

# Plot 2, East Birchwood, Migdale

## Archaeological Watching Brief

### Report



Site Number	AN2
OS Grid Reference	NH63207 91960
Author	Pete Higgins with a contribution by Anne Johnston
Date Produced	19/10/10
Date revised	

Photograph shows the French drain in the north of the site

## **Summary**

*A watching brief on groundworks for the construction of a new house and access road at Plot 2, East Birchwood, Migdale, Bonar Bridge, was carried out on 14 October 2010. One clearance cairn, a French drain and the truncation of a podzol were recorded; all probably date from mid to late 19<sup>th</sup> century land improvements. No other archaeological features were found.*

## **1. INTRODUCTION**

- 1.1. The Highland Council required an archaeological watching brief on groundworks as a condition of planning consent for construction works at Plot 2, East Birchwood, Migdale, Bonar Bridge, NGR NH63207 91960. Planning reference number 09/00255/FULSU.
- 1.2. The client, Mr J Markland, commissioned Archaeology North Ltd to carry out this work.
- 1.3. The map below shows the location of the site.
- 1.4. An online digital version of this report may be found on the OASIS website at <http://www.oasis.ac.uk/form/formct1.cfm?oid=archaeol21-83991>

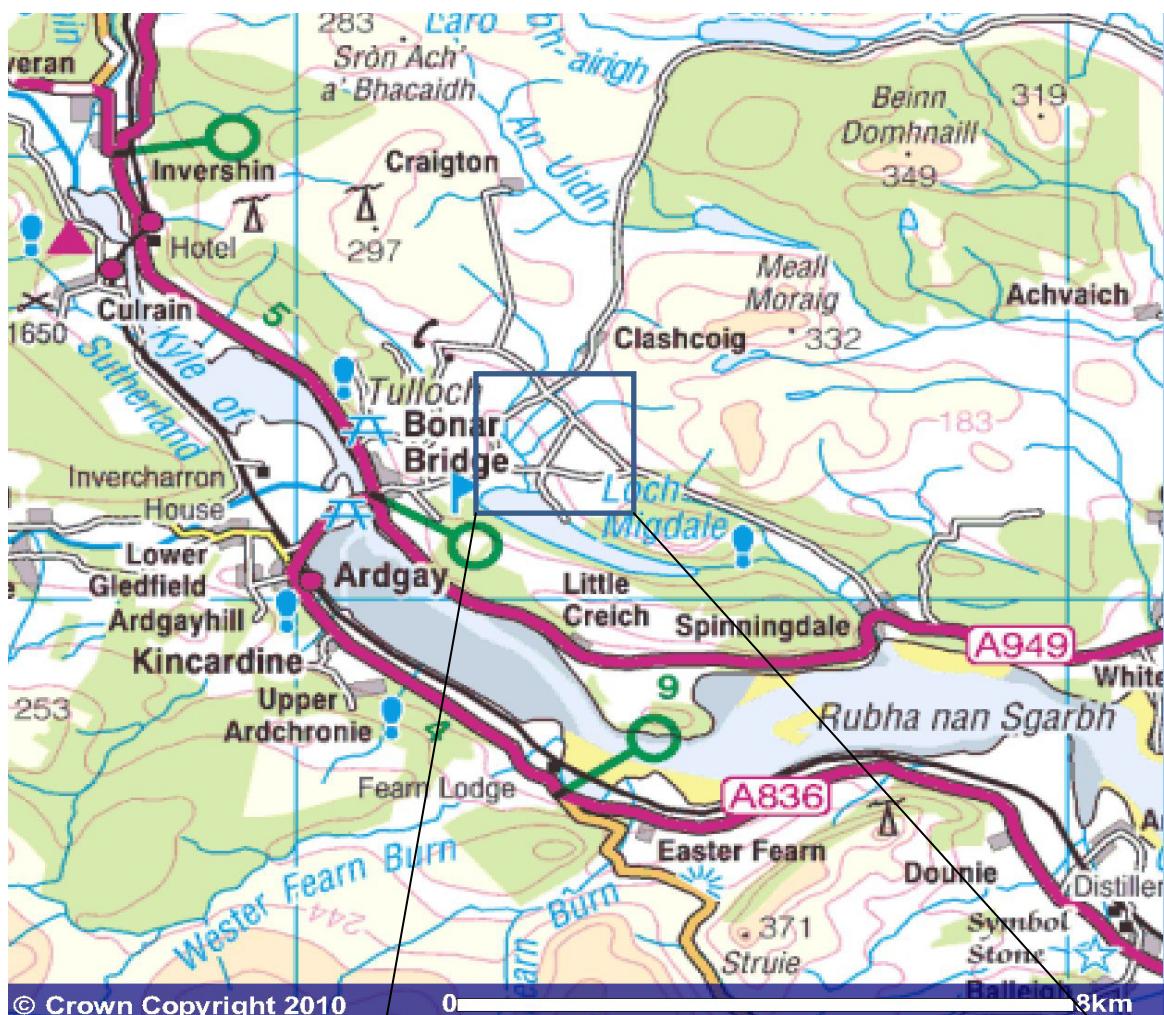
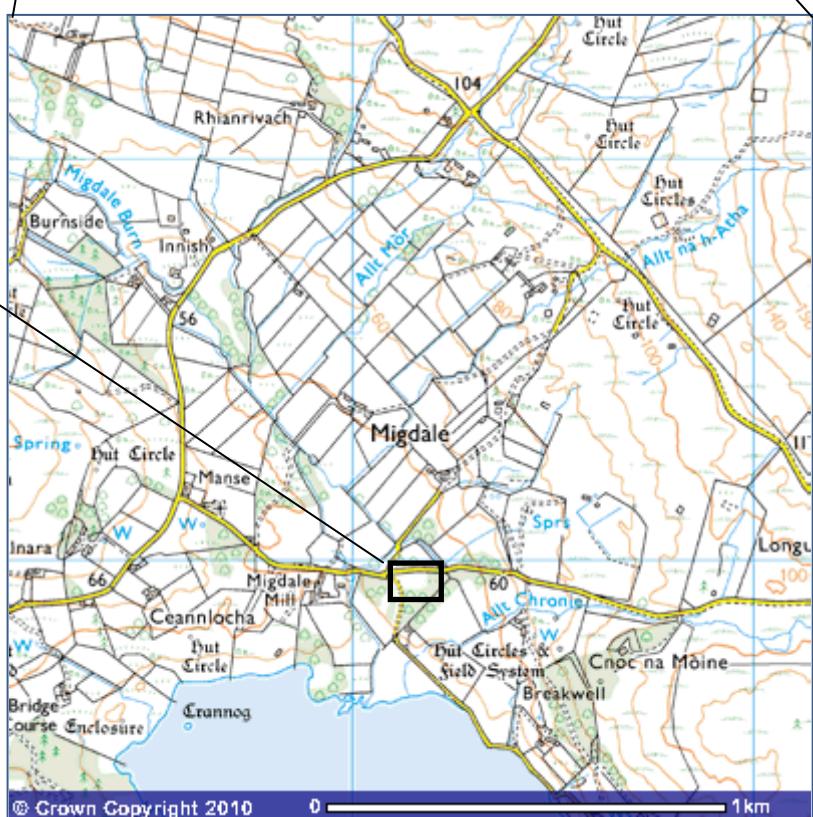


Figure 1 Site location



## 2. AIMS AND OBJECTIVES

- 2.1. To minimise delays or costs to the development by integrating archaeological works with the project.
- 2.2. To identify, so far as is possible, the nature, extent, date, state of preservation and significance of the archaeological resource of the site, and to preserve this; where preservation is not possible, to record the resource in line with local and national standards.
- 2.3. To propose arrangements for the safeguarding where possible, and recording where necessary of any archaeological features or finds identified.
- 2.4. To analyse and report on the findings of the investigations in line with local and national guidelines and requirements.

## 3. SITE LOCATION AND BACKGROUND INFORMATION

- 3.1. The site is situated to the north of Loch Migdale, in an area known to contain archaeological remains of several periods.
- 3.2. The site lies to the south of an east-west single track road, near a cross roads. It is currently partly wooded with mature *Betula pubescens*, partly grassed. There are two high points within the site, separated by a marshy area of sedge. The site is bounded to the east and west by post and wire fences, to the south by wire mesh fence erected within the last few weeks, and to the north by a stane dyke recently pierced to create a new access. Formerly access was by a gate in the south west corner. These boundaries are located in the same positions as those shown on the 1874 OS 1<sup>st</sup> edition map, see figure 10.
- 3.3. The British Geological Survey shows the superficial geology of the site to be Devensian Till deposits of sand and gravel over Altnaharra Psammite Formation.

## 4. REGULATORY FRAMEWORK AND QUALITY ASSURANCE

- 4.1. Scottish Planning Policy (SPP)<sup>1</sup>, Scottish Historic Environment Policy (SHEP)<sup>2</sup>, Planning Advice Note 42 (PAN 42)<sup>3</sup> regulate the way archaeological matters are dealt with during the planning process. There is an assumption in favour of preservation *in situ*, although *preservation by record* may be deemed sufficient by the planning authority, in this case Highland Council, advised by their in-house Archaeology Unit.

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1 <http://www.scotland.gov.uk/Publications/2010/02/03132605/0>

2 <http://www.historic-scotland.gov.uk/shep-july-2009.pdf>

3 <http://www.scotland.gov.uk/Publications/1994/01/17081/21711>

- 4.2. The Highland Council Structure Plan 2001<sup>4</sup> sets out the ways Highland Council implements the above policies. Those relevant include Identifying and Regulating the Use of Archaeological Sites, (BC1) Archaeological Heritage Areas, (BC3) the Integration of Environmental and Community Interests (G5), and the Conservation and Promotion of the Highland Heritage (G6).
- 4.3. Archaeology North Ltd follows the Code of Conduct of the Institute for Archaeologists (IfA). Quality of work is assured both through adherence to the standards of the IfA and through internal monitoring.

## 5. METHODOLOGY

- 5.1. The archaeological works comprised the following:

- 5.1.1. *Desk-based assessment.* The available archival resources were reviewed and interpreted in context.
- 5.1.2. *Watching Brief.* The watching brief involved the archaeological observation of topsoil stripping over the whole of the house and garage footprint, and of the access road, on 14 October 2010. Written, photographic and drawn records were made of all archaeological features or deposits exposed; their positions were plotted on a large scale plan. Stripping was by a 360 backhoe; spoil was temporarily stored on stripped areas once the surface had been roughly cleaned back. The eastern half of the site was stripped to natural; the strip in the western half did not penetrate the topsoil.

## 6. RESULTS AND DISCUSSION

- 6.1. *Desk-based assessment and documentary research* By Anne Johnston

### **Desk-based assessment :**

The data bases of the *National Monuments Record of Scotland* (NMRS) and Highland Council's *Historic Environment Record* (HER) were viewed online<sup>5</sup>. Whilst no known archaeological sites or artefacts are noted as lying within the confines of the proposed building site, the records reveal that 2 Birchwood lies within a wider area which preserves many traces of former settlement and land-use. This land lying above the northern shores of Loch Migdale has clearly formed a focus for settlement over several millennia with the current pattern of dwellings and field boundaries dating mainly to the period of the late 18th/early 19th-century agricultural improvements implemented by Skibo Estate.

The majority of known sites date to the prehistoric period and survive in varying states of preservation. The much worn hut circle at Ceanlocha (NGR NH 6260 9181) to the west of 2

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<http://www.highland.gov.uk/yourenvironment/planning/developmentplans/structureplan/thehighlandstructureplan.htm>

<sup>5</sup> [www.rcahmgs.gov.uk](http://www.rcahmgs.gov.uk) and <http://www.her.hightland.gov.uk/>

Birchwood is a good example of a site where the denuded outlines of a dwelling are just discernible but where more modern farming practices have erased any traces of associated field systems. By way of contrast the iron-age crannog at the west end of Loch Migdale (NGR NH 625 915) is deemed to be of national importance and was 'scheduled' (i.e. listed) as such by Historic Scotland in 2004 under the terms of the *Ancient Monuments and Archaeological Areas Act 1979*<sup>6</sup>. To the north-west of the 2 Birchwood lies the find spot of the Migdale Hoard (NGR NH 6336 9214), a collection of high-status bronze-age artefacts uncovered in 1895 and now in the collection of the National Museums of Scotland<sup>7</sup>. Lacking from the archaeological record is any trace of the Norse-speaking peoples whose place-names survive so prominently in the landscape, including the many incorporating the Old Norse topographical suffix *dalr* (dale) as preserved in the names Migdale, Spinningdale and Swordale.

East Sutherland was systematically surveyed in the early 1900s by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) in the course of preparing an inventory of archaeological sites in the area.<sup>8</sup> In the late 20<sup>th</sup> century, Migdale formed part of the survey area covered by the RCHAMS' *1<sup>st</sup> Edition Map Project* which sought to record sites noted on the Ordnance Survey's map of Sutherland first published in 1879. This resulted in many new potential sites being recorded on paper but which still remain to be investigated on the ground.

The requirements of Migdale Mill and the remnants of a small pot-barley mill nearby helped shape the landscape to the immediate west of 2 Birchwood and the Migdale Burn and formed the subject of a standing building survey and watching brief in 2002<sup>9</sup>.

### **Documentary background:**

2 Birchwood lies within the parish of Creich and, in common with the other land-holdings in Migdale and Spinningdale, formed part of the estate of Skibo and Pulrossie. The land divisions seen today date mostly from the reforming practices of Sir George Dempster, estate owner, who, in the latter decades of the 18<sup>th</sup> century and whilst most of his contemporaries were focusing on introducing sheep runs on to their land, determined to create a manufacturing base reliant on home-spinning and weaving. Part and parcel of this enterprise was a desire to create villages to support a working population and Dempster was determined to 'give people secure possession of their houses, gardens and arable land, with full liberty (of) to cultivate as much of the waste lands as they pleased'<sup>10</sup>. Thus the loosely-arranged townships of Spinningdale, Migdale and Bonar Bridge took on the appearance of planned settlements with a regular pattern of associated enclosures. Dempster's plans are outlined succinctly in the Rev. George Rainey's report for the (First) Statistical Account of Scotland, compiled between 1791 and 1799, which also gives a snapshot of life in the parish at that period<sup>11</sup>.

<sup>6</sup>Historic Scotland. Loch Migdale Crannog. Scheduled Ancient Monument 10917.

<sup>7</sup>Anderson, Joseph, 1901, 'Notice of a hoard of bronze implements and ornaments and buttons of jet found at Migdale on the estate of Skibo, Sutherland' in Proceedings of the Society of Antiquaries of Scotland, vol 36, pp. 236-42.

<sup>8</sup>RCAHMS, 1911, Inventory of Ancient Monuments and Constructions in the County of Sutherland.

<sup>9</sup>Farrel, Stuart, 2002, *Migdale Mill (Creich Parish) Standing Building Recording, watching brief, Discovery and Excavation in Scotland*, vol 2, p.66

<sup>10</sup>Rainey, Rev. George. 1799, *Parish of Creich* in Statistical Account of Scotland, Sutherland Caithness vol. XVI p.347

<sup>11</sup>Ibid., pp.344-351

Rainy reports, also, on the chief crops of the district, the barley, white oats, 'small black oats' and potatoes that sustained the population and speaks of the inhabitants' reliance on the rearing of black cattle. Migdale Mill which lies to the west of 2 Birchwood dates from the early 19<sup>th</sup> century and it is the proximity to this category C-listed building, and the remnants of a pot-barley mill nearby, which best explains the dykes and enclosures represented on the 1<sup>st</sup> edition Ordnance Survey map of 1879. The outlet of the mill lade is shown running in to the water course which forms the western boundary of the site, the Migdale Burn, whilst the eastern boundary is formed by the Allt Chronis (G. the murmuring stream) and the lochside road. The 1879 map also highlights the new softwood plantations which resulted from Dempster's plans to improve his estate's income, he having reserved the right to 'enclose and plant all such areas of wasteland as are fit for no other purpose'<sup>12</sup>. Earlier maps of the area are known, notably General Roy's survey of 1745-1755 and an estate map of 1812 showing land in dispute between the Proprietors of Skibo and of Creich, but neither they, nor the smaller -scale maps of the early 19<sup>th</sup> century show any features within the area under consideration.

## **Bibliography**

[www.rcahms.gov.uk/pastmap.html](http://www.rcahms.gov.uk/pastmap.html)

[www.historic-scotland.gov.uk](http://www.historic-scotland.gov.uk)

[www.her.highland.gov.uk](http://www.her.highland.gov.uk)

[www.geo.nls.uk/OS6inch](http://www.geo.nls.uk/OS6inch)

Anderson, Joseph, 1901, 'Notice of a hoard of bronze implements and ornaments and buttons of jet found at Migdale on the estate of Skibo, Sutherland' in Proceedings of the Society of Antiquaries of Scotland, vol. 36 pp. 236-42

Ordnance Survey 6" to the mile map of Sutherland surveyed 1874, published 1879, Sutherland, Sheet CXI.

Farrell, S, 2002, *Migdale Mill (Creich Parish) Standing Building recording: watching brief*. Discovery and Excavation Scotland, vol 3. p.66.

Rainey Rev. George, 1799, *Parish of Creich* in Statistical Account of Scotland, Caithness and Sutherland vol. XVI pp. 331-362.

Royal Commission on the Ancient and Historical Monuments of Scotland, 1911, Inventory of Ancient Monuments and Constructions in the County of Sutherland.

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<sup>12</sup>Ibid. p.347.

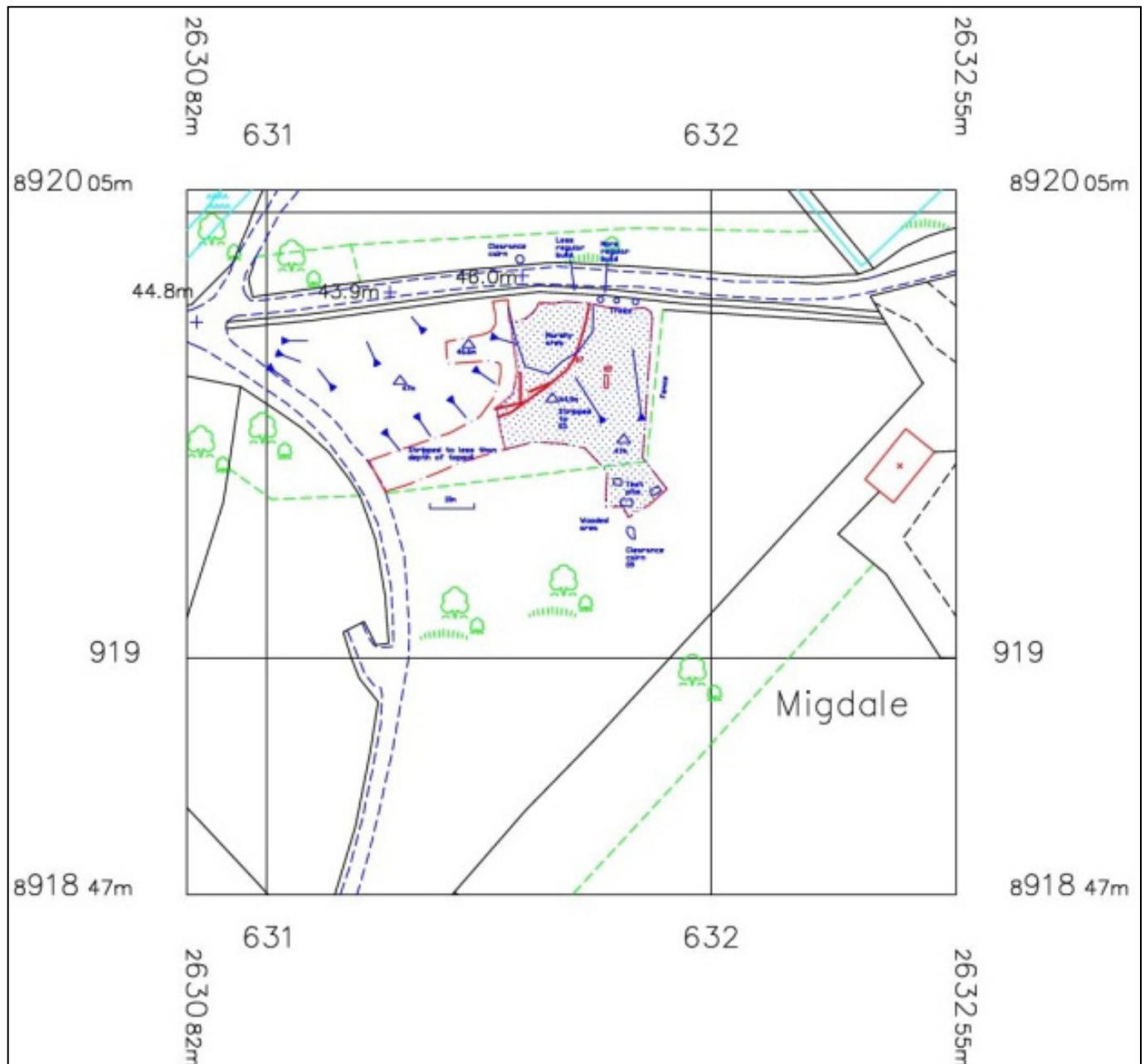


Figure 3 Plan of site, showing stripped areas and archaeological features

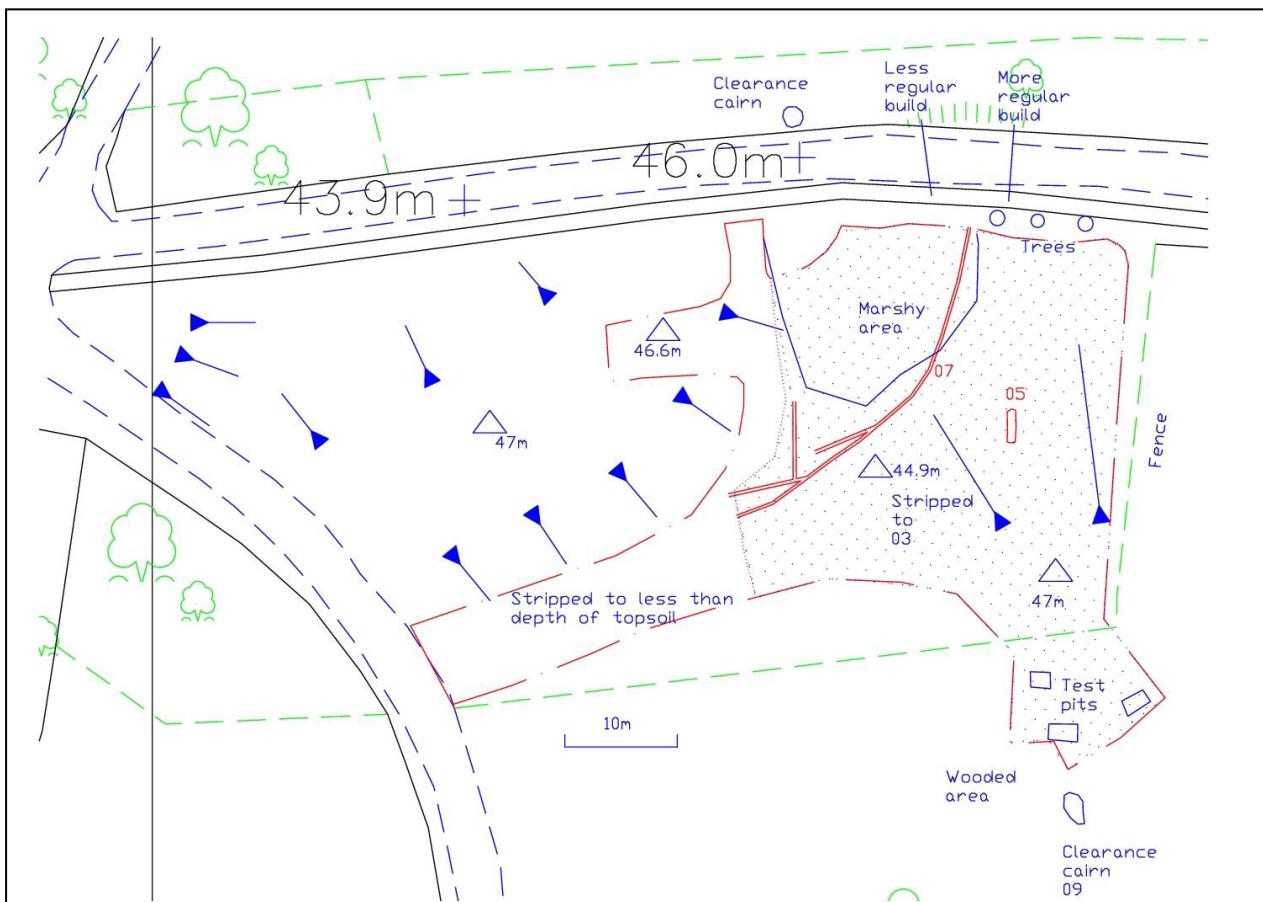


Figure 4 Plan of site, showing archaeological and other features.

Note the hachures denote slope before stripping, although the underlying natural deposits generally conformed to the same degree and direction of slope. For explanation of other annotations, see text.

**Table 1.**  
**Context table**

Context	Category	Description	Colour	Texture	Length (m)	Width (m)	Ht/Depth/Thk (m)
01	Layer	Topsoil. Firm, with rare charcoal inclusions. Mainly A horizon of leaf litter. Many burrows.	Dark brown	Peaty silty loam	12 N/S	10 E/W	0.08
02	Layer	Subsoil. Well-developed podzol. Includes all horizons. Present more or less continuously within wooded area; only survives as remnants in hollows across rest of site.	Greyish brown	Mainly loamy sand	12 N/S	10 E/W	0.09
03	Layer	Natural deposits. Range from strong yellow brown silty sand at top of site to greyish brown silty sand further downslope.	Dark brown	Peaty silty loam	Site	Layer	>0.15
04	Layer	Topsoil. Developed ploughsoil, well-mixed. Varies in thickness from 0.09 at top of slope in east to 0.61 in marshy area.	Greyish brown	Silty clay loam	80 E/W	50 N/S	0.61
05	Feature	Rectilinear feature running N/S across west slope in east of site. Shallow, probably very truncated. South terminus present, north end possibly truncated.	N/A	N/A	>2.23	0.53	0.07

Context	Category	Description	Colour	Texture	Length (m)	Width (m)	Ht/Depth/Thk (m)
06	Fill	Fill of 05. Siltier and darker than overburden, 04.	Dark greyish brown	Silty loam	>2.23	0.53	0.07
07	Feature	French drain. Runs across bottom of west slope in centre of site, along the upslope edge of the marshy area. Includes several drains as part of small herringbone.	N/A	N/A	43	0.28	0.22
08	Fill	Fill of 07. Sub-rounded and sub-angular stones in a silty matrix. Occasional slab stones set on edge.	Dark greyish brown	Loamy silt	43	0.28	0.22
09	Feature	Clearance cairn. In wooded area. Small heap of sub-angular stones ranging from 50mm to 350m in leaf mould matrix. Partly grass covered.	Dark brown	Mould/loam	2.5 N/S	1.8 E/W	0.32

## 6.2. *Watching brief*

Table 1 lists the contexts recorded, together with their descriptions and interpretations. Their position is plotted on figure 4. The lowest point of the site lies at 45.4m aOD, rising to 47m aOD at the top of the two high points, see figure 4.

6.2.1. The topsoil in the wooded area in the southeast corner of the site, **01**, appears to be a forest soil in process of formation, with a large A horizon of leaf litter from the deciduous woodland. It lies directly above a well-developed podzol, **02**.



Figure 5 North-facing section through woodland area soils.

6.2.2. In the main part of the site a different topsoil, **04** was found. This was characterised as a well-mixed ploughsoil. Where it was present the podzol was restricted to small patches of survival in hollows in the natural deposit, **03**, presumably as a result of destruction by ploughing. The area in which **04** was found coincides with the depiction of improved land on the 1874 1<sup>st</sup> edition OS map.

6.2.3. The natural deposit, **03**, was found across the area stripped and consisted of sands and gravel, although areas of silting in depressions were noted. It is consistent with the British Geological Survey description of the superficial geology. Areas of panning were observed, with some suggestions of manganese staining. These areas suggest **02** formed under heath conditions rather than coniferous woodland.

6.2.4. A rectilinear feature, **05**, with its long axis more or less northwest/southeast, was found lying along the contours of the west-facing slope in the east of the site. It was very shallow, and had probably been truncated by ploughing. The southern terminus was present but the northern end appeared truncated; the bottom of the feature was stained darker than the

surrounding soils. The fill, **06**, was siltier than, but otherwise similar to, **04**. The function of this feature is not known, although it was noted that it was oriented almost directly with a change in build of the northern boundary dyke.



Figure 6 Feature **05**, looking north



Figure 7 Change in build in northern boundary dyke

6.2.5. A French drain, **07**, was found in the centre of the site, running along the eastern side of the marshy area, see cover photograph and figure 4. It was filled with stones, **08**, and presumably acted as both interceptor and dispensor, taking the runoff from the slope to the east and diverting it to the north. At the southern end of this curved drain three smaller, similar drains formed a small herring bone pattern, possibly part of a larger pattern concealed beneath the baulk.



Figure 8 French drain, 07

6.2.6. Two small cairns were noted in and around the site, see figure 4. The stones were mostly small (50 - 200mm), although larger stones up to 350mm were present in cairn 09. These are probably clearance cairns, albeit very small ones.



Figure 8 Clearance cairn 09, in wooded area.

6.3. The dyke along the north of the site had earlier been pierced to allow a new access, so the opportunity was taken to photograph its construction, see figure 9. It extends to the east, outwith the area of the site and is of similar construction to many in the area, all thought to date from the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.



Figure 9 West facing section through northern boundary dyke

6.4. No finds were recovered, and no other archaeological features were observed.

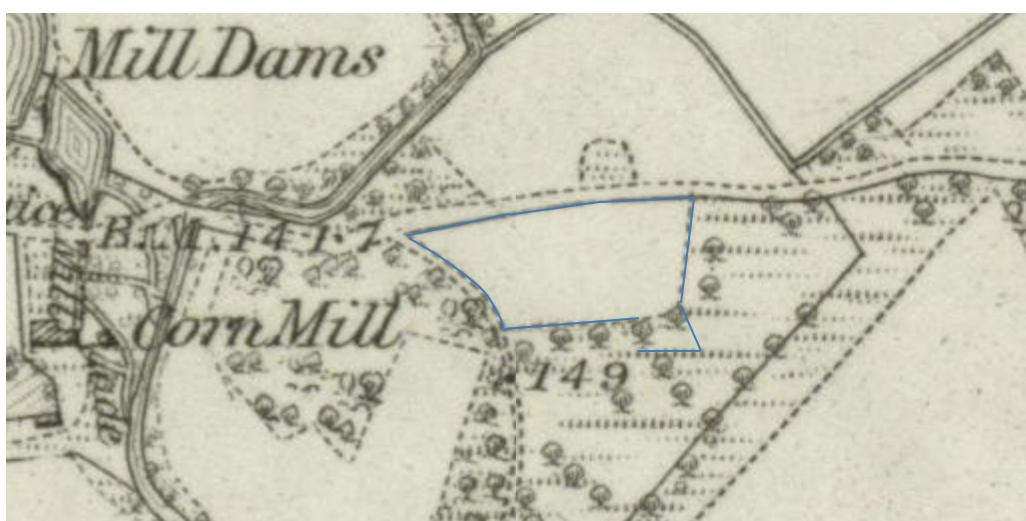


Figure 10 The site located on the 1874 OS 1<sup>st</sup> edition map

## 7. DISCUSSION

- 7.1. The podzol, **02**, was found intact only below the developing woodland topsoil in the wooded area, and had been destroyed, presumably by ploughing, over most of the rest of the site. Its absence coincides with the area marked as enclosed on the 1874 map, and demonstrates the transition from heathland to pasture caused by the improvement of the land by enclosure and draining.
- 7.2. It is likely that the northern boundary wall, which continues along the western boundary, dates from the period of improvements made by Sir George Dempster in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries. It was noted that the other boundaries were marked only by post and wire fence and it is possible that the dyke predates the formation of the enclosure.
- 7.3. The French drain, **07**, is located across a slope just above the marshy area, see figure 4, and appears to be an attempt to reduce waterlogging. The fact that the drain was still functioning, even in a dry spell, suggests both that it had been at least partly effective and that it was much needed. It branched towards the southern part of the stripped area, and it is probable that the branches formed part of a wider pattern. It is worthy of note that the drain fell towards the north, carrying the drained water to a confluence with channels gathering water to feed the nearby mill pond. Many similar small channels do the same, demonstrating the wide effect the construction of the mill had on the neighbouring landscape.
- 7.4. Where the projected line of the drain **07** met the northern dyke there appeared to be a change in build of the dyke, with a stretch of some four metres being of a less regular construction than the majority, suggesting a repair. Feature **05** was also oriented with its long axis aligned with this point (though the stripped area did not extend far enough to reveal any conjunction with either **05** or **07**). It is probable that part of the dyke was demolished to allow construction of the drain, which therefore postdates the dyke. Taking into consideration the post and wire boundaries, and assuming the dyke dates from late 18<sup>th</sup> and early 19<sup>th</sup> century improvements by the landowner, Sir George Dempster, see the Documentary background, above, then it seems likely that the grassed enclosure and drain are of a later date, possibly carved out of a wooded enclosure. The grassed enclosure appears on the 1874 map.

## 8. CONCLUSIONS

- 8.1. All the evidence recorded dates from the improvement of agricultural land during the 18<sup>th</sup> and 19<sup>th</sup> centuries. The difference in soil development between the wooded and improved areas is striking and reflects the success of the improvements.
- 8.2. The enclosure may be of a later date than the majority of such fields locally.

8.3. It is probable that the agricultural improvements of that period and later have obscured or removed any traces of earlier activity.

8.4. There are no recommendations for further archaeological work.

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## APPENDIX

### *Planning application references*

**Ref Number** 09/00557/PIPSU **Application Type** Planning Permission in Principle

**Decision Date** 02/02/2010 **Grid Reference** 263366 892014

**Decision** The Highland Council Grant Permission

**Description of Works** Erection of house. Installation of septic tank and soak away system. Formation of new

access to public road (Amended access position to previous permission Ref: 09/00429/PIPSU)

**Location of Works** 194 Migdale, Bonar Bridge,

**Applicant Name** Mr T McBride

**Applicant Address** Crossroads Cottage, Spinningdale, Ardgay, Sutherland, IV24 3AD

**Case Officer** Rebecca Scott

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