



Millhaugh 2016

Data Structure Report: CB16
18 June - 10 July 2016

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Summary

The excavations at CB16, Millhaugh revealed evidence for settlement from the Early Neolithic, Late Neolithic, Bronze Age and Iron Age. The recognised prehistoric structures, and features include putative Late Neolithic and Iron Age dwellings, Bronze Age double cist, sub-circular palisade enclosures, post alignment, post-defined palisades, slot defined palisades, fire pits, midden pits and numerous other postholes and pits. The preliminary phasing of the site is based on the typology of material culture recovered. The prehistoric pottery assemblage amounts to more than 650 sherds from across those archaeological, although the majority are Early Neolithic. There are also indications of Bronze Age, and possible Iron Age funerary practice.

Introduction

SERF Phase 2

Phase 2 of the SERF Project moved its focus to Dunning following the completion of the fieldwork at Forteviot in 2010 and has excavated a range of sites and monuments at Leadketty (Brophy *et al.* 2012; Brophy and Green 2015, forthcoming), Baldinnies (Brophy and Wright 2013), Millhaugh (Brophy 2014), Dun Knock (Poller 2015) and Wellhill (Wright 2014b, 2015b). Other fieldwork has included, although not exclusively, a large area (51 hectares) geophysical survey at locations in Forteviot and Dunning (Wright and Poller 2015), and fieldwalking at Leadketty (Wright 2013) and Millhaugh (Wright 2014a, 2015a, 2016).

The excavations for 2016 focus on the cropmarks at Millhaugh [MH14.4] (Figure 1). The cropmarks at NO 01SW28 (NGR 01128 14149)/NO 01SW43 (NGR NO 01195 14087) are described in the National Monuments Record as a settlement comprising an interrupted ditched enclosure, putative pit enclosure and pit alignment. The cropmarks were scheduled in 1993 (SM5776). The excavation at MH14.4 is considered to be integral to the aims of phase 2 of the SERF Project in developing an understanding of the archaeology of Dunning, and its place within the wider landscape (cf. Poller 2014).



Figure 1: Location and notation of fields at Millhaugh. Image from Google Earth © 2015 Digital Globe; © 2015 Google.

The trench is recorded as 'CB16' after the nearest named landmark, i.e. Cranberry Cottage in the south-west corner of MH14.4.

The fieldwork at Millhaugh was the principal vehicle for the mentoring of trainee supervisors, and teaching both University of Glasgow undergraduates, external students, and other volunteer participants excavation methodologies, techniques and the recording of data.

Location

The track entrance to the steading at Millhaugh (centre National Grid Reference 'NGR' NO 02670 15864) is approximately 1.5km west of the centre of Dunning village on the B8062 to Auchterarder (Figure 2).



Figure 2: Location of track entrance to Millhaugh. © Crown copyright and database rights 2015 Ordnance Survey.

Archaeological background

MH14.1

There is no record of any previous archaeological investigations at MH14.1, save for the fieldwalking undertaken in 2014 (Wright 2014a), and the test-pitting, geophysical survey and fieldwalking carried out in 2015 (Wright 2015a). Neolithic and Bronze Age lithic artefacts were collected during fieldwalking at MH14.1 in 2014, and 2015.

The cropmarks were formally scheduled in June 1996 (NO01SW 34/NGR NO 0067813952 and NO01SW 36/NGR NO 0061514044) [Scheduled monument index 'SM' 5774]. They are recorded as a prehistoric settlement comprising a number of circular enclosures and other cropmarks; interpreted as an enclosure/barrow, pit alignment, ring ditch and later rig and furrow.

The footprint of the enclosure/barrow is broadly similar to the kerbed cairn in MH14.3, which was excavated in 2014 (cf. Brophy 2014). However, it appears that the putative ploughed down barrow is enclosed by a ditch. There is the intriguing possibility that the cropmark could be what survives of an Early Neolithic round barrow. There is only one such monument currently known in Scotland, and that is at Pitnacree, Perth & Kinross (cf. Brophy 2010, 2014; Coles *et al.* 1965).

The proposed excavations at MH14.1 scheduled for August/September 2016 have had to be deferred due to a late harvest. It is hoped that the work can be carried out in Spring 2017.

MH14.2

Prior to the fieldwalking in 2014 (Wright 2014a), there were no references to either any known archaeology, or archaeological investigations at MH14.2.

MH14.3

Prior to the SERF excavations in 2014 (Brophy 2014), no previous archaeological work had ever taken place at this monument, and indeed there is no tradition of this being a prehistoric burial mound until relatively recently. This prominent, upstanding, tree-topped mound was not even recorded formally as an archaeological site until 1991 when it was recognised by Gordon Barclay (1991), then Inspector of Ancient Monuments, as a possible barrow. The mound quickly became a scheduled ancient monument (SM5775). The site is also known as Parkside, and has NMRS no. NO01SW 41 with NGR NO 010140. Subject to the completion of post-excavation tasks, the excavations have demonstrated that the monument is a kerbed cairn, possibly Bronze Age in date (cf. Brophy 2014).

Other cropmarks were scheduled in 2001. They are located 200m south-east of the cairn and comprise of a putative barrow, sub-rectangular ditched enclosure and other indeterminate cropmarks (NO01SW69; NGR NO 0096613916).

Fieldwalking was undertaken in February 2016 (Wright 2016). 39 lithic artefacts were collected, although none can be said to be truly diagnostic to an archaeological period.

MH14.4

The SERF excavations sampled the cropmarks at MH14.4 (Figure 3). A geophysical survey was undertaken on 15-16 August 2016 (forthcoming). The area surveyed was 6000m² to the north of CB16.



Figure 3: Combined aerial photograph and draft transcription of the scheduled monuments located within MH14.4 (SM5776), and approximate location of trench (CB16). Transcription by Cathy Maclver; Image Crown Copyright © HES.

Geology, topography and vegetation

The solid geology comprises of Sheriffmuir Sandstone. Glacial till is recorded as the principal drift geology for MH14.4, save for alluvium and river terrace in the north-east of corner of the field (Digimap® EDiNA Geology Roam) [Figure 4].

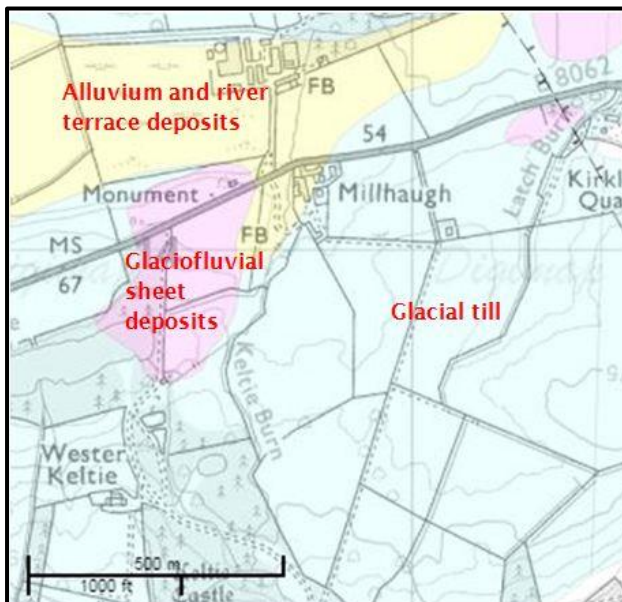


Figure 4: Drift geology at Millhaugh (Digimap® EDiNA Geology Roam online resource; © NERC/Crown copyright database right).

The southern part of the field gently falls away to the east. For example, the fall in trench (CB16) which was c.90m in length was 2.31m. To the north, immediately beyond the old field boundary line which can be seen in Figure 3, the field falls away relatively steeply towards the road (B8062).

The land is used for arable farming. At the time of the excavation the field was under a crop of winter barley.

Research Questions

In addition to the overall SERF Project objectives (Driscoll *et al.* 2010; Poller 2014), the investigations at MH14.4 (CB16) will respond to the following research questions.

- What is the character of the features revealed in CB16, and what do they represent?
- Where features are recognised as post defined: what type of timber was used, what were the sizes of the posts, and how were they erected?
- Is there any artefactual evidence for domestic events and/or tasks, and if so how does that evidence relate to the cropmarks and to farming settlement evidence at revealed at Wellhill?
- What is the relationship of the prehistoric features to the cropmark complex at Leadketty (Brophy *et al.* 2012; Brophy and Wright 2013), the farming settlement at Wellhill (Wright 2014b, 2015b), and the Millhaugh cairn (Brophy 2014)?
- Other than ploughing, is there any evidence for disturbance, and if so, how might this have an impact on dating strategies? If required, a soil scientist will be consulted, and Kubiena tins samples will be taken as directed for post-excavation analysis.

RESULTS OF THE EXCAVATIONS: 18 JUNE - 10 JULY 2016

Preamble

The trench (CB16) was machine stripped under careful supervision on 8 June 2016 and left to weather. The area opened was approximately 2300m².

The trench was then cleaned by hand using hoes and trowels. Subsequent cleaning was undertaken as and when necessary. All of the features revealed were planned. All stages of the excavation were recorded in detail and sampling was carried out in accordance with the documentation submitted to Historic Environment Scotland in advance of the excavations.

Post excavation tasks are ongoing, and accordingly what follows should be understood on that basis; all observations are at this stage provisional working narratives. All archive numbers used in this report are listed in tabular form in the appendices.

Top soil

The top soil comprised medium dark brown humic sandy silt with pea gravel, small rounded and sub-angular stones (5mm-2cm). The depth of the top soil varied from 20cm to 35cm.

Levels

Following cleaning, surface levels (ordnance datum 'OD') were taken across CB16 with a Leica CJR 10 digital global positioning system 'dGPS'. The highest and lowest levels recorded on the cleaned surface level were 60.246m OD (west), and 57.935m OD (east).

Pre-excavation plan

The dGPS, with sub-centimetre accuracy, was used to create the pre-excavation plan of the features revealed at CB16 (Figure 8). It is estimated that the use of the dGPS saved up to four days of work by not having to set out a grid and undertake the planning by hand (Figures 5 and 6).

The trench was arbitrarily split into three areas, namely A, B, and C (Figures 5 and 6).

Coupled with the digital pre-excavation plan, the gyrocopter images were particularly useful, as part of the working record on site, for annotating both features and potential features for investigation.

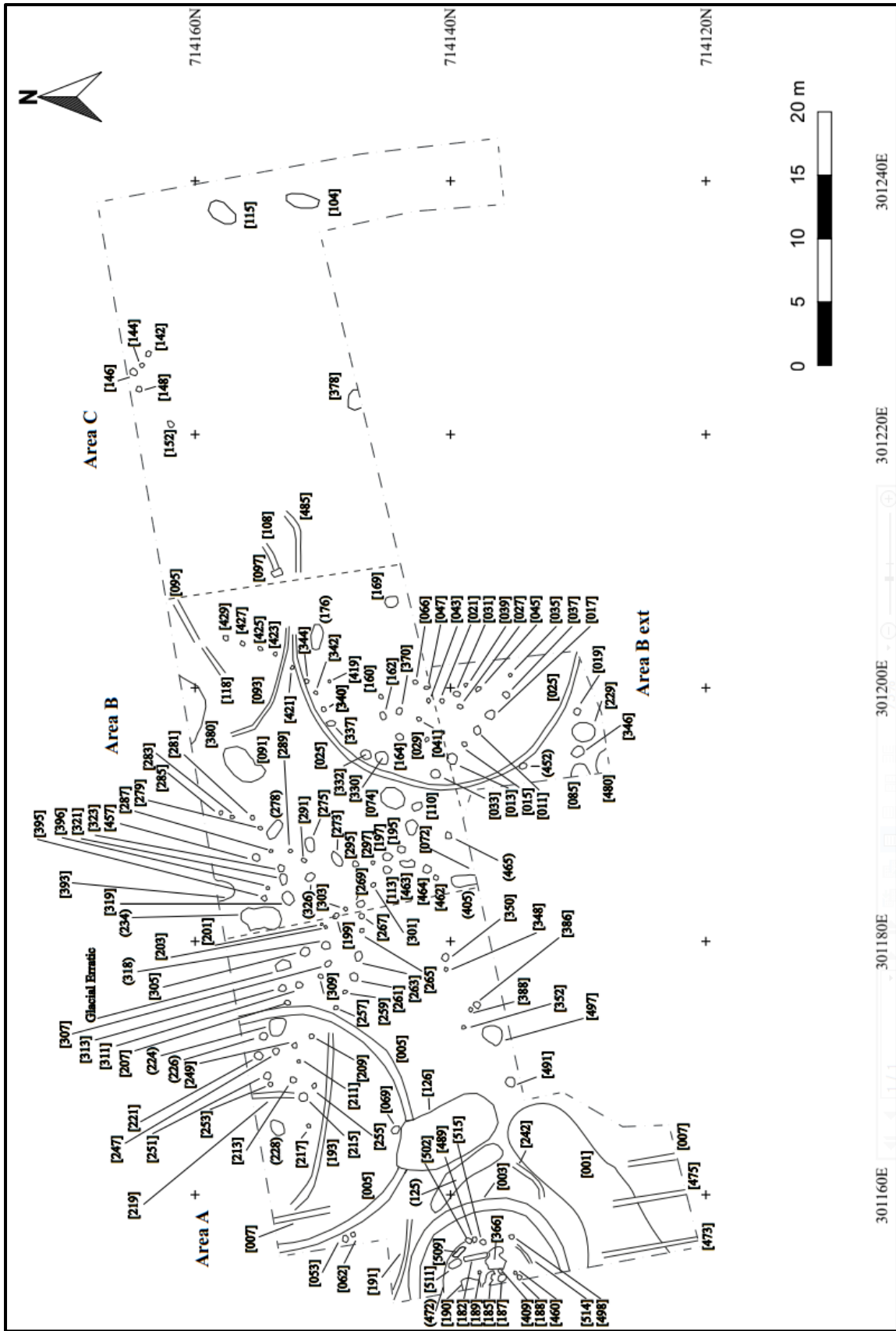


Figure 5: Pre-excitation plan of CB16 using dGPS with context numbers.

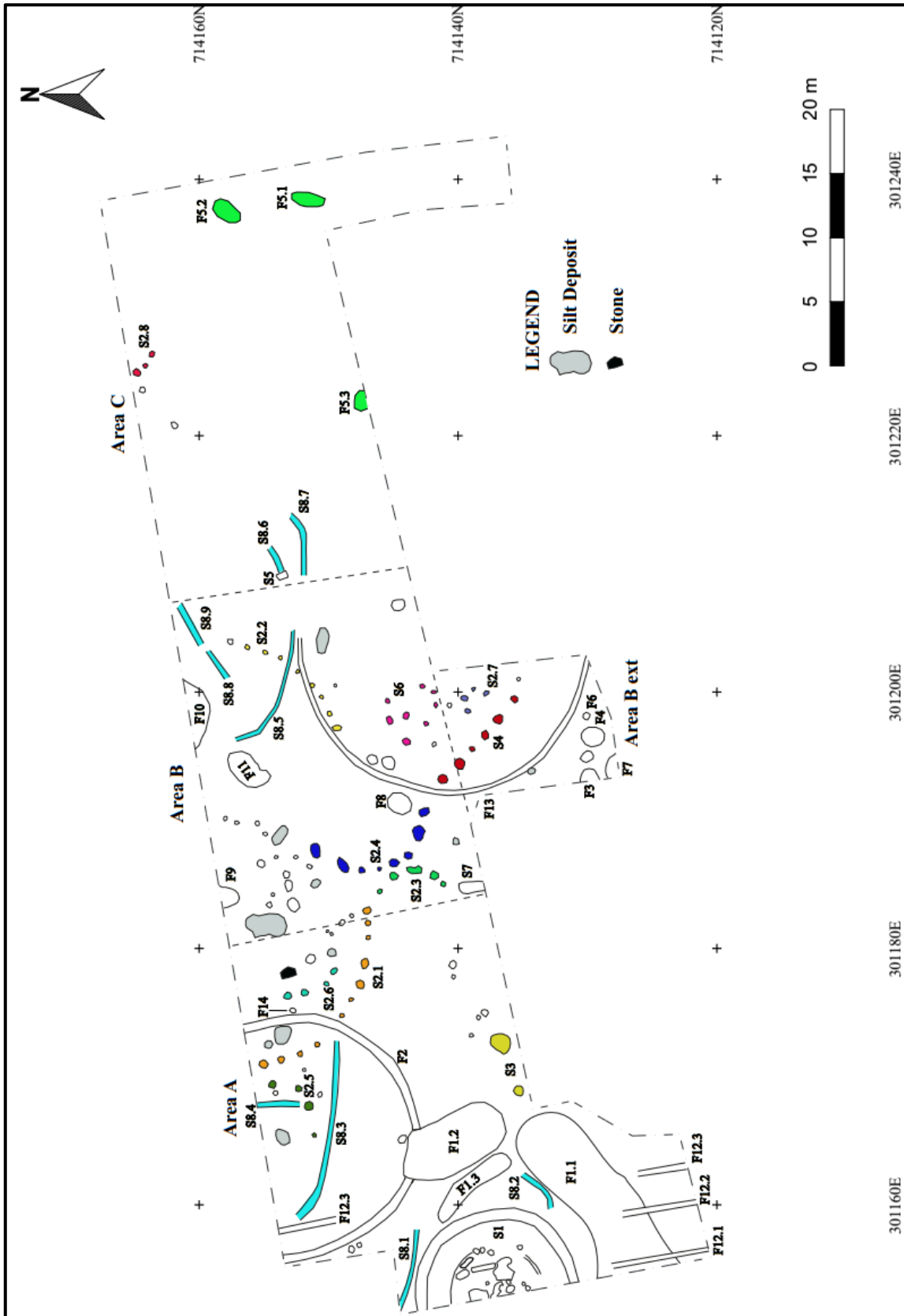


Figure 6: Pre-excitation plan of CB16 using dGPS with structure and feature numbers.

Plough damage

It became clear during cleaning that the archaeology had been severely truncated by ploughing. This was particularly noticeable to the features (Structure 1) in Area A, and the double cist (Structure 5) in Area C.

CB16: Structures and features

The structures and features revealed in CB16 may be provisionally be described as:

- Sub-circular palisade enclosures (Features 2 and 13);
- Post-defined palisades (Structures 2.1 -2.8, inclusive);
- Slot defined palisades (Structures 8.1-8.9, inclusive);
- Post alignment (Structure 4);
- Putative dwelling (Structure 6);
- Fire pits (Features 5.1-5.3, inclusive);
- Putative decommissioned postholes (Feature 6 and Structure 3);
- Pits (Features 3, 4 and 7)
- Truncated hearth with surrounding paving and cobbled surface (Structure 7);
- Western enclosure and internal features (Structure 1);
- Large ditch (Feature 1.1-1.3, inclusive);
- 'Halo' pit (Feature 8);
- Double cist (Structure 5)
- Large pits (Features 9, 10 and 11);
- Numerous other pit/posthole features; and
- Rig and furrow (Features 12.1-12.3, inclusive).

Appendix 6 tabulates and summarises the features and contexts associated with each of the structures. Features and their related contexts are summarised at appendix 7. The data from the context records may be found at Appendix 1, together with the stratigraphic relationship of contexts for each feature.

The slot defined and sub-circular palisades have common differences in construction for self-supporting fence structures. The palisades are held in place by small sub-rounded stones, and soil as packing materials. However, that is not to say that the slot defined and sub-circular palisades are contemporary. This issue with considered further below.

The initial appraisal of the sherds of prehistoric pottery recovered from secure contexts provide evidence for a tentative preliminary phasing of events at CB16.

Early Neolithic

Three features (F3 [16085], F4 [16229], and F6 [16019]) in Area B ext produced numerous sherds of Early Neolithic pottery. Fragments of saddle quern stones were

recovered from F4 and F6 (Figure 7). A number of the fragments from F4 refitted. There was evidence that the quern stone was fire cracked. The fills of the pit F4 represent the structured deposition of hearth material with pottery, and the broken saddle quern stone.

In contrast, the structured deposition in pit F3 may be described as midden fills with pottery and pieces of burnt flint. The feature was recut twice in the Late Neolithic (see below).

F6 is considerably smaller than either F3, or F4. However, the redeposited packing stones, sherds of Early Neolithic pottery, and the saddle quern stone fragment suggest that this may be a decommissioned posthole.

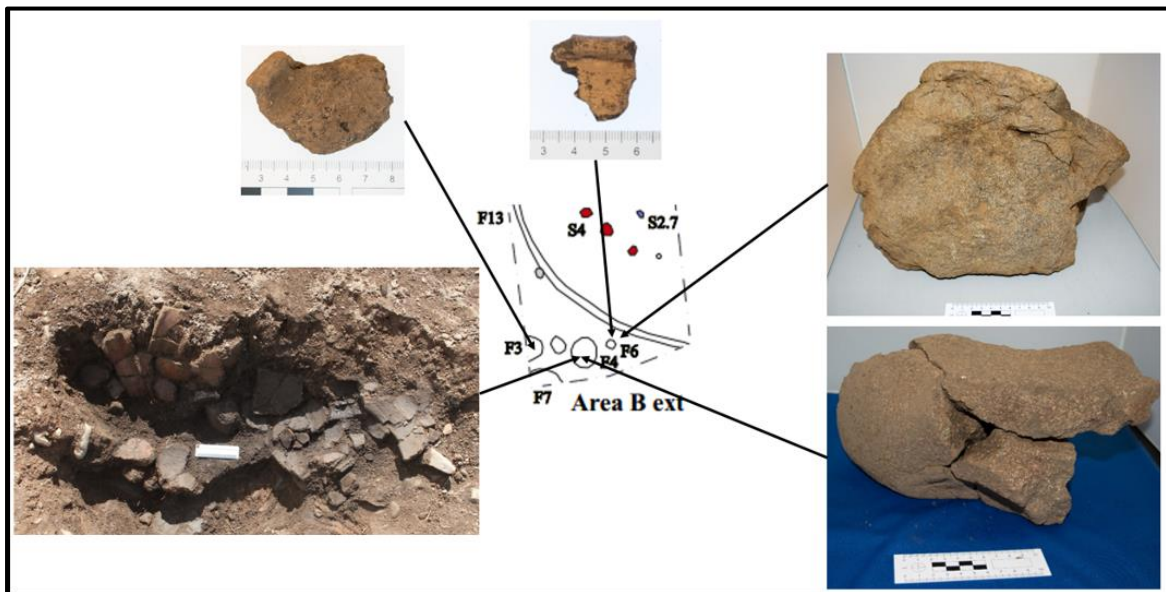


Figure 7: Pottery sherds *in situ* in plan, and in section of F4; refitted saddle quern stone (F4); fragment of saddle quern stone, and one of the sherds (rim) of pottery from F6; and rim sherd from F3.

Late Neolithic

Sherds of Late Neolithic pottery were recovered from three of the features ([16033] [16013] [16017]) in the post alignment (S4), one of postholes [16164] to the putative dwelling structure, the midden pit (F7), and the first and second recuts to an Early Neolithic midden pit (F3) [Figure 8].

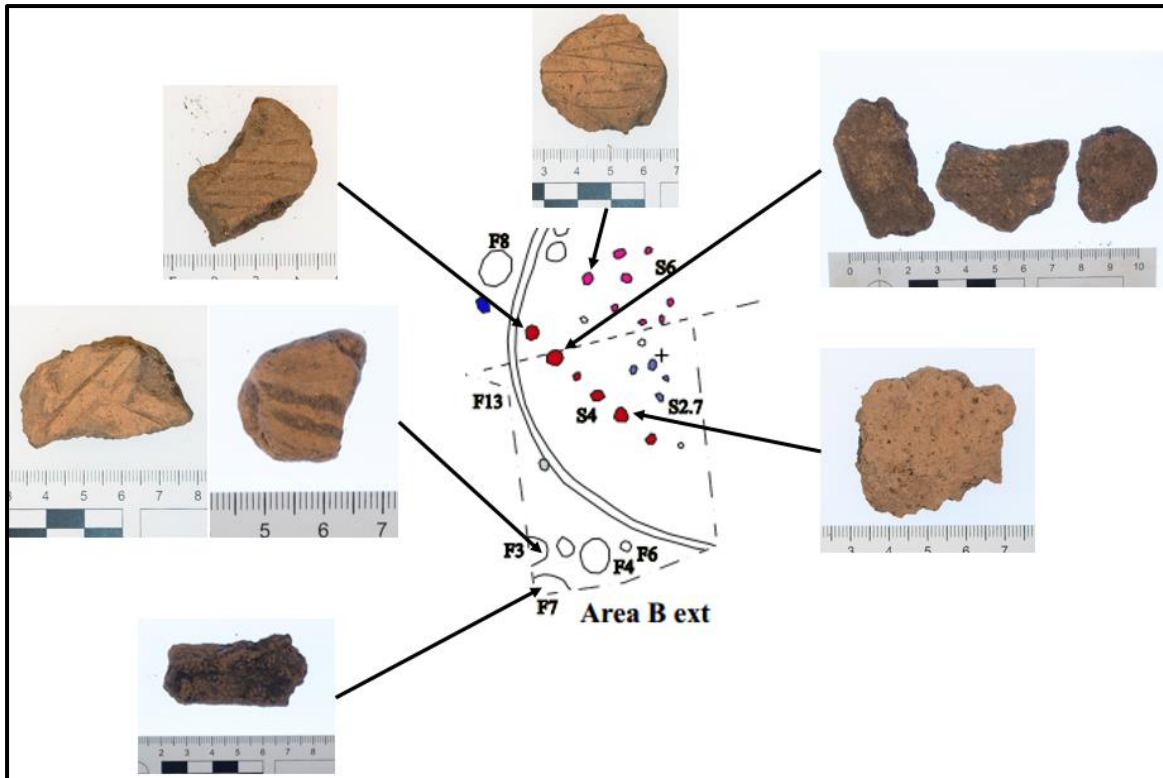


Figure 8: The structures (S4; S6) and features (F3; F4) from which sherds of Late Neolithic pottery were recovered.

Post alignment S4

The decay cone visible in section of most northerly of the post [16033] in the alignment (S4) indicates that the post decayed in situ (Figure 9). Flint artefacts were recovered from three of the posts ([16013] [16015] [16033]) in the alignment (S4), and a chert blade from [16033].



Figure 9: Post excavation photograph of posthole [16033] (S4) showing decay cone in section.

Dwelling structure S6

S6 has been provisionally interpreted as a sub-circular putative dwelling structure with an inner supporting post. 14 flint blanks were found in the same context (16165) [16164] as the Early Neolithic pottery.

Midden pit F7

The midden pit [16480] was located in the south-west corner of B ext. It was not fully exposed in the trench (Figure 10). In addition to the sherds of Late Neolithic pottery there were a number of lithics recovered from the single fill (16481) These comprised pieces of burnt flint, flint blanks, flint scraper and a chert scraper.



Figure 10: North facing section of midden pit F7 [16480] (16481).

Midden pit F3

Sherds of Late Neolithic pottery were found in the midden fills of both recuts to an Early Neolithic pit [16085] (Figure 12). No other artefacts were recovered.

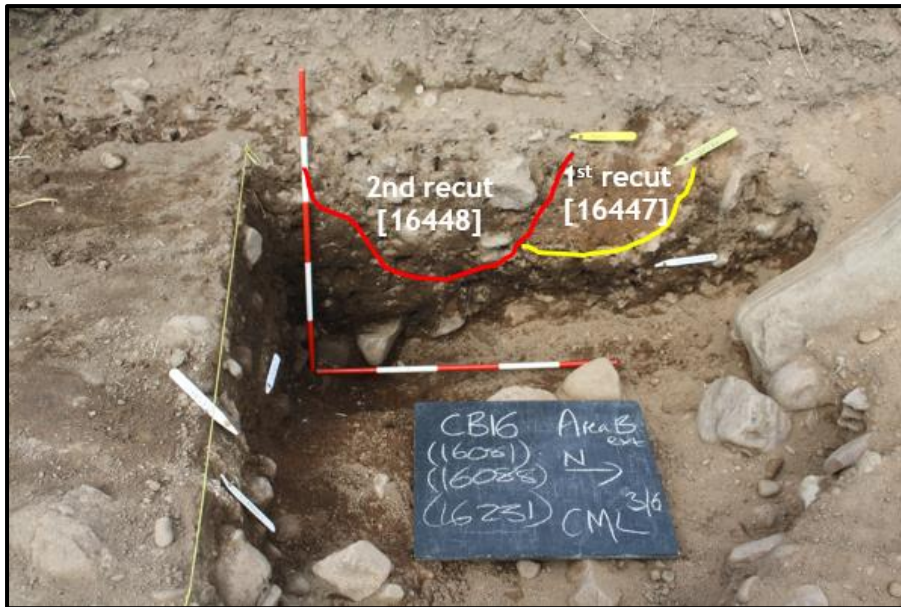


Figure 11: East facing section of Early Neolithic feature [16085] with recuts in the Late Neolithic [16447] [16448].



Figure 12: Late Neolithic pottery from recuts to F3. Left - first recut [16447]; right - second recut [16448].

Bronze Age

The southern posthole feature [16110] to the post defined palisade S2.4 produced sherds of AOC Beaker suggesting that the feature may date to the Bronze Age. The only other evidence for Bronze Age events is the double cist S5 (Figures 13 and 15).

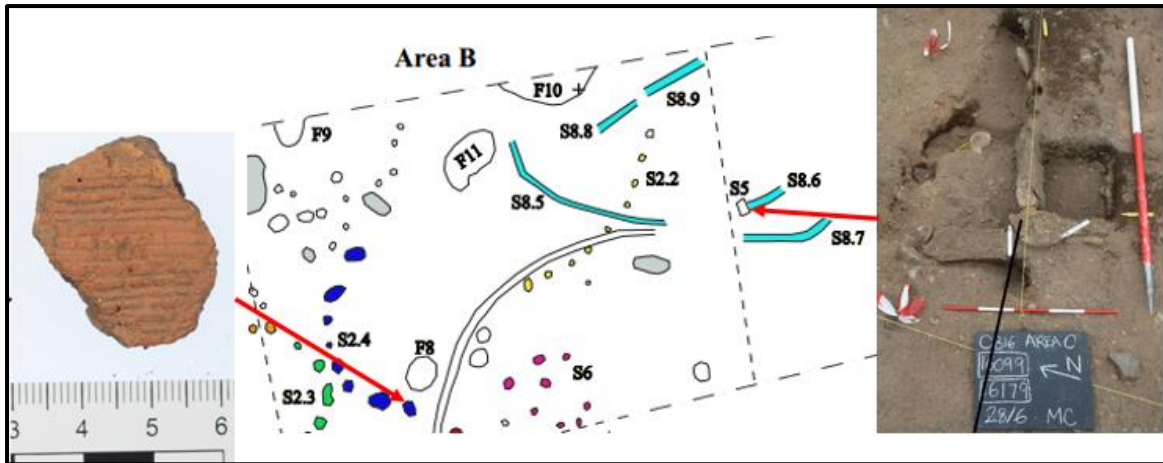


Figure 13: Putative Bronze Age features posthole [16110] (S2.4) and the double cist (S5).

Post defined palisade S2.4

Burnt bone, and flecks of charcoal were noted in both the primary (16236), and upper fills (16111) of posthole [16110] (Figure 14). 17 sherds of AOC Beaker, and five flint flakes were recovered from (16111).

The post appears to have removed, and decommissioned with re-deposition of one packing stone, along with the pottery and lithics.



Figure 14: East facing section of posthole [16110] to S2.4.

Double cist S5

The double cist cuts the slot defined palisade 8.6 [16108]. The structure comprises of retaining sandstone orthostats. Water penetration has corroded the sandstone, and the structure has been badly damaged by ploughing. The southern cist [16099] has survived in a more complete form than the adjacent northern cist [16179] (Figure 15). All that could be retrieved was a small sample of burnt bone and

charcoal from the fill (16098) of the southern cist [16099]. Similarly, there was nothing recovered from the triple cist at Forteviot (cf. James and Gondek 2010).



Figure 15:

Iron Age

A diagnostic rim sherd of Iron Age pottery (Dr Ann MacSween pers. comm.) was recovered from the secondary silting fill of the ditch [16001] in Area A (Figure 16).

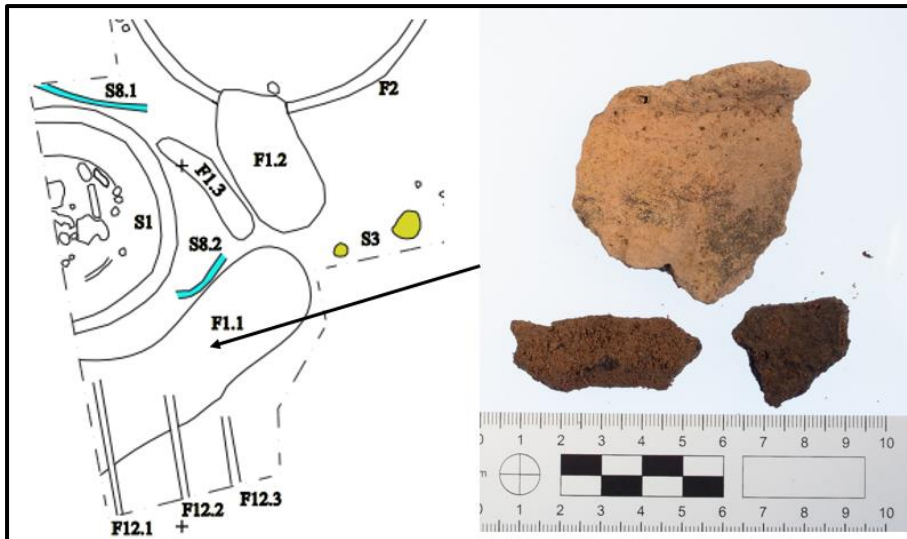


Figure 16: Sherds of Iron Age pottery recovered from the ditch (F1.1).

Ditch F1.1-F1.3

The slot through the ditch (F1.1 [16001]) revealed that it was 3.2m in width, and cut to a depth of 1.5m. The primary fill (16408) was a shallow silting episode, and underlying a second more substantial silting event (16364). The Iron Age pottery was found near the base of (16364). The upper fill (16002) is a B plough soil horizon. A quarter of the ditch terminal ([16055] same as [16001]) was also investigated. The ditch is cut by Medieval rig and furrow (F12.1 and F12.2).



Figure 17: West facing section of ditch F1.1.

The ditch extension (F1.2 [16126]) cuts the sub-circular palisade enclosure (F2). The stratigraphic sequence in the extension matches the fills for F1.1, save for a gravel fill (16446) intrusion overlying B plough soil horizon at the western edge of the ditch extension section (16446) [Figure 18].

The northern terminal of the ditch extension cuts the sub-circular north-western palisade enclosure (F2).

To the west and adjacent to the ditch extension (F1.2) is a silt deposit [F1.3 (16125)] which may be the remnant of an inner bank.



Figure 18: North facing section of ditch extension F1.2. Background is the quarter section of the southern terminal.

Western enclosure and internal features S1

The dwelling is enclosed by a sub-circular palisade [16003] (Figures 16 and 20). The palisade would have a self-supporting fence structure held upright by stone and soil packing infill. The working narrative is that the dwelling and enclosing palisade are contemporary with the ditch features (F1.1-F1.3).

The construction of the dwelling comprised a ring of slot cuts for planks ([16509] [16514] [16519], postholes ([16489] [16498] [16502] [16511] [16515] [16521]), and a centre stone post pad (16525). The internal postholes [16188] [16460] [16517] [16523]), pit [16190], and stakehole [16189] are later features (Figures 19 and 20).

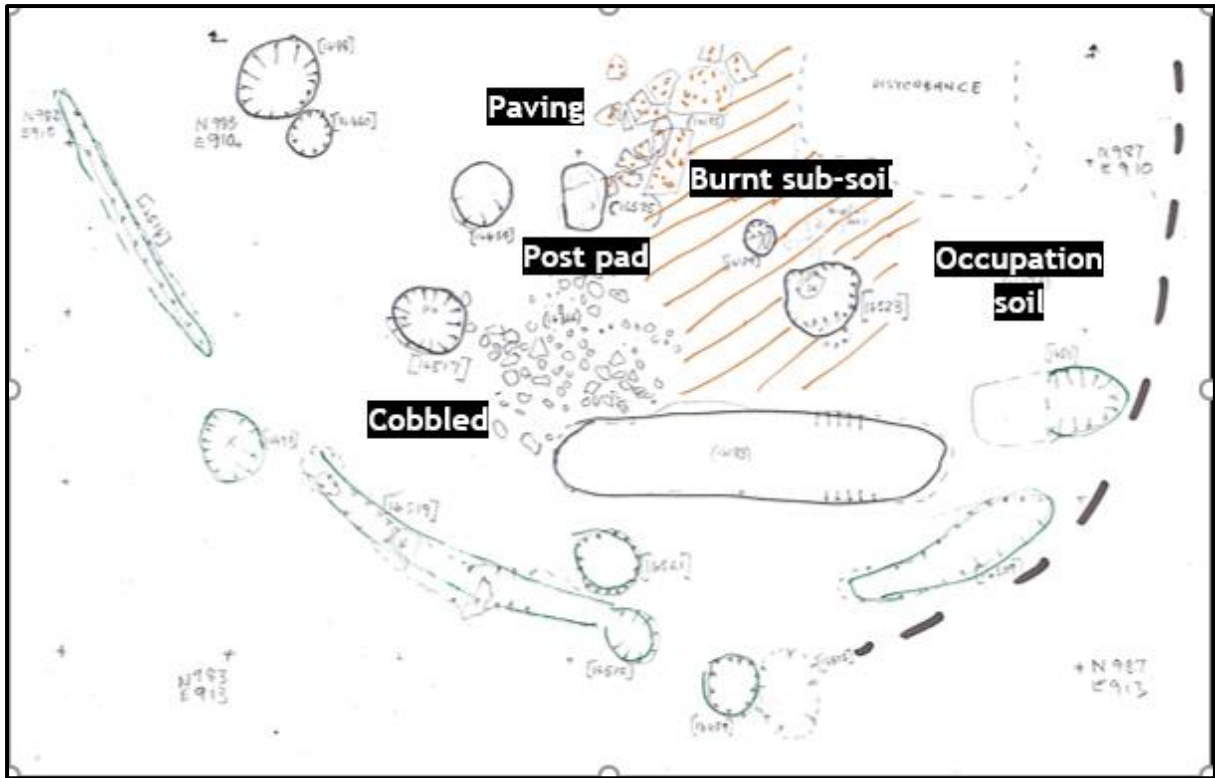


Figure 19: Post-excavation sketch plan (east at top) to scale (1:20) showing structure, contemporary internal features (annotated) and later features.

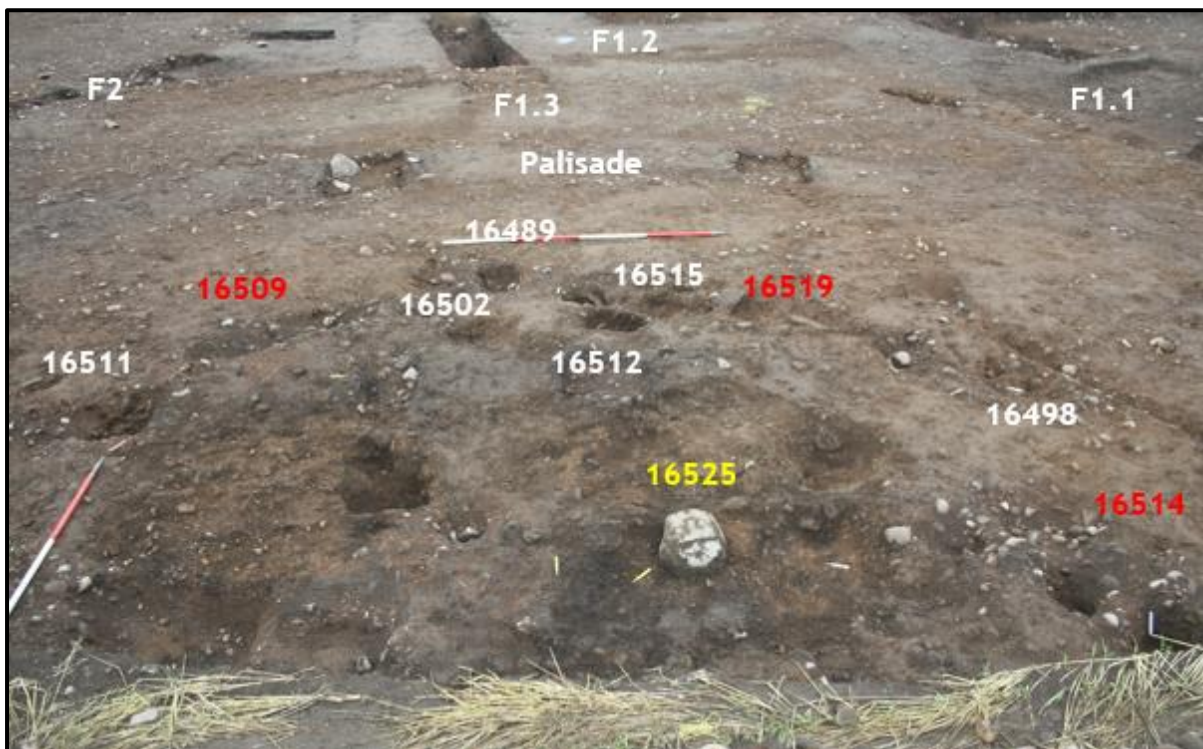


Figure 20: Annotated photograph taken from the west showing dwelling construction features and relationship to enclosing palisade, ditch features (F1.1-F1.3), and northern palisade (F2) cut by F1.2. Context numbers in white indicate postholes, red are plank slots, and yellow is centre post pad.

The internal features contemporary with the timber super-structure have been loosely termed as the ‘hearth complex’ [16184]. All of the features have been damaged by ploughing. The complex comprises rough sandstone paving (16185), overlying burnt sub-soil (16186). To the east of the paving is a cobbled surface (16366). Underlying the paving (16185) is a brown soil matrix with charcoal. Surrounding the hearth is an occupation soil (16472), which may be a floor potentially contemporary with the complex [16184] (Figures 19 and 20). The top soil had been removed from the internal area prior to the construction of the hearth complex.

There is one later feature which has not yet been referred to. A pit [16455] for a cremation deposit cuts the paving (16185), and burnt sub-soil (16186). This may be either contemporaneous with the other later features, or may mark the dwelling being taken out of use (Figure 21).

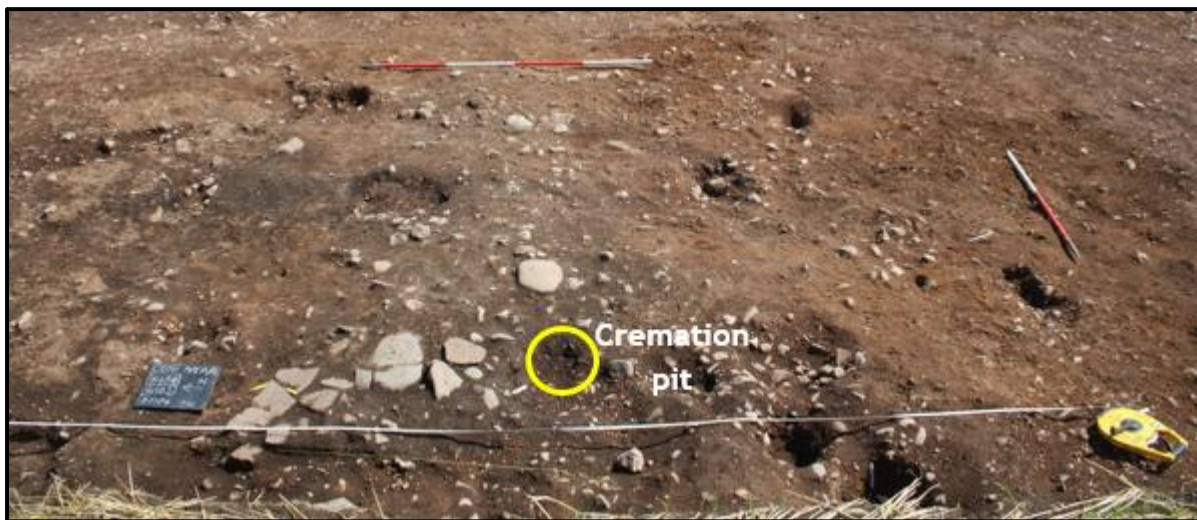


Figure 21: Location of cremation pit [16455], paving (16185), burnt sub-soil (16186), cobbled surface (16366), and occupation soil (16472).

Other structures and features

Sub-circular palisade enclosures (F2 and F13)

The north western palisade enclosure (F2) is cut by the Iron Age ditch extension (F1.2), and by a small pit (F14). The broad common differences both in plan, character, and construction suggest that F2 and F13 may be contemporaneous.



Figure 22: Mid-excitation record of stone packing in slot through north western palisade (F2).



Figure 23: Mid-excitation record of stone packing in slot through north western palisade (F13).

Post-defined palisades (S2.1-2.8)

The grouping together of features as palisade structures is provisional pending completion of post-excitation tasks. The recovery of AOC Beaker from one of the posts in S2.4 indicates that this structure, and others may be Bronze Age.

Slot defined palisades (S8.1-8.9)

The view in plan, and character of the slot defined palisades have possible comparisons to the Early Neolithic field boundaries at Wellhill [WH14.1 and WH14.2] (cf. Wright 2014b). S8.6 being cut by the Bronze Age double cist, which is the only stratigraphic relationship of slot defined palisades to other features.

There was a stakehole, presumably acting as an anchor support, at the angle of the dog-leg palisade (S8.3 [16193]) [Figure 24].



Figure 24: Post-excavation photograph from north of S8.3 [16193].

Hearth area (F7)

This truncated feature (Figure 25) has a number of common differences with the hearth complex ([16184] S1) to the putative Iron Age dwelling. Firstly, the top soil had been removed before the hearth construction. Secondly, it has been badly disturbed by ploughing, although there are remnants of paving (16467), and a cobbled surface (16468) overlying the burnt sub-soil (16508). An occupation soil comprises a firm compaction of brown black charcoal rich sandy clay with charcoal, and fragments of burnt bone (16405), has been provisionally interpreted as contemporaneous to the paving and cobbled surface.



Figure 25: Pre-excavation photograph of hearth area (F7) showing remnants of occupation soil, paving, cobbled surface and burnt sub-soil.

There were no surviving postholes, or slots for planks indicating an enclosing structure.

Structure 3

Two postholes ([16491] [16497]) revealed in Area A may be part of a post-defined structure. If so, the other postholes were outwith the trench. The fills to the features comprise charcoal rich sandy silt with re-deposited packing stones. Fragments of burnt bone were recovered from the fill (16493) to [16497].



Figure 26: Mid-excavation of posthole [16497] showing re-deposited packing stones (16504).

Fire pits (F5.1-5.3)

Fire pits (F5.1 [16104] and F5.2 [16115]) were rectangular cuts filled fire cracked rock, and charcoal rich soil matrices. There was no evidence of the lower fills or sub-soil being burnt, although the southern sector of F5.2 was lined with clay. This suggests deposits of burnt materials and not *in situ* burning events. Pieces of burnt flint were recovered from F5.1 and F5.2.



Figure 27: Post excavation F5.1 [16104].



Figure 28: Post excavation F5.2 [16115].

F5.3 [16378] can be distinguished from F5.1 and F5.3. A sub-oval bowl shaped pit with a fill friable black charcoal rich sandy silt with fire cracked stones (16379). There was no evidence of burning to the sandy sub-soil indicating the deposition of burnt materials from elsewhere.



Figure 29: Post excavation F5.3 [16378].

Large pits (F9, F10 and F11)

Two of the large pits (F9 [16393] and F10 [16380]) have been initially interpreted as either gravel, or midden pits. Both features were only partly revealed extending into the northern baulk. F9 is cut to a depth 93cm; F10 1.2m. The fills include sub-rounded stones of varying sizes up to a maximum dimensions ranging from 5-7cm to 70-80cm. Charcoal was recovered from the upper fill (16459) of F9.



Figure 30: Post excavation F10.

F11 was a large 3m elongated pit [16091] (width 1.5m; depth 30cm) for the red-deposit of large stones (16123). A sherd of modern transfer pottery was recovered from the soil matrix fill (16092).

'Halo' pit (F8)

A pit [16074] in plan presented with the same 'halo' character that was noted in the Mesolithic pit alignment at Wellhill in 2014 (Figure 31). The pit had been left open. The primary silting 'halo' fill (16239) was followed by a second episode of silting (16075). Sub-rounded stones, flecks of charcoal, and one fleck of charcoal were found in the primary fill. The maximum dimensions range for the stone inclusions was 3-10cm.

Inclusions in the secondary fill were pea gravel, sub-rounded and sub-angular stones, flecks of charcoal, fragment of burnt bone, and a carbonised seed. The varying for maximum dimension range of stones was up to 17cm, although the largest stone measured 35cm by 16cm.



Figure 31: Left - pre-excavation photograph of 'halo' pit [16074]. Right - Mesolithic pits from Wellhill excavations in 2014.

Post-excavation plan

The plans for the excavated features were drawn by hand and georeferenced using the dGPS to enable the plan drawings of the excavated features to be incorporated with the pre-excitation data (Figure 32)

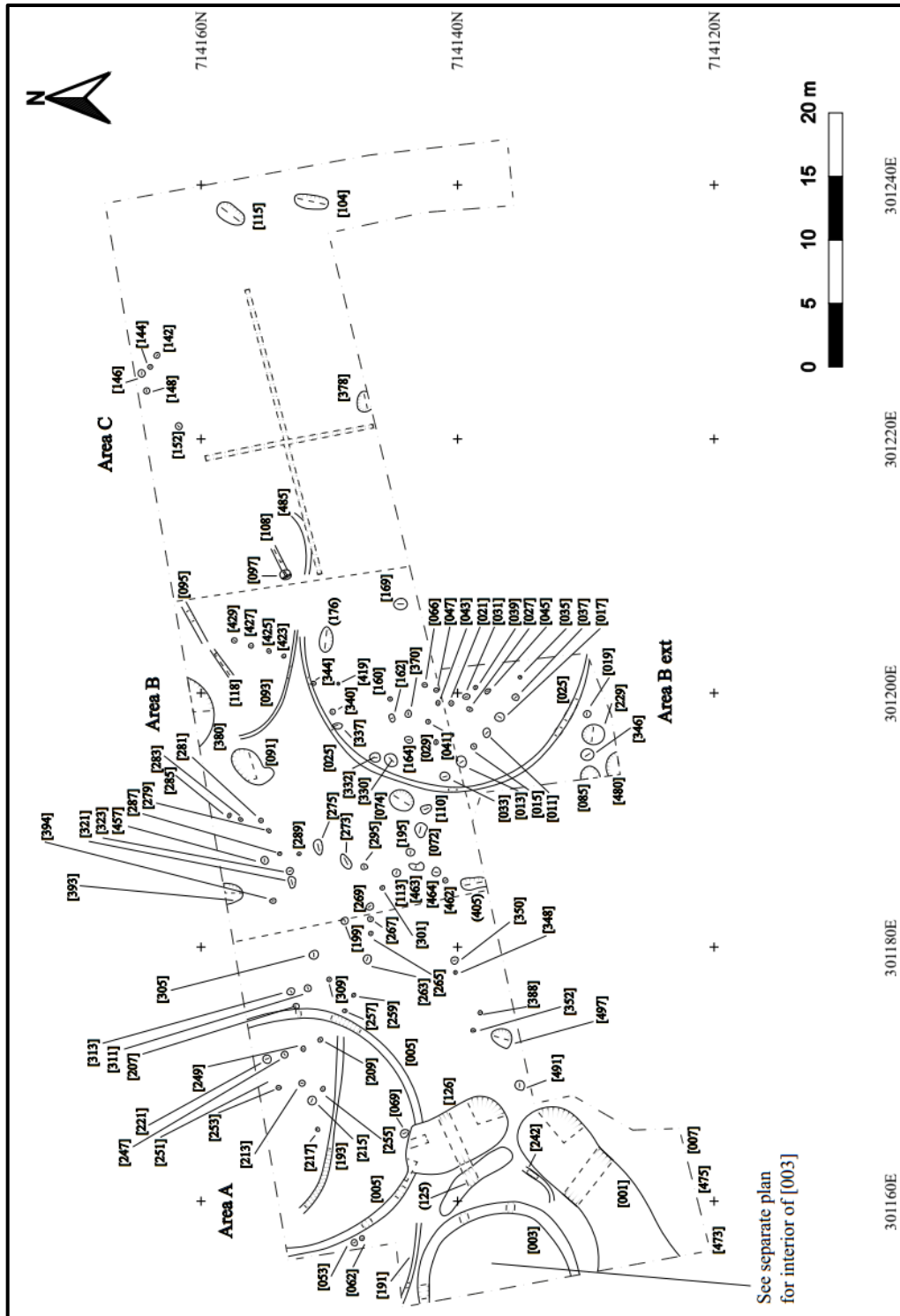


Figure 32: Post excavation plan for CB16.

Summary remarks

The excavations at CB16 have revealed settlement evidence from Early Neolithic, Late Neolithic, Bronze Age and Iron Age events. Subject to completion of post-excavation, the preliminary phasing of the site has largely been based on the typology of the material culture recovered from features. Until such time as radiocarbon dates are to hand it is particularly difficult to frame the archaeology other than in generalisations to a given archaeological period.

The Early and Late Neolithic settlement and putative field boundaries adds to the corpus of knowledge from the Wellhill excavations in 2014 and 2015 (Wright 2014b, 2015b), and Dun Knock in 2009 (Dalglish *et al.* 2009) and 2015 (Poller 2015). The Bronze Age cist gives us further data on differential funerary practice in the research area. In particular, to the cists at Forteviot (Brophy and Noble 2009; James and Gondek 2010) and Wellhill (Wright 2015b), and the kerbed cairn at Millhaugh (Brophy 2014). The possibility of post-defined palisades being possibly attributable to the Bronze Age provides primary evidence for settlement, as opposed to ritual, for the SERF Project. The Iron Age structure and features have to be considered with the results from the excavations at Leadketty in 2013 and 2015 (Brophy and Green 2015; Brophy and Wright 2013), and the hillfort investigations.

There was no evidence of disturbance other plough damage. This should have no adverse effect on dating strategies.

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Figure 33: The excavation team at CB16.

Bibliography

- Barclay, G. J. 1991. Millhaugh (Dunning Parish): burial mound. *Discovery and Excavation in Scotland*: 73.
- Brophy, K. 2010. '...a place where they tried their criminals': Neolithic round mounds in Perth and Kinross. In J. Leary, T. Darvill, and D. Field (eds), *Neolithic mounds and monumentality in the British Neolithic and beyond*: 10-27. Oxford: Oxbow.
- Brophy, K. 2014. Millhaugh Cairn Excavations 2014: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Brophy, K., A. Gould, G. Noble, A. D. Wright and R. Younger. 2012. Leadketty Excavations 2012: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Brophy, K. and H. Green. 2015. Leadketty Excavations 2015. Unpublished SERF DSR: University of Glasgow.
- Brophy, K. and H. Green. forthcoming. Leadketty Excavations 2016. Unpublished SERF DSR: University of Glasgow.
- Brophy, K. and G. Noble. 2009. Forteviot, Perthshire, 2009: Excavations of a henge and cist burial. Unpublished SERF DSR: University of Glasgow.
- Brophy, K. and A. D. Wright. 2013. Leadketty excavations 2013: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Coles, J. M., D. D. A. Simpson and C. B. Denston. 1965. The Excavation of a Neolithic Round Barrow at Pitnacree, Perthshire, Scotland. *Proceedings of the Prehistoric Society*, 31: 43-57.
- Dalglish, C., O. Lelong, G. MacGregor and D. Sneddon. 2009. Dun Knock Hillfort Excavations 2009: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Driscoll, S. T., K. Brophy and G. Noble. 2010. The Strathearn Environs and Royal Forteviot Project (SERF). *Antiquity* 84 Project Gallery: www.antiquity.ac.uk/proigall/driscoll323/.
- James, H. and M. Gondek. 2010. Forteviot Double Enclosure Complex Excavations 2010. Unpublished SERF DSR: University of Glasgow.
- Poller, T. 2014. SERF Project Summary. Unpublished SERF document: University of Glasgow.
- Poller, T. 2015. Dun Knock Excavations 2015: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Wright, A. D. 2013. Leadketty, March 2013: Fieldwalking LK13.01. Unpublished SERF Report: University of Glasgow.
- Wright, A. D. 2014a. Millhaugh 2014: Fieldwalking MH14.1 and 14.2. Unpublished SERF Report: University of Glasgow.
- Wright, A. D. 2014b. Wellhill excavations 2014: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Wright, A. D. 2015a. Millhaugh 2015: Fieldwalking, test pitting and geophysical survey at MH14.1. Unpublished SERF Report: University of Glasgow.
- Wright, A. D. 2015b. Wellhill excavations 2015: Data Structure Report. Unpublished SERF DSR: University of Glasgow.
- Wright, A. D. 2016. Millhaugh 2016: Fieldwalking MH14.3. Unpublished SERF Report: University of Glasgow.

Wright, A. D. and T. Poller. 2015. SENSYS Geophysical Survey on behalf of SERF: Preliminary Summary of Results. Unpublished SERF Report: University of Glasgow.