# Leadketty excavations 2013

## Data Structure Report

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*Cover image: Excavations in the northern sector of the LK13 trench*

**SUMMARY**

*Excavations as part of phase 2 of the SERF Project commenced in August 2012 with focus shifting from the cropmark complex at Forteviot, to Leadketty, just north of Dunning and 4km to the west of Forteviot in Perth and Kinross. This complex of cropmarks has been recorded frequently since 1970 and consists of what appear to be late Neolithic and early Bronze Age monuments, including a palisaded enclosure, several mini-henges, pits, barrows, ring-ditches, and a putative causewayed enclosure. The focus in 2013 was the putative causewayed enclosure immediately to the north of the late Neolithic complex that we investigated in summer 2012. The excavations were inconclusive, although we were able to shed light on the nature of the features causing the cropmarks, and identified multiple features that had not previously been recorded. It is hoped post-excavation analysis will provide a chronology for what we found, and offer a better understanding of this enigmatic enclosure.*

**BACKGROUND**

In 2007-10 the SERF project investigated the prehistoric monument complex at Forteviot, a remarkable cluster of ceremonial and burial monuments of the later Neolithic and early Bronze Age (c3000-1900BC). Excavations here focused on cropmarks which revealed a huge palisaded enclosure, several henges and burial monuments of Bronze Age and later date. A selection of these were excavated and the evidence from Forteviot suggests that the range of timber, earthwork and megalithic monuments found here represent one of the most significant power centres of the 3rd millennium BC in northern Britain (Driscoll et al 2010; Noble & Brophy 2011a). As the SERF project moves into a second phase, we have shifted our attention 4km west to the comparable prehistoric cropmark complex of Leadketty; excavations here will give us an unparalleled opportunity to explore an extensive later Neolithic monumental landscape, offer a context for Forteviot and explore just how large this power centre might have been.

The cropmarks at Leadketty were initially recorded in 1970 by Cambridge University's CUCAP, and regular repeat flying since 1976 by RCAHMS has revealed a remarkable complex of archaeological sites (Figure 1). These are largely concentrated in two large fields on a ridge and south-facing slope, situated on a terrace on the south side of the Earn valley. The complex consists of a range of sites which most likely date to the Later Neolithic and Bronze Age, although some elements are probably later prehistoric, perhaps even medieval. The cropmarks in the area have a patchy character, with variable soil depth and underlying palaeochannels creating areas of clarity, and voids in the cropmark, which are evident on all air photos taken here. Until our work here commenced in 2012, no archaeological excavation had been previously carried out on any of these sites, although some fieldwalking has been carried out (see below), and as part of the SERF Project, small-scale geophysical surveys have been undertaken in 2012 and 2013 (see below, and see Maldonado & Brophy 2012; Poller 2013).

The largest element of the Leadketty complex, as with Forteviot, appears to have been a huge timber-defined palisaded enclosure, one of only four such monuments recorded in Scotland (Noble & Brophy 2011b.) The boundary of the Leadketty monument encloses an area just to the north of Leadketty Farm, with the

southern side defined by an escarpment leading down to Duncrub Burn. At its widest extent the enclosure measures around 400m east-west, with north-east facing entrance avenue; the constructed element of the boundary itself is some 600m long. Our excavations in 2012 demonstrated that this boundary consisted of equally spaced large postholes, some of which contained sherds of Grooved Ware pottery; we await radiocarbon dates for these posts, but they were probably erected in the late Neolithic. This enclosure is of a closely comparable form to excavated palisaded enclosures such as Forteviot, Dunragit and Meldon Bridge which have all been dated to 3000-2500BC (ibid). The palisaded enclosure at Leadketty encloses a series of hengiform enclosures, pits and post-structures. We investigated some of these in 2012 and identified a four-post Grooved Ware structure, and a small hengiform with a single internal post-pit. Additional cropmarks cluster around the enclosure, particularly to the north and east which may be the subject of future excavations.

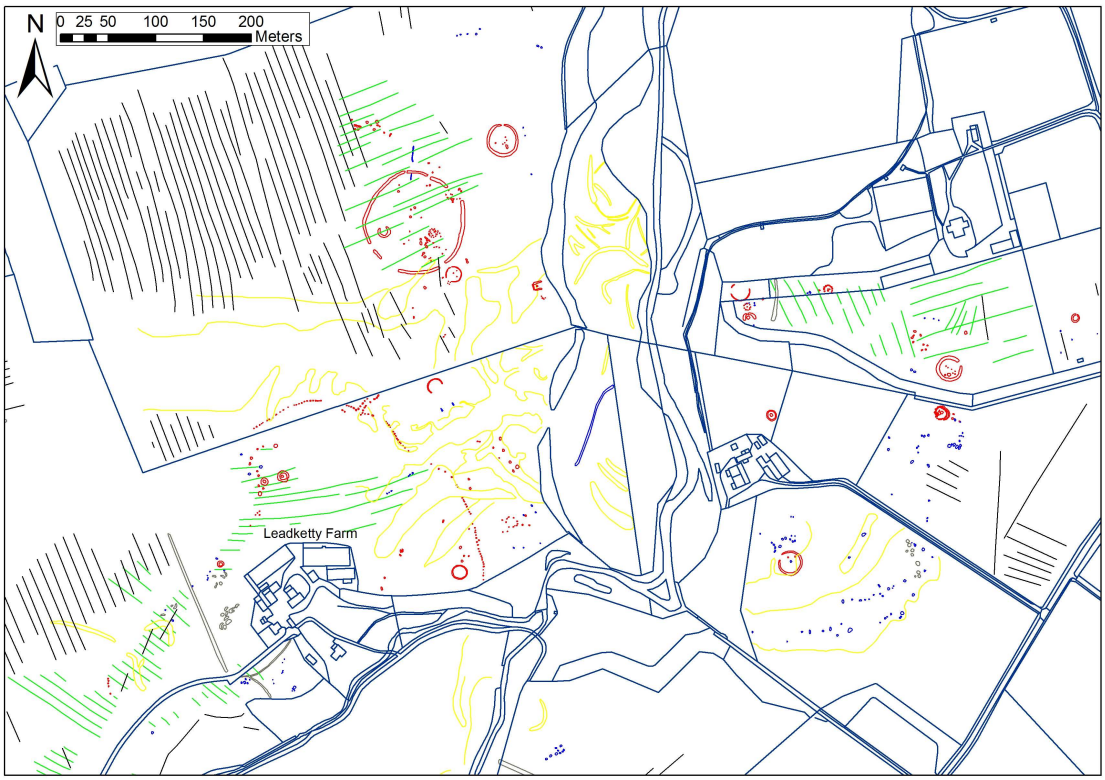


*Figure 1. This RCAHMS transcription shows the palisaded enclosure with internal features in the southern field (immediately north of Leadketty Farm), and the so-called causewayed enclosure in the field immediately to the north. The cropmark 'void' is situated within the western half of the palisaded enclosure © Crown Copyright RCAHMS.*

In the field immediately to the north of the palisaded enclosure a very different large enclosure has been identified, again by aerial photography, and this site was the focus of our excavations in 2013. The circular ditched enclosure (NO01NW 21) has a diameter of some 100m, and is located on the southeast slope of a knoll. The boundary of the enclosure appears to have multiple causeways (gaps) and this has led in the past to the suggestion that this is an early Neolithic causewayed enclosure (cf. Barclay 2001, 151; Oswald et al 2001, 41). This interpretation is supported by the wobbly nature of the boundary, and a few diagnostically Neolithic fieldwalking finds. If this were to be the case, this would be the first confirmed example in Scotland,

and the most northerly causewayed enclosure in the British Isles (see Brophy 2004). On the other hand, the presence of what appear to be roundhouses within the enclosure suggests a later prehistoric, or perhaps even early medieval, date for the monument.

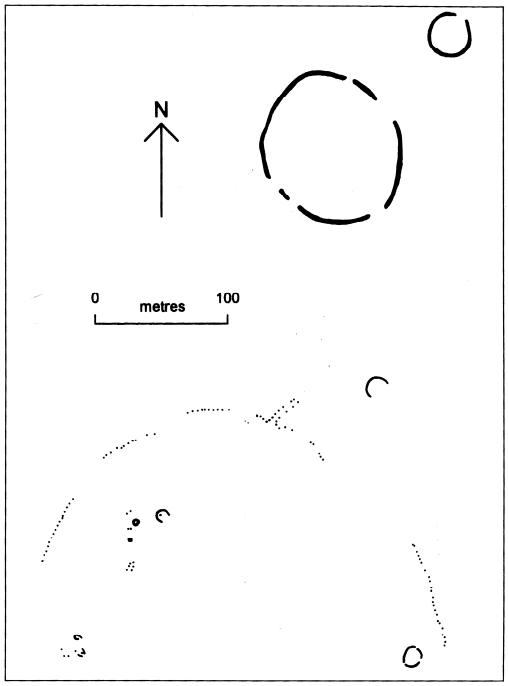


*Fig 2: Stylised transcription of the enclosure from Barclay 2001.*

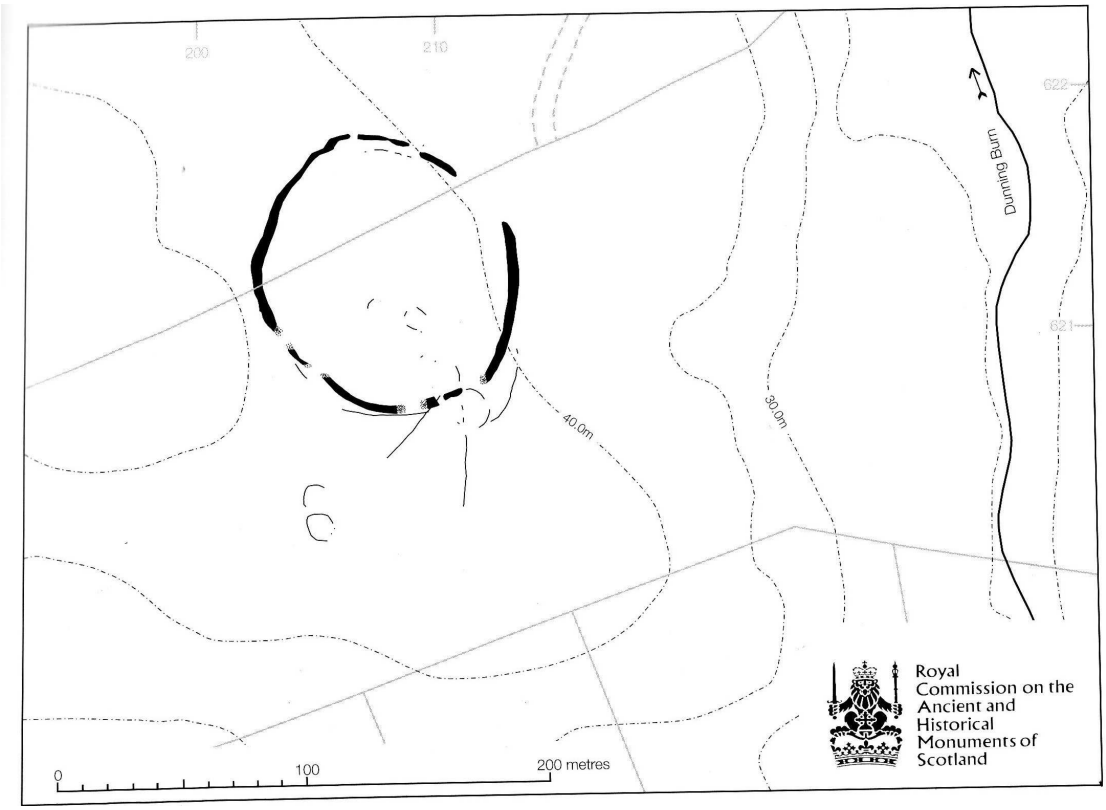


*Fig 3: RCAHMS 'old' transcription, published in Oswald et al 2001, Fig 3.7. Note the network of palisades to the south of the enclosure, and ring-ditch, identified during our excavations*

Different interpretive transcriptions of this monument have focused on different aspects of this site (see Figs 1-3). Although the recent transcription by RCAHMS (Fig 1) is the most comprehensive and satisfactory, the 'old' RCAHMS transcription is very interesting (Fig 3) and brings out some details relevant to our excavations on the southern boundary of the monument, namely various palisades and a ring-ditch abutting the ditch of the enclosure. There are many other cropmarkings within and around this enclosure, which may or may not be contemporary with it, including several ring-ditches and circular maculae (probably sunken floored structures), many pits and blobs and palisade lines, one of which may more or less follow the route of the ditch. Other circular enclosures within this field are of unknown date and purpose (both hengiform), and at least one square barrow has been identified (possibly dating to the 1st millennium AD). Two phases of rig and furrow agriculture have also been identified as cropmarks.

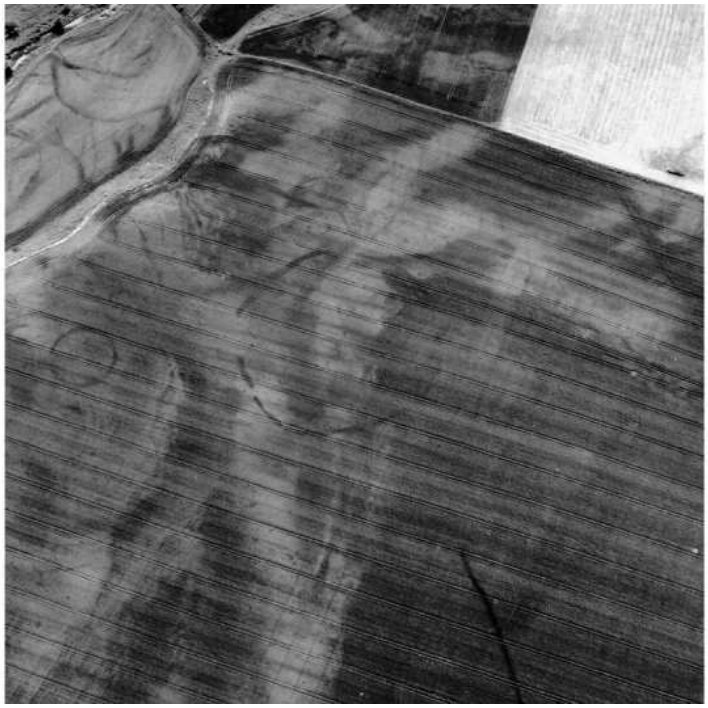

*Fig 4: Air photo focused on the putative causewayed enclosure; in this photo north is roughly towards the bottom of the image © RCAHMS*

**GEOPHYSICAL SURVEY 2013 AND FIELDWALKING**

In April 2013 a geophysical survey was undertaken by the SERF project (for a full report on this work, see Poller 2013) over and around the causewayed enclosure. This aimed to clarify elements of the cropmark complex. Gradiometry and resistivity surveys were conducted at varying degrees of resolution and extent. This survey revealed a series of anomalies that confirmed the cropmark evidence, but suggested further features were likely to be present below the topsoil. However, some cropmark features, such as the palisaded enclosure boundary, did not show as convincingly, or were absent. Geophysical survey at Forteviot has also been similarly limited in further elucidating the cropmark complex meaning that excavation is the

most successful method for characterizing the archaeological deposits. Where relevant, results from this survey will be included in excavation descriptions, below.

The 'causewayed enclosure' ditch showed variably, and resistivity survey showed more detail and consistency. It seems likely that there is no magnetic material within the ditch, or at least none that was detected during the survey. A key outcome of the survey was the apparent spatial inaccuracy of RCAHMS most recent transcription (which is should be noted has not yet been subject to peer review and so is provisional). Poller (2013) in her report notes that in 'comparison with the cropmarks identified by aerial photography the results of the survey clearly show that there is a discrepancy in the georeferencing of two datasets. Nonetheless, the circuit of the large enclosure noted in the geophysical survey can be seen to roughly follow that of the cropmarks; however, the gaps in the ditch do not match.' A key outcome of the excavations will be to improve the accuracy of the transcription and this work is currently ongoing in partnership with RCAHMS.

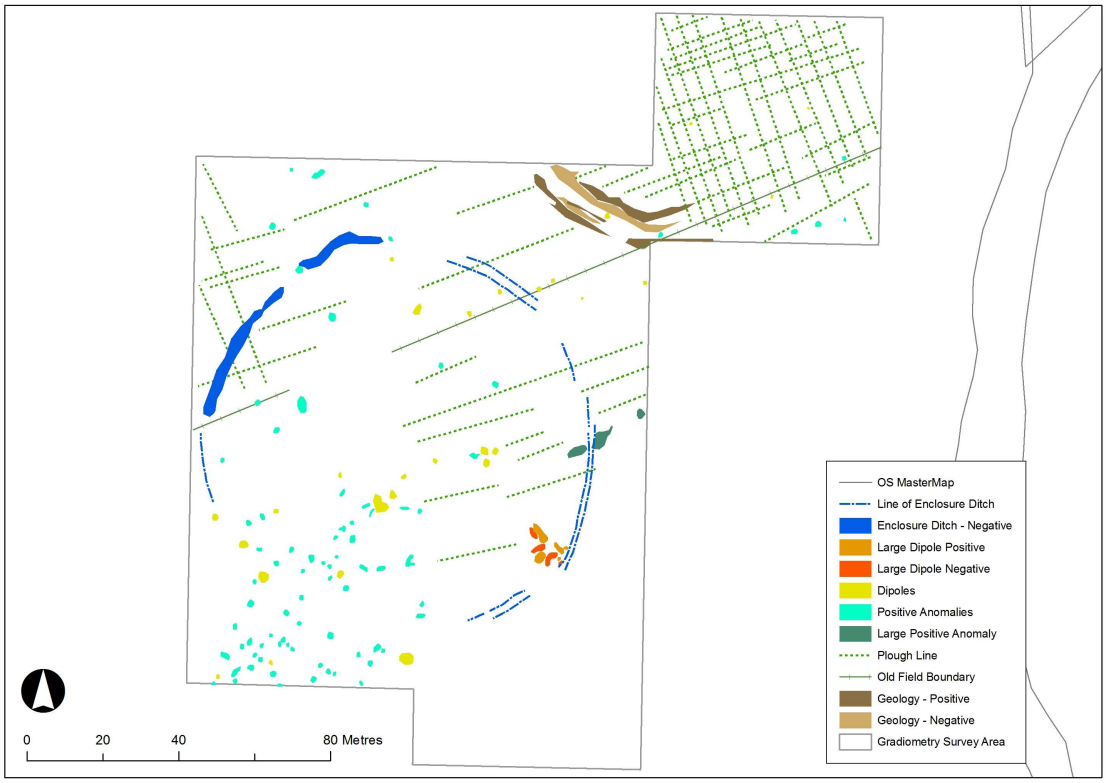


*Fig 5: Interpretive plot of the gradiometry results, showing the outline of the causewayed enclosure, and a series of dipole readings near the southern entrance gap (Poller 2013)*

None of the internal or external features were picked up convincingly on the geophysical survey, and instead the main anomalies were focused on areas with no cropmark evidence. Most notably these included a series of high/low magnetic readings (dipoles) just within the southern entrance of the big enclosure. Poller notes at least one of these 'may be a metallic object, but more likely an igneous stone, perhaps similar to the stone discovered at the entrance of the double enclosure at Forteviot', which was interpreted as a fallen standing stone. This cluster of readings is shown as orange and yellow blobs on Fig 5, above.

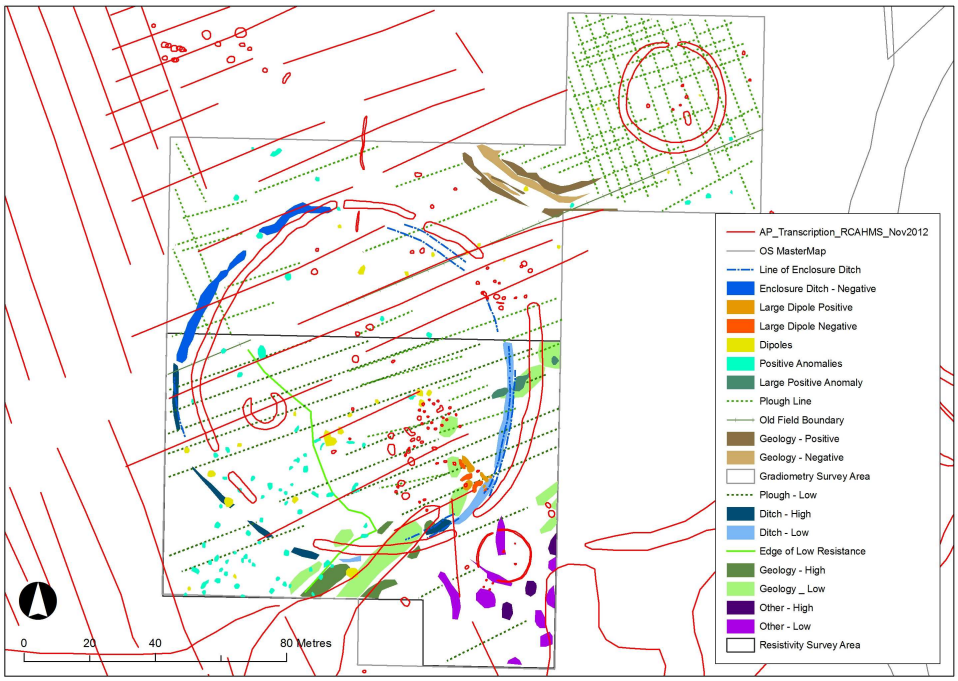


Fig 6: *Interpretation of gradiometry and resistivity data overlain with aerial photographic transcription (RCAHMS) (Poller 2013)*

A fieldwalking programme in the 1990s organised by Perth Museum and Art Gallery with Dunning Parish Historical Society included work at Leadketty. Finds included a transverse arrowhead located just to the east of the palisaded enclosure (NO01NW 131) and a small scatter of material including a flint core, flakes and quartz and agate in a field immediately south of Duncrub burn (NO01NW 155) (King 1993; Hallyburton & Brown 2000). Neolithic pottery has also been found during fieldwalking in the northern field (King 1993, 102) although we have not yet looked at this material. Fieldwalking was also undertaken by a small group of students from the University of Glasgow Archaeology Department in the mid 2000s, with few objects found, and no indication of any clusters or concentrations of material. A small area in the vicinity of the excavation trench was fieldwalked by SERF team members in March 2013, with no finds of note made (Wright 2013).

**SERF PHASE 2 RESEARCH QUESTIONS**

Aside from the overall SERF Project objectives (see Driscoll et. al. 2010), the work at Leadketty is designed to develop a detailed understanding of the wider significance of the Forteviot complex through investigating the nearby monument complex at Leadketty, and the wider earlier prehistoric archaeology of Strathearn through targeted excavation, fieldwalking and analysis.

*General research questions for SERF Phase 2 related to prehistory*

- What was the nature of the activity at large-scale Late Neolithic and Early Bronze Age monument complexes such as Leadketty and Forteviot?

- How did these complexes relate to their wider environment and landscape, and each other?

- What is the significance of the study area for our understanding of transitions in prehistory such as the late Neolithic - Chalcolithic - Early Bronze Age (EBA)?
- Were prehistoric features an important element of much later political strategies as has already been suggested for Forteviot?
- What are the implications of the Leadketty cropmarks for the formation of archaeological features of this kind and how can we manage their preservation and identification better?

*Neolithic / Bronze Age Leadketty research questions*

- What do the cropmarks and geophysical anomalies at Leadketty represent?
- How did Leadketty function? Was it the foci of settlement conglomerations, or a pilgrimage sites drawing people from a wider catchment?
- What is the chronological relationship between Leadketty and Forteviot? Were both palisaded enclosures in use at the same time? Can we find a connection between them? Did both 'complexes' have the same purposes, and were they used by the same people? Did one 'replace' the other? Were they competing centres of power?
- What is the nature of the Leadketty palisaded enclosure? Was it defined by timber posts, and if so, what type of timber was used, what size of posts, and how were they erected? Were there any connecting features between postholes e.g. fenceline, bank? Was there a single or double boundary, and was there phased construction? How long did it take to build?
- What is the nature of the features within and around the palisaded enclosure?
- What can we say about Neolithic / EBA burial practices at Leadketty? Was there a 'founding' cremation cemetery at Leadketty as with Forteviot? Are there mounds or barrows at Leadketty (as the cropmarks suggest)?
- Is there any evidence for early Neolithic activity e.g. pit digging?
- Why is this monument complex in this particular location?
- How do the archaeological sites and monuments related to the variable topography within the field? How did this impact on those using the monuments? How visible was the wider landscape? Can our survey and excavation results be fed into existing GIS and viewshed models?

*Environs / the bigger picture research questions*

- What was the landscape like during the Neolithic and EBA in central Strathearn? What was the extent of woodland clearance in prehistory? How did the construction of the palisaded enclosure impact on the local and wider landscape (e.g. deforestation)? Where did the material to build the monuments come from? What other types of landuse/form existed in the area and what can this tell us about human activity in prehistory?
- What is the chronological connection between Leadketty and Forteviot? Were

both palisaded enclosures in use at the same time? Can we find a connection between them? Did both 'complexes' have the same purposes, and were they used by the same people? Did one 'replace' the other? Were they visible from one another, and under what conditions?

- How do the monuments at Forteviot / Leadketty relate to Neolithic cursus monuments and other structures (such as henges and buildings), and EBA funerary monuments, located elsewhere along the Earn?
- Where were the monument builders living?

*Later activity / continuity research questions (overall SERF theme)*

- Can we find any direct evidence for later prehistoric or medieval interaction with the Leadketty complex?
- Are there square barrows and long graves within the enclosures? What is the nature of the internal macula within the mini-henge?
- Did later activity disturb prehistoric contexts, and how might this impact on dating strategies?
- Is there any connection between later activity at Leadketty and the hints of Pictish / early medieval activity within Dunning village?

*Complex management / cropmark issues research questions (overall SERF theme)*

- Why do the cropmarks show up so variably? Have we recorded all available archaeology or are there more sites in the dark 'void' areas? How many archaeological features do not show as cropmarks?
- How can we explain variations between the geophysical and cropmark showing of features such as the mini-henge?
- How does the level of truncation of archaeological features compare with Forteviot? Does this have a connection to different crop and ploughing regimes (for instance no history of potato planting in the southern field at Leadketty)? How much of an impact has multiple episodes of rig-and-furrow cultivation had on these fields, and the archaeology?

**2013 EXCAVATIONS**

Excavations in June/July 2013 focused on the south side of the so-called causewayed enclosure within Leadketty northern field (Fig 7). The trench was specifically located to answer some of the research questions outlined above, and to allow us to begin to make some comparison (in terms of the archaeological remains, survival and chronology) with Forteviot as well as augmenting the 2012 Leadketty excavation results.

The trench was opened and machine-stripped under careful supervision, and left to weather for almost a week. The trench was then cleaned by hand, using hoes and trowels, and subsequent cleaning occurred as and when necessary. There was much less silt overburden than we encountered in 2012, reflecting fewer palaeochannels in this location, but also the location of the site on a slope. All

features revealed were planned, and a sample excavated in line with pre-arranged scheduling conditions negotiated with Historic Scotland; in some cases features were only half-sectioned while a selection of features were left unexcavated. All stages of excavation were recorded in detail, and sampling was undertaken in line with documentation submitted to Historic Scotland in advance of the excavations.


*Figure 7: LK13 trench in relation to the cropmark and geophysical survey – the trench is the black box.*

Post-excavation work is ongoing, and so the discussion that follows should be seen in this light; *all observations are at this stage provisional*. All archive numbers used in this report are listed in tabular form in the appendices.

The trench that was opened at Leadketty (known as LK13) measured about 50m NNW-SSE by 20m, and was intended to allow us to excavate a representative sample of the boundary (including an entrance gap), internal and external features, as well as a range of geophysical anomalies (see Figs 7 and 8). A wide range of features were excavated, many of which did not show either from the air, or during the geophysical survey. With one exception, it was not possible to show stratigraphically the relationship between the main groups of features, and so the following discussion is not arranged chronologically. A provisional attempt to make sense of this will follow towards the end of this report. The trench areas referred to in the following sections are shown in Figure 9, while complete lists of contexts and small finds can be found at the end of this report.

*Fig 8 – LK13 trench, north to top, © SERF and Flying Scotscam*

| | |
|---|---|
| **A** | **B** |
| **C** | **D** |
| **E** | **F** |
| **G** | **H** |
| **I** | **J** |
| **K** | **L** |

*Fig 9 – Schematic representation of the Trench areas, north to the top, C-J are 10x10m boxes, the others 10xmax3m up to the edge of the trench*

*Top soil*

The top soil comprised of a dark brown humic matrix with infrequent rounded, sub-rounded and sub-angular stones (5mm-2cm). The depth of the top soil varied from 25cm to 35cm. This was found across the entire trench. The small finds recovered during cleaning following the machine stripping of the top soil were two pieces of worked quartz (small finds 1301 and 1307), worked agate (SF1302), daub (SF1305) and three pieces of white glazed pottery (SF1303).

*Silt deposits*

There was silt deposit (1489) across much of the trench. It covered an area encompassing parts or all of Areas B, D, E, F, G and H (see Fig 9). A slot was investigated in Area D where it was found that silt overlay natural gravels. The maximum depth of the silt was 35cm, although when later excavating the ditch to the putative causewayed enclosure it was found to be much deeper in places, up to 67cm.

*Plough furrows*

The trench was punctuated by wide plough furrows, which ran in an east-west alignment and were spaced on average 10m apart.

A slot was excavated though the plough furrow [1431] in Area C/D. The profile of the cut was a shallow bowl shape with a maximum depth of depth of 30cm; width 4m. The fill comprised of a B soil horizon comprising of a medium brown sandy silt (1430) with sub-rounded and sub-angular stones (maximum 20cm by 10cm).

The date of these plough furrows is unknown – although they are wide, this does not necessarily point more strongly towards a medieval, or post-mediaeval origin (Chris Dalglish pers. comm.). On some occasions the furrows disturbed earlier features e.g. putative cremation feature [1507] [1547], the causewayed enclosure ditch (described in more detail below).

*Figure 10: Post-excavation photograph of west facing section of plough furrow [1431]. © University of Glasgow.*

*Pit cluster*

A cluster of irregular features with distinctive dark fills was identified in the NW corner of the trench (areas A and C) (Figure 11). The area is defined to the south by the northern-most furrow [1431] in the trench. There was no direct stratigraphic relationship between the furrow and any of the pits. Out of a total of 18 features within the pit complex thirteen were either half-sectioned or fully excavated. The putative pit features not excavated were [1320], [1342], [1346], [1350] and [1353].

*Figure 11: Record photograph of pit complex in Areas A and C. Photograph taken from the north. © University of Glasgow.*

The largest pit within the complex is [1325] which was aligned north-south, sub-circular in plan measuring 130cm by 124cm. The profile of the cut of the pit was u-shaped with a rounded base and cut to a depth of 78cm. The primary fill (1468) comprised of dark brown sandy silt which was sampled for charcoal. Overlying (1468) was a stony fill (1463) within a dark grey sandy silt. The inclusions included rounded, sub-rounded, angular and sub-angular stones with diameters ranging from 5cm to 15cm. Above (1463) was another stony fill (1472). The character of the inclusions had broad common differences to (1463), although the stones were generally larger (5-25cm) and made up c.80% of the context. The soil matrix consisted of greyish brown sandy silt. Overlying (1472) was a dark brown sandy silt with pebbles and stones (1473) with maximum dimensions in the range of 2-10cm. A short period of natural silting is indicated by dark grey sandy silt (1470). Overlying (1470) was another stony fill (1469) within a light grey sandy silt. The pebble inclusions (1-5cm) accounted for approximately 50% of the context. A corroded ferrous object (SF1308) was recovered from (1469). The upper fill of pit [1325] comprised of medium grey sandy silt with gravel and charcoal which may represent a deposit of burnt material. (1466) is the same as (1324), the upper fill of the adjacent pit [1474]. Corroded ferrous objects (SF1308) were recovered from (1466).

[1474] is an irregular 'D' shape in plan aligned east-west measuring 82cm by 50cm. The profile of the pit is u-shaped and was cut to a depth of 55cm. A medium greyish brown sandy silt with pea gravel (1475) constituted the primary fill of the pit. Overlying (1475) was a dark brown sandy silt (1477), which underlies a dark grey sandy silt (1479) with small pebble (2-4cm) inclusions and a medium brown sandy silt (1530). The range of the size of pebble inclusions were the same as (1479), although the percentage frequency was much greater at c.40% compared to less than 5%. Abutting (1530) is a context of medium brown silty sand underlying the upper fill (1324). A sherd of 19th century ceramic (SF1304) was recovered from (1324), which has been sampled for charcoal.

*Figure 12: North facing section of pits [1474] and [1325]. © University of Glasgow.*

South of pit [1474] on the border of Areas A and C were three intercutting pits. Two adjacent pits [1323] [1561] were cut by a central pit [1560]. The north-west perimeter of [1323] and south-east perimeter of [1561] were cut by [1560] (Figure 13). All three pits were half-sectioned. The primary fill of pit [1323] comprises of medium orange brown silty sand (1563) with small rounded pebbles and stones (1-2cm) making up approximately 15% of the context. Overlying (1563) was a greyish brown sandy silt (1562) where sub-rounded and sub-angular stones (1-5cm) accounted for c.20% of the context. The light grey silt upper fill (1322) has stone inclusions which are similar in size and character to (1562), although percentage frequency is higher at c.35%. Also included was charcoal and burnt bone with samples taken. The north-westerly of the three pits was [1561] cut to depth of 37cm; [1323] 46cm. This feature [1561] had a single homogenous fill comprising of light grey sandy silt (1566) with charcoal and burnt bone. Two large sub-rounded stones were set within (1566) measuring 28cm by 10cm, and 12cm by 8cm. Smaller stones (1-5cm) were noted throughout the context. (1566) was sampled. The central pit [1561] was sub-circular in plan with a bowl-shaped profile with a rounded base cut to a depth of 45cm. The homogenous fill consists of medium greyish brown sandy silt (1564). The stone inclusions have common differences with the smaller stones found within (1566). A lens of reddish orange clay was recorded in section.

*Figure 13: East facing sections of pits [1323] [1560] [1561]. © University of Glasgow.*

A pit [1318] was severely truncated by another pit [1598] to the east and [1628] to the west. [1628] also cuts [1598]. All three pits were half-sectioned (Figure 14). [1318] was cut to a depth of 40cm. It is filled by light orange brown sandy silt (1319) with pea gravel and sub-angular stones (6-9cm) inclusions. [1598] was sub-oval in plan and cut to a depth of 30cm. The fill comprised of dark reddish brown silty sand (1590) with flecks of charcoal and large sub-rounded and sub-angular stones throughout. The largest stone measured 25cm by 20cm by 15cm. Pit [1628] had a bowl shaped profile with a rounded base and cut to a depth of 30cm. The slope of the cut was approximately 45° to the east and 60° to the west. The pit was filled by medium greyish brown sandy silt (1629). Inclusions consisted of flecks of charcoal, pebbles and larger sub-angular stones, the largest of which measured 15cm by 15cm by 10cm. (1629) has been sampled for charcoal.


*Figure 14: North facing section of pits [1318], [1598] and [1628]. © University of Glasgow.*

A small sub-circular pit [1648] measuring 40cm by 30 cm in plan was fully excavated. The profile of the cut was u-shaped at c.60° with a flat base. The pit was cut to a depth of 26cm. The primary fill comprised of dark blackish brown sandy silt (1647). 30% of the context was made up of small rounded pebbles and stones (2-5cm). The context was sampled for charcoal. Overlying (1647) was a brownish black silt (1565) with inclusions of small stones (1-3cm), burnt bone and charcoal. (1565) is the same as (1343) which has been sampled. Pit [1344] is adjacent to pit [1648] and was also fully excavated. It is an elongated oval in plan, aligned east-west and measures 94cm by 40cm. The depth of the pit is cut to 33cm. The

character of the fill (1343) is the same as (1565) save for the presence of a large sub-angular stone measuring 50cm by 36cm.

A sherd of 19th century ceramic (SF1326) was recovered from near the base of the homogenous fill (1702) of pit [1701]. The feature was oval in plan measuring 71cm by 57cm and aligned north-south. The profile of the cut was u-shaped with almost vertical sides and an irregular flattish base at a depth of 27cm. (1702) comprises of dark greyish brown sandy silt. Approximately 20% of the context generally consists of pebbles and sub-angular stones (2-10cm), although the largest stone had a maximum dimension of 24cm. (1702) has been sampled for charcoal and burnt bone.

Two small adjacent pits [1366] [1555] were half-sectioned. Both pits were sub-circular in plan with u-shaped cuts with a rounded base and vertical sides. [1555] and [1366] were aligned south-east to north-west and [1555] measured 19cm by 14cm; [1366] 13cm by 12cm. [1555] was cut to depth of 14cm; [1366] 13cm. The fill of [1555] comprised of light greyish brown sandy silt (1556) with pea gravel and small rounded pebbles (2-3cm). The character of the fill (1365) of [1366] was the same as (1556).

*Possible Timber circle*

Part of a putative timber circle was exposed in Areas A and B. The timber circle is clearly defined in aerial photographs and the transcription thereof. All four postholes within the trench were excavated to some extent. The pit cluster, above, lies 5m to the W of this structure, which itself sits amidst a further group of features (below).

[1338] is the most westerly of the four postholes and was half-sectioned. It was sub-circular in plan with an east-west alignment (32cm by 24cm) and cut to depth of 51cm. The profile was u-shaped with a rounded base and near vertical sides. The primary fill comprised of medium orange brown silty sand (1679). 60% of the context consisted of small pebbles and sub-rounded and sub-angular stones which ranged in size from 1cm to 3cm. The depth of the context was 28cm. The upper fill consisted of dark blackish brown silt (1337) which was sampled for charcoal. Inclusions were recorded as small sub-rounded, angular and sub-angular stones (5mm-25mm) representing 30% of the context. The fills appear to be silting episodes following the removal of the post.

Posthole [1340] was oval in plan (30cm by 26cm) and aligned north-west to south east. The profile had common differences with [1338] except that base was flattish as opposed to rounded. The posthole was cut to a depth of 49cm. The homogenous fill matrix comprised of dark greyish black silt (1339) with sub-rounded and sub-angular stones (5-20mm). Approximately 5% of the fill was charcoal and sampled accordingly. Set within (1339) were a number of what have been interpreted as tumbled packing stones (1580). These were rounded, sub-rounded, angular and sub-angular in character. The largest stones measured 20cm by 13cm by 5cm, 18cm by 9cm by 5cm and 14cm by 10cm by 3cm. It is possible that post was partially burnt before being removed.

The third of the four postholes exposed in the trench was [1309] (Figure 15). It was recorded as sub-circular in plan (28cm by 26cm) and aligned east-west. The profile was u-shaped with vertical sides and a flat base and cut to depth of 49cm with a fill of dark brown sandy silt (1568). Rounded stones (5-7cm) and flecks of charcoal were noted as inclusions. Packing stones (1567) were set within (1568) comprising of sub-rounded and sub-angular stones measuring from 18cm by 15cm by 4cm, to 8 cm by 7cm by 4cm. All of the packing stones were found the upper third of (1568). One of the packing stones was visible in plan showing through what was considered to be a B soil horizon deposit (1308). This was thought to represent the re-depositing of packing stones effectively sealing the posthole

following the removal of the post. A similar situation was evident with many of postholes excavated at LK13.

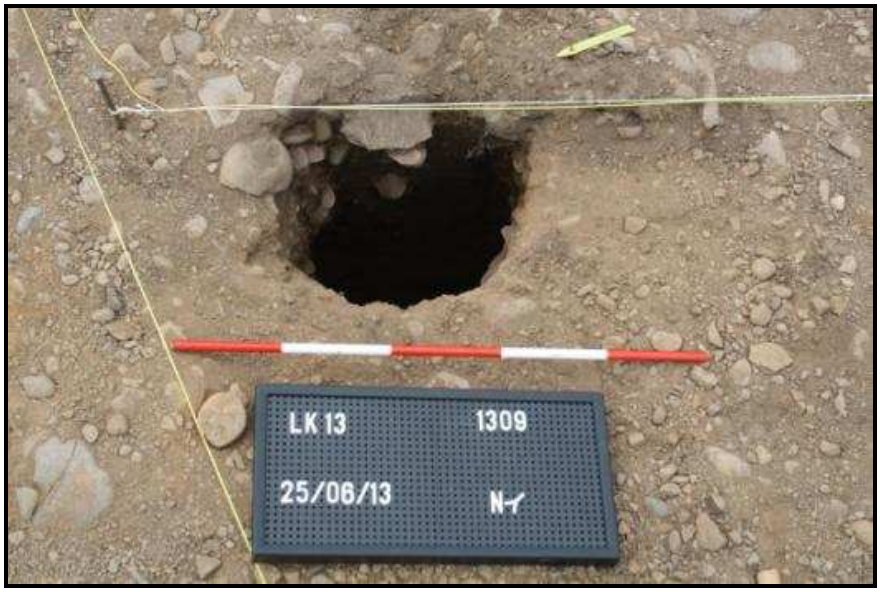


*Figure 15: South-east facing section of posthole [1309]. © University of Glasgow.*

[1315] is the most easterly of the postholes of the timber circle exposed in the trench (Figure 16). It was sub-circular in plan (28cm by 26cm) and cut to a depth of 41cm. It had a u-shaped profile with a flat base and vertical sides with medium dark brown silt fill (1314). Fragments of burnt bone and charcoal were sampled from the base of (1314). Inclusions comprised of rounded and sub-rounded pebbles and stones (2-3cm). The fill is considered to represent silting following the removal of the post.


*Figure 16: Post-excavation photograph of posthole [1315]. © University of Glasgow.*

A number of features were identified within the possible timber circle, although direct connections with this structure could not be made nor do they seem to mark out any structural feature themselves. A putative posthole [1515] was half-sectioned (Figure 17). The character of the feature is markedly different to the postholes of the timber circle. Sub-circular in plan it measures 50cm by 40cm with a cut depth of 33cm. The profile is u-shaped with a flattish base and vertical sides rounding at c.45° to the base. There was a homogenous medium orange brown silty sand fill (1314) with small rounded and sub-rounded pebbles (1-2cm). The matrix has been sampled for charcoal. Set within (1314) were larger sub-rounded and sub-angular stones (5-9cm) which have been interpreted a tumbled packing stones following the removal of the post. Other features which were not excavated consisted of a posthole [1348] only approximately half of which was visible in the trench, and a number of stakeholes [1332], [1426] and [1429]. [1332] is adjacent to [1426].


*Figure 17: South facing section of posthole [1515]. © University of Glasgow.*

*Palisade / wind break and assorted cut features*

The palisade/windbreak is located in Areas B and D, immediately to the south-east of the putative timber circle (Figure 18). This is a curvilinear feature aligned south-west to north-east with a maximum length of 6m. The width of the cut in plan is irregular varying from 14cm to 21cm. In addition to excavating the northern terminal, three further slots through the feature were investigated. No extension of the palisade feature to the north or west was found suggesting this supported a free-standing fence rather than being an enclosure although the possibility that plough truncation removed some of this feature cannot be ruled out.

The ephemeral cut at the terminal of the palisade/windbreak [1696] is bowl shaped with a maximum width of 21cm and cut to a depth of 10cm. The cut tapers at c.20° to the terminal. The fill comprises of light reddish brown sandy silt (1697) with pea gravel. The western slot showed a u-shaped profile with a flat base and vertical sides [1691]. The palisade/windbreak had a maximum width of 20cm; depth 8cm. The character of the fill (1304) had common differences to (1697), although the colour has been recorded as a medium greyish brown.

The profile of the palisade/windbreak in the eastern slot was u-shaped with a rounded base [1305] with sides of c.80°. The width is narrower at 14cm and deeper at 12cm. The fill (1589) has the same character as (1304). The fill of the palisade/windbreak appears to have been due to natural silting over time.

*Figure 18: Record shot of palisade/windbreak in Areas B and D. © University of Glasgow.*


*Figure 19: South-east facing section of slot through palisade/windbreak [1305]. © University of Glasgow.*

A bulge in the northern edge of the palisade/windbreak indicated that it either cut, or was cut by, a feature. The resultant investigatory slot through the feature showed that the cut displayed similarities to [1305]. The cut of the palisade/windbreak severely truncated three stakeholes with burnt postpipes (Figure 21). Two the stakeholes [1672] [1684] were adjacent. The third stakehole [1682] was cut and truncated by [1684]. The burnt postpipes of all three stakeholes were sampled. The southern perimeter of [1672] was cut by the palisade/windbreak. It was ascertained that it had been originally oval in plan, aligned east-west with a u-shaped profile. The sides to the cut were c.70°and cut to a depth of 14cm. The fill comprised of dark reddish brown clayey silt (1673) with sub-rounded pebbles and sub-

angular stones (1-5cm), which have been interpreted as packing stones. The burnt postpipe within (1673) was blackish brown charcoal rich silt (1680). All that can be gleaned from the cut of stakehole [1684] was that the sides appeared to have been at c.70°. The maximum length at the base was 20cm; width 20cm. The fill has broad common differences with (1673). The burnt postpipe (1683) is also a blackish brown charcoal rich silt, although the width is much greater at 16cm. The stakehole [1682] was so badly trashed by the stakehole [1684] that it was not possible to determine any data regarding the shape, profile or inclination of the original cut. The black burnt postpipe (1681) had an identifiable width of not less than 5cm.

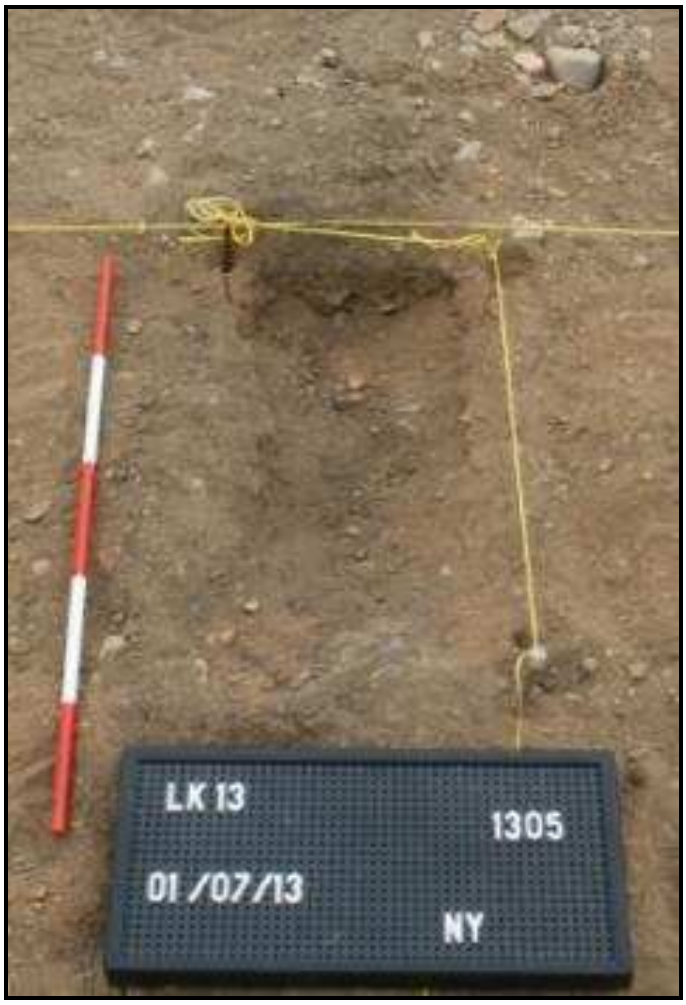


*Figure 10: Excavation of the eastern terminal of palisade/windbreak. North facing section of palisade/windbreak. © University of Glasgow.*

The stratigraphic relationship determines that the stakeholes pre-date the palisade/windbreak. It could be possible that these stakeholes may have been contemporaneous with other features recorded in Area B and D between the south of the timber circle and north of the palisade/windbreak.

A wide range of cut features were found within the vicinity of the palisade/windbreak. These include a putative trapezoidal setting of small cut features, as well as various pits and stakeholes.


*Figure 11: Record photograph of stakeholes [1672] [1682] and [1684]. © Glasgow University*

Six stake holes or small postholes appeared, very tentatively, to form some kind of trapezoidal structure. Two of the stakeholes were investigated by excavation: [1327] and [1534]. The remaining unexcavated stakeholes were [1311], [1388], [1390] and [1532]. [1327] was circular in plan with a diameter of 26cm (Figure 22). The profile of the cut was u-shaped with an irregular rounded base and cut to depth of 32cm. The sides to the cut were almost vertical (>80°). The fill consisted of medium brown sandy silt (1326). 30% of the fill was made up of rounded stones (3-6cm).


*Figure 12: North facing section of stakehole [1327]. © University of Glasgow.*

[1534] was appreciably smaller than [1327] this may be due to its positioning within the putative structure, i.e. outer support (Figure 23). It was sub-circular and measured 14cm by 12cm in plan. The corresponding stakehole [1388] was a similar size. The cut was u-shaped with a flat base and cut to a depth of 10cm with a sandy silt gravel fill (1533). The fill appeared to have been due to silting following the removal of the stake. Both (1326) and (1533) were sampled for organic material.


*Figure 13: North-west facing section of stakehole [1534]. © University of Glasgow.*

To the north-east of the putative trapezoidal structure there was a triangular formation of stakeholes [1509] [1511] and [1513]. None of these features were excavated. It is possible that stakeholes [1672] [1682] 1684] cut by the palisade/windbreak may have been broadly contemporaneous with the stakeholes north-east of trapezoidal structure.

Pits [1307] and [1543] located in Area D may have represented the most westerly features within this complex, or may have been completely unrelated. [1307] was sub-circular in plan (70cm by c.62cm), aligned north-south and cut to the south by pit [1543] (Figure 24). The profile was u-shaped with a flat base and cut to depth of 23cm. The west side is cut at c.45°; east c.80°. The primary fill was dark orange brown sandy silt (1542) with sub-rounded stones (1-5cm) which made up c.40% of the context. Overlying (1542) was a medium greyish black sandy silt (1545). 10% of which was small sub-rounded and sub-angular stones up to 1cm in length. Set within (1545) and at the interface with (1542) were a number of larger stones which were up to 20cm in length and comprised of sub-rounded, angular and sub-angular varieties. One of the stones was a piece of muscovite with its unmistakable pearly lustre which suggested the probability of some form of structured deposition. Pit [1543] was sub-circular in plan (49cm by 35cm) and aligned east-west. There was bowl shaped profile with a flat base which was cut to a depth of 20cm. The sides were irregular at c.45°. The primary fill comprised of dark orange brown sandy silt (1544). Approximately 45% of the context was made up of sub rounded and sub-angular stones (5mm-5cm). The upper fill was light greyish brown silty sand (1306) with sub-rounded and sub-angular pebbles and stones (5mm-4cm). The inclusions accounted for c.25% of the context.

*Figure 14: South-east facing section of pits [1307] and [1543]. The muscovite underlies the 'capping' stone. © University of Glasgow.*

Posthole [1364] was sub-circular in plan (50cm by 45cm), aligned north-west to south-east and cut to a depth of 30cm. There was a u-shaped profile to the cut with its sides at c.80°. The primary fill was light brown silt (1690) with angular and sub-angular packing stones (c.8cm by 3cm) and crumbs of burnt bone. A postpipe (1480) within (1690) was clearly visible. (1480) was distinguished as a dark brown sandy silt with flecks of charcoal and angular and sub-angular packing stones (20cm by 3cm). The posthole was sealed with placement of a large stone (1467) measuring 29cm by 27cm by 5cm. This is perhaps an example of a formal decommissioning practice of features at Leadketty, something that will be returned to later (Figure 25).


*Figure 15: Southeast facing section of posthole [1364]. © University of Glasgow.*

There were two adjacent postholes [1336] [1334] south of and in the vicinity of the western terminal to the palisade/windbreak. It is possible that these postholes were associated with [1303] and [1386], which were located to the north of the palisade/windbreak, forming an arc of postholes south of the putative trapezoidal structure. This interpretation may be said to hinge on the possibility of a posthole cut by the palisade/windbreak to the east of the

burnt stakeholes [1672] [1682] [1684] underlying the palisade/windbreak [1691]. There was a further arc of postholes [1384] [1382] [1703] which appeared to be following the same curvilinear character of the palisade/windbreak.

Only one of these features was excavated. Posthole [1382] was circular in plan with a diameter of 48cm with u-shaped profile (c.75-80°), flat base sloping from east to west and cut to a maximum depth of 27cm. The fill comprised of medium brown sandy silt (1557) with gravel and flecks of charcoal. There was a clearly defined postpipe (1381) of a greyish dark brown sandy silt (Figure 26). The diameter of the post would have been c.25cm.

A number of putative postholes/stakeholes [1303] [1313] [1386] [1536] were recorded in this area, but not excavated.


*Figure 16: East facing section of posthole [1382]. © University of Glasgow.*

*Disturbed cremation deposit?*

A slot through the northernmost furrow [1431], aligned east-west, was excavated. The maximum width of the furrow at this point was 4m and cut to a depth of 22cm. The fill of the shallow bowl-shaped cut comprised of a medium brown sandy silt (1430) with pea gravel and sub-rounded and sub-angular stones. The largest stone measured 20cm by 10cm. (1430) has been interpreted as a B soil horizon.

At the base of the furrow [1431] it appeared that it had severely truncated two features [1507] [1547]. There were a number of sub-angular stones visible in plan on the surface and within the cut boundaries of the truncated features. The evidence for [1507] suggested that it was a u-shaped cut, aligned east-west and with

sides at 60-70°. The truncated depth was recorded at 30cm. A medium silty sand (1506) filled [1507]. The adjacent feature [1547] with indications that the original cut was a shallow bowl shape in profile (truncated depth 25cm) with gently sloping sides at c.20°. The fill comprised of medium reddish brown sandy silt (1546). Charcoal and fragments of burnt bone from both (1506) and (1546) were sampled.

*Figure 17: David Clelland, Alan Doherty and Helen Green discussing the strategy for the excavation of the putative disturbed cremation deposit. © University of Glasgow.*

*Putative post-defined structure*

A series of postholes were identified in Area E that, with the eye of faith, may have been part of a timber structure that partially lay beyond the west edge of the trench. This comprised features [1374], [1654], [1330], [1380], [1372] and [1370] with a gap in this setting, a possible entrance, on the north-east side of the post group. [1374] and [1370] were not excavated. The deepest feature, [1654], may have had a central location within the post group.

[1654] was circular in plan with a diameter of 50cm. It was u-shaped in profile with vertical sides and cut to depth of 80cm (the deepest cut feature found during the excavation). The fill was dark brown gravel silt (1655) with *in situ* sub-rounded and sub-angular packing stones (1656) at the edge of the posthole. The largest measured 35cm by 25cm by 8cm with three others at c.25cm by 5cm by 15cm. Set within (1655) was a clearly defined postpipe (1671) of reddish dark gravel silt. The post would have had a diameter of 20cm (Figure 28). (1655) and (1671) were sampled for charcoal. The feature was covered by a dark blackish brown B soil horizon (1617) with flecks of charcoal, of which rounded and sub-rounded stones (5mm-2cm) made up c.25% of the context.


*Figure 18: Record photograph of posthole [1654] with in situ packing stones (1656) and postpipe (1671). © University of Glasgow.*

The character of [1330] (Figure 29) was clearly distinguishable from [1654]. This may have some bearing on whether or not these features were contemporaneous as part of a structure. [1330] was sub-circular in plan (66cm by 65cm), aligned east-west and cut to a depth of 30cm. The profile is bowl shaped with an irregular rounded base. The cut to the north was almost vertical; south c.45°. The fill comprised of dark brown sandy silt (1329) with sub-rounded and sub-angular stone inclusions (5mm-9cm). A large sub-angular stone measuring 28cm by 14cm by 14cm was deposited in the upper section of (1329).


*Figure 19: South-west facing section of posthole [1330]. © University of Glasgow.*

Unlike [1654] the characteristics of [1380] (Figure 30) had similarities with [1330]. The feature was sub-circular in plan (68cm by 66cm). There was a u-shaped profile with shallow v-shape to the base (north - vertical; south - 60°). The feature was cut to a depth of 45cm. A light greyish brown sandy silt with pea gravel (1379) and flecks of charcoal filled [1380]. Inclusions consisted of multiple pebbles (9-13cm) with a concentration towards the centre of the feature.


*Figure 20: East facing section of posthole [1380]. © University of Glasgow.*

[1372] was sub-circular in plan (45cm by 42cm). The profile was u-shaped with gently rounded base. The sides were cut at c.70° to a depth of 42cm. The primary fill, which was not in section being confined to the west section of the feature, was blackish brown silty sand (1553) with small pebbles (1-2cm) approximating to something less than 10% of the context. The maximum depth of the fill was 5mm. Overlying (1553) was a greyish black silty sand (1540) with small sub-rounded and sub-angular stones and pea gravel inclusions. Large *in situ* packing stones (1559) were visible in the east facing section lining the cut of the posthole. The stones ranged from 28cm by 18cm by 10cm, to 10cm by 9 cm by 2cm. In the eastern part of the posthole there was a redeposited large triangular packing stone wedged upright in (1540) which measured 30cm by 23cm by 8cm. Two other redeposited packing stones measured c.17cm by 7cm by 7cm. Above (1540) was a blackish brown sandy silt (1371). Set within (1371) was a redeposited flat stone (14cm by 7 cm by 1.5cm), similar in character to the *in situ* packing stones. The posthole appears to have been 'sealed' with a sub-angular block of sandstone (1494) measuring 34cm by 20cm by 15cm (Figure 31).


*Figure 21: East facing section of posthole [1372] with 'capping stone' (1494). © University of Glasgow.*

Three other postholes in area E may, or may not, have been related to the aforementioned putative structure. Of the three, [1496] [1498] [1704], only [1498] was excavated.

Cut feature [1498] was circular in plan with a diameter of 50cm. The profile was u-shaped with vertical sides and cut to a depth of 55cm. The fill comprises of darkish brown silty sand (1497). In the upper section of (1497) were a number of sub-angular redeposited packing stones (1574). The average measurement for these stones was c.15cm by 15cm by 5cm. The posthole was sealed with a large flatstone (20cm by 16cm by 4cm) (Figure 32). The decommissioning of this feature has profound common differences with other postholes, e.g. [1372].


*Figure 22: South facing section of posthole [1498] and redeposited packing stones (1574). © University of Glasgow.*

*Fenceline / screen*

Immediately to the north of all of these postholes, straddling areas C and E, was a line of small postholes, aligned north-west to south-east, with a very slight arc in plan. The features are located north of the plough furrow [1394], and their similarity to one another, even spacing (between 25cm and 50cm apart) and position suggest they are all related features. Of the eleven features identified, [1461], [1591], [1603], [1607], [1609], [1626], [1613], [1615], [1617], [1619] and [1623], five were excavated.

[1461] was sub-circular in plan (49cm by 46cm) and aligned north-west to south-east. The cut was u-shaped with an irregular rounded base with a vertical cut to the east and c.60° to the west; depth 47cm. The fill comprised of dark brown clayey silt (1460) with numerous sub-rounded pebbles and sub-angular stones. A large stone near the base of the fill measured 19cm by 14cm. (1460) was sampled for charcoal. Situated at the eastern end of the alignment, this was by far the largest of the postholes here, and may mark the end of the feature. The dimensions to the adjacent circular stakehole [1591] (Figure 33) were considerably smaller than [1461]. The diameter of [1591] was 23cm and cut to depth of 15cm. The stakehole had a u-shaped profile with a rounded irregular base. The cut to the

east was vertical; west c.75°. A dark greyish brown silty sand (1592) with small pebbles and pea gravel filled [1591].

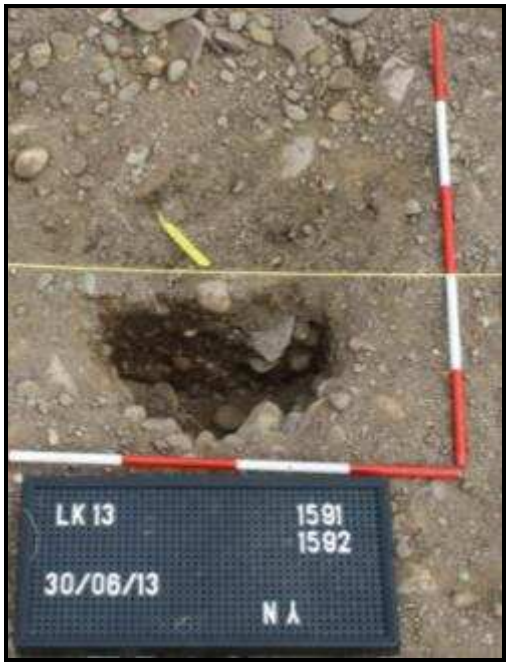


*Figure 23: South facing section of stakehole [1591]. © University of Glasgow.*

[1607] was also circular in plan (diameter 20cm) with a u-shaped profile cut to a depth of 20cm (Figure 34). The base was rounded with almost vertical sides. The fill was orange brown sandy silt (1608) with rounded and sub-rounded stones (1-2cm). It was noted that there was a higher density of charcoal in the upper part of the fill. Samples were taken.


*Figure 24: North-west facing section of stakehole [1607]. © University of Glasgow.*

Posthole [1609] was cut to a depth of 15cm (Figure 35). It was circular in plan (diameter 13cm) with a u-shaped profile and a rounded base. The sides of the cut were vertical. A dark reddish brown sandy silt (1610) with pea gravel filled the stakehole. (1610) was sampled for charcoal.


*Figure 25: North west facing section of stakehole [1609] with 'capping stone' sealing the feature. A number of packing stones are seen to the right of the feature. © University of Glasgow.*

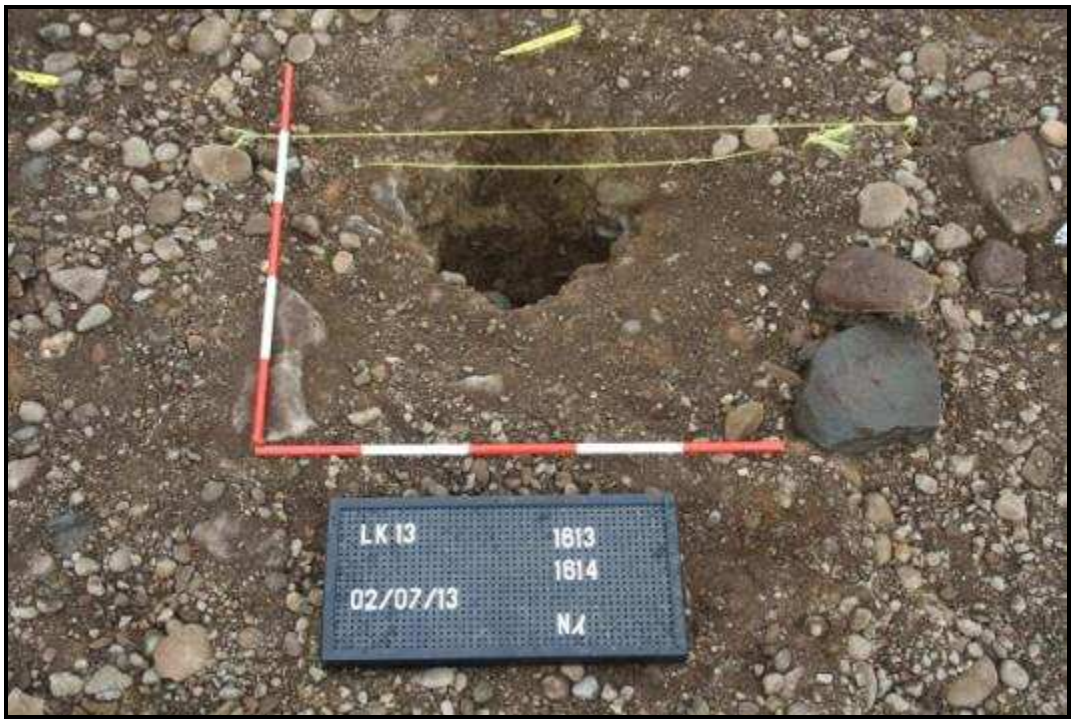


*Figure 26: South facing section of stakehole [1613]. A number of packing stones are seen to the right of the feature. © University of Glasgow.*

[1613] was circular in plan (diameter 30cm) with a u-shaped profile (c.80°) and an irregular rounded base (Figure 36). The fill comprised of dark blackish brown sandy silt (1614) which was sampled for charcoal. Sub-rounded and sub-angular stones (2-6cm) together with a larger sub-angular stone (16cm by 13cm) have been interpreted as tumbled packing stones following the removal of the stake/post. During cleaning daub (SF1305) was recovered from the surface of (1614).

To the east of [1461] there were two unexcavated features [1459] [1538] considered to be further stakeholes. If these features were associated with the fenced enclosure then this would have created a dog-leg to the shallow arc of stakeholes anchored by [1461] which may have accounted for [1461] being so much larger than the other stakehole features.

*Other pits and postholes in areas E and F*

There were two intercutting pits in Area E south-west of and adjacent to the putative post-defined circular structure.

[1412] was aligned east-west and cut to a depth of 62cm. The profile was u-shaped with a rounded base with its sides cut at c.65°. The primary fill was medium brown silty sand (1503) with small rounded and sub-rounded stones (2-5cm) and occasional flecks of charcoal. The fill overlying (1503) comprised of light brownish grey silty sand (1571). There was some evidence of root penetration and the fill may have been due to natural silting. Above is dark grey silty sand (1501). It was possible that this was a silting episode after a stone set in the surface of the feature was disturbed. [1504] cuts the western edge of [1412] (Figure 37). [1504] was aligned east-west (113cm by 82cm) and cut to a depth of 50cm with a bowl shaped profile and an irregular rounded base. The slope of the cut to the west was c.50° in contrast to the east where the cut was almost vertical rounding gently towards the base. A medium whitish brown coarse silty sand (1572) was the basal fill to the pit. Approximately 50% of the context consisted of sub-rounded and sub-angular stones (2-5cm). (1572) underlay greyish brown silty sand (1573) with some evidence of root penetration. Overlying (1573) was a light brown sandy silt (1502). Originally this was thought to be the fill of a cut into (1573), however, on further reflection it has been interpreted as natural silting similar to (1501). Covering the greater part of both features was the remnants of a B soil horizon comprising of a greyish brown humic matrix with small pebbles and gravel (1-2cm).

In Area F, immediately west of [1412] and [1504] was a posthole [1433] cut into the natural clay silt deposit (1489). The sub-circular posthole measured 44cm by 40cm in plan and was cut to a depth of 63cm. The profile was u-shaped with a flat base and almost vertical sides. The fill comprised of brown clayey silt (1532) with pea gravel and sub-rounded stones (2-11cm) and was sampled for charcoal. Towards the base of the fill there was a large sub-angular flat stone (46cm by 26cm by 14cm) wedged into the posthole (Figure 38). The stone fractured into three pieces during excavation. Another large sub-angular stone (1552) was deposited in the upper section of (1432) (Figure 39). This stone was smaller than (1558) and measured 26cm by 18cm by 10cm.


*Figure 27: South facing section of [1412] and [1504]. © University of Glasgow.*


*Figure 28: Record shot of lower large stone (1558) within fill (1432) of posthole [1433]. © University of Glasgow.*


*Figure 29: Record shot of upper large stone (1552) within fill (1432) of posthole [1433]. © University of Glasgow.*

A furrow [1394] to the south of (1433) aligned east-west extended across the entire width of the trench. A slot was excavated through [1394] to ascertain if there was a truncated posthole adjacent to [1433]. There was no evidence of any features below the B soil horizon fill (1393) of [1394] which was a reddish brown humic matrix with pebbles and stones (2-7cm) and accounted for approximately 30% of the context. North of posthole [1433] was a line of three stakeholes [1521], [1523] and [1525]. The features may have formed either a fence or a screen which may have been contemporaneous and associated with the larger fence / screen to the west. Only one of features was excavated. The u-shaped circular stakehole [1523] (diameter 10cm) with a rounded base was cut to depth of 10cm. The sides of the cut were almost vertical. Medium orange brown silty sand (1522) filled the feature. Approximately 30% of the context comprised of sub-rounded and sub-angular stones (1-3cm).

*Palisade?*

A possible straight palisade [1596] (1.6m by 17cm), aligned north-east to south-west, was visible in Area G. A slot through the feature showed that the profile of the cut was u-shaped with a rounded base. It was cut to a depth of 12cm with a vertical cut to the south; north c.80°. The fill comprised of medium orange brown silty sand (1597) with rounded stones and pebbles (4-6cm) which made c.30% of the context. This may have been the fragmentary remains of a longer palisade although it was very ephemeral.

*Charcoal rich deposit*

A charcoal rich deposit (1375) spread over several square metres in Area J was investigated. There were no associated features and the proximity of the charcoal to the base of the topsoil meant that samples were not appropriate for this deposit.

*Causewayed enclosure ditch*

A stretch of ditch some 12m was visible within the trench, leading to a rounded terminal and causeway. The ditch [1392] was very difficult to excavate, due to the similarity of the silt fill to the silt natural the ditch was cut into (see Figure 40). In addition to the quarter section excavation of the terminal, two slots were excavated through the ditch of the 'causewayed enclosure'. The northern edge of the ditch was cut by a furrow [1669] which was filled by a B soil horizon (1670). The ditch varied in surface width from 2.15m to 2.66m, with depth between 58cm to 67cm. The profile was generally uniform which comprised of a bowl shaped profile with an irregular rounded base. The slopes of the cut varied from 45° to 60° (Figure 41). The primary fill was a medium reddish brown clayey silt (1661) (1663) with small sub-rounded pebbles (1-3cm). Above which was a medium reddish brown silty clay (1391) (1662) with similar inclusions to the primary fill. Both fills have been interpreted as episodes of natural silting. (1391) and (1662) were both sampled for charcoal. The profile at the ditch terminal had a low bowl shape and showed a cut with a gentle slope of c.30° (Figure 42).

Samples were taken from the lower ditch fills although charcoal flecking was rare; no small finds were made at all. At this stage, nothing found during the excavation has shed light on the nature of the large enclosure that this ditch defines, and no trace of the bank was evident in the trench either.

*Figure 30: Record photograph of the 'causewayed enclosure' ditch. © University of Glasgow.*

*Figure 31: East facing section of ditch to 'causewayed enclosure'. © University of Glasgow.*

*Figure 32: South facing section showing the profile of the cut [1392] of the ditch of the 'causewayed enclosure' at the terminal.*

*Ring ditch*

The eastern half of a ring-ditch was identified in the southwestern corner of the trench; this feature is visible as a cropmark and appears to abut the terminal of the ditch to the 'causewayed enclosure' beyond the extent of our excavations. The curvilinear character of the ring ditch and northern terminal was exposed in Area I of the trench. There was an entrance on the south-east side of the ring-ditch. The

southern arc of the ring ditch extended from the south-west corner of the trench (Area K) suggesting a structure with diameter of 15m. This southern arc cuts the most easterly posthole [1651] of the post-defined palisade (see below). Two slots were excavated through the northern arc of the ring ditch in Area I, and the southern terminal in Area K was also excavated; several internal features were also excavated.

The southern slot through the northern arc of the ring ditch [1400] showed a bowl shaped profile (c.45°) with a rounded base. The width of [1400] was 56cm and cut to a depth of 26cm. The primary stony silting fill comprised of a greyish brown sandy silt (1641) with small rounded and sub-rounded stones and pebbles (5mm-2cm) which made up more than 80% of the context. Overlying (1641) was a reddish brown silt (1644) with sub-rounded and sub-angular stones (1579) the largest of which ranged from 10-15cm in length. These large stones were set within the upper section of (1644) in a curvilinear formation matching the arc of the ring ditch [1400]. Above (1644) was coarse greyish brown silty sand (1399). Approximately 20% of the context consisted of rounded and sub-angular stones (5mm-5cm). The cut for the northern slot [1698] showed a profile with common differences to [1400], although cut to a depth of 37cm. The primary fill (1699) was the same as (1641). Overlying (1699) was brownish grey silty sand gravel (1634) which underlay stony gravel fill (1633) made up of sub-angular and sub-rounded stones and pebbles. Above (1633) was dark brown clayey silt (1632). The upper fill (1700) equated to the character of (1399). The evidence suggests that the ditch [1400] [1698] was gradually infilled through natural episodes of silting, save the possible dumping of stones (1579). This part of the ring-ditch was disturbed by a plough furrow. The character of the ditch [1625] to the south of the entrance had profound differences to the ditch in the northern arc [1400] [1698]. It was u-shaped with vertical sides (Figure 43). The width was considerably narrower at 25cm and cut to a depth of 30cm. The terminal was half u-shaped in profile at c.60°. The primary fill consisted of medium brown gravelly silt (1601) which underlay medium brown silt (1602) with flecks of charcoal. The upper fill was medium brown sandy silt (1600) which also had flecks of charcoal throughout. Both (1602) and (1600) were sampled. The fills from appeared to be from natural silting over time.

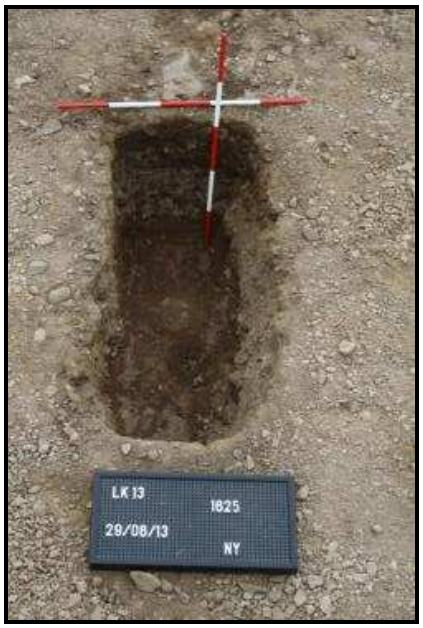


*Figure 33: South facing section of cut of southern arc of the ring ditch with half u-shaped profile of terminal in the foreground. © University of Glasgow.*

A slot through the ring ditch [1651] ascertained that it post-dated the post defined enclosure encircling the 'causewayed enclosure' (see below) by cutting posthole [1638]. The cut was bowl shaped (east c.60° and west c.45°), with a width of 28cm and cut to a depth of 29cm. The primary fill comprised of greyish brown silty gravel (1653) which was below brownish black clayey silt with small sub-rounded stones and pebbles (1-3cm). There has to be some doubt as to whether or not the southern and northern arcs are part of the same feature.

A series of internal features were identified within the ring-ditch, although these did not easily resolve themselves into any structure.

[1424] was a circular u-shaped posthole (diameter 31cm) with a flat base and cut to a depth of 53cm. The eastern cut is vertical; west slightly convex at c.80°. The primary fill was medium reddish brown sandy silt (1599) with sub-rounded and sub-angular stones considered to be packing stones (2-7cm). The largest stones were located near the base of fill. Overlying (1599) was a light greyish brown silty sand (1693) with small sub-rounded and sub-angular stones (2-4cm). There was evidence of root penetration. Covering the feature was a B soil horizon comprising of medium greyish black sandy silt (1423). Small sub-rounded stones (2-3cm) made up approximately 5% of the context. (1599) was sampled for charcoal. [1484] was a sub-circular posthole measuring 25cm by 20cm (Figure 44). The profile was u-shaped with a rounded base and cut to a depth of 53cm. The solitary fill comprised of dark brown sandy silt (1485) with small angular stones (1-2cm).


*Figure 34: East facing section of posthole [1484]. © University of Glasgow.*

Another sub-circular (37cm by 34cm) posthole [1404] (Figure 45) was excavated with a u-shaped profile and rounded base. The sides of the feature were almost vertical and the feature was cut to a depth of 37cm. The feature was filled by medium brown sandy silt (1403) with small pebbles and flecks of charcoal. (1599), (1485) and (1403) were sampled.

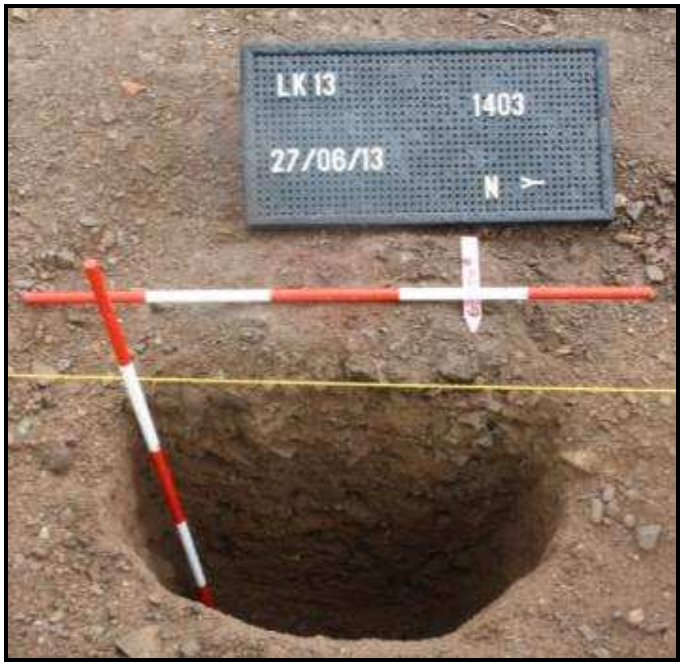


*Figure 35: East facing section of posthole [1404] (1403). © University of Glasgow.*

*Post-defined palisade*

In Areas K and L, a palisade was identified, consisting of a series of adjacent postholes (Figure 46). This feature has been recorded on some aerial photographs (e.g. Figure 3), although it is unclear how extensive the palisade is beyond the trench, or how it relates to the causewayed enclosure to the north.

*Figure 36: Record photograph from the east of the post defined enclosure. This is the eastern extent of the palisade within the trench, with putative entrance gap © University of Glasgow.*

There was an entrance to the south-east of the enclosure marked by two large postholes; [1363] marked the western entrance post and [1705] the east. Six postholes were excavated west of the entrance and two to the east of the entrance. The posthole [1638] in the extreme south-west of the trench was cut by the ring ditch [1651] (Figure 47).


*Figure 37: Post-excavation photograph of posthole [1638] cut by the southern arc of the ring ditch [1651] in the south-west corner of the trench. © University of Glasgow.*

The following description of the postholes on the palisade moves from west to east.

[1638] was sub-circular in plan (56cm by 54cm) and cut to depth of 29cm. The primary fill (1639) was grey silty gravel with a larger stone (20cm by 16cm by 20cm) interpreted as a redeposited packing stone (1649).

A sub-circular posthole [1587] (Figure 48) measuring 66cm by 50cm in plan was cut to a depth of 22cm. The profile was bowl shaped with sides cut at c.60° and an irregular base. A medium reddish brown silty sand (1588). Set within (1588) were a number of redeposited packing stones (1630). The largest of which measured 17cm by 6cm and was visible in section and also the pre-excavation surface of the feature.

[1585] was a sub-circular posthole (56cm by 44cm) with a u-shaped profile with vertical sides and a flat base (Figure 49). The posthole was cut to a depth of 40cm. The fill comprised of medium brown sandy silt (1586) with packing stones redeposited in the centre and upper section of the context. The largest packing stone (1593) measured 18cm by 17cm by 12cm. Three packing stones, including (1593) were visible at the surface before excavation.


*Figure 38: North-west facing section of posthole [1587]. © University of Glasgow.*


*Figure 39: South-west facing section of posthole [1585] with excavated redeposited packing stones (1593). © University of Glasgow.*

A circular posthole [1485] with a diameter of 30cm presented with a u-shaped profile with vertical sides and a flat base. The posthole was cut to a depth of 30cm. It was filled with medium light orange brown sandy silt (1454) with small sub-rounded stone inclusions. A large packing stone (1581) measuring 24cm by 20cm by 5cm redeposited effectively sealing the feature.

[1453] was a sub-circular posthole in plan (35cm by 30cm), u-shaped with vertical sides and a rounded base (Figure 50). It was cut to a depth of 35cm with dark brown sandy silt (1452) fill within which were small sub-angular and sub-rounded stones. Set within (1452) were redeposited sub-angular packing stones (1631) of varying sizes up to 3cm by 1cm. (1452) was sampled for charcoal. A worked agate chunk (SF1310) was recovered from (1452).


*Figure 40: West facing section of posthole [1453]. © University of Glasgow.*

A sub-circular posthole [1451] measured 67cm by 63cm in plan was aligned north-west to south-east and cut to a depth of 55cm (Figure 51). The profile was u-shaped with a flat base. The slope of the cut to the east was almost vertical; west c.75°. The primary fill was medium brown sand (1643) with pea gravel and flecks of charcoal underlying medium brown sandy silt (1450). Approximately 15% of the context comprised of small sub-rounded and sub-angular stones (2-5cm). Flecks of charcoal were also noted. An *in situ* sandstone packing stone (1642) measuring 26cm by 6cm by 3cm was recorded in the section to the west. Also within (1450) were three other large redeposited sub-rounded and sub-angular packing stones (1659). They ranged in size from 16cm by 14cm by 10cm, to 13cm by 11cm by 6cm. A sherd of clear glass with possible decoration (SF1309) was recovered from the surface of (1450).

The western entrance post beside the gap in the palisade was considerably larger than the postholes to the west. [1363] was sub-circular in plan, aligned north-east to south-west (1.8m by 1.11m) with a u-shaped profile and a rounded base. The slope of the cut to the south was c.60°; north c.45°. The posthole was cut to a depth of 62cm. The primary fill comprised of dark greyish brown sandy silt (1637) with pea gravel. Overlying (1637) was a light greyish brown silty sand (1582) with small sub-rounded gravel pebbles. Sub-rounded and sub-angular packing stones (1362) were recovered from within (1582) and from the lower surface of (1582). The maximum dimension of the packing stones ranged from 9cm to 52cm (Figure 52). The largest stones were found in centre of fill (1582) with smaller stones to the periphery of (1582) and at the interface with (1637).


*Figure 41: South-west facing section of posthole [1451]. © University of Glasgow.*


*Figure 42: Packing stones (1362) from posthole [1363]. © University of Glasgow.*


*Figure 43: Post-excavation photograph of western entrance post [1363] in the palisade. © University of Glasgow.*

The eastern entrance post [1705] was not excavated. It appeared to have similar dimensions in plan to the western entrance post [1363].

The postholes to the east of the entrance, although not as large as the entrance postholes, were appreciably larger than their counterparts to the west of the entrance. [1583] was sub-oval in plan (90cm by 36cm). It was aligned north-east to south-west with a bucket shaped profile with vertical sides (Figure 54). The posthole was cut to a depth of 55cm. Dark brown sandy silt (1635) with pea gravel made up the primary fill of [1583] which underlay redeposited sub-rounded and sub-angular packing stones (1594) within a medium greyish brown sandy silt matrix. *In situ* packing stones were visible in section. The largest packing stones measured 50cm by 28cm, 50cm by 26cm, 36cm by 18cm and 24cm by 12cm. Above (1594) was an orange brown sandy silt (1636) with small pebbles (1-2cm) which accounted for approximately 30% of the context. The upper fill of [1583] comprised of a darkish brown sandy silt (1584) with small flecks of charcoal. (1584) was sampled.

The character and alignment of the adjacent posthole [1645] (Figure 55) had broad similarities to [1583]. It was sub-oval in plan (84cm by 40cm) and cut to a depth of 58cm. The sides of the bucket shaped profile were c.75-80°. The primary fill was dark brown coarse silty sand (1678) which underlay light brown silty sand (1646) with small sub-rounded and sub-angular pebbles and stones (2-4cm) and occasional flecks of charcoal. The postpipe (1675) was visible as a medium brown silty sand with small pebbles (1-2cm) which made up c.10% of fill. Large tumbled and *in situ* sub-rounded and sub-angular packing stones (1676) were recovered from (1678) and (1675). The largest measured 34cm by 24cm by 20cm. Others ranged from 12cm to 17cm in diameter. Overlying the *in situ* packing stones at the southern edge of the section was medium dark brown clayey silt (1677). This context has been interpreted as an episode of natural silting following the unknown taphonomic circumstances of the disturbance and removal of a packing stone.


*Figure 44: South-west facing section of [1583] showing packing stones (1594) in section, perhaps indicative of post removal / collapse. © University of Glasgow.*


*Figure 45: North-west facing section of posthole [1645]. Tumbled packing stones (1676) are visible in section. © University of Glasgow.*

In addition to [1705] there were a number of other postholes that were not excavated, namely [1706], [1707], [1708], [1709], [1457], [1355] and [1710].

*Features south of the palisade*

An amorphous silt spread was identified in the southeast corner of the trench, and a second cut feature identified. Both lay to the south of the post palisade, although excavation of both did not reveal a great deal about these features, or what their relationship to one another, or the palisade, might be.

Pit [1686] was cut to a depth of 29cm. The western perimeter of [1686] was cut by pit [1359] (Figure 56). The evidence from the eastern slope (c.45°) of the cut suggested that the pit [1686] was bowl shaped with a rounded base. The fill comprised of reddish brown sandy silt (1687). [1359] was sub-circular in plan (65cm by 62cm) and aligned north-south. The cut was bucket shaped with slope of the cut to the west of c.80°; east c.45°. The base of the cut was lower at the west (37cm) and sloped gently upwards at c.45° to the east (30cm). Dark brown clay silt (1660) with sub-rounded and sub-angular stones (2-5cm) filled the pit [1359]. The context was sampled for charcoal.

*Figure 46: South facing section of pits [1686] and [1359]. © University of Glasgow.*

The second feature, immediately to the west, was oval in plan and aligned north-west to south-east [cut number]. The feature had a broadly v-shaped profile which was cut to a depth of 31cm. The slope of the cut to the east was c.45°; c.70°. The fill comprised of light yellowish brown silt (1694). 20% of the context consisted of small sub-rounded and sub-angular stones (5mm-4cm) and flecks of charcoal. Set within (1694) were lenses of dark greyish brown silt (1695). None of the lenses were visible in section. (1694) was sampled for charcoal.

## DISCUSSION

Although a wide range of archaeological features was found during the excavation, few artefacts or stratigraphic relationships means that it is difficult to comment on the date, form and function of this site. Although it does seem likely to be a location that was used for different roles through time, the comments here should be viewed as provisional.

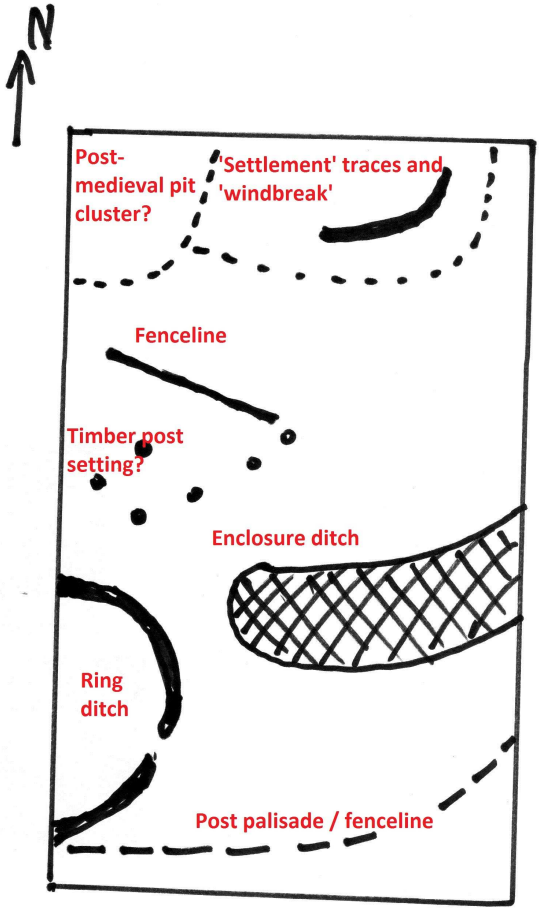


*Fig 57: Schematic sketch showing the main features in the trench, north to the top, not to scale.*

### *The causewayed enclosure*

The primary objective of the excavation was to make sense of the so-called causewayed enclosure, and on this score, success was mixed. We were able to establish that the cropmark did indeed record the location of a ditch, and that at least one of the causeways was real rather than a gap in the cropmark. The ditch however was relatively uninformative; allowing for truncation it may originally have been just over 1m in depth, and between 2m and 3m wide, with a simple sequence of natural silt fills. No evidence was found of a bank on either side of the ditch, although the ephemeral nature of the plough furrow running across the north side of the ditch suggests there may have been a greater depth of plough soil here at one time, maybe indicative of a bank. No finds were made and very little charcoal was apparent, and it may not be possible to date the ditch or the enclosure from this particular excavation. Therefore, it is very difficult to determine the date of this

monument and we cannot say for sure whether it is a Neolithic causewayed enclosure, or something much later.

***Palisades and fences***

A number of linear features were found within the trench, some of which were apparent as cropmarks. At this stage, once again, with no diagnostic finds, and little stratigraphy, it is very difficult to say much about the chronology of these features, and they may all be contemporary, although the very different character of each suggests that they may belong to different phases of activity.

*External palisade*

This substantial post-line was identified in the southern sector of the trench, on the exterior of the causewayed enclosure. The palisade consisted of closely spaced postholes, grading towards larger postholes adjacent to a possible entrance gap. This gives the impression of a fence line with some kind of gate structure (Fig 58).

*Fig 58: Possible gate structure within the palisade / fenceline, brown blocks = timber posts*

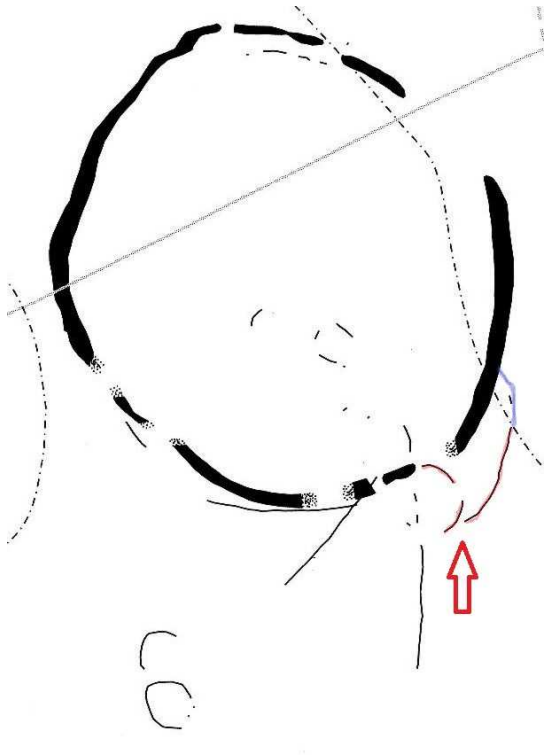

*Fig 59: Annotated extract from RCAHMS 'old' transcription (below). The palisade and ring ditch within trench 13 are highlighted in red, and the arrow points to the place where the meet, just inside the trench. Blue addition shows extent of palisade on some air photos*

Looking back at the cropmark, this palisade trench is visible, although the extent and nature of this feature is far from clear. The RCAHMS old transcription (Oswald et al 2001, and see Figures 3 and 59 in this report) suggests that the extent of the palisade is little more than we found in our trench, although having looked at various air photos, on its eastern side it does arc sharply back to the north and meet the causewayed enclosure trench. On the western side, it stops at a ring ditch, and we know from our excavations that it is cut by the ditch of that structure. A series of other stretches of palisade have been recorded as cropmarks, including features parallel to and mirroring the circuit of the causewayed enclosure, as well as a single line running almost north-south through the middle of the aforementioned ring-ditch. We have no way of telling whether all of these palisades are connected, or of the same character. Although during the excavations we felt the palisade represented an external element of the causewayed enclosure (perhaps a larger enclosure) and this is to an extent suggested by cropmarks, it seems as likely this palisade offers some kind of elaboration of the southern side of the causewayed enclosure, enclosing the entrance area, and with an entrance on the same alignment. This need not be contemporary with the causewayed enclosure, and may represent an augmentation of the enclosure during a later re-use for instance. It is to be hoped that radiocarbon dates will shed some light on the chronology of this feature.

*Internal palisade arc – screen / windbreak*

Discovered in the northern sector of the trench, this extremely ephemeral slot described an arc enclosing an area of some 5m by 5m. The slot did not seem to continue in either direction, although given that the feature was less than 10cm deep in places, this may have been due to plough truncation. It is to be supposed this slot once held a slight fence or screen of some kind, perhaps associated with the 'settlement cluster' (see below) which is largely contained within its arc. This screen is faintly visible as a cropmark in hindsight, suggesting it used to be a more substantial feature, and may now be falling victim to plough truncation. This does not *seem* to have been a structural slot (e.g. a wall or roof support), and so seems more likely to have been some kind of free-standing structure, perhaps a screen, division of windbreak. The latter are usually associated with earlier prehistoric settlement, discussed further below.

*Fence line*

Within the interior of the causewayed enclosure, a regular line of some 11-13 small postholes were found, with each posthole being able to support at best a slight wooden post. This line ran roughly WNW – ESE and was visible for some 5m. It was not clear if this represented part of a larger structure, and it seems likely that this was some kind of fence line of unknown date.

***'Settlement cluster' / timber circle***

A remarkable concentration of features was found within the northern sector of the trench, mostly (but not all) within the arc of the ephemeral palisaded screen (mentioned above). This collection of features includes postholes, pits, stakeholes,

scoops and hollows. No artefacts were found, although some charcoal, and very occasional burnt bone fragments, holds out hope of dating some of these features. As noted above some of these postholes seem to mark out the presence of a small timber circle here, with diameter of no more than 6-8m. It is possible that this was a small roofed structure, although it could just as easily have had no roof and been a circle of free-standing timbers. Other possible structures could be suggested using a join-the-dots methodology (discussed in the descriptions above), although none are as convincing as the timber circle.

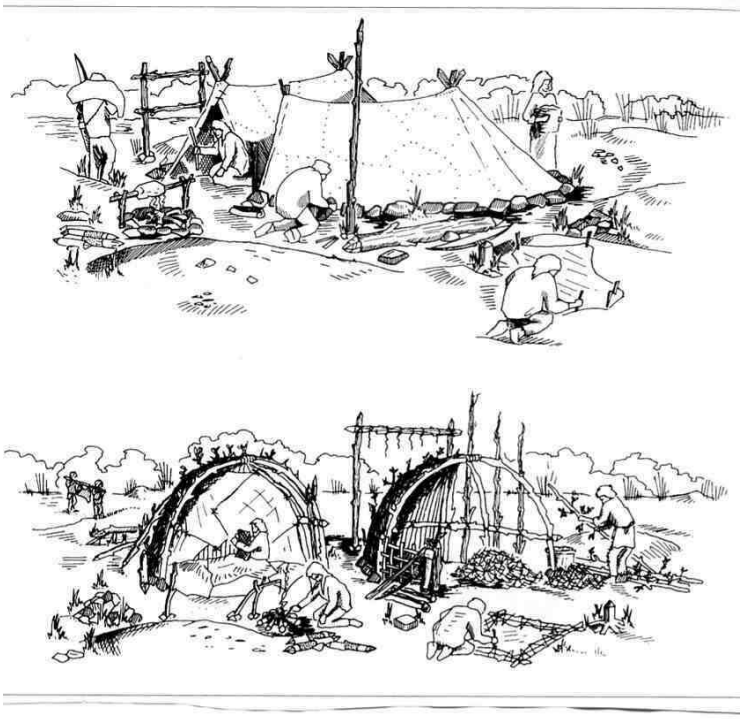

*Fig 60: Artist's impression of Mesolithic settlement in Kinloch, Rum (drawing by Alan Braby, source: Wickham-Jones 1990, Illustration 98)*

This jumble of features is reminiscent of other sites where Mesolithic / Neolithic settlement has been discovered. Typically, these settlements are defined by multiple cut features indicative of light timber buildings, and associated structures such as drying racks, and so on (see Fig 60). Windbreaks are another characteristic of such sites, and daub elements to walls could be expected. The discovery of Mesolithic settlement of this type here would be a quite remarkable discovery (no Mesolithic sites or material have yet been recorded in lowland Perth and Kinross). It is more likely that this is a Neolithic occupation site, with such pit clusters increasingly commonly being found in mainland Scotland (Brophy & Noble 2011). The circular structure suggests a later Neolithic element to this complex, akin to the settlement at Cowie, Stirling (Atkinson 2002). *This is a tenuous and cautious interpretation.* The lack of finds does weaken this argument, although as with any putative fireplaces and hearths, these could have been victims of plough truncation. The cluster is relatively small, but may continue beyond the edge of the trench. And once again, it is impossible at this stage to relate this cluster of features to the causewayed enclosure they sit within - none can stratigraphically be tied to the enclosure ditch.

Whether this activity pre- or post-dates the enclosure, or is contemporary with it, remains to be seen.

***Pit cluster in NW corner of the trench***

To further confuse the picture, a series of large intercutting pits were found in the NW corner of the trench, very close to the putative settlement cluster. These were of a very different character however: much larger, intercutting, charcoal rich in places and with some cremated bone evident. Indeed, in form these are akin to more typical Neolithic settlement traces, where intercutting pits is a classic characteristic indicative of multiple returns to the same site (Brophy & Noble 2011). However, a major flaw with this argument emerged during the excavation – the discovery of three relatively modern small finds within these features, none of which very easy to explain away as a result of disturbance (two corroded metal objects, and one modern ceramic from the base of a pit). That these pits were dug in the last few hundred years, and backfilled with midden material, seems unlikely, given this is the middle of a big field. They may be animal burials, although the shapes and arrangements seem unusual for this kind of activity and we would have expected some traces to remain. Excavations at Birnie, Moray, revealed some large pits which were interpreted as Victorian midden pits (reference), and this may yet be the most likely interpretation. Adding to the mystery, the most substantial feature in this cluster [1325] may have been a posthole, again unusual for modern activity. We await radiocarbon dates to offer some clarity on these mysterious features.

***Possible timber structure***

Yet another enigmatic cluster of features was found within the causewayed enclosure, just to the south of the aforementioned straight fenceline. This group of features consists of a number of very similar, circular cut features which are probably postholes. These postholes have a high stone content, and in two cases, very large stones seemed to have been jammed into the base of the postholes, probably after the post had been removed. Amidst the cluster was one posthole of slightly different character, [1654] as noted the deepest cut feature found on site, and perhaps a more typical posthole than the others in this cluster. It contained no small finds, but charcoal was recovered. The date and function of this cluster of features remains unknown. They have no discernible structural arrangement, although plough furrows and the trench edge may have obscured other relationships, and it is also possible some of these features may relate to the fence. With the eye of faith, these features may be part of some kind of ellipse or circle, but this is not convincing.

***The ring-ditch***

One of the most readily identifiable features in this excavation was a ring-ditch, half under the baulk, towards the SW corner of the trench. As a cropmark, this ring-ditch was apparent (see Figures 3 and 59) abutting the palisade to the south (cutting it as we discovered) and the causewayed enclosure ditch to the north (beyond the edge of the trench). We investigated aspects of the ditch which defined the ring-ditch (with one entrance gap identified), and several small internal features, which may

have been postholes. Once again, no artefacts were found, and virtually no charcoal. The ditch was incredibly difficult to dig in the dry conditions, and variable: north of the entrance the ditch was much more substantial than it was south of the ditch. The nature of this structure remains unclear. The diameter of c15m, and the presence of an entrance on the SE side, as well as some internal features that could have been postholes, suggests that it is possible that this was once a round house of some kind, later prehistoric certainly, but when built we cannot be sure. The proximity to the palisade and ditch does not seem coincidental and it may have been constructed when both were in a state of collapse, filling a gap between the two. When this might have been is unknown, and once again, plough truncation has given us little to work with. Some of the other features in the vicinity e.g. slight structures, fences, pits, may represent contemporary activity, but at this stage none of this can be demonstrated.

***Cremations?***

The presence of cremated bone in small quantities on the site is intriguing, and seems to suggest that cremations were carried out in the vicinity, and even perhaps that cremation burials took place within the excavation area. The putative disturbed burial beneath the plough furrow had perhaps the highest concentration of cremated bone, but no other features had much more than a surface scatter of burnt bone. The lack of pottery and any convincing features are not promising however, and we have yet to even establish if the burnt bone is human or animal. Post-excavation analysis will be vitally important in helping us work out whether cremations did indeed take place in the locality, and if so, when.

***Comments on the geophysical survey and cropmark evidence (see Figs 2-6, 60)***

The geophysical survey revealed a number of interesting features, and allowed us to locate the trench in the correct place, but upon excavation all unexplained anomalies turned out to be of little interest. The major cut features in the trench – the causewayed enclosure ditch and plough furrows were picked up very well by the survey, although these too show as cropmarks very clearly and the geophysics added little to our pre-excavation interpretation of these features. A series of very large dipole readings just within the causewayed enclosure entrance coincided with a compact silt and clay natural patch in the subsoil, and the geophysics was also very helpful in identifying areas of geological variation, which in turn helped us find our way into making sense of the spatial arrangement of the trench. Beyond out trench, there is no doubt that the geophysical survey has added a good deal to our knowledge of the cropmarks here, and many anomalies and intriguing features remain to be investigated out with our trench.

The survey, along with the excavation, will be used to help rework the transcription, which suffered from spatial inaccuracy. The cropmark detail, however, was very good, although given the site has been photographed on almost 30 different occasions, this is perhaps not a surprise. A good deal of the features we excavated did appear on historic air photos, if not transcriptions, although notable features e.g. the straight fence, pit clusters, were indistinct or did not show as cropmarks at all. Some features were only visible after the event, and with hindsight,

air photos are much easier to interpret. Overall, the cropmarkings are a very reliable indicator of the bulk of the archaeological features, although we would caution reliance on the transcriptions alone – referring to the original photos is equally important.

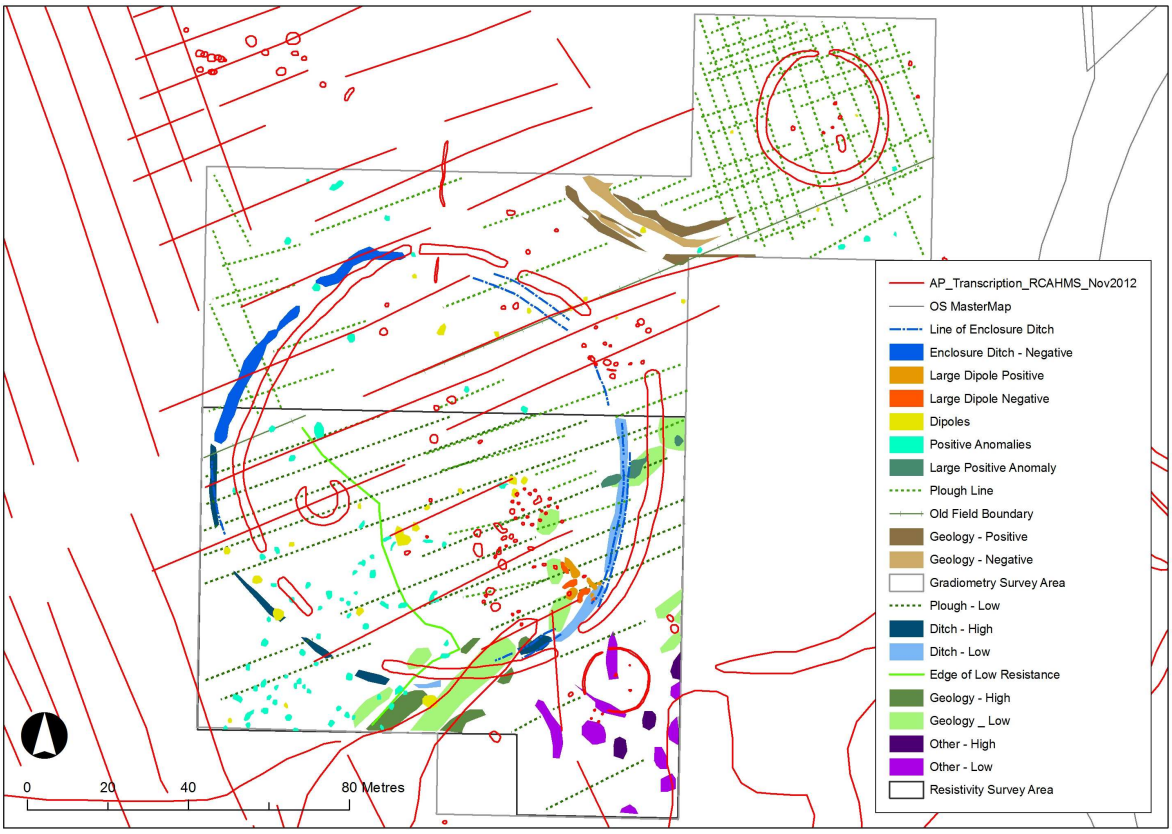


*Fig 60: Geophysics and the cropmarks*

**CONCLUSION**

This was a very frustrating season of excavation, all the more frustrating because of the unusual nature of the cropmark enclosure we focused on, and its prominent place in the literature. Sadly the question of whether the enclosure should continue to be included in Neolithic studies remains unresolved. In terms of difficulty, this was certainly as tough as any excavation we have carried out as part of the SERF Project to date, in no small part due to the dry weather conditions. Aspects of the site – including the ditch, the ring-ditch and some pit features – were rarely ever visible with any clarity, and in general the excavation was a real technical challenge. Ultimately, this excavation will add a good deal to our understanding of the nature of Leadketty in prehistory (and perhaps beyond) although we will have to wait for post-excavation work to really understand what this impact might be.

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For further information on the SERF Project, including all SERF interim reports, and DSRs, please go to our website:
www.gla.ac.uk/schools/humanities/research/archaeologyresearch/projects/serf/

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