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Iron-Age to Saxon Farming Settlement at Bishop's Cleeve, Gloucestershire: excavations at Church Road, 1998 and 2004

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INTRODUCTION

An excavation and archaeological watching brief were carried out by Wessex Archaeology, in 1998, at the site of a former animal feed mill on the south side of Church Road, Bishop's Cleeve, Gloucestershire (OS Nat. Grid 395855 227560) in advance of the construction of a retail outlet for Tesco (Wessex Archaeology 1999). Additional archaeological excavations and a watching brief were undertaken in 2004, in advance of extensions to the Tesco store and car park (Wessex Archaeology 2005). The results of both these periods of work are presented here.

Previous work at Bishop's Cleeve indicates a long history of settlement in the area, from at least the Middle Iron Age, though the information to date is rather piecemeal. Middle to Late Iron-Age enclosure ditches and pits were revealed in an earlier evaluation of the site (Parry 1993). These probably form part of the settlement, also represented by enclosure ditches and pits, excavated on the north side of Church Road at Gilder's Paddock (Parry 1999) as well as 21, Church Road (Cullen and Hancocks forthcoming) (Fig. 1).

Romano-British pottery of 1st–2nd-century AD date was found to the north-west of the site prior to and during construction of the Bishop's Cleeve bypass road; first in a number of pits at Gilder's Brook (Wills and Parry 1990) and secondly, associated with a surface of paving slabs, during fieldwalking at Dean Farm (Rawes and Rawes 1990) (Fig. 1). At Gilder's Paddock, Romano-British activity of 2nd–4th-century AD date is represented by a ditch, which follows the line of one of the Iron-Age enclosure ditches, and seven inhumation burials. These features probably relate to the late 2nd–4th-century AD occupation at Home Farm, immediately to the west (Hart 1993; King 1994; Barber and Walker 1995; 1998) (Fig. 1). This consisted of a series of small ditched enclosures, possibly garden plots, the remains of a masonry building, and traces of small-scale industrial activity, including smithing, brass casting and flax retting or leather tanning. Ditches and pits spanning the 2nd–4th-centuries were also revealed during an evaluation at Cleeve Hall (Fig. 1) (Ings and Enright 1996; CAT 1997; Enright and Watts 2002).

Evidence for Anglo-Saxon settlement at Bishop's Cleeve has so far proved elusive though it probably lies beneath the modern village (Aldred 1976). A late 6th-century cemetery at Lower Farm (Wilson and Hurst 1970; Holbrook 2000) was seen by Heighway (1984) as an indication of the colonisation of the upper Thames valley by pre-Christian Saxons. The site of a possible

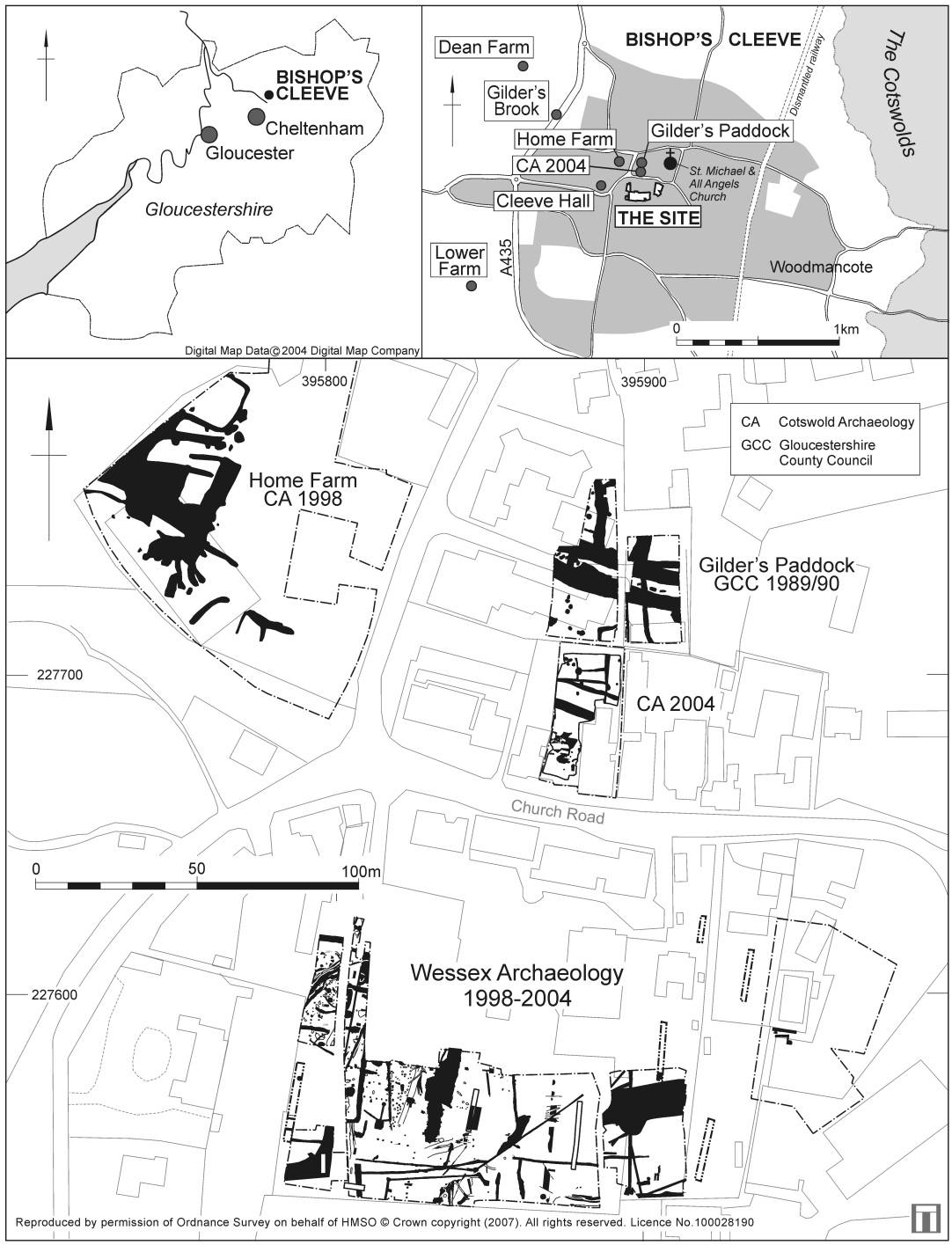

Fig. 1. Location plan.

monastery is situated immediately to the west of the church (Hanson 1922), to the north-east of the site discussed in this report. It is recorded that, between AD 768 and 779, Offa of Mercia and Aldred, underking of the Hwicce, granted land in Cleeve to the monastic church of St. Michael (Elrington 1968, 8). A few sherds of Saxon pottery were recovered from the upper fills of the Roman ditches at Home Farm.

At Domesday, 94 people are recorded in Cleeve (Elrington 1968, 7), the settlement lying towards the centre of a triangle formed by the early boroughs of Gloucester, Tewkesbury and Winchcombe. Tewkesbury had a monastery, and Gloucester and Winchcombe had minsters associated with royal centres and mints. Bishop's Cleeve became a possession of the bishops of Worcester before the Norman Conquest, indeed by AD 888, and they had a manor house there (now Cleeve Hall). The present church of St. Michael and All Angels dates to the 12th century (Elrington 1968, 8). The village may have benefited from the desertion, presumably at the time of the Black Death, of the medieval settlement at Prestbury, only 2 km to the south.

A number of 16th- and 17th-century timber-framed buildings survive in Bishop's Cleeve and the village remained the same in area until the 19th century when the number of houses increased by 50 per cent (ibid. 3). This number remained fairly constant until the outbreak of the Second World War, but since that time the pace of expansion has increased, culminating in the proliferation of new housing estates in the late 1980s and 1990s.

The Church Road site itself is shown on the tithe and OS maps of the 19th and early 20th century to have been predominantly used as orchards with, at different times, barns and a malthouse, until being taken over by an animal feed mill (formerly Oldacre's Mill, later Bishop's Cleeve Mills).

THE EXCAVATIONS

The site is situated west of the springline at the foot of the Cotswolds, to the south of Bishop's Cleeve village centre (Fig. 1). The nearest watercourses are the Dean Brook, *c.*1 km north, and the Hyde Brook, *c.*2 km south, both tributaries of the River Swilgate. The excavated area lies below Cleeve Hill, part of the Cotswold scarp to the east, on land falling gently to the west and to the south to the Hyde Brook. The underlying geology comprises a drift deposit of Cheltenham Sand. Close to the southern boundary of the site, the Cheltenham Sand meets the solid deposits of Lower Lias Clay. The site covered an area of *c.* 0.48 ha of relatively flat land at a height of *c.*55–57 m above OD.

The southern part of the site was masked by remnant topsoil with a number of intrusive modern features; several machine-excavated slots dug through these in 1998 revealed archaeological features (Fig. 2). This topsoil was removed by machine during the 2004 excavations, to the east and west of the existing Tesco store, and exposed underlying river channel deposits. The site revealed evidence for activity dating from the Early Bronze Age to the present day with the most coherent sequence found in the north-west part of the site, where predominantly Iron-Age features included roundhouse gullies and a series of pits, postholes, and ditches.

Early Bronze Age

At least two features yielded pottery sherds of Bronze-Age date. Kidney-shaped feature 2222 (Fig. 3), probably a tree root hole, contained eight grog-tempered sherds from a single carinated bowl, and another, probably contemporary, grog-tempered bodysherd. The bowl was decorated with a zone of comb-impressed diagonal and horizontal lines on the upper exterior surface (Fig. 8, no.

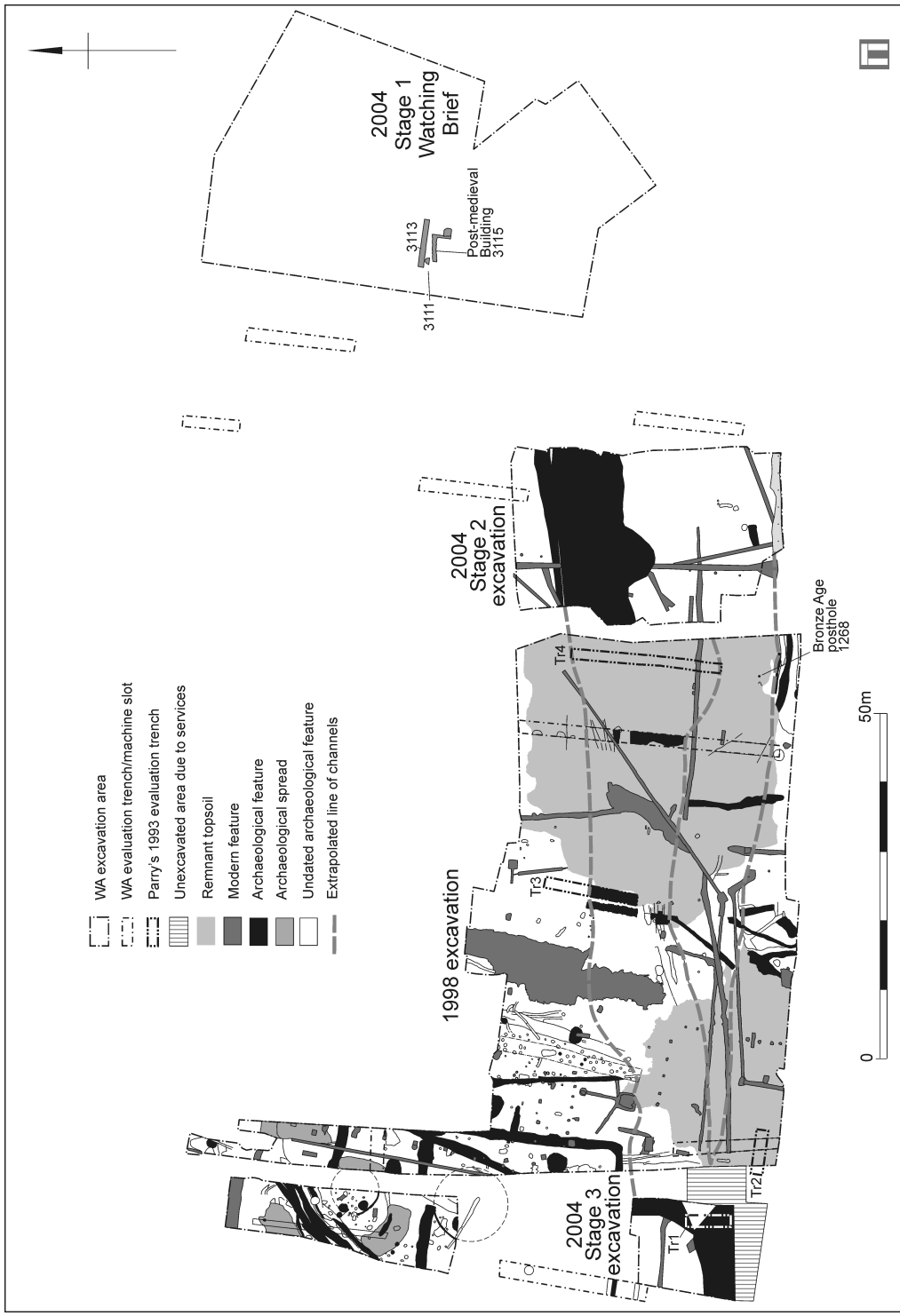

Fig. 2. All features plan.

1), and probably belongs to the Beaker or Food Vessel tradition. The feature also contained the carbonised remains of grain, sloe and hazelnut. Two tiny sherds of early prehistoric pottery were recovered from posthole 1268 (Fig. 2), and a small quantity of Early Bronze-Age pottery was also recovered from several later features.

Evidence of early Bronze-Age occupation in the vicinity has already been identified through pottery, including urn material, comprising at least three vessels in mixed grog- and/or limestone-tempered fabrics recovered during the excavation of the nearby Saxon cemetery at Lower Farm (Woodward 2000, 85).

Middle/Late Iron Age

The earliest phase of occupation consists of a number of roundhouses, with associated pits, postholes and spreads of material, concentrated in the north-west of the site (Fig. 3). A total of 169 sherds (2175 g) of pottery from these (and later) features date to the Middle and Late Iron Age. Among seven fabric types (Appendix 1) are coarse shell-tempered, fine oolitic limestone-tempered and Malvernian rock-tempered wares, as well as several limestone-tempered wares with inclusions of Palaeozoic and Jurassic origin. Malvernian B1 wares of Iron-Age tradition, like the rock-tempered wares, often feature on rural sites in the area well into the later 1st century A.D (Timby pers. comm.).

A number of lengths of ring-gully suggest the presence of up to three roundhouses. Gullies 2131 and 2184, the latter producing a sherd of limestone-tempered Malvernian ware, were both *c.*0.20 m wide and up to *c.*0.10 m deep, their projected diameters being *c.*12 and 8 m respectively. Two further lengths of curved gully (2196 and 2260), with similar alignments, may represent a third building although, as this would have overlapped with 2184, it could not have been contemporary with it. Several undated pits and postholes lay within the area enclosed by 2184 and 2196/2260, some of which may have been associated with the roundhouses.

One hundred and twenty-six post or stakeholes were identified. Just four (postholes 1629, 2218 and 2273 and stakehole 2122) contained Middle Iron-Age pottery, in each case comprising exclusively Jurassic limestone and/or shell-tempered wares. Neither these nor any of the undated post or stakeholes of similar dimensions could be related to any recognisable structure.

Seven pits (1716, 2119, 2134, 2152, 2156, 2174 and 2203) could be dated to this phase of activity. They were generally sub-circular or oval in plan, with steep or vertical sides and flat or slightly concave bases, and up to 1.60 m in diameter and 0.80 m deep. Among the smaller pits, 2119 (0.66 m in diameter) contained a deposit of burnt objects associated with weaving – part of an antler comb, up to three antler needles, a triangular clay loomweight and a spindle whorl fashioned from a fossilised fish vertebra (Fig. 4). Pits 1716, 2152, 2156 and 2174 contained vesicular slag probably derived from iron smelting, and pit 2134 produced fragments of fired clay in a variety of fabrics, including one containing shelly limestone.

Middle Iron-Age pottery, again comprising exclusively Jurassic limestone and/or shell-tempered wares, was associated with pits 2134, 2152 and 2203. Substantial parts of two jars from the primary fill of 2152 are among the earliest vessels from this site (4th–3rd century BC) and include one in a shell-tempered fabric with a complete profile (Fig. 8, no. 2). Pit 2133 contained ten sherds, of which one was organic-tempered and one was a Malvernian B1 sherd, alongside Jurassic wares, suggesting a slightly later Iron-Age date for this pit. It also produced two fired clay loomweights and a rotary quern fragment. The Malvernian tradition continues through into the Roman period but the presence within the assemblage of at least three pieces with stamped decoration (e.g. Fig. 8, nos. 5–6) suggests material dating well within the Iron Age. Limestone-tempered Malvernian ware was also recovered from pit 1716 alongside Jurassic limestone-tempered ware; a Malvernian

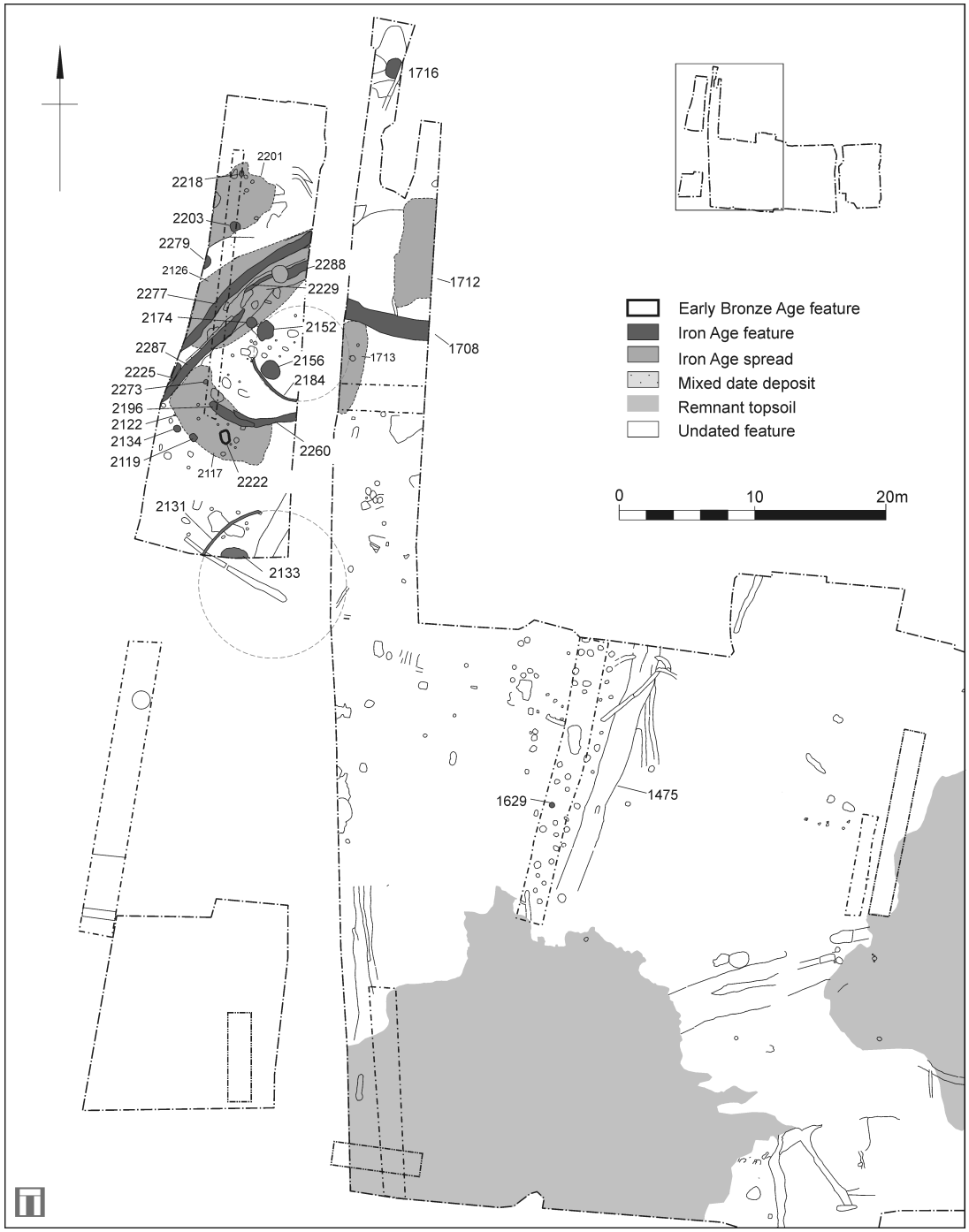

Fig. 3. Bronze-Age and Iron-Age features.

B1 jar with a vertical rim was found (presumably redeposited) in the primary fill of Roman quarry pit 1429 (Fig. 8, no. 8); and Malvernian A sherds of Middle to Late Iron-Age date occurred in pit 2174.

Several spreads of material (1712, 1713, 2117, 2126 and 2201), probably broadly contemporary with the pits and postholes, filled shallow hollows around the ring-gullies. Material recovered from these spreads included pottery, fired clay, ceramic building material, animal bone, a few fragments of slag and a whetstone.

To the north of the ring-gullies was a series of parallel, and in some cases intercutting, ditches interpreted as drainage ditches, aligned NE–SW and yielding pottery of Middle Iron-Age to Romano-British date (e.g. 2225, 2288, 2229, 2277 and 2287). These had steep, straight sides and concave or 'V'-shaped bases, measuring up to 1 m wide and 0.73 m deep. Ditch 2287, which recut an earlier ditch (2229), produced a small group of material potentially of 1st-century AD date, including a Malvernian A sherd, a sherd of Iron-Age shelly ware and a sherd of early Severn Valley ware possibly of pre-Conquest date (cf. Timby 1990), as well as a calcitic-tempered sherd with part of a curvilinear tooled decoration, probably of Middle Iron-Age date (Fig. 8, no. 4).

To the east of these ditches was a length of ditch, 1708, aligned approximately east–west and at a right angle to undated ditch 1475 to the south-west. If these two features were related they would form parts of two sides of a rectangular enclosure. Ditch 1708, which was up to 1.45 m wide and 0.55 m deep, produced a small amount of limestone-tempered Malvernian ware and Malvernian A sherds, as well as Jurassic limestone-tempered ware.

A small quantity of Iron-Age pottery was recovered from river channels 1240, 1532, 3102, and 3105, and also from natural erosion feature 3076 (Fig. 5). Although present, the pottery is likely to be residual; the deposits it came from were of mixed date and subject to fluvial reworking.

Romano-British

As with the Iron-Age occupation, most of the Romano-British features were found in the west of the site (Fig. 5), and the Roman pottery fabrics (334 sherds, 3643 g) suggest occupation from the mid 2nd to the late 4th century AD. The assemblage is dominated by sherds of Severn Valley ware (63% by sherd count), with Malvernian ware and Dorset black burnished ware accounting for 8 per cent and 15 per cent respectively. Each of these industries is particularly long-lived with pre-Roman origins, the repertoire of vessels within the Severn Valley and Malvernian industries tending to be quite conservative. Imports include eight sherds of Central Gaulish samian (Dragendorff forms 18/31, 31 and 45). Products of the Oxfordshire industries (in particular colour-coated wares and white ware) are present, as well as a few sherds of local colour-coated ware, greyware sherds from the North Wiltshire industries and micaceous greywares typical of the later Roman period.

The Iron-Age drainage ditches appear to have been re-cut several times during the Roman period. While ditch 2287 potentially dates to the 1st century AD, the only ditch which might date to the earlier part of the 2nd century is ditch 2289. This contained a straight-sided Severn Valley ware dish and a sherd of Central Gaulish samian, as well as a number of Iron-Age sherds. Otherwise most of the assemblage appears to date to the later 2nd–4th centuries AD. Ditch 2253, one of a series of intervening gullies in the north of the site, produced ten sherds of a single jar of Severn Valley ware, and it is assumed that three undated ditches, 2255, 2268 and 2282, were broadly contemporary with it.

Burnt spread 1679 and pits 1429, 1551, and 1717 also appear to belong to this phase but again contained only very small amounts of pottery. The pits, interpreted as possible quarry pits, were large, irregular sub-circular features measuring 2–3 m across and up to 1 m deep, with undulating

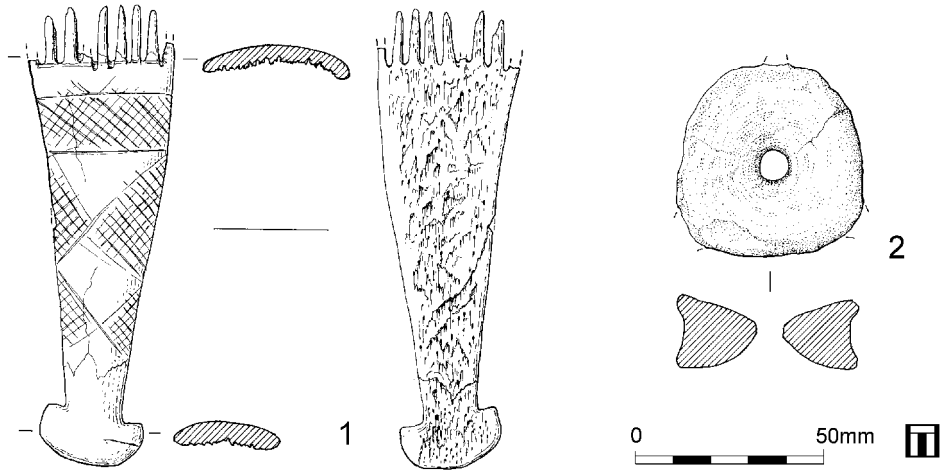

Fig. 4. Antler comb and spindle-whorl made from a fossilised fish vertebra, both from Iron-Age pit 2119.

sides and bases cutting into the natural sand. Pit 1429 produced one small sherd of Dorset black burnished ware (as well as a Saxon sherd considered to be intrusive). Pit 1551 produced four sherds of Severn Valley ware and Malvernian rock-tempered ware, the latter including a straight-sided dish, while pit 1717 produced 11 sherds – one of Dorset black burnished ware and the rest of Severn Valley ware, including part of a tankard. Layer 1709 contained Malvernian A sherds from a straight-sided, handmade jar with a slightly beaded rim and a handmade bowl decorated with diagonal burnished lines on the interior and overlapping chevrons on the exterior (Fig. 8, no. 9). It also produced a small cylindrical copper-alloy bar, with flattened ends (object 1813), possibly of Late Iron-Age/Early Romano-British date. The upper fill of pit 2133 produced a large quantity of charcoal and 'cokey' material associated with iron slag.

Ditch 1691, aligned NE–SW, contained a small amount of Roman pottery and, along with parallel undated ditch 1475, may have formed part of a field/drainage system. Ditch 1649 contained some Roman pottery and three iron objects – a possible heckle or point, a curved object and half of a 'U'-shaped staple. It also contained some Saxon pottery, suggesting that the ditch may have been maintained into the Saxon period. The alignment of ditch 1649, at a right angle to 2293, implies that together they formed an enclosure, possibly of a later phase than ditch 1691. A small quantity of pottery was recovered from an east–west aligned feature, gully 1562, which joined ditch 1649 at a right angle. Ditch 2293, ditch 2008 (a possible westward extension of 1649, on the same orientation as the former), together with hollow 1689 produced the latest stratified Roman pottery on site – all containing sherds datable to the later 3rd or 4th century AD. Later 4th-century AD sherds are present on the site but only in post-Roman or mixed date contexts.

The largest group of sherds (15 pieces, including a Severn Valley ware vessel with a wall perforation) came from river channel 1532, exposed in a machine-excavated slot through the area of remnant topsoil in the centre of the site. Small quantities of Roman pottery of 2nd–4th-century date also were retrieved from channels 1240, 3102 (including a Dorset black-burnished ware dropped flange bowl with a graffito) and 3105 and natural erosion features 3076 (which also contained a residual piece of Iron-Age pottery), 3093 and 3094. Some Roman structural ceramic building material and dressed limestone were also found in river channel 3105, probably dumped or washed into the channel from the nearby settlement.

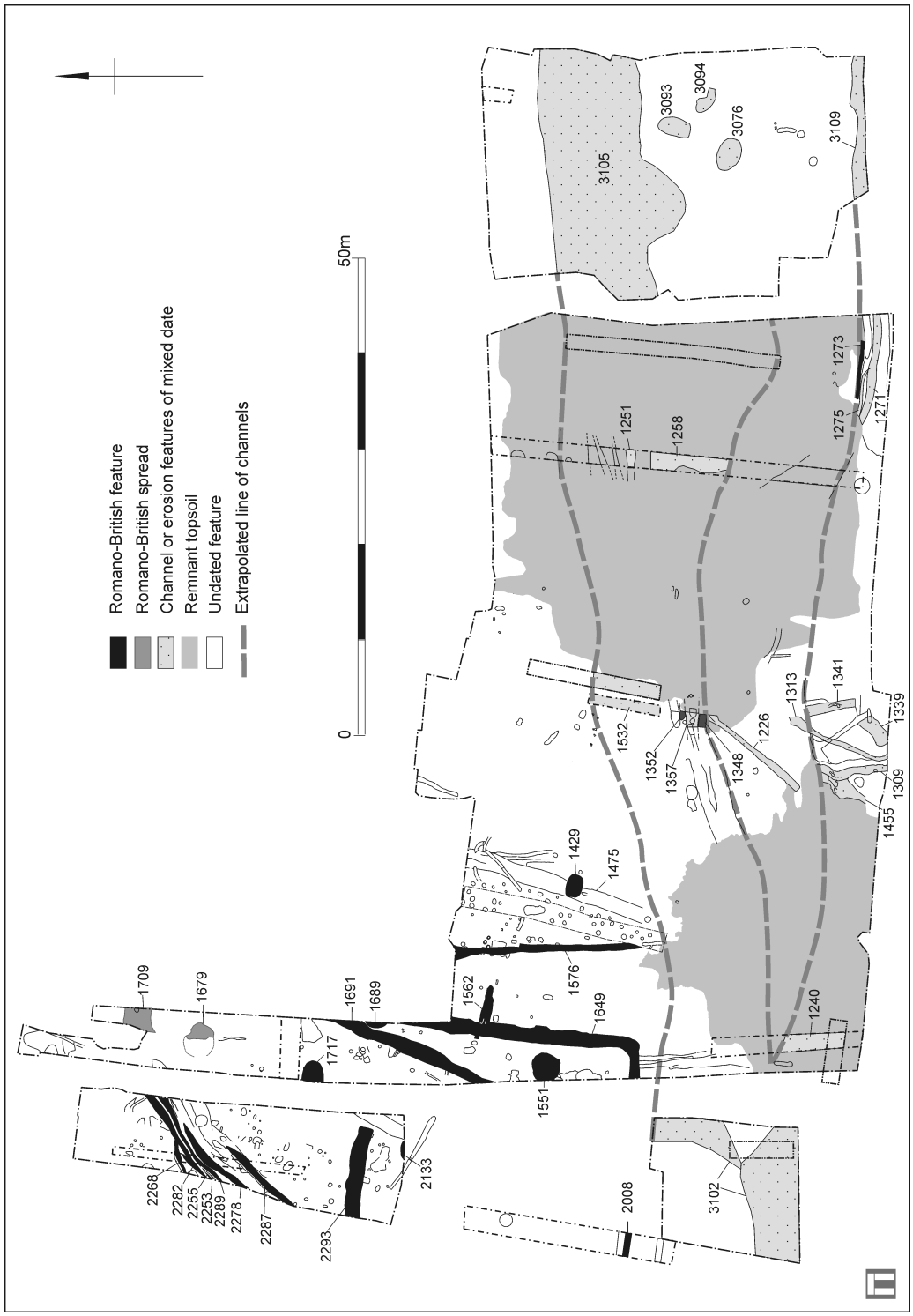

Fig. 5. Romano-British features.

A series of shallow gullies and ditches (1273, 1348 and 1352), discovered beneath the remnant topsoil in the southern part of the 1998 excavation area, contained some Roman pottery. Sherds of Severn Valley ware were also recovered from east–west aligned ditch 1348, and, in association with two rotary quern fragments (of Iron-Age or Roman date), from parallel ditch 1352 *c.*2 m to the north. Two other quern fragments, part of the same object as one of those in 1352, were recovered from the intervening ditch 1357, associated with further sherds of Roman and medieval pottery. In the light of further archaeological excavation to the east and west of this area, these features which were difficult to differentiate from the natural are reinterpreted as natural gullies scoured out by water action, falling within the line of the river channels. This explains why conjoining quern fragments were found in ditches of apparent separate stratigraphic phase and why the pottery was of mixed date. Similarly, although it contained a small amount of Roman pottery, the shallow depth and undulating base of gully 1576 suggests that again it is a water erosion gully draining downslope to the river channels. It is likely that other undated gullies aligned north–south and located to the immediate north of the area of remnant topsoil are also of natural origin.

Saxon

In the Saxon period activity appears to have shifted towards the southern and eastern parts of the site (Fig. 6).

A significant quantity of Saxon pottery was recovered from a section of Romano-British ditch 1649. It is assumed to have derived from an unidentified later feature cutting the ditch or, alternatively, it may suggest that the ditch was maintained into the Saxon period. Pottery of this date was also found in layer 1201 (overlying the area around Romano-British pit 1551 immediately to the west) where it was associated with a broken whetstone. Three small pits or postholes, 1413, 1432 and 1637, each *c.*0.50 m in diameter and up to 0.32 m deep, produced Saxon pottery (Fig. 8, no. 10), while posthole 1372 contained a polychrome glass bead of 6th–7th-century date. The NE–SW alignment of postholes 1372, 1413, and 1637 is interpreted as a possible fenced boundary.

In the east of the site ditch 3106, oriented east–west, was seen to cut the northern edge of channel 3105 and in turn was cut by possible gully 3007. Some sherds of Saxon pottery were retrieved from the lower fill together with some Roman pottery, thought to be residual. The presence of rye and stinking mayweed in the bulk samples taken from the ditch also suggest a Saxon rather than Roman date. The alignment of ditch 3106 along the edge of the channel suggests that it served as a drainage or boundary ditch demarcating the marshy, channelled land to the south. It is likely that ditch 1649, further to the west, served a similar function.

Machine-excavated slots through the area of remnant topsoil in the southern half of the site identified the remains of a water channel (1258/1532). The deposits in 1258 produced Saxon pottery and a fragment of a double-sided composite antler comb, of a type in use from the Roman through to the early medieval period. A possible terrace on the northern edge of 1258 appears to have truncated a number of features, including 1251, which also produced Saxon pottery. These linear features are now considered to be part of the channel. Deposits in 1532 produced well-preserved Saxon pottery (Fig. 8, no. 13), as well as two Saxon knives comparable with Evison's Type 1 knives (having a curved back and curved cutting edge), a fragment of a possible third blade, and a looped iron strip, as well as two whetstones and a perforated stone object of unknown function.

A number of small abraded sherds of Saxon pottery were recovered from a series of shallow gullies and irregular features close to the southern boundary of the site – 1226 (which also produced half of a small conical spindlewhorl), 1271, 1275, 1309, 1313, 1339, 1341 and 1455. Half of these

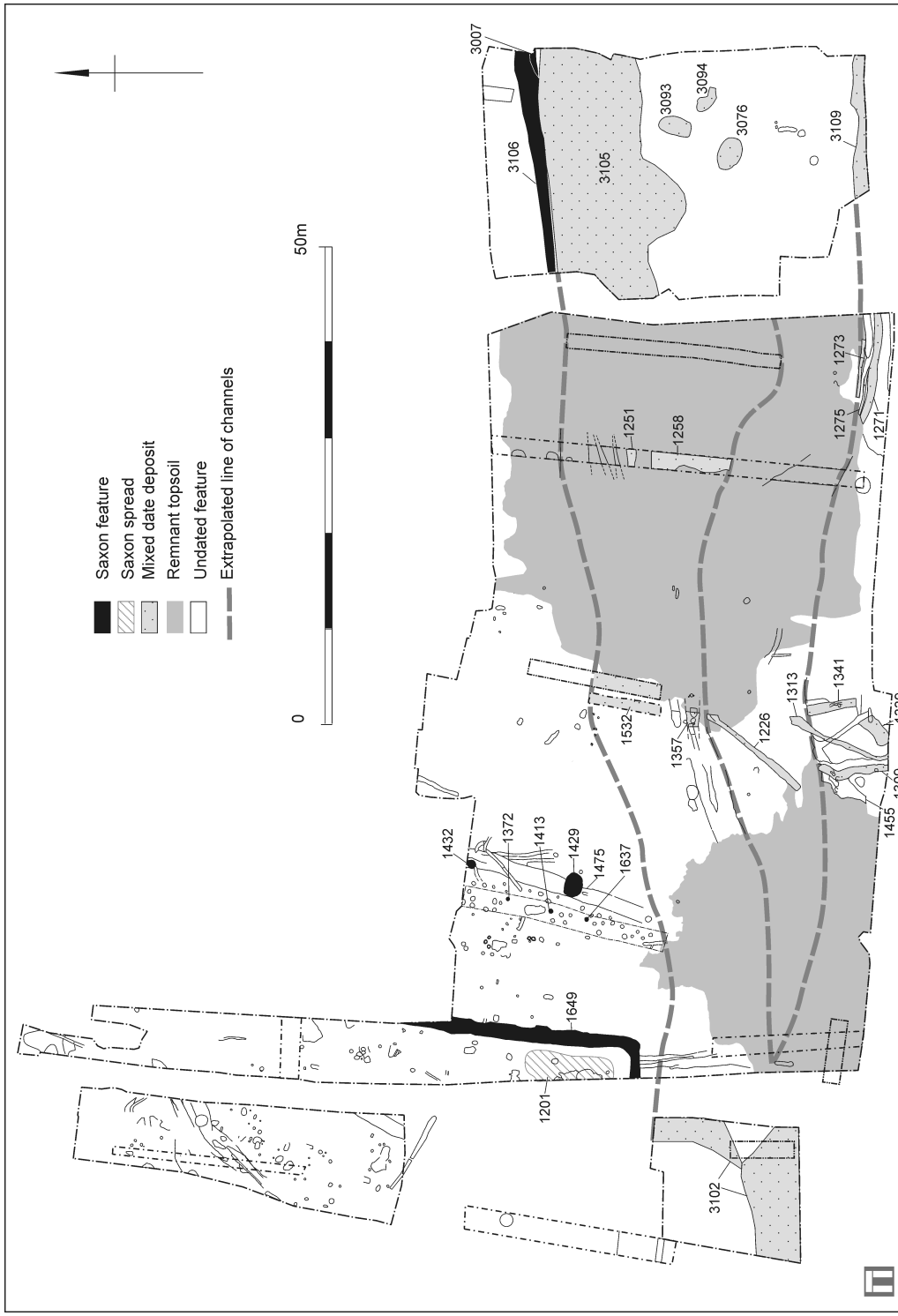

Fig. 6. Saxon features.

features also contained a little medieval pottery and two contained a couple of Roman sherds as well. The poor definition of these features, the mixed pottery dates and the projected alignment of channel 3102/3109 strongly suggest that these are variable natural deposits within the river channel.

A total of 230 sherds (2440 g) of Saxon pottery was recorded. The material from posthole 1413 (and from other contexts on the site) is of particular interest, as it contains sherds of late Saxon Gloucester limestone-tempered ware (Fig. 8, nos. 11–12, 14) alongside handmade Saxon wares, giving a date in the late Saxon period, i.e. 9th–11th centuries. However, the organic-tempered wares recovered from the site have traditionally been dated, in default of other dating evidence, to the early–middle Saxon period, i.e. 6th–8th centuries. The Bishop's Cleeve assemblage seems to suggest, therefore, that the same potting traditions were continuing into the later Saxon period.

Medieval

There is relatively limited evidence of medieval activity on the site (Fig. 7). Of 74 sherds of medieval pottery recovered, 42 were unstratified. Only three features are considered to be of medieval date: pit 1644 contained 12th-century wares (although it also contained redeposited Roman sherds and a later intrusive piece); pit 1316, cut through one of the arms of the river channel, yielded a single sherd of 11th–12th-century pottery; and posthole 1592 had sherds of glazed Malvernian jug, probably of 13th-century date.

A number of sherds of medieval pottery were recovered from a series of shallow gullies and irregular features close to the southern boundary of the site, all of which contained other pottery sherds of Roman and/or Saxon date. Gully 1313 produced a single sherd of 11th–12th-century pottery; pottery in gully 1341 is also of 12th-century date; and the sherds of glazed Malvernian jug found in irregular feature 1455 are probably of 13th-century origin. The largest group of sherds came from east–west aligned linear 1357 and consisted of a mixture of local wares and regional imports. The mixed date of pottery from these features and their ephemeral nature suggest that all these features are shallow erosion gullies related to the river channels.

Overall the pottery suggests a date of abandonment in the early 13th century. It is dominated by products of the Malvern Chase industries accompanied by other local wares, including vessels from the Herefordshire/Worcestershire area, both glazed and unglazed wares, and from around Gloucester. At least two sherds from a green glazed, decorated jug of Brill-Boarstall type (Buckinghamshire) are also present, one from a layer sealing feature 1455, considered to be a final deposit within the river channel.

Two other objects dating from this period warrant brief comment. Both are architectural fragments recovered from an unstratified mound of rubble during the watching brief. The first is a window mullion in shelly limestone; the second is an arched moulding, possibly a voussoir, in oolitic limestone, with Romanesque style incised chevron decoration. The provenance of both fragments makes it uncertain where they originate, although it is assumed that they derive from a structure (or structures) within the immediate area. The quality of the voussoir suggests high-status secular or religious building.

Post-Medieval

Post-medieval building foundations 3115 with associated ditch 3113 and pit 3111 were discovered during the 2004 watching brief and are of local significance only (Fig. 2).

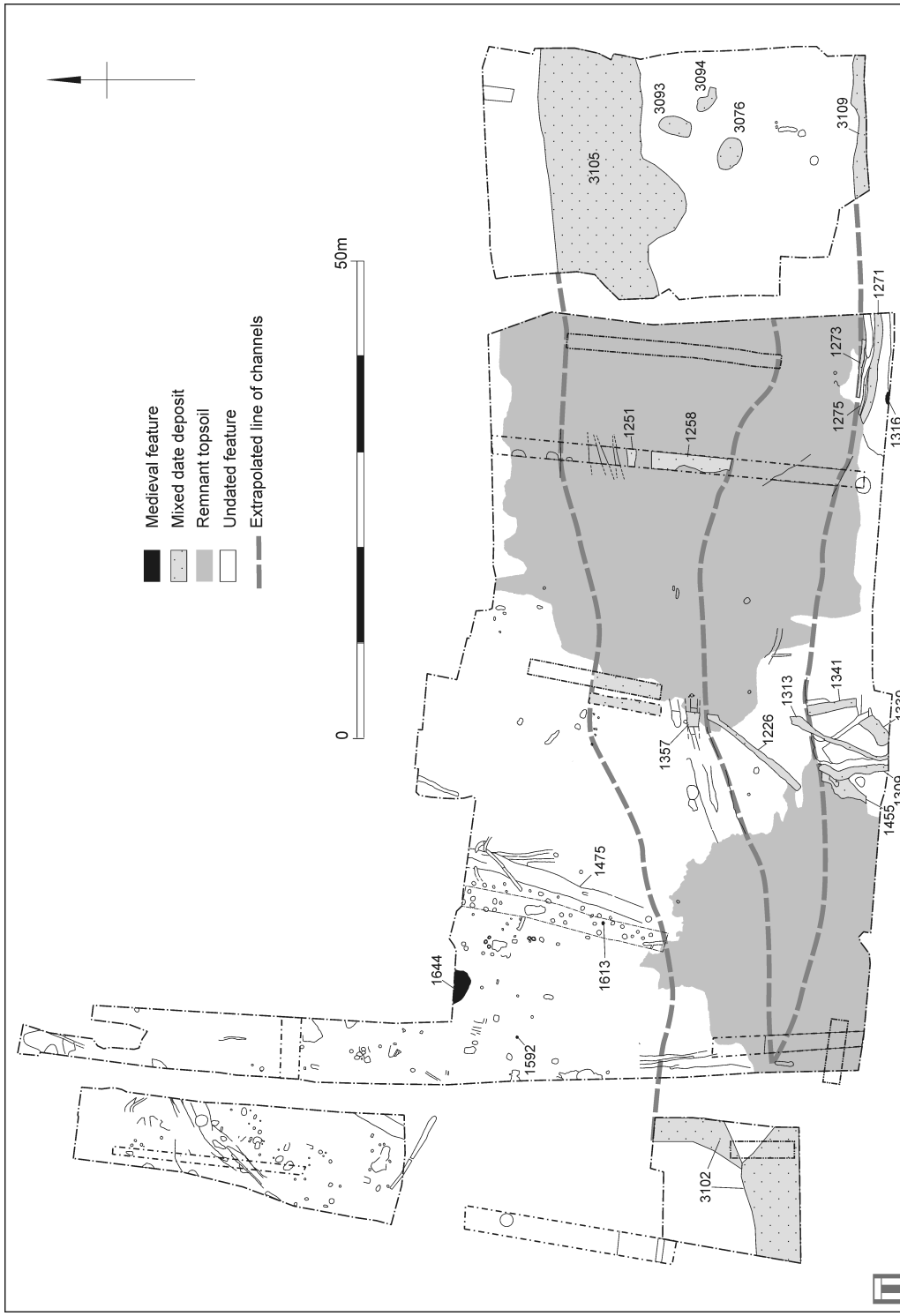

Fig. 7. Medieval features.

River Channels

The archaeological excavations have clearly demonstrated the presence of a river course with at least two separate channels in the south of the site (1240, 1258, 3102, 3105, 3109 and 1532), possibly joining in the south-west corner. Many shallow gullies and irregular features were discovered in trenches machined through the remnant topsoil in this area of the site in 1998. These were initially thought to represent cut archaeological features, but the mixed pottery date from these features and their ephemeral, shallow nature has led to their interpretation as deposits within the river channels, scoured out of the soft sandy natural through water action. This conclusion is confirmed by re-examining the results of the original archaeological evaluation (Fig. 2) of the site (Parry 1993). At the northern end of trench 1 was 'a ditch', 3.55 m wide and 0.95 m deep; trench 2 contained two 'cuts', one a minimum of 13 m wide, and both had a basal fill of 'olive green clay' that 'incorporated large blocks of oolitic limestone and lumps of decaying wood' (Parry 1993). The similarity of the description of these features to deposits later defined by Wessex Archaeology as channels is striking and leaves little doubt that these features and deposits actually represent the river course. This is true also of two adjacent east–west 'ditches' in trench 3 which had 'high sand and gravel content', and in trench 4 'a cut feature' was seen across the length of the trench (Parry 1993).

The river-channel deposits contained a very small number of Iron-Age pottery sherds, not enough to definitely state that the channels were open during this period. Most of the pottery dates to the Roman and Saxon periods, which therefore represents the main periods of the channels' natural infilling. Whilst some of the finds retrieved will have washed into the channels, a large assemblage of Saxon pottery (44 sherds) from one layer (in 3105) and the presence of large blocks of dressed masonry suggest that rubbish was deliberately disposed of, into the channels, at certain times. A small number of medieval sherds of pottery were retrieved from the upper layers of the channels. This implies that the tertiary filling of the channels continued into the medieval period. The presence of remnant topsoil, only found in the south of the site within the area of the channels, suggests that this soil settled into the final depression of the river channels.

The environmental evidence retrieved from channel 3105 shows a small quantity of molluscs characteristic of slow flowing rivers and the sediment description of the monolith sample clearly shows the alluvial origin of the contexts. The nearest modern watercourses are the Dean Brook, *c.*1 km north, and the Hyde Brook, *c.*2 km south. It is feasible that the river channels discovered during the excavations represent the former course of one of these, or of the River Swilgate, of which the former are both tributaries. In summary, the entire south of the site was channelled, marshy land that could not be utilised for settlement between the Iron Age and medieval period. Therefore, this explains the discovery of the peripheries of an Iron-Age settlement and Roman activity in the north–west corner of the site. The main focus of these settlements must be to the north because the marginal channelled land prevented expansion to the south.

SETTLEMENT DEVELOPMENT

Very little can be said about Bronze-Age activity in the vicinity of Bishop's Cleeve as only very small quantities of material have been recorded.

Settlement in the area is apparent from the Middle Iron Age and the results of the present excavation provide substantial evidence for the presence of at least one settlement with associated fields. Up to three roundhouses seem to have been present, together with pits, postholes and

boundary ditches. The presence of other Iron-Age pits and ditches elsewhere in Bishop's Cleeve suggests either that there was a cluster of farmsteads in the vicinity or that the site was on the edge of a more substantial settlement. The pottery evidence may help to resolve this issue. The most common group of wares was the local Jurassic shell/limestone-tempered group, which collectively accounted for 69 per cent of the Iron-Age assemblage by sherd count. The Malvernian wares (MAL RE A and B1), in contrast, accounted for just for 15 per cent and 10 per cent respectively. These proportions differ considerably to those at Gilder's Paddock, where the local Jurassic limestone fabric and Malvernian fabric B1 each accounted for over 40 per cent of the assemblage, with Malvernian A fabrics representing just 7 per cent. As the assemblage is considerably smaller than that from Gilder's Paddock it is difficult to know whether this is a real difference or simply a reflection of the sample. Taken at face value the assemblage from the site appears to have a higher proportion of earlier material, whereas there was more of an emphasis on Middle to Later Iron-Age occupation to the north at Gilder's Paddock. It is likely that both sites essentially form part of the same settlement complex and that the different emphasis of material may reflect differing uses or disposal of material over time.

Evidence of Early or Middle Iron-Age occupation was found at the site of the Saxon cemetery at Lower Farm to the south-west, where just two very fragmented vessels were found (Woodward 2000, 86–7); one in a shell and limestone fabric and the other in a dense sandy ware. Iron-Age pottery, again similar to the Tesco site and Gilder's Paddock, was recovered from Dean Farm (Timby 1999a). No wares of this date were present from the large pottery assemblage recovered from Cleeve Hall (Timby 1999b) or that from Stoke Road (Timby 2002), suggesting the focus of this occupation very much lies in the Church Road area.

Comparable pottery to that from Bishop's Cleeve has been found on many sites in the area. Amongst these are some of the hillforts in the north Cotswolds, such as Uley Bury and Leckhampton (Saville 1984). There are perhaps more examples from non-hillfort open settlement sites such as King's Beeches below Cleeve Hill (Saville 1984, 153–4), Ireley Farm, Hailes, Stanway (ibid. 157), Frocester (Timby 2000), Naunton (Timby in prep) and Lechlade (Timby 2003), of which an increasing number have been excavated in recent years (Moore 2007a–b).

Other finds of Iron-Age date from the site also indicate that the main area of settlement lay not far away. They include quern stones, undiagnostic fired clay, loomweight fragments and a whetstone together with a collection of weaving tools (comb, needles, spindle whorl and triangular loomweight) from pit 2119. As all the latter appear to have been burnt we might imagine that a small domestic accident had occurred close by. Some iron-working slag was recovered and there is some possible evidence for bone working (see below) indicating small-scale craft activities.

There is nothing to indicate any major change in the area of the site in the Romano-British period. No buildings or other structures were recorded though four fragments of tegula, three fragments of imbrex and four fragments of box flue tile were recovered. Although the quantity of pottery and other finds is quite small it is clear that the excavation area lies on the periphery of a small rural settlement of broadly similar nature to that of the preceding period. Continuity of occupation on the site itself cannot be demonstrated but evidence elsewhere in Bishop's Cleeve points towards general continuity with, presumably, the adoption of new products and cultural influences by the existing population.

The Church Road area seems to have been incorporated into a field system associated with that settlement. Iron-Age ditches were recut and some new ones established and spreads of material indicate unspecified activities that included the use of fire and pottery. Some quarrying also seems to have taken place. The pottery assemblage is very much dominated by sherds of Severn Valley ware. Malvernian ware and Dorset black burnished ware are also quite well represented. All three industries are particularly long-lived with pre-Roman origins, and the repertoire of vessels within

the Severn Valley and Malvernian industries tends to be quite conservative. It is thus almost impossible closely to date unfeatured, isolated occurrences of such sherds.

Some non-local products are in evidence. They include Central Gaulish samian, black-burnished ware and products of the Oxfordshire industries (in particular colour-coated wares and white ware) and later Roman shelly ware. Amongst the black burnished ware forms are flat-rim bowls, straight-sided dishes, jars and conical flanged bowls reflecting the 2nd- to 4th-century occupation span. Other wares include local colour-coated ware, greyware sherds from the North Wiltshire industries and micaceous greywares all typical of the later Roman period. Whether any of these indicate direct trade is open to question.

There is, as yet, very little archaeological evidence for the position of the Saxon settlement at Bishop's Cleeve although it probably lies beneath the modern village (above and Aldred 1976). The couple of ditches occurring in the south of the site probably represent some small-scale activity related to continuing, or renewed, agricultural practices and demarcate the marshy channelled land to the south. The Saxon pottery from the site is, therefore, perhaps surprisingly varied with 15 fabrics identified (Appendix 2). The quantity of Saxon pottery is significant and indicates a Saxon settlement within the vicinity of the site. It also implies that the inhabitants of the Saxon settlement were deliberately disposing of their waste into the river channels.

The pottery assemblage is dominated by organic-tempered wares which account for some 52 per cent by sherd count and are probably of local origin. Petrological analysis by Alan Vince (Appendix 2) indicates the presence of both quartz- and chaff-tempered wares that were probably produced at Bishop's Cleeve using clay sources in the Severn Valley to the south of the Jurassic outcrop (i.e. Bredon Hill) and fabrics tempered with Jurassic limestone with granitic inclusions that are likely to have been selected from local gravels or obtained from the Charnwood Forest or a glacial deposit derived from the outcrop.

Limestone-tempered fabrics account for 15 per cent of the assemblage. Other locally available materials include oolitic limestone that would have been available within a mile or so of the village. In addition, sandstone-sand tempered wares, with variable quantities of 'chaff' temper, are present. These fabrics are common in the Anglo-Saxon period in the West Midlands and are typical, for example, of the pottery recovered from Hatton Rock, in the Warwickshire Avon valley. The actual sources, which are probably derived sands rather than the parent rock, are not certain but it is likely that these three fabrics were made using raw materials in the Warwickshire Avon valley or that part of the Severn valley closest to the junction of the two river systems.

Granite-tempered pottery is widely distributed in the Anglo-Saxon period in England, and at present there is no conclusive evidence of how the granite was obtained. However, in this case we can at least exclude the possibility of it being naturally present in the clay or local gravels. Aside from the fragments of acid igneous rock the fabric is almost identical to the five oolitic limestone-tempered fabrics; it contains fossiliferous limestone not noted in those sections and has a calcareous matrix, also not noted in those samples. Without the granitic inclusions the fabric would have been classified as a variant of the 'local' limestone-tempered wares, and this, presumably, is an indication of the source of the clay and most of the temper. Presumably either granite in general, or the Mountsorrel granodiorite in particular, had a symbolic meaning to the potters and users of this pottery.

The large number of distinct fabrics present at Bishop's Cleeve in the Anglo-Saxon period can be interpreted in several ways. There is little reason to invoke a distant source for most of the fabrics and it might be that personal preference or other cultural considerations led potters to choose different materials from within the wide selection available locally. It is difficult to tell whether this is the correct interpretation of the data on the basis of a single site. Another interpretation could be that Bishop's Cleeve was relying on a series of potters located at different

points in the Severn valley and along the Cotswold scarp, and that it is this geographic spread which gives rise to distinct fabric groups.

At least six fabrics have been identified from previous work (Timby 1999a; 1999b) which show parallels with the assemblage recovered here. Broadly these include some coarse quartz sandy wares with sparse organic and/or oolitic limestone and an oolitic limestone-tempered ware which were originally thought to be of early Saxon date, and a fine ware with a high density of organic matter, as fabric SXORG here (see Appendix 2). There are now quite a large number of sites across Gloucestershire which have produced organic-tempered Saxon pottery although few of these can produce independent dating evidence (Timby 1995). Only one other site, Churchdown near Gloucester (Timby 2005), has recently produced sherds GLOS TF41A in close association with handmade Saxon material suggesting a possible overlap of the two traditions. Recent radiocarbon dating of a group of material from Lower Slaughter the only site in Gloucestershire to be independently dated to this period (Timby 2006), has dated contexts containing a diverse range of Saxon handmade wares of the middle Saxon period.

The small number of medieval features identified during the excavations suggests that the site again lies on the periphery of the medieval settlement at Bishop's Cleeve. The finds suggest abandonment in the early 13th century although this is unlikely to reflect the situation in the village as a whole. The very small pottery assemblage is dominated by products of the Malvern Chase industries (GLOS TF40/52, see Appendix 1), accompanied by other local wares. These include vessels from the Herefordshire/Worcestershire area, both glazed and unglazed wares, and from the Gloucester area. At least one green glazed, decorated jug of Brill-Boarstall type (Buckinghamshire) is also present.

AGRICULTURAL LANDSCAPE AND ANIMAL HUSBANDRY

Sampling for environmental evidence was carried out on site and analyses of charcoals (Rowena Gale), mollusca (Michael J. Allen) and charred plant remains (Ruth Pelling) were undertaken, together with examination of the animal bone assemblage. The following discussion has been drawn together by Michael J. Allen, incorporating information from the specialist reports.

From the Early Bronze Age (tree root hole 2222) to the Middle–Late Iron Age (pits 2156 and 2279) there is evidence either of moist conditions locally created by occasional flooding or spring seepage or of the exploitation of riverine resources (reeds for thatching, bedding and lining; alluvial mud for walling and lining; and water for drinking) in the form of the occasional freshwater and amphibious snails (*Bithynia leachi*, *Anisus leucostoma* and *Gravulus albus*) recovered. The area was predominantly open and free from extensive woodland. Cultivation of wet land and the possibility of seasonal puddles are suggested by sedges (*Carex* sp.) and blinks (*Montia fontana* subsp. *Chrondrosperma*), and during the Romano-British period of even wetter, possibly boggy ground by the presence of bog bean (*Menyanthes trifoliata*) in the charred plant record (Table 1). This ties in with the archaeological evidence for the river channels mentioned above.

The Early Bronze-Age evidence is both limited and questionable (see below); charcoal from tree root hole 2222 is largely of shrubby species (including hazel, ash, sloe/blackthorn) which are likely to have grown as an understorey or in marginal woodland or hedgerows. This concurs with the presence of charred sloe stone and hazelnuts. This important evidence suggests that open cleared conditions existed with shrubby vegetation, though there is the possibility of contamination of the assemblage by later material (see below).

Little significant difference can be detected in this general landscape environment from the Iron-Age to Saxon periods. The area persisted as being one of open land and shrubby woodland or

hedgerows with some damper ground and stream banks being colonised by willow, guelder rose and poplar, while the drier calcareous soils supported dogwood, purging buckthorn and wayfaring tree. Much of the charcoal throughout these occupation phases comprised a wide range of trees and shrubs and was predominantly represented by narrow roundwood stems or branches suggesting the collection of local material.

Much of the landscape seems to have been open farmland pasture or arable. Weed seeds of chickweed (*Stellaria media*), fat hen (*Chenopodium album*) and docks (*Rumex* sp.) are common. Extensive grassy habitats are suggested by the presence of vetch/vetchling/tare *Vicia/Lathyrus* sp.) and medick/clover/trefoil types (*Medicago/Trifolium/Lotus* sp.). Evidence for established woodland, or its exploitation, is sparse, and the fact that oak seems to have been used sparingly and highly selectively (see below) may suggest that either extensive oak forest was not present in the immediate vicinity or the majority of the activities did not require oak and other major trees for construction, artefact manufacture or burning.

Agriculture

Even from the Early Bronze-Age there is evidence of cultivated wheat (*Triticum* sp.), probably emmer (*Secale/Triticum* sp.), barley (*Hordeum vulgare*) and oats (*Avena sp.*). However, the presence of charred remains of spelt wheat (*T. spelta*) and stinking mayweed (*Anthemis cotula*) in this assemblage, which are Iron-Age or Romano-British introductions, places some doubt on this evidence (Table 1).

During the Iron Age hulled and free-threshing wheats were farmed, especially spelt (*T. spelta*), a hulled wheat. An increase in leguminous weeds in the Iron Age may be associated with depleting soil fertility, particularly as here it is accompanied by a decrease in nitrophilous ruderal species (i.e. those of nitrogen rich disturbed ground) such as fat hen (Jones 1988).

The Romano-British harvest was more diverse, with oats (*Avena* sp.) as well as wheat and barley being common. The farming regime included autumn sown crops (indicated by *Galium aperine*), and cultivation of heavier clay soils (indicated by red bartsia, *Odontites verna*) probably on the Lower Lias Clay, as well as the lighter sandy soils (*Rumex acetosella*) which developed locally on the Cheltenham Sand. By the Saxon period four major cereals were cultivated (wheat, barley, oats and rye) as well as some pulses. The wheat was nearly all free-threshing varieties, largely bread wheat (*T. aestivum*).

The dominance of spelt wheat in the Iron-Age and Romano-British deposits is commonly seen elsewhere in southern and central Britain, such as in the Danebury environs (Campbell 2000), the Thames valley (Jones 1988; Robinson and Wilson 1987) and Oxford (Pelling forthcoming). Emmer wheat in the Iron Age here is likely to be little more than a weed of the spelt crop. Some barley is present in both Iron-Age and Roman phases and is principally hulled six-row barley typical of these periods (Grieg 1991). A general shift from hulled to free-threshing wheats in the Saxon period is typical across southern and midland Britain.

Livestock and Animal Husbandry

The charred remains indicate open fields. It seems likely that many of these may have been bounded by hawthorn/blackthorn traditionally used to produce thorny stock-proof barriers (Edlin 1949). Hazel, dogwood, *Viburnum*, field maple, purging buckthorn, ivy, elder and willow, all present in the charcoal record, are also common hedgerow species. Indeed the high proportion of shrubby species in the charcoal suggests that hedges were a common element of the landscape.

Table 1. The charred plant remains

Prehistoric and Roman						
	Sample	32	31	25	2	27
	Feature	Pit 2222	Pit 2174	Pit 2119	Ditch 2196	Pit 2133
	Context	2238	2280	2120	821	2132
	Volume	30	30	30	10	30
	Phase	EBA	M–LIA	M–LIA	M–LIA	RB?
Cereal Grain						
Triticum sp.	Wheat, free-threshing short grain	–	6	–	–	5
Triticum sp.	Wheat, cf. free-threshing grain	15	–	8	–	–
Triticum spelta	Spelt wheat grain	–	2	17	–	4
Triticum spelta	Spelt wheat, short grain	–	–	5	–	–
Triticum spelta	Spelt wheat grain, germinated	–	1	–	–	–
Triticum spelta/dicoccum	Spelt/Emmer wheat grain	–	1	6	1	–
Triticum sp.	Wheat, short grain	15	12	14	1	10
Triticum sp.	Wheat grain	6	4	–	5	6
Hordeum vulgare	Barley, hulled asymmetric grain	–	–	–	1	2
Hordeum vulgare	Barley, hulled straight grain	–	–	–	–	1
Hordeum vulgare	Barley, hulled grain	–	2	1	1	5
Hordeum vulgare	Barely grain	1	2	–	8	3
Avena sp.	Oats, grain	2	–	1	–	8
Secale cereale/Triticum sp.	Rye/Wheat grain	1	–	–	–	–
Cerealia indet	Cereal grain	16	24	11	4	29
Cerealia indet	Detached embryo	–	–	1	–	–
	Total	**56**	**54**	**63**	**21**	**73**
Cereal Chaff						
Triticum aestivum type	Free-threshing hexaploid wheat rachis	–	1	2	–	–
Triticum sp.	Free-threshing wheat rachis	–	–	–	–	3
Triticum spelta	Spelt wheat glume base	4	3	6	2	17
Triticum cf. *spelta*	cf. Spelt wheat glume base	–	1	–	–	–
Triticum dicoccum	Emmer wheat glume base	–	–	2	–	1
Triticum cf. *dicoccum*	cf. Emmer wheat glume base	–	–	9	1	–
Triticum spelta/dicoccum	Spelt/Emmer wheat glume base	1	6	32	11	28
Hordeum vulgare	Barley rachis	–	1	–	–	2
Avena sp.	Oats, floret base	–	–	–	–	1
Cereal size	Culm node	–	–	1	–	–
	Total	**5**	**12**	**53**	**14**	**52**
'Other' Economic Plants						
Vicia/Pisum sp.	Vetch/Bean/Pea	–	–	–	–	1
Corylus avellana	Hazel nut shell fragment	1	2	–	–	2
Prunus spinosa	Sloe stone	1	–	–	–	–
Prunus cf. *spinosa*	cf. Sloe stone	1	–	–	–	–
	Total	**3**	**2**	**0**	**0**	**3**

Weeds						
Ranunculus parviflorus type	Small flowered buttercup	–	1	–	–	–
Ranunculus sp.	Buttercup	–	–	1	–	–
Silene gallica	Small-flowered Catchflower	1	–	–	–	–
Stellaria media type	Chickweed	–	1	1	–	15
Caryophyllaceae		–	–	–	–	3
Montia fontana ssp. *chondrosperma*	Blinks	–	–	1	–	–
Chenopodium album	Fat Hen	–	1	9	–	5
Atriplex sp.	Orache	–	1	2	–	9
Chenopodiaceae		–	4	4	–	8
Malva sylvestris	Common Mallow	–	–	–	–	1
Malva sp.	Mallow	–	1	1	–	9
Vicia/Lathyrus sp.	Vetch/Vetchling/Tare	–	2	35	15	20
Medicago lupulina	Black Medick	–	–	3	3	1
Medicago/Trifolium/ Lotus sp.	Medick/Clover/Trefoil	–	4	–	–	19
Leguminosae	Small seeded legume	–	–	14	–	–
Polygonum aviculare	Knotgrass	–	–	6	–	2
P. persicaria/lapathifolium	Red-Shank/Persicaria	–	–	–	–	1
Fallopia convolvulus	Black Bindweed	–	–	1	–	2
Rumex acetosella	Sheep's Sorrel	–	–	1	–	6
Rumex sp.	Docks	–	5	6	15	19
Polygonaceae		–	–	5	–	5
Veronica sp.	Speedwell	–	–	1	–	–
cf. *Menyanthes trifoliata*	cf. Bogbean	–	–	–	–	1
Odontites verna/ Euphrasia sp.	Red Bartsia/Eyebright	–	–	1	–	1
Sherardia arvensis	Field Madder	–	–	1	–	–
Galium aparine	Goosegrass	1	12	1	8	11
Sambucus nigra	Elderberry	–	–	–	1	–
Anthemis cotula	Stinking Mayweed	2	–	1	–	–
Tripleurospermum inodorum	Scentless Mayweed	–	–	1	–	3
Centaurea sp.	Knapweed/Cornflower	–	–	–	–	1
Compositae	Compositae, small seeded	–	–	–	–	1
Carex sp.	Sedges	1	–	5	1	1
Bromus sterilis	Barren Brome	–	1	–	–	1
Bromus subsect *Eubromus*	Brome Grass	1	2	1	1	24
Arrhenatherum elatius	False oat-grass tuber	–	–	3	–	–
Gramineae	Grass, large seeded	–	1	5	2	19
Gramineae	Grass, small seeded	1	4	5	5	15
Indet		3	6	–	4	30
	Total	**10**	**46**	**115**	**55**	**233**

Saxon

	Sample	14	21	12
	Feature	Ditch 1251	Ditch 1454	Channel 1258
	Context	1246	2238	1257
	Volume	30	15	30
	Phase	Sax	Sax	Sax
Cereal Grain				
Triticum sp.	Wheat, free-threshing short grain	–	10	72
Triticum sp.	Wheat, cf. free-threshing grain	3	–	–
Triticum dicoccum	Emmer wheat grain	1	–	–
Triticum cf. *dicoccum*	cf. Emmer wheat, grain	–	–	1
Triticum sp.	Wheat, short grain	4	1	76
Triticum sp.	Wheat grain	–	4	–
Hordeum vulgare	Barley, hulled asymmetric grain	4	1	–
Hordeum vulgare	Barley, hulled straight grain	1	–	4
Hordeum vulgare	Barley, hulled straight grain, germinated	1	–	3
Hordeum vulgare	Barley, hulled grain	5	–	15
Hordeum vulgare	Barely grain	9	–	25
Avena sp.	Oats, grain	–	2	14
Secale cereale	Rye grain	–	–	2
Secale cereale/Triticum sp.	Rye/Wheat grain	–	1	2
Cerealia indet	Detached embryo	–	–	4
Cerealia indet	Cereal grain	12	14	25
	Total	**40**	**33**	**243**
Cereal Chaff				
Triticum aestivum type	Free-threshing hexaploid wheat rachis	–	–	8
Triticum turgidum type	Free-threshing tetraploid wheat rachis	–	–	1
Triticum sp.	Free-threshing wheat rachis	–	–	129
Triticum spelta	Spelt wheat glume base	–	5	–
Triticum spelta/dicoccum	Spelt/Emmer wheat glume base	–	1	–
Triticum sp.	Hexaploid wheat rachis	–	–	1
Triticum sp.	Hexaploid wheat basal rachis	–	–	4
Triticum sp.	Wheat rachis	–	–	6
Hordeum vulgare	Barley rachis	–	–	2
Avena sp.	Oats, floret base	–	–	1
Secale cereale	Rye rachis	–	–	4
S. cereale/H. vulgare	Rye/Barley rachis	–	–	5
Cerealia indet	Indeterminate rachis	–	–	7
Cerealia indet	Indeterminate basal rachis	–	–	5
Cereal size	Culm nodes	–	–	4
	Total	**0**	**6**	**177**

'Other' Economic Plants				
Vicia/Pisum sp.	Vetch/Bean/Pea	–	–	3
Corylus avellana	Hazel nut shell fragment	7	3	10
Prunus cf. *spinosa*	cf. Sloe stone	–	1	–
Prunus sp.	Sloe/plum etc stone frags	–	1	–
Indet	cf. nut fragments	–	–	2
	Total	**7**	**5**	**15**
Weeds				
Silene gallica	Small-flowered Catchflower	–	1	–
Atriplex sp.		3	–	–
Chenopodiacae		–	–	2
Malva sp.	Mallow	1	–	–
Umbelliferae		–	–	1
Vicia/Lathyrus sp.	Vetch/Vetchling/Tare	2	1	5
Medicago/Trifolium/ Lotus sp.	Medick/Clover/Trefoil	1	–	1
Fallopia convolvulus	Black Bindweed	–	–	1

	Sample	14	21	12
	Feature	Ditch 1251	Ditch 1454	Channel 1258
	Context	1246	2238	1257
	Volume	30	15	30
	Phase	Sax	Sax	Sax
Rumex sp.	Docks	2	–	–
Polygonaceae		–	–	3
Odontites verna/ Euphrasia sp.	Red Bartsia/Eyebright	–	1	1
Galium aparine	Goosegrass	9	1	–
Anthemis cotula	Stinking Mayweed	–	2	56
Anthemis cotula	Stinking Mayweed, seed head core	–	–	1
Compositae	Compositae, small seeded	–	–	1
Eleocharis palustris	Common Spikerush	–	–	1
Carex sp.	Sedges	–	1	2
Bromus sterillis	Barren Brome	–	–	1
Bromus subsect *Eubromus*	Brome Grass	–	1	19
Gramineae	Grass, large seeded	–	–	17
Gramineae	Grass, small seeded	2	1	18
Monocotyledon	Ryzome	–	–	1
Indet		–	2	4
	Total	**20**	**11**	**135**

The main domesticates (examined by Adrienne Powell) were cattle, sheep/goat and pig (Table 2), with some horse. In the Iron-Age and Romano-British phases sheep were numerically more important than cattle. Those cattle that were present were mature and probably dairy or draft animals. By the Saxon period, cattle were significantly numerically most important. Both sheep and cattle were predominately adults (in their third year), possibly suggesting that they were flocks

Table 2. Animal bone: relative proportions of the main domestic mammals

	Iron Age		**Roman**		**Saxon**	
	n	%	n	%	n	%
NISP (number of fragments identifiable to species)						
Cattle	15	34	29	34	169	67
Sheep/goat	23	52	40	47	59	24
Pig	6	14	17	20	23	9
Total	**44**		**86**		**251**	
MNI (minimum number of individuals)						
Cattle	2	33	2	22	8	47
Sheep/goat	3	50	6	67	7	41
Pig	1	17	1	11	2	12
Total	**6**		**9**		**17**	

kept primarily for their wool and dairy herds. In contrast, pigs, during the Saxon period at least, were largely killed in or before their second year, probably for their meat.

Farm Conditions

Obviously much of the evidence is that of the wider farmland, but the buildings were scavenged by dogs which are present in the faunal record and are evidenced by the high proportion of gnawing seen on the bones. Scavenging was not, however, restricted to dogs, as rodent gnawing was present in low levels on both Iron-Age and Romano-British bone. Domestic fowl and probably domestic or greylag goose (*Anser anser*) were present in Romano-British and Saxon phases. These were probably penned or kept among the houses. Domestic cat (*Felis catus*) was present in the Iron Age, while either wild or domestic cat was present in the Saxon period.

Farming Activities

Evidence for the processing of harvested crops is particularly prevalent in charred assemblages. In the Iron-Age and Romano-British periods several stages of crop processing were conducted on site and the waste burnt and discarded. Evidence of the final stages – winnowing and sieving waste – in particular is present. The early stages of cereal processing (represented by large chaff elements such as culm nodes, straw and large weed seeds), however, are not evident indicating that this may have occurred in the fields. Although the Saxon evidence is more limited, again, cereal processing on site is evidenced and large dumps of cereal processing waste (chaff and weed seeds) are present. Chaff is sparse, in part because of the free-threshing nature of the cereals cultivated, but some straw seems to have been brought on to site.

Carcasses were also butchered and processed on site: jointing and filleting for consumption with removal of some by-products for other uses are indicated. Butchery of cattle, sheep and pig was undertaken. Two Romano-British horse bones also show butchery evidence; this is likely to have been the result of carcass disposal rather than consumption as this meat was generally not to the Roman taste. Cattle horn cores were sawn (Iron Age), and cattle metatarsal split (Saxon) for extraction of marrow or preparation for bone working.

The presence of red or fallow deer in the Romano-British phase suggests that these were hunted and prepared for consumption.

Apart from preparation of food stuffs, other activities are represented in the environmental record. Although oak charcoal was sparse, 'cokey' material and possible fire-slag within a large Iron-Age spread (layer 815) of mixed large charcoal pieces suggest high temperature combustion. In the Romano-British period oak was selected and used probably for iron working. Iron working requires the use of charcoal (Percy 1864), and the use of dense wood, such as oak heartwood, increases the carbon content per unit volume (Tillman *et al.* 1981); the upper fill of pit 2133 contained large pieces of charcoal, mainly oak, and iron-working slag. Oak heartwood has been recorded from numerous Romano-British iron-working sites in southern England (Gale in prep.), but, in the Forest of Dean narrow roundwood, surprisingly, seems to have been more frequent as at *Ariconium* 1963 and 1993 (Gale unpubl.) and Blakeney (Gale 2000).

CONCLUSION

One or more small agricultural settlements have existed in the vicinity of what is now Bishop's Cleeve since at least the Middle Iron Age. The excavations described here investigated an area that was generally on the periphery of this settlement, adjacent to the river channels, and reflect the changing relationship of buildings and fields within what was probably always a largely self contained farming community. Continuous occupation and land-use cannot be demonstrated but the nature of occupation and associated activities changed little over the centuries with a mixture of arable and pastoral farming in hedged fields accompanied by a limited range of essentially domestic activities, small-scale local craft working and waste disposal.

APPENDICES

Pottery Fabrics by Jane Timby

Methods

The pottery was sorted into fabrics based on the main inclusions macroscopically visible in the pastes. Further subdivisions were made where appropriate based on the size and frequency of these inclusions and using a binocular microscope (x20). The fabric codes used for the prehistoric and Saxon sherds reflects the main inclusions identifiable, for example SA sand, LI (LIME) limestone, IG igneous, OR (ORG) organic, CAL calcite and SH shell. The earlier prehistoric sherds were pre-fixed with the letters EP, the Iron Age with IA, the Saxon with SX and the post-medieval with PM to distinguish the groups, particularly those sharing similar constituents. Most of the Roman wares were coded following the National Roman reference collection (Tomber and Dore 1998). These were supplemented with Gloucester Unit fabric codes and general groups. The medieval wares were coded following the Gloucester Unit Medieval fabric series (prefixed GLOS). Details of these can be found in Vince (1983).

The sorted fabrics were quantified by sherd count, weight and estimated vessel equivalence (Eve) for each context (Table 3). Data for the pottery from the 2004 watching brief, recorded to the same level and using the same fabric series, are held in the project database (Access).

Table 3. Quantification of pottery fabrics

Period	Fabric	Description	No.	%	Wt. in g	%
Earlier Prehistoric	EP1	grog-tempered	10	62.5	155	87.5
	EP2	shell and limestone-tempered	1	6.25	4	2.25
	EP3	limestone and grog-tempered	3	18.75	5	2.75
	EP00	miscellaneous	2	12.5	13	7.5
Sub-total			*16*	*100*	*177*	*100*
Earlier/ Later Prehistoric	OO	non diagnostic crumbs	7		13	
Iron Age	IACAL	calcite-tempered	2	1.2	11	0.5
	IALIME1	oolitic limestone and fossil shell	27	16	485	22.3
	IALIME2	fine limestone and sandstone	2	1.2	99	4.5
	IASH1	coarse fossil shell-tempered	78	46.1	1087	50
	IASH2	finer fossil shell-tempered	9	5.3	60	2.8
	IAORG	organic-tempered	2	1.2	7	0.3
	IA00	miscellaneous	6	3.6	28	1.3
	MALREA	Malvernian rock-tempered	26	15.4	215	9.9
	MALREB1	Malvernian limestone-tempered	17	10	183	8.4
Sub-total			*169*	*100*	*2175*	*100*
Roman	CGSAM	Central Gaulish samian	8	2.4	47	1.3
	DORBB1	Dorset black burnished ware	50	15	421	11.5
	OXFRS	Oxfordshire red-slipped ware	10	3	61	1.7
	OXFWH	Oxfordshire white ware	1	0.3	4	0.1
	OXFWHM	Oxford whiteware mortaria	1	0.3	14	0.4
	MALRO	Malvernian Roman	28	8.4	320	8.8
	SVWOX	Severn Valley ware	210	62.8	2617	71.8
	ROBSH	late shelly ware	3	0.9	7	0.2
	WILRE	Wiltshire grey ware	2	0.6	17	0.5
	GLOS12D	local colour-coated ware	4	1.2	27	0.7
	GREY	miscellaneous grey sandy ware	13	3.9	65	1.8
	GROG	grog-tempered ware	1	0.3	21	0.6
	MICGW	micaceous grey ware	3	0.9	22	0.6
Sub-total			*334*	*100*	*3643*	*100*
Saxon	SXORG	organic-tempered	45	19.6	570	23.4
	SXSAOR1	sandy with organic	27	11.8	173	7.1
	SXSAOR2	sandy with organic	19	8.3	189	7.7
	SXSAOR3	sandy with organic	29	12.6	206	8.4
	SXLIOR	limestone with organic	24	10.4	316	13
	SXSA1	sandy	9	3.9	64	2.6
	SXSA2	sandstone	15	6.5	238	9.8
	SXSA3	sandstone	20	8.7	238	9.8
	SXSALI1	sandy with limestone	1	0.4	20	0.8
	SXSALI2	sandy with limestone	1	0.4	20	0.8
	SXSALI3	sandy with limestone	1	0.4	15	0.6
	SXLIME1	limestone and shell mix	9	3.9	109	4.5

	SXLIME2	oolitic limestone sand	9	3.9	134	5.5
	SXLIME3	oolitic limestone	17	7.4	121	4.9
	SXLIORIG	limestone/organic/igneous	2	0.9	21	0.9
	SXMISC	miscellaneous	2	0.9	6	0.2
Sub-total			*230*	*100*	*2440*	*100*
Medieval	GLOS40	Malvern Chase cooking pot	15	20.3	89	16.7
	GLOS41A	late Saxon limestone-tempered	18	24.3	130	24.5
	GLOS42	sandy ware	8	10.8	48	9
	GLOS43	sand and limestone-tempered	7	9.5	91	17.1
	GLOS44	Minety ware	4	5.4	42	7.9
	GLOS49	quartzite-tempered (Hereford)	2	2.7	16	3
	GLOS52	Malvern Chase glazed ware	15	20.3	92	17.3
	GLOS83	Brill-Boarstall type	1	1.3	4	0.8
	GLOS90	Worcester glazed jugs	2	2.7	6	1.1
	GLOS91	Worcester cooking pot	2	2.7	14	2.6
Sub-total			*74*	*100*	*532*	*100*
Post-Medieval	GLOS54	Herefordshire Border ware	2	4.5	40	5.4
	PMGRE	glazed red earthenware	24	54.6	495	66.3
	PMFEGL	iron-glazed kitchen ware	3	6.8	30	4
	PMREW	red unglazed earthenware	1	2.3	16	2.1
	PMSLIP	slip decorated ware	1	2.3	4	0.5
	PMSTW	English stoneware	2	4.5	59	7.9
	PMNOTS	Nottingham stoneware	2	4.5	12	1.6
	CHINA	industrial whiteware	3	6.8	56	7.5
	PMMISC	miscellaneous	5	11.4	34	4.6
	STAFFS	Staffordshire-type slipware	1	2.3	1	0.1
Sub-total			*44*	*100*	*747*	*100*
Total			**874**		**9727**	

Early Prehistoric fabrics

EPGROG: Light orange-brown ext., black core. Moderately soft paste; moderate sub-angular, light coloured grog, fairly finely crushed <1 mm; rare, fine, rounded, quartz sand. ?Beaker or Food Vessel (Fig. 8, no. 1).

EPGRLI: Orange ext. and ext. core, black int. and inner core. Very vesicular, large voids from dissolved limestone < 4–5 mm; slightly soapy feel; rare rounded iron, sparse sub-angular grog.

EPSHELL: Light brown, black core and int. Soft, vesicular; flat surface voids suggest originally contained fossil shell. In fresh fracture fabric contains badly decayed limestone and other calcareous inclusions, mainly fine but with some larger inclusions up to 3–4 mm in size.

Later Prehistoric fabrics (Iron Age)

IALIME1: Brown to dark grey; generally black core. Moderately hard; common fine calcareous material including discrete ooliths, fossil shell and other fossiliferous debris, mainly <1 mm.

IALIME2: Light brown; finely micaceous clay. Common red sub-angular ferruginous sandstone and iron, 3–4 mm; sparse fine limestone.

IASH1: Hard, patchily fired; often quite thick-walled. Sparse to moderate fossil shell <7–8 mm and other fossiliferous material; rare limestone (Fig. 8, nos. 2–3).

IASH2: As IASH1 but denser, finer shelly fabric.

IACAL: Black. Sparse to moderate fine <1 mm calcite (Fig. 8, no. 4).

IAORG: Dark brown, soapy. Moderate to common coarse organic matter.

IASA1: Brown, grey-black core. Fine, very sandy, texture. At x20 contains sparse ill-sorted, rounded quartz.

MAL RE A Malvernian Group A reduced ware (Tomber and Dore 1998, 147) (Fig. 8, nos. 5–7, 9).

MAL RE B Malvernian Group B1 reduced ware (Peacock 1968). Gloucester Unit type fabric 33. Common to moderate fragments of Palaeozoic limestone (Fig. 8, no. 8).

Roman fabrics

Imports
Central Gaulish samian (CG SAM).
Dorsert black burnished ware (DOR BB1) (Tomber and Dore 1998, 127).
Oxfordshire red-slipped ware (OXF RS) (Tomber and Dore 1998, 174; Young 1977).
Oxfordshire white ware (OXF WH) (Tomber and Dore 1998, 174; Young 1977).
Wiltshire grey sandy ware (WIL RE).
Late Roman shelly ware (ROB SH) (Tomber and Dore 1998, 212).
Micaceous greyware (GLOS TF5) (Ireland 1983, 101).

Local wares
Malvernian rock-tempered ware (MALRO). Wheel made and handmade vessels in reduced fabrics.
Severn Valley ware (SVW OX) (Tomber and Dore 1998, 148–50).
Local brown colour-coated ware (GLOS TF12D) Ireland 1983, 111).
Miscellaneous grey sandy wares (GREY).

Saxon fabrics

The Saxon sherds were sorted into macroscopically into 14 separate fabric groups. A sample of each group, fourteen sherds in all, was selected for detailed fabric analysis (Appendix 2, below) and a full report by Alan Vince is held in archive.

Medieval fabrics

Regional imports (over 20 miles)
Sandy ware (GLOS TF42).
Minety ware (GLOS TF44).
Quartzite-tempered ware (GLOS TF49).
Brill Boarstall type (GLOS TF83).

Local wares
Malvern Chase cooking-pot (GLOS TF40).
Late Saxon limestone-tempered ware (GLOS TF41A) (Fig. 8, no. 14).
Sand- and oolitic limestone-tempered ware (GLOS TF43).
Malvern Chase glazed ware (GLOS TF 52).
Worcester cooking pots (GLOS TF 91) and glazed jugs (GLOS TF 90).

Post-medieval–modern fabrics

Thirty-two sherds of post-medieval recent date are present, mainly types dating from the 18–19th century, notably English stoneware, glazed red and white earthenware, iron-glazed kitchenware, flower-pot and slip-decorated ware.

Catalogue of illustrated sherds (Fig. 8)

1. Carinated bowl. Light orange-brown surfaces, black core. Grog-tempered. Fabric EPGROG. Comb-impressed lines in all-over design, small comb-impressed chevrons on interior of rim has. Pit 2222, context 2238.
2. Simple slightly concave walled jar/cooking pot with undifferentiated rim. Exterior patchy black, brown and red-orange, upper half of interior has blackened residue, lower half black to brown. Fabric IASH1. Pit 2152, context 2154.
3. Straight-sided jar with undifferentiated rim. Brown, dark grey core, Fabric IASH1. Ditch 907, context 906.
4. Small rim sherd from handmade jar. Smooth exterior, traces of incised curvi-linear decoration. Dark grey-brown exterior, brown core with calcite inclusions. Fabric IACAL. Ditch group 2287.
5. Straight-sided jar. Black. Fabric MAL RE A. Two lines of impressed decoration below rim. Pit 2174, context 2176.
6. Straight-sided jar. Impressed 'duck' stamps, fabric MAL RE A. Unstratified in service trench.
7. Straight-sided, handmade jar, slightly beaded rim. Fabric MAL RE A. Layer 1709.
8. Handmade jar. Fabric MAL RE B. Burnished exterior with single burnished wavy line. Pit 1429 context 1482.
9. Handmade bowl. Mid grey-brown, dark grey core. Fabric MAL RE A. Diagonal burnished lines on interior and overlapping chevrons on exterior. Layer 1709.
10. Simple rim handmade jar. Black. Fabric SX SA2. Posthole 1413 context 1414.
11. Large, handmade jar. Fine, micaceous paste, containing limestone and organic matter. Dark grey to light brown exterior, dark grey core. Fabric SXLIME2. Context 1865.
12. Simple everted rim handmade jar, stamped rosette decoration. Red-brown exterior, brown core with orange margins, grey interior. Fabric SXLIME3. Ditch 1607 context 1608.
13. Simple, everted rim, handmade jar. Black. Fabric SXSA2. River channel 1532 context 1368.
14. Cooking pot, sharply everted rim. Slight sooting on rim exterior. Dark brown to grey-black. Fabric GLOSTF41A. Context 1865.

2. Petrological Analysis of Saxon Pottery by Alan Vince

Methods

Polished thin-sections were produced of each of the fourteen samples. This enables the section to be examined using a scanning electron microscope in the future as well as making it possible to study opaque inclusions using reflected light. In addition, each section was stained using Dickson's method. This allows dolomite (unstained) to be distinguished from ferroan (blue-stained)

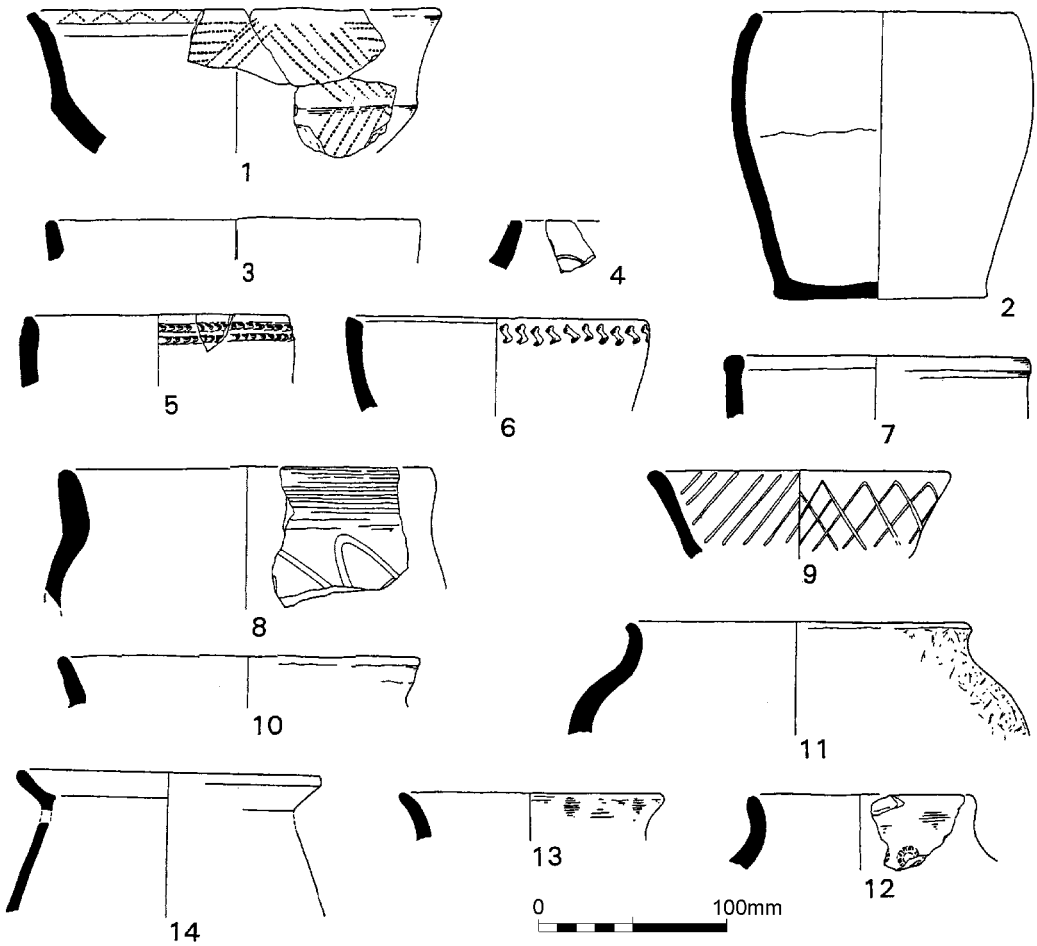

Fig. 8. Pottery.

and non-ferroan (pink-stained) calcite and is invaluable when studying limestone or shell-tempered wares, such as some of those from Bishop's Cleeve.

For each thin-section a qualitative description was produced, taking each inclusion type in turn, in order of frequency, and finally describing the groundmass of material less than 0.1 mm across.

Petrological Descriptions

1. Quartz- and chaff-tempered fabrics (SXORG; SXSAOR1–3).
Four fabrics contained a rounded quartz sand and organic 'chaff' temper. The main differences between the fabrics is in the relative frequency of these two inclusion types. In one case, SXSAOR1, the quartz sand is not only more abundant than in the remainder but has a different grain size distribution. In one, SXORG, the rounded quartz is not noticeable in the hand specimen but in thin-section sparse grains are visible.

Fabric SXSAOR2 (Thin-section No. V798)
Abundant rounded quartzose sand, grains up to 0.5 mm across. The majority of these grains are rounded monocrystalline quartz. A few have abundant parallel inclusions, probably chlorite, which may reflect their origin as a siltstone. Abundant organic inclusions, up to 2 mm long. Some of these retain internal structure and all are surrounded by carbon-enhanced haloes. There is phosphate filling of some of the voids. A single fragment consisting of a ferroan calcite echinoid shell and traces of a ferroan calcite cement, 0.7 mm by 0.3 mm. Also a single rounded opaque grain, 0.5 mm across. The groundmass is variegated and consists of anisotropic oxidized clay minerals and moderate to abundant quartzose silt. A high proportion of the silt grains are rectangular in outline suggesting that they are feldspar. Muscovite laths up to 0.2 mm long are moderately common.

Fabric SXSAOR3 (Thin-section No. V799)
Similar to SXSAOR2. A single rounded fragment of radiolarian chert 1 mm long was present and the matrix was not variegated. The chert is unlikely to reflect a significant difference but the clay matrix might well.

Fabric SXORG (Thin-section No. V796)
This sample contained the same mixture of organic and quartzose inclusions as SXSAOR2 and SXSAOR3 but in this case the organic inclusions are abundant and the quartzose sand sparse. The matrix is not variegated and contains quartz and muscovite silt as in the other two thin-sections.

Fabric SXSAOR1 (Thin-section No. V797)
Abundant quartzose sand. The larger grains are rounded, ranging up to 0.5 mm across, but the most are subangular and less than 0.2 mm across. Sparse rounded opaque grains up to 1 mm across are present. Sparse organic inclusions are present. The matrix is opaque, probably as a result of carbon rather than the firing temperature. Phosphate fills the numerous laminae.

These four fabrics were probably deliberately tempered with mixtures of organic material and quartz sand. The organic material may have been in the form of dung or chaff but is certainly not monospecies, nor does it seem to consist solely of glume fragments. The former interpretation is, therefore, preferred. The sand is similar to those found in the Severn Valley, from the Worcester area to the south of Gloucester (and quite possibly further afield in either direction). The only exception is SXSAOR1, where the sand appears to be a mixture of rounded grains of similar type to those in the other three samples and a subangular fine sand. There is also no sign of the quartz silt and muscovite which characterises the ground mass of the other samples.

The remaining clay matrices are comparable with samples of Middle and Upper Lias clay from the Severn Valley. Taking these features together suggests a source or sources in the Severn Valley to the south of the Jurassic outcrop (i.e., Bredon Hill). The fabrics could therefore have been produced at Bishop's Cleeve itself. Whether SXSAOR1 is significantly different in source is uncertain.

2. Sandstone-tempered fabrics (SXSA1–3) (Fig. 8, nos.10, 13) (Thin-sections Nos. V807–9)
Three samples had fabrics characterised by a quartz sandstone-derived sand. In each case the sand has very similar characteristics: larger fragments consist of sub-rounded quartz, and occasional orthoclase feldspar and opaque grains, cemented with a light-coloured clay (probably kaolinite). Some of the grains have evidence for overgrowth, with the original grain having a cloudier texture than the outer layer. Individual grains range up to 0.7 mm across and the largest rock fragments

are *c*.1.5 mm across. Sparse muscovite sheaves, up to 0.3 mm long, and a single rounded fragment of a quartz-mica schist 0.7 mm long may also have originated in this sandstone or may be detrital grains from some other source (there was no muscovite in any of the rock fragments present). Rounded fragments of a finer-grained sandstone, up to 1 mm across with grains *c*.0.1 mm across, were also present.

The section of SXSA1 also contained fragments of rounded non-ferroan calcite, in one case with possible dolomite veins/replacement. These ranged up to 0.5 mm across but were mainly less than 0.2 mm. The section of SXSA2 contained moderate organic inclusions, several mm long, and contained less quartzose sand than the other two samples.

The groundmasses of the three fabrics were very similar. They were variegated in texture and consisted of variable quantities of quartz silt, up to 0.1 mm across (and no muscovite, demonstrating that the muscovite entered these fabrics with the sand fraction). The clay matrix was anisotropic. Laminae were often filled with a brown phosphatic deposit, sometimes intermixed with ferroan calcite.

Sandstone-sand tempered wares, with variable quantities of 'chaff' temper, are common in the Anglo-Saxon period in the West Midlands and were typical, for example, of the pottery recovered from Hatton Rock, in the Warwickshire Avon valley. It has in the past been assumed that the sandstone sand, which ultimately derives from Carboniferous and Triassic sandstones, is local to the Avon valley but this has not actually been tested through sampling of local sands. Furthermore, it is not clear how the composition of quaternary sands varies where the terraces of the Warwickshire Avon and the Severn Valley meet. In the Gloucester area, however, the sands are very similar to the rounded quartz sands found in Worcestershire. Thus, it is likely that these three fabrics were made using raw materials in the Warwickshire Avon or that part of the Severn Valley closest to the junction of the two river systems.

3. Jurassic limestone tempered with granitic inclusions (SXLIORIG) (Thin-section No. V800)
The thin-section of this fabric contained a mixture of inclusions of which the most common were organic inclusions several mm long, many of which survived in a carbonised state, often surrounded by phosphate deposits. Rounded limestone inclusions up to 2 mm across were the next most common. These were of two different lithologies, both composed of non-ferroan calcite: fossiliferous limestone and oolitic limestone. The ooliths were formed of micrite casings often with other broken ooliths as their cores. The porous matrix consists of clay and fine-grained calcite with some sparry calcite crystals filling the larger pores. Sparse rounded quartz grains up to 0.3 mm across were present and sparse angular fragments of acid igneous rock, up to 1.5 mm across. One of these was a composite rock fragment consisting of quartz, orthoclase feldspar and biotite and the remainder were feldspar or feldspar/quartz intergrowth. The groundmass was variegated and contained abundant ferroan calcite inclusions, probably microfossils.

The rounded quartz sand and the limestone fragments are similar to those found in calcareous Severn Valley sands, for example in the vicinity of Gloucester. The calcareous clay matrix is also likely to be of local origin, for example the Lower Lias or an alluvial clay. However, although acid igneous rock is sometimes found in Severn valley sands it is rare (if not impossible) to find such a high proportion of igneous rock inclusions as are present in this sample. Furthermore, the presence of biotite and the absence of gneiss fragments precludes an origin in the Malvernian rocks of the Malvern Hills. It is likely, therefore, that the acid igneous rock fragments were selected from the local gravel and added as deliberate temper (some of the fragments had thin wedge-shaped cross-sections, such as one might find produce by deliberately chipping or perhaps fire-cracking). Alternatively they might have been obtained from the Charnwood Forest, or a glacial deposit derived from that outcrop.

Granite-tempered pottery is widely distributed in the Anglo-Saxon period in England and at present there is no conclusive evidence for how the granite was obtained. However, in this case we can at least exclude the possibility of it being naturally present in the clay or local gravels. Presumably either granite in general, or the Mountsorrel granodiorite in particular, had a symbolic meaning to the potters and users of this pottery.

4. Organic tempered fabric with limestone (SXLIOR) (Thin-section No.V804)
The thin-section revealed a fabric containing abundant organic inclusions, with some phosphate filling of their voids and with darkened haloes surrounding the voids (caused by the redeposition of carbon). In addition, moderate fragments of thin-walled bivalve shell, echinoid shell and echinoid spines were present. The bivalve shells were composed of non-ferroan calcite or dolomite and were usually coated with fine-grained ferroan calcite. None of the echinoid shell or spine fragments were similarly coated, however. The groundmass consisted of quartz-free clay with sparse muscovite laths and abundant fragments of ferroan calcite, up to 0.1 mm across. A single rounded fragment of fine-grained sandstone, 0.4 mm across, was present.

The organic inclusions are clearly 'chaff' temper added by the potter. However, the status of the remaining inclusions is unclear. It might be, for example, that the parent clay contained lenses of bivalve shell and other fossils within a ferroan calcite matrix, or it might be that these fossils were derived from a shelly limestone and are present as detrital grains in the clay. Given the nature of the local geology it is likely that the former interpretation is correct. The clay matrix itself is probably a Jurassic clay or derived mainly from the reworking of such a clay.

5. Oolitic limestone-tempered fabrics (SXSALI1–3, SXLIME2–3)
Five fabrics contained rounded fragments of oolitic limestone as their principal inclusion. However, in each case less common inclusions or characteristics could be used to distinguish the individual fabric.

SXSALI1 (Thin-section No. V801)
In addition to oolitic limestone the thin-section revealed sparse organic inclusions and moderate rounded quartz grains up to 0.3 mm across. The groundmass consisted of quartz-free anisotropic clay minerals with sparse laths of muscovite up to 0.1 mm long.

SXSALI2 (Thin-section No. V802)
This fabric contains organic inclusions, no rounded quartz but moderate quantities of subangular quartz. The clay matrix, however, is quartz-free with sparse laths of muscovite up to 0.1 mm.

SXLIME3 (Fig. 8, no. 12) (Thin-section No.V805)
In thin-section this fabric has a similar appearance to that of SXSALI1 (V801) except that there are no organic inclusions. The oolitic limestone inclusions are particularly well preserved in this section and can be seen to be composed of non-ferroan calcite with sparry ferroan calcite cement. There is some evidence for dolomitic replacement of both calcites.

SXLIME2 (Fig. 8, no. 11) (Thin-section No. V806)
The groundmass of this fabric consists of abundant angular quartz grains mainly up to 0.1 mm across but with some larger (*c*.0.2 mm). Sparse rounded fragments of a siltstone with similar quartz inclusions were present and ranged up to 2 mm across.

SXSALI3 (Thin-section No. V809)
This fabric has a similar appearance to SXLIME2 in thin-section but contains rounded quartz grains up to 0.3 mm across, absent from that fabric.

There appears to be a fundamental difference between those fabrics with silty/fine sandy groundmasses, which both contain siltstone fragments, and the remainder. The groundmass of the remaining fabrics is similar to that of Middle Lias Clays along the Cotswold scarp whereas the coarser texture of the silty/fine sandy fabrics may be indicative of a source in the upper Lias. It may be that the siltstone fragments are from the Upper Lias but no samples of the outcrop were available to the author. These two beds outcrop next to each other on the scarp with lower Lias forming the base of the valley. The rounded quartz sand found in both groups is typical of that found in the Severn valley terraces. There seems little doubt, therefore, that these fabrics were produced close to the Cotswold scarp and could therefore have been made with raw materials available within a mile or so of the site.

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Archive

The full archive is held at Cheltenham Museum (Accession No. 1997.199).

The following specialist archive reports associated with this paper are available on demand from Wessex Archaeology: postmaster@wessexarch.co.uk

Allen, M.J. 'Mollusca from Bishop's Cleeve'.
Gale, R. 'Bishop's Cleeve, Gloucestershire: charcoal'.
Loader, E., and Mepham, L. 'The Small Finds from Bishop's Cleeve'.
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