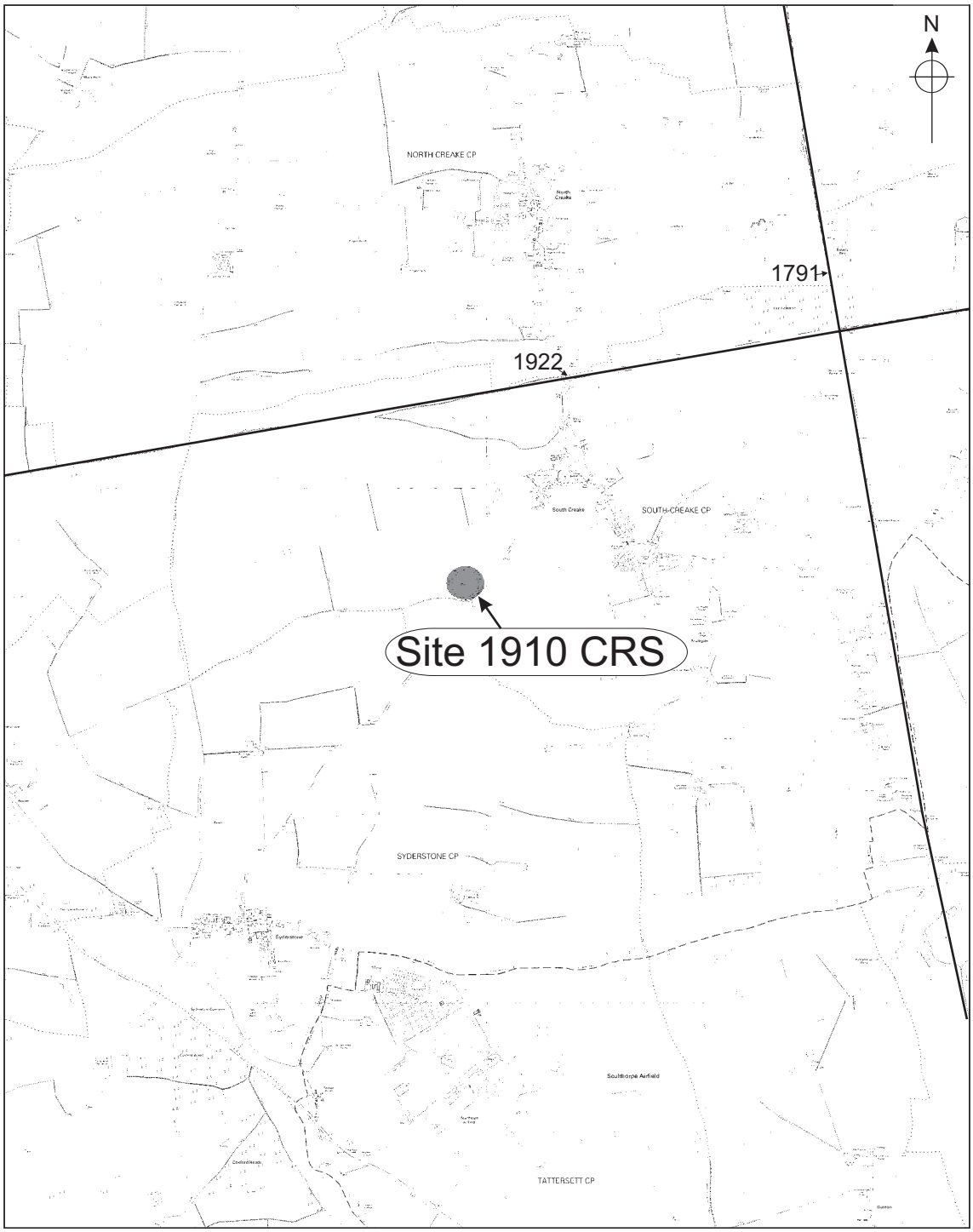


Figure 1. Site location. Scale 1:25,000

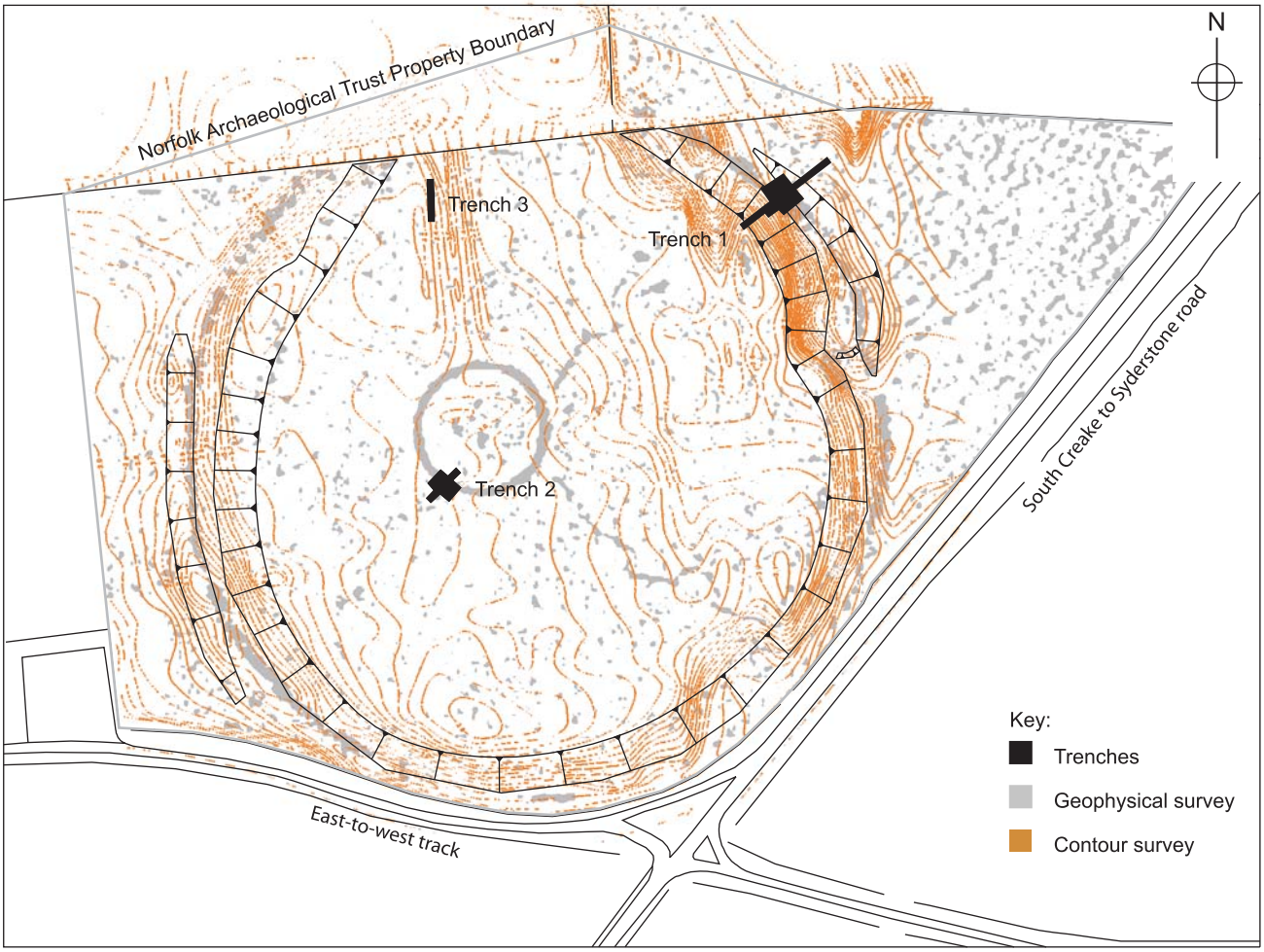


Figure 2. Site plan, with location of trenches 1, 2 and 3, contour survey (1973) and geophysical survey results (2003). Scale 1: 2500

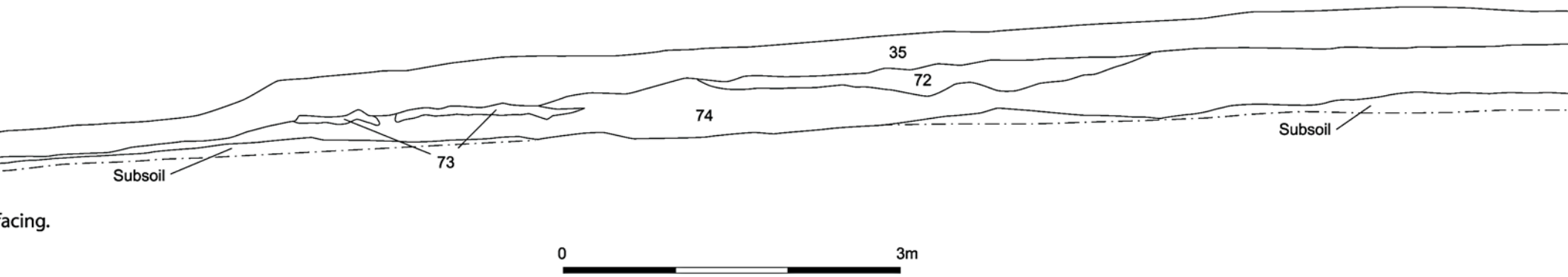


Figure 4. Trench 1, section through bank. Scale 1: 50

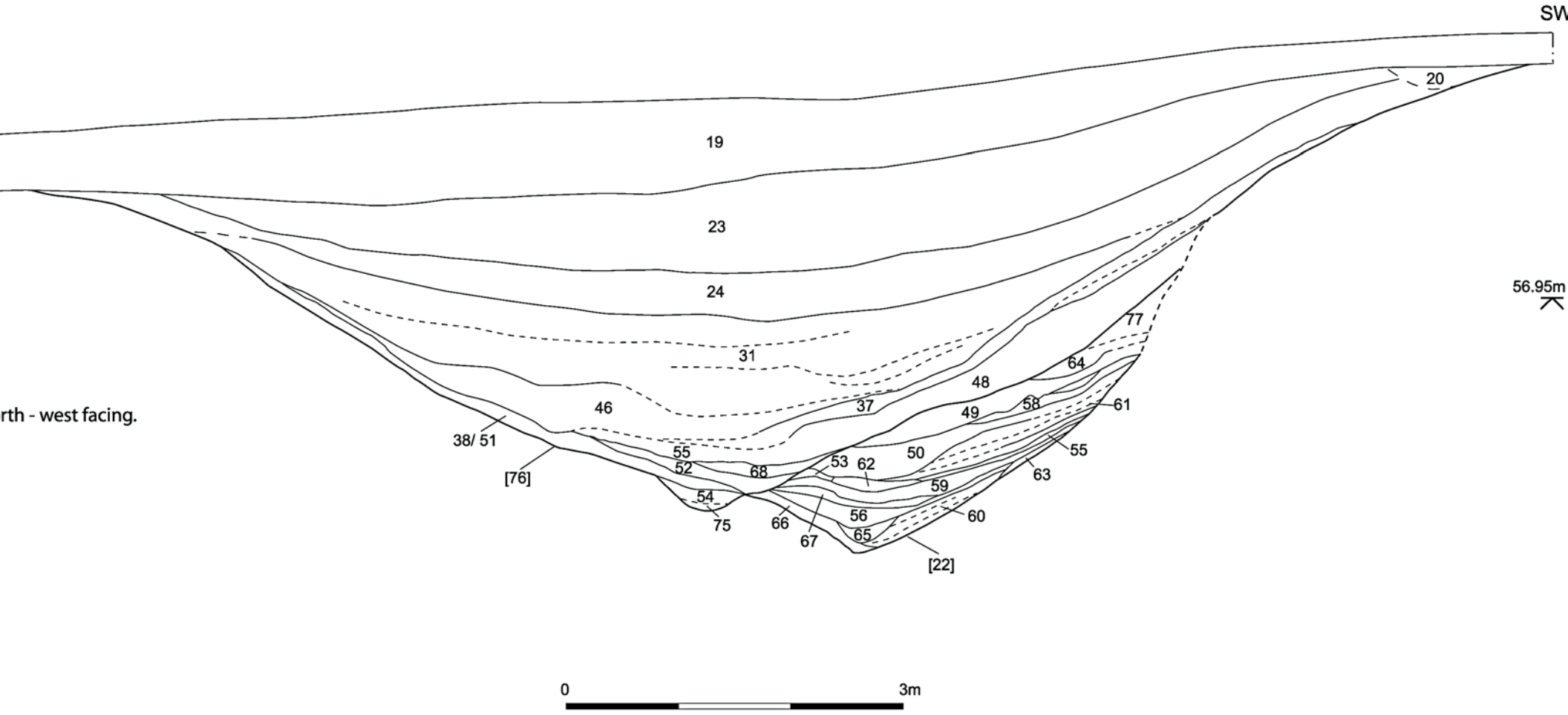
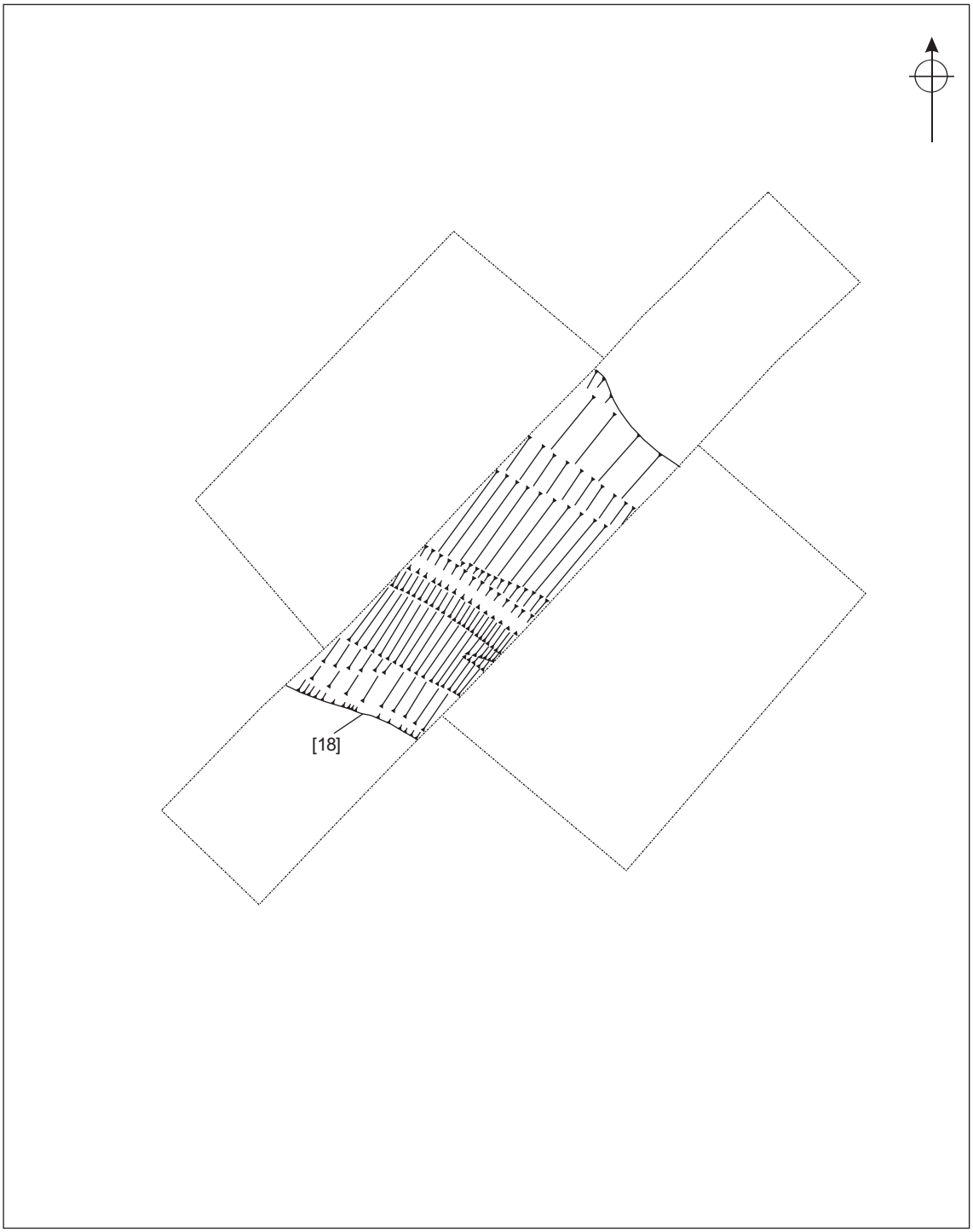


Figure 5. Trench 1, section across ditch. Scale 1: 50



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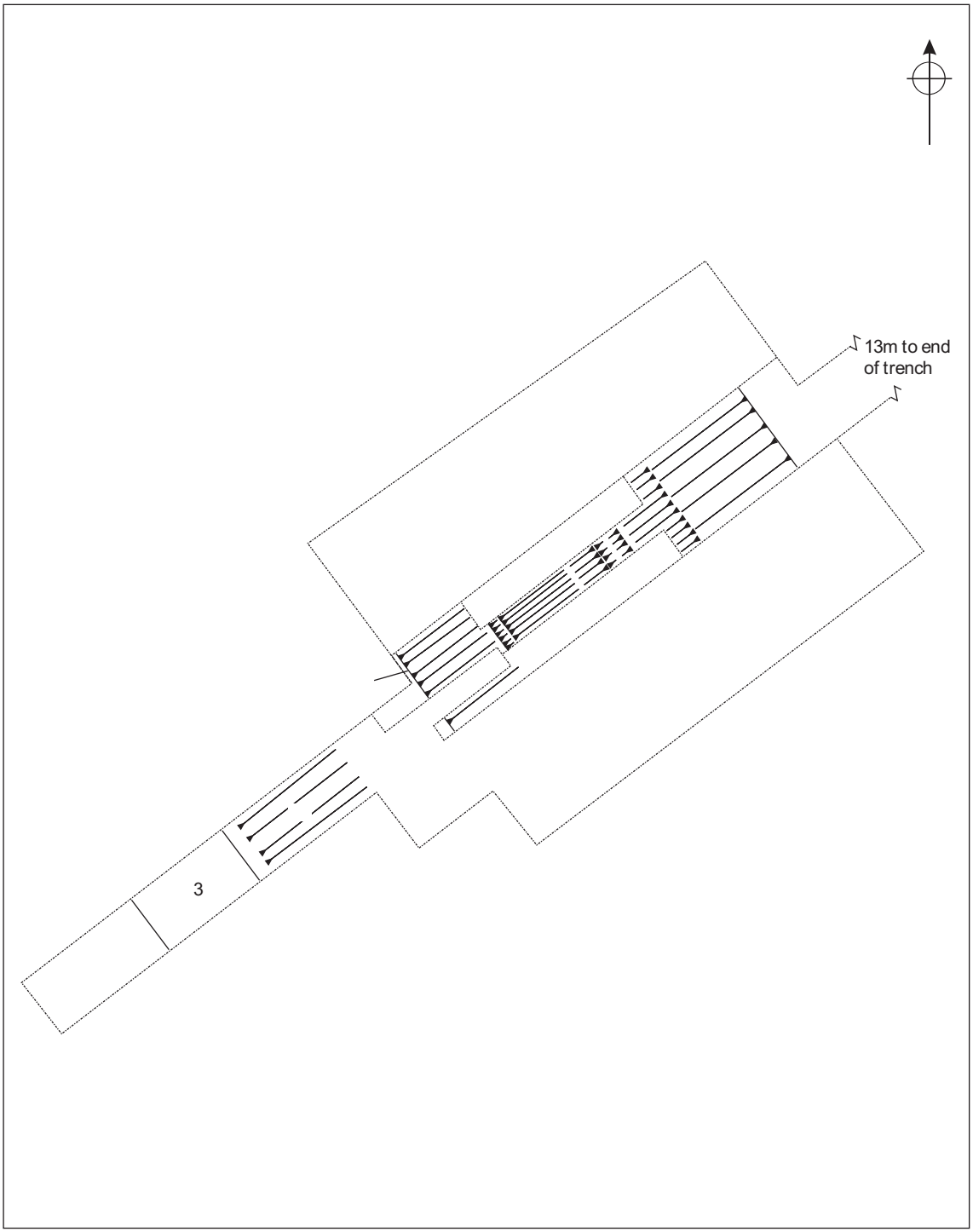

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NORFOLK ARCHAEOLOGICAL UNIT

Report No. 913

An Archaeological Evaluation at Bloodgate Hill, South Creake, Norfolk

1910 CRS

Kenneth Penn

March 2004

Contents

Figures

Location:	Bloodgate Hill, South Creake, Norfolk
Grid Ref:	TF 8482 3525
HER No.:	1910
SAM No.:	30538
Date of fieldwork:	September and October 2004

Summary

An evaluation excavation was carried out on the Iron Age hillfort at Bloodgate Hill by the Norfolk Archaeological Unit on behalf of the Norfolk Archaeological Trust. This work was undertaken during autumn 2003, in advance of the proposed public display of the monument.

Prior to the excavation air photography and geophysical survey were employed. The air photographs indicated the presence of a large ring-ditch within the hillfort enclosure. While the geophysical survey revealed further details of the hillfort including its probable entrances, the ring-ditch (with possible entrance and internal features) and adjoining ditches.

Excavation showed that the hillfort ditch had been recut some time after its initial construction. The bank (slighted in 1827) appeared to survive as a low bank of soil.

The central ring-ditch was of a distinctive V-shape, c*. 3m deep, with evidence for an internal bank. Iron Age pottery through its fills suggested a date for construction, although its function remains unclear.*

A chalky spread behind the line of the former bank was also recorded (representing the slighting of the bank in 1827) which sealed earlier soils. A small pit beneath these soils produced Iron Age pottery and flints.

Environmental evidence was slight but probably indicated an open environment locally. Optical Stimulated Luminescence (OSL) dating of samples from the site produced ambivalent results.

1.0 Introduction

(Fig. 1)

In March 2001 the Norfolk Archaeological Unit (NAU) was invited by the Norfolk Archaeological Trust to submit a Project Design for an archaeological evaluation of the hillfort site (*c*. 3.5ha) at Bloodgate Hill, South Creake, in north-west Norfolk. It was hoped the evaluation would provide archaeological information concerning the survival of subsurface features and deposits. The Project Design for Archaeological Evaluation (Sept 2002, No 1147) prepared in-line with the Outline Brief prepared by Norfolk Landscape Archaeology (31/01/01DG) attached to the letter from Dr P. Wade-Martins of the Norfolk Archaeological Trust (29/03/01 PW-M).

The earthwork is a scheduled ancient monument (SAM) and licence to excavate was granted by English Heritage (14.7.2003).

2.0 Geology and Topography

(Figs 1 and 2)

The site comprises an area of *c*. 3.5ha of arable land on the upper slopes of Bloodgate Hill situated in north-west Norfolk (TF 8482 3525) on the western side of the Burn Valley approximately 900m south-west of South Creake and 1.2km from the river (Fig. 1). It is bounded on all sides by arable land with the South Creake to Syderstone road running along its south-eastern boundary and an east-to-west track along its southern boundary. The site is located at the end of a subdued ridge on one of the highest points on the west edge of the valley and generally slopes towards the north-east and south-west. Surface elevations across the area are typically around 61m AOD, with the hillfort occupying the highest point.

The underlying geology of the site is Upper Chalk overlain by Chalky Boulder Clay of Quaternary date. On the site, a thin layer of yellow-brown sand overlay a white-grey glacial chalk, with pockets of red sandy clay and sands. The soils overlying the chalky till are typical palaeo-argillic brown earths of the Barrow association (Hodge *et al* 1984).

The geophysical survey carried out by GSB Prospection revealed clearly the 'patterned ground' on the gentle slopes to the north-east of the fort, that is, the distinctive alternation of glacial chalk and sands in downslope 'stripes', resulting in the variable natural subsoil encountered in excavation.

The site is a roughly circular ploughed-out Iron Age univallate hillfort with an entrance on the north-east side. The enclosure has an internal diameter of *c*. 210m enclosing an area of *c*. 3.5ha. Aerial photographs show the patchy remains of a ploughed-out flint bank and an infilled ditch. The bank is visible on the surface as a slight rise with the ditch marked by hollows up to *c*. 22m wide on the east and west sides. Aerial photographs of the site also show a ring ditch in the centre of the site with an overall diameter of *c*. 45m.

Documentary sources suggest that the interior of the hillfort has been under arable since the early middle ages with the earthworks levelled at the start of the 19th century (Rickett 1991; Rogerson and Ashley 1997). The earthworks are shown on a map of *c*. 1610, Faden's map of 1797 and the first edition of the Ordnance Survey 1" map of 1824.

The site was scheduled in 1951 (SM Norfolk 226) with the scheduling revised in 1998 (SM 30538).

This report sets out the results of the evaluation excavation with the intention to submit a report with fuller discussion to *Norfolk Archaeology* in due course.

3.0 Archaeological and Historical Background

The hillfort at Bloodgate Hill is one of handful of Iron Age forts known in the county, most of which lie in north-west Norfolk. Sites of this type have also been identified at Warham, Holkham, Narborough and possibly Bawsey, with another at Thetford and one possibly at Tasburgh in the south-west and south of the county. The earthwork at Bloodgate Hill has long been recognised as a hillfort, a view confirmed by examination of air photographs which also revealed a large ring-ditch within the hillfort enclosure, some 45m in external diameter (Edwards 1976, fig. 73, pl.XXXII). The modern landscape in which this ancient monument stands originates in the Late Saxon period or before (Hesse 1992; 1998).

The hillforts of Norfolk and the ancient landscape of the Creakes have been the subjects of recent reviews and discussions that allow the hillfort and associated features to be placed in their immediate context (Gregory 1986 A and B; Hesse 1992, 1998; Rickett 1991; Rogerson and Ashley 1997).

The Norfolk hillforts may all have lain within the territory of the Iceni, but lack of ‘dates’ for the individual earthworks and the possible ‘late’ date for the origins of the Iceni as a unitary tribe hamper understanding of them as a coherent group. (As a univallate hillfort, Bloodgate Hill is usually thought to belong to the earlier part of the Iron Age).

In his review of power and politics in the Iron Age, Davies has stressed the strong regional patterns in material culture found in the later Iron Age. The lack of excavations in these forts and at the smaller rectangular enclosures which characterise this part of Norfolk leave much still uncertain (Davies and Williamson 1999; Gregory and Gurney 1986). An apparent concentration of finds of Iron Age date may hint at some local concentration of power here by the later Iron Age (Green 1993).

The site has a naturally commanding position, with open views to the north and east in particular, where it overlooks the north-to-south Roman Road (3km across the valley to the east) that reaches the sea at Burnham Overy Staithe (HER 1791) This road remains undated but a military origin is not impossible, and may be related in some way to the later phase of use of the hillfort and the construction of the ring-ditch.

Another Roman Road (HER 1922), east-to-west, passes just 1.5km to the north of Bloodgate Hill (as Holgate Road) to make a crossroads with HER 1791 to the north-east.

The hillfort lies within a regular system of parallel east-to-west lanes and boundaries that extends across the Creakes and beyond. This system appears to be related to the line of the Roman roads. Hesse has argued that this pattern is very ancient, certainly of pre-conquest (1066) origin and this must point to an extensive arable landscape in the Creakes by the middle ages. Indeed, in the period 1250-1450, arable farming expanded outwards to take in outlying heath. The lands and strips of medieval manors were mixed in the same furlongs, and this continued into the 16th century, when the Townshend estate became dominant. By the mid-19th century, except for the commons and waste, the parish had been privately enclosed (Hesse 1992; 1998). In Hesse’s reconstruction of medieval land use, it is evident that by the thirteenth century, the interior of the hillfort was divided into two sets of strips, one

east-to-west, the other, north-to-south, named BURGHESDYKE and ABUVEEDIK. The name Bloodgate Hill is first mentioned in 1307-27, although the origins of the name remain unknown.

Using medieval documents and a newly-discovered map of part of South Creake, of *c*. 1610, Rogerson and Ashley (1997) provide more detail on the field systems on Bloodgate Hill. The map depicts the fort (the ditch and probably part of the ramparts): the ditch is labelled BURGHDIKES. A narrow entrance at the east is shown, with the road up from the village labelled 'Blood Gate'. The interior was divided into two parts, with Furlong 36 the south-west quadrant of the hillfort and furlong 37 divided into east-to-west parcels (and described in a terrier of 1590). The north-to-south division between Furlongs 36 and 37 once extended to the north bank of the hillfort; this remained as a slight rise in the surface and was recorded in Lawson's contour survey in 1973 (Rickett 1991, fig. 45). The ring-ditch within the hillfort was not recorded and presumably all trace of any monument had disappeared by then. As Hesse points out, the division of this landscape into arable fields goes back well beyond the records, into the pre-conquest period (Hesse 1992, 1998).

The reduction of the hillfort came in 1827 as part of wholesale improvement, involving sweeping away the small strip fields and the laying out of large new rectangular fields with hawthorn hedges. The local vicar recorded the 'Bank of Burdyke encampment removed and set on land, 1827-28' (Rickett 1991, 62). The area remained in arable agriculture. The Tithe map of 1839 (NRO DN/TA 413) shows the field layout as it is now, although it does not depict the earthwork itself, in Field 10. Field 10 was called 'Burrdyke' and was recorded as arable, in the ownership of the Townshends and with occupier Thomas Seppings.

In the 1870s, *The Raynham estate: Plans of Farms and Cultivation* (NRO BLxd/9) shows the farm in occupation of Mr HV Sherringham, with the field then called 'Burr Dykes', the whole area being down to roots and barley. Again, the earthwork was not depicted.

The present tenant, Mr John Sexton, confirmed that the field had remained arable during his occupation since 1960 and that ploughing had taken place to a depth of 12" (30cms) with subsoiling in the past to a depth of 15" (40cms).

Besides the documentary evidence, the earthwork is depicted in a series of maps, beginning with the map of *c*. 1610 (above). Faden's map of 1797 shows the fort, labelled 'BURROW DYKES'.

The Ordnance Survey map of 1824 (surveyed 1812-1818) shows the complete circuit; the hillfort is depicted and labelled 'Danish Encampment' on 1" and 6" 1st Edition Ordnance Survey maps. Bryant's map of Norfolk of 1826 shows it as 'Burrow Dyke'.

Air photographs taken in recent years have also added to understanding of the monument. Photographs since 1973 have shown the earthwork and revealed the faint traces of the internal ring-ditch (seen as a soilmark in the 1973 geophysical survey). A photograph taken in July 1975 shows the full circuit of the fort, its probable entrance and clearly revealed the ring-ditch at the highest point within the enclosure (Edwards 1976, pl. XXXII, fig. 73). A slightly later photograph, taken in July 1980 shows the same features but rather blurred (Rickett 1991, pls XIX, XX). Together, the photographs show two entrances, one to the east and a possible minor entrance to

the west. Interestingly, none of the air photographs shows the patterned ground recorded in the geophysical survey.

4.0 Excavation and Survey Results (Appendix 1)

Introduction

4.1 Fieldwalking

In May 2001, a fieldwalking survey of the hillfort enclosure and areas to the east and west was carried out by Alan Davison for the Norfolk Archaeological Trust. This was done at 10m intervals across the field, east-to-west, and then north-to-south. Although conditions were good with excellent visibility, finds were relatively few. However, three prehistoric worked flints, six sherds of Iron Age pottery, and three Romano-British sherds (one bowl rim, red-slipped or burnished; one colour-coated; one greyware) were recovered. The six Iron Age sherds found suggest the intermittent use of the fort rather than permanent occupation.

Medeival pottery sherds were also found in a quantitiy and condsition consistent with agricultural use and manuring since the 13th century or before. Thirteen medieval sherds and six later medieval to post-medieval sherds were found.

4.2 The 1973 geophysical survey

(Fig. 2)

In 1973 a geophysical survey was carried out across the interior of the hillfort by Oxford Research Laboratory for Archaeology and the History of Art. This covered an area across the western ditch and bank, besides a small area inside the fort (Edwards 1976, 267, fig. 74) but with inconclusive results (Rickett 1991, 62). The results of this survey are presented as part of Fig. 2.

A contour survey was also undertaken at this time which revealed both a north-east entrance and the north-to-south headland separating two sets of strip fields (Rickett 1991, fig. 45; Rogerson and Ashley 1997).

4.3 Geophysical survey 2003 (Appendix 10)

(Fig. 2)

As part of the programme of works commissioned by the Norfolk Archaeological Trust, GSB Prospection of Bradford carried out another geophysical survey of the interior of the fort in late Summer 2003. This was more sucessful and recorded the hillfort ditch and the ring-ditch already known from air photographs, and several previously unknown features. The results are shown in Fig. 2.

The central ring-ditch had been thought most likely to have been a ploughed-down Bronze Age barrow, but this survey indicated:

- a narrow entrance(?) on the side facing the hillfort entrance.
- two irregular 'ditches' connecting with and respecting the ring-ditch (therefore, presumably still evident as a surface feature).
- internal features, possibly a hearth or postholes or other large cut features.

During the course of the evaluation excavation a metal-detector survey was undertaken over the area of the central ring-ditch. Five metal objects were recovered, as follows: a Roman coin (SF1), an Iron blade? (SF2), a copper alloy object (SF3), a bronze button (modern?) and a fragment of lead waste (modern?).

4.4 The excavation

In autumn 2003, three trenches were excavated at Bloodgate Hill over a period of seven weeks. This followed on immediately from the geophysical survey carried out by GSB Prospection. Machine trenching was employed to open three trenches, in order to investigate the presence or absence, condition, character and date of any archaeological deposits and features. It was intended to clean and sample excavate to determine function, form and a relative date. Soil samples for palaeoenvironmental materials were collected from several deposits for future analysis, with further samples held back for possible radiocarbon dating.

Trench 1

(Figs 2, 3, 4 and 5)

Trench 1 was laid out across the hillfort ditch and bank, still evident as a slight dip and rise, but much reduced since levelling in 1827. The ploughsoil was removed by machine.

The bank

(Fig. 4)

The line of the bank remained as a low rise on the ground, falling away into the dip of the filled-up ditch.

The natural subsoil was a mixed glacial till deposit, mostly of chalk but with pockets of red clay-sand and deposits of bright yellow sand (seen in the north-east part of Trench 1). In places, a thin deposit of a hard yellow sand was also present. Above this lay a thin soil of grey sandy loam ([74]) grading into the material of the putative bank, a grey sandy loam, with a thin lens or scatter of chalk pieces ([73]) across its upper surface. This lens was likely to be a remnant of the bank as it existed in 1827, when it was levelled.and a spread of dirty yellow gritty sand ([72]) deposited on its upper surface. Above this lay the modern ploughsoil ([35]).

The ditch

(Fig. 5)

The uppermost deposits (below the ploughsoil) must represent the levelling of 1827: a sandy loam with packed chalk pieces ([23]). Below this was a succession of soily fills, above basal fills that included a substantial lens of clean blown sand. There were two cuts, ([22] and [76]), indicating a cleaning out of the first ditch and cutting through its silt/clay fills when it had already become silted to a depth of some 2m. Clearly, some time had elapsed before recutting took place. The recut was a little further out, producing a second 'base'.

The earlier of the two ditches ([22]) had been recut by the second ditch ([76]) after a long period, when a number of silty fills had developed. The basal fills of ditch [22] ([60], [62], [63], [65] and [66]) were stony sands and silts mainly, with some chalk

flecking. These fills were followed by a distinctive layer of clean bright yellow sand ([56]), probably blown in from exposed natural subsoil close by to the north-east.

These were followed by several layers of chalky material, ([67], [59], [53] and [62]). Thin bands of silts and gravelly sands ([61]) overlay these, clearly coming in from the bank, and then the beginnings of deeper and more clayey/silty deposits: constituting a mottled clay ([50]), a coarse sand ([58]) and a a silty deposit ([49]). These last were all very silty, with a very small chalk component and few stones; they probably represent a stable period of silting and slow infilling of the open ditch.

At this point, the partially-filled ditch [22] was recut. The new ditch [76] probably cut back into the sides of the earlier ditch to expose fresh faces, possibly deliberately, but was not quite so deep. The base of the new ditch was also a little further out. The basal fills were rather stonier than the fills of the earlier ditch. The primary fills consisted of a silty sand ([75]) and a chalky silt ([54]). These were sealed by a long ‘scree’ of stones ([38])/[51]) coming in from the external side, a lens of chalky silt ([52]) and a small lens of chalky material ([68]).

This marks the beginning of ‘soily’ deposits: a deep layer of dark sandy/silty loam ([48]) and another ‘scree’ of gravel ([37]), coming in from the internal (bank) side. These were followed by a silty sand ([46]), a moist loam ([31]) with packed flints towards the base and then a deep loamy soil ([24]) that was developing in 1827, when [23] was pushed in from the bank in 1827. This deliberate fill ([23]) was a dry loam full of chalk pieces and fragments, coming in from the internal, that is, bank, side. The modern ploughsoil ([19]) lay over this. The concentration of large flints seen at the base of [31] may represent increased agricultural erosion of bank material in the late middle ages or later. The finds (discussed below) suggest that until the medieval period, at least, [46] was probably the uppermost deposit in the open ditch.

Summary of finds.

Finds from the fills of the ditch were very few and came from the upper fills of the recut ditch. Fill [31] produced two medieval sherds, an iron nail, animal bone and flints; above that [24] produced five sherds of medieval to post-medieval pottery, two iron objects, a copper alloy buckle (late 17th to 18th century), a copper alloy button (19th century), and a copper alloy rivet. The 1827 clearance layers ([21], [23] and [26]) produced an iron nail and a fragment of lead. Deposit [48] produced fragments of a human skull, possibly derived from a much earlier burial below or within the bank.

Discussion of Trench 1

The ditch fills record the initial cutting of the ditch [22], followed by a long period of silting and development of soils before the recutting [76] took place, although there was no good dating evidence for the period involved. The fills of the first ditch, very chalky and stony, point to a bank of chalk and stones being raised (as was the case at Warham: ‘chalky mush’: Gregory 1986A, 24-5; Rickett 1991, 60). However, the low bank surviving at Bloodgate Hill consisted of a grey sandy loam, with here and there scattered fragments of chalk in thin lenses, not what one might expect of bank material.

The later history of the ditch and its ‘soily’ fills is fairly clear. Layer [31] contained medieval sherds, whilst [24] contained post-medieval objects, suggesting an

increased erosion from agriculture in the post-medieval period. The flints in [31] may represent increased or even deliberate erosion of the bank.

The hard chalky loam [23] must represent the clearance of the bank material in 1827; its junction with [24] was distinct and clearly represented an event rather than slow change from one deposit to the next.

Samples were taken from basal fills of ditch [22] for potential OSL dating. Environmental samples from basal fills indicated a dry open environment.

Trench 2

(Figs 2, 6 and 7)

Trench 2 was laid out to obtain a section across the ring-ditch recorded on air photographs and through geophysical survey. The geophysical survey showed the exact location of the ring-ditch, enabling the trench to be positioned to excavate the ditch. Removal of the ploughsoil ([14]) and a thin sandy subsoil ([15]) revealed the upper fills ([16], [25] and [17]) of ditch [18], cutting the natural subsoil and a possibly prehistoric soil ([28]). The ditch contained a sequence of stony and then soily fills sealed by a thick body of sandy clay with chalk fleck ([25]), probably coming in from an internal bank.

Full excavation revealed the ring-ditch ([18]) and a little of the interior. The ring-ditch was about 5m in width and some 3m deep below the present surface, with a distinctive ‘V’-shape and a steeper inner face. The fills indicated a bank on the inner side. The primary fills were a silty clay with large stones ([40]) and a silty sand ([41]) and two very stony deposits ([42] and [45]). Sandy clays ([43] and [44]) were followed by silty/sandy loams ([27] and [17]) and then the distinctively chalky deposit ([25]), coming in from the internal side. The uppermost fill ([16]) was a deep loamy soil, sealed by sandy subsoil ([15]).

Summary of finds

Sherds of Iron Age pottery were found in small numbers throughout the fills ([40] 1; [42] 2; [44] 6; [27] 7; [17] 1; [25] 4; [16] 1) of ditch [18]. There were six Iron Age sherds and a single post-medieval sherd from the topsoil and subsoil ([14] and [15]). These sherds were all small and abraded and therefore likely to be residual.

The snails found in fill [40] at the base of the ditch were of both woodland/shade and open country taxa, but with open country taxa dominant.

Discussion of Trench 2

The ditch was the only cut feature recorded in Trench 2, although the geophysical survey revealed an entrance on its east side and several internal features. (Augering within one of these features revealed natural sand at no great depth). The fills suggest an initial natural erosion of an internal bank imnto the base of the open ditch with slow silting occurring thereafter. Deposit [25] with its chalky fills may represent some deliberate slighting of an internal bank, but if so, this was done late, after a metre of silt had built up. The ring-ditch was not depicted on the map of *c*.1610 and a medieval date may be proposed for this. The presence of Iron Age sherds through most of the fills may point to an earlier date for this.

The distinctive shape of the ditch suggested a defensive rather than funerary function. The Iron Age sherds found in the fills and the lack of any Roman material argues against Roman construction.

Trench 3

(Figs 2, 8, 9 and 10)

Trench 3 lay within the circuit of the hillfort, but a little distance inside the line of the former bank (represented by a low rise in the nearby hedge) and on the line of a former low headland, recorded in the 1973 contour survey (Fig. 2). This trench was opened to examine a small sample of the hillfort interior, close to the line of the former bank.

The modern ploughsoil [1] rested on a horizontal deposit of sandy gravel-chalk ([2], [4] and [6]), with the chalk element close to the line of the bank and almost certainly derived from its levelling in 1827. Soil [3], a sandy loam, underlay this horizon and represents the buried soil of 1827. Below this lay a thin sandy soil ([5]) at the north end of the trench, with several sherds of Iron Age pottery from its interface with [3], resting on the natural subsoil, here a hard yellow sand.

Four cut features were recorded. The earliest were possibly pits [8] and [32]. Pit [8] was steep-sided with several fills ([9], [12] and [13]) that produced Iron Age pottery and flints. Pit [32] was a relatively shallow circular feature. Two small postholes [10] and [29] appeared to cut the soil [5] and were sealed by soil [3]; they remain undated.

Summary of finds

Pit [8] produced eighteen sherds of Iron Age pottery and twelve worked flints (besides fired clay). The pollen samples suggested the fill was a redeposited soil. Pit [29] (fill [30]) produced small fragments of coal, as did the lowest soil [5], probably intrusive. More indicative of true date were the Iron Age sherd and eight flints from soil [5], and the twenty flints and twenty-three sherds of Iron Age pottery (and fired clay) from soil [3]. It is interesting that it was soil [3] rather than [5] below, that produced most Iron Age sherds. The 1827 spread produced a piece of clay pipe from context [4].

Discussion of Trench 3

Trench 3 revealed evidence for Iron Age activity within the enclosure (in pit [8]), although little can be said about what it represents. On the question of survival, soil [3] rested on another buried soil [5], which was found at the lower (north) end of Trench 3.

5.0 The Finds (Appendix 2)

The Prehistoric pottery (Appendix 3)

The excavations produced an assemblage of 70 sherds weighing 0.246kg. The sherds were all of mid Iron Age date and included three rim sherds and a fragment of a possible pedestal base.

Methodology

The assemblage was analysed using the pottery recording system described in the Norfolk Archaeological Unit Pottery Recording Manual and in accordance with the Guidelines for analysis and publication laid down by the Prehistoric Ceramic Research Group (1992). The total assemblage was studied and a full catalogue was prepared. The sherds were examined using a binocular microscope (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. Fabric codes were prefixed by a letter code representing the main inclusion present (F representing flint, G grog and Q quartz). Vessel form was recorded; R representing rim sherds, B base sherds, D decorated sherds and U undecorated body sherds. The sherds were counted and weighed to the nearest whole gram. Decoration and abrasion were also noted. The pottery and archive are curated by Norfolk Archaeological Unit.

Fabrics

Six fabrics were identified from three fabric groups. Flint tempered fabrics make up just over half of the assemblage (59%; 0.143kg). The majority of the sherds are of ‘fine’ to moderate tempered fabric (F1). A single sherd of coarse flint tempered fabric was also found (F2). Quartz-sand tempered fabrics makeup 35% of the assemblage (0.085kg). Most of the sandy fabrics are in a coarse fabric (Q1), these are accompanied by smaller quantities of medium and fine fabrics (Q2 and Q3).

Fabric	Quantity	Weight (kg)
F1	31	0.143
F2	1	0.002
G1	3	0.016
Q	6	0.001
Q1	24	0.063
Q2	4	0.019
Q3	1	0.002
Total	***70***	***0.246***

Table 1: Prehistoric Pottery: Quantity and weight of pottery by fabric

Form

The assemblage contains few diagnostic forms but those that are present can be paralleled within the Iron Age assemblage from Thetford Castle (Davies and Gregory 1991, fig.11) which is of similar date. The South Creake assemblage contains two rim forms, one example has a rounded rim ending (*cf.* Davies and Gregory 1991, fig.11, 5) and two have flattened rim endings, one with fingernail impressed decoration applied to the rim top (*ibid*. fig.11, 12).

Decorations and surface treatment is scarce. One sherd has roughly scored decoration applied to the body of the vessel below the rim (Davies and Gregory 1991 fig.11 19) and one sherd has been pierced when wet.

A small piece of base, possibly from a pedestal form, was found in ploughsoil ([3]). Similar base sherds have been found in 1st century BC Iron Age contexts around the Isle of Ely, Cambridgeshire (Hill 2002, 148).

Discussion

The assemblage is important as one of the largest collections of pottery to be found during excavation of a fort monument. With the exception of the assemblage found at Thetford Castle little pottery has been recovered from Norfolk forts (Davies *et al* 1991). The pottery appears to date to the mid-to-late Iron Age, perhaps the 4th to 1st centuries BC and can be characterised as a domestic assemblage. The majority of the pottery was recovered from layers representing the pre-1827 ploughsoil suggesting that the assemblage was already being eroded into agricultural layers before the monument was completely levelled (see Table 1). Some pottery was also found in the fill of a pit [8] and within the large 'V'-shaped ditch ([18]). It is probable that the sherds found within the ditch had been weathered into the ditch or become incorporated during backfilling from deposits originally discarded on the ground surface as these sherds were small and abraded. The sherds from the pit were larger, perhaps indicating that these were found *in situ.* The assemblage does not suggest what the fort was used for and the exact nature of the monument remains elusive.

Medieval and later pottery (Appendix 3)

Eight sherds of medieval and later pottery were recovered, reflecting long agricultural use of the site.

Fired Clay (Appendix 4)

The fired clay assemblage included possible twenty-one structural pieces from [3], [6], [9], and [12] in a low-fired fabric containing chaff and other remains from cereal processing. Several of the pieces had curved surfaces suggesting wattle impressions. All but three of the pieces were found within the fills of an Iron Age pit with associated pottery (pit [8]). The pit also contained nine pieces of fired clay in a coarse sandy fabric; these pieces have no preserved surfaces and are probably from accidental burning or a hearth bottom.

Ceramic Building material

Sixteen fragments of post-medieval brick, roof and floor tile were found ([21], [23], [24], [26]).

Clay pipe

A single fragment of claypipe was found ([4]).

Prehistoric flint (Appendix 5)

A total of 63 pieces of struck (or possibly struck) flint were recovered from the site. The assemblage consists mainly of unmodified flakes with a small number of blades, blade-like pieces and retouched pieces. The flint from the site is mostly mid to pale grey in colour with cortex, where present, including that of a creamy orange colour with other flints having abraded or patinated surfaces indicating the probable use of surface-collected flint as a raw material. Sixty-eight percent of the material was patinated to some degree.

Three flakes, one of them retouched slightly and one a fragment from an already patinated core, were found in a fill [24] of the re-cut hillfort ditch (that pre-dated 1827) and three flints, two blades and a retouched cortical flake, were found in fill [31].

A side scraper on a small ovate flake and two unmodified flakes were found in the upper fill ([23]) of the hillfort ditch and an end scraper and two small flake fragments in another ditch infill [26]. The scraper was on a hard hammer struck flake with abrupt retouch across its distal edge. These fills dated to 1827.

Type	Number
Flake	40
Blade-like flake	1
Blade	3
Bladelet	3
Shatter	2
Spall	8
End scraper	1
Side scraper	1
Piercer	1
Retouched flake	2
Utilised blade	1
Total	**63**
Burnt fragment	8

Table 2. Summary of flint by type

Twenty flints were recovered from a layer of ploughsoil ([3]) below the 1827 ‘spread’ ([2], [4] and [6]). They were mostly small unmodified flakes, several of them patchily patinated. Also present is a small flake with its distal point retouched and used as a piercer.

Eight struck flints and a fragment of burnt flint came from a layer of soil ([5]) below the ploughsoil ([3]). The flints varied in size, one had clearly been struck by hard hammer.

A total of twelve struck flints and seven burnt fragments were recovered from fills [9], [12] and [13] in pit [8] which was of Iron Age date. They are small unmodified pieces including hard hammer-struck flakes with at least one piece being struck from an already patinated core. A possible struck flint, a blade-like fragment, was recovered

from pit [29] (fill [30]) and a single spall was found in fill [34] of post-hole [32]. One small flake fragment was found in a lower fill [27] of the ring ditch [18], of possible Iron Age to Roman date.

Four pieces of flint, one flake from an already patinated core, were found in the modern ploughsoil ([1] and [14]). A small utilised blade, another blade and four flakes including a hard hammer struck piece was unstratified ([69]). All of them were patinated, some to a bluish white colour.

Discussion

Most of the struck flint from the site consists of small pieces, many of them probably struck by hard hammer from small surface-collected fragments. This is consistent with a later prehistoric date and it is possible that much of the material, including those pieces found in the excavated pit, could date to the Iron Age. However, much of the flint is residual in the contexts in which it was found. This includes the material from the redeposited (1827) ditch fills as well as that from the features of possible Iron Age or Roman and medieval date.

The high percentage of patinated flint may be due, in part, to the chalky nature of the soils at the site although the differing types of patination may relate to the relative date of the flints. There are a small number of blades which may date to an earlier prehistoric period (earlier Neolithic) and it is noted that two of these, including one which is utilised, are quite heavily patinated.

The small finds and other metal finds (Appendices 6 and 7)

Seven copper alloy and iron objects were allocated Small Find numbers, with six other metal objects listed.

Shell

Land and marine mollusc was also collected (0.187kg, [23], [24] and [40]). Oyster shell was recovered from contexts [23] and [24], while land snail was recovered from [40].

The human remains

One fragment of human skull was recovered from one of the fills ([48]) of the recut Iron Age ditch [76]. The fragment is from the upper, rear part of the skull. The skull is adult sized, but no coronal suture fusion has taken place which would suggest that the skull is from a young adult.

The faunal remains (Appendix 8)

Summary

A total of 1.510kg of faunal remains was recovered from a variety of fills, including ditch deposits. Much of the assemblage was recovered from contexts dated to the Iron Age with few remains from contexts dated as medieval or later. Four species of mammal were identified and birdbone was recorded; butchering had been carried out on most of the remains.

Methodology

All the bone was scanned for basic information primarily to determine species, ages and elements present. Bones were also examined for butchering or other modifications, gnawing and pathologies. Bones were quantified; total counts were noted for each context and the total for each species in the individual contexts was also recorded, along with the total weight for each context. All information was recorded on *pro forma* faunal remains recording sheets.

Results

Overall the assemblage was in fairly poor condition and quite fragmentary, with few whole elements being present. Some surface were showing erosion and powdery surfaces which would suggest that they had been buried in more acidic soil.

Iron Age

The Iron Age contexts produced 1.271kg, just over 84% of the whole assemblage. Much of this material consisted of the main three domestic animals, cattle, sheep/goat and pig. Most of the bone in this period had been butchered; the elements included both primary processing waste, including evidence of skinning, and secondary butchering waste, which would indicate that the animals were being processed and eaten nearby. Ages of the animals varied with both adult and juvenile remains being identified suggesting varied uses for these animals.

Medieval and later

Only 0.123kg of bone were recovered from contexts probably dating to the medieval period or later. The remains included sheep/goat, equid and birdbone.

Undated material

A small amount, 0.116kg, of faunal remains were produced from contexts [27] and [68], both undated. These remains consisted of butchered cattle and sheep/goat.

Conclusions

The bulk of this assemblage is derived from primary and secondary butchering of the main domestic food animals with remains from all processes being found in the same deposits.

6.0 Environmental Evidence (Appendix 9)

Charred Plant Macrofossils and other remains

Introduction

Samples for the extraction of the plant macrofossil assemblages were taken from across the excavated area, and nine were submitted for assessment.

Sample	Context
1	[5], soil
2	[13], pit [8]
3	[30], pit [23]
4	[40], ditch [18]
5	[50], ditch [22]
6	[56], ditch [22]
7	[60], ditch [22]
8	[74], hillfort bank
9	[30], pit [29]

Table 3: Sample numbers and contexts

Methods

The samples were processed by manual water flotation/washover, collecting the flots in a 500 micron mesh sieve. As material was possibly required for C14 dating, the flots were placed in foil lined trays and air-dried. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils, mollusc shells and other remains noted are listed on Table 1. Nomenclature within the table follows Stace (1997) for the plant remains and Evans (1972) for the molluscs. Plant remains were charred unless otherwise stated. Modern contaminants including seeds, roots, leaves and arthropods were present throughout.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry. Artefacts/ecofacts will be removed for further specialist analysis.

Results of assessment

Plant macrofossils

Plant macrofossils, including charcoal fragments, were present in all samples, although frequently as single specimens. Most were poorly preserved and very fragmented. The following were noted and removed for possible C14 dating, although in all cases there may be an insufficient quantity for a successful determination:

Sample Number	Description
Samples 4 and 7	Small hazel (*Corylus avellana*) nutshell fragments
Sample 3	Vetch/vetchling (*Vicia/Lathyrus* sp.) cotyledon + culm/root fragments
Sample 2, 3 and 9.	Charcoal fragments were present throughout, but were only common in samples

Table 4 . Material that may be suitable for C14 dating

Molluscs

Mollusc shells were present in all but Sample 2, and formed the main component of Sample 4 ([40]). For the purposes of this report it is assumed that most specimens are contemporary with the contexts from which they were removed, although the possibility of some modern contamination cannot be ruled out. Shells of woodland/shade-loving, open country and catholic species were recorded, with the open country taxa being predominant. Two shells of marsh/freshwater slum snails were noted in Sample 7 (ditch [22], [60]).

Other materials

Other material types were extremely rare. Minute bone fragments were present in Sample 4 and pieces of abraded burnt or fired clay were noted in Sample 2 (from pit [8]). The coal fragments in Samples 1, 3 and 9 [all close to the surface] may be derived from the recent agricultural practise of steam ploughing.

Discussion

With the exception of Sample 2, plant macrofossils (including charcoal fragments) are extremely rare, and most are probably derived from scattered (possibly wind blown) detritus of unknown origin. The assemblage from Sample 2, which contains a higher density of charcoal, may be derived from a small deposit of fuel or fuel waste within pit [8].

Sample 4 was taken from the fill of ring ditch [18]. Mollusc shells form the main component of the assemblage, and these would appear to be indicative of a dry, open calcareous habitat with a minimum of shaded elements. A similar mollusc assemblage is present in Sample 5, from the fill of hillfort ditch [22].

Mollusc shells are common in other deposits within the hillfort ditch. Both primary fills (Samples 6 and 7) and re-cut fills (Sample 9) were sampled, and these again suggest a predominance of dry, open conditions. Unlike the ring ditch and upper hillfort ditch assemblages, shaded elements are not indicated. However, rare specimens of marsh/freshwater slum taxa are present within Sample 7, from the base of the ditch, possibly indicating that this feature was at least seasonally damp/wet at its base.

Conclusions and recommendations for further work

In summary, the few plant macrofossils recorded are probably derived from either dumped refuse or wind blown detritus. The mollusc assemblages indicate predominantly dry, open conditions with a minimum of shade and the possibility of a damp microhabitat at the base of the hillfort ditch.

As further analysis of either the plant remains or the mollusc assemblages would add little or nothing to the overall interpretation of the site or its component features, no further work is recommended.

Assessment of a pollen sample

Introduction.

A single sample was taken from a fill [13] of an Iron Age pit [8]. The purpose of this assessment is to simply determine if pollen survives on the site.

Methods

Approximately 4cm^3 of sediment was processed. Pollen preparations used techniques based on the method of Hunt (1985). The sediments were desegregated (breaking up larger masses of organic material and dissolving humic acids) by heating in 5% NaOH for 5-10 minutes, sieved through 120μm and 10μm wire and nylon sieves to remove the sand and clay sized fractions. The silt-sized fraction was removed by swirling (panning) on a large watch glass. Finally the remaining material was stained and mounted on slides with a semi-permanent mountant "aquamount".

Results

The preparation contained a very low pollen concentration and two coverslips were counted to attempt to gain a higher pollen count.

Trees	**No of pollen grains**
Pinus (pine)	5
Quercus (oak)	1
Shrubs	
Corylus (hazel)	1
Calluna (heather)	1
Terrestrial herbs	
Gramineae (grasses)	2
Fungal Remains	
Glomus	8
Total land pollen	10

Table 5: Pollen counts

In total 10 grains of pollen were found. The slide contained frequent unidentifiable organic debris together with occasional microscopic fragments of charcoal.

The extremely low pollen count obtained means the significance of any interpretation is limited.

Pine is as likely to be derived from long distance transport than from local stands of trees. Oak may be derived from local trees but the concentration is very low. It is possible that the heather pollen may be from local areas of heathland. This pollen in particular does not travel far, so such heathland may be quite close. Grass pollen at such low levels is not significant, but it does indicate areas of grass.

The relatively high incidence of the remains of *Glomus*, a soil fungus, together with large amount of fungal hyphae is indicative that much of this deposit was derived from a redeposited soil.

Conclusions.

The low pollen recovery is probably caused by several factors. These include corrosion of pollen due to oxidation within biologically active soils or from post deposition dissolution due to the alkali ground waters. It is probable the whole site is similarly affected.

Recommendations

It is possible that pollen may be found in greater concentration and be better preserved in deposits found at greater depth. Within deeper features the movement of ground water should be less pronounced and the effects of dissolution reduced.

It is recommended that if any further pollen analysis is carried out it is performed on well sealed, fine grained deposits. However, it is quite possible the pollen on the site is not well preserved in any location due to adverse chemical conditions.

7.0 The Scientific dating

Trench 2, ditch [18]. Sample OSL-1 from basal fill.

A sample was taken from one of the basal fills of the ditch for OSL dating. The preliminary results of neutron activation analysis give an age of 3810+/-450 years BP. This points to a date range centring on 1800 BC, with a range of 2250 to 1350 years BC. This might seem too early for the cutting of ditch [18], given its character and most importantly, the sherds of Iron Age pottery found in its fills. It was anticipated that a date around 0AD, in the Iron Age/Roman period might be indicated, but the results do not lend support to this idea.

Trench 1, ditch 22. Samples OSL-2 and 3 from basal fills.

Samples from the basal fills of ditch [22], submitted for OSL dating and neutron activation analysis both give an age of greater than 140,000 years BP. This clearly relates to the 'geological' age of the samples and is not relevant to the history of the hillfort.

8.0 Discussion

The work carried in the three trenches was intended to be an evaluation of the enclosure, the survival of archaeological deposits and the likely potential of the site, whilst providing information to shed light on the history of the site. Field survey had already had rather limited results, with very little material of early date (that might indicate occupation of the enclosure) being found.

The earthwork is regarded as Iron Age from its character, form and location; one of several such monuments in north-west Norfolk, but there was little direct evidence for its date or of any context for its construction and subsequent use, except that univallate forts are generally regarded as earlier than the multivallate (such as the Warham fort). Whilst initial construction may be presumed to date from the earlier Iron Age, without dating evidence, the recutting of the ditch (and the central ring-ditch) lack an historical context. It is possible, perhaps probable, that both belong to the later Iron Age, and may have been prompted by the troubles of the early 1st century AD.

Whether the recutting of the ditch and construction of the central ring-ditch were carried out at the same time is not known. The geophysical survey also indicates a pair of irregular ditches joining the ring-ditch with the enclosure bank and forming internal divisions in the enclosure. Neither date nor function of the ring-ditch is clear, although a military function and possible native construction and Roman date may be speculated. If so, then the internal features might represent postholes for some massive structure, even some sort of tower, within an enclosing bank. An alternative interpretation might involve some domestic or ‘ritual’ use.

One might also note the existence of the large enclosure at Wighton, 10km to the north-east, built in the century before the conquest of AD43, and demolished in the second quarter of the 1st century AD. This was quite large, some 140m in diameter, with a ‘V’-shaped ditch 5m across and about 2.5m deep (Gegory 1986B, 27-31), and may provide some sort of parallel for the recut hillfort ditch.

The fragment of human skull from the fill [48] of the recut ditch is not firmly dated, but may be Iron Age, although some later date is possible. Iron Age burials are rare, especially in East Anglia (Gurney 1998), but are occasionally found under or within the fabric of hillfort ramparts, possibly as deliberate votive deposits (Whimster 1981, 29-31).

Domestic activity within the hillfort is hardly represented in the three trenches, although the animal bone may hint at killing locally and the raising of cattle, pigs and sheep/goats.

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Appendix 1: List of Contexts

Context	Trench	Description	Period
1	3	Present ploughsoil. grey sandy loam	modern.
2	3	Chalky clay/sand (merges into [4], [6]). Material of bank levelled in 1827	1827
3	3	Dark grey-brown sandy loam. pre-1827 ploughsoil	Pre-1827
4	3	Gravelly layer, merges into [2]	1827
5	3	Lower soil, below [3]	?Prehistoric.
6	3	Gravelly layer, merges into [4]	1827
7	3	Natural sand subsoil in Trench 3	
8	3	Cut for pit	Iron Age
9	3	Fill of [8]	Iron Age
10	3	Cut for posthole	Pre-1827
11	3	Fill of [10]	
12	3	Fill of [8]	Iron Age
13	3	Fill of [8]	Iron Age
14	2	Present ploughsoil	Modern
15	2	Yellow-brown sand	?Modern
16	2	Brown sandy loam, compact. Upper fill of ditch [18]	?Medieval or later
17	2	Mid-brown loam. stoneless. Fill of ditch [18]	Roman or later
18	2	Cut for ring-ditch	?Roman
19	1	Present ploughsoil (same as [35])	Modern
20	1	Patch of hard chalk. 1827 infill. Part of [23]	1827
21	1	Chalky surface of layer 23. infill of 1827. Part of [23]	1827
22	1	Cut for first ditch	Iron Age
23	1	Upper fill of ditch. 1827	1827
24	1	Mid-brown sandy loam. pre-1827 fill	Pre-1827
25	2	Mid red-brown sandy loam with chalk pieces. upper fill of ditch [18]	Medieval or earlier?
26	1	Same as [21]	1827
27	2	Yellow-brown sandy loam. lower fill of ditch [18]	Roman or later
28	2	Pale yellow sand subsoil.natural or remains of prehistoric soil?	?Prehistoric.
29	3	Cut for pit	?Medieval
30	3	Fill of [29]	?Medieval
31	1	Dark moist loam. Fill of ditch [76]	Iron Age
32	3	Cut for post-hole	?Medieval
33	3	Fill of [32]	?Medieval

Context	Trench	Description	Period
34	3	Fill of [32]	?Medieval
35	1	Grey sandy loam. present ploughsoil (same as [19])	Modern
36	1	Natural feature	Iron Age
37	1	Thin lens of stone chalk pieces. Fill of ditch [76]	Iron Age
38	1	Layer of stones. Fill of ditch [76]	Iron Age
39	1	Natural chalk on north face of ditch [76]	Iron Age
40	2	Basal fill of ditch [18]. Stony clay with chalk fleck	Iron Age
41	2	Fill of ditch [18]. Silty sand	Iron Age
42	2	Fill of ditch [18]. Silty clay with stones	Iron Age
43	2	Fill of ditch [18]. Yellow brown sand, chalk fleck	Iron Age
44	2	Fill of ditch [18]. Grey silty sand	Iron Age
45	2	Fill of ditch [18]. Similar to [42]	Iron Age
46	1	Mid red-brown silty sand	Iron Age
47	1	Natural chalk at side of ditch	Iron Age
48	1	Brown sand. Fill of ditch [76]	Iron Age
49	1	Grey brown silty sand. Fill of ditch [76]	Iron Age
50	1	Yellow-red mottled clay. Fill of ditch [22]	Iron Age
51	1	As [38] but siltier. Fill of ditch [76]	Iron Age
52	1	Grey chalk silt with chalk pieces. Fill of ditch [76]	Iron Age
53	1	Grey chalky silt mottled orange. Fill of ditch [22]	Iron Age
54	1	Fine grey chalky silt. Fill of ditch [76]	Iron Age
55	1	Mid grey-brown silt with chalk fleck. Fill of ditch [22]	Iron Age
56	1	Yellow-mustard sand. Fill of ditch [22]	Iron Age
57	1	Fill of ditch [22]	Iron Age
58	1	Red-brown coarse gravelly silting. Fill of ditch [22]	Iron Age
59	1	Lens of chalk pieces with silt. Fill of ditch [22]	Iron Age
60	1	Grey sand, mottled, with chalk flecks	Iron Age
61	1	Grey-brown silts and gravelly sands, banded. Fill of ditch [22]	Iron Age
62	1	Pale yellow silty clay. Fill of ditch [22]	Iron Age
63	1	Red-brown silt-clay, no stones. Fill of ditch [22]	Iron Age
64	1	Brown sand. Fill of ditch [22]	Iron Age
65	1	Red sandy silt with chalk pieces. Fill of ditch [22]	Iron Age
66	1	Yellow-grey chalky silt. Fill of ditch [22]	Iron Age
67	1	Grey/white bands of chalky silt. Fill of ditch [22]	Iron Age
68	1	Not used	
69	1	Number for unstratified finds and metal-detector survey	
70	1	Mixed medium brown sand/stones. Tree disturbance?	Iron Age

Context	Trench	Description	Period
71	1	Natural feature	Natural
72	1	Yellow brown gritty sand. Part of 1827 levelling of bank?	Iron Age
73	1	Lens. Scatter of chalk pieces; upper part of bank material [74]	?Iron Age
74	1	Grey sandy loam. Remnant of hillfort bank?	?Iron Age
75	1	Moist brown sand. Lowest fill of ditch [76]	Iron Age
76	1	Recut of ditch [22]	Iron Age

Appendix 2: Finds by Context

Context	Trench	Description	Period
3	3	Pottery. Flints. Fired clay/daub	Iron Age
4	3	Clay tobacco pipe.	Post-medeival
5	3	Pottery. Flint flakes.	Iron Age
9	3	Pottery. Flint flake. Fired clay/daub.	Iron Age
12	3	Pottery. Flint flake. Fired clay/daub.	Iron Age
13	3	Pottery. Burnt flint. Flint flake. Animal bone. Fired clay/daub.	Iron Age
14	2	Pottery. Flint flake.	Iron Age and post-medeival
15	2	Pottery.	Iron Age
16	2	Pottery, animal bone	Iron Age
17	2	Pottery.	Iron Age
21	1	Animal bone. Tile.	Post-medeival
23	1	Animal bone. Brick. Flint flake, scraper. Glass. Iron nail. Oyster shell.	Post-medeival and modern
24	1	Brick. Pottery. Flint flakes. Oyster shell. Animal bone. Copper alloy buckle, button and rivet. Iron nails.	Medeival and post-medeival
25	1	Pottery. Animal bone.	Iron Age
26	1	Flint flake, scraper. Lead waste. Ceramic building material.	Post-medieval
27	2	Flint flake. Pottery. Brick. Animal bone.	Iron Age
30	3	Flint flake.	
31	1	Pottery. Animal bone. Flint. Iron nail.	Medeival
34	1	Flint.	
37	1	Animal bone.	
38	1	Flint flake.	
40	2	Pottery. Animal bone. Fired clay/daub. Land snail shell.	Iron Age
42	2	Pottery.	Iron Age
44	2	Potttery.	Iron Age
46	1	Animal bone.	
48	1	Animal bone. Human skeletal remains.	
49	1	Animal bone.	
51	1	Animal bone.	
69	Unstratified	Copper alloy coin and button. Iron knife. Lead waste. Flint.	
70	1	Animal bone.	

Appendix 3: The Pottery

The Prehistoric Pottery

Context	Quantity	Weight (kg)
3	23	0.055
5	1	0.002
9	2	0.008
12	5	0.043
13	11	0.074
14	2	0.015
15	4	0.015
16	1	0.002
17	1	0.002
25	4	0.006
27	7	0.011
40	1	0.007
42	2	0.005
44	6	0.001

The Medieval and post-medieval pottery

Context	Type	Description	Date
14	Glazed red earthern ware	Rim of bowl or pancheon	16 th to 18th century
24	Local medeival unglazed ware	Body sherd	11th to 14th century
24	Grimston-type ware	Base	Late 12th to 14th century
24	Grimston-type ware	?Rod handle or part of face jug.	Late 12th to 14th century
24	English stone ware	Body sherd	17th to 19th century
24	Glazed red earthern ware?	Body sherd	16th to 18th century
31	Grimston-type ware	Body sherd	Late 12th to 14th century
31	Local medeival unglazed ware	Rim	11th to 14th century

Appendix 4: The Fired Clay

Context	Quantity	Weight (kg)	Description	Context description
3	3	0.013	Vegetable tempered fabric. One large piece with one flat surface.	Pre-1827 plough soil
9	6	0.012	Vegetable tempered fabric. One large piece with one curved surface.	Fill of Iron Age pit (8)
12	4	0.024	Vegetable tempered fabric. One piece with possible with impressions. One large irregular piece.	Fill of Iron Age pit (8)
13	9	0.084	Coarse sandy fabric. Probably not structural. Possibly accidental burning or hearth bottom.	Fill of Iron Age pit (8)

Appendix 5: Flint by context

Context	Type	Number
1	Shatter	1
3	Bladelet	3
3	Flake	13
3	Spall	3
3	Piercer	1
5	Burnt fragment	1
5	Flake	4
5	Spall	4
9	Flake	4
12	Flake	2
13	Burnt fragment	7
13	Flake	4
13	Shatter	1
13	Spall	1
14	Flake	3
23	Flake	2
23	Side scraper	1
24	Blade-like flake	1
24	Flake	1
24	Retouched flake	1
26	Flake	2
26	End scraper	1
27	Flake	0
30	Flake	1
31	Blade	2
34	Spall	0
38	Retouched flake	1
69	Blade	2
69	Flake	4

Appendix 6: The Small Finds

Small Find	Context	Material	Object	Description	Date
1	69	Copper alloy	Coin	Pierced	Romano-British
2	69	Iron	Knife	Blade	
3	69	Copper alloy	Artefact		
4	24	Copper alloy	Buckle	Shoe buckle	Late 17th to 18th century
5	24	Iron	Artefact		
6	24	Iron	Artefact		
7	24	Copper alloy	Button	Regimental; Victorian	1837-1901

Appendix 7: Metal finds of no archaeological value

Context	Material	Object Name	Description	Date
69	Copper alloy	Button	Backing	Modern
69	Lead	Waste		Modern
23	Fe	Nail		Modern
31	Fe	Nail		Modern
26	lead	Metalworking waste		Modern
24	Copper alloy	Rivet		Modern

Appendix 8: Faunal Remains by Context.

Context	Date	Species	Quantity	Weight (Kg)	Species quantity	Age	Butchering	Comments
13	Iron Age	sheep/ goat	5	0.002	5	adult		molar fragments
16	Medieval	sheep/ goat	2	0.001	2	adult		molar fragments
21	1827	bird bone	1	0.001	1			shaft of large bird
23	1827	equid	5	0.105	3	adult		molars
		large mammal			2			fragments of jaw, probably equid
24	pre-1827	mammal	4	0.007	4		chopped	
25	Medieval	sheep/ goat	12	0.009	1	adult		proximal phalange
		mammal			11		chopped	fragments, possibly sheep/goat metapodial pieces
27		sheep/ goat	35	0.047	1		chopped	rib
		cattle			3	adult		molars
		mammal			31		butchered	poor condition, fragmentary
31	Iron Age	cattle	40	0.400	2	adult	butchered	chopped pelvis and humerus fragment
		pig			2	adult	butchered	chopped pelvis and astragalus
		sheep/ goat			1	juvenile	chopped	small humerus
		mammal			35		butchered	fragmentary and poor condition
37	Iron Age	sheep/ goat	1	0.007	1		chopped	tibia, erosion of surfaces

Context	Date	Species	Quantity	Weight (Kg)	Species quantity	Age	Butchering	Comments
40	Iron Age	cattle	24	0.150	1	adult	cut + chopped	metatarsal, chopped and cut (skinned?) & gnawed
		pig			2	juvenile	chopped	tibia and metapodial
		mammal			21		butchered	
46	Iron Age	cattle	43	0.365	4	adult	butchered	pelvis, tibia, proximal phalanges
		sheep/ goat			1		butchered	radius
		mammal			39		butchered	mammal fragments, adult and juvenile, skull frag (?cut marks on outer surface)
48	Iron Age	cattle	18	0.121	17	adult	Butchered, chopped	scapula and vertebrae fragments
		sheep/ goat			1	Juvenile	chopped	rib sections pelvis
49	Iron Age	cattle	6	0.020	6		chopped	rib sections
51	Iron Age	cattle	38	0.197	1	adult	chopped	tibia
		mammal			36		chopped	vertebrae and shaft fragments
70	Iron Age	pig	1	0.078	1		chopped	femur

Appendix 9 : The Macrofossils

Sample No. (context No)	**1 (5)**	**2 (13)**	**3 (30)**	**4 (40)**	**5 (50)**	**6 (56)**	**7 (60)**	**8 (74)**	**9 (54)**
Plant macrofossils									
Cereal indet. (grains)		x							
Corylus avellana L.				xcf			x		
Ericaceae indet. (stem)	x								
Vicia/Lathyrus sp.			xcf						
Charcoal <2mm	x	xxx	xx	x	x	x	x	x	xx
Charcoal >2mm		xx							x
Charred root/rhizome/stem	x		x						
Mineral replaced root/rhizome/stem						x			
Indet.culm frags.			x						
Molluscs									
Woodland/shade loving species									
Aegopinella sp.				x	x				
Oxychilus sp.				x	x				
Punctum pygmaeum				x					
Open country species									
Helicella itala	x		x	x					x
Helicidae indet.				x					
Pupilla muscorum	x			x	x	x	xx	x	x
Vallonia sp.	x			x			x	x	x
V. costata				xxx	x	x		x	
V. excentrica					x				
V. pulchella	x			x	x		x		
Catholic species									
Cepaea sp.				x					
Cochlicopa sp.				x	x		x	x	
Nesovitrea hammonis						xcf	x		
Trichia hispida group				xxx	xx	xx	x	x	
Marsh/Freshwater slum species									
Lymnaea sp.							x		
Vertigo sp.							x		
Other materials									

Sample No. (context No)	**1 (5)**	**2 (13)**	**3 (30)**	**4 (40)**	**5 (50)**	**6 (56)**	**7 (60)**	**8 (74)**	**9 (54)**
Black porous 'cokey' material	x		x	x					x
Black tarry material			x						
Bone	x			xx					
Burnt/fired clay		xx			x				
Burnt stone		x							
Mineralised concretions						xx	xx		
Small coal frags.	x		x						x
Sample volume (litres)	**5**	**10**	**10**	**10**	**4**	**10**	**5**	**4**	**4**
Volume of flot (litres)	**<0.1**	**0.2**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100 %**	**50%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Key to Table: x = 1 – 10 specimens xx = 10 – 100 specimens xxx = 100+ specimens

Appendix 10: The Geophysical Survey 2003

[Project Co-ordinator: Dr C F Gaffney; Project Assistants: J Adcock, D Shiel, C Stephens & Dr D Weston]

Aims of Survey

The aims of the magnetometer survey were to investigate the environs of the hillfort and identify other possible archaeological remains that may be present. The geophysical work forms part of an archaeological assessment prior to limited excavation and conservation. The site is a scheduled ancient monument (national monument number 30538) and consent for the work was granted by English Heritage under Section 42 of the Ancient Monuments and Archaeological Areas Act 1979.

Summary of results (to be read in conjunction with the detailed results of the survey)

The gradiometer survey has successfully identified the course of the hillfort ditch and the ring-ditch at its centre. In addition, a number of archaeological features not visible on aerial photographs have been recorded. In particular, two magnetically strong but irregular linear anomalies extend across the hillfort from the inner ring ditch. A number of pit type anomalies have been recorded inside the inner ring ditch that may be associated with burials. Elsewhere, the interior of the hillfort is magnetically quiet. A number of magnetically weak linear anomalies and trends have been recorded and isolated pit responses. However, the interpretation is cautious; modem debris and agricultural disturbance could have produced these anomalies.

Survey Results

Survey Area

Approximately 7ha of detailed gradiometer survey were carried out within the study area. The majority occupies one field with additional survey in the corner of a second field to the north. Proposed survey in a third field was not undertaken due to problems with ground cover. For ease of display the survey results have been divided into seven areas, A to G. However, the results will be described as a whole in the text of the report. Figure 1 shows the location of the survey areas on the basemap at a scale of 1:2000.

The survey grid was set out by **GSB Prospection** and tied in to existing boundaries. Detailed tie-in information has been lodged with the client.

Display

The results are displayed as X-Y traces, dot density plots and grey scale images. These display formats are discussed in the *Technical Information* section at the end of the text.

Figures 2 and 3 are a summary greyscale image and an interpretation of the survey results superimposed on the basemap at a scale of 1:2000. Figures 4 to 24 are data plots and interpretation diagrams of each of the survey areas produced at a scale of 1:500.

Letters in parentheses in the text of the report refer to anomalies highlighted in the relevant interpretation diagram.

General Considerations – Complicating Factors

The stubble fields resulted in good survey conditions over the majority of the study area. However, the presence of tall crops precluded survey in the north-western part and a complete circuit of the hillfort could not be recorded.

The soils are of a type that would be expected to provide a reasonable level of magnetic response particularly where remains of occupation and industrial activity are likely to be present.

Results of Survey

Most of the circuit of the hillfort ditch, which is about 200m in diameter, has been recorded successfully, except where dense vegetation was present at the north-west and along the southern boundary where the existing boundary follows the course of the defences.

An entrance (A) is identifiable in the east where it is accompanied by a possible inner ditch or large pit (B) that may have made up part of the defences. On the western part of the hillfort the ditch anomaly is found to be weaker than on the eastern flank. Furthermore, there are two points where there is slight evidence for a break in the ditch anomaly; the clearest being at (C). The one at (D) may be associated with the amorphous anomaly (E), possibly a pit? directly outside the monument. It should be considered that, given the weak strength of the ditch anomaly, these putative breaks in the ditch may only reflect variations in the fill of the ditch. Groups of parallel trends at two locations in the ditch anomaly (F) could indicate plough damage to the monument. Elsewhere, modem ploughing is apparent within the data, especially along the northern edge of the main field.

A ring ditch measuring 40 to 45m in diameter has been recorded at the centre of the hillfort. Contained within are a cluster of pit type anomalies (G) and magnetically weak linear responses that may represent successive periods of funerary and/or settlement activity.

Extending out from the ring ditch, to the south-east and to the north-east, two irregular linear responses (H) and (I) have been recorded that are not apparent on the aerial photographs. The anomalies are magnetically strong and are thought to be of archaeological interest, though the possibility that they are natural, perhaps indicating cracks in the underlying geology, cannot be dismissed entirely. However the anomalies show a high degree of symmetry; there are matching kinks in the courses of the ditches (J) and the anomalies themselves appear to flank the entrance of the hillfort ditch. Although dating via geophysical data is inherently difficult, the fact that (H) and (I) respect the ring ditch should indicate that the former are later. It is not certain how the ditches (H) and (I) relate chronologically to the hillfort defences, although they appear to terminate within the perimeter. It may be of some archaeological interest that the clearer of the two ditches (I) terminates about 15m short of the fort ditch. This may indicate that (H) and (I) are contemporary with the fort and the reason why they stop short is due to the presence of the bank. Bank material is very difficult to differentiate in magnetic data, but there is variation (K) that may indicate such material, especially in the south-eastern part of the fort. This variation (K) is different from the negative response that forms part of the ditch anomaly seen elsewhere.

Elsewhere within the hillfort, a number of magnetically weak and ill-defined linear responses and trends have been recorded. There are suggestions of parts of enclosures and in the east some appear to conform to the curve of the hillfort ditch. However, no clear pattern emerges from the data and it is likely that many of these responses are due to ploughing disturbance.

Similarly, isolated pit type anomalies have been detected but most are small-scale and could be due to debris and localised soil variations that are pedagogical/agricultural in origin. A possible site of occupation activity may be present at (L), while anomaly (M), which is magnetically strong and well defined, is the most promising.

The results from the triangle of land to the east of the hillfort provide a striking contrast to those recorded within. There is clearly an increase in the level of magnetic response but, beyond a number of linear trends thought to be due to ploughing, there is no obvious archaeological pattern. Such magnetic activity could represent enhanced material from ploughed out archaeological features. An alternative explanation is that material from elsewhere has been imported and landscaped in this area, although if that were the case then the earthwork itself has been respected during this activity. While a geological or pedagogical origin for the anomalies cannot be totally discounted, this seems unlikely given the responses appear to be constrained by the present field boundaries.

Small-scale ferrous type anomalies have been recorded throughout the survey area. It is likely that these anomalies represent iron debris in the topsoil. However, given the location, it is possible that ancient artefacts could have produced some of these anomalies.

Conclusions

The fluctuate gradiometer survey has successfully recorded much of the course of the hillfort ditch and also detected the ring-ditch at its centre. Probable archaeological features have additionally been found that are not present on aerial photographs; two magnetically strong but irregular linear anomalies extend across the hillfort from the ring ditch that contains a cluster of anomalies of interest. These presumed ditches appear to divide the internal area of the hillfort, with the smallest segment containing the entrance to the fort. That entrance has a large pit or ditch directly inside and it is assumed that this forms part of the defences.

With the exception of a number of weak linear responses, trends and isolated pit anomalies, the interior of the hillfort is magnetically quiet. However, it is not certain if the lack of clear anomalies is a good indication of a paucity of buried remains. Alternative interpretations include short lived occupation that has produced few measurable anomalies or that the plough has significantly destroyed much of the buried features. Against these arguments is the fact that significant anomalies have been produced by buried archaeology and that, while ploughing is apparent within the magnetic data, archaeologically coherent anomalies have been mapped.

The triangular piece of land to the east of the hillfort entrance has provided evidence for a significant increase in magnetic response. The cause of this variation is not apparent from the magnetic data and it is likely that invasive tests would be required to establish if it is a result of anthropogenic activity, or if some natural characteristic of the soils would account for this change.

A number of trends in the data indicate that ploughing, in at least some areas, has eroded the hillfort ditch.

References: SSEW 1983. *Soils of England and Wales. Sheet 4, Eastern England.* Soil Survey of England and Wales.

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