Excavations on the claylands at Caldecote, 9km to the west of Cambridge, revealed the almost complete ground plan of a late Iron Age banjo enclosure and associated settlement dating to between c. 100–75 BC and AD c. 50. A banjo enclosure is defined as a small enclosure with a narrow approach way consisting of parallel ditches (Perry 1982, 57–59). Although this type of monument has been occasionally identified as far north as Cleveland and Yorkshire most examples are concentrated in the southern counties of England, with the greatest number found in Hampshire. The Caldecote example is one of only five known in Cambridgeshire and the only one to have been archaeologically investigated.

Introduction

Since 1996 much of the Highfields area of Caldecote has been subject to large scale housing development. In advance of this work extensive archaeological evaluations and excavations were undertaken by Oxford Archaeology East (formerly Cambridgeshire County Council’s CAM ARC; Kemp 1995, Oakey 1996, Leith 1997, Abrams 2000, Kenney 2001 and 2007a) and the Cambridge Archaeological Unit (CAU; Redding 2002). Later investigations in the vicinity took place at Cambourne (Wright et al. 2009) and the A428 dualling scheme (Abrams and Ingham 2008).

Prior to this recent work, there were no entries for the parish of Caldecote in the Cambridgeshire Historic Environment Record (CHER) pertaining to local finds from the Palaeolithic, Mesolithic, Neolithic and Bronze Age periods, while evidence for the Iron Age and Romano-British periods was limited. Collectively therefore, this new work has enabled a major development in our understanding of the historic clay landscape in and around Caldecote. The evidence includes Iron Age settlement, an extensive Romano-British field system believed to be a vineyard, and large swathes of medieval ridge and furrow. This article is designed as a synthesis of the excavated findings and is supplemented by the full analytical report which can be freely accessed at http://library.thehumanjourney.net/view/subjects/UK-Iron-Age.html.

While a broad overview of the work at Caldecote has been published (Kenney 2007b), this report focuses in more detail on the banjo enclosure and contemporary settlement evidence, presenting the data in its wider landscape context and including significant results from recent aerial photography. The site (TL 354 588, Figs. 1 and 2) lies on some of the higher ground in the parish (at 66–69m OD) where the land slopes gently from north-east to south-west. The top- and sub-soils are poorly drained since the site overlies Pleistocene Boulder Clay geology (British Geological Survey 1975). Within the clay, patches of sands and gravels contain numerous glacial erratics.

The Banjo Enclosure

Limited evidence for early prehistoric activity (Phase 1) consisted of a scatter of Mesolithic flints and an aurochs bone. Many features could not be more closely dated than to the late Iron Age (Phase 2), although the banjo enclosure and some closely associated features have been allocated to subsidiary phases (Phases 2.1–2.5, Figs. 3–5). Pottery from these phases is of middle to late Iron Age type, although it is suggested to be of late Iron Age date (see Sealey below). Subsequent activity dates to the Romano-British period (Phases 3–5). Further details of the earlier and later phases have been published (Kenney 2007b).

Phase 2.1: Pits

Underlying the banjo enclosure was a group of extremely shallow and irregular pits, containing middle Iron Age-type pottery. These may have served as rubbish pits or working areas for the roundhouse within the banjo enclosure, suggesting that the building may have pre-dated the enclosure.

Phase 2.2: Construction and use

In its earliest form, the banjo enclosure comprised a ditch with a ‘V’-shaped profile which formed a sub-triangular feature (each arm being c. 32–41m long and up to 0.90m deep) enclosing an area of c. 812m². The
Figure 1. Site location.
entrances of the approach way were orientated to the north-west, across the natural slope of the land, facing towards a small watercourse.

As in subsequent phases, the approach way ditches were not continuous: each phase of the main enclosure ditches did not quite meet the entrance passage ditches on either side, and other gaps existed further along its length. It is suggested that these spaces would have been fenced with removable wooden hurdles to allow for the corralling of animals.

Located centrally within the enclosure, the roundhouse (Roundhouse 1) measured 12m in diameter, with its 2.7m wide entrance facing north-west, down the approach way. Its presence suggests that initially the enclosure was associated with domestic settlement, although the roundhouse may have pre-dated the construction of the banjo enclosure around it.

Phase 2.3: Re-establishment

During the late Iron Age the initial ‘banjo enclosure’ fell from use and silted up. After a period of time, perhaps several generations, the sub-triangular enclosure was re-established at which time the enclosed area was expanded to c. 1132m² by widening the enclosure on its northern side so that each arm measured between 32–51m. The re-cut ditch was shallower (at 0.50m deep) and had a more rounded profile than in its earlier form. During this phase, the approach ditches had a gap of 9.6m between their termini on the northern side, which may originally have been blocked by fences of which no traces survived. The disuse fill of the ditch contained both middle and late Iron Age-type pottery. The mollusca present in environmental samples indicate that by this date the environment was predominantly cleared of vegetation.

Eleven postholes in a roughly rectangular arrangement were found within the central area of the banjo enclosure where the roundhouse was located. They were either circular or sub-circular in plan, and evidently formed either part of an internal partition within the roundhouse or possibly represent another (simple lean-to) structure unrelated to the roundhouse – the fact that they respected the building footprint suggests it was still visible at the time of their construction. The absence of finds in their fills raises the possibility that the enclosure was not being used for settlement at this time and was perhaps temporarily given over to livestock management.

Two ‘sickle’-shaped ditched features lay just outside the enclosure to the south-east during this phase, and could be the remains (?drip-gullies) of roundhouses or other structures. Their presence suggests that the population may have chosen to live outside the enclosure at this time.

Phase 2.4: Redesign

The banjo enclosure ditch was subsequently re-designed for the third time, very much to its original plan and dimensions. The main enclosure entrance was modified slightly by the creation of short out-turned ‘horns’ and the addition of a fence-line along the inside of the entrance corridor on its north-eastern side.
The new layout again enclosed an area of c. 812m².
Within the enclosure the roundhouse was re-established, centred on the same spot as the original building but exactly 1m greater in diameter than its predecessor (at 13m). The ditch terminals at the entrance on the western side, which were 3m apart, held a deliberately placed deposit of middle Iron Age-type pottery and quern stone, which may have been part of a closure ritual when the site was abandoned.

To the south of this roundhouse and probably contemporary with it was a four-post structure measuring 3.2m x 3.2m to the outside of the postholes, which themselves measured 0.4–0.5m in diameter. Such structures are often interpreted as raised granaries, which would have been especially useful on clay geology where pit-based storage would have been liable to flooding and therefore impractical (Fitzpatrick 1997). An environmental sample from one of the postholes contained a small number of cereal grains.

**Phase 2.5: Destruction by fire and closure rituals**
The final phase of the banjo enclosure was marked by destruction; fills within the ditch were black in many places with charcoal and fragments of burnt daub seen throughout, but most prominently on the northeastern corner. Here a narrow feature 8m long had been dug; this might represent the last phase of infilling, although the steepness of the angle of its sides suggests that it was perhaps a cut feature.

On the opposite (southern) corner of the banjo enclosure lay a large oval quarry pit (Quarry 1). This had a shallow metalled ramp running down into it from the north, typical of small scale quarry pits at this time (Lyons 2004, 17–20). Most of the charcoal fragments recovered from the site came from this feature, and the assemblage includes both upper and lower stones, largely derived from non-local sources in the south of England (see Percival below). A large natural quartzitic boulder lay on the base of the pit; this was so massive that it could not be removed by hand and was machine-excavated. Although probably a glacial erratic found within the local geology, its presence within the base of this pit is intriguing.

**The Surrounding Late Iron Age settlement**
The banjo enclosure was not an isolated feature (Fig. 3). Another roundhouse (Roundhouse 2) lay in the northern corner of the site and appeared to have had at least two phases of construction, both with a similar 15m diameter, although slightly off-set from each other. The earlier curved gully was 7.5m long, with a wide shallow ‘U’-shaped profile. The second construction trench was an interrupted narrow ditch, with a sharper, squarer profile than the earlier footing. On the western side of the roundhouse was an entrance at least 1.7m wide, of which only the southern terminus appeared within the excavated area. There was also a narrow gap between two termini at the southern limit of the roundhouse. The roundhouse gully terminus cut through an oval pit containing numerous sherds of middle Iron Age-type pottery.

Within the roundhouse were eight postholes in a sub-rectangular arrangement with the long axis running north; it is possible that they formed an internal partition within the building(s). All of the postholes were circular or sub-circular with very steep sides. Four of these postholes contained packing stones. The mollusca that were found demonstrated a slight bias towards open country species.

To the south lay a trackway, demarcated by parallel flanking ditches extending over a recorded distance of 60m. Several other small straight ditch or gully features found in this part of the site were probably all that survived of several different enclosure systems. A human cremation burial was found in the ditch closest to roundhouse. It lay within a small patch of charcoal-rich fill: there was no urn, although it is possible that a leather (or other organic) container was used which decayed over time. The environmental sample from the cremation contained charred berry/bramble seeds, which may have been deliberately included in the cremation pyre.

Between the roundhouse and the trackway in the northern part of the site was a large quarry pit (Quarry 2), positioned to extract a vein of sandy material observed in the boulder clay. It is probable that it had a secondary use as a waterhole as the environmental and mollusca evidence indicate that the feature was full of standing water for much of its life and only slowly silted up. It was 17m long, 4.5–5.7m wide and up to 1.8m deep, with steeply sloping sides except on the northern edge where there was a ramp. While conquest period pottery was recovered from the upper fills, the lower deposits contained diagnostic sherds of middle Iron Age-type wares (Sealey, below).

To the west of this quarry lay three small pits, the most significant of which was a shallow sub-circular and flat-based example. At its base lay many stones, some of which were burnt having been deposited from elsewhere rather than burnt in situ.

A third roundhouse (Roundhouse 3), 15m in diameter, lay just to the west of the banjo enclosure. Again, its gully had a ‘U’-shaped profile, with a narrow gap indicating the position of its entrance to the south-west. Adjacent to this building to the south-east lay a second four-post structure. This possible granary measured 3.1m x 3.1m to the outside of the postholes.

**The Finds**

**The Middle and Late Iron Age Pottery**

*by Paul R Sealey*

**Introduction**
A total of 623 sherds of middle to late Iron Age pottery weighing 4474g with an average sherd weight of 7.2g was recovered, selected items being illustrated in Figs. 6–9. The most important single source of this pottery was the ditch of the banjo enclosure, from which 119 sherds weighing 1388g were retrieved. The
gullies and internal post-holes of roundhouses were also significant sources of material.

This pottery was studied in the first instance to elucidate site chronology. A research agenda for the Iron Age in eastern England (Bryant 2000, 14–16) has called for the publication of quantified pottery assemblages and remarked on the lack of such reports. When this report was in preparation, the middle Iron Age pottery tradition in the south of the Cambridgeshire still awaited satisfactory definition (Woudhuysen 1998, 37–8) and Caldecote can usefully contribute towards the elucidation of that tradition. The situation is slowly improving, although little has been published from south Cambridgeshire. Important exceptions include the material from the Hutchison Site at Cambridge itself and from the A428 dual carriageway (Webley and Anderson 2008; Percival 2008), but this part of the county has nothing to compare with two reports on large assemblages of pottery from sites from further north in the Fens (Hill and Horne 2003; Hill and Braddock 2006).

Fabrics
Twenty individual fabrics were recognised amongst the Caldecote assemblage (Table 1): these were defined on the basis of their inclusions and the size of those inclusions.

### Table 1. Pottery fabrics in the Caldecote assemblage.

<table>
<thead>
<tr>
<th>Fabric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFS</td>
<td>coarse flint &lt; 2.0mm + sand</td>
</tr>
<tr>
<td>CH</td>
<td>chalk</td>
</tr>
<tr>
<td>CHS</td>
<td>chalk + sand</td>
</tr>
<tr>
<td>CS</td>
<td>coarse sand &lt; 2.0mm</td>
</tr>
<tr>
<td>FIF</td>
<td>fine flint &lt; 1.0mm</td>
</tr>
<tr>
<td>FIRSV</td>
<td>flint + ironstone + sand + vegetable temper</td>
</tr>
<tr>
<td>FIS</td>
<td>fine sand &lt; 0.25mm</td>
</tr>
<tr>
<td>FISV</td>
<td>fine sand &lt; 0.25mm + vegetable temper</td>
</tr>
<tr>
<td>FS</td>
<td>fine flint &lt; 1.0mm + sand &lt; 1.0mm</td>
</tr>
<tr>
<td>GR</td>
<td>greg</td>
</tr>
<tr>
<td>GRS</td>
<td>greg + sand</td>
</tr>
<tr>
<td>S</td>
<td>sand &lt; 1.0mm</td>
</tr>
<tr>
<td>SCHF</td>
<td>sand + chalk + flint</td>
</tr>
<tr>
<td>SCHSH</td>
<td>sand + chalk + shell</td>
</tr>
<tr>
<td>SCHV</td>
<td>sand + chalk + vegetable temper</td>
</tr>
<tr>
<td>SH</td>
<td>shell</td>
</tr>
<tr>
<td>SHS</td>
<td>shell + sand</td>
</tr>
<tr>
<td>SIR</td>
<td>sand + ironstone</td>
</tr>
<tr>
<td>SV</td>
<td>sand &lt; 1.0mm + vegetable temper</td>
</tr>
<tr>
<td>VCFS</td>
<td>very coarse flint &lt; 4.0mm + sand</td>
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</table>

![Figure 3. Site features by group and phase.](image)
Figure 4. The changing outline of the banjo enclosure.

Figure 5. The banjo enclosure during excavation, looking north.
Chronology

There is nothing in the prehistoric pottery assemblage from Caldecote earlier than middle Iron Age. In fact, most of the Iron Age pottery was middle Iron Age in type, although (as we shall see) sometimes late Iron Age in date. The pottery of middle Iron Age type at Caldecote is a hand-made plain ware which has close typological affinities with contemporary pottery in neighbouring counties. Knowing when this tradition emerged is difficult to establish with any assurance, but the transition from early to middle Iron Age pottery in Cambridgeshire has been variously placed at the beginning of the third century BC or in the second half of the fourth (Hill and Horne 2003, 161; Bayliss et al. 2003, 243). The present author has seen an unpublished fourth-century La Tène I brooch associated with similar middle Iron Age pottery from Boreham in Essex which lends some weight to the earlier of these start dates.

As one moves from the late Bronze Age into the early and middle Iron Age in south Cambridgeshire there is a decline in the quantity of exclusively flint-tempered pottery, and an increase in sand and sand-with-flint temper (Woudhuysen 1998, 36–7). The same is true of Essex (Brown 1988, 269), Suffolk (Martin 1988, 34) and Norfolk (Gregory 1995, 90). Although there was no uniform rate of progression, this trend from flint to sand is typical of much of southern Britain from the middle of the first millennium BC. There were no fabrics at Caldecote tempered exclusively with flint, and fabrics which include flint only account for 4 per cent by weight of all the Iron Age pottery. Middle Iron Age pottery from adjacent sites on the line of the A428 dual carriageway to the north has a quite different composition. There, a fifth of the pottery by weight has fabrics that include some flint. There was nothing present that is typologically Aylesford-Swarling, and so prima facie the A428 pottery appears earlier compared to Caldecote (Percival 2008, 2–3, 6). If we can indeed rely on the incidence of flint as a potential indicator of relative date, this suggests that Caldecote is a developed middle Iron Age tradition that belongs later, rather than earlier in the sequence, beginning – let us say – c. 100 BC.

The Iron Age sequence (Phase 2) was divided into five sub-phases; pottery that could not be assigned to any particular sub-phase has simply been described as Phase 2. Table 2 gives the incidence of the pottery fabrics by sub-phase.

In Essex, Hertfordshire and Bedfordshire middle Iron Age pottery comparable to that found at Caldecote was eventually displaced by wheel-thrown pottery tempered with grog (pellets of crushed pottery). This new departure in ceramics marks the advent of the Aylesford-Swarling or ‘Belgic’ pottery that heralds the start of the late Iron Age. Such pottery is

<table>
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<tr>
<th>Fabric</th>
<th>Phase 2</th>
<th>Phase 2.1</th>
<th>Phase 2.2</th>
<th>Phase 2.3</th>
<th>Phase 2.4</th>
<th>Phase 2.5</th>
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<td></td>
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<td>Sherd weight (g)</td>
<td>Sherd count</td>
<td>Sherd weight (g)</td>
<td>Sherd count</td>
<td>Sherd weight (g)</td>
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<td>38</td>
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</tr>
<tr>
<td>Phase total</td>
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<td>1601</td>
<td>8</td>
<td>30</td>
<td>82</td>
<td>666</td>
<td>137</td>
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</table>

Average sherd weight (g) 5.9 3.8 8.1 6.9 11.0 4.1 7.2
found in cremation graves from as early as c. 75 BC in south-east England but did not become significant on settlement sites until later, replacing middle Iron Age wares c. 50–25 BC (Sealey 2007a, 27–31).

Pottery tempered with grog and with grog-and-sand was present in prehistoric Caldecote; some is wheel-thrown. This is unusual for south Cambridgeshire because the material so far published suggests that the ‘Belgic’ or Aylesford-Swarling pottery there tends to be found in sandy fabrics (Thompson 1982, 7, 17) with grog tempered fabrics in a minority (Hill and Lucas 2003, 220; Hill and Horne 2003, 168; Webley and Anderson 2008, 65).

Wheel-thrown pottery from Fen Ditton near Cambridge is said to have been present in first century BC contexts (Hill 2002, 160), and it might be that early as well at Caldecote. Grog-tempered pottery first appears at Caldecote in Phase 2.2. It peaks in Phase 2.3, only to recede significantly in importance in the next phase. Although the proportion rises in the final Iron Age phase, the tiny size of the Phase 2.5 sample makes it an unreliable indicator of trends in pottery supply and use. In view of what was said above about the start date of ‘Belgic’ pottery in East Anglia, it seems reasonable to put Phase 2.2 in the decades after c. 50 BC and to start the occupation of the site at c. 100–75 BC. Nothing specifically Roman was found in the banjo enclosure features and the farmstead apparently came to an end in the middle of the first century AD.

The occurrence of the incised band in the incidence of grog-tempered pottery at pre-Roman Caldecote (Table 3) is of interest. We have a site where, after an initial adoption of Aylesford-Swarling pottery, the vogue for this new pottery passed, and the existing middle Iron Age tradition reasserted itself. Caldecote is not alone. At nearby Duxford the same phenomenon has been recognised by Sarah Percival (in press). Not until the early Roman period was Aylesford-Swarling re-introduced at Caldecote, when it is present in some quantity in the c. AD 50–125 quarry (Quarry 2). The phenomenon has a direct bearing on the question of how and why the adoption of this new pottery in East Anglia could be so slow and fitful (Hill 2002, 157–8; Sealey 2007a, 30). The steep rise in the shell-tempered pottery there tends to be found in sandy fabrics (Hill and Lucas 2003, 220; Hill and Horne 2003, 168; Webley and Anderson 2008, 65).

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Table 3. Percentages by weight of grog-tempered fabrics in the Iron Age phases.

<table>
<thead>
<tr>
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<th>Fabric GRS</th>
<th>Fabrics GR + GRS</th>
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<tr>
<td>2.1</td>
<td>1.2</td>
<td>-</td>
<td>1.2</td>
</tr>
<tr>
<td>2.2</td>
<td>-</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>2.3</td>
<td>12.5</td>
<td>14.1</td>
<td>20.9</td>
</tr>
<tr>
<td>2.4</td>
<td>10.5</td>
<td>19.1</td>
<td>12.5</td>
</tr>
<tr>
<td>2.5</td>
<td>31.1</td>
<td>20.4</td>
<td>51.5</td>
</tr>
</tbody>
</table>

Fabrication, Typology and Decoration of the Late Iron Age pottery

It appears that the pottery of middle Iron Age type was always hand-made. Although some of the ‘Belgic’ pottery at Caldecote was wheel-thrown, it is equally clear that some was hand-made. Not all sherds from wheel-thrown pots need bear the evidence of manufacture in the way of thrown marks and other features, so it was not possible to establish if each and every sherd was hand-made or wheel-thrown (let alone finished on a turn-table). For this reason no attempt was made to quantify fabrication techniques, however useful such data might have been for clarifying the arrival or adoption of Aylesford-Swarling ‘Belgic’ pottery at Caldecote.

Analysis begins with the survey of middle Iron Age-type vessels; it covers not just middle Iron Age pottery from pre-conquest contexts, but pottery of recognisably middle Iron Age type that was present in the early Roman quarry pit. No complete vessel profile was recovered but the impression given is of an assemblage with some typological diversity. A few necked bowl or jar forms have the slack ‘S’-profile with everted rim above a high shoulder so typical of the middle Iron Age in East Anglia and Essex (Fig. 6, Nos 1–4). Some thick-walled vessels have steep sides with a high shoulder and vestigial neck (Fig. 6, No. 5); sometimes the neck is absent altogether to give a more globular bowl form (Fig. 6, No. 6). More open bowl forms with a rim diameter apparently wider than the base are rare (Fig. 6, No. 7). Vessels with shallow and unembellished necks are well represented (Fig. 6, No. 8). Sometimes a plain rim rises straight from the shoulder with barely any neck constriction at all (Fig. 7, Nos 9–13). Typically rims are simplicity itself: a plain rounded feature, sometimes thickened or swollen at the end (Figs. 7 and 8, Nos 14–15). Other rims are neatly finished with a flat outer edge (Fig. 8, No. 16). One is pinched and tapered (Fig. 8, No. 17). Bases are flat, without exception.

One of the most interesting vessels is the small hand-made bowl or cup in Fabric SHS, from Quarry 2 (Fig. 8, No. 18). The tall neck and carinated body are unique on the site; so too is the decoration, with its combination of grooved lines and double rows of square-toothed rouletting. Such rouletting is nowhere common and one must turn to the stamped Iron Age pottery of the Lincolnshire region to find parallels (Elsdon 1975, 29; 1996, 428–9; 1997, 108; Gregory
Figure 6. Iron Age pottery (Nos. 1–8).

(No. Fabric. Description. Feature (Fill/Cut), Phase)
1. SHS. Grey core with mottled light brown surfaces. Roundhouse 2 (280/279), Phase 2
2. SH. Grey core with mottled light grey and light brown surfaces, possibly burnt. Roundhouse 1 (1023/1025), Phase 2.2
3. S. Dark grey core and surfaces. Banjo enclosure ditch (354/353), Phase 2.3
4. FIS. Black core with dark brown surfaces. Banjo enclosure ditch (1039/1047), Phase 2.4
5. SCHF. Black core with a grey inner surface, the outer surface is brown. There are thick and extensive patches of burnt food residues on the interior. Quarry 2, Phases 2 and 3 (early Roman)
6. FISV. Black core and inner surface, the outer surface is dark brown. There are thick and extensive patches of burnt food residues on the interior. Quarry 2, Phases 2 and 3 (early Roman)
7. SCHF. Black core with a grey inner surface, the outer surface is brown. Pit (283/281), Phase 2
8. GRS. Dark grey core with brown surfaces. Banjo enclosure ditch (285/284), Phase 2.4
and Elsdon 1996, 509, stamp 22). Similar decoration on a pot from Hacheston (Suffolk) has also been recognised as having affinities with Lincolnshire (Arthur 2004, 160, fig.108), and one concludes that the Caldecote pot reached south Cambridgeshire from Lincolnshire as well. M. Brundenell kindly drew attention to two rims from Abington Pigotts with comparable rouletting (Fox 1924, plate V, sherds C and D) that might also be Lincolnshire products.

The Aylesford-Swarling component at pre-Roman Caldecote is represented by a necked bowl with bead rim and a vessel with a thickened rim quite distinct from the other Iron Age rim forms (Fig. 8, Nos 19 and 20). Vessels in this 'Belgic' tradition were more in evidence in Quarry 2. Although most are taken to be arrivals on the site after AD 43, not all of them need be making a few words on their typology appropriate. The assemblage is dominated by necked bowls, some with the corrugations or cordons on the shoulder so common in the tradition (Fig. 9, Nos. 21–23). A jar with pronounced horizontal grooving around the shoulder is the so-called Braughing jar, a common Hertfordshire form (Fig. 9, No. 24). What might be a local Cambridgeshire version of this long-lived form is represented by a globular vessel with horizontal combing (Fig. 9, No. 25).

The decoration of pottery at Iron Age Caldecote is most conveniently approached by considering the Aylesford-Swarling ‘Belgic’ pottery and wares of middle Iron Age type together. It should be made clear at the outset that we are dealing with what is essentially a plain ware tradition. Only three of the 33 rims were decorated (9%); what little decoration there is on rims is confined to pottery of middle Iron Age type. Two have finger-tip impressions along the top and another has straight, incised lines cut across the rim (Fig. 9, Nos 26, 27 and 29). Only 28 of the 623 body sherds (4%) were decorated. Several ‘Belgic’ sherds have combed surfaces; others have single grooves or corrugations and rippled surface mouldings. Incised lines are the only other significant surface decoration on body sherds; the only fabric in which it is common is the shell-tempered Fabric SH. One such sherd from the banjo enclosure ditch is a thick-walled sherd with deep scored tramlines, quite different from the other pottery on the site. It bears every appearance of
Sources of the Late Iron Age Pottery

It is generally suggested that most of the pottery in use on any Iron Age site would have been made in the immediate vicinity, and there is comprehensive ethnographic evidence to support this hypothesis (Hill and Horne 2003, 170; Sealey 2007b, 58). Caldecote lies on chalky boulder clay with veins and lenses of sand and gravel, and the Gault clay outcrops 3.25km to the south-west: both clays could have been exploited for pottery in antiquity. Structural fired clay from the site includes rounded ironstone pellets like those in Fabrics SIR and FIRSV, and suggests that these two fabrics could have been made on site.

The diversity of fabrics at Iron Age Caldecote is typical of sites in south Cambridgeshire and the Fen margins. To some extent this might be attributable to the variety of the geology in the neighbourhood of settlements or to the seasonal occupation of others, where residents brought pots to the site from elsewhere (Hill and Braddock 2006, 177, 188–9). Another possibility is that fabric diversity tells us the pottery came from different sources further afield. Indeed the use of tempers such as crushed burnt flint and grog that are impossible to tie down to a specific source region may have concealed the extent to which pottery was exchanged in the Iron Age (Sealey 2007b, 59). We may have to rely more and more on typological analysis to identify exotic vessels. Caldecote itself has one vessel that reached the site from Lincolnshire (Fig. 9, No.23). The few scored sherds in shell-tempered ware should be seen as imports from the west of the county, where East Midlands scored ware was the dominant ceramic. East Midlands scored ware reached as far west as Shropshire, perhaps as containers for some specialist product like cheese (Elsdon 1992, 84).

Burnt Residues on Late Iron Age Pottery

Three late Iron Age sherds have black deposits adhering to the surfaces on the inside of the vessel; one of them is illustrated (Fig. 9, No.21). These deposits consist of thin patches of matter up to a millimetre or so thick, sometimes with a cracked surface. That these residues were formed in antiquity is apparent as they do not run over the edge of the break on the sherd. This matter gives every impression of being the remains of accidentally burnt or charred foodstuffs and is the clearest evidence for the use to which pottery was put at Caldecote. Eventually the tabulation of data from many different sites may elu-
21. FISV. Black core and surfaces. There are post-firing perforations drilled through the neck. Quarry 2, Phases 2 and 3 (early Roman)
22. S. Light grey core with mottled light brown surfaces. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
23. S. Dark grey core with a brown inner surfaces, the outer surface is black. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
24. GR. Light brown core and inner surface, the outer surface is black. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
25. FIS. Black core and dark grey surfaces. Quarry 2, Phases 2 and 3 (early Roman)
26. SHS. Black core and outer surface, the inner surface is brown. Roundhouse 1 (1023/1025), Phase 2.2
27. FISV. Black core and inner surface, the outer surface is dark brown. Roundhouse 1 (1023/1025), Phase 2.2
28. S. Brown core and surfaces. Roundhouse 1 (274/273), Phase 2
29. CHS. Black core with a brown inner surface, the outer surface is mottled brown and dark brown. Banjo enclosure ditch (362/364), Phase 2.4

Figure 9. Iron Age pottery (Nos 21-29).

(No. Fabric. Description. Feature (Fill/Cut). Phase)
21. FISV. Black core and surfaces. There are post-firing perforations drilled through the neck. Quarry 2, Phases 2 and 3 (early Roman)
22. S. Light grey core with mottled light brown surfaces. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
23. S. Dark grey core with a brown inner surfaces, the outer surface is black. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
24. GR. Light brown core and inner surface, the outer surface is black. Wheel-thrown. Quarry 2, Phases 2 and 3 (early Roman)
25. FIS. Black core and dark grey surfaces. Quarry 2, Phases 2 and 3 (early Roman)
26. SHS. Black core and outer surface, the inner surface is brown. Roundhouse 1 (1023/1025), Phase 2.2
27. FISV. Black core and inner surface, the outer surface is dark brown. Roundhouse 1 (1023/1025), Phase 2.2
28. S. Brown core and surfaces. Roundhouse 1 (274/273), Phase 2
29. CHS. Black core with a brown inner surface, the outer surface is mottled brown and dark brown. Banjo enclosure ditch (362/364), Phase 2.4
cidate the processes involved (Moorhouse 1986, 111). Two of the sherds are from the banjo enclosure: one from the ditch and the second from the south butt end of the round house gully. The third sherd is a large Iron Age vessel from Quarry 2. Pots with burnt residues had been used for cooking and one would therefore expect such vessels to be coarser-tempered utensils that would have been capable of withstanding thermal stress and shock. This was not the case at Caldecote, where the burnt residues are on finer tempered sherds. Moreover the illustrated example (Fig. 9, No. 21) is a thin-walled and delicate pot with decoration, seemingly unsuited to the rough-and-tumble of the cooking hearth. The same apparent mismatch between fabric, form and function has been noted at some other Iron Age sites where burnt residues have been reported (Brown 1991, 286; Hill and Horne 2003, 181). The topic of burnt residues is discussed by the writer in more depth elsewhere (Sealey 2007b, 59–60).

**Querns**

*by Sarah Percival*

The incomplete remains of three saddle and two rotary-type querns, used to process cereal crops, were recovered from Iron Age deposits at Caldecote. Saddle querns were in use from the Neolithic period until the end of the Iron Age (Watts 2002). The fragmentary examples from Caldecote are robust, largely unmodified natural sarsen boulders (probably sourced from local glacial deposits) and as such are not closely datable. A large comparative assemblage was found at the Plant Breeding Institute site at Trumpington, however, which dates the sixth to the third centuries BC (Percival 2004).

The remains of two further querns are imported and consist of an incomplete rotary quern lower stone (a type in use between the late Iron Age and Romano-British periods) and the complete lower and upper stones from another example. These pieces are of greensand from the quarry site on the Hythe Beds at Lodsworth, Sussex (Peacock 1987, 62). Lodsworth querns have also been found at the late Iron Age to Roman settlement of Odell, Bedfordshire (King 1986, 80; Ingle 1990, fig.6) and at Hinchinbrooke County Park, where they were found with pottery dating to the first century AD (Percival 2004).

At Caldecote all of the quern pieces were found in late Iron Age ditches, features cut into ditches, eaves drips and features associated with the end of the active life of the site. The presence of special deposits within site boundaries is well attested and may act as a symbolic marker between wild nature outside and organised habitation inside (Hill 1995) and it is possible that the Caldecote querns are examples of ritual ‘closing’ behaviour.

**Worked Bone**

*by Scott Kenney*

Two worked bone objects came from Iron Age contexts. One was made from a sheep/goat tibia shaft with the distal end shaped and smoothed to form a gouge, while the other was a juvenile cattle ulna with the distal shaft shaped and smoothed to form an awl. Similar finds have been recovered from several other sites in Cambridgeshire; awls may have been used in activities such as leather or textile working (Bailey with Shepherd Popescu 2006, 18).

**Fired Clay**

*by Paul R Sealey*

**Structural material**

Forty-four per cent by weight of the site total of fired clay came from Iron Age roundhouses. Most was of a light brown to pink fabric with chalk and sand, with around a fifth of the total being red with fine sand. There was 235g from Roundhouse 2 in the north-east of the site; another 908g came from the gullies and internal post-holes of Roundhouse 1 within the banjo enclosure.

Only a very few pieces of structural fired clay have wattle impressions, making it clear that wattle-and-daub was not a regular structural component of the buildings at Caldecote. Instead the structural fired-clay is better explained by cob, a building material made from a mixture of water, clay, chalk and straw which could be used for structures without any timber framework (Stead and Rigby 1986, 47–50). Unlike wattle-and-daub, cob is not combustible and so its survival is more precarious (Barford et al. 1996, 327). Cob is seldom reported, and its presence at Caldecote is of some interest. Bearing in mind that so much of it came from the gullies of roundhouses, it is reasonable to think that it derived from the destruction of those dwellings. Houses can be destroyed in fire by accident or through hostile action in warfare. At Caldecote there was no way of telling what lay behind the final destruction of the banjo enclosure, but mindful of pleas to rehabilitate warfare as a major factor in the Iron Age (James 2007), we should at least acknowledge structural fired clay here and elsewhere as potential source material for evidence of prehistoric conflict.

**Fired Clay Artefacts**

The fired clay artefacts from Caldecote consist of loom weights and oven furniture. No complete loom weight was recovered, but pieces of triangular weights of Iron Age type could be recognised as such from the corners and perforations of fragments. Triangular loom weights disappear from the archaeological record soon after the Roman invasion (Wild 1970, 63). They were recovered from a length of roundhouse gully in the banjo enclosure, as well as from other deposits. The loom weights at Caldecote are in the same fabric as the structural cob; both were presumably made on site. Triangular loom weights are common finds across wide areas of south-eastern Britain in the Iron Age where their presence indicates not only the production of woven cloth on site, but access to flocks of mature adult sheep managed for their wool (Luff 1993, 18, 72, 82, 131). It is interesting that
this is not borne out by the faunal remains because most of the sheep/goat present had been slaughtered before their second year.

What is suggested here to be oven furniture consists of a flat plate and a pedestal. The flat plate is represented by five small fragments weighing 41g with a grey core and red-brown surfaces. It is 17.6mm thick with rounded edges and straight sides; there are no signs of perforations. Fragments of such plates are occasionally found in late Iron Age and Roman contexts, where they have been proposed as oven furnaces (Partridge 1989, 152–4; Drury 1978, 114). A length of roundhouse gully in the banjo enclosure produced a fragment of fired clay that had sufficient of the original surface to indicate a rod or bar that expanded at one end to give a flat under surface suggesting a pedestal that supported an integral upper plate.

Zooarchaeological and botanical evidence

Faunal Remains
by Ian Baxter

A total of 938 fragments of animal bone with a weight of 10kg were hand-collected from Iron Age deposits at Caldecote: of these 221 fragments are identifiable to species or a broader taxonomic category.

Analysis of this material has shown that the faunal assemblage is dominated by sheep/goat, which account for 48% by Number of Identified Specimens (NISP) of the main domesticates, while cattle comprise 22% and pigs 20%. The cattle bones derive from both juvenile and adult beasts, while most sheep were slaughtered before their second year. Pig remains are relatively frequent and these animals must have been around two years old when they were slaughtered. The bones recovered are consistent with domestic pigs, with nothing to suggest the presence of wild specimens. Pony-sized equine (Equus caballus) bone fragments account for 9.5% of the material; ages at death range between less than 4½ years and 10 years. This is a small assemblage (with relatively poor preservation) and there is insufficient data for any period to attempt to estimate and compare kill-off patterns for domestic livestock. It can be seen however, that animal husbandry, in particular sheep farming, was consistently practiced at Caldecote in the later Iron Age period.

Plant Macrofossils and molluscs
by Chris Stevens

Amongst the sixty-six environmental samples taken from Iron Age deposits, only three produced evidence for cereals. Notably one included a single grain of barley, Hordeum vulgare sensu lato, while evidence for arable weeds was relatively scarce, and consisted of a few grains of oat and some smaller seeds of the Chenopodiaceae, fat-hen, Chenopodium album and Atriplex. A seed of dock was also recovered, along with seeds of knotgrass, Polygonum aviculare and (probably wild) oats, Avena sp.

The finding of cereals within the samples would tend to point to some domestic activity and the storage of cereals at the site, though whether they were farmed locally is impossible to say. Evidence for the presence of scrub may be due to a lack of activity on the site, or possibly a short-lived occupation where grassland faunas and faunas of disturbed soils were unable to establish themselves. The presence of water-molluscs suggests damp conditions and possibly even some flooding of the site.

Discussion

The discovery of this late Iron Age landscape at Caldecote, including a banjo enclosure, is potentially very important to our understanding of the exploitation of the Cambridgeshire claylands during this period. Until recently it was thought that the claylands were not farmed by the Iron Age peoples (with limited technology to drain and manage this type of land) and that they preferred to only live in the fertile river valleys (Wright et al. 2009, 3). Development in aerial photography techniques and wider excavation however, has proven this not to be the case (Mills and Palmer 2007). Indeed excavations at nearby Cambourne have revealed mid to late Iron Age settlement by farming communities occupying round-houses set within enclosures linked by drove ways to extensive field systems (Wright et al. 2009, vii), while further excavations along the modern A428 revealed at least another four late Iron Age farmsteads in this immediate area (Abrams and Ingham 2008, xii). It is now clear that the settlement at Caldecote was not an isolated community but part of the widespread exploitation of these claylands during the mid-to-late Iron Age when agrarian activity was expanding and previously marginal land could be utilised for the first time with the development of iron tools (Winton 2003, 18, Sharples 2010, 61).

When it was excavated the Caldecote banjo enclosure was thought to be unique in this landscape, but thanks to a continuing campaign of aerial photography, it is now known to be one of at least five in central and south Cambridgeshire (Fig. 2). A circular banjo enclosure at Knapwell (Wright et al. 2009, 2–3, fig. 1; Cox and Deegan 1996), only c. 6km to the north-west of Caldecote has been discovered, while at Longstanton, located c. 13km to the north-east of Caldecote, an Iron Age settlement includes two small banjo enclosures (Evans et al. 2008, p.179, figs. 3.21 and 3.23.4). In addition another banjo enclosure complex has been provisionally identified at Tadlow a little further (c. 18km) to the south-west (Palmer 2009). All five share the same basic design of an enclosure with a ditched approach way, although the main enclosure at Caldecote is triangular, those at Longstanton and at Knapwell are circular and that at Tadlow square. All appear to be part of larger settlements, although from aerial evidence alone it is difficult to tell how
of the banjo enclosure at Caldecote.

It appears that the central and south Cambridgeshire banjo enclosures are not unusual in their diverse design. Despite the deceptively simple description of banjo enclosures, known examples exhibit great variation in size and shape. While many have circular or sub-circular main enclosures, some are ‘D’-shaped, sub-rectangular or irregular and complex. The main enclosure can be as much as 90m in diameter or as small as 35m (Fasham 1987, 61), within which range the Caldecote example (measuring 41m by 32m during its smaller phases and 51m by 32m during its expanded middle phase) comfortably fits. It has been suggested that the Knapwell example at least is comparable in size and shape to those found on clay soils in Northamptonshire (Deegan 2007, 116–117, fig. 55).

The artefactual and ecofactual evidence recovered during this excavation produced some interesting assemblages. Unfortunately environmental evidence is poorly preserved in these soils but some evidence for the presence of cereals has been found suggesting that crops were at least being processed on site (the presence of quern confirms this) and they may have been grown in the vicinity. The animal bones that have survived give a picture of mixed animal husbandry with a particular preference for sheep/goat farming. Sheep and goats are versatile animals that can accept clayland grazing and provide wool, milk and manure (when living) and provide meat, marrow, horn, bone and leather (once butchered). Other animals were still needed for a variety of meat and dairy items, for traction and transport.

It has already been seen from the landscape studies that the community at Caldecote was not an isolated one and both the pottery assemblage (which suggests links to the north (Lincolnshire) and the west and the querns (some of which were imported from Sussex), support this. Trade must have taken place along existing land and waterways and would have relied on the exchange of goods (Hill 2007, 25) as no coinage was recovered.

The changes in the layout to the banjo enclosure at Caldecote (combined with the abandonment of wheelmade Aylesford-Swarling pottery and the re-introduction of the mid Iron Age ceramic handmade tradition) are remarkable, as they show a continuous evolution of a single settlement over several generations - the pottery suggests between c. 100–75 BC and c. AD 50. This evidence for continual redevelopment is not available from aerial photography alone and demonstrates the value of detailed excavation.

Why these changes occurred is not certain; they may have been due to environmental issues such as fluctuating water levels (Wright et al. 2009, xii) or they were perhaps the result of the shifting tribal boundaries and allegiances known to have been taking place in the 'borderlands' of south Cambridgeshire (Evans et al. 2008). During the late Iron Age this area was on the edge of the territories of all of the four major tribes in the region: the Iceni to the east, the Corieltauvi to the west, and the Catuvellauni and Trinovantes to the south. Indeed the presence of several Iron Age
hill forts to the east of Caldecote suggests that a troublesome border may not have been far away. Knight (2007, 202–203) suggests that the re-cutting of existing enclosures could have been a symbolic act. Certainly the structured deposits found at Caldecote would indicate the changes that took place, over a period of approximately 150 years at Caldecote, were worthy of marking by the community that undertook them.

The evidence suggests the settlement at Caldecote should be viewed as only a small part of a wider system of agrarian clayland management at a time when the concept of enclosed property is first being introduced. These changes can be regarded as evidence of a community that was beginning to define its landscape and as the generations passed had the necessary skills to alter its surroundings to survive in a changing physical and political landscape.

Conclusion

At one time banjo enclosures were only identified in the counties of Hampshire, Dorset, Wiltshire, Berkshire and Oxfordshire, although this is now changing, thanks largely to a programme of aerial photography sponsored by English Heritage. New examples are now known in Bedfordshire, Cambridgeshire and Northamptonshire with some identified as far north as Cleveland and Yorkshire. At the time of going to press 142 examples of banjo enclosures have been recorded across the country, the majority being found in the south and south-west (National Monuments Record data). Excavated examples, such as the Caldecote banjo enclosure, are remarkably rare and as such significantly add to the corpus of published data for this monument type.

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