place on or near the site.

The cattle age-at-death data suggests that calves, juvenile and adult individuals were present in the assemblage, although most animals were killed before the age of 30 months old. Cattle bone fusion evidence indicates the presence of some individuals over 42–48 months old-at-death. Foetal cattle bones were recovered from midden layer 1401, suggesting that cattle breeding occurred close to the site. The primary focus of cattle husbandry in the early Iron Age may also have been meat production.

A total of six pig specimens were aged using mandibular tooth wear. This indicated that animals died as juveniles, immature individuals and sub-adults. Foetal, or possibly neonatal, pig remains were recovered from midden layers 1401 and 1405 (Trench 14), from gully fill 15183 (Trench 15) and from ditch fill 19109 (Trench 19). The presence of these bones suggests that pig breeding took place on or close to the site.

**Pit with human skeleton 15003**

Pit 15003 included 225 fragments of animal bone, only a few of which could be identified: cattle, horse, sheep, sheep or goat, pig, and frog or toad. Just six of the fragments were burnt and none exhibited butchery marks. The only complete elements were the cattle axis and phalanges with all other elements fragmented, and there are no articulating bones. It is likely that the animal bone is general refuse in the pit fill.
The middle Iron Age animal bone assemblage

A total of 4768 fragments of animal bone were recovered from middle Iron Age contexts in Trenches 13, 15 and 19, and from the Visitors' Car Park, the Offices, and the Drainage ditches. Features containing animal bone in Trench 13 comprised animal bone deposit 1302 in ditch group 1349, and fills 1309 and 1314 from the same ditch. Middle Iron Age animal bone in Trench 15 was recovered from pits 15254 and 15006 and from ditch group 15334, enclosure ditch group 15340 and its recut 15341. Features containing animal bone in Trench 19 comprised four pits (19019, 19050, 19055 and 19154), ditch 19185, ditch 19060 and ditch recut 19187.

Middle Iron Age contexts contained nearly all the species identified on site (see Table 7.2). Cattle and sheep/goat were most common, pig making up a much smaller proportion of the assemblage.

Mandibular tooth attrition could be used to estimate an age-at-death for 47 middle Iron Age sheep or goat, 22 middle Iron Age cattle and 8 middle Iron Age pig specimens. Age-at-death from bone fusion could be estimated for 15 cattle bones, 18 sheep or goat bones, three pig bones, 8 horse bones and a dog ulna.

The age at death data suggests that sheep or goats died at a similar range of ages to the early Iron Age specimens. There is less evidence of the slaughter of animals aged one to ten months old than in the early Iron Age, but many more individuals aged 20–34 months old. At least 14 specimens fall within this age range. Although there was no evidence for neonatal individuals from mandibular tooth attrition, foetal and neonatal sheep or goat bones were recovered from ditch fills 15015, 15203, 15271 and 15344, and pit fills 15252 in Trench 15; and from pit fills 19020 and 19114 in Trench 19.

Mandibular tooth attrition could be used to estimate an age-at-death for 22 middle Iron Age cattle specimens. Cattle were killed at a range of ages from 1–8 months old to senile. Half the ageable cattle specimens were from adults. No foetal or neonatal cattle were recorded. This mortality data suggests that although some cattle were used primarily for meat, others had a role in life such as traction or milk production.

Early Iron Age pigs were killed as juveniles, immature individuals and sub-adults. A foetal pig humerus was recovered from ditch fill 19109 in Trench 19.

The late Iron Age to early Roman animal bone assemblage

A total of 111 fragments of late Iron Age to early Roman animal bone were recovered from the fills of ditch 15337 in Trench 15. The species are shown in Table 7.2. The cattle, pig and horse bones represent a minimum of one individual, the sheep or goat bones derive from a minimum of three individuals. One large mammal long bone fragment had been charred. The same bone exhibited a heavy chop mark. Additional butchery marks were noted on a second large mammal long bone with fine cut marks, and cattle femur and humerus fragments which had been broken while fresh.

Age-at-death determined by tooth wear and bone fusion indicated that the sheep or goat bone assemblage included remains from at least three individuals; a neonate, an individual aged 24–30 months old at death and an individual aged 36–60 months old at death. The cattle bone included a freshly fused distal tibia indicating that the animal was aged approximately 30–36 months old at death.

The Roman animal bone assemblage

A total of 722 fragments of animal bone were recovered from Roman contexts. The species were varied (Table 7.2). Cattle, sheep or goat and pig were the most common taxa identified.

The Roman assemblage included five ageable sheep or goat mandibular tooth specimens. Two were very young (less than one month old), one was 3–10 months old, one was 10–20 months old and one was 20–30 months old. Gully fill 15142, in Trench 15, contained neonatal sheep or goat femora, along with humerus and metapodial fragments, possibly from an articulated deposition. Two cattle specimens could also be aged; one was from a senile individual and the other was adult or senile at death. These cattle were probably kept for traction, breeding or milk prior to slaughter.
Inhumation burial 333 (Visitors’ Car Park)

A total of 44 fragments of animal bone were recovered from fill 332 of this inhumation burial (probably Roman). The animal bone comprised a cattle metapodial and mandibular first or second molar, a horse astragalus, a pig molar and 38 large mammal sized long bone and indeterminate fragments and three calcined medium or large mammal unidentified fragments. The animal bone was all in moderate to poor condition and may have been redeposited in the grave fill from disturbed middle Iron Age features.

The faunal economy of Castle Hill environs

The animal bone assemblage provides evidence of animal utilisation in the environs of Castle Hill from the late Bronze Age to Roman periods. The late Iron Age or early Roman period is less well represented than other phases. Throughout the prehistoric and Roman periods, the faunal economy was dominated by the bones of cattle, sheep or goat and pig. Horses were also present in all periods, and dogs in all but the late Iron Age to Roman period. A single cat tooth was recovered from a middle Iron Age context. The relative proportions of cattle, sheep or goat and pig bone fragments varied throughout the periods and is considered in Figure 7.4. Pig bone fragments were relatively uncommon throughout the use of the site, especially in the late Bronze Age, middle Iron Age and Roman periods but were slightly more significant in the early Iron Age. Cattle made up around half the domestic bone fragments in the late Bronze Age and middle Iron Age but only around a third in the early Iron Age and Roman periods. Conversely sheep or goat bones made up around half the bone fragments in the early Iron Age and Roman periods and were slightly less common in the late Bronze Age and middle Iron Age. If the minimum numbers of individuals (MNI) represented is considered rather than the number of identified specimens (NISP), the picture portrayed is different (Figure 7.4). The MNI data suggests that pigs were as frequent on site as cattle in the late Bronze Age but of lesser importance in the later periods. The presence of cattle remains fairly constant throughout time but sheep become increasing prevalent during the Iron Age.

Figure 7.4 Relative proportions of cattle, sheep or goat and pig bone fragments (NISP and MNI)
Only the sample sizes for early and middle Iron Age NISP and early Iron Age MNI are large enough to allow for reliable comparison with other sites (following Hambleton 1999, 39). If the relative proportions of species are compared with other contemporary sites in Britain, they fall into the general pattern recognised elsewhere (ibid., 57). However, in the early Iron Age those occupying the area around Castle Hill had a relatively low proportion of cattle and a relatively high proportion of sheep and pigs. In the middle Iron Age they had a relatively low proportion of sheep and goats. The relative proportion of species (NISP) in the early and middle Iron Age falls into the general pattern exhibited elsewhere in the Upper Thames Valley.

Although the herd sizes of cattle and sheep may have varied through time, it is likely that beef made a greater contribution to the diet than mutton or lamb throughout the occupation of the site, due to the relative size of the animals.

Both sheep and goats were utilised in the early Iron Age. Sheep were also utilised in middle Iron Age and Roman periods. No fragments could be distinguished to either sheep or goat in the remaining periods.

Domestic fowl are known from British archaeological contexts from the middle or late Iron Age onwards. Birds played only a very small role in the animal economy around Castle Hill and there is no evidence for the utilisation of domestic fowl on the settlement outside the hillfort. The only potential evidence for domestic birds is a goose humerus, which could be domestic or wild, recovered from a middle Iron Age ditch. A further nine bird bone fragments were recovered from early and middle Iron Age contexts but none could be identified to species. One early Iron Age bird bone had been butchered indicating that birds were sometimes eaten.

There is very little evidence for the utilisation of wild faunal resources. This is consistent with the general picture for the Iron Age in Britain (Hambleton 1999). The only evidence for the hunting of wild birds is a possibly articulated duck wing (probably mallard) recovered from early Iron Age pit 15305 in Trench 15.

There is no solid evidence for wild mammal hunting. The only wild mammal remains are early Iron Age red deer antler and a Roman red deer lunate carpal. The antler may have been traded as a resource. It had been discarded when partially worked. The carpal may have been brought into the site attached to a deer skin or perhaps as a curated object. Other animal bones are known to have been curated in the Roman period and are sometimes interpreted as amulets (Meaney 1981).

There was no evidence for wild boar in the pig bone assemblage, although domestic and wild pigs can be hard to distinguish. No suitable measurements were available to distinguish the species osteometrically (Payne and Bull 1988; Magnell 2006).

A wolf calcaneum was recovered from late Bronze Age layer 1435. The calcaneum showed no evidence of having been butchered and its presence is unexplained. Like the deer carpal it may have been curated, but there is no evidence of surface modification through handling. Curiously, in later periods, canid feet were kept as amulets to prevent illness (Meaney 1981). A more mundane explanation for the presence of the wolf bone is that it is all that was recovered from an animal killed to protect the late Bronze Age herds and flocks.

There is evidence for fishing in the early and middle Iron Age contexts. Unfortunately, the small number of fish bone fragments could not be identified to species. Fish bones are not commonly found on Iron Age sites in Britain but were also identified in small numbers from excavations on Castle Hill (see Chapter 4).

Animal husbandry

Throughout the use of the site, the element representation of domestic mammal bones includes those parts that are normally removed in the first stages of butchery. This indicates that the complete animals were present on site rather than imported meat portions. Perhaps the easiest way to trade meat in prehistoric periods was to transport it ‘on the hoof’. The presence of neonates and foetal animals in the faunal assemblages suggests that sheep or goats were bred in the vicinity of the hillfort in the early Iron Age, middle Iron Age and Roman periods, that pigs were also bred in the early and middle Iron Ages and that cattle were bred in the early Iron Age. There is thus no evidence that animals of any of these species were brought into the site rather than being bred and raised there.
Although evidence for age-at-death was limited, the mortality profile of domestic animals suggests that they were utilised for multiple products (such as meat, milk, wool, traction and horn).

Cattle epiphyseal fusion data suggests a slight general decrease in the age-at-death of cattle from the late Bronze Age through to the middle Iron Age. However, mandibular tooth attrition data suggest a higher frequency of older cattle in the middle Iron Age than in the early Iron Age assemblage. It is likely that cattle were utilised for milk and/or traction as well as meat. Evidence of osteoarthritis on a late Bronze Age cattle bone, and possibly on early Iron Age cattle bones, plus a splayed early Iron Age cattle metacarpal, can also be used to suggest that the animals were used for traction.

Sheep or goat bone fusion suggests that a higher proportion of lambs were being killed in their first year in the middle Iron Age than the early Iron Age, although the sample sizes are very different for these two periods. Sheep or goat tooth attrition, however, suggests the opposite pattern, ie that a much higher proportion of early Iron Age sheep or goats were killed in their first year. The majority of the middle Iron Age specimens were killed at over 20 months old, compared to only 32% of the early Iron Age specimens.

Pig bone fusion suggests that only animals aged less than 2.5 years old at death were present in the early and middle Iron Ages, and mandibular tooth attrition indicates that animals were killed from juvenile to sub-adult. The prime motivation for keeping pigs is meat production, although they can also be used for by-products and manuring.

A butchered horse pelvis fragment recovered from pit 41 suggests that horse meat was sometimes consumed by either people or their animals during the Iron Age.

There is very little evidence either from sexually dimorphic characteristics or osteometry for the sex of the animals. The bone assemblage did not include enough measurable bones to comment on changes in animal size or investigate herd structure through size. Where it was possible to calculate a withers height, however, the animals were within the expected size ranges for the time.

OYSTER SHELL by Adam Partington

A total of 21 (66 g) fragments of shell was recovered, including oyster, bivalve and freshwater mussel species. Seven fragments came from the top layer of the midden (1401=1404) in Trench 14, four of which were identified as bivalve, the remaining three as oyster shell. Fourteen fragments came from Trench 15, four of which were identified as ‘bivalve’ (from pit 15010), one as freshwater mussel (from pit 15010), and nine as oyster shell (from the upper fills of middle Iron Age ditches 15075, 15077, 15163, 15341 and the topsoil).

The recovery of bivalve fragments from Iron Age pit fills is notable as shellfish are not a common component of Iron Age diet. Bivalve shells were, however, also recovered from the top fill of an Iron Age pit on Castle Hill (see Chapter 4). The presence of oyster shells in upper Iron Age pit and ditch fills, and in the uppermost Iron Age midden layers, is likely to represent the incorporation of intrusive Roman material from the overlying horizon through later ploughing.

CHARRRED PLANT REMAINS by Wendy Smith, Mark Robinson and Ben Harrold

A total of 94 samples were collected for the recovery of charred plant remains. Twelve of these (all from early and middle Iron Age pits) were considered suitable for further analysis (Robinson 2005).

The deposits from Trench 15 and from Hill Farm (Tables 7.3–4; Figs 7.5 and 7.6) mostly comprise a mixture of cereal grain, cereal chaff and weed/wild plants. These types of remain are typical for charred archaeobotanical assemblages and most likely represent crop processing activities (eg Jones 1988, 44). The two exceptions to this pattern of a relatively even mixture of grain: chaff: weed seeds are sample 15002, which is rich in cereal chaff, and sample 125 which contained a mixture of cereal chaff and weed/wild plants.

Hulled barley (Hordeum spp.) and spelt wheat (Triticum spelta L.) appear to be the main cereals cultivated, although small quantities of possible emmer grain (Triticum
### Table 7.3  Charred plant remains from Trench 15

<table>
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<th>Sample</th>
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<th>15006</th>
<th>15010</th>
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<td>Pit</td>
<td>Pit</td>
<td>Pit</td>
<td>Pit</td>
<td></td>
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<td>EIA</td>
<td>EIA</td>
<td>EIA</td>
<td>MIA</td>
<td></td>
</tr>
<tr>
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<td>20</td>
<td>40</td>
<td>40</td>
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<td>3.2</td>
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<td>6.4</td>
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<table>
<thead>
<tr>
<th>Latin Binomial</th>
<th>English Common Name</th>
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<tr>
<td>CEREAL GRAIN</td>
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<tr>
<td>Hordeum spp. – hulled, twisted</td>
<td>Hulled, twisted barley</td>
</tr>
<tr>
<td>Hordeum spp. – hulled, straight</td>
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</tr>
<tr>
<td>Hordeum spp. – hulled</td>
<td>Hulled barley</td>
</tr>
<tr>
<td>Hordeum spp.</td>
<td>Barley</td>
</tr>
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<td>Triticum cf. dicoccum Schübl.</td>
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</tr>
<tr>
<td>Triticum dicoccum Schübl./ spelta L.</td>
<td>Emmer or spelt wheat</td>
</tr>
<tr>
<td>Triticum spelta L.</td>
<td>Spelt wheat</td>
</tr>
<tr>
<td>Triticum spp. – indeterminate</td>
<td>Indeterminate wheat</td>
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<tr>
<td>Cereal – Indeterminate</td>
<td>Indeterminate cereal</td>
</tr>
<tr>
<td>CEREAL CHAFF</td>
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<td>Hordeum vulgare L. – rachis node</td>
<td>Six-row hulled barley</td>
</tr>
<tr>
<td>Triticum dicoccum Schübl./ spelta L. – glume**</td>
<td>Spelt wheat</td>
</tr>
<tr>
<td>Triticum spelta L. – glume**</td>
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</tr>
<tr>
<td>Triticum spp. – hexaploid basal rachis node</td>
<td>Bread or spelt</td>
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<tr>
<td>WEED/ WILD PLANTS</td>
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<td>Ranunculus acris L./ repens L./ bulbosus L.</td>
<td>Meadow/ creeping/ bulbous buttercup</td>
</tr>
<tr>
<td>Ranunculus parviflorus L.</td>
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</tr>
<tr>
<td>Chenopodium album L.</td>
<td>Fat-hen</td>
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<tr>
<td>Montia fontana L. agg.</td>
<td>Blinks</td>
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<tr>
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<td>Knotgrass</td>
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<tr>
<td>Rumex spp.</td>
<td>Dock</td>
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<td>Crataegus monogyna Jacq.</td>
<td>Hawthorn</td>
</tr>
<tr>
<td>Vicia spp./ Lathyrus spp.</td>
<td>Vetch or tare</td>
</tr>
<tr>
<td>cf. Medicago lupulina L.</td>
<td>Possible black medick</td>
</tr>
<tr>
<td>Galium aparine L.</td>
<td>Cleaver</td>
</tr>
<tr>
<td>Trileurospermum inodorum (L.)</td>
<td>Scentless mayweed</td>
</tr>
<tr>
<td>Carex spp. – 3-sided</td>
<td>Sedge</td>
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<tr>
<td>Avena sp.</td>
<td>Wild or cultivated oat</td>
</tr>
<tr>
<td>Bromus spp.*</td>
<td>Brome grass</td>
</tr>
<tr>
<td>cf. Bromus spp.</td>
<td>Brome grass</td>
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<td>Grass Family</td>
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<tr>
<td>Indeterminate</td>
<td></td>
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</table>

| Total Identifications | 73 | 128 | 315 | 67 | 255 | 503 |

† Sample contains some mineralised items.
* Bromus spp. = Bromus Section Eubromus, but reflects nomenclature changes in Stace (1997).
** Glume can indicate glume/ glume base or spikelet fork - however, 2 glumes per spikelet fork are counted (pers. comm. M. Robinson).
*Habitat Codes based on Stace (1997) and modified from M. Jones (1978) and Carruthers (1990):
A = weed of arable cultivation
C = cultivar
G = plant of grassland
H = plant of hedgerows
M = plant of marshy or very damp ground
S = plant of scrub
Wb = plant of woodland borders
Wa = plant of waste ground
We = plant of shallow water, lakes, ponds, slow rivers
c/d = preference for cultivated and disturbed ground
o = preference for open, unshaded conditions
r = preference for rough ground
- = unassigned
Figure 7.5 The relative proportion of charred plant remains from early-middle Iron Age pit deposits in Trench 15

Figure 7.6 The relative proportion of charred plant remains from early-middle Iron Age pit deposits at Hill Farm
### Table 7.4 Charred plant remains from early and middle Iron Age pit deposits at Hill Farm

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<tr>
<th>Sample Number</th>
<th>Context Number</th>
<th>Feature Number</th>
<th>Context Description</th>
<th>Period</th>
<th>Sample Volume (L)</th>
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<td>EIA/ MIA</td>
<td>EIA/ MIA</td>
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<td>40 L</td>
<td>40 L</td>
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<td>122</td>
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<td>5 ml</td>
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<td>1 ml</td>
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<td>pit</td>
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<td>10 ml</td>
<td>20 ml</td>
<td>6.8</td>
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<tr>
<td>125</td>
<td>71</td>
<td>41</td>
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<td>10 ml</td>
<td>5 ml</td>
<td>6.8</td>
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Table 7.4 (continued) Charred plant remains from early and middle Iron Age pit deposits at Hill Farm

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<td>769</td>
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<td>EIA/ MIA</td>
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<tr>
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<td>40 L</td>
<td>40 L</td>
<td>40 L</td>
<td>30 L</td>
<td></td>
<td></td>
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<tr>
<td>Flot Volume (ml)</td>
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<td>5 ml</td>
<td>10 ml</td>
<td>1 ml</td>
<td>6.7</td>
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<tr>
<td>Seeds/ Litre</td>
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<td>5.3</td>
<td>24.4</td>
<td>6.8</td>
<td></td>
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</tr>
</tbody>
</table>

**CARYOPHYLLACEAE – internal structure**
- *Polygonum aviculare* L. Knotgrass A - 1 3 - 2
- *Polygonum spp.* Knotgrass - - 1 6 -
- cf. *Polygonum spp.* Possible Knotgrass - -
- *Polygonum spp./ Rumex spp.* Knotgrass/ Dock/ Sedge - 1 1 4
- *Carex spp.* – internal structure Sedge
- *Fallopia convolvulus* (L.) Á. Löve Black-bindweed A - 1 -
- *Rumex spp.* Dock - 4 5 29 5 6 16
- cf. *Rorippa sp.* Water-cress - - - 1
- *Vicia hirsuta* (L.) Gray Hairy Tare G 1 5 5 - 3
- cf. *Vicia hirsuta* (L.) Gray Possible Hairy Tare G - 1 - -
- *Vicia spp./ Lathyrus spp.* – Small-seeded Vetch/ Vetchling - 56 52 200E 9 2E 72
- *Melilotus spp./ Medicago spp./ Trifolium spp.* Melilot/ Medick/ Clover - 3 2 32 - 4 8
- *FABACEAE – immature seed* Pea Family – immature seed - - 1 5 - -
- cf. *APIACEAE - unidentified* Carrot Family - - - 4 - -
- *Lithospermum arvense* L.* Common Gromwell A - - 1 - -
- *Plantago major* L. Greater Plantain A c/d 1 1 - -
- *Plantago media L./ lanceolata L.* Hoary/ Ribwort Plantain G ?b - 1 - -
- *Euphrasia spp./ Odontites spp.* Eyebright/ Bartsia A G 1 5 23 - - 2
- *Galium cf. mollugo* L. Possible Hedge Bedstraw G H b - - 3 -
- *Galium aparine* L. Cleaver A - - 2 - - 3
- *Galium spp.* Bedstraw - - 1 1 - - 4
- cf. *Galium spp.* Possible Bedstraw - - 1 - -
- *Valerianella dentata* (L.) Pollich Narrow-fruited Cornsalad A - - - - 1
- *Cirsium sp.* Thistle - - - - - -
- *Tripleurospermum inodorum* (L.) Pollich Scentless Mayweed A c/d - 20 125 4 - 5
- Sch. Bip. cf. *Tripleurospermum inodorum* (L.) Sch. Bip. Possible Scentless Mayweed A c/d 2 - -
- *ASTERACEAE – internal structure* Daisy Family – chamomile/ mayweed type - 3 31 133 6 - 5
- *ASTERACEAE – unidentified* Daisy Family - - - - 1
- *Carex spp. – 3-sided* Sedge M h 1 - - 1 -
- Poa cf. *annua* L. Possible Annual Meadow-grass A D c/d - 3 2 - -
- *Avena spp. – aven* Oat A - - 1 1E - -
- *Avena spp. – caryopsis* Oat A - - 1 - -
- *Avena spp. – floret base* Oat A - - 1 - -
- *Avena spp./ Bromus† spp.* Oat/ Brome A 4 3E 24E 5E 8 19E
- Bromus† spp. Brome A 6 2 43 11 4 9E
- *POACEAE – Small-sized caryopsis* Grass Family – small-sized seed - 12 13 42 3 24 3
- POACEAE – Medium-sized caryopsis Grass Family – medium-sized seed - 2 5E 23E 3 4 11
- *POACEAE – Large-sized caryopsis* Grass Family – large-sized seed - 4E - 11E 4E - 5E
- POACEAE – culm node Grass Family - - 1 1 1 1
- POACEAE – basal rhachis node Grass Family - - 1 - - -
- Unidentified – rootlet Unidentified rootlet - - 1 1 - -
- Unidentified – seed coat Unidentified seed coat - - 1 - -
- UNIDENTIFIED Unidentified - 10 10 73 1 20 4
- INDETERMINATE Indeterminate - 5 7 78 4 60 43E

**TOTAL** 211 977 68 267 154 334
The majority of weed/wild plants recovered typically occur as weeds of arable field and/or cultivation; however, there are some taxa present that indicate damp or even wet conditions. In addition, there is limited evidence for hedges or scrub.

Results

Sample 606 from the late Bronze Age enclosure ditch was almost entirely charred cereal grain (N = 95.9%). The samples from Iron Age pits, and sample 604 from posthole 6028 in the upper enclosure ditch fill are also dominated by charred cereal grain, but also contain small quantities of cereal chaff and fairly sizeable assemblages of charred weed/wild seeds (from 18.5% to 29.5% of all identifications). The early–middle Iron Age pit 319 (sample 304), however, contained a fairly even mixture of charred weed/wild seeds (54%) and cereal grain (42%), with a small quantity of cereal chaff (4%). Trench 15 Iron Age pit samples and sample 116 contain a more even mixture of cereal grain, cereal chaff and weed/wild seeds. The middle Iron Age deposit (sample 15002) is, however, strongly dominated by spelt glume/glume bases and indeterminate emmer/spelt glume/glume bases, accounting for 83.3% of all identifications from this sample.

Two pits (F41, sample 122 (69.5 %), sample 123 (80.6 %), sample 124 (82.2 %), sample 125 (88.2 %) and F137, sample 137 (55.1 %) respectively) are dominated by weed/wild plant remains and include many taxa that typically occur as weeds of cultivation (see habitat coding, column 3, Table 7.4). The third pit (F94, sample 116) contained a fairly even mixture of cereal grain (30.7 %), cereal chaff (25.5 %) and weed/wild plants (30.7 %).

Discussion of the charred plant remains from Castle Hill and its environs

There is no apparent difference in the composition of samples between pits dating to the late Bronze Age, early Iron Age, transitional early–middle Iron Age or middle Iron Age (Table 7.5). This suggests that throughout the period of site occupation hulled barley and spelt were the main cereal crops cultivated.

In terms of taphonomy, it is likely that all the samples represent secondary deposition of charred plant remains. Use of cereal processing waste as fuel is well-attested (Hillman 1981, 1984) and disposal of spent fuel into pits seems the most likely explanation for the preservation of this material. The fairly pure deposit of charred cereal grain (N = 189 or 95.9% of the assemblage) in the late Bronze Age enclosure ditch 6003 (Sample 606 / Context 6027), however, could either represent accidental charring of grain during food preparation/processing or intentional deposition. This deposit was found in close proximity to a nearly complete decorated jar (see Chapter 2, Plates 2.7 and 2.8; Chapter 3, Fig. 3.2.9), which could...
lend support for the latter interpretation. However, no discrete patches of charred
grain were noted during excavation and the vessel contents were unproductive
(Mark Robinson pers. comm.). Certainly the recovery of only 197 charred plant
remains in 40L of sediment converts to only 0.2 see ds recovered per litre of
sediment sampled, which is possibly more consistent with general ‘background
noise’ of charred debris from the settlement.

The early medieval pit deposits from Trenches 4 and 6 are almost entirely cereal
grain. In both cases the majority of wheat grain identified was a short-grained free-
threshing variety. Sample 405 also contained a large quantity of hulled barley grain.
Although informative, these two deposits are not likely to be representative of the
full range of activities in the early medieval period. In addition, the limited recovery
of cereal chaff and weed/wild seeds means that it is not possible to discuss these
samples further.

The charred plant remains from late Bronze Age through middle Iron Age
deposits at Castle Hill, Little Wittenham provide evidence for the type of cereal
cultivation, cereal crop processing activities and cultivation conditions. They also
provide limited evidence for either hedges or scrub woodland in the vicinity. Finally,
there is an interesting difference in the general pattern of dominance between the
Hill Farm, Trench 15 and the Castle Hill samples, which may relate to the location
of cereal processing activities and/or deposition activities on site.

**Cereals cultivated in the Iron Age**

In terms of cultivation of cereal, spelt (*Triticum spelta* L.) or indeterminate
emmer/spelt (*Triticum dicoccum* Schübl./*spelta* L.) were most frequently recovered.
Both grain and glume/glume bases were securely identified as spelt. As a result, it
seems likely that spelt was the main wheat crop cultivated. In addition, hulled barley
(*Hordeum* spp.) grains were frequently recovered. Preservation of twisted barley
grain and clear six-rowed barley (*Hordeum vulgare* L.) rachis nodes suggests that
six-rowed barley was cultivated. In his assessment of the samples from the Time
Team trenches, Stevens identified both spelt and emmer, which is rarely recorded in
the Upper Thames Valley in the Iron Age (Wessex Archaeology 2005, 29), but these
samples have not been fully analysed.

Spelt is a hulled wheat (sometimes termed glume wheat), which generally has two
grains in each spikelet of the cereal ear. Although rarely grown today, hulled wheats
do have a number of properties that would have been advantageous to past farmers.
In particular spelt can tolerate poor soil conditions and can resist a range of fungal

---

**Table 7.5 The relative proportion of charred plant remains from Late Bronze Age – Middle Iron Age deposits in Trenches 3, 4 and 6 and Trench 15**

<table>
<thead>
<tr>
<th>Sample</th>
<th>606</th>
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<table>
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<tr>
<td>Cereal Chaff</td>
</tr>
<tr>
<td>Other Food Plants</td>
</tr>
<tr>
<td>Weed/ Wild Plants</td>
</tr>
<tr>
<td>Indeterminate</td>
</tr>
<tr>
<td>Total Identifications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROPORTION</th>
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</thead>
<tbody>
<tr>
<td>Cereal Grain</td>
</tr>
<tr>
<td>Cereal Chaff</td>
</tr>
<tr>
<td>Other Food plants</td>
</tr>
<tr>
<td>Weed/ Wild Plants</td>
</tr>
<tr>
<td>Indeterminate</td>
</tr>
</tbody>
</table>

*italic = dominant plant category*
diseases (Nesbitt and Samuel 1996, 42). During threshing, cereal ears of spelt will break up into individual spikelets, which contain grains surrounded by tough chaff. At this point the prehistoric farmer could either store or further process the spikelets of hulled wheat. Storage of hulled wheat in spikelet form is well known archaeobotanically and may serve to protect the grain from insect predation (ibid., 52).

Cereal crop processing activities

In order to dehusk spelt wheat, the spikelets must be pounded and the resulting mixture of freed grain and chaff is then winnowed, which separates light weed seeds and larger fragments of chaff from the grain. The product of winnowing (ie the heavier grains and similarly heavy weed seeds and cereal chaff) is then sieved to remove any remaining weed seeds and smaller fragments of chaff from the grain. The samples from around Hill Farm, for example, contained substantial qualities of spelt wheat and indeterminate hulled wheat chaff and small-sized weed seeds (< 1 mm diameter). The chaff remains were made up of smaller fragments of glume bases and rachis internodes which strongly suggests that this material is a sieving by-product from the later medium and/or fine sieving stages of cereal processing (Hillman 1981, 1984, 1985). The limited number of pits that were sampled may not be fully representative of cereal processing activities taking place on site from the late Bronze Age through to the middle Iron Age. Nevertheless, the consistent recovery of samples dominated by charred cereal grain in Trenches 3, 4 and 6 does suggest accidental burning of a cereal processing product or in food preparation.

The more mixed deposits from Trench 15 are somewhat harder to interpret and may simply represent a mixture of separate deposition events related to cereal processing and/or food preparation. Early Iron Age samples assessed from pits and from the midden in the Time Team trenches were generally also poor and mixed, but pit 1103 in trench T11 had an abundance of grain, chaff and weeds (Stevens in Wessex Archaeology 2004, table 6).

The ubiquity of barley grain in the pit and posthole samples from Castle Hill suggests that barley was also likely to have been cultivated throughout the late Bronze Age to middle Iron Age phases of the site. Because crop processing of hulled barley grain requires the removal of the awn, a process known as hummelling (eg Hillman 1985, 20; Langer and Hill 1991, 67), before consumption by animals or humans, it is perhaps not unsurprising that barley was not found in large quantities in deposits clearly dominated by spelt wheat, except in the case of sample 414 where a fairly even mix of barley and spelt grain was recovered. It is plausible that this sample simply represents an extremely mixed deposit, representing any number of separate crop processing/food processing events; which have ultimately been deposited, or indeed re-deposited, into this pit feature.

The results from pit 41 are particularly striking, as they represent vertical sampling of different lenses down a section through this pit, from the upper to lower fills. The uniformity of these results suggests repeated activity, both in terms of generating crop processing by-products, but also in terms of their charring and subsequent deposition into the pit. A few vetch/vetchling (Vicia spp./Lathyrus spp.) seeds from sample 123 (context 69), toward the middle of this sequence, were dated between 200 BC and 1 AD (Poz-14320: 2080±35BP).

Cultivation conditions

The weed/wild plants recovered from Hill Farm frequently occur as weeds of arable crops (see Tables 7.3–4, column 3). In addition, vetch/vetchling (Vicia spp./Lathyrus spp.) typically occur in either arable fields or in grassland (eg Stace 1997); however, it is rarely possible to identify these to species level (eg Butler 1996).

A few of the taxa recovered in these deposits do provide some indication for the types of soil conditions cultivated; however, it should be born in mind that soil conditions within a reasonably large field system can be highly variable. The recovery of corn spurrey (Spergular arvensis L.) may suggest that lighter soils (ie free-draining) were cultivated. The presence of both corn spurrey (Spergula arvensis) and hoary/ribwort plantain (Plantago media L./lanceolata L.) may suggest that basic soils were cultivated. Finally the recovery of a few sedge (Carex spp.) seeds may suggest that heavier soils and/or possibly damp to wet soils were culti-
vated. All of these soils are present within the fields east and south of Hill Farm.

Several taxa typical of grassland have also been identified such as eyebright/bartsia (*Euphrasia* spp./*Odontites* spp.), hairy tare (*Vicia hirsuta* (L.) Gray), possible hedge bedstraw (*Galium* cf. *mollugo* L.) and hoary/ribwort plantain (*Plantago media/lanceolota*).

A few of the taxa recovered (such as *Eleocharis* spp., *Schoenoplectus lacustris* (L.) Palla and *Carex* spp. and a possible rush seed (*Juncus* spp.); Stevens in Wessex Archaeology 2004, 29) suggest cultivation in areas with damp or even seasonally flooded soil conditions.

**Limited evidence for scrub or hedges**

Two hazel (*Corylus avellana* L.) nutshell fragments from sample 317 (Trench 3), plus others from layer 506 within the midden in Trench T5, and one hawthorn (*Crataegus monogyna* Jacq.) haw from sample 15018 (Trench 15) provide extremely limited evidence for the presence of scrub or hedges in the vicinity of the site.

**Comparison with other Iron Age results in Oxfordshire**

Iron Age samples from Oxfordshire sites at Ashville Trading Estate, Barton Court Farm and Farmoor studied by Martin Jones (1978, 1984; Robinson *et al.* 1979), all had assemblages frequently dominated by spelt wheat grain and chaff or including mixtures of spelt and hulled barley grain and chaff. The accompanying weed floras were all remarkably similar. Taxa such as brome (*Bromus* spp.), chickweed (*Stellaria media* L.), cleaver (*Galium* spp.), eyebright/bartsia (*Euphrasia* spp./*Odontites* spp.), oat (*Avena* spp.), narrow-fruited cornsalad (*Valerianella dentata* (L.) Pollich), scentless mayweed (*Tripleurospermum inodorum* (L.) Sch. Bip.) and vetch/vetchling (*Vicia* spp./*Lathyrus* spp.) are frequently present in deposits from these sites. Results from slightly further afield at the Cleeve-Didcot Pipeline (Carruthers 1990), Oxford Road, Bicester (Pearson 1997) and Slade Farm, Bicester (Monckton 2000) are notably different, both in terms of weed flora and composition of cereal remains. All three sites produced deposits primarily dominated by cereal chaff, especially spelt glume bases and spikelet forks.

**Conclusions**

There is a marked difference in the general proportion of Bronze Age – Iron Age charred plant remains between areas of the site. Prehistoric Hill Farm pit samples are usually dominated by weed/wild seeds, Castle Hill Trenches 3 and 6 pit samples are dominated by cereal grain and the Trench T11 and Trench 15 pit samples generally contain a fairly even mixture of cereal grain, cereal chaff and weed/wild seeds. There is a consistent pattern of deposition of certain mixtures of cereal processing products/by-products within these three areas.

Whether this data indicates the location of specific cereal-related activities is unclear, as the Hill Farm deposits are generally middle Iron Age, later than most of those from Castle Hill and the area immediately outside. The only middle Iron Age sample from within the hillfort is dominated by cereal grain, but this was only one small sample. We cannot assume that the early Iron Age pits within Castle Hill were contemporary with those in Trenches T11 and 15. Nevertheless, the Castle Hill Trench 3 and 6 early Iron Age deposits are clearly dominated by charred cereal grain, a crop-processing product, whereas the Trench 15 and T11 early Iron Age deposits are more likely to reflect crop processing by-products. This pattern in the early Iron Age pit deposits may reflect the location of different crop-processing activities across the site. Alternatively, given that the samples from within the hillfort come from only two pits, the predominance of grain may instead reflect the selection of particular materials for deposition within the hillfort. One cannot rule out the possibility of hillforts being loci of prehistoric communal feasting resulting in such patterns of deposition (eg van der Veen 2007; van der Veen and Jones 2006).

Overall, the late Bronze Age through middle Iron Age posthole and pit samples analysed here appear to be part of a remarkably consistent pattern of disposal of crop processing products and/or by-products related to the cultivation of spelt in Oxfordshire. Moreover, the results are particularly similar to some of the early work...
carried out by Martin Jones in the region. In most cases, it was possible to determine the repeated deposition of crop processing by-products from later sieving stages of cereal crop processing. The weed flora contained a range of taxa typical of arable cultivation with a few indicators of both basic and high (ie free-draining) soil and damp to wet soil conditions. A small quantity of hazel and hawthorn remains provides limited evidence for scrub or hedges in the Iron Age.

CHARCOAL by Wendy Smith
Ten samples dating to the early Neolithic and the late Bronze Age to the middle Iron Age were assessed for charcoal from the flots of plant macrofossil samples (Robinson 2005). The majority of samples contained only small quantities of charcoal, and two samples, albeit not very rich, were selected for further analysis because charcoal analyses from the periods concerned in the region are quite limited. Methods are outlined in the digital report.

Results
Sample 107 (Feature 135, context 179) was from an early Neolithic pit and contained very small-sized fragments (usually < 4 mm³) of charcoal. Analysis confirmed that the charcoal assemblage was a mixture of alder (Alnus sp.) and hazel (Corylus sp.). These results are consistent with other evidence from the period in Oxfordshire, which frequently have charcoal from either species, such as at Abingdon (Western 1982), Barrow Hills, Radley (Thompson 1999), City Farm (Dimbleby 1966), Gravelly Guy (Gale 1988; Gale 2004) and the Rollright Stones (Straker 1988).

Sample 117 (Feature 258, context 259) was from a pit dating to the middle Iron Age. Hawthorn group (MALOIDEAE) taxa are dominant, but oak (Quercus spp.) is also present and one fragment of possible birch (cf. Betula spp.) charcoal was also identified. In addition, samples from pit deposits and one grave cut dating from the late Bronze Age through middle Iron Age also produced provisional identifications of elm (Ulmus sp.), alder/hazel (Alnus sp./Corylus sp.) and ash (Fraxinus excelsior L.) (Robinson 2005). These taxa are all known from this period in Oxfordshire, such as at Chinnor (Richardson and Young 1951), Gravelly Guy (Gale 1988; Gale 2004) and Stanton Harcourt (Pilcher 1966).

Evidence for fuel use
The charcoal from these pits is most likely spent fuel. Although oak was present, other wood taxa (eg alder, ash, hawthorn group and hazel) are frequently recovered. It seems that alder and hazel (both capable of tolerating floodplain conditions) were in use as fuel in the Neolithic and a range of other wood taxa were in use in the late Bronze Age to middle Iron Age. The site's location on a terrace above the Thames suggests that wood resources were obtained from the Thames floodplain. The fact that late Bronze Age through middle Iron Age pits are dominated by different taxa (MALOIDEAE group, alder/hazel, oak, elm or ash) suggests that a variety of habitats were exploited for wood fuel—in particular both the floodplain and the upland (ie areas on the terraces above the floodplain). The limited quantity of material (< 75 ml) and the fact that only one assemblage from each period was fully analysed, however, means it is likely that neither assemblage is fully representative of the range of wood fuels used at Hill Farm.

POLLEN AND PHYTOLITHS FROM TRENCH 14 by Adrian Parker
Four samples were prepared from a column sample from Trench 14. The samples were chosen to examine four separate contexts within the lower part of the midden sequence (layers 1413, 1406, 1407 and 1409: see Table 7.6 for details). No pollen was recovered except for a few resistant Liguliforae (Compositae) grains. Three of the phytolith samples (from contexts 1406 = 1455, 1407 = 1456 and 1409 = 1457 below the midden) did yield countable material. All three samples were dominated by grassland elements with a few ligneous dicotyledonous forms, suggesting that some phytoliths were derived from woody material. These were, however, very low in number. The grass
elements were dominated by round/square/oblong short-cell forms. These are typically found in C3 grasses that are the dominant form in temperate regions of the world. A number of dumbbell/cross forms were present which are typically derived from C4 Panicoid forms, although some C3 types may produce these forms as well.

All three phytolith yielding samples contained dendriforms. These are derived from the inflorescence spikes of grasses and are often associated with cereals. The relatively high proportion of these forms suggests that cereal were processed at the site. This would also account for the high proportion of C3 (round/square/oblong) forms found. The latter types may have been derived from the surrounding pasture used for animal grazing, grasses collected for animal fodder or bedding, or derived from their dung.

**SOIL MICROMORPHOLOGY by Marta Perez**

Soil micromorphological analysis was carried out on the ‘midden’ found in Trench 14 in an attempt to understand the formation and character of this deposit, the character of the soil horizon prior to the deposition of the midden and the environmental conditions under which it formed. The midden sealed a buried soil profile, the top of which contained a wolf bone radiocarbon dated to 2680 ± 35BP (900–790 cal BC; Poz-12517). In section, the midden appeared to consist of two main deposits separated by a horizon overlain by clay patches.

During excavation, this horizon was only evident where there were separating layers, such as the clay patches, and the analysis aimed to establish whether the horizon could be identified within the soil profile. The analysis also examined whether the middening above and below this horizon was of different character, and if so, whether this was caused by different inputs, by post-depositional chemical processes, or by disturbance of the upper part of the deposit. The analysis also looked for other horizons within the deposit, in order to establish whether the deposit formed rapidly or slowly, and what the scale of inputs was. The methodology is outlined in the digital report.

**Discussion**

The lowest layer in the sampled sequence (1409) appears to consist of a rendzina soil that is totally biologically reworked, containing fewer chalk clasts and other anthropogenic aggregates (pottery, building material, digestive matter) than the overlying soils.

These elements occur throughout the overlying soils, including the midden, although the presence of ashes and spherulites is more common in the lower part of the profile. The term spherulite describes crystal aggregates or calcium oxalate druses from plants ingested by herbivores (Canti 1997, 219). A survey of animal faeces suggests that most are produced by ruminants (sheep, cow, goat and deer), low numbers are produced by omnivorous and carnivorous species (pig, man, badger, dog, cat and fox) and that they are absent from the faeces of horses, rabbits and hares (Canti 1997, 254). This could indicate that burnt dung from domestic animals was dumped in this deposit.

Variations in the quantity of organic carbon in the three thin-sections studied (higher in the two lower thin-sections) are the product of various soil-forming factors: management of the soil, climate, biota (vegetation and soil organisms) and topography (Baldock and Skjemstad 1999, 164).

The near total absence of charcoal is surprising given the evidence of burning

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### Table 7.6 Percentage phytolith counts from Trench 14, section 2, Wittenham. Crosses denote the presence of morphotypes but counts yielded insufficient number for reliable percentage calculations

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Layer</th>
<th>Round, Square, Oblong</th>
<th>Dumbbell and Crosses</th>
<th>Saddle Grasses</th>
<th>Cyperaceae Alcots</th>
<th>Corklike Grass</th>
<th>Dendriform Long Cells</th>
<th>Other Hairs Long Cells</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>1413</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>32</td>
</tr>
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<td>0</td>
<td>11</td>
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<td>0</td>
<td>7</td>
<td>28</td>
</tr>
</tbody>
</table>
from ashes. The fact that these ashes appear with digestive matter seems to indicate the use of dung as fuel.

The soils have been severely disturbed by plants and burrowing fauna, which have probably altered the chemical composition of the soils and produced a mixed stratigraphy. Studies in a project on Papa Stour, Shetland (Davidson 2002, 1252) indicated that the total reworking of the soil by animals and plants could occur within 40 years. Micromorphological features diagnostic of cultivation will therefore be lost within decades unless such soils are very quickly sealed within archaeological contexts. In this case, there has been structural breakdown within the fossil horizon, as is shown by the movement of fine material through the deposit horizons.

Trampling is suggested by the high degree of homogenisation of the archaeological material within the natural sediments and the absence of clear layering of the sediments. In addition, the fragments of shell found in these thin sections are crushed and show sharp edges, characteristics typical of trampling. Trampling can also cause compaction, and is often indicated by a compact structure of closely packed grains (Exaltus and Miedema 1994, 295). These characteristics were observed in the three thin sections studied here, indicating that not only was the midden used as a dumping area, but that it was also heavily trampled.

The sections seem to indicate that layers 1406, 1413 and 1401 were not formed in situ, but were anthropogenically formed and then dumped in the deposit. Models of such ‘midden’ formation have been discussed and illustrated at Potterne, Wiltshire (Lawson 2000).

AN INTEGRATED INTERPRETATION OF THE ENVIRONMENTAL EVIDENCE FROM THE MIDDEN by Adrian Parker

Layer 1410 of the midden in Trench 14 equates to Rhodes’ chalk clay and is most likely to represent in situ weathered chalk. There may be an element of soliflucted, slope material, with some Greensand inclusions. However, this is likely to be localised as plateau gravel materials would probably also have been incorporated, had widespread solifluction or slope wash occurred.

Layer 1409 corresponds to Rhodes’ layer 4 (yellow clay) and the micromorphology suggested that this was at one time a rendzina soil—a shallow soil which usually forms over Chalk, typically under grassland conditions. Few artefacts occurred in this layer, which lies beneath the midden. Phytolith (plant silica) work produced only a low count with a distinct grassland element. The soil was bioturbated. Evidence for grassland is further provided by the presence of spherulites (derived from the dung of herbivores such as cattle, goat, sheep or deer). This may have originated either from the burning of dung for fuel, or, more likely, reflects the fact that this layer was a soil covered in grassland which was grazed. This latter suggestion would also account for the post-depositional clay coated in former root voids.

Layer 1407 comprised the bunter pebble-rich horizon with some chalk inclusions and charcoal. This layer was not investigated by the micromorphological work. The phytolith work suggested grassland with reasonable preservation. It is likely that this unit reflects colluvial slope wash, most likely related to clearance of woodland or instability derived from disturbance related to constructional activities on the hillslopes above. This would account for the presence of bunter pebbles, which would have been derived from the top of Castle Hill.

Layer 1406 represents colluvial material, as is suggested by the presence of angular quartz and Greensand in the micromorphological sample. The layer contained occasional charcoal flecks, ash and spherulites, which would suggest grazing by herbivores. It is possible that the spherulites were incorporated by manuring or via ash from the burning of dung. However, the phytolith evidence suggests grassland and the phytoliths could have been derived from dung, or ash from the burning of dung, via manuring. The latter is consistent with the presence of dendriform phytoliths. Whilst these are found in the inflorescence bracts of grasses, the types observed were more akin to those found in cereals. Cereal chaff is often used to temper dung cakes for fuel and thus burning is a possibility consistent with the presence of charcoal.

Both units 1406 and 1407 represent Rhodes’ Layer 3. Layer 1406 is dated to 2680± 35BP (900–790 cal BC; Poz-12517). The micromorphological work indicates extensive bioturbation in layers 1406/1407, which would support the notion of worm sorting and the concentration of bunter pebbles deriving from colluvial processes.
Layers 1401/1413 represent the early Iron Age midden. This unit was charcoal rich with only a small quantity of spherulites and ash. There were few phytoliths in unit 1413, suggesting that spherulites and phytoliths are closely linked taphonomically in Trench 14.

PALAEOENVIRONMENTAL EVIDENCE FROM A PEAT FLUSH IN LITTLE WITTENHAM WOOD by Adrian Parker

The Upper Thames Valley has numerous calcium-rich springs and seepages which have led to localised development of peat and calcareous tufa deposits (Parker and Goudie 1998). The site at Little Wittenham Wood is of importance as it is situated at the foot of Castle Hill offering insight into the Bronze Age and Iron Age landscape. Within the Upper Thames region there are very few palaeoenvironmental sequences spanning these periods (Parker 2000).

The peat deposited has developed at the juxtaposition of Upper Greensand and Gault Clay at the foot of Castle Hill. The slope is covered with broadleaved woodland today, with disturbed open woodland/grassland along the river itself.

The core site (SU 573931) lies at base of the steep slope of Castle Hill adjacent to the River Thames. The core was recovered using a Russian pattern corer (Jowsey 1966) and the stratigraphy is shown in Figure 7.7. The calcareous nature of the sediments at Wittenham and the potential for modern root penetration presented problems using conventional radiocarbon dating. Therefore, accelerator-dating on selected, non-aquatic, plant macrofossils was required (see Table 7.10). A detailed methodology can be found in the digital report.

Results

Sediment stratigraphy

The stratigraphy and physical properties are shown in Figure 7.7. A total depth of 250 cm of sediment was recovered. Unit a (250–200 cm) comprised silty clay, with a high bulk density and low organic content. At the base of Unit 1 (200–182 cm) there is a peak in bulk density and a relatively high LOI value (62%). A steady decline in bulk density is apparent throughout the sequence. Units 3 and 4 (170–100 cm) consists predominantly of marl/tufa deposits, and commences with a period of high magnetic susceptibility and carbonate content. Significant increases are also seen in both moisture content and particularly LOI which reaches a peak of 78% at 140 cm and corresponds with a rise in carbonate content and a significant decline in magnetic susceptibility. Notably, LOI falls to a low value (6%) at 120 cm. The tufa deposit is overlain by a very humified peat sediment from 100 cm in Unit 5 to 64 cm. Unit 6 (64–26 cm) is silt/clay rich and displays increases in both bulk density and carbonate content, along with decreases in moisture content and LOI. Finally, this is overlain by humified peat sediment (Unit 6), which shows in particular increases in LOI and moisture content, with a corresponding decline in bulk density.

Macrofossils

Figures 7.8 and Tables 7.7 and 7.8 show the plant and molluscan macrofossil results. Zones 1–3 and 6–7 contained well-preserved plant and molluscan remains, whilst zones 4 and 5 contained a few horizons with good preservation. No macrofossil remains were present in zone a. In Zones 1–3 plant marsh and aquatic taxa were represented by the presence of Glyceria maxima, Carex sp., Caltha palustris, Apium nodiflorum and Mentha aquatica. In Zone 2 marsh taxa replace aquatic taxa suggesting slightly drier conditions. Some woodland/scrub elements are present suggesting at least intermittent or open tree and scrub vegetation represented by Sambucus nigra, Rubus fruticosus and Populus sp. Zones 2 and 4 contained disturbed ground taxa including Rumex conglomeratus, Chenopodium alba and Polygonum aviculare. The molluscan evidence supports the plant macrofossil record with evidence for some woody cover and episodes of disturbance around the marsh with phases of open water. Woodland species including Discus rotundatus, Agapinella nitidula and Nesovitrea harmonis appear at intervals in between open ground species including Trichia hispida and Vallonia sp.
Figure 7.7 Physical and chemical characteristics of peat column from base of Castle Hill
### Table 7.7 Plant macrofossils from peat at base of Castle Hill

<table>
<thead>
<tr>
<th>Depth (cm)</th>
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<th>12</th>
<th>16</th>
<th>20</th>
<th>28</th>
<th>40</th>
<th>50</th>
<th>54</th>
<th>58</th>
<th>70</th>
<th>78</th>
<th>80</th>
<th>92</th>
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<th>120</th>
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<tr>
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<td>2</td>
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</table>
Figure 7.8 Combined macrofossil and molluscan diagrams for peat at base of Castle Hill
Zone 4 contained only three horizons in which plant and molluscan remains were preserved. Both lines of evidence suggest open ground conditions prevailed with the presence of *Trichia hispida*, *Rumex conglomeratus* and *Urtica dioica*. Zone 5 shows evidence for both disturbed ground and some shrub/woody elements. In Zone 6 preservation is much better and shows disturbed open ground conditions being replaced by increasing elements of woodland as represented by *Discus rotundatus* and *Oxychilus cellarius*.

### Pollen

The pollen results are shown in Table 7.9. In unit (a) at 240 cm preservation was sparse but did contain *Betula*, *Pinus* and *Corylus* pollen. Whilst the count is not sufficient to yield a count of statistical reliability it does suggest an early Holocene environment.

**Table 7.9 Numbers and percentages of pollen taxa from peat at base of Castle Hill**

<table>
<thead>
<tr>
<th></th>
<th>40cm %</th>
<th>80cm %</th>
<th>120cm %</th>
<th>160cm %</th>
<th>200cm %</th>
<th>240cm %</th>
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<tbody>
<tr>
<td><strong>Trees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Betula</td>
<td>11 3.00</td>
<td>2 1.93</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12 0.00</td>
</tr>
<tr>
<td>Pinus</td>
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<td>2 1.93</td>
<td>0.00</td>
<td>1 0.23</td>
<td>0.00</td>
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<tr>
<td>Quercus</td>
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<td>11 10.61</td>
<td>2 0.46</td>
<td>0.00</td>
<td>11 4.58</td>
<td></td>
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<tr>
<td>Tilia</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1 0.42</td>
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<tr>
<td>Fraxinus</td>
<td>14 3.81</td>
<td>4 3.86</td>
<td>1 0.23</td>
<td>0.00</td>
<td>3 1.25</td>
<td></td>
</tr>
<tr>
<td>Alnus</td>
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<td>10 9.65</td>
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<td>4 0.90</td>
<td>33 13.75</td>
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<tr>
<td>Corylus</td>
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<td>9 8.68</td>
<td>5 1.14</td>
<td>19 4.28</td>
<td>15 6.25</td>
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<tr>
<td>Salix</td>
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<td>Crataegus t.</td>
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<tr>
<td>Rubus t.</td>
<td>5 1.36</td>
<td>4 3.86</td>
<td>0.00</td>
<td>0.00</td>
<td>4 1.67</td>
<td></td>
</tr>
<tr>
<td><strong>Herbs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cereal t.</td>
<td>3 0.82</td>
<td>12 11.57</td>
<td>0.00</td>
<td>8 1.80</td>
<td>5 2.08</td>
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<tr>
<td>Gramineae</td>
<td>77 20.98</td>
<td>102 98.39</td>
<td>202 46.12</td>
<td>178 40.09</td>
<td>102 42.50</td>
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<tr>
<td>Cyperaceae</td>
<td>51 13.90</td>
<td>98 94.53</td>
<td>77 17.58</td>
<td>44 9.91</td>
<td>22 9.17</td>
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</tr>
<tr>
<td>Ranunculaceae</td>
<td>12 3.27</td>
<td>0.00</td>
<td>4 0.91</td>
<td>4 0.90</td>
<td>2 0.83</td>
<td></td>
</tr>
<tr>
<td>Chenopodiaceae</td>
<td>4 1.09</td>
<td>1 0.96</td>
<td>2 0.46</td>
<td>21 4.73</td>
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<td>Caryophyllaceae</td>
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<td>0.00</td>
<td>0.00</td>
<td>3 0.68</td>
<td>0.00</td>
<td></td>
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<tr>
<td>Filipendula</td>
<td>23 6.27</td>
<td>14 13.50</td>
<td>2 0.46</td>
<td>5 1.13</td>
<td>2 0.83</td>
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<tr>
<td>Plantago lanceolata</td>
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<td>33 31.83</td>
<td>21 4.79</td>
<td>21 4.73</td>
<td>3 1.25</td>
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<tr>
<td>Plantago major/media</td>
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<td>2 1.93</td>
<td>0.00</td>
<td>4 0.90</td>
<td>0.00</td>
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<tr>
<td>Rumex spp.</td>
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<td>12 11.57</td>
<td>53 12.10</td>
<td>44 9.91</td>
<td>5 2.08</td>
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</tr>
<tr>
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<td>1 0.42</td>
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</tr>
<tr>
<td>Galium t.</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>Polygonum spp.</td>
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<td>0.00</td>
<td>4 0.91</td>
<td>23 5.18</td>
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<tr>
<td>Compositae Liguliflorae</td>
<td>2 0.54</td>
<td>14 13.50</td>
<td>33 7.53</td>
<td>44 9.91</td>
<td>2 0.83</td>
<td></td>
</tr>
<tr>
<td>Compositae Tubuliflorae</td>
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<td>0.00</td>
<td>3 0.68</td>
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</tr>
<tr>
<td>Cirsium/Carduus t.</td>
<td>2 0.54</td>
<td>0.00</td>
<td>4 0.91</td>
<td>0.00</td>
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<tr>
<td>Umbellifera</td>
<td>14 3.81</td>
<td>4 3.86</td>
<td>14 3.20</td>
<td>10 2.25</td>
<td>15 6.25</td>
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<tr>
<td>Mentha aquatica</td>
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<td>0.00</td>
<td>0.00</td>
<td>2 0.83</td>
<td>0.00</td>
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<tr>
<td><strong>Spores</strong></td>
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<tr>
<td>Polypodium</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>4 1.67</td>
<td></td>
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<tr>
<td>Filicales</td>
<td>2 0.54</td>
<td>4 3.86</td>
<td>11 2.51</td>
<td>6 1.35</td>
<td>3 1.25</td>
<td></td>
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<tr>
<td>Pteridium</td>
<td>4 1.09</td>
<td>0.00</td>
<td>0.00</td>
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<td>0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total number</strong></td>
<td>367</td>
<td>354</td>
<td>438</td>
<td>444</td>
<td>240</td>
<td>34</td>
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</table>

Trees 70 19.07 29 8.19 3 0.68 5 1.12 48 20.00 25
Shrubs 44 11.99 16 4.52 5 1.14 20 4.48 23 9.58 8
Herbs 246 67.03 305 86.16 419 95.66 413 92.60 162 67.50 1
Spores 7 1.91 4 1.13 11 2.51 6 1.35 7 2.92 0

Note there were insufficient grains preserved and counted to yield a statistically reliable count from 240cm
At the base of Zone 1 (200 cm) tree and shrub pollen are represented by the presence of *Quercus*, *Tilia*, *Fraxinus*, *Alnus*, *Corylus* and *Rubus*. Open ground conditions are highlighted by the presence of Gramineae, Cyperaceae, Ranunculaceae and *Rumex*. Marsh and emergent aquatic elements are represented by Umbelliferae and *Mentha aquatica*.

In Zone 3 (160 cm) tree and shrub pollen values are low and represented by *Quercus* and *Corylus*. NAP dominated with Gramineae, Cyperaceae, *Rumex*, *Plantago lanceolata*, Chenopodiaceae, Caryophyllaceae, Compositae Liguliflorae and *Polygonum aviculare* t. Aquatic and spore taxa include *Mentha*, *Equisetum*, *Iris* and Filicales.

Zone 4 (120 cm) shows an open environment with low tree pollen values represented by *Quercus* and *Alnus* and a single grain of *Tilia*. Shrub pollen includes low values of *Salix* and *Corylus*. The sample is dominated by Non-Arboreal Pollen (NAP), dominated by Gramineae and lower levels of Cyperaceae, Chenopodiaceae, *Rumex* and *Urtica*.

Zone 5 (80 cm) shows a fairly open environment with an increase in tree and shrub pollen values including *Quercus*, *Alnus*, *Corylus*, *Prunus* and *Sambucus*. Non-Arboreal Pollen (NAP) includes Gramineae, Chenopodiaceae, *Rumex*, *Polygonum aviculare* t., *Urtica*, Umbelliferae and Caryophyllaceae.

In Zone 6 (40 cm) the pollen assemblage shows an increase in woodland taxa including *Quercus*, *Fraxinus*, *Acer*, *Pinus* and *Fagus*. Shrub taxa include *Alnus*, *Salix*, *Corylus*, *Sambucus* and *Rubus*. NAP is dominated by Cyperaceae and Gramineae with some *Urtica*, *Rumex*, *Filipendula*, *Plantago lanceolata*, and *Polygonum aviculare* t. present. Aquatic taxa included *Mentha aquatica* and *Iris pseudochorus*.

**Discussion**

The basal silt/clay deposit is likely to represent a period of early Holocene slope wash deposits (undated) underlying the main organic sediment unit. Sparse pollen in this unit indicates birch, pine and hazel were present. The onset of organic accumulation began during the late Bronze Age/early Iron Age and the lower units (1–3), 2550–2335 BP, indicate a period of fluctuating environment in the vicinity of Castle Hill. The molluscan and plant macrofossil remains suggest several phases of clearance, disturbance and slope wash interspersed with short-lived periods of increased wood/scrub cover and stability reflected by phases of partial scrub/woodland regeneration. Such events are likely to relate to the clearance of the regional woodland mosaic from the middle Bronze Age. Pollen evidence from the Upper Thames Valley has shown that clearances began in the early Neolithic and were largely related to monument sites often close to river confluences. These sites tended to remain open with grassland persisting and some scrub development. However, upland sites such as Ascott under Wychwood, Hazleton North and Waylands Smithy underwent clearance prior to construction followed by later woodland regeneration.

In the Trench 14 midden samples, the micromorphological work by Perez suggested worm sorting and the concentration of bunter pebbles derived from colluvial processes on Castle Hill from middle?/late Bronze Age activity. Phytolith work indicated grassland with some inflorescence bracts derived from cereals. Evidence for an open landscape with grassland is supported by abundant animal bone remains including cattle, goat and sheep. Unit 1406 was dated to 2680±35 BP (900–790 cal BC; Poz-12517) and these data suggest that the landscape was already open prior to the onset of the peat deposit at the foot of Castle Hill. The snail samples from the late Bronze Age hilltop enclosure ditch on Castle Hill, however, show a predominance of woodland snails in their lower fills, which span the period 1000–800 cal BC. The molluscan evidence may be interpreted in several ways: some of the snails may indicate the environment of the hilltop at the time the enclosure was constructed, incorporated residually into the ditch from the upcast bank, or they could indicate only partial clearance of the hilltop, or possibly a phase of woodland regeneration soon after the ditch was dug. This evidence, however interpreted, shows the continuing presence of woodland on the hilltop contemporary with the earliest dated peat deposit.

The regional pollen diagram from Spartum Fen, located in the catchment of the River Thame, which enter the Thames at nearby Dorchester, and from Sidlings
Copse, near Oxford, both show widespread deforestation from the middle Bronze Age (Day 1991; Parker 2000). Organic environmental sequences from non-fluvial environments spanning late Bronze Age and Iron Ages are rare in the Upper Thames Valley (Parker 2000), with evidence for these periods tending to be restricted to sites located on the floodplain of the Thames and its tributaries. For example, late Bronze Age pollen and plant macrofossil evidence is available from Eight Acre Farm, Abingdon (Parker 1995b; Robinson 1995), which indicated an open landscape. At Mount Farm, Dorchester, a landscape of lightly grazed grassland with some thorn scrub was indicated by plant waterlogged and invertebrate remains from a late Bronze Age pond (Robinson and Lambrick 1984). At Mingies Ditch, on the lower Windrush floodplain, alder woodplain was being cleared in the late Bronze Age and some mixed scrub survived into the Iron Age (Allen and Robinson 1993). Pollen and insect evidence indicated that the gravel terrace was, however, grassland. At Stanton Harcourt, also in the Windrush Valley, palaeochannel sediments showed that floodplain clearance had largely occurred by 910–790 cal BC (Barclay et al. 1995).

The onset of flooding, alluviation and raised water tables occurred from c. 2500 years BP in the Upper Thames region (Robinson and Lambrick 1984; Robinson and Wilson 1987). These can be correlated with accelerated forest clearance and agricultural intensification in the catchment area. In a number of areas, major phases of alluviation occur significantly later than clearance (Parker 2000). Pollen evidence shows that major clearance took place during the middle Bronze Age from 3300 BP in the Upper Thames Valley (Day 1991; Parker 2000; Parker and Goudie 2007). A similar pattern occurred in the Severn and Avon Valleys (Shotton 1978; Parker and Chambers 1997), but this is dated to the late Bronze Age. There was greatly accelerated erosion and alluvial sedimentation between 2000 and 3000 BP (Brown 1987) which has been related to the sowing of autumn crops (Shotton 1978).

Bell and Walker (2005) suggest that intensive Iron Age activities rather than climatic change were responsible for alluviation. However, Macklin and Lewin (1989) see river alluviation in Britain as climatically driven but culturally blurred.

During the early Iron Age human activity at the site had become considerable with the building of a large hillfort enclosure with a ditch, bank and rampart system (see Chapters 2 and 9). The continuing clearance of woodland was most likely related to the increased use of timber to build a rampart palisade, as well as the need for grazing areas. This extensive land usage is reflected in the data with increases in bulk density and magnetic susceptibility suggesting instability and slope wash into the site. Throughout this time period there is also a definite suggestion of pastoral land use and also disturbed ground within the macrofossil data. The pollen evidence suggests open conditions with evidence for pasture/grazing on the floodplain of the Thames. During the Iron Age there is evidence that many floodplain areas in the Upper Thames became overgrazed and developed species poor grassland, which were seasonally waterlogged. Indeed, the macrofossil remains from Trench 20 on the floodplain itself indicated species related to poor-overgrazed conditions. However, during the Roman period evidence for floodplain grassland management was evident with the development of hay meadow.

The Iron Age period also coincided with a deterioration of the climate with Lamb (1977; Anderson et al. 2007) suggesting that annual temperatures may have fallen by 2°C, whilst the increased precipitation that also occurred is possibly evidenced by high magnetic susceptibility values, caused by increased alluviation in the river valleys and colluvial slope processes following the construction of the hillfort at the site. Similarly, the pollen record shows that with the exception of relatively little Alnus and small numbers of Fraxinus, herbaceous pollen types dominated the area and in particular Gramineae. It should be noted that a number of wild grasses have large pollen grains that may fall within the size-class categories for cereal types, e.g. Agropyron repens and Glyceria maxima, so there can be a problem with identification (Edwards and Whittington 1997). Whilst the pollen evidence does suggest some cereal cultivation was taking place (Zones 3 and 4) it should be noted that plant macrofossil remains of Glyceria maxima were found between 198–164 cm.

The decline in carbonate content, decrease in bulk density and increase in moisture content at 100 cm may reflect the fact that most of the activity at the site took place during the earlier phases of the Iron Age. This supports the current archaeological evidence from Castle Hill and the surrounding settlement, where the scale of activity
appears to have been reduced towards the end of the Iron Age, perhaps implying that part of the population moved when the valley fort at Dyke Hills was built.

There is a break in the sequence at c 100 cm depth, which may be due to several factors. The first is that sediment accumulation slowed down and ceased to continue owing to a fall in the water table. This may be related to a period when the hillslopes were overgrown between the late Roman and the late medieval periods, thus reducing runoff. The second is that erosion truncated the sequence before a later phase or re-accumulation. When sediment accumulation re-commenced the landscape was open and dominated by grassland/wet meadow. In the uppermost unit woodland is present as suggested by all proxies. The increase in bulk density between 60–40 cm may be related to increased slope wash during the Little Ice Age. The peak in LIA cooler conditions is centred on AD 1700. This period of neoglaciation in the Northern Hemisphere was characterised cooler conditions and increased mass movement processes.

The rise in woodland in Zone 7 relates to the planting of woodland in the past 200 years. At Spartum Fen, located 10 km to the north of the site in the valley of the River Thame, a tributary of the Thames, woodland regeneration is noted from around AD 1300, with an increase in the pollen frequencies and concentrations of *Betula*, *Quercus* and *Salix* amongst others, suggesting woodland regeneration (Parker 1995a). Such change may reflect a change in land use, as for example a move away from local grazing and cultivation and/or the development of carr woodland on the site. The planting woodland in the Upper Thames region during the past 200 years has also been noted in the pollen record from Wytham Woods, near Oxford (Hone et al. 2001).

**Conclusions**

In conclusion, the deposit is late Holocene in age with three phases of deposition. The first was a phase of early Holocene, though undated, sedimentation of clay-silt rich material. The next phase of sedimentation did not commence until the late Bronze Age (2550±35 BP) and it is likely that this corresponded to a rise in the water table due to the removal of regional woodland. The landscape then showed progressive clearance and the development of open ground conditions and phases of slope wash on Castle Hill. This probably corresponded with phases of constructional activities during the late Bronze Age and Iron Age associated with the hillfort. Sedimentation ceased c 2000 BP (late Iron Age). A renewed phase of organic sediment accumulation began c 400 BP and may have been associated with wetter conditions associated with the Little Ice Age. Woodland became re-established on Castle Hill in the past 200 years.

**RADIOCARBON DATING by Tim Allen**

Eleven samples, six of animal bone and five of seeds from the peat core, were submitted to the Poznan Radiocarbon laboratory for accelerator mass spectrometry.

<table>
<thead>
<tr>
<th>Lab. No.</th>
<th>Depth</th>
<th>Material</th>
<th>δ13</th>
<th>Radiocarbon Age (BP)</th>
<th>95.4% Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poz-14310</td>
<td>39-41 cm</td>
<td>2 x <em>Sambucus nigra</em></td>
<td></td>
<td>130±30BP</td>
<td>1670AD - 1950AD</td>
</tr>
<tr>
<td>Poz-14311</td>
<td>79-81 cm</td>
<td>1 x <em>Carex</em> spp., 1 x <em>Urtica dioica</em>, 1 x <em>Cyperus indet.</em>, 2 x <em>Populus</em> buds</td>
<td></td>
<td>310±30BP</td>
<td>1480AD - 1650AD</td>
</tr>
<tr>
<td>Poz-14312</td>
<td>119-121 cm</td>
<td>2 x <em>Eleocharis subgenus palustris</em></td>
<td></td>
<td>2270±60BP</td>
<td>420BC - 1600BC</td>
</tr>
<tr>
<td>Poz-14313</td>
<td>157-161 cm</td>
<td>1 x <em>Urtica dioica</em>, 1 x <em>Iris pseudocorus</em>, 2 x <em>Cladium mariscus</em>, 1 x <em>Eleocharis subgenus palustris</em>, 3 x <em>Glyceria</em> spp., 1 x <em>Menha aquatica</em>, 5 x <em>Apuim nodiflorum</em></td>
<td>2335±35BP</td>
<td>520BC - 230BC</td>
<td></td>
</tr>
<tr>
<td>Poz-14309</td>
<td>193-195 cm</td>
<td>1 x <em>Apuim nodiflorum</em>, 1 x <em>Caltha palustris</em>, 2 x <em>Rumex conglomeratus</em>, 1 x <em>Polygonum aviculare agg.</em>, 2 x <em>Glyceria</em> sp., 1 x <em>Silene dioica</em>, 1 x <em>Chenopodium album</em>, 1 x <em>Viola</em> subgenus viola, 1 x <em>Carduus/Cirsium</em></td>
<td>2550±35BP</td>
<td>810BC - 540BC</td>
<td></td>
</tr>
</tbody>
</table>
The determinations have been calibrated using OxCal v3.10 and atmospheric data from Reimer et al. (2004). The date obtained on the wolf calcaneum (900–790 cal BC; Poz-12517) was consistent with that of much of the pottery from the same context. The two dates obtained on cattle mandibles from a ditch in Trench 13 were consistent with one another, and although somewhat later than the few diagnostic pottery sherds from the ditch, these sherds may well be residual. There is therefore no reason to doubt the validity of the dates obtained.

The date from charred hazelnut shells in context 179 within pit 135, 3770–3640 cal BC (Poz-14321), is consistent with the early Neolithic date indicated by the Plain Bowl pottery from the same context.

The date obtained from charred grains from middle fill 69 within pit 41, 200 cal BC–cal AD 1 (Poz-14320), is consistent with the Iron Age pottery from the feature. By association the radiocarbon date also dates the group of large refitting fragments of Lodsworth rotary quern from the same context. This is the first prehistoric radiocarbon date for such rotary querns in the region, but is consistent with previous evidence from nearby sites, which includes a group of such querns from a pit at Abingdon Vineyard associated with large sherds of middle Iron Age pottery (Allen in prep.).

The date obtained upon charred grains from layer 176 at the base of pit 149, cal AD 250–410 (Poz-14322), is unexpected. Although firm dating for this pit was not provided by the artefacts from the pit fills, these were entirely Iron Age, and the character of the pit and its location made an Iron Age date for the pit probable. While a late Roman date for this feature is not impossible, given the presence of a probably Roman burial some 20 m to the north-east, the material that was dated may well be intrusive in this feature.

The five dates obtained on seeds are in correct stratigraphic sequence, and there is no reason to doubt the dates obtained.
INTRODUCTION

Parts of three fields adjacent to Paradise Wood between Little Wittenham and Long Wittenham were chosen as the site for a new wood (Neptune Wood) to commemorate the 200th anniversary of the Battle of Trafalgar (see Chapter 1, Fig. 1.1). To mitigate the damage caused by tree-planting and subsequent root-growth, Oxfordshire County Archaeological Services asked the Northmoor Trust to commission a review of the cropmark evidence, and undertake a geophysical survey and limited investigation of archaeological features. Oxford Archaeology carried out the work in 2006, and also monitored the excavation of a pond within the wood by Archaeological Watching Brief (Fig. 8.1).

Archaeological and historical background

The westernmost field (Plate 8.1) contains a variety of cropmarks (SMR 15311; see Chapter 1 Fig. 1.3). These comprise a rectangular enclosure with a circle inside (SMR 8519), thought to be Iron Age, several sinuous ditches (some meeting at right angles) that possibly represented a field system (NMR 1089371), a trackway (NMR 1089349, almost certainly Roman) and a group of large individual marks probably representing pits or wells (see Fig. 8.1). Seven Saxon sunken-featured buildings are recorded further north-west in this field (SMR 8522), and a probable Saxon hall has been identified only 50 m north of the rectangular enclosure from

Plate 8.1 Wittenham Clumps looking north-west, with Paradise Wood and Long Wittenham behind (taken by Stuart Ainsworth of Time Team, copyright Videotext Communications Ltd)
Figure 8.1 Area of Neptune Wood showing location of archaeological trenches and geophysical survey results in relation to cropmarks (Benson and Miles 1972, Map 32), highlighting features interpreted as corresponding to cropmarks, and indicating furrows.
a photograph taken in 1986 (Booth et al. 2007, fig. 3.26 c). The cropmark evidence suggested that the rectangular enclosure lay just outside Neptune Wood, but the geophysical survey showed that its south-east corner was just within the development area.

A smaller C-shaped enclosure (NMR 1089369) was plotted in the middle field just north of Neptune Wood. The Roman trackway is also visible on aerial photographs in the eastern field beyond the limits of the wood. Along the southern edge of this field, just outside Neptune Wood, are several linear cropmarks aligned north-east and north-west, possibly connected with the sinuous field system seen in the western field. No cropmarks are visible in the area liable to flooding either side of the stream.

The earliest maps (Rocque 1761) and subsequent OS maps show the area as open fields, and examination of vertical aerial photographs from the 1940s at the NMR suggests that the western field was covered by medieval furrows. Evidence for the use of the middle and north fields is less clear, but it is likely that the whole area has been open fields since the medieval period.

Findspots in the Sites and Monuments Record include a ground Neolithic axe from the western field (in possession of the Northmoor Trust). Fieldwalking over an area 120 m by 30 m in the northern part of the middle field was carried out under the supervision of J Hinchcliffe of English Heritage in 1998. A summary report indicates that Roman pottery was found, particularly towards the south end. Struck flint (including a proportion with secondary working) was also recovered throughout the area, but with a concentration towards the north end (closer to the river). As part of the HLF project the field immediately west of Neptune Wood was walked in 2004, and produced part of a rotary quern of Upper Old Red Sandstone, probably Roman, and a scatter of Roman pottery (Lamdin-Whymark and Allen 2006). A little struck flint, largely of Neolithic or early Bronze Age date, was also recovered.

Cropmarks in adjacent fields include a Roman and possibly prehistoric settlement astride a north-south trackway some 300 m to the north-east, within the Northfield Farm Scheduled Ancient Monument (Oxfordshire SAM 180), and medieval and probable Saxon halls some 200 m to the west just south of Long Wittenham. The archaeological potential of the area was therefore high.

**SUMMARY OF RESULTS**

The geophysical survey was not generally very informative, although it did indicate that medieval furrows covered both the middle and western fields (Fig. 8.1). Faint traces of the rectangular enclosure in the western field suggested that this did extend into the area of the wood, and this was confirmed by trenching (Trench 9), which provisionally dated this feature to the early Iron Age. Following discussion between Oxfordshire County Archaeological Services, The Northmoor Trust and OA, and in accordance with the aims of the project to protect any significant archaeology in the area of the proposed wood, it was agreed to redesign the northern limit of the wood in the vicinity of Trenches 4 and 9, in order to minimise any impact on the area of the prehistoric enclosure.

A Mesolithic or early Neolithic flint blade was found in a probable tree-throw hole in Trench 7, and a pair of large pits in Trench 4 belonged to the Saxon period. Finds from two parallel ditches in the middle field (Trenches 6 and 7), at least one of which continued across the western field, support the suggestion that they represent a Roman trackway of the 2nd–4th centuries AD. Further parallel ditches to the north and south, one containing a group of Roman pottery, may indicate an associated field system, although one of these ditches contained a medieval potsherd. Other features on a very similar alignment in the western field (Trench 1) may have been medieval furrows.

A significant variation in the depth of soil overlying the gravel terrace was also noted in different fields, with gravel occurring at a higher level towards the north-west, and soil cover being correspondingly thinner (0.35–0.4 m compared to 0.65–0.7 m). This may have influenced the siting of some of the archaeological features discovered, and explain the difference in visibility of archaeological features as cropmarks and on the geophysical survey. Late medieval/post-medieval ridge-and-furrow was also revealed in the middle field.
Mesolithic or early Neolithic

Part of a small irregular hollow in the gravel (25715) was found on the north edge of ditch 25713 in Trench 7 (see Fig. 8.1 and Fig. 8.6 below). It was 0.37 m deep and at least 0.8 m across, with a dome of flaky largely dissolved limestone concretion on the flat base, overlain and surrounded by a layer of flaky soil (25716) with black inclusions and reddened stones and a worked flint blade. This was probably a tree-throw hole in which the gravel pushed up by the roots had subsequently decayed. The reddening and blackening could both have been due to mineral deposition (iron and manganese) rather than burning, though layer 25716 may have incorporated a little charcoal along with the flint.

Early Iron Age enclosure and associated features

Trench 9

The south-east corner of the rectangular enclosure in the western field was sectioned in Trench 9 to test its size and date (Figs 8.1 and 8.2). In the east-west section the ditch was 4.5 m wide by at least 0.85 m deep, but was not bottomed. The ditch had fairly gently sloping sides (40°) (Fig. 8.2), and the outer edge appeared to be flattening at a depth of 0.85 m, suggesting either a ledge or the base of the ditch.

The earliest excavated fill (25006) produced five sherds of early Iron Age pottery and one sherd of early-mid Iron Age pottery (see Edwards, Prehistoric Pottery). This may have been primary silting.

A concentration of gravel in the fills along the northern edge of the feature may have derived from erosion of an internal bank, or could simply represent greater erosion at the inside corner of the ditch. Finds from these fills comprised a few mammal bones (see below). The north-south section of the ditch was extended to investigate an ovoid feature (25010) to the east and its relationship to the enclosure. The feature was shallow (0.08 m) and poorly defined, but contained a sherd of mid-late Roman pottery suggesting a later date than the enclosure.
Roman (2nd–4th century AD)

The cropmarks showed a trackway running intermittently roughly south-west across the site (Fig. 8.1). Trenches 1 and 2 were located to investigate the trackway in the western field and its relationship to the sinuous cropmark running north-east across it, as tentatively identified by the geophysical survey (Figs 8.1, 8.3 and 8.4). Trench 10 was positioned west of Trench 1 to look for a continuation of its ditches, and to investigate discrete geophysical anomalies, while Trenches 6 and 7 were laid out in line with the trackway ditches to find it in the middle field (Fig. 8.1). The sinuous feature was irregular in form and section (Trench 2) and was probably a periglacial frost-wedge.

More than two ditches on the appropriate alignment were found in most of the trenches. Almost all of these ditches had been filled by similar processes, but the fills varied considerably in detail from trench to trench, as did the profiles of the ditches. A large proportion were without finds, and in combination with the wide spacing of the trenches, this created some uncertainty as to how many of the ditches might represent the cropmark trackway, what was its development, and what any remaining ditches might represent. In retrospect, the 2 m wide trenches were too narrow to project the line of the ditches over such large distances with confidence, and the stripping of broader areas would have made interpretation much clearer.

Despite these qualifications, however, there is some consistent patterning in the evidence, and this has been used to arrive at a plausible interpretation. For a more detailed description of the various features see the digital report.

Trenches 1 and 2

In Trench 1 (Fig. 8.3) there were four ditches. No dating evidence was recovered from any of them, but the most substantial were ditches 25106 and 25104, some 4 m apart, which were both c. 2 m wide and c. 0.25 m deep. Ditch 25104 was recut by a narrower and deeper ditch 25100 (1.5 m wide by 0.5 m deep). Further north was ditch 25109, 1.25 m wide and 0.3 m deep, with steeply sloping sides and a flat base 0.85 m wide. Just 2 m north of this was another parallel gully 25112, 0.8 m wide and 0.25 m deep, with very steep sides and a flat base.

Trench 2 (Fig. 8.4) was targeted on a further intersection between the cropmark trackway ditches and the sinuous linear feature shown on the cropmark plot. Two well-defined ditches were excavated in Trench 2 (25203 and 25211). These were c. 2 m wide by 0.4 m deep and were spaced 3.7 m apart. The northern ditch 25203 was re-cut as ditch 25201. One sherd of later Roman pottery and one residual prehistoric sherd were recovered from fill 25202, lying above the primary erosion deposit. The recut 25201 had a squarish profile, and had only a single fill. There were no finds from either feature.

Trench 10 (not illustrated)

This was positioned west of Trenches 1 and 2 to look for continuation of the cropmark ditches, and to investigate geophysical anomalies (see Fig. 8.1). Two soilmarks of similar width (3 m) ran parallel east-west some 12.5 m apart, the more northerly of which (25801) was excavated. It was only 0.1 m deep, with an irregular base. Both features correspond to furrows evident on the geophysical survey, although the southern soil-mark (which was not dug) is also close to the line of the northernmost of the ditches in Trench 1, and may have masked a continuation of this.

The line of the most substantial pair of ditches in Trenches 2 and 1 does not correspond to that of the cropmark triple ditches plotted in this field, the ditches heading more south-westwards. Added to this, the recut ditch is different in these two trenches, raising the possibility that it was the recut ditch in both trenches that belongs to the same boundary, the others either side being unrelated to one another. In this case the more northerly of the pair in Trench 1 could be continued by the southern unexcavated soilmark in Trench 10, though if so the ‘trackway’ would have been widening considerably on the west.

Seen on the larger scale, however (see Chapter 1, Fig. 1.3), the cropmark trackway clearly curves more south-westwards in the fields to the west, and indeed
its northern trackway ditch lines up with the southernmost of the three ditches crossing the western field. It is possible that in this field the alignment of the cropmarks is derived from three parallel furrows, and not from the trackway ditches at all, and the interpretation provided by the excavated ditches should be preferred.

**Trench 6**

Trench 6 (Fig. 8.5) was located to the west of the middle field on the projected route of the cropmark trackway and upon two discrete geophysical anomalies (Fig.
Figure 8.4  Plan and sections of Trench 2
Figure 8.5 Plan and sections of Trench 6
8.1). Stripping revealed several ditches aligned roughly north-east to south-west, the most southerly pair lying around 3.75 m apart. These may be the continuation of the trackway. The more southerly of these ditches was not excavated, as it was only partially exposed in the southern end of the trench. The northern ditch (25613) was 1.5 m wide by 0.44 m deep and produced several sherds of mid-Roman pottery.

Some 6 m north of ditch 25613 was another linear feature (25603), 3.5 m wide and 0.8 m deep, with four fills. Alongside this ditch was a narrower ditch 25610, some 1.3 m wide, with a bowl-shaped profile 0.4 m deep. There were no finds from either ditch. Ditch 25610 cut a possible pit or natural hollow 25608.

At the very north end of the trench, some 6 m from 25610 and running parallel to it, was another linear soilmark 0.4 m wide interpreted as a deep ploughing mark.

**Trench 7**

Trench 7 (Fig. 8.6) was located east of Trench 6 over the projected line of the trackway ditches, and to target two discrete anomalies shown on the geophysical survey (Fig. 8.1). Three ditches were also found at the south end of this trench, and ditches 25708 and 25713 probably represent the continuation of the trackway. Ditch 25708 was 0.65 m deep and was at least 1 m wide, extending beyond the end of the trench. Ditch 25713 was 0.39 m deep and 1.5 m wide. Both produced several sherds of 2nd–4th century AD pottery.

Immediately north of ditch 25713 was another ditch (25705), c 3 m wide, which was part-sectioned and at least 0.5 m deep. This feature was tentatively linked with 25603 in Trench 6, and if so, would indicate a slightly different alignment to the trackway ditches, running more westwards.

Towards the north end of Trench 7 was a fourth linear feature 25703, of which several metres were exposed. The fill 25704 produced two sherds of Saxo-Norman pottery, and this is judged to be a medieval furrow.

**Ponds complex**

In addition to the trackway, evidence for a Roman field system was uncovered during the ponds complex watching brief (Fig. 8.7). Ditch 25974 in the north of the area was a metre wide and 0.32 m deep, was aligned roughly SW-NE, and was traced for over 25 m. Where sectioned it had sloping sides and a cupped base. A significant quantity of Roman pottery was recovered from the one excavated section (fill 25976). A further ditch (25980), found at the bottom of a small circular pond, was recorded in plan running north-west to south-east at right angles, and it is possible that these features together represent Roman field boundaries associated with the trackway. The pottery recovered probably dated from between the late 2nd and late 3rd centuries AD, and, together with the close alignment of these ditches to the trackway, this suggests that they may all have been contemporary.

At the south end of the ponds complex, a single posthole or small pit, 0.6 m in diameter and surviving 0.32 m deep, was recorded (25960), containing a single sherd of Roman pottery. A second circular feature (25977) was found immediately to the east, but was only 0.12 m deep. Several other circular or oval soil-marks were investigated, but all proved to be irregular and sterile. The purpose and date of 25960 and 25977 remains uncertain.

**Early-mid Saxon**

The geophysical survey identified several large discrete anomalies, two of which were investigated in Trench 4 (Figs 8.1 and 8.8). These proved to consist of several pits of Saxon date which produced much pottery, bone and some metalwork, indicative of the dumping of domestic refuse. Pit 25424 (Figs 8.8; Plate 8.2) was 3.5 m in diameter and 1.1 m deep and was initially backfilled to a depth of 0.2 m with a layer of redeposited natural (25425). The subsequent fills comprised a single layer of charcoal-rich silt with inclusions of early-mid Saxon pottery (see Fig. 8.9) and some animal bone (25426) and a final layer of gravelly silts, thought to represent gradual erosion and silting (25427). This also contained Saxon pottery, together with one
Figure 8.6 Plan and sections of Trench 7
Figure 8.7 Plan of Pond complex

Key
- - - Edge of excavation
- - - Geological feature
- - - Removed to expose feature beneath
Figure 8.8 Plan and sections of Trench 4
residual late Bronze Age or early Iron Age sherd. The initial re-deposition of natural gravels perhaps suggests that this feature was dug as quarry and later reused as a refuse dump.

In the west of the trench one third of another large soilmark was excavated. This was provisionally interpreted as a series of intercutting pits (25400, 25403, 25413). The earliest fill (25418) extended below the water table, so was not completely excavated, but its silty nature suggested that it derived from the initial phase of erosion of the pit sides. In section, it is clear that pit 25413 cuts both pit 25400 and 25403, though in the later stages of silting both pit 25403 and 25413 were filled together (Fig. 8.8: fills 25411 and 25412; Plate 8.3). The lower fills comprised redeposited gravels (25404, 25405, 25410) interspersed with layers of fine silty material (25408, 25418), thought to indicate repeated periods of deliberate backfilling followed by erosion and silting. The upper fills (25412, 25416, 15419) contained charcoal, animal bone, mid-Saxon pottery and some metalwork, interpreted as domestic debris.

The pottery from both pit 25424 and the larger pit group consisted predominantly of sherds of two vessels, one of them extremely large (Fig. 8.9), and conjoining sherds of this vessel were found in both features. The material in pit 25424 came from the second fill 25426, whereas that from the pit group was from the topmost layer, possibly indicating that the pit group was in use earlier than 25424. It clearly demonstrates that both features were very close in date.

The function of the intercutting pits was not clear from the excavation, however it is possible that they could represent either quarrying activity or a waterhole (as the level of the water table was reached towards the bottom of the deepest pit). It seems likely that the pits relate to the Saxon settlements identified from cropmark evidence further north in the same field and in the field to the west of the investigation area (Dodd in Booth et al. 2007, fig. 3.26), and from a cemetery further west under Long Wittenham.

Roman or Medieval?

Ponds complex
Pit or posthole 25960 lay immediately east of a gully terminus (Fig. 8.7), which was sectioned but produced no finds. This gully was part of a group of gullies or ditches, all on a west-south-west alignment approximately parallel both to 25974 and to the trackway ditches in Trenches 6 and 7. Apart from the gully terminal there were four linear features (25952, 25954, 25956, 25962/25965). Ditches 25954 and 25962/5 lay 5.5–6 m apart, and were both 0.75–0.9 m wide and up to 0.25 m deep; 25952 was a much narrower and steeper-sided gully (0.2 m wide and deep) that merged with 25954, and 25956 lay 1.7 m further south and was 0.5 m wide and 0.2 m deep. A single body sherd was recovered from fill 25955 in ditch 25954, but its date is uncertain.
**Trench 11**

Two narrow ditches (25919, 25907) crossing Trench 11 on a west-south-west alignment appear to be in line with ditches 25952 and 25956 in the Ponds complex, and probably represent continuations (see Fig. 8.1). Neither contained any finds. Trench 11 also revealed a series of intercutting pits and a third ditch or gully (25912) approximately at right angles to the others. None of these features contained any artefacts.

The alignment of all of these ditches makes it probable that they were associated, but whether Roman or late Saxon/medieval remains uncertain.

**Medieval**

A series of broad shallow NW-SE aligned features in the Ponds Complex (25968, 25970, 25972; Fig. 8.7), which cut Roman ditch 25974 and overlay the WSW ditches described above, represent the furrows of ridge-and-furrow open field cultivation. The lines of these furrows are also visible on the geophysical survey plot in the middle field (Fig. 8.1). The artefactual evidence recovered from them includes clay pipe fragments, indicating a late medieval or post-medieval date.

Four shallow east-west linear features were also excavated in the western field (Fig. 8.1), which have been attributed to medieval ridge-and-furrow on the basis of their wide, shallow nature and the fact that they cut soils overlying the gravel (not illustrated). One of these features (25703) contained two sherds of Saxo-Norman pottery.

**FINDS AND ENVIRONMENTAL REPORTS**

**Flint** by Hugo Lamdin-Whymark

Three flints were recovered during the excavation and watching brief at Neptune Wood, all of them residual in later contexts. The assemblage consists of two flakes and a blade. A small cortical flake was recovered from context 25800 and a side trimming flake was found in context 24205. Neither flake exhibit distinctive technological traits that assist with dating. The blade from context 25716 (Sf 25004), a possible tree-throw hole, is more diagnostic. The blade is of narrow proportions, exhibits platform edge abrasion, a narrow linear platform and appears to have been removed using a soft percussor, such as antler. The dorsal surface of the blade also exhibits the scars of previous flake removals, demonstrating this blade was removed from a single platform blade core. This form of blade technology is associated with Mesolithic to early Neolithic flintworking.

**Prehistoric pottery** by Emily Edwards

A total of nine plain, broken and abraded body sherds were recovered from contexts 25006, 25202 and 25427 at Neptune Wood. These were small, plain undiagnostic sherds which were dated according to fabric. Six sherds were recovered from the fill of an enclosure ditch in Trench 9 (25006), one from a probably Roman ditch (25203) and two from the fills of a Saxon pit (samples 25001 and 25003 from layers 25426 and 25427) in Trench 4.

This assemblage consists of very broken and abraded plain body sherds and, as such, the fabrics can only indicate a late prehistoric date and a local origin. The flint, shell, sand and calcareous inclusions will derive from the Lower Chalk, Upper Greensand and Fourth Terrace glacial sands and gravels of which Castle Hill is comprised (British Geological Survey, 1: 50,000 Solid and Drift series, Sheet 254).

The pottery is of similar appearance to material recovered from a number of adjacent sites including nearby excavations at the Wittenham Clumps (see Chapters 3 and 6) Allen’s Pit (Bradford 1942), Mount Farm (Myres 1937) and Wigbald’s Farm (Savory 1937).

**Roman pottery** by Paul Booth

Trenching at Neptune Wood produced 53 sherds (923 g) of Roman pottery, the majority of which was of middle to late Roman date (AD 200–400), or occurred in context groups of that date. The pottery was in moderate to good condition—surfaces were relatively well-preserved and the average sherd weight of 18.7 g was
quite high, although a few very small sherds were present. A breakdown of the pottery by context, and giving spot dates, is given in Table 8.1, while the numbers and weight of potsherds by ware type is given in Table 8.2.

The assemblage was dominated by reduced coarse wares, but too small for consideration of the proportions of fabrics or ware groups to be meaningful. One significant characteristic of the material is the lack of late Iron Age/early Roman 'Belgic type' (E) wares. Widely distributed in the region, their absence here is likely to be significant and indicative of a low level (if not a total lack) of 1st century activity. The oxidised and reduced coarse wares are all likely to have been products of the Oxford industry. There were few particularly distinctive fabrics and forms; the Oxford mortaria included a rim of Young (1977) type M17 (AD 240–300) and the colour-coated ware (F51) sherds included a bowl base. Joining sherds of another base were recorded in fabric F50. The appearance of the colour-coat and of the base form suggest that this was not a typical F51 vessel and it may have been an example of the small-scale mid-late 2nd century fine ware production at Lower Farm, Nuneham Courtenay (Booth et al. 1993). Other vessels represented by rim sherds were a jar in fabric W20, jars and probable jars (less likely bowls) in fabrics R10 (2) and R30 (3) and a straight sided bowl or dish in fabric R20. Few of these vessels can be considered chronologically diagnostic, although one of the fabric R10 jars has a rim type which appears to be more common after AD 240 than earlier, but earlier examples are known (c.f. Young 1977 type W33.6 for the rim form).

Table 8.1 Roman pottery summary dating table giving number and weight of sherds by context

<table>
<thead>
<tr>
<th>Context</th>
<th>No. sh</th>
<th>Spot date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>25002</td>
<td>1</td>
<td>240-400</td>
<td>F51</td>
</tr>
<tr>
<td>25202</td>
<td>1</td>
<td>240-400?</td>
<td>F51</td>
</tr>
<tr>
<td>25614</td>
<td>3</td>
<td>240-300 (+)</td>
<td>R30, M22 (type M17)</td>
</tr>
<tr>
<td>25711</td>
<td>1</td>
<td>240-400</td>
<td>F51</td>
</tr>
<tr>
<td>25714</td>
<td>6</td>
<td>2C +</td>
<td>W10, W20, R10, C10</td>
</tr>
<tr>
<td>25961</td>
<td>1</td>
<td>Roman</td>
<td>R30</td>
</tr>
<tr>
<td>25975</td>
<td>1</td>
<td>?1-2C</td>
<td>R10</td>
</tr>
<tr>
<td>25976</td>
<td>39</td>
<td>?late 2-3C</td>
<td>O10, O80, R10, R20, R30, R50, F50 - ?F51 or F59 base</td>
</tr>
<tr>
<td>Totals</td>
<td>53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8.2 Numbers and weight of potsherds by ware type

<table>
<thead>
<tr>
<th>Ware</th>
<th>Summary description</th>
<th>Nosh</th>
<th>Wt (g)</th>
<th>RE</th>
</tr>
</thead>
<tbody>
<tr>
<td>F50</td>
<td>Local brown colour-coated ware</td>
<td>6</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>F51</td>
<td>Oxford red/brown colour-coated ware (OXF RS)</td>
<td>3</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Fine wares subtotal</td>
<td>9</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>M22</td>
<td>Oxford white mortaria (OXF WH)</td>
<td>2</td>
<td>29</td>
<td>0.03</td>
</tr>
<tr>
<td>M</td>
<td>Mortaria subtotal</td>
<td>2</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>W10</td>
<td>Fine Oxford white ware (OXF WH)</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>W20</td>
<td>Coarse sandy white ware</td>
<td>2</td>
<td>17</td>
<td>0.07</td>
</tr>
<tr>
<td>W</td>
<td>White wares subtotal</td>
<td>3</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>F &amp; S</td>
<td>Fine and Specialist wares subtotal</td>
<td>14</td>
<td>155</td>
<td>0.10</td>
</tr>
<tr>
<td>O10</td>
<td>Fine Oxford oxidised ‘coarse’ ware</td>
<td>2</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>O80</td>
<td>Coarse (usually grog-tempered) oxidised wares undifferentiated</td>
<td>5</td>
<td>254</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Oxidised wares subtotal</td>
<td>7</td>
<td>271</td>
<td></td>
</tr>
<tr>
<td>R10</td>
<td>Fine reduced ‘coarse’ wares undifferentiated</td>
<td>16</td>
<td>262</td>
<td>0.38</td>
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<td>R20</td>
<td>Coarse sandy reduced wares undifferentiated</td>
<td>4</td>
<td>44</td>
<td>0.04</td>
</tr>
<tr>
<td>R30</td>
<td>Moderately fine sandy reduced wares undifferentiated</td>
<td>7</td>
<td>170</td>
<td>0.16</td>
</tr>
<tr>
<td>R50</td>
<td>Black surfaced moderately sandy reduced ware</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Reduced wares subtotal</td>
<td>28</td>
<td>490</td>
<td>0.58</td>
</tr>
<tr>
<td>C10</td>
<td>Shell-tempered ware undifferentiated</td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Calcareous-tempered wares subtotal</td>
<td>4</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>53</td>
<td>923</td>
<td>0.68</td>
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</table>
Early/middle Saxon assemblage

The fabrics were as follows:

F1: Chaff-tempered. Moderate to dense organic voids up to 5 mm, rare to sparse sub-rounded quartz and/or calcareous material up to 1 mm. 20 sherds, 373 g

F2: Sand and chaff. Moderate to dense sub-rounded quartz up to 1 mm, sparse organic voids up to 5 mm. 17 sherds, 1955 g

This assemblage consisted mostly of the remains of two large hand-built vessels, one in fabric F1 and the other in fabric F2 (Fig. 8.9). It was not possible to fully reconstruct either, but all the contexts which produced early/middle Saxon pottery produced sherds of these vessels, and cross-fitting sherds from the vessel in fabric F2 also occurred in all of them (25412, 25419, and 25426). Both the vessels are undecorated, and of a standard sub-globular form, so it is impossible to date them typologically other than to within the broad early-middle Saxon period (c. AD 450–850). Radiocarbon dating has shown that they date to the very late 6th to mid-7th century (see below).

Post-roman pottery by Paul Blinkhorn

The pottery assemblage comprised 51 sherds with a total weight of 2494 g (Table 8.3). It consisted predominantly of the fragmented remains of one unusually large jar (Fig. 8.9) and part of a second large jar of early-middle Saxon date, and a small assemblage of medieval and early post-medieval wares.

Table 8.3 Saxon and medieval pottery by number and weight of sherds per context by fabric type

<table>
<thead>
<tr>
<th>Context</th>
<th>F1</th>
<th>F2</th>
<th>OXBF</th>
<th>OXAM</th>
<th>OXDR</th>
<th>Date</th>
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<td>9</td>
<td>250</td>
<td>2</td>
<td>203</td>
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<td>E/MS</td>
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<tr>
<td>25419</td>
<td>8</td>
<td>115</td>
<td>13</td>
<td>1694</td>
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<td>E/MS</td>
</tr>
<tr>
<td>25426</td>
<td>3</td>
<td>8</td>
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<td>58</td>
<td></td>
<td>E/MS</td>
</tr>
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<td>25700</td>
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<td>31</td>
<td></td>
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</tr>
<tr>
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<td>10</td>
<td></td>
<td></td>
<td>mid-11thC</td>
</tr>
<tr>
<td>(25955)</td>
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<td>2</td>
<td>21</td>
<td>2</td>
<td>53</td>
<td>15thC</td>
</tr>
<tr>
<td>25964</td>
<td></td>
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<td>2</td>
<td></td>
<td>15</td>
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</tr>
<tr>
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<td>13thC</td>
</tr>
<tr>
<td>25964</td>
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<td>3</td>
<td>36</td>
<td></td>
<td></td>
<td>mid-16thC</td>
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</tbody>
</table>

Total: 20 373 17 1955 4 31 5 99 3 36

Early/middle Saxon assemblage

The fabrics were as follows:

F1: Chaff-tempered. Moderate to dense organic voids up to 5 mm, rare to sparse sub-rounded quartz and/or calcareous material up to 1 mm. 20 sherds, 373 g

F2: Sand and chaff. Moderate to dense sub-rounded quartz up to 1 mm, sparse organic voids up to 5 mm. 17 sherds, 1955 g

This assemblage consisted mostly of the remains of two large hand-built vessels, one in fabric F1 and the other in fabric F2 (Fig. 8.9). It was not possible to fully reconstruct either, but all the contexts which produced early/middle Saxon pottery produced sherds of these vessels, and cross-fitting sherds from the vessel in fabric F2 also occurred in all of them (25412, 25419, and 25426). Both the vessels are undecorated, and of a standard sub-globular form, so it is impossible to date them typologically other than to within the broad early-middle Saxon period (c. AD 450–850). Radiocarbon dating has shown that they date to the very late 6th to mid-7th century (see below).

There was insufficient pottery to reconstruct a profile of the chaff-tempered pot (Fig. 8.9.1), but a single rimsherd was present, which indicates that the vessel originally had a rim diameter of around 220 mm, and the curvature of the surviving body sherds indicates a large vessel.

The second vessel, in sandy fabric F2, was more complete than the chaff-tempered vessel, and it was possible to reconstruct it to virtually a full profile (Fig. 8.9.2), although the very top of the rim is missing, and the base sherds could not be joined to the body. Despite this, it is obvious that it is an extremely large vessel for the period, with a maximum diameter of nearly 500 mm. The remains of the neck
Figure 8.9 Saxon pottery (1–3)
suggest that it originally had a rim diameter somewhere in the region of 360 mm, and was around 480 mm high. A small rimsherd (Fig. 8.9.3) in the same fabric weighing 7 g was found in context 25426, but appeared to belong to a third vessel with an estimated diameter of perhaps 210 mm.

Early-middle Saxon hand-built pots of the size of No. 2 are rare in the region. For example, at Eynsham Abbey, Oxfordshire, just five hand-built early-middle Saxon rimsherds from a total of 1,183 examples had a diameter greater than 300 mm, and just 22 had a diameter of 260 mm or greater (Blinkhorn 2003). One decorated vessel in a comparable fabric with a rim of nearly 300 mm was found at the Oxford Science Park excavations (Blinkhorn 2001, 89–197 and figs 12.1 and 14), one plain vessel with a diameter of just over 300 mm in a limestone fabric came from Yarnton (Blinkhorn 2004, 267–270 and fig. 14.1), and one unpublished vessel of comparable size to No. 2 came from New Wintles Farm, Eynsham (OXCMS 1976.97; see also Hawkes and Gray 1969).

The function of these pots is unclear. The fact that few other sherds of contemporary material occurred at this site suggests that very little pottery apart from these two vessels were used. There are no obvious signs of the vessels having been heated, and no limescale on the inner surface of either. It is possible that they may have been used for storage in an isolated structure with only seasonal or occasional use, but what they may have held can only be a matter for speculation.

The medieval assemblage

The medieval pottery was recorded utilising the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

- **OXBF**: North-East Wiltshire Ware, AD1050 – 1400. 4 sherds, 31 g
- **OXAM**: Brill/Boarstall ware, AD 1200 – 1600. 5 sherds, 99 g
- **OXDR**: Red Earthenwares, 1550+. 3 sherds, 36 g

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 8.3. Each date should be regarded as a terminus post quem. The range of medieval pottery types is typical of sites in the region. Most of the assemblage comprised plain bodysherds, although a glazed bifid rimsherd in fabric OXAM was noted in context 25964. Such vessels are typical of the 15th/16th century.

Metalwork by Ian Scott

This site produced a small assemblage comprising 44 fragments, most of which are very small unidentifiable fragments (n=32) from sieving of samples. Most of the assemblage is from Saxon or early medieval contexts. The finds include a whittle tang knife fragment of uncertain form (Sf 25002), a fragment of plate with a regular pattern of punched holes (Sf 25001), possibly a strainer, and an irregular sheet fragment. There is a fragment of thin sheet (Sf 25000) from an early Iron Age context. There are also a number of nails and a chisel, the latter possibly quite modern.

Roman coin by Paul Booth

Only one coin was recovered during the excavation at Neptune Woods. The coin was unstratified and in poor condition, to the extent that it could not be precisely identified. It is believed that the coin is of 4th century date, assignable to the major period of minting of the House of Constantine, from AD 330–346. The reverse types, Urbis Roma and Victoriæ DD Aug q NN, are very common ones in this period. The identification of the latter is, however, quite speculative, although entirely consistent with the obverse, which is probably of Constans.

Animal bone by Fay Worley

A refitted total of 293 fragments (2457 g) animal bone was recovered from the excavations at Neptune Wood. The assemblage originated from five individual features as presented in Table 8.4. The features are an early Iron Age enclosure ditch
(25011), two Anglo-Saxon pits (25413/25403 and 25424), and two sections of Roman trackway ditch (25613 and 25708).

Taxa identified include domestic species (cattle, horse, sheep, goat, pig), possible domestic species (goose) and wild species (deer, bird, fish, micro-mammal). Cattle and large mammal are the most frequent taxa represented, followed by sheep/goat and then the remaining taxa.

The condition of the bone was generally very good (grade 1) or good (grade 2) with a small minority of fragments graded fair (grade 3) or poor (grade 4). The animal bone from the trackway fills was in the worst condition (fair or fair to poor). The condition of the bone was suitable for the recognition of modification in the form of burning, gnawing, fresh breaks and butchery. A small proportion of burnt fragments were recovered from the two pits. This is interpreted as disposal of bone burnt during domestic activities. The only gnawed bone fragments were recovered from pit 25413/25403 and indicate the presence of canids in the vicinity and that they had access to the faunal remains.

A proportion of the bone from all features, with the exception of trackway ditch 25708, exhibited fresh breaks indicating post-depositional mechanical damage. Butchery was identified on bone fragments from all features. The cattle scapula from context (25008) exhibited unusual taphonomic modification in the form of a series of small circular and sub-circular holes on the medial and lateral faces of the scapula neck. These are interpreted as possibly the results of insect action.

**Trench 9: Early Iron Age enclosure ditch group 25011**

A total of 13 animal bones came from four contexts (Table 8.4). The assemblage included cattle, horse, large mammal, sheep or goat and medium mammal bone. Cattle bones were most frequent, and all came from the right hand side of the skeleton. An unsided maxillary molar was also identified. The long bones and mandible both produced evidence of age-at-death which together with the element representation indicates that the bones came from at least one individual 8–18 months old.

Horse was represented in Trench 9 by two left mandibular fragments; the gonial angle and third molar. Both may have come from the same animal. Although the mandibular molar was too fragmentary to be aged using metric data (see Levine 1982), its presence indicates that the animal was at least 3.5–4.5 years old at death.

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**Table 8.4 Frequency of animal bone species (number of fragments) (EIA: Early Iron Age; AS: Anglo-Saxon; Ro: Roman)**

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<thead>
<tr>
<th>Feature</th>
<th>Date</th>
<th>Context</th>
<th>Bird?</th>
<th>Cattle</th>
<th>Cattle / deer</th>
<th>Deer</th>
<th>Fish</th>
<th>Goat</th>
<th>Goose</th>
<th>Horse</th>
<th>Large mammal</th>
<th>Mammal</th>
<th>Medium/mammal</th>
<th>Micro-mammal</th>
<th>Pig</th>
<th>Sheep</th>
<th>Sheep/goat</th>
<th>Small mammal</th>
<th>Small/medium mammal</th>
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</table>
In addition, thirteen indeterminate fragments, a long bone diaphysis fragment and an unfused vertebral plate were also from a large mammal, possibly horse or cattle. If horse or cattle, the unfused vertebral plate suggests an age-at-death of less than five years.

A sheep or goat right humerus and right metacarpal were recovered from the ditch. These also represent one or more individuals aged at least 10 months old. A medium mammal long bone diaphysis fragment from this context was also found. This element had been broken when fresh, presumably to recover the bone marrow. A single medium mammal sized indeterminate fragment was the only animal bone recovered from sieved deposits in this feature.

**Trench 4: Anglo-Saxon pits 25413/25403 and 25424**

Trench 4 contained two Anglo-Saxon pits, from which came the majority of the faunal assemblage excavated from Neptune Wood. Pit 25413/25403 had two phases of deposition. A total of 142 bones weighing 1898 g were identified to species. The lower fill of the pit (25418) included redeposited natural from which a goose right humerus, fragment of cattle metatarsal and fragment of worked bone plate were recovered. No dating evidence is available for this fill. The upper fills of pit 25413/25403, (25412) and (25419), contained domestic refuse, as is shown by the animal bone assemblage, which included cattle, large mammal, medium mammal, pig, sheep, goat and small/medium mammal elements. Horn cores also suggest that debris from horn-working was deposited in the pit. Cattle was the most common taxon identified followed by sheep/goat (including elements identified as both sheep and goat). A single pig element was recorded. Many fragments could however only be identified as large, medium or small mammal.

Cattle was mainly represented by cranial and lower limb elements. The element representation of the assemblage suggests that it represents a minimum of two cattle (from three identified horn cores and four metatarsals). Three elements could be assigned to an age-at-death range from epiphyseal fusion and tooth eruption. The mandible suggests that one individual was over 28–36 months at death while fusion of the proximal radius and distal phalanx suggest an age at death of over 12–18 months and over 18 months respectively.

Butchery in the cattle bone assemblage from the upper fills of the pit suggests horn working and marrow processing. All metatarsal fragments had been split approximately longitudinally, presumably for the bone marrow. Two horn cores had been butchered; one had been chopped from its skull while the other had been sawn both longitudinally and transversely. The transverse saw cut was probably to remove the horn sheath from the horn core and the longitudinal cut may have been made in order to open or ‘break’ the horn into a sheet for further working (MacGregor 1985, 66). MacGregor suggests that the horn is usually softened by soaking whilst on the horn core but is broken after having been removed and then boiled (ibid.). The evidence from Neptune Wood suggests that here the horn was broken whilst attached to the horn core, either before or after boiling.

In addition to the cattle bone fragments in the upper fills of pit 25413/25403, 43 fragments of bone were identified as large mammal. In the absence of any other identified species in this feature, these are most likely to be cattle.

Butchery was identified on two flat bone fragments (each with a cut mark) and the long bone diaphysis fragments which all had been broken when fresh. The cut mark on the flat bones may have been inflicted during division of the carcass or removal of the meat while the broken long bones suggest processing for marrow.

Sheep/goat was represented by seven fragments including one positively identified as sheep (a left mandible aged at 3–10 months old at death) and one as goat (a horn core). Elements identifiable only as sheep/goat were a left and right humeri (the left older than 10 months at death), a left metatarsal, a left tibia (aged 1.5 to 2 years old at death) and a metacarpal. Where bones could be distinguished as left or right side, all were from the left side.

Butchery was identified on two sheep or goat fragments. The goat horn core had been chopped transversely from the skull, probably to remove the horn sheath for processing. The proximal articular surface of the sheep/goat metatarsal was punctured by a hole, c 6 mm across, possibly made to access the bone marrow.
The only pig specimen identified in the upper fill of pit 25413/25403 was a left frontal bone.

Pit 25424 also contained two phases of activity (25426 and 25427), separated by a lens of gravel. Both fills contained single residual small prehistoric pottery sherds, but 25426 also contained Saxon pottery, and a substantial assemblage of charred grains (see below).

The top fill (25427) of the pit contained large mammal, medium mammal, deer and cattle/deer elements. Deer was represented by a shed antler including the coronet, the base of the beam and brow tine. The antler had fragmented into 16 pieces post-deposition. While the size of the antler suggests that it might be red or fallow deer, its smooth surface morphology with very little pearling or guttering (Hillson 1996, 9) is suggestive of fallow deer. Recent archaeozoological research has considered the date of the introduction of fallow deer into Britain and concluded that living populations were not introduced until the Norman period (Sykes 2004). If the antler fragments from (25427) are indeed fallow deer, whether of prehistoric or Anglo-Saxon date, they indicate long distance trade of antler as a raw material or artefact rather than local procurement.

A right calcaneum from (25427) may be cattle or red/fallow deer. The calcaneum had been broken into at least four pieces post-deposition. Eight further large mammal indeterminate fragments from this context may also be from that element.

Fill 25426 contained cattle, sheep/goat, fish, bird, large mammal, medium mammal and micro-mammal bone, all of which was recovered from sieved samples. The only identified cattle bone was an incisor tooth. Identified sheep/goat bone included a mandibular canine tooth and distal fibula.

Cross-joining sherds of the same pottery vessel were found in both pits, strongly suggesting that they were in use at much the same time. The character of the faunal assemblages in pits 25413/25403 and 25424 is—in contrast—very different, in both the species and element composition and size of the fragments. While pit 25413/25403 appears to have been for the disposal of domestic and possibly craft refuse, the assemblage in pit 25424 is more residual in character.

**Trenches 6 and 7: Roman trackway ditches 25613 and 25708**

The fills of the trackway ditches contained only three fragments of large mammal long bone in fair and poor condition. The two fragments from (25614) and one fragment from (26711) had been broken when fresh suggesting that they are possibly debris from processing for marrow. One of the fragments from (25614) had been further fragmented post deposition. These fragments are interpreted as refuse disposal but may have been redeposited in the context.

**Charred plant remains by Ruth Pelling**

Four samples of 40 litres, three from layers in Saxon pits and one early Iron Age ditch fill, were taken during excavation and were processed by flotation using a modified Siraf-type machine. Flots were collected onto a 250 micron mesh. Dried flots were scanned under a binocular microscope at Oxford Archaeology before being submitted for more detailed examination. A reasonable assemblage of charred seeds and chaff was noted in one Saxon pit fill (sample 25001, context 25436) while two items were noted in pit fill 25426 (sample 25003).

Quantifications given in Table 8.5 are based on seed, nutlet etc unless otherwise stated. Grain is quantified on the basis of embryo ends.

**Results (Table 8.5)**

Charred remains were dominated by cereal grain and weed seeds. The majority of cereal grain was identified as *Hordeum vulgare* (barley). Preservation was generally moderate or poor with distortion and clinkering. Better preserved grains displayed the characteristic angular profile of hulled *Hordeum vulgare* with fragments of lemma and palea still adhering. A single grain of *Avena* sp. (oats) and a rachis node of *Triticum* sp. (wheat) were also identified. Neither could be identified to species although the *Triticum* is of a free-threshing variety (either *Triticum aestivum*, bread type wheat or *T. turgidum*, rivet wheat). Two further possible economic taxa were
more tentatively identified: Linum usitatissimum (flax or linseed) and Vicia/Pisum sp. (bean/pea). The preservation of the Linum usitatissimum seed was poor due to the oily nature of the seed, although the surface texture did appear to be consistent with the identification. The Vicia/Pisum seeds lacked the testa and hila necessary for identification and the presence of a wild vetch cannot be discounted. A single fragment of Corylus avellana (hazel) nut shell was recovered from sample 25003, possibly derived from food waste.

Wild seeds identified included species which tend to be associated with disturbed ground or arable habitats, such as Rumex sp. (docks), Polygonum aviculare (knotgrass), Plantago lanceolata/media (plantain) and Anthemis cotula (common mayweed), all of which may have entered the assemblages as contaminants of cereal grain. Brassica/Sinapis sp. includes the cultivated brassicas (cabbage, turnip, mustard etc) as well as wild species, several of which are also characteristic of disturbed ground. Eleocharis palustris (common spike-rush) is characteristic of at least seasonally wet ground while several species of Carex (sedge) are also found in wet or damp habitats. The presence of such damp ground species in association with charred arable weeds and cereal grain may indicate that cereal crops were being cultivated on damp ground.

**Discussion**

The deposits from the Saxon pits at Neptune Wood produced low densities of charred plant remains in which cereal grain and weed seeds predominate. Chaff was very rare, although the chaff of free-threshing cereals (barley, oats and free-threshing wheats, all of which have grain which separates easily from its rachis) tends to enter charred assemblages less readily than grain. Free-threshing chaff tends to survive charring less well than the chaff of hulled wheat (Boardman and Jones 1990) while the initial threshing stages in which the grain is separated from the rachis and straw are more likely to take place outside the settlement. Such a mixture of crop plants and weeds in low densities might represent background
scatters of routine crop processing waste, including occasional lost crop seeds, which has been re-deposited in the back fill of pits.

The crop plants identified are characteristic of the Saxon period. Hulled barley was a staple cereal crop throughout the Saxon period and the charred grains are ubiquitous on Saxon sites. The wheat present could not be identified to species although a free-threshing variety is indicated. *Triticum aestivum* (bread wheat) is the species most commonly encountered on Saxon sites (e.g. Greig 1991), largely replacing the hulled wheat, *Triticum spelta* (spelt wheat), following the collapse of Roman administration. The status of oats on the site is unclear and could be present as an arable weed, although the cultivation of oats was established in southern Britain by this time. It is not possible to establish whether the flux represents an oil or a fibre crop at the site, either of which is possible.

**Land and freshwater snails by E C Stafford**

The four samples processed for charred plant remains from Neptune Wood were also examined for molluscan remains. Sample <25000> derived from an enclosure ditch (25011) of early Iron Age date. Molluscan remains were moderately preserved, although the majority of the shell comprised broken unidentifiable fragments. Of the identifiable shell the majority comprised freshwater *Lymnaea* spp., predominantly the slug species *L. truncatula* with lesser numbers of *L. palustris, L. peregra*. The presence of these species suggests a rather damp environment, possibly seasonal standing water within the ditch. Terrestrial species were present in low numbers although these largely consisted of *Trichia hispida*. Single specimens of *Carychiium minimum* and *Vallonia excentrica/pulcella* were also noted. This suggests the presence of damp grassland within the vicinity, possibly pasture (Robinson 1988). There is no evidence for the growth of lush vegetation within the ditch or of the presence of a hedge immediately adjacent, nor any form of shaded environment such as woodland in the immediate vicinity.

Three samples from pit fills dated to the Saxon period were also examined. These included <25001> and <25003> from pit 25424 and <25002> from pit 25401. Shell numbers were very low in these samples and consisted entirely of dryland terrestrial species. Identifiable species mainly included *V. excentrica, Vertigo pygmaea, Candidula* spp. including *C. gigaxii* and *T. hispida*, with single specimens of *Carychiium* spp. *Cepea* spp. and *V. pulcella*. Interpretation is limited due to the low shell numbers, but the species present would be consistent with an open environment, possibly short (grazed?) grassland.

**Radiocarbon dating**

Charred barley grains (*hordeum vulgare*) taken from layer 25426 within Saxon pit 25424, were selected and submitted for AMS radiocarbon dating to the Pozna Radiocarbon Laboratory in Poland. The grains gave a date of 1410 ± 30 BP, which calibrates to cal AD 590–670 at 95% probability. This date falls within the expected date range for the artefacts and environmental remains from the layer, and although no δ13C measurements have yet been provided for the sample, there is no reason to doubt the date obtained.

**DISCUSSION**

**Geophysical and cropmark survey**

One of the principal aims of the fieldwork was to use geophysical survey to pinpoint the exact location of the cropmarks identified on the aerial photographs. It is clear from the survey results that the buried enclosure and other archaeological features lie significantly further south and east than they are plotted as cropmarks (see Fig. 8.1). Although the enclosure and some larger discrete features were identified, the geophysical survey overall did not reveal a clearer picture of the buried archaeology (see Bartlett 2005). In the south-western field in particular the response was very patchy, which may have been in part due to interference from the low overhead power lines, although there is no clear evidence of a localised effect along the course of the power lines.
Several of the anomalies interpreted from the geophysics plan and investigated in the subsequent excavation proved to be geological in origin, in particular the sinuous feature running the west field and the soil marks investigated in Trench 5. However, particularly in the case of the features in Trench 5, the anomalies were indistinguishable from those which represented archaeological features on the geophysics plot. This has significant implications for the interpretation of the geophysical survey over the areas not investigated by excavation.

The furrows of medieval or post-medieval ridge-and-furrow were picked up by the geophysical survey in both the western and middle fields, and were confirmed in both fields by subsequent trenching and excavation.

The early Iron Age enclosure

The pottery from the ditch shows that this enclosure was probably contemporary with the hillfort and the settlement on the plateau below it. In addition to the pottery from the enclosure ditch, there were two residual sherds of late Bronze Age or early Iron Age date in Trench 4 and one in Trench 2. These sherds could represent contemporary external activity around the enclosure, or evidence of earlier activity in the area. If contemporary, they suggest an earlier inception for the enclosure than suggested by the few sherds from the ditch, possibly in the late Bronze Age.

At approximately 60 m square the enclosed area is only 0.36 ha, and the enclosure is of average size for those in the Upper Thames Valley (Hingley and Miles 1984, fig. 4.3). It is very similar in area to the nearest other confirmed early Iron Age enclosure, a sub-rectangular enclosure at Allen’s Pit, Dorchester, which was c. 40 m by 80 m. However, the latter had a ditch more than 5 m wide and nearly 3 m deep (Bradford 1942), and although the ditch at Neptune Wood was not bottomed, this was only 4 m wide and did not appear to be a defensive earthwork of the same type. The width as found is the result of considerable erosion, and the ditch was probably less than 3 m wide originally. Harding (1972, 15–6) also suggested that Wigbald’s Farm, Long Wittenham, was an enclosed settlement of similar type and date, but this is uncertain. The Neptune Wood enclosure, with its possible roundhouse inside, is better regarded as a domestic farmstead, similar to other local sites such as Smiths pit 1, Cassington (Harding 1972, 15 and Pl. 27) and a cropmark site at Culham Heights overlooking Andersey Island, from which early Iron Age pottery has been noted when fieldwalking.

The environmental evidence is limited but informative. Snails from the enclosure ditch include aquatic species, suggesting that the water table was high enough for seasonal standing water in the ditch. There was no evidence to suggest that the enclosure was enclosed by a hedge, so protection was presumably provided by upcast from the ditch, possibly surmounted by a fence or palisade. The surroundings included damp grassland, possibly pasture.

The Roman trackway and field system

Cropmark evidence suggested that there were three roughly parallel ditches crossing the western field, thought to represent part of a Roman trackway (Fig. 8.10), although the cropmarks plots may not be entirely accurate, and were perhaps confused with the furrows evident in the geophysical survey on very much the same alignment. However, ditches belonging to the trackway were certainly revealed within a number of the excavation trenches, and although the scale of the investigations makes it difficult to be certain about their orientation and development, it is nevertheless possible to draw some conclusions.

Ditches plausibly associated with the cropmark trackway, and containing Roman pottery, were found crossing the middle field in Trenches 6 and 7 (Fig. 8.10). The more northerly ditch, the only one excavated in both trenches, is of very similar size and character in both cases. The artefactual evidence recovered from these ditches suggested that they silted up during the 2nd–4th centuries AD.

The trackway is shown as a triple-ditched feature in the western field on the cropmark survey, and three or more ditches on virtually parallel alignments were found in Trenches 1 and 2, in addition to Trenches 6 and 7 further east. The third ditch in Trenches 6 and 7 was more substantial than either of the others, and should certainly be regarded as a significant boundary.
Figure 8.10 Interpretation showing possible field system and cropmark plot
Like the ditches containing Roman pottery in Trenches 6 and 7, the two most substantial ditches in Trenches 1 and 2 lay approximately 4 m apart, and have plausibly been interpreted as two of the trackway ditches. One of those in Trench 2 also contained a sherd of Roman pottery. If these ditches are linked across these two trenches (Fig. 8.10), their orientation has changed from that in Trenches 6 and 7, turning more south-westwards. While not corresponding to the cropmark evidence in this field, this would be more in line with the continuing alignment of the trackway evident from cropmarks in the field to the south-west.

The recut found in Trenches 1 and 2, which was seen in the southernmost ditch in Trench 1, but the more northerly in Trench 2, could have been present as separate ditches along other sections of the trackway, indicating a route that may have shifted laterally over time. Alternatively it may indicate a change of orientation, representing the same ditch cutting obliquely across the earlier ones; it is of very similar dimensions to the more northerly ditch in Trenches 6 and 7, and is in line with them. As the modern boundary of the middle and eastern field still lies very close to the trackway line, it is also possible that these ditches represent boundaries of widely-spaced date, phases in the long-term survival of this boundary from the Roman period.

No surviving trackway surface was found between any of the ditches, but those spaced 3.75 m apart have been seen as the most likely contemporary pairing. The trackway is therefore considered to represent a minor track rather than a major route.

The dating evidence for the trackway is of particular interest in terms of the local landscape, as there are several small Roman settlements which were connected by this trackway and an adjoining track which ran north towards Northfield Farm (see Chapter 1 Fig. 1.3). Excavations of this north-south trackway have indicated that it was only in use in the early Roman period, along with the rest of the settlement (Gray 1977, 15; Hewett 1901). As only mid to late Roman pottery was recovered from the trackway section examined in the current excavation, this could indicate the construction or continued use of the east-west trackway at a time when the north-south trackway was falling out of use. Where specified, the later Roman sherds come from secondary fills, so it is more likely that the trackway was all of one date, but that this part of the trackway continued in use.

North of the trackway in the middle field a number of parallel, or nearly parallel, ditches were found, one of which (25974) in the Ponds Complex contained a reasonable assemblage of Roman pottery. A cropmark enclosure has tentatively been identified some 30 m north of this ditch (and just outside the wood), although the geophysical survey provided only tentative confirmation of the existence of this feature. The form of this enclosure is similar to late Iron Age and Roman enclosures around Stanton Harcourt further upriver (Grimes 1943–4; Case and Whittle 1982, 115–6), so it is conceivable that the pottery in the ditch is residual, and is derived from the enclosure. Most such enclosures, however, date to the 1st or early 2nd century AD, rather than any later (see Lambirck and Allen 2004, Chapter 4, 161–75), so residual material of this date is less likely. Ditch 25974 was exposed over a fair distance, and does not cut any Roman features, so overall residual material seems less likely than that the pottery does date the ditch. This suggests a Roman field system adjacent to the trackway.

Ditch 25315 to the south (Trench 3) is also on much the same alignment, and it is possible that this too belongs to this Roman field system. Ditches 25300 and 25319, opposite to 25315 in Trench 3, may then have been another part of this system, forming fields that were not rectangular but rhomboidal. The possible layout of such a field system is indicated in Figure 8.10. As the modern field boundary in the middle field however follows the line of the trackway so closely, ditches broadly parallel to this could be of any date, and a later, possibly Saxon or early medieval date, for some of the ditches cannot be ruled out.

Other undated ditches in Trench 1, 6 and 7 may also potentially have belonged with the Roman field system, or could have been part of the medieval ridge-and-furrow indicated on the geophysical survey.
The middle Saxon waterholes

The circular anomalies investigated in Trench 4 proved to be Saxon pits, probably associated with the settlement evident in cropmarks further north in the same field (Fig. 8.8). The presence of sherds of both vessels within both pits may indicate that they were in use contemporarily, but the animal bones suggest otherwise. The majority of the sherds of both vessels occurred in pit 25413, and these were also the larger sherds. It is therefore possible that pit 25413 was filled first, and that sherds lying around the pit were later incorporated into the neighbouring pit 25424. The date of the very large vessel found in pit 25413 may therefore be slightly earlier than the radiocarbon date of 590–670 cal. AD provided for charred barley in layer 25426, but the state of the sherds in 25424 was not significantly more abraded than those in 25413, so the difference in date was probably slight.

The unusually large size of the vessels found in the pits has been commented upon (above), and the neck of vessel LW2 is without parallel in the region. It is possible that these vessels were made as water containers, hence their large size, and that the pits in which they were eventually deposited were indeed waterholes. The convex neck of LW2 was probably accompanied by a short out-turned rim (similar to LW3), providing two grooves around the neck where rope could be secured for lowering the pots into the water.

The charred seeds deposited in pit 25424 indicate that the local inhabitants were cultivating barley, wheat and possibly oats, and the presence of *eleocharis palustris* (common spike-rush) suggests that cultivation was occurring not only on dry ground but also on damp ground. Although very few, the snails suggest that the vicinity of the pits was dry, and hint at grazed grassland, so perhaps cultivation was occurring close to the Thames. There is a tantalising hint of the cultivation of flax as well, which is known on other sites in the Upper Thames Valley in the Saxon period. The single charred hazelnut also suggests that nut trees were present in the vicinity.

Animal bones from pit 25413 indicate a predominance of cattle, but with sheep, goats and pigs also present. Crafts are also indicated by the working of horn-cores, and geese may either have been kept or hunted. The second pit 25424 contained a very different fauna, including antler from red or roe deer, a small mammal, a small bird and a fish. Some of these bones may have entered the pit accidentally, but the shed antler and the fishbone must be evidence of human agency. They provide evidence of the exploitation of wild resources as well as domesticated animals.

The function of these pits is uncertain, although the evidence is suggestive of quarries or waterholes that were subsequently reused for the disposal of animal bone, pottery and various organic components along with a little metalwork. This domestic rubbish suggests a continuing focus of Saxon settlement close by.

Evidence of medieval activity (other than agricultural) is inconclusive. One of the group of ditches parallel to the Roman trackway, and to the modern field boundary, in the middle field contained a single potsherd whose date is disputed. If this was not medieval, then all of the ditches and adjacent pits may have been Roman, and this area may have been part of the open field system throughout the medieval period.
As only very small areas of Castle Hill were excavated during the current project, any conclusions about how the role and significance of the hilltop developed through time must be regarded as tentative and provisional. Nevertheless, the excavations have made it clear that Castle Hill was a favoured locale in the local landscape (Plate 9.1), which was returned to repeatedly over the last 3000 years. The recurring choice of the site as a focus for activity was no doubt influenced by its dramatic topographical situation. The twin rises of Castle Hill and Round Hill are striking in their isolation, and offer excellent views northwards along the Thames Valley, southwards to the Berkshire Downs and eastwards to the Chilterns. The creation of the hilltop enclosure ramparts during the late Bronze Age, replaced by the hillfort ramparts during the early Iron Age, would have further marked out Castle Hill as a special place in the landscape. This may partly explain some of the subsequent activity on the hilltop, for example its use for burial in the Roman period, while Round Hill was seemingly ignored. In recent history, mythic associations of Castle Hill included the belief that it was the site of a battle, and that it possessed a buried treasure guarded by a phantom raven (Page 1972, 381).

Plate 9.1 Aerial view of Clumps from the north looking towards the Berkshire Downs (courtesy of Time Team, copyright Videotext Communications Ltd)
THE NATURE OF THE SURVIVING EVIDENCE WITHIN THE HILLFORT

Documentary evidence shows that the interior of the hillfort has been cultivated on and off since at least AD 1542, a period of more than 450 years, and the excavations confirmed that a considerable depth of ploughwash has built up behind the rampart at the edges of the interior. The depth of the soil buried beneath the Iron Age rampart indicates that at least 0.3 m of soil originally overlay the chalk within the interior and has now been mixed by ploughing. Ploughmarks were also evident in the chalk towards the top of the hill, and the shallow depth of the middle Iron Age pits, particularly towards the top of the hill, when compared to those from the adjacent settlement, suggests that there has been significant truncation of archaeological features over much of the interior of the hilltop enclosure, if not further downslope. The trenches dug within the wooded clump did not indicate significantly different preservation from those outside the clump, although the trenches deliberately avoided standing or fallen large trees, where localised damage may well have been much greater.

No postholes were found during the excavation except at depth within the fills of the large hilltop enclosure ditch, which may indicate that smaller features such as these do not survive in this area, although they may simply have been absent from the areas investigated. The possible removal of all small features, and of any structural evidence associated with them, must nevertheless be borne in mind during the following discussion of the recovered evidence.

EARLY PREHISTORIC ACTIVITY

Evidence for Mesolithic activity was slight, but did include a small number of flints from Castle Hill, perhaps indicating occasional visits to the hilltop to take advantage of the view afforded by its elevated position.

Only one early prehistoric feature was found, an early Neolithic pit at Hill Farm. The radiocarbon date from this pit was upon hazel charcoal from twigs, which made up some 25% of the fill. The burning dates to before 3630 cal BC, which places this feature in the first phase of Neolithic activity in the Upper Thames Valley, contemporaneous with the earliest monuments of the Dorchester complex across the river to the north (Whittle et al. 1992) and prior to the construction of the Drayton cursus some 6 km to the west (Barclay et al. 2003). Published radiocarbon dates would suggest that it might overlap with the earliest use of the Abingdon Causewayed Enclosure some 10 km to the north-west (Case and Whittle 1982), but a new dating programme suggests that the enclosure is unlikely to have been constructed until after 3650 cal BC (Whittle et al. forthcoming). Occupation sites of this early date are relatively uncommon in the Upper Thames Valley; only at Yarnton are there securely dated pits as early (Hey forthcoming).

A scatter of struck flint, some of it Neolithic, was recovered from the field west of Castle Hill prior to this project (R Eeles pers. comm.). A few flint artefacts datable to the Neolithic were also recovered from the topsoil or as residual material from later features in the trenches dug in 2004, and others (including a leaf-shaped arrowhead) from Castle Hill. Overall this suggests a low level of activity across the area during the early Neolithic.

A continued presence in the middle Neolithic is shown by one probable sherd of Peterborough Ware. Some of the Neolithic flints may also have been of this date, though nothing diagnostic was found. Late Neolithic activity is not represented, but Beaker activity is shown by the sherds recovered by Rhodes in 1947 (Rhodes 1948, 22), and early Bronze Age activity by two pottery sherds (beaker or collared urn) from Trenches 3 and 5 on Castle Hill. Except perhaps for the early Neolithic, the overall paucity of evidence suggests that use of the hills prior to the late Bronze Age was relatively low-level or sporadic.

Middle Bronze Age pottery was recovered from Hill Farm in small quantities, but no contemporary features were identified. Bronze Age pottery was apparently found by Dr Watts, the amateur excavator of Castle Hill, near to Hill Farm on the surface, but the finds have not been located (Underhill 1937, 37). Rhodes recorded a sherd of middle Bronze Age cinerary urn from his excavation on the plateau (Rhodes 1948, 24), possibly indicating that the tradition of burial here began in the Bronze Age, but it has not yet been possible to examine the vessel held at the Ashmolean Museum.
THE LATE BRONZE AGE ENCLOSURE

One of the most significant results of the Wittenhams project has been the discovery of a late Bronze Age enclosure on Castle Hill, preceding the Iron Age hillfort. Geophysical survey and excavation have demonstrated that the enclosure was sub-circular in form, measuring c. 100 m in diameter. The ditch was substantial and potentially of defensive proportions, reaching 2.5 m deep in Trench 3, though narrower in both Trench 4 and Trench 6. The ditch fill sequence seen in Trench 3 hints that an inner upcast bank once existed, although no evidence of postholes or a palisade for revetment was found in any of the three trenches. It therefore seems plausible that this was a simple dumped rampart. No entrances were located during the excavation, although the geophysical plot appears to show three gaps in the south-eastern half of the enclosure circuit. The lower fills of the enclosure ditch can be securely ascribed to the earlier part of the late Bronze Age, on the grounds of finds of 'plain ware' pottery (Barrett 1980) and four radiocarbon determinations with date ranges falling between the late 11th and 9th centuries cal BC.

Surprisingly, molluscan evidence from the lower ditch fills is indicative of shaded conditions, and eventually of tree cover. Phytolith evidence from the ditch and from late Bronze Age buried soil layers beneath the hillfort ramparts is also consistent with wooded conditions. It is possible that many of the snails recovered date from the original clearance and construction of the enclosure, being incorporated into the upcast bank at this time, and later being introduced into the ditch when the bank slumped. The evidence can also be interpreted to some extent as reflecting the very local environment of the ditch, with the fairly rapid growth of long grass in the ditch bottom, and perhaps the retention of pre-existing trees and bushes within the upcast bank, forming a natural hedge. Nevertheless, the occurrence of open country species is very low, and at face value the evidence suggests that woodland regeneration occurred fairly soon after construction of the enclosure, or conceivably that the hilltop was only partially cleared in the first place.

Significant numbers of finds were recovered from the lower ditch fills, including much pottery and animal bone, and worked flint possibly from a contemporary knapping industry. Two possible 'deliberate' or 'special' deposits can be identified: a large semi-complete pot (Fig. 3.2; Plate 2.9) of non-local type also found on other enclosure sites, accompanied by a deposit of pure charred cereal grain, and a human radius fragment (Trench 3). The faunal remains included a notably high proportion of pig, with cattle and sheep/goat also represented. Charred plant remains were otherwise sparse.

The upper fills of the enclosure ditch belong to the early Iron Age, although they contained significant amounts of residual late Bronze Age pottery. On the analogy of pieces from other late Bronze Age sites, a fragment of worked igneous rock from one of these fills probably represents part of a late Bronze Age mould, suggesting that bronze casting took place in the vicinity.

Despite the significant quantities of artefacts deposited within the ditch, evidence for late Bronze Age activity elsewhere on the hilltop was limited to one pit broadly dated to the late Bronze Age/early Iron Age from Trench 7. Some residual late Bronze Age pottery occurred in later features both inside and outside the enclosure, but the quantities were relatively sparse. While the apparent emptiness of the enclosure could simply be the result of the limited scale of excavation, the geophysical survey showed few features inside that part of the enclosure outside the clump, and it is possible that it never saw permanent settlement.

South of Castle Hill Rutland's excavations in the car park (Hingley 1980) recovered late Bronze Age pottery, and a buried land surface with late Bronze Age activity was found in Trench 14 some 200 m further west, possibly including the inception of a midden. Modest quantities of late Bronze Age pottery, together with a scabbard chape (Fig. 6.11.2), were also recovered from around Hill Farm. This strongly suggests that a contemporary settlement lay to the south-west of Castle Hill, although no features were certainly of this date.

There is as yet no evidence that Castle Hill was a focus for the deposition of metalwork, although three pieces of middle or late Bronze Age metalwork have been found over the years in the adjacent stretch of the River Thames (York 2002). A similar probable association of a late Bronze Age hilltop enclosure with metalwork in the adjacent Thames is evident at Taplow, Bucks (Allen et al. 2009,199–200).
Later Bronze Age enclosures in southern England

Recent fieldwork has revealed several new examples of later Bronze Age hilltop enclosures in southern England. A survey of the evidence will be presented below in order to provide a context for the results from Castle Hill. Broadly speaking, three chronological groups of enclosures can be identified:

1. A small group of Bronze Age enclosures of around 100 m in diameter, radiocarbon dated to the last quarter of the second millennium cal BC;
2. A further group of similarly-sized enclosures, broadly contemporary with Castle Hill, radiocarbon dated to c 1050–800/700 cal BC and associated with post-Deverel-Rimbury ‘plain ware’ pottery;
3. Hillforts ‘proper’, which appear across much of southern England after c 800 BC, being associated with ‘decorated’ post-Deverel-Rimbury pottery. This group spans the end of the Bronze Age and the earliest Iron Age.

2nd millennium BC Bronze Age enclosures

The best known of the early enclosures lies only 25 km to the south-west of Castle Hill at Rams Hill on the Berkshire Downs. As at Castle Hill, the enclosure lies within a later hillfort. The enclosure is oval, with a ditch and internal bank, measuring c 120 x 75 m. Excavations at the site by Piggott and Piggott (1940) and by Bradley and Ellison (1975) have been reinterpreted (Needham and Ambers 1994). The radiocarbon evidence implies that the enclosure was established around 1250 cal BC, with the rampart later remodelled with timber lacing. The interior of the enclosure contained scattered roundhouses, four-post structures and small pits. However, it is unclear how much of this activity was actually contemporary with the enclosure; some, at least, appears to have been either earlier or later (Needham and Ambers 1994, 238–9).

A further possible example from the Upper Thames basin comes from Camp Gardens, Stow-on-the-Wold. Here, a section of ditch more than 1.7 m deep has been excavated whose overall extent is uncertain, although it is suspected to form part of a hilltop enclosure preceding the Iron Age hillfort on the site. Two radiocarbon dates of 1400–990 cal BC and 1390–1005 cal BC have been obtained from the ditch (Parry 1999).

Other putative middle Bronze Age ‘Rams Hill-type’ enclosures were cited by Bradley and Ellison (1975), but at each of these sites doubts can be raised over the dating evidence and interpretation of the structural remains (Needham and Ambers 1994). Subsequent work has identified some more convincing examples, however. A sub-oval enclosure c 100 m across has recently been found in the Chilterns at Fairfield Park, Bedfordshire, preceding an early Iron Age settlement. The ditch was shallow, and its lower fills contained few finds, but a radiocarbon determination of 1250–1012 cal BC has been obtained. No evidence for internal occupation was found, although a small cluster of later Bronze Age pits and an unurned cremation burial lay just outside (Webley et al. 2007). A further possible parallel comes from Thundersbarrow Hill, Sussex, where again an inner enclosure (1.2 ha in size) has been found preceding a later hillfort. Antler from a basal fill of the enclosure ditch produced a radiocarbon date of 1670–1320 cal BC, but this could have been residual, as the middle ditch fills contained late Bronze Age ‘plain ware’ pottery (Hamilton and Manley 1997).

Late Bronze Age enclosures

At least two other enclosures in the Upper and Middle Thames basin can be dated to the late Bronze Age. One is the Rams Hill enclosure, where the final phase of the defences, dating to the late 11th–10th centuries BC, was a double palisade set into the infilled ditch (Needham and Ambers 1994). A further enclosure has recently been discovered at Taplow Court, Buckinghamshire, once again within a later hillfort (Allen et al. 2009). Although the enclosure was only partially exposed, it probably measured around 160 m long and 80–100 m across, occupying a bluff overlooking the River Thames. The V-profiled enclosure ditch was up to 2.2 m deep and approaching 5 m wide, and contained late Bronze Age ‘plain ware’ pottery; the lower silts have been dated to 1070–790 BC using optically stimulated luminescence
Figure 9.1 Comparative plans of later Bronze Age hilltop enclosures from southern England.
1: Rams Hill, Oxon., 2: Fairfield Park, Stotfold, Beds., 3: Carshalton, Surrey,
A palisade trench to the interior of the ditch also produced plain ware, and further palisade or fence lines lay both outside and inside the ditched enclosure, although the chronological relationship between these different elements of the enclosure is uncertain. Little of the interior of the enclosure was excavated, although one possible Bronze Age post-built roundhouse and several possible four-post structures were found (Allen et al. 2009, 63–70).

Another possible Late Bronze Age defended enclosure, with a V-profiled ditch 2 m deep and radiocarbon dates from the middle fills of the last quarter of the 2nd millennium BC, was found at Eynsham, Oxfordshire (Barclay et al. 2001). Only two lengths of separate ditch lay within the excavation, however, so it is uncertain whether this was an enclosure, and the authors argued that it might have been earlier prehistoric, the Bronze Age occupation being secondary (Barclay et al. 2001, 155–8).

Claims have also been made that the poorly-understood subcircular earthwork at Marshall’s Hill near Reading may be a late Bronze Age enclosure, on the grounds of finds of pottery from the interior and metalwork from the surrounding area (Bradley 1986). However, there is no dating evidence from the enclosure circuit itself, and the diminutive size of the earthwork (reportedly only 20 x 13 m: Seaby 1932) suggests that it is unlikely to be related to the other sites discussed here.

Looking further afield, roughly circular enclosures of a similar size to that at Castle Hill are known from Carshalton, Surrey and Thrapston, Northamptonshire. The Carshalton enclosure is around 150 m in diameter, and has produced plain ware pottery from its ditch (Adkins and Needham 1985). Recent small-scale excavation has produced evidence for pits both inside and outside the enclosure (Groves and Lovell 2002). The Thrapston enclosure is around 110 m in diameter and has been ascribed to the 10th–mid 8th centuries BC through radiocarbon dating and associated artefacts. Again, occupation in the form of pits was found both within and outside the enclosed area (Hull 2001).

Also belonging to this period is the well-known group of late Bronze Age circular ‘ringworks’ of Essex and Kent, including Mucking North and South Rings, Springfield Lyons and Mill Hill, Deal. These may be of a slightly different character, however, as they are rather smaller at 40–75 m in diameter. Complete excavation of the sites at Mucking and Springfield Lyons has shown that they contained one or more roundhouses, and they have been interpreted as high-status residential units (Needham 1993).

Discussion

This survey has shown that Castle Hill can be placed in a tradition of similarly-sized hilltop enclosures in southern England that had emerged by the later Bronze Age (see Fig. 9.1). Most of these enclosures, including both that at Castle Hill and at Taplow, have only been discovered in the last decade, and it is therefore likely that more will come to light. Comments about their distribution may therefore be premature. In addition, the extremely limited extent of excavation of most of these enclosures makes interpretation of their function difficult. Nevertheless, on present evidence these sites are still uncommon and widely separated, unlike their Early Iron Age successors, the hillforts. Along the Thames Valley, for instance, there is one in the Middle Thames at Taplow, one on the Upper Thames at Castle Hill, and one along the Berkshire Downs at Rams Hill, possibly suggesting regional rather than local significance (Fig. 9.2).

Enclosures like this have been seen as dominating the surrounding area, with a commanding view of the middle and late Bronze Age field systems below (eg Yates 2007). The enclosure at Taplow was constructed close to an extensive field system alongside the Thames at Dorney, Buckinghamshire, dated to the preceding middle Bronze Age (Allen and Mitchell 2001, 26). A similar relationship may exist between the enclosure at Castle Hill and the extensive cropmark field system alongside the Thames at Northfield Farm, commonly also ascribed to the middle Bronze Age. The significance of this juxtaposition is not however so clear. Yates (2007) saw the enclosures as the centres of power of these organised farming communities, and as an expression of the wealth generated from riverine trade. Contemporaneity between the field systems and enclosures, or even any continuity from one to the other, is however difficult to demonstrate. There is, for instance, no overlap between the
Figure 9.2  Map showing late Bronze Age and Iron Age defended enclosures, and other selected late Bronze Age sites discussed in the text.
radiocarbon dates for the field system at Dorney and those for the defences of the Taplow enclosure (Allen et al. 2009, 190). At present, therefore, such theories remain attractive but unproven.

The tentative evidence for surrounding woodland at Castle Hill also raises the possibility that the hilltop enclosure was not necessarily intended to be highly visible, despite its hilltop position. Indeed, Castle Hill is largely invisible from the field system on the gravel terrace at Northfield Farm to the north-west, due to Round Hill. The enclosure at Taplow was sited on the edge of a plateau overlooking the river Thames, but did not occupy the most dominant and visible location at the end of the plateau only a few hundred metres to the south. From here it could have commanded an extensive view of the valley, and its middle Bronze Age field systems, below, but instead the enclosure was constructed several hundred metres further north, effectively invisible from the valley below (Allen et al 2009, 197, contra Yates 2007). If the enclosure at Castle Hill commanded a view, this is more likely to have been to the south, where the adjacent settlement was also situated.

Some evidence of internal occupation has been found in most of the enclosures, the most convincing being a dark soil containing a high density of late Bronze Age pottery and other finds inside the defences at Taplow (Allen et al. 2009, 63–5). This may have been the remains of a midden, but whether the result of domestic occupation is unclear (see below). Whether any of the enclosures saw permanent settlement is at present unproven. The presence of the stone mould at Castle Hill is notable given that residues of non-ferrous metallurgy have also been found deposited at the Thrapston enclosure and at a number of the Essex ringworks. As metalworking also appears to have taken place at many unenclosed sites during this period, however, the significance of this is uncertain.

Broadly contemporary activity has been found outside most of these enclosures, though so far the scale of investigation has generally been limited, and the relationship between enclosure and surrounding activity, and their relative roles, remains poorly understood.

Given the subsequent activity around Castle Hill, it would be tempting to suggest that such enclosures may have served as places for periodic gatherings for communities in the local area, but as yet evidence for large gatherings such as feasting debris is generally lacking. If true, such an emphasis on group performance might contrast with the smaller ringworks found in Essex and Kent, which arguably emphasised the prestige of particular individuals or family groups.

THE EARLY TO MIDDLE IRON AGE HILLFORT

The hillfort defences

Dating evidence from the hillfort defences was sparse, but a few sherds of pottery from the lower fills of the ditch and from the core of the counterscarp bank suggest that construction took place in the early Iron Age, in line with most other hillforts in the local region. However, the defences appear to have been maintained into the middle Iron Age, to judge by the very limited accumulation of layers in the ditch prior to the late Iron Age/early Roman period. It seems that the ditch underwent a series of episodes of cleaning out, with upcast used to heighten the counterscarp bank, which showed a series of dumped layers separated by thin turf lines. Mollusc evidence from the lower ditch fills indicates that clearance had occurred since the late Bronze Age, the hillfort being established in a largely open landscape.

Excavation of the inner bank of the defences has shown that its present profile is somewhat misleading (see Chapter 2). The accumulation of Roman and post-Roman deposits to the rear of the original bank has created a ‘false crest’ on this side, while the front of the original bank may well have eroded into the ditch. The internal stratigraphy of the original Iron Age bank is difficult to interpret, due to severe disturbance from animal burrowing, and the fact that only a narrow slot was excavated through the feature. However, it seems that the soil and chalk rubble core of the bank was revetted to the rear by a timber palisade or kerb, which was replaced at least once. No evidence for the use of stone in the ramparts was seen either in situ or in the ditch fills.

Despite the build-up of colluvial soil behind the rampart, the buried ground surface did not survive except beneath the rampart itself. In the excavated trench the
The geophysical survey, which identified a ‘lynchet’ corresponding to the edge of the dip (Fig. 2.1), suggests that this dip extended along much of the south and east sides of the hillfort. One plausible explanation for this dip would appear to be a quarry hollow excavated to add material to the rampart, but the limited excavation evidence does not support an Iron Age origin for this feature, as only one very thin deposit that could have predated the late Roman period was found within it. A later palisade dug into the rear of the rampart was identified, but was not securely dated, although the evidence did suggest the possibility of a late Roman alteration to the defences, immediately preceding the later 4th century occupation. There was however no evidence in Trench 2 for the extensive use of chalk in this refurbishment to substantiate late Roman quarrying for this purpose.

There are now two entrances to the hillfort, on the south-west and north-east. No archaeological investigation of the north-east entrance has been carried out, but limited clearance of part of the south-west entrance suggests that the causeway leading through this entrance is undisturbed chalk, suggesting that this entrance may have been original. This entrance is sited where it might be expected, facing the large external settlement. Pairs of opposing entrances are a common feature of early Iron Age hillforts, occurring for instance at White Horse Hill (Miles et al. 2003) and at Wessex hillforts such as Quarley Hill and Danebury (Cunliffe 1991, 348 and fig. 14.24).

Further excavation – including some intentional investigation of the entrances – would be required in order to elucidate the extent to which the hillfort was a seriously defensible structure, rather than being primarily for show. One possible flaw in the defensive capabilities of the hillfort may have been the presence of the slightly higher Round Hill within slingshot range to the west. In addition, in their surviving state the rampart and ditch on this side, where the approach is easiest, paradoxically appear to be less substantial than on the south, east and north. Evidence for the use of the sling is, however, 4th century BC and later (Ralston 2006, 123–4), later than the probable date of construction of the hillfort. We also need to be careful to avoid anachronistic interpretations; defence of the whole circuit of a hillfort against serious assault by large bodies of attackers is highly implausible on both counts, and the defensive purpose of the bank and ditch was more likely to deter small numbers of raiders from making any serious attempt to enter. What is clear is that the hillfort ramparts in their original state would have formed an imposing and impressive monument, visible for many miles around.

**Comparison with other hillforts in the Upper Thames Valley** (Fig. 9.3)

The nearest contemporary hillfort to Castle Hill was that at Blewburton, lying 7 km to the south and clearly visible across the intervening valley (Fig. 9.3). Blewburton belongs to the group of hillforts on the chalklands of the Berkshire Downs, of which Castle Hill has sometimes been considered an outlier (Cotton 1962). Most of the Berkshire Downs hillforts are similar to Castle Hill in having a univallate form, often with a counterscarp bank, and where excavated all have been shown to originate in the early Iron Age. Beyond this, however, some variation can be seen in the construction and developmental sequence of their defences. At Blewburton (Collins 1947; 1953; Avery 1993) and Segsbury (Lock et al. 2005) a similar sequence can be seen whereby an early Iron Age palisade was followed by a timber-laced rampart, which was in turn replaced by a dump rampart revetted with drystone walling (Blewburton) or an inner retaining wall of sarsens (Segsbury). In the case of Blewburton, the third of these phases is dated to the middle Iron Age and may have followed a period of desertion. At Uffington (Miles et al. 2003) an early Iron Age timber-laced ‘box’ rampart was similarly replaced by a chalk rubble dump rampart with sarsen stone facing. At Alfred’s Castle (Lock and Gosden 2000; Gosden and Lock 2001), meanwhile, only the latter phase of chalk rubble with sarsen facing is apparent. At Rams Hill the severely plough-damaged ramparts appear to have been of dump type (Piggott and Piggott 1940); ploughing has brought many pieces of sarsen to the surface, suggesting they were used in the rampart structure in some way (Bradley and Ellison 1975, 67). The evidence from the Berkshire Downs hillforts is thus consistent with the wider trend within southern England for timber-laced hillfort ramparts to precede dump ramparts (Avery 1993). The implied
relative chronological sequence is summarised by Table 9.1, although it cannot be assumed that any given constructional technique was directly contemporary at different sites. It should also be noted that the apparent absence of the third constructional form at Castle Hill may simply be accounted for by the lack of local availability of sarsen stone.

In contrast to the sites on the Berkshire Downs, much less is known about the group of hillforts lying to the east of Castle Hill in the western Chilterns, although surface traces indicate that all were large univallate enclosures. Dating evidence is scarce, although at Bozedown Camp, Whitchurch, limited excavation during the 1950s produced flint-tempered pottery sherds and a shale bracelet fragment from the lower fills of the hillfort ditch, suggesting a late Bronze Age or early Iron Age
date. The inner bank was too plough damaged to reveal much about its structure (Wood 1954). At Danesfield Camp, Medmenham, small-scale excavation of the hillfort interior has produced evidence for middle Iron Age occupation, although the recovery of a late Bronze Age spearhead from the ramparts in early 20th century may suggest an earlier origin (Keevill and Campbell 1993).

Table 9.1 Summary of evidence for rampart construction at Castle Hill and the Berkshire Downs hillforts

<table>
<thead>
<tr>
<th>Time?</th>
<th>Palisade</th>
<th>Timber-laced rampart</th>
<th>Stone-revetted dump rampart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castle Hill</td>
<td>?</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Blewburton</td>
<td>•</td>
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<tr>
<td>Segsbury</td>
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<td>•</td>
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<tr>
<td>Uffington</td>
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<td>•</td>
</tr>
<tr>
<td>Alfred's Castle</td>
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<td></td>
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<tr>
<td>Rams Hill</td>
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</tbody>
</table>

**Internal occupation**

Evidence for internal occupation of the hillfort during the early Iron Age in terms of features was slight. As mentioned earlier, ploughing may have removed shallow features, and modification of the area immediately behind the rampart, possibly in the late Roman period, may also have removed Iron Age evidence. Two postholes were found sealed by early Iron Age layers within the upper fills of the late Bronze Age enclosure ditch in Trench 6, but these may have belonged to a feature marking the line of the enclosure itself, such as a fence, rather than evidence of unrelated structures on the top of the hill that have now been removed by the plough.

Otherwise, the only feature datable to this period was a single large pit (3006) near the summit of the hill in Trench 3. This pit was unusual in size, being 3.5 m in diameter and surviving 0.75 m deep, and was larger than any of the pits excavated on the settlement outside the hillfort. The largest of these were at Hill Farm, and were 2.6 m, 2.3 m and 2.1 m across. In comparison with pits on the gravel terraces of the Upper Thames it is also unusually large; the largest of 900 pits at Gravelly Guy, Stanton Harcourt, for instance, was 2.5 m in diameter (Lambrick and Allen 2004, 112–3), and pit N/3 at City Farm, Hanborough, which was 2 m across, was described as conspicuously large (Case et al. 1964/5, 43). Lambrick however notes that pits cut into chalk are generally considerably larger, and the pits excavated at Segsbury do include a number at around 2.8 m in diameter, and one (1316) just over 3 m across (Gosden and Lock 2005, 56). At Danebury (Whittle 1984, 130–131), also on chalk, the cylindrical pits did not exceed 2.5 m in diameter, and only 8 of the 753 beehive pits were more than 3 m across at the base. The largest pits were almost all of the latest phase, that is, later middle Iron Age. This brief review suggests that the size of this pit at Castle Hill was exceptional, particularly for the early Iron Age.

The pit contained a series of dumped deposits which produced a remarkable assemblage of finds, including 12 kg of pottery, 12 kg of animal bone including a number of skeletons of very young sheep, four worked bone implements, a sling bullet and a few fragments of fired clay. The animal bone included an articulated raven skeleton, representing a type of ‘special deposit’ seen at several other Iron Age sites in southern England (Hill 1995a). Charred plant remains from the pit included wheat, barley and oat grains, and wheat processing waste (chaff). This pit is unusual within the region for the sheer wealth of material it contained, and while it might be argued that a large pit is likely to contain a larger assemblage of finds, the quantity of material is exceptional even taking this into account. Allowing for its greater volume, only two of the 900 pits at Gravelly Guy were proportionally as rich, and none of those at Segsbury was remotely comparable.

Reynolds, who successfully demonstrated by experiment that Iron Age pits might be used for grain storage (Reynolds 1974; 1979), stated that such pits needed to be at least 1 m deep, and as deep as they were wide, to be effective. Due to the sprouting of the grain at the pit edges and surface, shallow pits with large diameters would lose a high proportion of the grain stored. In the Upper Thames Valley most
pits are shallower than deep, even allowing for later truncation, but a ratio of width to depth like that of pit 3006 is unusual, making it less likely that this was a standard storage pit, later backfilled with occupation material.

Its fills are likely to have resulted from unusual processes or events, although the exact nature of these events is debatable. The combination of ‘placed’ items (eg the raven skeleton) and apparent ‘refuse’ or midden material of more fragmented character is fairly typical of Iron Age pit deposits (Hill 1995a), and it could be argued that only the scale of the assemblage is out of the ordinary. The large and unabraded sherds of a number of vessels refitting across the fills, however, shows that deposition occurred rapidly, and that most of the material had not been curated for any length of time. In this context the number of animals represented, many of whose bones were also in good condition, is significant, as it indicates the death and disposal of a large number of animals in a very short time, something that is unlikely to have occurred commonly. It is therefore tempting to see the large quantities of animal bone and pottery as the residue of a specific event such as a feast, especially as particular types of vessel, possibly those associated with cooking and drinking, are very strongly represented in the pit assemblage. Against this, the animal bones show no particular emphasis on ‘choice’ meat, some of the young animals are neonatal, and some of the other finds, for instance the worked bone implements, would be more difficult to explain in this way.

Much depends upon whether we need see all of the material in the pit as representative of the same activity, and what the pit contents may have been intended to commemorate or to bring about. The neonatal animals may have been those stillborn during the spring lambing, but may still have been offered up at a celebration of spring. While the quantity of other animal bones does suggest that there may have been a feast, this may only have been an accompaniment to other ceremonies enacted at that gathering, of which the other items were perhaps offered in memory. The raven skeleton and the slingshot may have been connected, the shot either the one used to bring the bird down, or to represent its killing. The elaborate lid may have belonged to a vessel brought in gift exchange, or whose contents had been consumed during the rituals performed on this visit to the hilltop. The more domestic tools may then have represented the creation of garments prepared for the rituals, the assumption of certain domestic duties, perhaps on marriage, or their renunciation in a rite of passage. In addition, not all of the finds need have been incorporated deliberately; some unabraded sherds of pottery were found that are believed to have been residual, and it is possible that some of the other items were also incorporated accidentally.

Overall, it seems unlikely that this feature and its contents were simply the product of domestic activity, and an interpretation connected to some gathering, possibly in the springtime, is preferred.

Three of the four trenches excavated into the late Bronze Age enclosure ditch revealed a dark deposit in its top containing a considerable quantity of early Iron Age pottery and animal bone, and the fourth also contained some sherds. Unless the excavations have happened upon particular concentrations of such material, a significant quantity of early Iron Age finds is likely to have been deposited along the silted ditch on the hilltop. This evidence does not fit with the relative scarcity of early Iron Age features apparent from the geophysical survey and the excavated trenches. It strongly suggests either that a considerable number of features of this date within the hillfort have been destroyed entirely by later ploughing, or that the silted hollow was chosen preferentially for the deposition of material, possibly a deliberate reference to the past existence of the hilltop enclosure within the larger hillfort. The extensive evidence for early Iron Age settlement on the plateau below the hillfort, including numerous storage pits, makes the former suggestion perhaps less convincing. Evidence from the settlement outside the hillfort shows that middening was practised (see Chapter 5 Trench 14), and it is also possible that material was deliberately deposited in the hollow left by the earlier enclosure. In his discussion of the mound at East Chisenbury, Wiltshire, McOmish notes the presence of deep Early Iron Age occupation deposits below the ramparts of the hillfort at Quarley Hill, and either below or within the rampart at Meon Hill, which he suggests represent middens (McOmish 1996, 74). At these sites the middens are interpreted as an earlier form of communal display than the defences, but the chronological relationship between middening on the hilltop and the hillfort of Castle Hill is still unclear.
There is more tangible evidence for widespread occupation within the hillfort during the middle Iron Age, represented by thirteen pits in Trench 3 and one in Trench 6. Most of these were fairly shallow bowl-shaped features, although one probable storage pit of cylindrical form was also found. No less than six of the pits contained articulated, partially articulated or fragmentary human remains. Other finds were modest in range, being limited to small assemblages of pottery and animal bone and some copper alloy fragments. Notably, environmental samples produced a small amount of fish bone, apparently from secure contexts. While fish is not generally thought to have played a significant dietary role in Britain during this period, pike bone has been previously recorded from a middle Iron Age settlement elsewhere in the region at Watkins Farm, Northmoor (Allen 1990). The samples also contained limited amounts of wheat and barley grain and wheat chaff.

The human burials represent examples of the well-attested Iron Age tradition of depositing human remains in settlement and hillfort contexts. Neonates, adult females and males were all represented. Radiocarbon date ranges from the burials span the 4th to 1st centuries BC. The most remarkable of the burial deposits came from pit 3152, which had the classic profile of a storage pit, but was considerably deeper than any of the others investigated within the hillfort. At the base of the pit lay the crouched skeleton of an adult male, while the middle fill of the pit contained the partially articulated remains of an adult female, showing cut marks from the defleshing or dismemberment of the body. A neonate burial inserted into the top of the pit during the late Iron Age or early Roman period (see below) completed the sequence. Multiple burials of this kind are not common in Iron Age contexts, but some parallels do exist. At the Danebury hillfort in Hampshire, for example, one early Iron Age pit contained three successive inhumations, with a young adult male followed by an infant, in turn followed by another adult (Walker 1984, 447). At the Iron Age settlement at Brightwell-cum-Sotwell, less than 1 km south of Castle Hill (Wilson 2008, 218), one middle Iron Age partial burial was described as ‘possibly partially dismembered’, although there was no clear evidence for this, and it may simply have been truncated. Another possibly dismembered skeleton came from a pit at Beard Mill, Stanton Harcourt (Williams 1951, 14), but this may have been a partial, or partially articulated skeleton, as there is no positive evidence for dismemberment.

Within the local region, finds of Iron Age human bone deposits have come from Blewburton (Collins 1952/3), from Segsbury (Lock et al. 2005) and Alfred’s Castle (Lock and Gosden 2000), perhaps suggesting an association between hillforts and mortuary ritual. Human remains have also been found at many non-hillfort settlements in the region, including at Hill Farm just outside Castle Hill. Most notably, more than 60 individuals were found at Gravelly Guy, Stanton Harcourt, Oxfordshire (Lambrick and Allen 2004, Chapter 6 and 458–46). Nevertheless, the proportion of excavated middle Iron Age pits associated with human remains at Castle Hill (some 46%) is still extremely high, and human bones found in the late Roman quarry cutting other middle Iron Age pits may well have derived from further examples. Only further excavation will determine whether the sample of pits that were excavated is anomalous or representative of activity within the hillfort, but on present evidence a strong association between this hillfort and burial is plausible.

Castle Hill is unusual within the region in that the hillfort was associated with a contemporary settlement just outside on the plateau below. Only at Madmarston and at Cherbury is there otherwise evidence of an adjacent settlement, and in both cases this is known only from cropmarks (Allen 2000, fig. 1.5). Limited excavation at Madmarston hillfort (Fowler 1960) suggested that the hillfort was middle Iron Age in origin, later than Castle Hill. At Cherbury excavation was confined to the defences, and revealed largely middle Iron Age activity (Bradford and Goodchild 1939), although fieldwalking of the interior has suggested that there may have been earlier occupation (Lambrick with Robinson 2009, 356). Cropmarks of an external settlement some 300 m to the west include penannular enclosures inside a system of rectilinear enclosures, for which Hingley suggested an early to middle Iron Age date (Hingley 1983, 123 and 125). At present, however, only at Castle Hill is there excavated evidence of a hillfort and adjacent settlement co-existing throughout the Iron Age.

Outside the region the evidence is more equivocal. At Battlesbury hillfort in Wiltshire, for instance, recent excavations in advance of a road have revealed an
extensive early Iron Age settlement just outside the hillfort (Ellis and Powell 2008). Here investigation of the hillfort defences and interior, which was very limited and was carried out in the 19th and early 20th century, provided only evidence of middle or late Iron Age occupation, and on morphological grounds the hillfort was thought to succeed the external settlement (ibid., 9–11). In the Middle Thames Valley at Taplow, a large pit settlement of early Iron Age date has recently been discovered less than 1 km east of the hillfort (Coleman and Collard 2005). The bulk of the occupation in the excavated strip across the settlement is however dated to 800–500 BC, between the abandonment of the Bronze Age hilltop enclosure and the construction of the hillfort late in the early Iron Age (Allen et al. 2009). Thereafter only limited middle Iron Age activity was found (Hart et al. forthcoming). The significance of the juxtaposition at Little Wittenham is the range of possible relationships offered between the two, and of roles for the hillfort.

At Castle Hill it may be possible to gain some sense of the role of the hillfort by comparing its finds assemblages with those from the trenches across the settlement. In general the artefact assemblages seem broadly similar, for example in terms of the character of the pottery, although the decorated early Iron Age lid from pit 3006 was not matched in the settlement. Finds of querns and pottery sherds with charred residues suggest that food preparation and cooking took place in each case. Each of the sites also produced artefacts probably associated with textile manufacture. Evidence for iron working (iron slag and a tuyère) was however limited to the settlement, and this was perhaps one activity not pursued at the hillfort.

In contrast, the charred plant remains suggest that while cereal processing took place on the settlement, the deposits found within Castle Hill represent fully processed grain. In addition, the faunal assemblage from Castle Hill shows a consistently higher proportion of pig bone in the early and middle Iron Age than in the settlement below. The relative amounts of pig from the hillfort are in fact unusually high for this period in a regional context. This is potentially significant as it has been argued that pigs and pork carried status associations during the Iron Age (Parker Pearson 1999). Unusually fish bones were present in both early and middle Iron Age pits on Castle Hill, but an eel vertebra was also found in a middle Iron Age pit at Hill Farm. The occurrence of fish bones in both the hillfort and settlement probably indicates that fishing was practised by the local community; there were too few bones to suggest any distinction between the species found in either.

Recent work elsewhere in southern Britain has emphasised the diversity of differing roles probably served by the sites lumped together under the label ‘hillfort’ (Hill 1995b; Hamilton and Manley 2001). Within the local region, the wide variation in size shown by hillforts arguably makes it unlikely that all performed the same functions. The smallest, Alfred’s Castle, is only 2 acres in size, while the largest, Segsbury, is no less than 26 acres in size (Castle Hill is middling at c 10 acres). Furthermore, where excavated the interiors of the hillforts show significant variation in the character and intensity of occupation. At Uffington, a series of early Iron Age pits and limited evidence for middle Iron Age activity was found in the interior, while at Segsbury there was internal occupation including pits and roundhouse gullies from both the early and the middle Iron Age. In both cases, however, the excavators argue that the evidence is more commensurate with temporary, repeated occupation than permanent settlement. The lack of evidence for crop processing at Segsbury was highlighted in particular (Miles et al. 2003; Lock et al. 2005). At Alfred’s Castle, however, preliminary results suggest dense early to middle Iron Age occupation in the hillfort interior, including storage pits, a roundhouse, and evidence for crop processing (Gosden and Lock 2001; Lock and Gosden 1999; 2000).

Fully understanding the roles served by the hillfort at Castle Hill would require larger scale excavation of its interior, but a few observations can be made at this stage. The presence of the seemingly very substantial early and middle Iron Age settlement immediately to the south-west of Castle Hill suggests that warfare or raiding was not sufficiently frequent to make the hillfort itself the primary focus for permanent occupation in the immediate area.

The hillfort and surrounding settlement could be argued to represent something akin to the medieval castle and surrounding town. As yet, however, there are no confirmed structures within the hillfort, and apart from one pottery lid, the artefacts from the hillfort do not differ significantly from those in the settlement outside. Both
the charred plant remains and the higher proportion of pig consumed within the hillfort suggest a significant difference between the hillfort and the adjacent settlement, but this need not imply a higher-status group living within the hillfort. Instead, pig may have been consumed by the whole community, but particularly in association with special events that only, or most often, took place within the hillfort, as the finds from pit 3006 suggest. The hillfort may therefore have served certain specific functions for this community and others in the wider local area. In addition to its potential role as a refuge in times of trouble, the hillfort may have served as the venue for special activities such as feasting (represented by the unusual early Iron Age pit deposit), burial and perhaps sacrifice (the atypical middle Iron Age burials in pit 3152).

THE LATE IRON AGE AND ROMAN PERIOD: ABANDONMENT AND REOCCUPATION OF THE HILLTOP

Activity at Castle Hill seems to have been much reduced in scale during the late Iron Age and early Roman period. The focus of occupation in this period may have been on the lower ground to the south-west of Castle Hill, as pottery of the 1st to 2nd centuries AD has been recovered from Trenches 13–15 and Hill Farm, as well as from Rhodes' (1947) and Time Team’s (2003) excavations.

Finds of late Iron Age to early Roman material from silting deposits in the hillfort ditch suggest that the defences were no longer actively maintained. The finds included modest amounts of pottery and animal bone, and some fired clay blocks of uncertain purpose. The only other evidence for activity in this period was the neonate burial inserted into the upper part of middle Iron Age pit 3152, which has been radiocarbon dated to 20 BC–AD 130 (Poz-12518: 1945 ± 30 BP). The placing of this burial squarely within a pit that contained two much earlier inhumations is unlikely to be coincidental, indicating persistence in the tradition of using the hilltop as a place of burial.

The reduction in activity may indicate that the role of the hillfort as a local centre was taken over in the late Iron Age by the ‘oppidum’ at Dyke Hills, on the low ground on the opposite bank of the river. Access to or control of the River Thames was perhaps now deemed more important than the defensive benefits and visibility provided by a hilltop location. During the early Roman period the centre of gravity shifted again a short distance to the town of Dorchester.

There was no evidence from the excavated trenches for significant activity on Castle Hill during the 2nd and 3rd centuries AD, but material held in Wallingford Museum from the 1920s amateur excavations within Castle Hill Clump includes Samian ware and other coarsewares of a probable 2nd or 3rd century date, and Samian sherds were also given to the Reading Museum and the British Museum by the amateur excavator Harry Watts. Indeed, taken at face value his account would suggest plentiful Roman activity. A penannular brooch found within a late Roman midden should date to the late Iron Age or early Roman period, and was presumably a long-curated item when deposited. Following this hiatus occupation returned in the late 4th century. Occupation below the hill in the area of Trenches 13–15 and Hill Farm seems to have dwindled by this time, although some late Roman pottery was recovered from the Rhodes (1948) and Time Team (Wessex Archaeology 2004) investigations of the building overlying the early Iron Age midden.

Features uncovered on Castle Hill included two very large pits in Trench 3. The function of these pits, which were only two of a line identified by the geophysical survey (Fig. 2.1), remains uncertain. The pits were vertical-sided and flat bottomed, though the upper sides of the larger of the excavated pits had weathered back to a 45° angle. The regularity of the sides and base of these features perhaps suggests that they were not simply quarries. No trace of any surrounding post or slot-built structure was found to indicate that these might have been cellars, though insufficient of either was dug to rule out the possibility of steps or of supports at the sides for a superstructure, and the weathering may have removed surrounding postholes or slots.

During the excavation it was noted that a seam of clay running through the chalk reached the side of the hill just above the line of pits indicated by the geophysical survey. This layer of clay would have prevented rainfall from draining through the chalk, so that a springline would have emerged on the hillside after heavy rain. It is
just possible that these pits were temporary cisterns, as chalk will hold water for a short time before it drains away. Against this, a slightly smaller pit was found towards the top of the hill in Trench 4, again late Roman, and with the same rectangular shape, vertical sides and flat base as the larger pits.

A few much smaller pits were scattered across Trenches 3, 4 and 7, and midden layers were dumped behind the hillfort ramparts. A varied range of finds was recovered from late Roman deposits, including pottery, vessel glass, a rotary quern fragment, a spindle whorl, and several pieces of ironwork. Some tile was found, but not in sufficient quantities to suggest the presence of a Romanized building on the hilltop. Much animal bone were also recovered, along with small amounts of both freshwater and marine fish bone and some oyster shells. The overall character of these finds suggests domestic activity.

The hilltop was once again used for burial in this period, with a single inhumation grave occurring in Trench 3. Disarticulated human bone was found in the late Roman deposits in the hillfort ditch, although it is unclear whether this was a deliberate mortuary practice or simply the result of disturbance of earlier burials. Four unaccompanied inhumation burials found in the 1980s immediately outside the eastern entrance of the hillfort could well also belong to this period (Chambers 1986). The Roman burials found in the 19th century immediately outside the ramparts on the north and west are not closely dated, but apparently included both cremations and inhumations (Wade and McGavin 1978; Fig. 1.2 No. 9). The bracelet found nearby (Fig. 1.2 No. 10) might indicate that some at least were late Roman. Human bone from rabbit holes in the ditch on the south-east was also handed in during the course of the project, though whether this was Roman or prehistoric is unknown.

The burials may all relate to the reuse of the hillfort by a substantial population in the later 4th century AD, but alternatively may indicate continuity of use of the hillfort as a place of burial throughout much of the Roman period. In general, Roman cremation burials in the region tend to be early, and inhumations later, slightly favouring the latter interpretation, but Roman burial practice was highly variable, and no firm conclusion can be based upon present evidence.

Reoccupation during the late 4th century AD can been seen at several other hillforts in the region (Fig. 9.4). At Rams Hill, a rectangular enclosure cutting the eastern side of the hillfort ditch contained three inhumation burials along with coins giving terminus post quem of AD 395 (Piggott and Piggott 1940; Sutherland 1940). It has been suggested that this enclosure could have been the temenos of a late Roman shrine (Bradley and Ellison 1975, 71). At Uffington, activity dating to the late 4th and early 5th centuries AD was found within the hillfort interior, mostly in the form of unstratified artefacts, suggesting to the excavators that the site was a focus for votive deposition. An oven or corn-drier was also found, however. Just outside the hillfort, 49 inhumations and 9 cremations were found cut into a Neolithic long barrow, with at least one of the burials dated by pottery to after AD 340 (Miles et al. 2003). Slightly further afield, at Madmarston Camp in north Oxfordshire, limited excavation has produced 4th century pottery, coins and other artefacts from layers butting up to the inner face of the hillfort rampart, as at Castle Hill (Fowler 1960). Castle Hill is thus part of a trend in the region to return to long-abandoned hillforts during the closing decades of the Roman period. The character of the activity usually includes a mortuary or other ritual element, although at Castle Hill this may well have been combined with domestic occupation. None of these sites, however, appears to have the defences renewed.

If genuine, the refurbishment of the fortifications at Castle Hill lies within the 4th century, i.e. still within the late Roman period; it does not belong to the sub-Roman refortification against the Saxon advance found further west at hillforts like South Cadbury and Cadbury Congresbury (Alcock 1971). Given the proximity of Dorchester-on-Thames, with its late Roman military fittings, and very early Saxon settlement (Hawkes 1986), this raises interesting questions about the relationships between local communities in the Dorchester area north and south of the Thames at the end of the Roman period. There is some evidence of the strengthening of perimeters at late Roman sites in the region, for instance at Claydon Pike, Glos. (Smith in Miles et al. 2007, 396), which may reflect increasing insecurity, but as Smith points out, the situation from site to site is very variable.
Discussion of Castle Hill and its Immediate Environs
POST-ROMAN OCCUPATION AND AGRICULTURE

Evidence for activity in the early to middle Saxon period was limited to four small residual pottery sherds from Trench 3. As a few Saxon sherds have previously been recovered as surface finds from Castle Hill (Wade and McGavin 1978), and Saxon sherds are also recorded from just north of the defences (Fig. 1.2, OA 17), it would seem that there was some use of the hilltop during this period, perhaps continuing on from the late Roman occupation.

There is more substantial evidence for occupation during the 11th to 13th centuries. Individual pits occurred in both Trenches 4 and 6, containing local Wallingford ware pottery and, in one case, a spoon bit augur. Significant amounts of charred wheat, barley and oat grain were recovered from the pits, but the absence of chaff may suggest that the processing of the grain took place elsewhere. Abundant beech charcoal and some hazelnut shell also occurred in the pits. The assemblages from the pits may suggest an emphasis more on the use of local woodland resources than on farming. Subsequently, however, the area was given over to agriculture, as indicated by a ploughsoil deposit overlying pit 6011 but predating the 18th century planting of the Clumps.

Ploughing of the hilltop during the medieval period is also suggested by a series of colluvial layers which built up behind the hillfort ramparts in Trenches 2 and 3. Among the finds from these layers were further sherds of Wallingford ware pottery and a number of iron objects, including a decorative door hinge fragment, a padlock bolt, a horseshoe and two possible arrowheads. The sherds of Wallingford Ware included an associated group of large sherds from a single vessel, suggesting that this had been deposited during the same phase of occupation represented by the pits, and prior to the onset of agriculture. By analogy with the sequence seen in Trench 6, it could be suggested that these colluvial layers resulted from agricultural use of the hilltop after the two pits had been infilled, incorporating material from the preceding medieval occupation, although this chronological relationship cannot be proven.

The stratigraphic evidence for cultivation of Castle Hill is corroborated by Leland’s Itinerary, which mentions crops grown within the hillfort in the 16th century (Toulmin-Smith 1907).

THE SETTLEMENT OUTSIDE THE HILLFORT

Geophysical survey has demonstrated the presence of a very substantial prehistoric settlement south, west and south-west of Castle Hill, within which a number of different elements can be discerned. Despite several different campaigns of excavation, however, only a very small part of this extensive settlement has been examined, making interpretation of the overall duration and development of this settlement extremely tentative. Sufficient has been done to make an outline interpretation possible, but the limited scope of the investigations needs to be borne in mind during the following discussion.

Late Bronze Age activity

A late Bronze Age element to the occupation on the plateau south of Castle Hill and Round Hill was first noted by Hingley when he wrote up Rutland’s 1970 excavations on the site of the Castle Hill car park (Hingley 1980). In addition to the evidence from the car park, Hingley suggested that there was late Bronze Age material amongst that recovered by Rhodes (ibid.). The excavation of Trench 14 in 2004 confirmed the presence of a late Bronze Age activity horizon beneath the early Iron Age midden. Two features in Trench 15 south of Hill Farm were tentatively dated to the late Bronze Age, and a scabbard chape was found by metal detecting in the vicinity of the trench. Small quantities of late Bronze Age pottery were also recovered from the excavations at Hill Farm. The discoveries thus spread some 700 m along the plateau, though activity is concentrated beneath the midden and to the east.

The midden

The buried land surface in Trench 14 lay at the base of an accumulation of dark soil containing numerous finds, which is interpreted as a midden. The chronology of the
stratigraphic sequence is not particularly clear. In his excavation Rhodes (Rhodes 1948, 22) found a few Iron Age sherds and Beaker pottery at the base of his sequence (layer 4), while in Trench 14 the earliest features contained either late Bronze Age or early Iron Age pottery, and were sealed by soils corresponding to Rhodes' layer 4. It is therefore possible that the whole sequence is of early Iron Age date, the Beaker and late Bronze Age finds being residual in a reworked soil, or derived from activity further upslope.

Alternatively, some of the postholes only recognised where cut into the light soils at the base of the sequence may in fact have been cut from higher up, and similar unrecognised features could also explain the presence of a few early Iron Age sherds in layers otherwise containing mainly late Bronze Age or earlier finds. This interpretation, which is preferred here, would mean that there was a buried topsoil containing finds from activity of Beaker, middle Bronze Age and late Bronze Age date sealed by middening.

The preservation of large and unabraded sherds of late Bronze Age pottery, and the presence of a swan's neck pin of Hallstatt D type, close to the base of the sequence in Trench 14, probably indicates that the midden began to accumulate either during the late Bronze Age or immediately afterwards. The wolf bone from the base of the midden may therefore provide an approximate start date to the accumulation. The quantity of late Bronze Age pottery within Trench 14 alone, an area of only 10 x 2 m, suggests a significant accumulation of occupation material across the midden as a whole, whose extent, although uncertain, was tested by augering and can be broadly estimated using the negative evidence from some of the Time Team trenches excavated in the vicinity (Fig. 5.1). The auger survey suggested that the deposit extended for at least 30 m east, west and north, and south to the hedge bordering the road. The sequence was truncated in Trenches T7, T8 and T10, only a pebble horizon and a thin layer of soil above (probably corresponding to 1457 and 1456) surviving below the Roman levels. The midden deposits were probably present in a deep soil build up in trench T4 that contained much early Iron Age pottery, and may also have survived, though disturbed, in layer 6005 in Trench T6, but was absent from Trench T11, and was not recorded in Trench T9. This would suggest that the midden may have extended to the edge of the enclosure on the west, did not go beyond it on the north-east, but did continue beyond it on the south-east. This suggests that the midden may have been oval, more than 70 m and less than 120 m NW-SE, but possibly much smaller in the other dimension.

The deposit uncovered by Rhodes, Time Team and in Trench 14 is interpreted as a midden, rather than simply as an occupation soil, due to its depth, the condition of some of the finds, including large pottery sherds and groups of sherds, and complete animal bones, within it, and due to the sheer quantity of finds. As such, it bears comparison with the very large middens of later Bronze Age and Iron Age date found in Wiltshire, predominantly in the Vale of Pewsey, at sites such as Potterne, All Cannings Cross and East Chisenbury (Lawson 2000; Brown et al. 1994). These sites are characterised not only by the quantity of finds within them, but also by the associated structural evidence, in particular chalk platforms like the one found by Rhodes (McOmish 1996, 73).

The site at Potterne began in the middle Bronze Age and continued until the end of the early Iron Age; at Little Wittenham accumulation appears to have begun only towards the end of the Bronze Age, and to have finished by the end of the early Iron Age, although it is possible that the limited investigation has only tested a peripheral area of the midden, and that earlier deposits will be found at its core. A shorter period of use would in part explain the more limited scale of the Little Wittenham midden, but may also indicate that this southern custom was only adopted here after it had been customary for centuries in Wiltshire. Some of the Wiltshire middens, such as All Cannings Cross, also date mainly from the earliest Iron Age.

Just north-west of the Castle Hill carpark, some 120 m to the south-east, a dark occupation deposit overlying a light occupation deposit was found in test-pits by Rutland (Hingley 1980). The sequence is similar to that in Trench 14, and the excavator compared this to the midden deposit found by Rhodes, but the two deposits are certainly not now continuous, as no trace of such a deposit was found in Trench T11 dug midway between them. Several explanations are
possible. Possibly this was a second smaller localised midden, as was apparently the case at East Chisenbury (McOmish 1996, 70). Alternatively Rutland’s deposits were the result of digging into a large feature of some sort, or possibly there was originally a much more extensive midden or occupation deposit that was later truncated. This might have occurred in the Roman period, such that the deposits were removed outside the ditched enclosure, but were preserved inside it, or in the medieval period. The survival of parts of the midden may be due to the area of Roman building debris, and to headlands at the edge of the medieval fields, such as that running south-west from the hillfort entrance (see Plate 1.10).

On balance a very extensive occupation deposit seems least likely, although middens in the Vale of Pewsey do reach even greater size than this (Brown et al. 1994; Lawson 2000). Trench T11 contained only a modest quantity of early Iron Age pottery, the majority of which came from two pits, and later features did not contain the quantity of residual material that might have been expected had the midden deposit extended over this area.

At Potterne the range of finds, and the areas from which they are drawn, led Lawson to argue that these accumulations are more than the rubbish dumps of local settlements, and that they represent the deposition of materials from a wide area, and by large numbers of people, perhaps at times of major gatherings. The scale of excavation at the Wittenham site has been small, but the finds do include rare items such as the swan’s neck pin and the wolf bone, as well as a variety of bone and other artefacts. A similar function to that suggested for Potterne may be represented, albeit on a smaller scale, on this site. Rhodes’ chalk platform occurs at much the same horizon within the midden as a number of postholes, suggesting a significant period of construction within it at one point. McOmish (1996, 73) speculated that the chalk platforms might either have been structural or related to capping of the material after certain episodes of deposition. The clear edges of the chalk and pebble layer here, and the concentrated band of pebbles on the south side, favours the first of these interpretations.

Within the Upper Thames Valley, sites of this type have not previously been positively identified, although others may well exist. At Wallingford a late Bronze Age occupation deposit some 0.3 m deep was found on an eyot in the Thames (Cromarty et al. 2006). This is one of several such island sites where accumulations of this date are known, most notable being Runnymede (Needham and Sørensen 1988; Needham and Spence 1996).

Perhaps an even closer parallel is the site at Woodeaton, where a remarkable range of Iron Age metalwork has been recovered (Kirk 1949; Goodchild and Kirk 1954; Bagnall-Smith 1998). Excavations by Harding showed that the Roman temple was underlain by an Iron Age dark occupation deposit some 0.4 m deep that extended for at least 20 m in either direction, and which included small areas of cobbling within it (Harding 1987). This deposit had material of late Bronze Age and early Iron Age date at the base, and although the deposit was somewhat mixed, predominantly middle Iron Age pottery towards the top. This may well be another such midden site, which Harding suggested might have been involved in metalwork production (ibid., 33). I am grateful to George Lambrick for drawing my attention to this site.

Further fieldwalking, geophysical survey and limited trenching by Oxford Archaeology in 1990 found more evidence of this dark deposit, and has shown that the Woodeaton deposit lies within an extensive cropmark complex including what appear to be several roundhouse gullies and enclosures (OA 1991; Lambrick and Robinson 2009). As at Little Wittenham, the midden may have formed part of a wider settlement, but the chronological and spatial relationships between them has not been tested by excavation.

Considering the topographical position of the middens in the Vale of Pewsey, McOmish drew attention to their west-facing orientation (McOmish 1996, 74). The midden at Little Wittenham is shielded by Round Hill and Castle Hill on the north and east, but is visible to the west and to the south, so broadly shares the same orientation. The association of discard with the west is uncertain; a link between the end of use of objects and the setting sun or the end of the day is possible, but speculative.
Early Iron Age occupation

Date and extent of occupation

Early Iron Age activity has been found covering almost the full extent of the settlement identified by geophysical survey. Excavations by Rutland in 1970 (Hingley 1980) revealed pits and a possible roundhouse gully just east of the car park, and Rhodes, Time Team and the excavation of Trench 14 indicated the presence of a midden some 200 m to the west. Time Team's trenches T11, T9 and T6 investigated early Iron Age pits, showing that settlement activity extended across the area between them, and (in the case of the pit in Trench T6) beyond. Trench 19 to the south revealed a series of semicircular gullies of small diameter, at least one surrounding a four-post structure, and Trench 15 revealed another focus of activity including a probable roundhouse gully, a dense cluster of pits and other ditches. Further early Iron Age features, including another ring gully of small diameter, were exposed in the staff car park to the north just east of Hill Farm, and several early Iron Age features were encountered during the excavations within and to the west of Hill Farm. A wide scatter of residual pottery was recovered from later features here, testifying to an early Iron Age presence in areas where no contemporary features were identified.

Whether all of this activity was contemporary has not been clearly established. The illustrated material from Rutland's excavations included handled bucket-shaped jars and bowls that are early Iron Age, but are not closely dateable. Finds from Rhodes' excavation of the midden include a few examples of earliest Iron Age type, as do those from Trench 14. His bowls include a large proportion of carinated types, which may be earlier that the round-bodied angular bowls that are argued to date from the later part of the early Iron Age (see Chapter 3). Some sherds belonging to the round-bodied type were also present in Trench 14. Although the material from the Time Team excavation of the midden has not been analysed for publication, initial assessment and spot-dating showed a similar variety of material to that recovered by Rhodes (Wessex Archaeology 2004; Allen pers. comm.). This suggests that activity was continuing on the midden throughout the early Iron Age.

Associated with the round-bodied angular bowls on Castle Hill were coarse shelly vessels with T-shaped rims, which were also argued to belong in the later part of the early Iron Age. Another substantially complete example of the latter was recovered from a pit in Trench 15 cut by other pits attributed to this period, showing that some of the early Iron Age activity in this trench was of the 5th century. There were also no clearly identifiable forms of the earliest Iron Age at Hill Farm or in Trench 15, perhaps suggesting an expansion of early Iron Age settlement from further east. The material from Trench 19 did not include large assemblages, and so is not closely dateable.

Structural evidence

Structural evidence from this phase is limited but varied. One probable roundhouse gully 13 m across was found in Trench 15, two possible posthole rings in Trench 19, one 7 m across, the other only 5 m across, and one four-post structure, also in Trench 19. Another probable roundhouse drainage gully, this time only draining the uphill (northern) side of the structure, was found by Rutland adjacent to the Castle Hill Car Park (Hingley 1980). The diameter of the gully in Trench 15 is similar to that commonly found at Ashville, Abingdon (Parrington 1978) and at Gravelly Guy, Stanton Harcourt (Lambbrick and Allen 2004), but nothing unfortunately survives to indicate what, if any, type of building lay inside. At 7 m across the larger post-ring in Trench 19 is similar to one at Ashville (ibid., fig. 17), and well within the range of those found at Gravelly Guy (ibid., fig. 3.12), most of which had doorposts beyond the ring, suggesting aisled construction. The post-ring at Ashville, however, did not.

The east and south-east of the ring in Trench 19 lay beyond the limits of excavation, so cannot usefully be categorised further. The post-ring of the later roundhouse within gullies 174/5 at Hill Farm is only 5 m across, and single examples of post-rings as small were also found at both Ashville (ibid., fig. 12) and at Gravelly Guy (ibid., fig. 3.11), but at Hill Farm and at Gravelly Guy this was only the inner ring of a larger aisled structure, and the same was probably true at Ashville, where a series of probable door posts on the south-east were not recognised. It is possible
that outer doorposts could lie outside the limits of Trench 19. Smaller buildings with irregular post-rings are known, for instance at Mingies Ditch, Hardwick-with-Yelford (Allen and Robinson 1993, Houses 1, 2 and especially 4). Alternatively this post-ring could simply represent a fence.

If genuine, the four-post structure within semicircular gully 19183 is towards the upper end of the size range for most sites in the region, comparable for instance to the largest of those at Gravelly Guy (ibid., fig. 3.16), and with correspondingly substantial postholes. Four-post structures at least 3 m square are however a feature of this site, two of those at Hill Farm (548 and 549) being as large, and one (structure 547) considerably larger. Additional postholes along the sides are occasionally recognised on other sites, but appear to be another feature of this settlement, as they also occur with structures 548 and 549.

A number of four-post structures with surrounding gullies are known in the region; at Ashville early Iron Age ditch 346 (Parrington 1978, 11 and fig. 10) formed a crook-shaped enclosure around a possible four-post structure, but clear semicircular ditches like those in Trench 19 are uncommon. A semicircular gully 180 of similar diameter at Ashville (ibid., figs 3 and 4) surrounded postholes that could have included a four-post structure, but this was not recognised as such by the excavators, and the gully was dated to the middle Iron Age. The alignment of the ends of the gully with one side of the four-post structure is not matched within the region, and could even indicate an alternative structural arrangement such as a semi-circular building. The presence of several semicircular gullies in Trench 19 may indicate that a group of such structures lay within this area, a possible hint of zoning within the early Iron Age settlement.

**Pits**

A number of pits of this period were excavated in Trench 15, and several others were excavated in Time Team trenches 6, 9 and 11. The pits came in two sizes, those around 0.5 m in diameter, and those 1–1.5 m in diameter; the larger pits survived up to 0.8 m deep. Three or four large pits at Hill Farm may also be of this date, but stand out from the rest in terms of size (2–2.5 m in diameter and up to 1.2 m deep) and fills, having very few finds.

The pits were filled in a variety of ways, some showing a pattern of slow natural silting, others rapid infilling, and yet others a combination of phases of both. As is now commonly recognised on Iron Age settlements, some of the pits contained placed deposits. The most obvious of these was a pile of sherd s from a large jar with a T-shaped rim, and from a decorated black burnished bowl, found on the base of a shallow small pit (15018) underneath a pile of small burnt pebbles. The pebbles were mostly of similar size, about 50 mm in diameter, and could perhaps have been used as slingshots. Other examples of placed deposits include the adult and child skeletons buried in intercutting pits (15003 and 15155), a complete and usable saddle quern in pit 15069 (Plate 5.20) and possibly a pair of horse mandibles in pit 15010.

**Middle Iron Age**

**The extent and character of the settlement**

Amongst the widespread settlement activity identified through geophysical survey, one of the most prominent features is the ditch or ditches running for some 800 m in an arc from west of Round Hill to south of Castle Hill, with various ditches and pit alignments at right angles either side suggesting a division into fields or enclosures (Figs 5.2 and 5.3). This ditch was sectioned in Trench 13, and at this point was shown to date to the middle Iron Age. The ditch, which formed the main spine of the settlement system, splayed east of Trench 15 to form a sub-rectangular enclosure in one phase, and was interrupted where crossed by Trench 19, a penannular enclosure (Fig. 5.10, 19188) lying along its projected line.

A second penannular enclosure, probably enclosing a roundhouse, was found within Trench 19 north of this, ie on the north side of the boundary line (Fig. 5.10, 19185). Other than this no significant evidence of middle Iron Age activity has yet been recovered within the arc of this boundary. Nothing of this date was recognised.
in Rhodes’ or Rutland’s excavations (Rhodes 1948, Hingley 1980), nor in the Time
Team trenching in 2003 (Wessex Archaeology 2004). The excavation of Trench 14
similarly contained only a handful of sherds diagnostic of the middle Iron Age,
perhaps suggesting that there was a drift of settlement southwards in this period,
and that the bulk of middle Iron Age activity may have lain south or outside the
boundary. Given the presence of early Iron Age activity west of the boundary,
however, and the middle Iron Age pennanular gullies to the north in Trench 19, this
was clearly not a hard and fast division, and much more investigation would be
needed to clarify its function.

Adjacent to the boundary at the east end of the settlement were ditches
suggesting an enclosure about 1 ha. in area, with a pennanular enclosure at the
centre (Fig. 5.2 M). Another kite-shaped enclosure is suggested halfway along the
spine ditch (Fig. 5.2 B), and other divisions within the settlement are hinted at by
lines of pits, most (but not all) at right angles to the spine ditch; boundaries marked
by lines of pits are known from other Upper Thames Valley settlements such as
Gravelly Guy (Lambrick and Allen 2004, fig. 3.2). The geophysical survey suggests
that pennanular enclosures, whether of early or middle Iron Age date, may have
been widely spaced, but the excavations have shown that the geophysical survey
does not give the whole picture; the obvious pennanular enclosure at G has another
adjacent just to the north, so that there was probably a line of small enclosures here
stretching from G to E. A pair of adjacent pennanular enclosures is evident north of
B, and another two close to another at J, while the excavations at Hill Farm have
shown a pattern of separated enclosures, but no more than 30 m from one another.

A similar mix of single house enclosures and lines of linked or loosely associated
enclosures is evident at Faringdon, where part of another large settlement has
recently been excavated (Weaver et al. 2004; Cook et al. 2004), though no overall
plan of the excavated area has been published. The cropmark settlement west of
Cherbury is also characterised by pennanular gullies within rectilinear enclosures
(Hingley 1983, 125), though this is approached by a ditched trackway, which are
much commoner in the late Iron Age or Roman period. Perhaps the closest
excavated comparison for the linear boundary within the Upper Thames Valley is at
the middle Iron Age settlement at Latton Lands, Wiltshire (Powell et al. 2009),
where a linear boundary was traced for nearly 400 m, and had smaller subrectan-
gular enclosures along one side, with a few roundhouse gullies also on the other side.
Cropmark evidence suggests that the boundary continued north for another 100 m
or so. The linear boundary formed a series of dog-legs, possibly skirting existing
smaller enclosures or marking the edge of rectangular fields in places, and this
mirrors the kite-shaped angles in the boundary at Little Wittenham.

The archaeological features from Hill Farm overwhelmingly date to the middle
Iron Age. A complex of features, including a post-built structure surrounded by a
double pennanular gully enclosed in turn by a large ditch, was exposed in the
northern part of the Visitors’ Car Park; a second pennanular gully was revealed in
the southern area of the site. Datable features from the Offices and Boiler House site
include pits and postholes (some of which formed four-post structures), another
pennanular gully with two phases of ditch, and the ditch of a possible small sub-
rectangular enclosure.

**Structures**

The structures at Hill Farm displayed some degree of order in their positioning, but
the evidence for recutting and truncation clearly shows that they did not represent
a single phase of development. The pennanular gullies that surrounded the round-
house 532 were all recut on at least one occasion, while ring gullies 60/70 and
690/700 also show subsequent phases of modification. These developments indicate
that the structures were constructed and used over an extended period. Enclosure
100, which cut two earlier pits, was itself recut on one occasion and is later cut by
other pits.

The four-post structures in the Offices excavation are a group of four or five.
Postholes in two of these, 548 and 549, contained diagnostically middle Iron Age
pottery, the remainder are dated by association. The larger three cluster in an area
surrounded by three pennanular enclosures whose entrances faced the structures.
This purposeful arrangement implies a degree of central settlement organisation,
perhaps involving the communal use of these structures. One smaller four-post structure, 546, lay across the line of penannular enclosure ditch 690/700, and another possible example to the east lay within this enclosure, but had one corner obliterated by a pit, suggesting that the more southerly of the group may have gone out of use when this enclosure was created. These were the smallest of this group of four-post structures, with the smallest postholes. A tentative shift towards larger and more substantial four-post structures might be suggested, but the dataset is too small, and the dating evidence insufficient, to substantiate this.

The association of a roundhouse enclosure with an adjacent annexe is fairly common on middle Iron Age settlements within the region, for instance at Farmoor (Lambrick and Robinson 1979, Areas II and III), at Ashville, Abingdon (Parrington 1978, fig. 12) and at Salmondsbury (Dunning 1976). At Salmondsbury two round-houses were enclosed by one gully, at Ashville the annexe was believed to contain an ancillary structure, while at Farmoor there were hardly any internal features. The presence of a human skull fragment at the base of pit 149 in the centre of the annexe at Hill Farm, and the fact that the other pits all lay at the edges of the annexe, suggests that this annexe did not have a purely agricultural function.

The excavated penannular gullies are mostly of similar size, at least 11 m in internal diameter, while the early Iron Age example in Trench 15 is more than 12 m across. The additional examples evident from the geophysical survey appear to be of broadly similar size, but the partially excavated penannular enclosure on the north side of the Offices excavation, 12066, was considerably smaller, only 8–9 m across.

As is usual in this region, entrances are commonly on the east or south-east. Hillforts generally share the predominantly east or south-east entrance, although Castle Hill itself has entrances on the north-east and south-west. Oswald has argued that the orientation of house and enclosure entrances is symbolic, and is related to the sunrise, and Fitzpatrick has suggested oppositions between light and dark or even life/birth and death (Oswald 1997, 92–5; Fitzpatrick 1997, 76–9). There are however also west-facing entrances in two cases, 690/700 in the Offices excavation and 19188 in Trench 19, both of which were subsequently blocked. As neither enclosure was completely exposed, it is not clear whether these enclosures were reoriented from west to east, or originally had two entrances, the west entrance later being blocked. House enclosures with 'back doors' are not particularly common in the region, but are known, for instance at Mingies Ditch (Allen and Robinson 1993, House 3).

It is therefore possible that the blocking of the western entrance of the penannular enclosures is symbolic rather than purely functional. Whether this relates to an opposition between the rising and the setting sun, and thus between the realms of birth and death, or has some other cosmological significance, is unknown. An attractive theory would link the recutting of the enclosure ditch to a change of ownership after the death of the first occupant, leading to the need to close the opening to prevent the return of the dead, but this is purely supposition.

Evidence for the houses themselves is less clear. The surviving circle of posts in structure 532 is only 5 m in diameter, and postholes to the east form a 3 m long line leading to a pair of pits or massive door postholes. Such a small building would be very unusual, and the post-ring is better interpreted as internal, the building being aisled and the line of the wall being indicated by the massive doorpostholes, and by a short length of stakeholes on the south-east. These would suggest that structure 532 at Hill Farm was 8–9 m across. What may be a wall slot within the more northerly enclosure in Trench 19 would suggest a diameter of around 10 m. Wall lines rarely survive in Iron Age houses in the Upper Thames Valley, exceptions being the stake wall at Mingies Ditch, Hardwick-with-Yelford (Allen and Robinson 1993), and the ring-groove at Warrens Field, Claydon Pike (Miles et al. 2007, fig. 3.11).

The middle Iron Age enclosures are more substantial than those of the early Iron Age. This is certainly clear in Trenches 15 and 19, and also at Hill Farm, the only possible exception being the north-westernmost enclosure in the Visitors Car Park. A wide variation in the depth and width of roundhouse enclosure ditches is evident across the region, one example at Gravelly Guy reaching nearly 2 m in depth. There is no particular indication from the finds or internal structures that depth or width is associated with status at this or other Upper Thames Valley sites, nor is it likely that variations in geology or the depth of the water table below Castle Hill affect the
depth of the ditches. Possibly the depth and width of the ditches is related to the organisation (or lack of it) within the settlement, more substantial ditches being provided in areas where, or at periods when, animals were allowed to roam freely, posing a threat to the thatch of the buildings, as suggested at Watkins Farm, Northmoor (Allen 1990, 75).

**Pits and placed deposits**

Pits of this period were found at Hill Farm, in Trench 14 and in Trench 19. The pits were mostly circular, with a few oval examples, and were mostly from 1–1.6 m in diameter, although there were single pits up to 2.7 m across in Trench 19 and the Offices excavation. Most of the pits were up to 0.8 m deep, the exceptions being the large pit 19055 in Trench 19 and pit 53 in the Visitors’ Car Park, which were respectively 1 m and 1.3 m deep. As in the early Iron Age, the pits were filled in a variety of ways, some showing a pattern of slow natural silting, others rapid infilling, and yet others a combination of phases of both. The tradition of placed deposits within pits continued, most obviously in the placing of a human cranium on the base of pit 149 in the Visitors’ Car Park. Other possible deposits of this type include a collection of saddle quern fragments and a complete rubber in pit 769 (Fig.5.24), and the collection of Lodsworth quern fragments in pit 41 (Fig. 6.8). A bellows guard from pit 19154 in Trench 19 may also fall into this category. This object is good evidence for metalworking within this part of the settlement in the middle Iron Age.

Placed deposits were also found in penannular enclosure gullies, for instance most of a pot in the terminal of 121 at Hill Farm in the Offices excavation. The use of enclosure ditch terminals for such deposits is relatively common in the Upper Thames Valley, but these are usually animal skulls as at Farmoor (Lambrick and Robinson 1979, Enclosures 2 fig. 13) and Gravelly Guy, Stanton Harcourt (Lambrick and Allen 2004, 130 Enclosure B3). Concentrations of pottery and burnt stone are frequently remarked in enclosure terminals, but are normally viewed as refuse from domestic activity rather than deliberate deposits (eg Allen et al. 1984, fig. 6.3; Allen 1990, 75), substantially complete pots being rare.

The material recovered from the settlement provides some clues as the contacts and cultural affinities of the site. Briquetage from Hampshire has rarely been found in the Upper Thames Valley, but these are usually animal skulls as at Farmoor (Lambrick and Robinson 1979, Enclosures 2 fig. 13) and Gravelly Guy, Stanton Harcourt (Lambrick and Allen 2004, 130 Enclosure B3). Concentrations of pottery and burnt stone are frequently remarked in enclosure terminals, but are normally viewed as refuse from domestic activity rather than deliberate deposits (eg Allen et al. 1984, fig. 6.3; Allen 1990, 75), substantially complete pots being rare.

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**Late Iron Age activity**

Evidence for this period is currently limited to ditches in Trench 14, which appear to indicate at least two small rectilinear enclosures. A virtually complete pot was found at the junction of two of the ditches, demonstrating that the tradition of placed deposits continued here to the very end of the Iron Age. Whole or virtually complete vessels are known from late Iron Age or early Roman deposits at other Upper Thames Valley sites, for instance in a terminal of a small horseshoe-shaped enclosure at Smithfield, Hardwick-with-Yelford (Allen 1981; Lambrick and Allen 2004, 175), and at the base of one of the oppidum ditches at Abingdon (Allen pers. comm.). This emphasises the southern connections of this site, and the significance of the river Thames for transport.

**Roman and post-Roman period**

The Roman settlement below Castle Hill consisted of several enclosures, one of which, a trapezoid c 70 m by 70 m, contained a Romanised building boasting mortar and tessellated floors, painted plaster on the walls and a tiled roof (Rhodes 1948; Wessex Archaeology 2004). A second sub-rectangular enclosure just south of Hill Farm was larger, c 125 m by 65–70 m, and surface indications of limestone and small quantities of Roman tile may indicate a second building, though this evidence could equally reflect a corn-drier. Only a corner of a third enclosure north of Hill Farm was seen, but this was at least 80 m by 30 m. A fourth rectangular enclosure south-west of Hill Farm is only known as a cropmark, but as its west side is formed by a linear boundary running north parallel to an excavated Roman ditch, it seems
Figure 9.5  Comparative plans of cropmarks and geophysical surveys of similar-sized small villa enclosures in the Upper Thames Valley
likely that this too is Roman. This enclosure is only 30 m by 25 m. A fifth slightly smaller enclosure, at 25 m square, lay south of the road just west of the Castle Hill Car Park, but this is undated.

Given its rural location, the main building can reasonably be described as a villa building, and was included in Miles’ gazetteer of villas in Oxfordshire (Miles 1982). Situated on a plateau sheltered from the prevailing winds by Round Hill and Castle Hill, and facing southwards with an uninterrupted view as far as the Berkshire Downs, the location is very suitable, although it is not clear how close a source of water could be found. Details of the building are unclear, but the trenches dug around the area by Time Team perhaps support the view that this was a relatively simple, corridor building rather than anything more elaborate.

The surrounding enclosure is smaller than those known from excavation and from cropmarks at other Oxfordshire villas (see Fig. 9.5): the enclosure at Barton Court Farm, for instance, is c. 120 m square, that at Ditchley 100 m square and that at Islip 85 m by 130 m. The closest is probably that at Gatehampton Farm, Goring, at around 80 m by 90 m (Sharpe 2006, 50–55 and fig. 15). Other enclosures less than 1 ha. in area immediately around the villa buildings do exist, for instance at Little Milton (80 m by 100 m) and at Woodstock (60 m by 90 m +), but these are elements of a larger system of integrated enclosures, as are the examples quoted at Ditchley, Islip (Miles 1982, 74–6, figs 8–10) and Goring. Both the enclosures north of the modern road appear to have been in use contemporarily, and the group of enclosures as a whole may together have performed the functions found in larger enclosures elsewhere, but the layout is considerably less formal. The key to the Roman settlement layout appears to have been the ditched trackway approaching up the slope from the south-west, adjacent to which three of the four known enclosures were placed. The geophysical survey suggests that the Roman road disappeared under the modern road just south of the south-west entrance to the hillfort, and either ended or continued south-east beneath it.

Two small square enclosures are known as cropmarks east of the main villa enclosure, both with a central anomaly perhaps indicating a pit. A trench (Fig. 5.1, Trench 11) was dug by Time Team across the more westerly enclosure, showing that the ditch was V-profiled and shallow, but no central pit was found, and the only dating evidence was a couple of early Iron Age sherds that could have been residual. These enclosures, at c. 10 m and 8 m across, are reminiscent of late Iron Age square barrows, though a small square enclosure of early Iron Age date has recently been excavated at Frilford (Lock et al. 2002, 76–8 and fig. 18).
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