

**BROOM LODGE, MILL ROAD
INVERURIE
ABERDEENSHIRE**



- Excavation -
Carried out 26th-28th July 2010
by
Murray Archaeological Services Ltd



Report No: MAS 2010-8
by
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1. Background

- 1.1 Prior to submission of an application for housing on a small area of ground at Broom Lodge, Mill Road, Port Elphinstone, Inverurie, the owner, on enquiry, was advised by the Archaeology Service, Planning and Environmental Services, Aberdeenshire Council, that an archaeological field evaluation of 10% of the area of development would be required. Murray Archaeological Services Ltd was commissioned by Strutt & Parker, on behalf of the then owner Mr R Minto, to undertake the evaluation. The work was carried out 26th - 27th September 2007. Five small truncated features of possible prehistoric date were identified in the NW part of the site. Radiocarbon dates of two pieces of charcoal from one of these features yielded two dates that fall within the Mesolithic period (Murray and Murray 2007a, 2007b). This had potential significance in the context of the adjacent later ritual complex around the henge of Broomend of Crichton (NMRS No: NJ71NE6.)

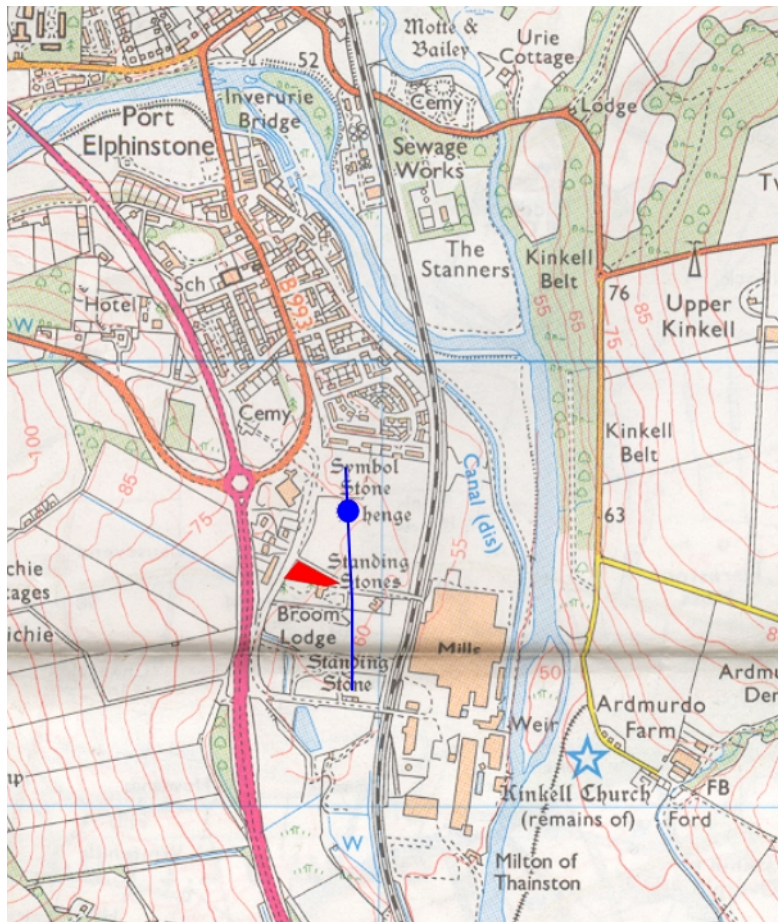
As a result a further planning condition was put on the site that there should be full excavation of the NW part of the site. Murray Archaeological Services Ltd was commissioned by Veitchi Homes Limited to undertake the excavation, the field element of which was undertaken 26th-28th July 2010.

- 1.2 The archaeological condition was applied in the context of current planning legislation (PAN 42 para 34, SPP 23, SHEP) which states that it is necessary for developers to arrange for archaeological fieldwork to take place prior to development, in appropriate circumstances.

2. Desk-top survey

- 2.1 A search was carried out in the Sites and Monuments Record, Archaeology Service, Aberdeenshire Council and in the Sites and Monuments Records of the Royal Commission for Ancient and Historic Monuments in Scotland (RCAHMS) through Canmore, Canmap and Pastmap.

- 2.2 The search revealed that, although there were no references to the area of the site itself, the site is adjacent to a series of prehistoric features centred on the henge of Broomend of Crichtie (NMRS No: NJ71NE6. Bradley and Clarke, 2007). Part of this ritual complex was an avenue leading from the henge towards the river Don (Illus 1). This avenue is situated just to the E of the present development site and it was felt very possible that activity connected to the ritual complex might be within the site area.



Illus 1 Site (red) in relation to Broomend of Crichtie henge and avenue (blue) and to the confluence of rivers Don and Urie (Ordnance Survey © Crown copyright (2002) All rights reserved. Licence number 100049810)

3. The Site

- 3.1 The site is located on the E side of Mill Road, Inverurie in Kintore Parish.

- 3.2 The site comprises a flat grass field of c.0.43 hectares, used as a paddock. In general there was cultivated topsoil, and in places some subsoil, over natural yellow sandy boulder clay. There was evidence of animal burrowing.

4. Methodology

- 4.1 The topsoil was excavated using a full-slew 8-tonne digger with a toothless ditching bucket.
- 4.2 The area was then cleaned by hand and all apparent features sectioned.

5. The Excavation

An area 20 x 20m was excavated, extending S from the evaluation trench 1 and incorporating the evaluation trench 2 (Illus 2).



Illus 2 Broom Lodge. Location of excavation (green) and 2007 evaluation trenches (red).

In the plan (Illus 3) and in the discussion of features, the probable prehistoric features (Features 9-12) excavated in 2007 trench 1 are included and these retain their original feature numbers (Numbers 9-12 were not assigned in 2010).

Two modern water pipes and a drain cut across the excavated area. These are not further described.

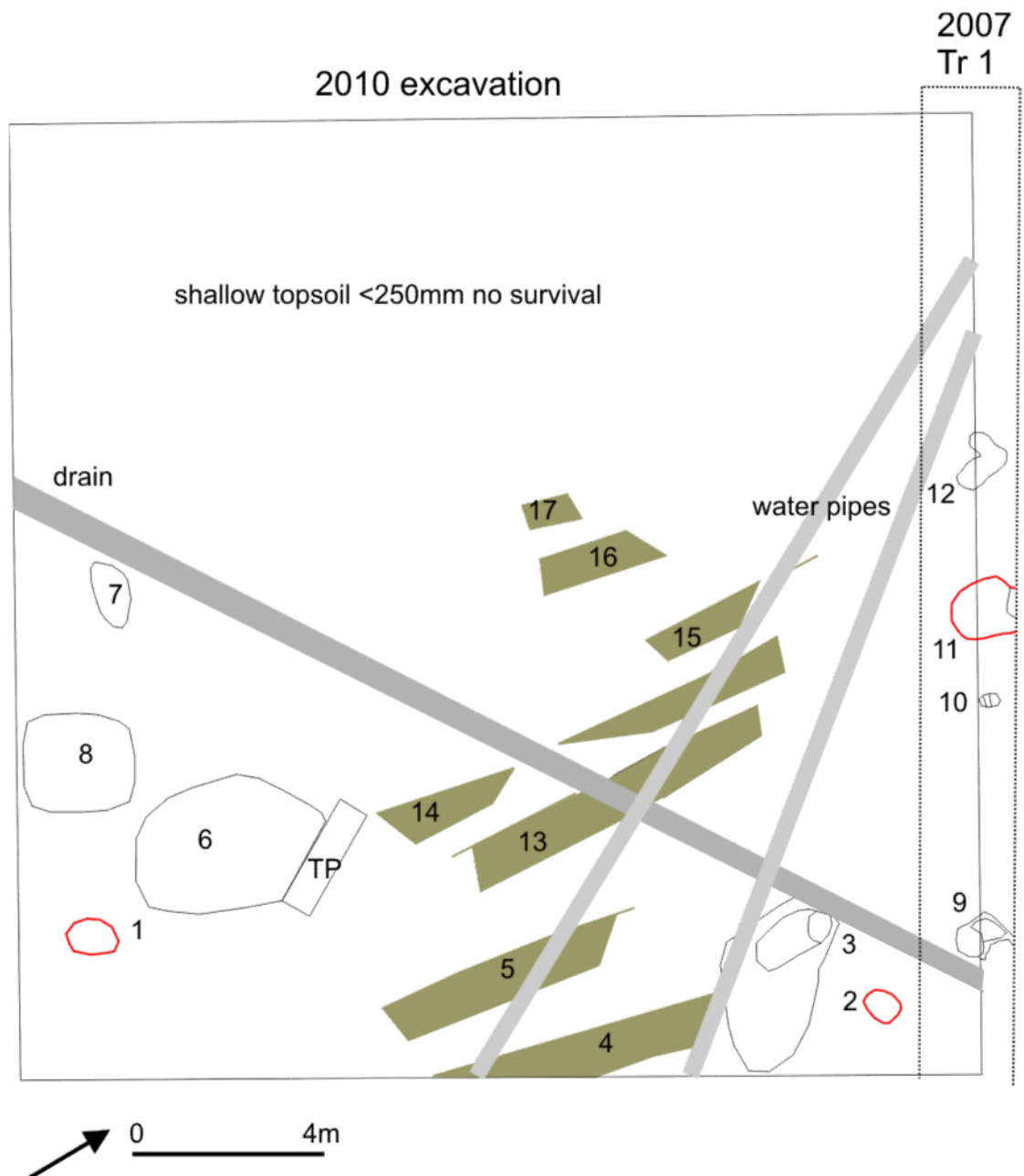
The W side of the site had less than 250mm of topsoil and modern plough marks were clearly cut into the natural. No early features survived. On the W side of the site topsoil depths ranged between 300 and 400mm, the greatest depth being in the NE quadrant where two definite prehistoric features and several possibly prehistoric features had survived.

Traces of seven N-S cultivation furrows were visible across the centre of the site. They were between c.600 and 980mm in width and between c.500mm and 1.3m apart. In profile they were shallow with a maximum depth of c.50mm. The width and spacing make these unlikely to be rig and furrow and it is perhaps most likely that these were from 19th/20th century hand dug cultivation- possibly for potatoes, or possibly to break up the ground – this small triangular field has been enclosed since at least the 1st OS of 1867 (pub 1869: Aberdeenshire sheet LIV.12).

Three features (3, 6, 8) appear to have been accumulations of peaty soil developing over impermeable patches of extremely hard iron pan. Large tree roots were associated with 3 and 6. In certain soil conditions localised patches of iron pan can develop very quickly either in relation to tree planting or even to deposits of peat (for example fuel stores) (Cunningham et al 2001). These features may therefore be related to an anthropogenic activity but it may be relatively recent.

Three features have definite association with prehistoric material. Feature 1, a small truncated pit contained two sherds of probable Bronze Age pottery.

There was no trace of any surviving burnt bone to suggest that this was the remains of a cremation. Feature 2, also a small truncated pit, had a single, possibly Bronze Age flint in the upper fill. Feature 11 (excavated in 2007) had a charcoal rich fill which yielded two C14 dates (from short-lived timber species) that fall within the Mesolithic. Two other features excavated in 2007 near F11 (F9, 12: Appendix 1) had similar charcoal rich fill and may also be prehistoric features. An unstratified flint found in topsoil from an engineer's test pit is of probable Neolithic type.



Illus 3 Plan of 2010 excavation and 2007 Trench 1 (red indicates features with definite prehistoric material. TP = Engineer's test pit)



Illus 4 Feature 1



Illus 5 Feature 2

Table 1 Excavated features (features 9-12 were excavated in 2007 Trench 1- see appendix 1).

Context No	Size	Description	Interpretation	Finds
1	620 x 580mm D:160mm	Small pit cut into natural. Fills 1/1, 1/2	Possible post hole?	

		Truncated with modern plough marks across it.		
1/1		grey brown sandy silt	fill F1	SF 2,3
1/2		yellow brown sandy silt	fill F1	
2	730 x 380-500mm D:160mm	Small pit cut into natural		
2/1		soft dark brown/black silt	fill F2	SF 4
2/2		lense of clean yellow sand	fill F2	
2/3		dirty grey sandy silt	fill F2	
3	3.3 x 2m max D:100mm	As 6	Fairly recent tree roots around edges suggest the pan and subsequent peaty accumulation may have been from conditions near tree.	
3/1		thin patch of dark, almost peaty soil over hard thick patch of iron pan		
3/2		initial silt in hollow over iron pan		
3/3		charcoal in fill at		

		NW corner		
4, 5, 13-17	600-980mm wide. 500mm -1.3m apart. D:50mm max	shallow, gently sloped furrows	F4, F5, F13-F17 cultivation furrows.	
6	3.7 x 3m D <50mm	thin patch of dark, almost peaty soil over hard thick patch of iron pan	Fairly recent tree roots around edges suggest the pan and subsequent peaty accumulation may have been from conditions near tree.	
7	-	burrow		
8	2.5 x 2m <50mm	As 6 (on photo as 6A)	As 6	
9	(2007 Trench 1)	see Appendix 1		
10	(2007 Trench 1)	see Appendix 1		
11	(2007 Trench 1)	see Appendix 1		
12	(2007 Trench 1)	see Appendix 1		

6. Finds

Only four finds of prehistoric date were recorded (Table 2). Two sherds of coarse pottery of probable Bronze Age date were found in F1; they did not conjoin but appear likely to have been from the same vessel.

Flint SF4 from F2 may also be of Bronze Age date but an isolated flint SF1 found in topsoil is more likely to be of Neolithic date (Ballin:Appendix 2).

Table 2 Small finds

SF No	Context	Object
1	Topsoil u/s from Engineer's test pit	Flint
2	F1/1	Body sherd coarse prehistoric pottery
3	F1/1	Body sherd coarse prehistoric pottery
4	F2/1	Flint

7. Interpretation

There is a small amount of evidence for some activity from the Mesolithic to the Bronze Age. It is not perhaps surprising if hunter-gatherer communities were active for some purpose in the area as the site lies near the River Don, which would have been a resource for fishing/ wildfowling as well as a means of transport.

The later prehistoric activity can best be regarded in relation to Broomend of Crichtie which was a major centre of ritual activity from at least the Early Bronze Age. Two samples from the excavation of that site date to the Early Neolithic, and although not associated with specific features, suggest some activity on the site prior to the Bronze Age (Bradley and Clarke, 2007, Sheridan and Bradley 2007). It is easy to imagine that people visiting such a place of ritual focus would leave mundane detritus in the peripheral area – as is common with more recent pilgrimage sites.

8. Impacts and Mitigations

8.1 Impact

A small number of scattered prehistoric features have been found where there was slightly deeper topsoil allowing limited survival. Modern ploughing and earlier cultivation, tree roots and animal activity had severely damaged the evidence of earlier activity.

8.2 Mitigation

No further excavation is required.

References

Bradley, R and Clarke, A 2007 Excavations at Broomend of Crichtie 2005-7: interim report.

- Cunningham, D, Collins, J and Cummins, T 2001 'Anthropogenically-triggered iron-pan formation in some Irish soils over various time-spans', *Catena*, 43, 167-76.
<http://natres.psu.ac.th/Link/SoilCongress/bdd/symp16/563-t.pdf>
- Murray, H K and Murray, J C 2007a Broom Lodge, Mill Road, Port Elphinstone, Inverurie, Aberdeenshire unpublished archive report MAS 2007-32.
- Murray, H K and Murray, J C 2007b 'Broom Lodge, Mill Road, Inverurie', *Discovery and Excavation Scotland*, 8, 25.
- Sheridan, A and Bradley, R 2007 'Radiocarbon dates arranged through National Museums Scotland during 2006/7', *Discovery and Excavation Scotland*, 8, 221.

List of digital photographs (supplied to archive on CD)

Table 3 Archive photographs

Table1	
Digital frame no	Content
001-004	F1
005-006	F1 general view
007-009	F1 section
010-013	overall view looking N
014-015	service trench across site
016-020	F2
021-025	F3
026-029	F4 and F5 rig and furrow
030-033	F6 area of iron pan
034-037	F7
038-045	F3
046-048	General view of F3 looking SW
049-054	General view of site looking N
055-057	General view of site looking E
058	General view of site looking NE
059	General view of site looking SE
060-061	General view of site looking S
062-067	F3

Appendix 1

Extract from 2007 report (Murray and Murray 2007a, 2007b) giving details of the possible prehistoric features in 2007 Trench 1.

These features are shown in this publication illus 3 and table 1 and retain their 2007 feature numbers

9: This appeared to have been an oval hole c. 450 x 300mm and cut 50mm deep into natural. This had a charcoal-rich fill and two small stones. It had been considerably disturbed by animal burrows and as a consequence it was decided that there was too much possibility of contamination to sample for radiocarbon dating. However the similarity of the fill with the dated feature 11, suggest that this may be a prehistoric feature.

10: Oval feature 450 x 240mm and cut 160mm deep into the top of natural. The fill was predominantly topsoil but slightly darker.

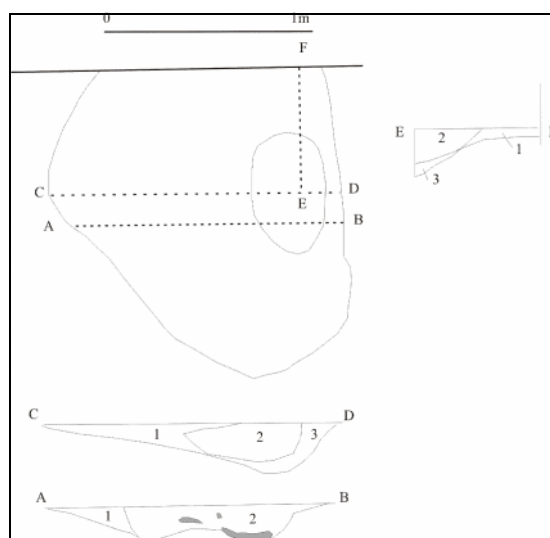
11: Large feature extending into N section of trench. 1.45m N-S x 1.0- 1.4m E-W.

Fills: 11/1: Mottled, mixed between grey/ black fill like (2) and patches of yellow sand (natural) and patches that were more silty.

11/2: Dark grey/ black. Very greasy in texture. Carbon-rich although with few actual pieces of charcoal. This contained small patches of hard yellow clayey lumps (drawn grey in section below) - these were quite like daub but had no clear shape. They were sampled and have been retained but not analysed to date.

11/3: Dark grey. Still very like (2) but much sandier in texture.

In the sections (2) appears to be the fills of a slightly deeper cut (c. 600mm diameter, 200mm deep), which was only partially visible in plan. It may be a later fill- or a recut into the larger pit filled with (1) and (3).



2007 Trench 1. Feature 11. Detailed plan and sections



2007 Trench 1, Feature 11. Section C-D

*Radiocarbon samples: F11/2 from SE quadrant was sieved and charcoal retained. The charcoal was sent to Dr Scott Timpany, environmental specialist, Headland Archaeology, for identification. Two samples of hazel (*Corylus avellana*) were chosen for radiocarbon dating as hazel is a relatively short-lived wood, which reduces the error that can be introduced by long-lived species such as oak.*

The samples were sent to SUERC (Scottish Universities Environmental Research Centre) for AMS dating. (Appendix)

Sample 1: 7030-6640 calibrated BC (95.4% probability)

Sample 2: 4900-4680 calibrated BC (95.4% probability)

12: Irregular cut into natural (c. 1m long). The W part of this had fill mixed with topsoil and may be disturbed by burrowing, however the E end had an area 500 x 600mm of dark charcoal-rich fill comparable to feature 11 and may be an early feature.

Appendix 2: The lithic assemblage

Torben Bjarke Ballin

INTRODUCTION

The purpose of the present report is to characterize the lithic artefacts in detail, with special reference to raw-materials and typo-technological attributes. From this characterization, it is sought to date and discuss the finds. The evaluation of the lithic material is based upon a detailed catalogue (the following section) of the lithic finds from Broom Lodge, and in the present report the artefacts are referred to by their original small finds number (SF no.).

THE ASSEMBLAGE

Only the following two lithic finds were recovered from the site.

Topsoil (engineer's test pit)

SF 1. Tertiary indeterminate platform-blade; fine-grained, marbled, grey flint (59 x 18 x 6 mm). Only a few millimetres of the original striking platform survives; the entire bulb of percussion has been detached from the ventral face, probably indicating the use of hard percussion.

Context 2/1

SF 4 Squat, secondary hard-hammer flake; coarse-grained, brown flint (17 x 26 x 5 mm). Certainly based on a small pebble; unprepared, cortical platform.

DISCUSSION

Neither of the two lithic artefacts is diagnostic *sensu stricto*. However, SF 1 is *most likely* to be of a Late Neolithic date, and SF 4 of a later prehistoric, probably middle or late Bronze Age date.

The raw material of SF 1 is probably so-called Yorkshire flint, which was exchanged between groups in north-east England and Scotland mainly in the Late Neolithic period (Ballin forthcoming b). The fact that the piece is a blade suggests a date prior to the Bronze Age (when the production of blade blanks had been phased out; Ballin 2002; Suddaby & Ballin forthcoming) and, within the pre-Bronze Age period, the size of the blade (ie, a *macroblade* rather than a *microblade*) indicates a date either at the beginning of the Mesolithic period or at the end of the Neolithic period (cf. Butler 2005; Pitts & Jacobi 1979). The fact that the blade is of *substantial* size (Ballin forthcoming b), and that it is most likely to have been manufactured by the application of hard percussion (Ballin forthcoming a), makes a Late Neolithic date most probable; Mesolithic and Early Neolithic blades were predominantly made by the application of soft percussion. It is unfortunate that almost nothing is left of the platform remnant, as the presence of a finely faceted platform would have made the suggested Late Neolithic date certain rather than just likely (*ibid.*).

SF 4 is based on poor-quality local pebble-flint, and 1) its production by hard percussion, 2) the complete lack of any form of core preparation (cortical platform), as well as 3) its squat shape, are all attributes consistent with a later Bronze Age date (Ballin 2002; also see Suddaby & Ballin forthcoming), although earlier and later dates are also possible.

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- Ballin, T.B. forthcoming b: *Overhowden and Airhouse, Scottish Borders. Characterization and interpretation of two spectacular lithic assemblages from sites near the Overhowden henge*. BAR British Series. Oxford: Archaeopress.
- Butler, C. 2005: *Prehistoric Flintwork*. Stroud: Tempus.
- Pitts, M.W. & Jacobi, R.M. 1979: Some Aspects of Change in Flaked Stone Industries of the Mesolithic and Neolithic in Southern Britain. *Journal of Archaeological Science* 6, 163-177.

Suddaby, I., & Ballin, T.B. forthcoming: Stoneyhill Landfill Site, Peterhead, Aberdeenshire. *Scottish Archaeological Internet Reports (SAIR)*.