BROOMHILL MIDMILL, KINTORE ABERDEENSHIRE



- Archaeological Evaluation -Carried out 15th-16th April 2015 by Murray Archaeological Services Ltd



Report No: MAS 2015-12 by H K Murray & J C Murray

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-Archaeological Evaluation-

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- 1. Background
- 1.1 A Planning Application (APP/2014/3159) was granted permission for the development of a small housing estate on a green field site at Broomhill, Midmill, Kintore, Aberdeenshire.
 An archaeological condition was applied to this application in the context of Scottish Planning Policy (PAN 2/2011, SPP, SHEP).
 The condition required that no development should take place before the implementation of a 7-10% archaeological evaluation.
- 1.2 Murray Archaeological Services Ltd was commissioned by Veitchi HomesLtd, on behalf of their client Tor Ecosse Ltd, to undertake the work.
- 1.3 The evaluation was undertaken on 15^{th} - 16^{th} April 2015.
- 2. Desktop Survey
- 2.1 A search was carried out in the Sites and Monuments Records of the Royal Commission for Ancient and Historic Monuments in Scotland (RCAHMS) through Canmore and Pastmap. The historic OS maps for the area were also consulted.
- 2.2 **Roy's Military map of Scotland 1747-55** shows no settlement or cultivation on this area directly to the W of the road S of Kintore.
- 2.3 The 1st ed OS 25" Aberdeen sheet lxv.5 (Kintore) 1865 (pub 1869) shows this area as open ground bisected by the mill lade for Midmill to the NE (illus 1).



Illus 1 Detail from 1865 OS map with site outlined in red. (www.nls.ac.uk)

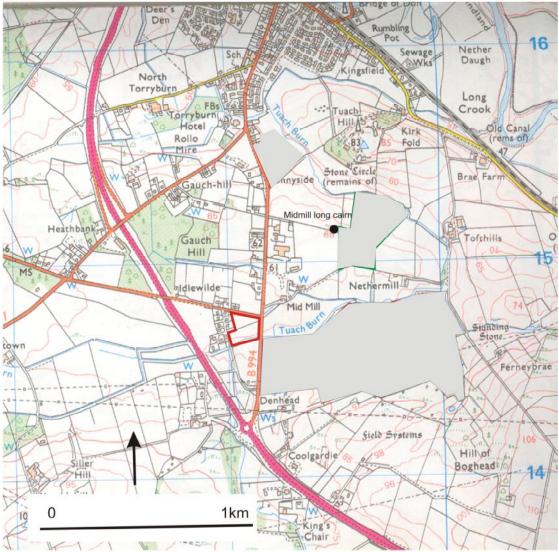
2.4 **OS 25" Aberdeenshire 065.05 1899 (pub 1900)** shows no change (Illus 2).



Illus 2 Detail from 1899 OS map with site outlined in red. (www.nls.ac.uk)

2.5 **OS 25"** Aberdeenshire 065.05 1924 (pub 1925) shows the area unchanged.

- 3. The Site
- The site comprises two fields lying in the angle between the B994 and the
 B977 on the S outskirts of Kintore just N of the A96. It is directly W of the
 Midmill industrial estate (illus 3).
 NGR: NJ 79074, 14688 Parish: Kintore

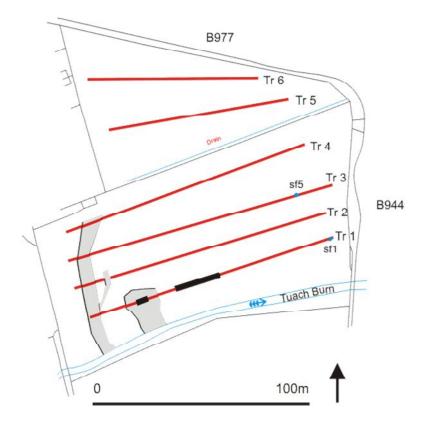


Illus 3 Location of site (red outline) in relation to the 2007-2014 evaluations and excavations (grey) around Midmill. Ordnance Survey © Crown copyright. All rights reserved. Licence number 100049810.

- 3.2 The two fields lie on the N bank of the Tuach Burn with much of the ground being level, except for the S edge where the ground slopes steeply down to the burn and the SW corner of the S field which also slopes down, fairly steeply, to an area of damper ground.
- 3.3 At the time of the evaluation the field was in rough grass.

4. Methodology

- 4.1 Six evaluation trenches were excavated (Illus 4). Topsoil was removed using a full slew excavator with a 2.1m wide toothless ditching bucket. Any possible features were cleaned and excavated by hand.
- 4.2 All mapping was done with a Magellan Mobile Mapper 120 GPS and Glonass.



Illus 4 Plan of trenches evaluated (red). Reproduce from Ordnance Survey digital map data, © Crown Copyright, All rights reserved. 2014. Licence No 100041040. Grey denotes palaeochannels (5, 6 & 7). Black areas in trench 1 are shown in more detail in illus 5, 6 & 9. Blue dots mark isolated finds (pottery).

5. The Results

Trench 1

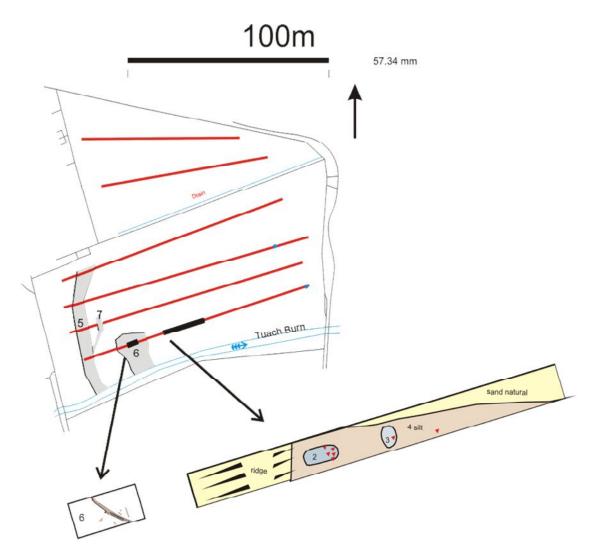
GPS ENE end: 379133,814682 WSW end: 379020,814644

Orientation: ENE/WSW Length: 118 m Width: 2.1m

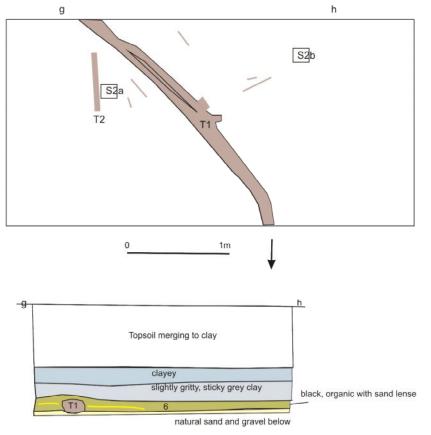
Stratigraphy: Topsoil of 250-400mm overlay stoney, sandy gravel natural for much of the trench but there were three palaeochannels (illus 5). At the W end of the trench, channel (5) was in line with and relates to the same channel in trenches 2-4. Further E

a channel or pool (6) had become filled with clay, preserving an organic layer incorporating some preserved wood (illus 5 - 8).

A ridge separated this 'pool' from a silted up former bank of the Tuach Burn (4: illus 5, 9, 15). Two small pits (2, 3 : illus 5, 9-11) with scant remains of charcoal and with some flints in the upper fill of each, were dug in shallow hollows in the top of the silted up former channel.



Illus 5 Detail of site plan indicating position of excavated features. Details in illus 6 & 9.



Illus 6 Plan and section of exposed timber in Trench 1, context 6.



Illus 7 Detail of wood 6, looking E

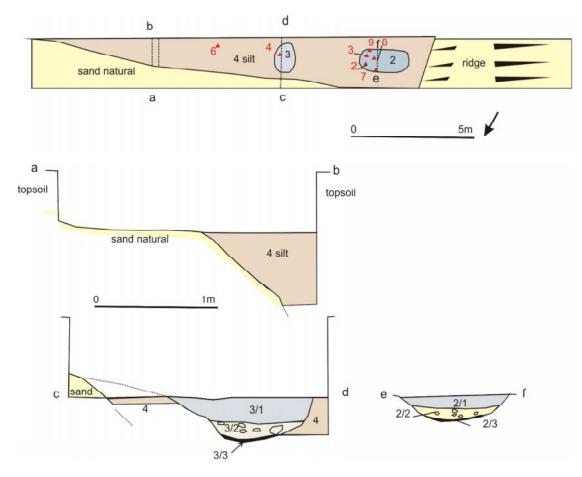


Illus 8 Trench 1. S section over wood 6

| Feature | GPS |
|------------------------------|----------------|
| (2) Pit. 2.05 x 0.90m. | 379068, 814660 |
| Depth 200mm. Cut into (4) | |
| fill of palaeochannel. | |
| 2/1 Top fill of pit 2. Grey | |
| silty sand with rare | |
| charcoal at edges. Flints SF | |
| 2,3,7,8 & 9 were in this | |
| layer. | |
| 2/2 Fill pit 2. 20-40mm. | |
| Similar to 2/1 but with | |
| frequent waterworn | |
| pebbles | |
| 2/3. Fill pit 2. Very thin | |
| basal layer with moderate- | |
| rare charcoal. <10mm. | |
| (3) Pit. 1.15 x 0.80m. | 379069, 814660 |
| Depth: 360mm. Cut into | |
| (4) fill of palaeochannel. | |

| 3/1. Fill of pit 3. Grey sand | |
|---|--|
| with rare charcoal. Flint SF | |
| | |
| 4 in this layer. | |
| 3/2 Fill of pit 3. Small | |
| water rounded pebbles in | |
| sandy silt. | |
| 3/3. Fill of pit 3. Very thin | |
| basal layer with moderate- | |
| rare charcoal. <10mm | |
| (4) Silted up former bank | Extends SE/NW across the |
| of burn. About 14m N of | trench between 379080, 814667 |
| the present bank. Section | and 379060, 814658 |
| a-b (illus 9) indicates that | |
| the original bank was quite | |
| steep and had silted up | |
| prior to the use of pits 2 | |
| and 3. Fill: mid brown silt. | |
| (5) Palaeochannel | Between 379026,814646 and W |
| | Detween 577020,814040 and W |
| extending through trenches | end of trench at 379020,814644 |
| | , , , , , , , , , , , , , , , , , , , |
| extending through trenches | |
| extending through trenches T1-T4. Approx 6.5m wide | , , , , , , , , , , , , , , , , , , , |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not | , , , , , , , , , , , , , , , , , , , |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running | |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. | end of trench at 379020,814644 |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a hollow in natural clean | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a hollow in natural clean yellow gravel/sand. A | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a hollow in natural clean yellow gravel/sand. A single tree trunk (T1) | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a hollow in natural clean yellow gravel/sand. A single tree trunk (T1) appears to have fallen or | end of trench at 379020,814644 Between 379053, 814654 and |
| extending through trenches T1-T4. Approx 6.5m wide (to end of trench). Not excavated to base, running approx N/S across trench. (6) Palaeochannel/pool c 15m across (E/W) with preserved organic material/wood. Lies in a hollow in natural clean yellow gravel/sand. A single tree trunk (T1) appears to have fallen or been swept onto the gravel, | end of trench at 379020,814644 Between 379053, 814654 and |

| appears to have collected | |
|----------------------------|--|
| around and over the tree | |
| trunk and smaller | |
| branchwood. A thin layer | |
| <10mm of clean yellow | |
| sand suggests rain causing | |
| run off from clean sand at | |
| edge of dip. No evidence | |
| of human activity. | |



Illus 9 Plan and sections of pits 2 and 3 and former burn bank 4.



Illus 10 Trench 1, pit 2 section



Illus 11 Trench 1, pit 3 section

Finds: SF5. A small group of crumbling fragments of indeterminate prehistoricpottery were found on natural at the base of topsoil at the E end of the trench (379132, 814681). There were no associated features.

SF 2-3, 7-9, all flints, were found in the top fill of pit 2 (2/1) and a single flint (SF 4) was in the surface of the top fill of pit 3. A flint on the surface of the silted channel (4) some 2m W of pit 3 may have been plough-dragged from the pit.

Trench 2

GPS ENE end: 379130,814692 WSW end: 379014,814658 Orientation: ENE/WSW Length: 120 m Width: 2.1m Stratigraphy: Topsoil of 300-400mm overlay stoney, sandy gravel natural for much of the trench but there were two palaeochannels at the W end.

| Feature | GPS |
|----------------------------|----------------------------|
| (5) Palaeochannel | Between 379018, 814659 and |
| extending through trenches | 379025, 814661 |
| T1-T4. Approx 7m wide | |
| and 1m deep from modern | |
| surface, running approx | |
| N/S across trench. Fill | |
| clay/silt | |
| (7) Palaeochannel c. 2m | 379030, 814661 |
| wide, 600mm deep. Fill | |
| clay/silt | |

Trench 3

GPS ENE end: 379132, 814705 WSW end: 379011,814670 Orientation: ENE/WSW Length: 126 m Width: 2.1m Stratigraphy: Topsoil of 400-450mm overlay natural for much of the trench but there was a palaeochannel (5) extending across W end. Natural to the E of the palaeochannel was stoney, sandy gravel with some modern plough marks in the surface, to the W of the palaeochannel it was sand.

| Feature | GPS |
|----------------------------|----------------------------|
| (5) Palaeochannel | Between 379015, 814671 and |
| extending through trenches | 379021, 814673 |
| T1-T4. Approx 5.75m | |

| wide and 1m deep from | |
|---------------------------|--|
| modern surface, running | |
| approx N/S across trench. | |
| Fill clay/silt | |

Finds: SF5. Two conjoining sherds of indeterminate prehistoric pottery were found on natural at the base of topsoil at the E end of the trench (379116, 814702). There were no associated features.



Illus 12 Palaeochannel (5) in Trench 3, looking E

Trench 4

GPS ENE end: 379120, 814724 WSW end: 379010, 814683 Orientation: ENE/WSW Length: 116 m Width: 2.1m Stratigraphy: Topsoil of 300-450mm overlay natural for much of the trench but there was a palaeochannel (5) extending across W end. Natural to the E of the palaeochannel was stoney, sandy gravel with some modern plough marks in the surface, to the W of the palaeochannel it was sand.

| Feature | GPS |
|-------------------|----------------------------|
| (5) Palaeochannel | Between 379017, 814686 and |

| extending through | 379027, 814690 |
|-----------------------|----------------|
| trenches T1-T4. | |
| Approx 10.8m wide | |
| and 900mm deep from | |
| modern surface, | |
| running approx N/S | |
| across trench. E side | |
| markedly steep. | |
| Fill fine dark silt. | |
| | |



Illus 13 Paleochannel (5) in trench 4, looking E

Trench 5

GPS ENE end: 379112,814754 WSW end: 379030,814730 Orientation: ENE/WSW Length:84 m Width: 2.1m Stratigraphy: Topsoil of 350-450mm overlay stoney, sandy gravel natural with some modern plough marks. There were no features.



Illus 14 Trench 5, looking E

Trench 6

GPS E end: 379099, 814754 W end: 379020,814754

Orientation: E/W Length: 78 m Width: 2.1m

Stratigraphy: Topsoil of 380-400mm overlay stoney, sandy gravel natural with some modern plough marks. There were no features.

6. Discussion

The evaluation suggests limited prehistoric activity on the site. Two isolated finds of indeterminate prehistoric pottery at the E end of Trenches 1 and 3 were both at the base of topsoil; it is possible they were the remnant of a greater spread that had not survived ploughing. No features were associated or survived at this end of the site. They can be seen in the context of some of the isolated finds in ploughed out areas of other Midmill evaluations (Murray & Murray 2103).

Another area of prehistoric activity was recorded towards the W end of Trench 1, where two small pits 2 and 3 were cut into the top of a former raised bank of the Tuach Burn. Both pits were very shallow scoops, with very similar fills. Neither appeared to have had in-situ burning and, although small quantities of charcoal were associated with the primary fill of each pit, they were suggestive of very short-lived fires – possibly single event cooking fires. Flints were found in the upper fill of each pit.

The evaluation also gives some insight into the prehistoric landscape with a silted palaeochannel running towards the Tuach Burn N/S across trenches 1-4, and a braided channel (7) in trench 2. A linear feature in trench 1 was sectioned and appears likely to have been a former raised bank of the Tuach Burn, probably from the period of high sea levels in the post-glacial period. Preserved wood (6) appears to be the result of a tree falling or being swept into another palaeochannel; the tree slowing the water so that fine silt collected around it, forming a clay layer that allowed anaerobic conditions to preserve the timber.

The detail of environment and landscape change is of some importance in relation to the prehistoric activity in the general Midmill area.



Illus 15 Trench 1 looking W with ranging rods in pits 3, 2 and 'pool' 6, in relation to the Tuach Burn (LHS)

7. Impacts and Mitigations

Impacts

7.1 a A small area of possibly early prehistoric activity is associated with two small pits. These appear to be isolated and transitory features, possibly hearths set near the bank of the burn. Examination of the flints by a specialist and dating of a sample of

the charcoal (if suitable) may add detail. It is unlikely that any further excavation would add to this picture.

7.1.b An area of preserved timber and organic matter in a silted palaeochannel or pool appears to be a restricted area of preservation. There is no evidence of related human activity but it has, if dated, the potential to give useful environmental and landscape evidence as a background to the wider prehistoric settlement of Midmill area.

Mitigations

7.2 a The flints from pits 2 and 3 have been sent to specialist Torben Ballin for identification and comment in relation to the flints from the other Midmill sites. Charcoal from pit 3 (context 3/1) has been sent to Scott Timpany (Orca UHI, Orkney) for identification of a suitable sample for C14 dating at SUERC. The very similar fills and contents of the pits suggest pits 2 and 3 are contemporary so only one date will be necessary.

7.2 b If the timber and organic material in palaeochannel/pool 6 can be dated, it will be possible to assess the potential value of further environmental analysis of two 5L bulk samples of the organic material (6) and samples of two timber (T1 and T2). A visually identifiable hazelnut from context 6 will be sent for C14 dating at SUERC. When the result is known, further action in regard to additional environmental analysis will be agreed following discussion with Aberdeenshire Archaeologist, Claire Herbert and with Scott Timpany.

7.2 c When the results of specialist reporting and C14 dates are available, a short final report will be produced by MAS Ltd.

7.2 d No further action is required on site. However, this does not preclude the possibility of chance finds or archaeological discoveries outwith the evaluation trenches. Should such chance finds occur, then the Archaeology Service, Aberdeenshire Council, or Murray Archaeological Services Ltd, must be informed immediately so that an appropriate archaeological response can be formulated and agreed by all parties concerned.

References

Murray H K & Murray J C 2013 *Midmill Industrial Estate, Kintore, Aberdeenshire: Archaeological Evaluations and Excavations 2007-2012.* Unpublished report MAS 2013-10 in archive at Aberdeenshire SMR and NMRS.

Catalogue of finds

| SF No | Trench | Context | Artefact type | GPS |
|-------|--------|------------|---------------------------|---------------|
| 1 | 1 | 1 (Base | Crumbling fragments | 379132,814681 |
| | | topsoil on | indeterminate prehistoric | |
| | | natural) | pottery | |
| 2 | 1 | 2 | Burnt flint | 379068,814660 |
| 3 | 1 | 2 | Burnt flint | 379068,814660 |
| 4 | 1 | 3 | Flint | 379070,814661 |
| 5 | 3 | 1 (Base | 2 conjoining sherds | 379116,814702 |
| | | topsoil on | indeterminate prehistoric | |
| | | natural) | pottery | |
| 6 | 1 | 4 | Burnt flint | 379062,814658 |
| 7 | 1 | 2/1 | Flint | 379068,814660 |
| 8 | 1 | 2/1 | Flint | 379068,814660 |
| 9 | 1 | 2/1 | Burnt flint | 379068,814660 |

Catalogue of photographs (Photographs supplied to archive in digital form.)

| Photographic catalogue | |
|------------------------|--|
| Digital frame no | Content |
| 1-3 | Trench 5 looking E |
| 4-5 | Looking N across trenches 5 & 6 |
| 6 | Looking S across trenches 1-4 |
| 7-9 | Looking E across trench 4 palaeochannel 5 |
| 10-13 | Looking E along trench 3, palaeochannel 5 |
| 14-17 | Wood in Trench 1, context 6 as first exposed |
| 18 | Working on site |
| 19-21 | Section of pit 2 |
| 22-23 | Trench 1 looking E with pit 2 (sectioned) and grey shadow of pit 3 (foreground) in top of 4 (darker brown line across RHS of trench) |
| 24-27 | Excavating timbers 6 |
| 28-29 | Timbers 6 in relation to Tuach Burn |
| 30-54 | Tr 1 Details of timbers 6 |

| 55-68 | Tr 1. Detail of clay in section above wood 6 | |
|--------|---|--|
| 69-75 | Tr 1 pit 3 | |
| 76-85 | Tr 1 pit 2 | |
| 86 | Tr 1 section through 4 | |
| 87-92 | Tr 1 Poles in pits 3 and 2 and at wood 6 | |
| 93-96 | Tr 1. Silted former bank (4) and pits in relation to Tuach Burn | |
| 97-100 | Tr 1 Detail of 4 looking N | |