Torrachilty Hut-Circle, Highland: Archaeological Investigation

Data Structure Report

by Claire Williamson, Douglas Gordon & Thomas Rees

issued 23rd September 2011



Quality Assurance

This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.

| | A Gordon | | |
|--------|----------|------|---------------------------------|
| Signed | | Date | 23 rd September 2011 |

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:

| _ | Thomas Rees. | | |
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Non-Technical Summary

- 1. Presented within this Data Structure Report are the results from a programme of work designed to investigate the importance of Torrachilty Hut-Circle and to consider the consequence of damage to the site caused by the use of the ground for forestry.
- 2. The on-site works commenced with a survey to record the hut-circle in detail and to identify any additional related monuments in its immediate landscape (other hut-circles, clearance cairns or field banks). This identified two linear banks that connected into the eastern side of the monument.
- 3. Targeted areas within the hut-circle were then hand excavated to recover information on the monument's date and form as well as examining the nature of any damage from tree planting and forestry operations. These showed the monument to be a slight rubble bank encircling a circular area on the east side of a low ridge. A probable entrance was located in the southeast, while excavations in the sunken interior showed no evidence for a superstructure having been present or for substantive occupation of this space.
- 4. These on-site works have given information that has allowed us to explain the importance of the surviving monument including the consequences, both positive and negative, of its long-term presence within woodland. Some recommendations are made to inform future best practice in managing sites that emerge from harvested forestry.

Introduction

- 5. This Data Structure Report has been prepared for Forestry Commission Scotland in support of their management of Torrachilty Hut-Circle, Highland within the forest estate. This document presents the findings of Stage 1 investigative works, the first element of a programme of sequential archaeological works which has been designed to understand the consequences of inadvertent damage to the monument and to establish the importance of this site.
- 6. The Forestry Commission Scotland Archaeologist provided a Brief on the structure of the archaeological works required on this site and has monitored the implementation of these works.
- 7. A preceding Project Design (Rees & Williamson 2011) presented a baseline of the known archaeological resource, the objectives of the project and the structure of the archaeological works to be undertaken. Elements of that report (*Background* and *Objectives*) are reproduced here to deliver clarity as to the preconception of the character of this monument.
- 8. Rathmell Archaeology was appointed to implement the agreed Project Design which focused on the evaluation of the monument through survey and intrusive trenching, excavated by hand.

Terminology

- 9. The following key terms are recognised within this Report:
 - The Client Forestry Commission Scotland;
 - ❖ The Archaeological Curator Forestry Commission Scotland Archaeologist;
 - The Archaeological Contractor Rathmell Archaeology Ltd, who were appointed by the client to implement the agreed Project Design

Background

10. The well preserved hut-circle of Torrachilty (NGR: NH 441 588, RCAHMS Canmore ID 77991, Highland Council HER ID: MHG8333) occupies land to the south of the Black Water immediately above the Rogie Falls and to the north of the A835 running between Garve and Contin, Highland.

11. The hut-circle measures 16m in diameter, formed by a substantial turf covered stony bank spread between 2.5m and 3m and reaching up to 0.6m in height. It is built on a rising slope to the west with a sunken interior. There is no identified entrance through the annular bank, although it has been cut in three places by a modern, re-vegetated, forestry track; it is possible that one of these cuts exploited a pre-existing break in its circuit. The site is overlain by stumps of a timber crop previously felled from the site.

Topography, Geology and Soils

- 12. The hut-circle is located on a north-facing river terrace overlooking an east / west stretch of the Black Water, which discharges from Loch Garve some 2km to the WNW, and flows roughly southeast to converge with the River Conon. The Black Water is only one of four substantial watercourses which converge with the Conon to the east of Strathconon, where the mountainous land to the west is replaced by the low-lying floodplain of the Conon. In time the Conon discharges into the sea close to the modern towns of Maryburgh and Conon Bridge.
- 13. The site itself sits within this mountainous area, forming part of a high ridge which separates Strathconon (to the south) from the valley of the Black Water to the north. It is, however, fairly low-lying, sitting at approximately 80m OD, and flanked on the north and east sides by the Black Water, and on the south and west sides by the sharply rising ground which constitutes the ridge, culminating in the three peaks of Creag a Chaoruinn, a second unnamed peak to the southeast, and lastly, Cnoc Dubh.
- 14. The underlying geology of the wider area is sedimentary in character, composed of broad alternating bands of Glenfinnan Pelite and Glenfinnan Psammite, which run roughly NNE-SSW, with occasional evidence of volcanic activity recorded in the form of igneous intrusions and a concentration of volcanic dykes. Overlying these are superficial deposits of diamicton (poorly sorted sediments), which are probably glacial in origin.

Historical and Archaeological

- 15. The spur of ground upon which the hut-circle stands was shown as forested land on Roy's Military Survey of Scotland (1747-55, Figure 1a) with the nearest arable land and settlement being Balnain (now named Rogie) on the north side of the Black Water and Tarve to the west of Cnoc Dubh. The forestry cover was still evident in the late nineteenth century when Tarvie Wood was marked over the site on the 1st edition Ordnance Survey map (Figure 1b, Ross-shire & Cromartyshire (Mainland), Sheet LXXXVII, Surveyed 1876, Published 1881).
- 16. The annular bank was first re-identified by an archaeological survey conducted in 1991 in support of forestry operations when it was described as a hut-circle located by a six figure grid reference (Ross 1991). That it represents this form of later prehistoric settlement remains the most likely interpretation, although at 20m in diameter it is at the upper end of the known size range. Later prehistoric settlement in Northern Britain is typically characterised as dispersed, with either individual homesteads or village sized communities (Harding 2004) occurring. The economic basis which underpinned these communities combined pasturalism with some agriculture, predominantly a barley monoculture in the north. The material culture was domestic or local in scale with an almost aceramic tradition in the earlier Iron Age.
- 17. While numerous roundhouses have been identified in the upland landscape of northern Scotland as upstanding penannular banks, they may not reflect dense populations or a long duration of occupation. Excavation work on Kilearnan Hill in Sutherland (McIntyre 1998) showed that most of the those excavated appeared to be single phase structures with no evidence for repair or re-use, raising the issue of whether these 'villages' represent the sequential occupation of a site by a single kinship group rather than multiple contemporary structures. This still presumes that these roundhouses all fulfilled a predominantly domestic role rather than an agricultural one (e.g. stock pens or barns).
- 18. There are some examples of re-use, such as Hut-Circle V at Kilphedir (Fairhurst & Taylor 1971) where an early, slight roundhouse was reworked to create a more massive walled

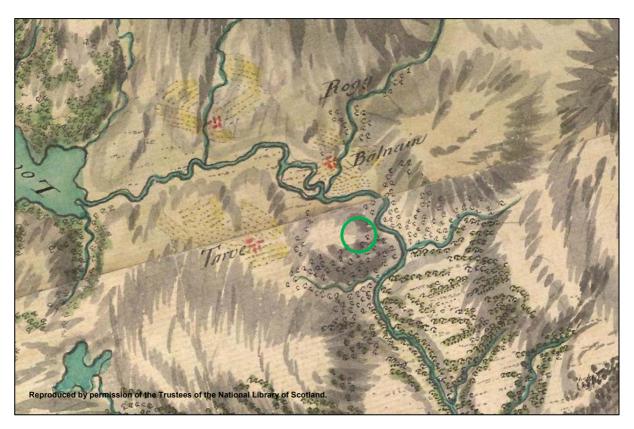


Figure 1a: Detail from Roy's Military Survey of Scotland (1747-55)

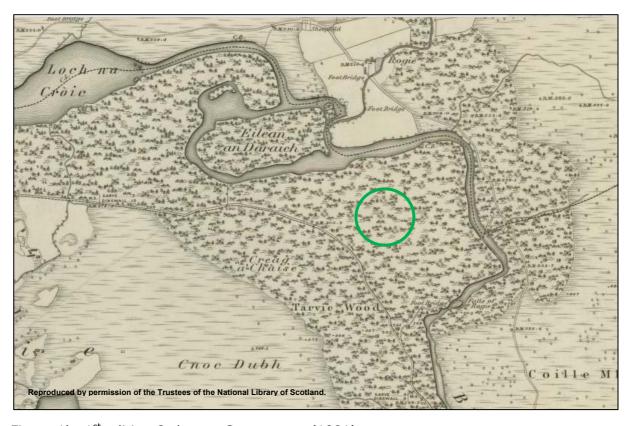


Figure 1b: 1st edition Ordnance Survey map (1881)

structure. A similar pattern of the re-use of an individual structure was noted during the landscape excavations at Lairg (McCullagh 1998). Overall these roundhouse structures have been dated from the mid 2^{nd} millennium BC to the mid 1^{st} millennium AD, reflecting a long continuity in this style of structure.

- 19. After dating and re-use, two main themes have dominated the study of roundhouses: the form of the superstructure, and the internal use of space. Both are reliant on the recovery of architectural floor plans. Roofing can be simplified to a Southern British model of 45° pitched straw thatched conical roofs, but these rarely fit the evidence for varying roundhouse diameter and identifiable roof supports which is seen in northern Scotland (e.g. post-holes, heel stones or paving supports). Work has focused on identifying load bearing structures and inferring roof designs that could work at lower angles (often looking at heavier roofing materials like heather and sods).
- 20. Indeed for the largest structures (such as Scotstarvit) the potential for annular ridge-roof buildings has been postulated (Harding 2004). Where upstanding banks have been identified excavators have focused on differentiating between substantial stone and earth structures that could have been load bearing and those that may have acted as little more than bedding for the feet of the rafters.
- 21. The study of the interior division of space often focuses on the core of the structure as communal space (hearths etc) while the periphery fulfils personal or functional roles. Such divisions can be delivered through internal timber fittings (e.g. Culhawk Hill, Rees 1998) or through slight walls and paving (e.g. Kilphedir). The use of stone to define passageways can also extend through the entrance to the immediate forecourt of the building (e.g. Kilearnan Hill). The changing orientation of entrances through time has also been examined to identify consistent trends (Cook & Dunbar 2008).
- 22. Not all settlement structures in the area are defined by banked materials or walls. Work at Upper Suisgill (Barclay 1985) illustrated the continuing potential for wholly post-defined structures within this upland landscape hence monuments that cannot be identified by topographic survey.
- 23. Contemporary clearance of the better ground for arable use has often placed hut-circles comparable to Torrachilty in landscapes of small-scale clearance cairns or small fields, defined by slight clearance banks. These stone structures, in combination with the banked enclosure of the hut-circle, have left a residing mark on the landscape. This memory of past land-use has the potential to have shaped subsequent use of the land and influenced the location and character of activities in more recent periods. In turn, the hut-circle is unlikely to have been placed within an empty landscape; instead, evidence of earlier landuse may underlie the structure (e.g. Upper Suisgill) or there may be foundation deposits occurring (e.g. Sollas or Cnip).
- 24. Without additional information, another potential interpretation should be considered for an annular bank of this size: that it represents instead a form of Bronze Age funerary monument known as an enclosed cremation cemetery. While some of these enclosures are ditch defined (e.g. Loanhead of Daviot, Kilbride-Jones 1936) others survive as bank defined monuments. These annular banks enclose areas, often without entrances through the bank, where burials have taken place; examples are known nearby such as the 19m by 16.4m enclosure at Croftcrunie, Killearnan (RCAHMS 1979).
- 25. Until recently, few prehistoric sites had been identified in the immediate landscape. However, additional prehistoric monuments were identified in recent work carried out by the North of Scotland Archaeology Society. Their survey focussed on the Rogie township, which lies across the Black Water from Torrachilty Hut-Circle (Marshall 2008), but it also revealed two knolls rich in cup and ring marked stones (NGR: NH4411 5969), which comprised some twelve rock-cut art groups in total.
- 26. During this same survey, another annular bank was located (NGR: NH 4411 5969). This monument, which was interpreted as a dun (Marshall 2008, Site 15), is roughly 12m in internal diameter with the bank spread to 3m and upstanding to a height of some 1.5m high externally and 0.5m high internally. Again there is no definite entrance, though there is a break resulting from forestry operations. This newly located structure appears

very comparable in scale to the Torrachilty Hut-Circle, suggesting that more prehistoric monuments may exist around this portion of the Black Water.

Impact Assessment

- 27. The hut-circle at Torrachilty is known to have suffered damage from the running of informal forestry tracks over its fabric and also from the growth of trees now harvested over the site. The potential for adverse impacts on archaeological monuments from forestry has long been recognised. During the mid 1950s the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) instigated the Marginal Land Survey to record important monuments prior to their loss or damage through landuse change.
- 28. The onset of mechanised afforestation during the 1960s and 1970s led to archaeologists highlighting the unmitigated impact on our Historic Environment (Jackson 1978, Proudfoot 1989 and Barber 1997). As currently understood, the character of the tree planting over this site suggests that it was not planted by these more destructive ploughing techniques.
- 29. Work has been conducted to explore the differing character of the relationship between forestry and the historic environment (Yarnell 1993 and Crow 2004). While poorly managed afforestation can have serious adverse impacts, other forestry and woodland regimes can create relatively benign environments which serve to protect monuments in the longer term. The visible character of Torrachilty Hut-Circle, with the exception of the forestry track damage, appears to sit within this more benign pattern, with the fabric of the monument surviving sufficiently well to enable its identification during a walkover survey of Forestry Commission land in 1991.
- 30. The Forestry Commission has established sound guidance for handling archaeological sites within forestry. This has either been delivered through targeted technical advice (Forests and Archaeology Guidelines), through planting design guidance encompassing archaeological and historical sites (Forest Design Planning) or through strategy documents (Scottish Forestry Strategy). The cyclic nature of land use for forestry means that maturing crops will continue to be harvested from land that was not subject to modern archaeological survey prior to afforestation. The identification of the Torrachilty Hut-Circle, and the subsequent inadvertent damage by vehicle movement, provides the potential to test the nature of the impact resulting from this specific forestry regime and also to establish the residual importance of the monument.
- 31. The role that 'marker sites' monuments that are massive enough to be readily identifiable after harvesting can play in prompting more intensive prospective survey to locate associated ephemera can also be studied.

Objectives

- 32. The character and scope of the archaeological resource was established within the Project Design through analogy with monuments of similar form and extent which have previously been investigated elsewhere in mainland Scotland and beyond. However, this requires to be confirmed through excavation, as similar assumptions have been challenged and indeed disproved elsewhere. For example (and as mentioned previously), there are broad similarities in terms of basic morphology between Bronze Age enclosed cremation cemeteries and later Iron Age hut-circles.
- 33. The overall objectives for these works was:
 - to excavate a sufficient portion of the archaeological monument to allow the recovery of artefactual, palaeo-environmental and structural evidence, assisting in our interpretation and understanding of the site in order to more confidently establish its date, function, and form;
 - b. to determine the consequence to the archaeological resource from the use of the ground within a commercial forestry operation, covering both positive and

negative aspects, while considering the future consequences of typical management; and

- c. to disseminate the findings of these works in the appropriate manner.
- 34. More specific objectives which applied to assessing the character of the monument were:
 - d. to explore the relationship between the monument and the local topography, hydrology and drift geology. This will include the characterization of the wider landscape, both at the time of its main phase of occupation and use, and in the period immediately preceding it;
 - e. to determine whether the monument lies within an identifiable larger archaeological landscape and if so, to establish the inter-relationship between its individual elements;
 - f. to elucidate whether the monument as we view it today is the product of a single coherent build, or a sequential build, and if the latter, to identify and interpret each separate phase of occupation or rebuilding as appropriate;
 - g. to clarify its structural elements, establishing in particular whether it should be interpreted as a building or an enclosure;
 - h. to recover palaeo-environmental and artefactual evidence which may clarify the nature and function of activities undertaken within and immediately adjacent to the monument, thus enabling a patterning of activity by space and time;
 - i. to consider the evidence for the process of abandonment of the monument, with specific attention paid to any indications of causal factors;
 - j. determine whether monument has subsequently been reused;
 - k. to establish where this particular archaeological resource fits in with the chronological sequence of later prehistoric occupation within the wider area.
- 35. The more specific objectives with regard to the impact of afforestation and related forestry operations on the monument are:
 - I. to establish the impact of tree planting and subsequent growth on the buried sediments and upstanding fabric;
 - m. the extent of the disruption resulting from the forestry Forwarder track and the harvesting process;
 - n. whether the identification of the hut-circle could have been used as an appropriate prompt for a post-harvesting targeted prospective survey;
 - o. the consequence of renewed vegetation growth upon the archaeological resource, in particular any impacts from the re-vegetation of the forestry Forwarder track, natural tree regeneration or the spread of bracken;
 - p. to understand what archaeological importance can be given to the ground that would typically be within a buffer to protect the visible monument; and
 - q. to establish the extent of any areas which are subject to active erosion, in particular as a result of burrowing animal activities.
- 36. These objectives are addressed in this report based on the information that was garnered in the field.

Project Works

37. The programme of works forming an archaeological evaluation was carried out between the 3rd August and the 12th August 2011. The works were carried out in keeping with the

agreed Project Design (Williamson and Rees 2011) which comprised:

- a. detailed survey of the monument to record both its micro-topography and the impact of the modern damage upon this;
- b. limited excavation carried out in carefully selected areas of the monument and also in its immediate vicinity, thus allowing the surviving archaeological remains to be properly characterised;
- c. prospective survey of the surrounding landscape to clarify the landscape context of the monument;
- the assessment and stabilisation of artefacts, including emergency conservation, as required; and
- e. the production of a preliminary site report which integrates the findings of the works through a Data Structure Report, detailing the nature, form and extent of the archaeological features recorded.
- 38. Continuous liaison was carried out with the Forestry Commission Scotland Archaeologist to keep them apprised of progress and archaeological finds. A site visit was undertaken on Thursday 11th August by Forestry Commission Scotland Archaeologist and representatives of Highland Council Historic Environment Team and Forestry Enterprise Scotland.
- 39. The fieldwork was generally undertaken in changeable weather, being a mixture of dry and moderate rain conditions. However, prolonged torrential rainfall was experienced during Thursday 4th August (during the survey stage) and Wednesday 10th August (during the excavation stage); these weather conditions were unseasonable.

Stage 2

40. This report is the enabling document for the appropriate programme of post-excavation analysis of significant material recovered and the required level of publication. Such Stage 2 works are also expected to encompass the declaration of finds through the Treasure Trove process and the deposition of the project archive with RCAHMS Collections to ensure the long-term preservation of the archaeological information obtained during the on-site works.

Standards

- 41. The enabling Project Design was been designed in accordance with current best archaeological practice and the appropriate national and regional standards and guidelines including:
 - Code of Conduct (Institute for Archaeologists 2000);
 - Standard and Guidance for Archaeological Excavation (Institute for Archaeologists 2001); and
 - Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (Institute for Archaeologists 2001).

Survey

Detailed survey

42. The micro-topography of the monument was surveyed before excavation to record the form of the monument and the location of the planned trenches. All survey data was three-dimensional, to an appropriate resolution for purpose (sub 0.1m) and referenced to the National Grid and Ordnance Datum, using the same geoid and correction system as employed by the Ordnance Survey. Within this survey, care was taken to accurately survey modern adverse impacts on the monument including Forwarder tracks, tree

stumps and vegetative cover.

- 43. The point data, in combination with breakline data, was used to generate a contour plot across the monument with a 0.1m contour interval (see Figure 3); the same data was used to generate an axial profile through the monument and Trenches 1 and 3 (see Figure 6).
- 44. The monument was characterised by this survey as a broad penannular grass and bracken clad bank that was spread between 4m and 6.2m broad and up to 0.7m high relative to the ground surface in the interior. The bank showed frequent and common evidence for medium to large stones having been used in its construction, as they penetrated the vegetative cap. This was more evident in the north and northeast where the bank was also heather clad.
- 45. An apparent break in the circuit, 3.5m wide, lay in the southeast. The outer limits of the visible bank followed a circular shape in plan some 18.5m in diameter, while the inner break of slope also enclosed a circular area roughly 12m in plan (see Table 1 for a summary of plan and area dimensions).

| Table 1: Ar | eas withir | n monume | ent |
|-------------|------------|----------|-----|
|-------------|------------|----------|-----|

| Area | Description | Area (m²) | % of whole* |
|------------------|---|-----------|-------------|
| Whole Monument | Area of ground within the outer bottom break of slope, roughly 18.5m diameter | 258 | 100 |
| Visible Bank | Area of visible, apparent bank | 201 | 77.9 |
| Inner Area | Area of interior within inner bottom break of slope, roughly 8m in diameter | 57 | 22.1 |
| Area Enclosed | Area of interior within inner upper break of slope, roughly 12m in diameter | 116 | 44.9 |
| Forwarder Tracks | Area covered by forwarder tracks within Whole Monument | 71 | 27.5 |
| Excavation Areas | Excavation trenches 1 to 4 | 19 | 7.4 |

^{*}these are all relative to the whole monument and as some Areas overlap they do not add to 100%

- 46. Tracks appearing as broad re-vegetated ruts were recorded crossing the enclosure; these probably derive from a forwarder used during the clear felling of the area. A forwarder is a 6 or 8 wheel articulated machine used to transport logs, which have been cut to prescribed lengths, from the forest floor to a stacking area alongside the forest road, ready for uplift. It is all-wheel drive vehicle that come in a range of sizes, classified by their load carrying capacity, which typically varies from 6 tonnes to 18 tonnes.
- 47. The dominant track enters through the entrance in the southeast, skirting the base of the western inner bank slope before climbing westwards at a point with a shallower gradient. The track makes a rolling turn within the interior of the enclosure, with the sunken portion of the interior noted within the *Brief* having a surface form that suggests it derives from the vehicle movement across the site.
- 48. A second track strikes off to the north from the interior, crossing the bank. Where these tracks cross the line of the bank to the northwest and north the bank, though damaged, is still identifiable. This is not the case in the southeast where there are no visible traces of the bank at this point.

Targeted Prospective Survey

49. In addition to those works which focused upon the monument itself, a systematic prospective survey of the surrounding 4ha of ground was undertaken. The survey team walked the target area in a regular grid pattern to ensure the close visual inspection of the ground to enable the identification of additional upstanding archaeological monuments. In those areas which are densely afforested, some flexibility in the layout of



Figure 2a: Looking south along bank (S1) toward hut-circle, in bracken stand



Figure 2b: Interior of hut-circle from northwest showing forwarder tracks

the grid pattern was necessary.

50. The only identifiable sites noted by the prospective survey were two linear banks in close associated with the hut-circle (see Table 2 and Figure 3). While not mapped, both these banks were noted by the earlier pre-felling survey (Ross 1990).

Table 2: Survey Sites

| No. | Starts (NGR) | Ends (NGR) | Description |
|-----|---------------------------------------|---------------------------------------|--|
| S1 | ² 44238 ⁸ 58824 | ² 44232 ⁸ 58848 | Linear grass clad bank spread between 1.6m to 2.2m broad and up to 0.2m high running north from the east side of the hutcircle bank. It is unclear whether this bank merged with the enclosure bank, but this is possible. The bank was traced for 24.5m. |
| S2 | ² 44236 ⁸ 58817 | ² 44271 ⁸ 58826 | Linear grass clad bank spread between 2.5m to 3.6m broad and up to 0.5m high running east from the immediate northeast of the 'entrance' to the hut-circle. The bank did not join the enclosure bank of the hut-circle. After the first 5.6m there was a 4m break in the bank, overall (inc. break) the bank was traced for 36.3m. |

- 51. These two linear banks were surveyed to common standard with the bank of the hutcircle and the immediate environs. The northern bank (S1) potentially merged with the enclosure bank at its eastern point, while the eastern bank (S2) commenced from the putative entrance of the enclosure in a broken form, not joined to the enclosure, before climbing to the east. Both banks petered out in landscape locations that did not suggest destruction or large-scale landscape denudation that might have removed these monuments should they have originally been longer.
- 52. This survey contrasts with the original survey (Ross 1990) which proposed that the northern bank (S1), while much disrupted by forest tracks, enclosed the raised ground to the west forming a 100m by 50m field. The current survey did not recognise this description as matching identifiable monuments on the ground.

General ground conditions

- 53. The survey area lay within an area that had been under Scots Pine that had been harvested by clear felling in the recently; although this was sufficiently in the past for the area to have commenced recovering. Mature (c. 30 year old) coniferous tree stumps were visible extensively in the general landscape as were quantities of brash. There was no evidence of ploughing, suggesting the planting was done by hand. However, these mature stumps did not extend to the immediate area of the enclosure, stopping some 1.5m short of this upstanding monument. A number of native trees had been left standing on the higher ridge to the WSW of the monument.
- 54. The general landscape was of a hillside falling to the northeast towards the Black Water, broken by numerous knolls with outcropping bedrock visible. The dominant cover in felled areas was heather or grass, with the same ground cover acted as an understory to the coniferous trees in unfelled blocks. Bracken was evident throughout the survey area, in low densities within areas of standing trees but becoming dense stands in the felled areas. A number of dense stands of birch saplings, illustrating tree regeneration, were noted in felled areas as were some solitary juvenile birch trees. Areas of impeded drainage dominated by reeds were also noted.
- 55. The penannular enclosure lay on the western side of a saddle between a slight ridge to the WSW, which it nestles into, and the rising ground to the ENE. The ground falls away to the north, towards Black Water, and into a marshy hollow to the south. The slope of the western arc of bank, in the interior, appear very similar in gradient to the slope of

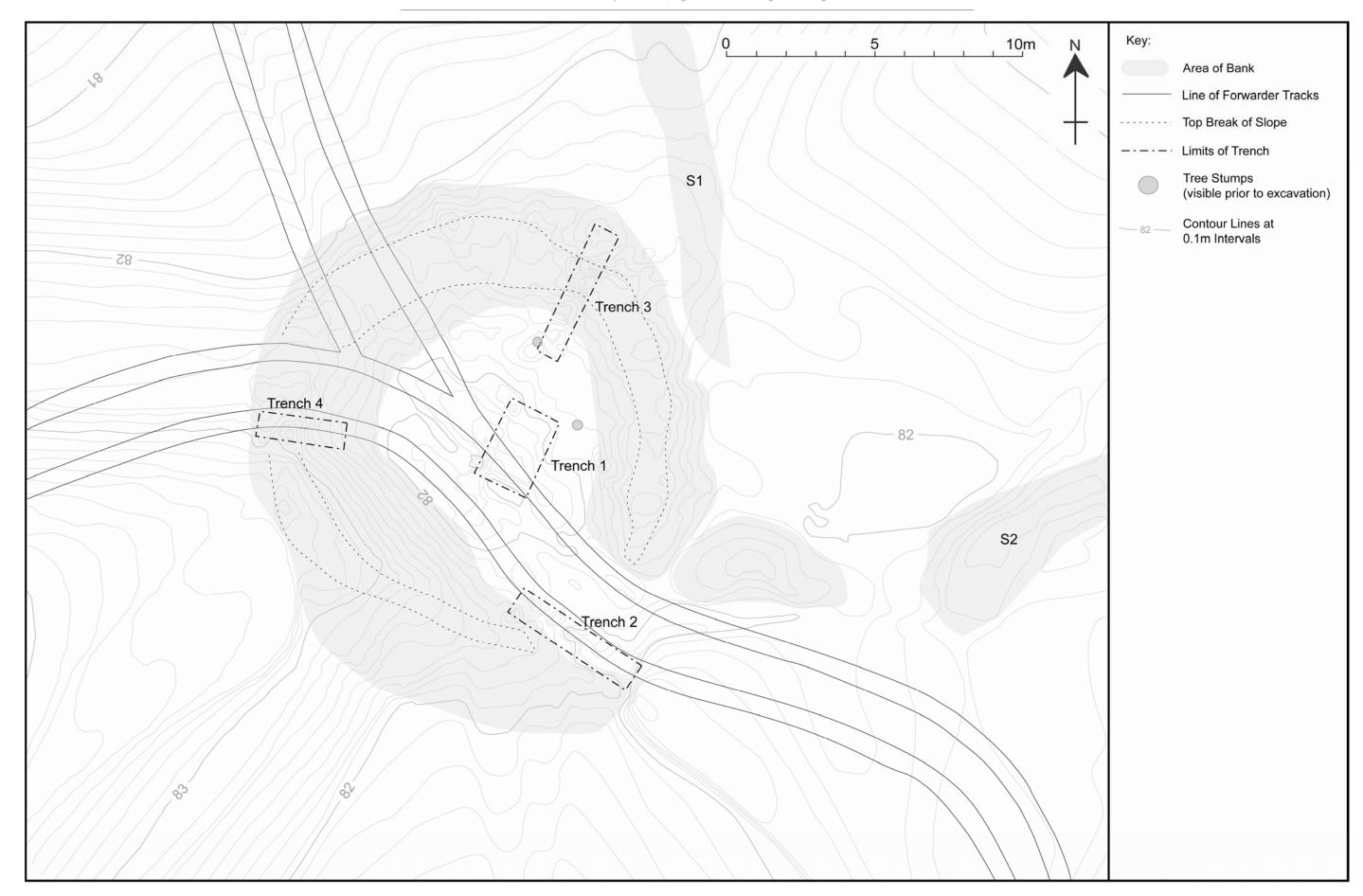


Figure 3: Contour survey with trenches shown

- southern side of the slight ridge to the WSW (see Figure 3). This appears to suggest that a significant portion of the broad spread of the bank may be natural slope profile.
- 56. The immediate ground cover of the monument was predominantly a dense bracken stand with some tussocky grass. No substantive eroding or bare earth surface were visible except within and adjacent to the vehicle tracks which also retained standing water.

Excavation

57. A series of four targeted hand excavation areas (Figure 5) were excavated to examine the character of the monument and the consequence of the previous disruption to its fabric (see *Strategy*). Each of these excavation areas had a specific task (see Table 3 extracted from Project Design); in addition Excavation Areas 1 and 3 shared a common alignment so that a composite sections through the roundhouse was prepared (see Figure 6), supported by survey data for the intervening profile.

Table 3: Targets for each Excavation Area

| Area | Task | Size |
|------|---|---------------------------|
| 1 | To characterise the archaeological remains within the centre of the interior crossing between track and non-track ground. This may capture hearth locations, internal flooring and/or structural post-holes. Located across the central dip, this is likely to be the shallowest part of the site. | 3m by 2m On axial line |
| 2 | To examine the potential entranceway to determine whether there are traces of this structure, examine how this has been impacted by the track and check the potential for internal and external flooring at this location. This trench would remove tumble from the bank but not excavate the <i>in situ</i> wall. | 5m by 1m |
| 3 | To section the bank at an undisturbed location (by the track) to examine (i) its composition and construction method, (ii) whether it overlies a buried palaesol and (iii) whether there are additional structural features in the immediate interior or other sign of variation in use of the interior. This trench would cut through the bank; particular attention would be paid to the depth and disruption caused by tree root structures. | 5m by 1m On axial line |
| 4 | To section, at an adjacent point, both an intact bank and a track that has run through the bank to enable comparative analysis of the consequences of the track having been formed | 3m by 1m |

58. A description of each trench is within the *Trench Summaries* section of Appendix 1: Registers at the rear of this report; all trenches are also depicted on Figure 3 and 5. Appendix 1 also contains the registers for context description, photography, drawing, sampling and finds.

Conventions

- 59. Where significant features are discussed their location will normally be quoted as a distance along the relevant trench (such as +3m). This distance was measured from the end of the trench quoted first for the orientation of the trench in the *Trench Summaries* in Appendix 1. All depths given for features are given from the original ground surface of the trench unless otherwise stated.
- 60. The context is the basic archaeological unit of description relating to either a structure, cut or sediment of common characteristics. Structures (such as walls or built surfaces)



Figure 4a: Trench 1 from south, note compressed subsoil under central rut



Figure 4b: Burnt deposit (014) in Trench 1 surviving within the compressed subsoil

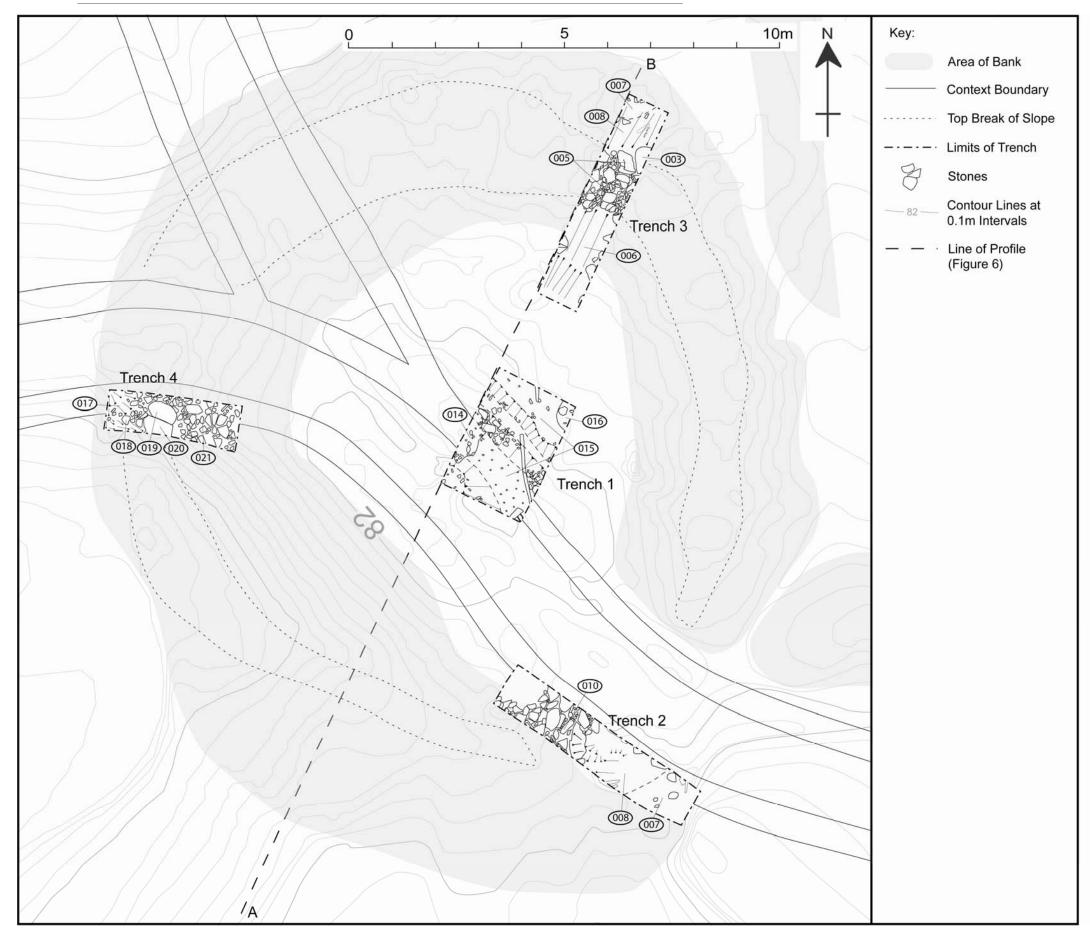


Figure 5: Trench Layout incorporating plans of each trench

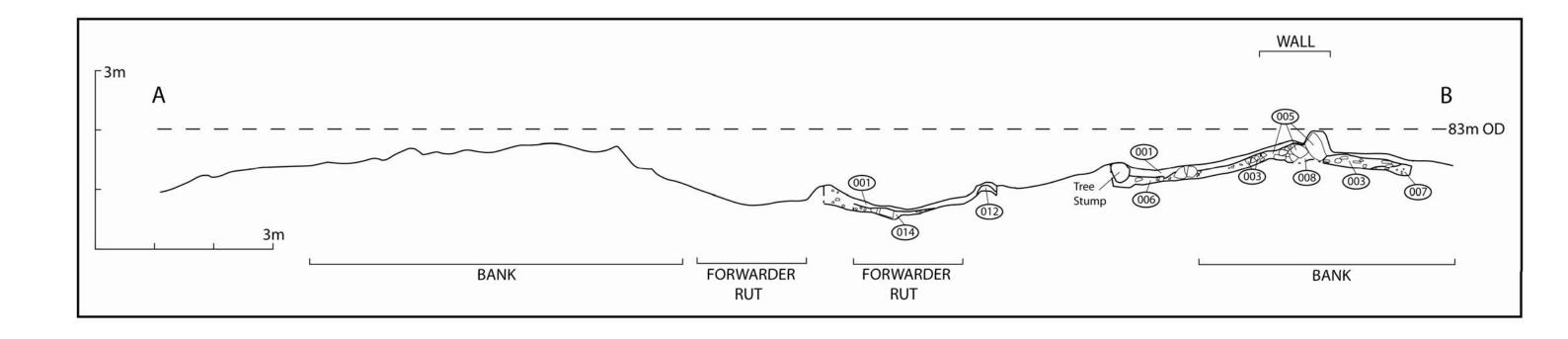


Figure 6: Axial profile across monument including sections of Trenches 1 and 3

and cut features (normally identified as they cut the underlying subsoil) are denoted by squared brackets (e.g. [040]). Sediments are denoted by rounded brackets (e.g. (041)). Finds are denoted by angled brackets (e.g. <04>).

Trench 1

- 61. Trench 1 was placed within the centre of the enclosure; it was aligned NNE-SSW, on the axial line laid out across the enclosure, and measured 3m by 2m (Figure 5). The majority of the south-western half of the trench lay within a sunken area (see *Survey* above) while the eastern portion appeared level with the balance of the interior of the enclosure. This difference gave a height difference on the surface between the eastern portion and the sunken area of 440mm.
- 62. The sunken area, part of the forwarder tracks, was prone to waterlogging with flooding occurring during the works (Figure 9b). In general the trench was in an area of grass cover with occasional bracken strands.
- 63. The stratigraphy consisted of 50mm to 300mm of a mid to dark brown humic topsoil (001) with small to medium sized sub-angular stone inclusions over a variable subsoil. The range of subsoil encompassed yellowish red silty clay (015), pinkish grey clay sand (016) and reddish brown silty clay (017). As with the surface, the subsoil in the sunken area appeared to have been subject to compression (see Figure 4a).
- 64. A layer of loose medium to large sized sub rounded stones measuring 50mm to 350mm in size within dark reddish brown silty sand (012) was recorded at the northern end of the trench. This context, which extended to 2m by 0.95m and was up to 0.12m in depth, lay between the topsoil (001) and the subsoil.
- 65. To the southwest of this rubble, again immediately overlying the subsoil was a spread of compact mixed yellow red and black silt sand with frequent inclusions of sub rounded and sub angular stones and occasional burnt bone and charcoal present (014); some of the stones appear to be heat affected. The spread measured 1.45m by 0.45m and up to 0.1m deep and extended to the north outwith the trench.
- 66. In the area of significantly shallower topsoil, at the south-western end of the trench, there were a series of modern roundwood branches approximately 100mm in diameter compacted into the subsoil. Occasional tree roots were also noted at the northern end of the trench penetrating through the topsoil though having much lesser impact on the subsoil (015).
- 67. The shallowest topsoil, 50mm, was within the sunken areas linked to the ruts of the track crossing the trench. The subsoil surface within the same area was clearer lower, by some 210mm, than the undisturbed subsoil (Figure 4a). This appears to have been predominantly a product of compaction rather than truncation given the survival of (014) within one of these ruts (Figure 4b). This compacted subsoil surface runs at a level under the ridge of topsoil between the ruts (Figure 4a) suggesting that this topsoil has been churned and is not *in situ*.

Trench 2

- 68. Trench 2 was placed over the southern circuit of the annular bank; it was aligned NW-SE and measured 5m by 1m (Figure 5). The form of the vegetated surface with the southwestern half following a bank topographic form while the north-eastern was within the tracks crossing the enclosure. The trench was grass covered with occasional bracken strands, although a dense stand of bracken overlay the bank to the west.
- 69. The stratigraphy within the trench consisted of 50mm to 150mm of a mid to dark brown humic topsoil (001) with small to medium sized sub angular stone inclusion with very frequent roots and rootlets. This overlay (009) a black sandy clay with frequent rootlets and tree roots up to 400mm in diameter and frequent small to large angular stone inclusions. These two contexts masked the remains of this portion of the circuit of the annular stone bank (010) and its tumble (011) (Figure 7a).
- 70. This sequence was underlain by a variable natural subsoil of light grey sandy silt (007)



Figure 7a: Trench 2 from east, note wall fabric dislocated towards interior



Figure 7b: Tree root and rootlet penetration focused on overlying topsoil in Trench 2



Figure 8a: Trench 3 from southeast, rubble wall prior to removal of tumble



Figure 8b: Trench 3 from southeast, rubble wall prior to removal of tumble

and yellowish red clay silt (008) with frequent small angular and sub angular stones. While the stones within (008) appeared to be part of the subsoil, given their position within the track and the high level of compaction of this context, they could equally have been pressed into the subsoil.

- 71. The remains of the bank (010) were of drystone construction, consisting of rounded and angular stones ranging from medium sized stones to large boulders, the largest being 760mm by 350mm. These stones were bedded directly onto subsoil with no evidence for a construction cut. The largest stone was similar to larger stones present within Trench 3 and may have been the outer face of the wall there was however no clearly visible inner face. Within the trench the wall was 1.1m wide and ran across the full width of the trench. At its highest point the dry stone bank stood 0.3m high within the trench; in comparison the bank stood 0.12m high within the track.
- 72. The drystone bank was highly disturbed throughout the trench, with little or no stonework appearing to remain *in situ*. Rather the stonework of the bank appeared to have been flattening and spread, retaining an identifiable form while being physically dislocated. The severity of this dislocation was greater under the track but was present throughout the trench (see Figure 7a).
- 73. Tumble (011), presumably from the bank, extended to either side of the wall although the majority lay within the interior, to the northwest. The maximum depth of this material was 0.5m with this spread of stone not reaching the southern end of the trench as a coherent layer.
- 74. Frequent tree roots were evident within the trench primarily at the southern end which dominated the topsoil with some minor penetration into the subsoil (007). There also were a series of modern roundwood branches approximately 100mm in diameter within the topsoil (001). In addition to tree roots there was a high volume of bracken rhizome present within the topsoil and to a lesser extent the subsoil in the southern portion of the trench (Figure 7b). While occasional rhizome penetration of the wall (010) was evident for the most part it hugged the upper surface of the stones.

Trench 3

- 75. Trench 3 was positioned over the annular bank in the NE quadrant; it was aligned NE-SW, on the axial line laid out across the enclosure, and measured 5m by 1m (see Figure 5 and 7a). This portion of the monument had not been impacted by the tracks, hence the surface topography showed a clear bank form across which the trench was laid out (Figure 3 and 5). The bank at this point was heather clad with a dense bracken stand to the exterior of the bank, northeast, and grass in the interior.
- 76. Within the trench the stratigraphy comprised of between 30mm and 150mm of a mid to dark brown humic topsoil (001) with small to medium sized sub angular stone inclusions with very frequent roots and rootlets. This lay over (003), (005) and (006) as a continuous layer which reflected the upper ground surface.
- 77. A spread of loose grey medium angular to sub-angular stones (003) extended across almost the full footprint of the trench, the exception being the southwestern 0.4m. The layer was up to 0.3m in depth and masked the drystone annular bank (005); it was thickest either side of the bank, thinning in distance from this feature (Figure 8a).
- 78. The drystone bank (005) measured 1.2m wide as it crossed the full width of the trench and stood to a height of 0.44m (Figure 6). The bank had a marked outer face or kerb of a single course of medium to large angular and sub-angular stones (Figure 8b). The inner face of the wall was very poorly defined and could not be differentiated from the wall core of small angular to sub-angular stones. While the wall core was clast supported, it did incorporate silty sediment within its fabric.
- 79. A compact dark reddish brown silty clay (006) with frequent small angular and sub angular stones lay within the interior of the wall. This extended 2.3m by 1m within the trench and was up to 0.25m in depth.
- 80. The bank (005) and tumble (003) all overlay a yellowish red clay silt subsoil (008) with



Figure 9a: Trench 4 from northwest, note compaction of topsoil to left by track



Figure 9b: Impeded drainage in the rutted interior of monument



Figure 10a: Trench 3 after removal of bank, showing interior subsoil surface



Figure 10b: 'Bothy' to south of Torrachilty

frequent small angular to sub angular stones which was exposed in the bed of the trench. The topography of the upper surface of this subsoil drops 0.5m from its highest point directly under the wall (005) to the lowest point within the trench to the southwest (Figure 6 and 10a). There is a marked break of slope in this surface at the interior edge of the drystone bank (005).

81. Occasional small lateral tree roots were present within the topsoil and subsoil especially within the south-western end of the trench. Infrequent bracken rhizomes were also present across the whole trench within both the topsoil and subsoil; these rhizomes penetrated the loose rubble (003) and the rubble bank (005).

Trench 4

- 82. Trench 4, in common with Trench 3 was positioned running over the bank though in the northwest circuit; it measured 3m by 1m and was aligned northwest-southeast (Figure 5). The form of the vegetated surface with the south-western half following a bank topographic form while the north-eastern was within the western rut of the track crossing the enclosure. This surface difference was reflected in the vegetation, with heather cover to the southwest and sparse grass and bracken to the northeast.
- 83. Within the trench the stratigraphy comprised 30mm to 150mm of a mid to dark brown humic topsoil (001) with small to medium sized sub angular stone inclusions with very frequent roots and rootlets. This lay over (017) to (021) as a continuous layer which reflected the upper ground surface.
- 84. The drystone bank (019) within this trench was formed of medium to large sub-rounded stones and measured 0.8m wide crossing the full width of the trench. In common with Trench 2, the bank was highly disturbed with little or no stonework appearing to remain in situ having been physically dislocated while retaining an identifiable form. This dislocation appears to have been predominantly downslope, to the southeast. At its highest point the dry stone bank stood 0.3m high within the trench; in comparison the bank stood 0.15m high within the track.
- 85. Within the makeup of the wall there was one particularly large stone (Figure 9a), which most likely represents the outer face of the wall. The condition of the wall made it impossible to discern any sign of an inner face.
- 86. The bank was masked by tumble (018) and (021) presumably from the wall (019) which comprised medium to large sized stones in a dark reddish grey humic silt clay matrix, comparable to (001), with very frequent rootlets and tree roots. While this material spread to both sides of the bank, it was more notable downslope to the southeast (021).
- 87. The subsoil within the trench consisted of a reddish brown silty clay (017) which was primarily evident in the northwest end of the trench. The topography of the upper surface of this subsoil drops 0.72m from its highest point to the immediate northwest of the wall (019) to the lowest point within the trench to the southeast. The subsoil had also been compacted under the track this was best illustrated after initial topsoil stripping when to the exterior of the enclosure the non-rutted area had reached subsoil while within the track the compressed topsoil was still evident (Figure 9a).
- 88. On the western limit of the trench was the degraded remains of a tree stump (020). The visible root structure extending from this stump was still discernible penetrating the remains of the wall (019) and the subsoil (017). Across the trench there was also a high volume of bracken rhizome which extended across the whole of the trench within the topsoil and frequently penetrated the tumble (021).

Finds

89. As *per* the Project Design (Williamson and Rees 2011) all sediments from significant archaeological strata were sieved unless weather conditions made this impossible. In the course of the investigation no artefacts were recovered; this includes a total absence of 19th and 20th century material.

Sampling

90. Samples were recovered in the course of the work; these were either purposive samples (e.g. for dating) or general bulk soil samples (for palaeo-environmental processing).

Table 2: Samples recovered from trenches

| Sample No. | Trench | Context | Sample Type | Description / Quantity |
|---------------|--------|---------|----------------|---|
| 001 | 2 | 009 | Dating | Charcoal fragment |
| 002 | 3 | 005 | Bulk (1 tub) | Silty sediment from wall core (005) |
| 003 | 3 | 007 | Bulk (1 tub) | Subsoil |
| 004 | 3 | 006 | Bulk (2 tubs) | Red-brown silty spread at SW end |
| 005 | 3 | 008 | Bulk (2 tubs) | Subsoil |
| 006 | 1 | 014 | Bulk (3 tubs) | Yellow red and black burnt spread with charcoal and bone. |

Discussion

91. The survey and excavation work undertaken at Torrachilty has been targeted at a series of specific issues (see *Objectives*) based on a series of preconceptions about the character of both the monument and past landuses (note *Background* derives from the *Project Design* so reflects our pre-start understanding). As with all designs, these objectives were tested by the realities of the archaeological character of the monument as discovered through the site works.

Character of the monument

- 92. The prospective survey has shown that the monument, while potentially associated with two short stretches of linear bank, does not lie within an immediate landscape of additional identifiable sites. Rather this is an isolated monument standing within the surrounding 4ha of hillside. The location of the enclosure within a saddle, nestled into the slight ridge to the southwest of the saddle, suggests a purposeful selection of a sheltered southeast-facing location.
- 93. The primary construction element of the enclosure is a drystone rubble bank or wall which is defined on its outer edge by a kerb of larger orthostats (Figure 7a and 8b) and a suggestion of a slighter, inner kerb. These kerbs define a wall some 1.2m broad, with the wall core is comprised of smaller stones rising to around 0.4m in height. Tumble from this wall is evident in all the trenches, especially those across its circuit (Trenches 2, 3 and 4). However, the volume of tumble is relatively minor compared to the apparent physical mass of the banks as described in the original identification of the monument (Ross 1991) and the survey stage of this project.
- 94. The evidence from Trenches 2, 3 and 4 is that the basal course of the bank rests on a subsoil surface that, for Trenches 3 and 4, rapidly falls within the interior of the enclosure (see Figure 6 and Figure 10a). This enables the characterisation of the interior of the enclosure as a bowl with a marked break of slope at the inner kerb of the rubble bank (Figure 6). The lowest point in the bowl, drawn from an uncompacted point in Trench 1, is some 0.56m below the highest base of the wall (Trench 4).
- 95. It was not clear from the excavation whether this upper surface of the subsoil was a natural form or erosive surface; as noted during the survey, the slope on the western side of the interior corresponds well with the natural slope of the ridge further west. Balancing this is the marked break of slope at the interior kerb in Trench 3 (Figure 10a) suggesting an eroded character to this interior surface and the relatively level subsoil in Trench 2 compared to the interior. Overall the view of the authors is that this bowl form is an erosive product either formed during the construction stage or deriving from the

use of the monument.

- 96. Within the interior of the enclosure no structural features were located (pits, heel stone, postholes etc) to suggest that there was a superstructure (i.e. that this was a structure). A burnt deposit within a hollow (014) in Trench 1 (Figure 4b) indicates that at some point there was clear anthropic activity within the enclosure formed by the bank. Accepting that the upper subsoil surface is an erosive landform, this burnt deposit must have been formed after the erosive process had substantially finished. Thus this material may be a last use even a reuse compared to the original formation of the monument. This can be combined with the comprehensive absence of material culture to suggest that burnt deposit derived from a short lived activity with the more common use of this site not being rich in activity that generates anthropic deposits.
- 97. The absence of a palaeosol underneath the *in situ* rubble bank (esp. Trench 3) suggests that the line of the rubble bank was deturfed prior to the construction of the monument. Given the uncertainty over the origin of the bowl-form in the interior it is not clear whether this deturfing extended to the full footprint of the monument. The potential generation of significant volumes of turf within the initial stages of site clearance may correlate with its reuse in the bank structure or superstructure (if there was one). Certainly the irregular character of the rubble wall base and the minimal volume of rubble all suggest that the drystone element of this bank is unlikely to have reached much higher than 0.6m. A 1.2m broad 0.6m high drystone wall would have been an excellent base for a turf sod upper wall.
- 98. The mixture of rounded to angular stones in the bank suggests that the material did not derive from a common source. Some of these stones appear to be comparable to inclusions within the underlying subsoil, while the frequency of stone outcrops in the immediate landscape and the waterworn stone in the Black Water give ready local sources. Overall the construction style of the enclosure bank appears to be predominantly caespititious, drawing from the site and the immediate landscape.
- 99. The identification of the monument and our survey all suggest that there is a break within the circuit of the bank to the southeast (Figure 3). Some doubt was raised due to the forwarder tracks passing through this gap raising the potential of wholesale destruction of the bank at this point rather than an intentional entrance. Trench 1 identified bank material crossing the full width of this trench (Figure 5), but the detailed contour survey (Figure 3) shows that this trench was located at a point where a lobe of bank material could be identified regardless of the track.
- 100. Looking at Trench 4, and Trench 1, it is clear that the forwarder tracks have severely compressed and displaced the wall fabric but have not removed it. On this basis it is reasonable to infer that the break in identifiable bank in the contour map, beyond Trench 1, shows an entrance in the southeast some 2.2m broad. The difficulty in recognising the bank within the southeast arc is exaggerated by this being the lowest subsoil point (see above).
- 101. Gross waterlogging and flooding was evident within the monument during the excavations (Figure 9b). While the rainfall was torrential, the work were conducted in August which should be a period of better drainage. The interior had clearly suffered from compaction by the forwarder tracks, but the interior if not roofed must have always had a strong tendency to water collection and dampness.

Potential function and date of the monument

- 102. The supposition that the monument identified at Torrachilty was a hut-circle originated from the post-felling survey that first identified the monument (Ross 1990, Ross 1991), an attribution reflected in the treatment of a comparable monument on the far side of the Black Water (Marshall 2008). The character of the monument as excavated (see above) raises significant doubts as to whether this is a hut-circle.
- 103. The absence of interior structural features and the bowl form of the interior do not correlate well with known later prehistoric structures (Harding 2004) while the scale of the monument at 18.5m diameter remains at the upper end of the known size range for

such monuments. The absence of evidence for a superstructure on such a large diameter penannular bank suggests that it is more reasonably interpreted as an enclosure. As identified by McIntyre (1998) the use of a common vernacular form to generate both houses and stock pens is reasonable, with the potential for the use of a single structure to in time alternate between these functions.

- 104. In this context, if the bowl form of the interior is accepted as from use as a stock pen then this could have eroded evidence for an earlier origin of the monument as a structure. Such an erosive impact is in many ways similar to the internal erosion sometimes used to explain ring-ditch structures in Scotland (Rees 1998). The absence of material culture within the excavated trench does not undermine this hypothesis given the common dearth of material culture surviving on many sites from later prehistory.
- 105. However, to accept a later prehistoric construction and use of this monument there is the difficulty in the absence of additional monuments in the immediate landscape for contemporary occupation. In the larger landscape there are options, including the comparable monument on Rogie township (Marshall 2008) across the Black Water. However, the character of this monument has not been tested.
- 106. Another circular structure common to the upland landscape is that of turf and stone shieling huts (Ritchie & Wordsworth 2010). Shieling grounds were integral to the medieval and post-medieval agricultural regime with the temporary occupation of summer grazing in upland areas giving rise to small irregular settlements.
- 107. The size of the Torrachilty bank, with the absence of structure or occupational features, again militates against it being a residential structure within this context. However, shieling settlements also incorporated animal folds for managing stock. In this context the eroded bowl form to the interior, the sheltered setting in the side of the rise to the northwest and the proximity to a potential water source to the south west all appear positive indicators of an animal fold.
- 108. The interaction of the two linear banks with the monument also critical given that these do not appear to be elements of a larger pattern of enclosure or landscape management. These are not rickles of clearance material forming fields such as those identified at Kilphedir (Fairhurst & Taylor 1971) in association with later prehistoric settlement. Rather they are substantial banks that, on survey, appear comparable to the drystone banks of the enclosure. Their layout (Figure 3) forms an angle, at which point the banks are broken, to the immediate northeast of the entrance of the enclosure. The eastern bank (S2) blocking the saddle before climbing the rising ground to the east and the northern bank (S1) leading straight down to the Black Water.
- 109. This layout, is accepted as a full extent of the original bank scheme, suggests management of stock being moved in a generally unenclosed environment. Animals being driven upslope from the Black Water would have been channelled towards the entrance of the enclosure making stock management easier.
- 110. A potential sheiling hut was visited in the course of the on-site works, although this fell outwith the prospective survey area (Figure 10b). Located some 127m to the southeast (at NGR ²442 ⁸587; RCAHMS ref: NH45NW 11) the structure appears to be a drystone rectilinear building some 6m by 2.5m internally in plan set into a hillside with the south end abutting a rock face. The structure has been disrupted by trees and is partly covered by bracken meaning the survey records are partial.
- 111. There are a range of other activities, other than settlement in prehistory or medieval to post-medieval shieling settlements, that can generate circular banks of rubble that subsequently appear and annular or penannular banks. Perhaps the most well known would be stone fanks (stells or buchts) and planticrubs. Stone fanks, gathering or holding pens for sheep, are often located in upland areas with earlier types often surviving as slight monument in the landscape. As such they illustrate a continuation of a vernacular form of construction for animal folds into the 18th and 19th centuries.
- 112. Planticrubs are small circular stone enclosures used for sheltering and growing cabbage plants. They are predominantly 18th and 19th century in origin and classically restricted in

distribution to Shetland and Orkney where some remain in use. However, in the absence of a confirmed entrance through the bank the option of a horticultural use should be explored. The sheltered, southeast facing location near water but on drier ground are all very positive factors; but the eroded bowl character of the interior combined with the shallow soils militate against this interpretation.

- 113. Both the stone fank and planticrub options are also undermined by the monument not being mapped in the 19th century (Figure 1b, 1st edition Ordnance Survey) when the ground was under forestry. Further, an 18th century date seems unlikely given the presence of multiple settlements (inc. Tarve and Balnain, see Figure 1a) in the immediate landscape which suppress the likelihood of dispersed activity more commonly found at distance in remoter locations.
- 114. There are more exotic options which are unlikely to be mapped that should not be omitted from consideration. A slight rubble bank may be used as a windbreak or bounding feature for pitching a tent; the better known of these are Colby camps such as that on Creach Bhein, near Fort William (Owen & Pilbeam 1992, 21). These camps were built during the campaigns of triangulation under Captain Colby in the early 19th century. They are typically located close to triangulation pillars, with the stone banks encircling the pitches for the larger tents for labourers and sappers. As with the examples on Creach Bhein, they can be laid on sloping ground, exploiting the natural topography. While the absence of any nearby triangulation pillar makes Torrachilty unlikely to be a Colby camp; though a temporary or seasonal use of the site by camping cannot be discounted.
- 115. On balance, the excavators are of the view that the most likely explanation for the Torrachilty monument is that this was a purpose built animal fold that may relate to the use of the area as shieling grounds within the medieval to post-medieval period. The interior of the monument has suffered progressive erosion as a result of this use, leaving its bowl-shaped form. This enclosure is associated with the use of the two banks to funnel stock into the entrance as they are driven upslope from the Black Water. At some point either at the end of its use of significantly after its use the enclosure was re-used, evidenced by a burnt deposit from an *in situ* fire.
- 116. This cannot be confirmed at this point with confidence given the excavation results; there is a residual potential that this same sequence of construction and use can be relocated into later prehistory. There is a notional potential that the first use of the site was as a structure which was then reused as an animal fold, a use that erased evidence for the earlier superstructure.

Consequences of afforestation

- 117. The survey has clearly shown that while the immediate landscape was planted with coniferous woodland, the monument was excluded from this planting regime. The raised, drier ground to the west and the lower, wet ground to the south were both planted. Hence there appears no topographic or environmental reason for not planting the monument. The reasonable inference was that the planting team made a positive decision not to plant this location and to maintain it as a clearing within the woodland block; the only apparent prompt for this behaviour being the presence of the upstanding monument. We should not be surprised that forestry workers used their judgement to exclude archaeological sites that they recognised where the planting regime permitted such discretion.
- 118. Through the exclusion of the monument we have the opportunity of considering the long-term consequence of excluding the monument from the planting regime, but placing it within a clearing without recorded proactive maintenance of this clearing. This may not reflect the actual history of the clearing given that rotten, overgrown tree stumps were recorded within both Trench 3 and 4. While these may derive from historic woodland (such as that mapped in the late 19th century, see Figure 1b) they may equally be self-regenerated trees that have been thinned within the recent management of the clearing.
- 119. Ignoring felling impacts, the monument has suffered from the long-term establishment of

vegetation typical of understorey and woodland margin habitats. These include bracken, heather and some tree regeneration generating two small trees that were felled out when the commercial crop was harvested.

- 120. The impact from such vegetation and burrowing animals in such edge locations was identified as one of the critical issues consequent to forestry by the work at Tamshiel Rig (Cressey 1996a, 1996b). The subsequent programmes of work commissioned by Historic Scotland (Dunwell & Trout 1999, Rees & Mills 1999) assessed the character of these impacts (burrowing animals and bracken respectively) with recommendations for management. The concern about the consequence of these impacts in clearings within woodland is also reflected in the work of Forest Research (Crow 2001).
- 121. Some caution should be recognised in discussing the impacts as the vegetation cover on the monument will have altered with the removal of the surrounding forest leading to increased light, precipitation and exposure (see Crow 2001 for full discussion). However, the following pattern of impacts can be recognised:
 - Bracken rhizome was identified in all trenches, with the topsoil commonly being physically disrupted by these. Some penetration of the underlying subsoil was also noted. Where drystone rubble bank material was recorded (i.e. Trenches 2, 3 and 4) rhizome penetration through loose rubble was common, but physical disruption of the actual wall fabric was much less common;
 - Tree roots were occasionally noted in all trenches and typically the larger roots lay solely within the topsoil with little to no penetration into rubble or wall fabric or subsoil. This should be understood within the context that the only trees on the monument were three self-regenerated trees;
 - Heather root structures (woody vegetation) were noted on the bank material and wall fabric in the northern and northeastern circuit of the enclosure. While these only penetrated the upper layers of the stony material;
 - No evidence for burrowing animals was noted in any of the trenches or from the survey of the monument and surrounding area; and
 - No evidence for pre-felling eroding surfaces or dumping / storing of materials were noted during the survey of the monument.
- 122. Overall, in common with the recorded pattern in other studies, the impact of the bracken rhizome, heather roots and tree roots are for localised physical disruption of sediments.

Consequences of felling and post-felling regime

- 123. The monument had been preserved in a clearing within a Scots Pine plantation presumably through the initiative of the foresters planting this woodland. A pre-felling survey (Ross 1990) coarsely located and accurately described this monument although the description of surrounding fields appears over generous. This discovery was reported (Ross 1991) and incorporated into both the Sites & Monuments Records (Highland Council) and the National Monuments Record of Scotland (RCAHMS Collections). All these summary historic environment records identified the monument as a hut-circle, and hence by inference a significant monument.
- 124. The planning and implementation of the subsequent harvesting of this forest block failed to take cognisance of this information. As a consequence the small clearing, on the leading edge of the ridge, offered an ideal route for harvesting machinery striking west from the main forestry road that ran from the A835 to the north. As previously described (see *Survey*) a bifurcating track is visible crossing the monument, most likely generated by a forwarder servicing a harvester by extracting timber from the point of felling / processing. There appears not to have been any use of brash mats across the area during harvesting (i.e. protective measures for soft ground compliant with Murgatroyd & Saunders 2005 were followed) and it is uncertain whether forwarder used band tracks or chains on its front and rear bogies (not Table 3 in Ireland 2006 gives guidance on potential consequences of differing options depending on ground conditions).

- 125. The survey and excavation have characterised the physical impact of the forwarder that is inferred to have made multiple runs through the monument on both routes:
 - gross physical displacement of stone bank, slighting the fabric in a common direction that in both instances was towards the interior of the enclosure but leaving the fabric in a comprehensible wall form;
 - gross physical compaction of robust sediments, this compaction visible in Trench 4 and especially Trench 1 where the harvester appears to have compressed the underlying subsoil while preserving negative features in its upper surface (i.e. burnt deposit (014));
 - driving robust material into the underlying robust sediment forming a collation surface, identified through roundwood branches from the original ground surface relocated to the subsoil surface in Trench 1 - but potentially also affecting stones from the original soil profile; and
 - displacement of less robust sediment, specifically the virtual absence of topsoil from the visible ruts in Trench 1 and the apparent redeposition of topsoil as the ridge between the ruts – although the subsoil beneath has been compacted suggesting this had also been travelled over previously.
- 126. Overall the excavation and contouring of the survey data has also clarified that the visible ruts may reflect only the final passage of the forwarder on each route with broader underlying disruption reflecting the composite footprint of tracks generated by successive passes through the monument.
- 127. This impact is dissimilar to that caused by typical farm tracks as forwarders, though significantly heavy carrying loads between 6 tonnes to 18 tonnes over their unladen weight, have all-wheel drive through its broad wheels so can behave in a manner closer to a low ground pressure vehicle than a road vehicle.
- 128. The long-term consequence for the tracked portion of this monument is likely to encompass impeded drainage, reduced aeration and impeded root penetration (Crow 2001). This combination will inhibit future plant cover within the ruts and may lead to the initiation of erosion.
- 129. The dense stand of bracken focused on the southern bank, and the lesser coverage elsewhere in the interior, suggest that the rhizome pre-dates the felling of the forest. However, the open aspect and lack of grazing is reflected in the vigorous character of the bracken and its rapid encroachment on the harvester tracks. This may suggest that the removal of the surrounding forest has led to a significant re-balancing of the general flora in the landscape and, for the monument, a surge in the scale of bracken infestation and hence consequent physical disruption.

Recommendations

- 130. Presented below are our recommendations for Stage 2 archaeological works to conclude this project. These recommendations are framed to support and inform the iterative design process for the extraction proposal.
- 131. Given the findings of the project (presented above) we do not recommend substantive post-excavation analysis further than the information presented within this report. However, the *in situ* burning deposit (014) in Trench 1 has been interpreted as the last use of the interior. A date from this deposit would act as a *terminus ante quem* for the eroding of the subsoil within the interior. In the absence of any additional secure dating material we recommend the processing of this material and the recovery of a radiometric date to provide this *terminus ante quem*.
- 132. The information garnered from this survey and excavation have provided valuable insight into:
 - the potential value in surveying impromptu clearings within historic plantings

prior to felling;

- the failure of a substantive monument to act as a marker site for additional, slighter sites in the immediate landscape;
- the pitfalls inherent in interpreting monuments that have a structural form that has a long tradition of utilisation over millennia;
- the long term impact of leaving a monument within a clearing without subsequent management;
- the physical disruption caused by harvesting machinery, especially forwarders, to a banked enclosure (comparable in many ways to a hut-circle);
- the consequent change in vegetation and drainage from the harvesting machinery impacts; and
- the progressive realignment of flora and invigoration of adverse vegetation in the post-felling environment.
- 133. Given the ongoing programme of investigation of environmental and forestry impacts on archaeological sites being undertaken by Forestry Commission Scotland, we recommend that this information is combined with the outcomes of subsequent work to generate a single document on archaeological sites within forest clearings.

Conclusion

- 134. The on-site works commenced with a survey to record the Torrachilty hut-circle in detail and to identify any additional related monuments in its immediate landscape. The hut-circle appeared to be a broad penannular grass, heather and bracken clad bank that was spread between 4m and 6.2m broad. The outer limits of the visible bank followed a circular shape in plan some 18.5m in diameter, while the inner break of slope also enclosed a circular area roughly 12m in plan. A break in the circuit, 3.5m wide, lay in the southeast. The broader survey identified two linear banks that connected into the eastern side of the monument.
- 135. Four targeted areas within the monument were hand excavated to recover information on the monument's date and form as well as examining the nature of any damage from forestry operations. These showed the bank to be a slight rubble wall, 1.2m broad, encircling a hollow in the natural subsoil slope. The interior showed no evidence for a superstructure having been present or for substantive occupation of this space.
- 136. On balance, the excavators are of the view that the most likely explanation for the Torrachilty monument is that this was a purpose-built animal fold that may relate to the use of the area as shieling grounds within the medieval to post-medieval period. The interior of the monument has suffered progressive erosion as a result of this use, leaving its bowl-shaped form. The two banks associated with this enclosure may have been used to funnel stock into the entrance as they were driven upslope from the Black Water. At some point either at the end of its use of significantly after its use the enclosure was reused, evidenced by a burnt deposit from an *in situ* fire.
- 137. These on-site works have given information that has allowed us to explain the importance of the surviving monument including the consequences, both positive and negative, of its long-term presence within woodland. Some recommendations have been made to inform future best practice in managing sites that emerge from harvested forestry.

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Cartographic

| 1747-1755 | Roy | Military Survey of Scotland |
|-----------|-----------------|---|
| 1881 | Ordnance Survey | 1 st edition Ordnance Survey |
| 1905-07 | Ordnance Survey | 2^{nd} edition Ordnance Survey |
| 1959-69 | Ordnance Survey | 3 rd edition Ordnance Survey |

Appendix 1: Registers

Within this appendix are all registers pertaining to the intrusive evaluation works.

Trench Summaries

| Trench | Orientation | Size | Topsoil Depth | Subsoil Character | Modern Features | Significant Features | Artefacts |
|--------|----------------------------------|-----------------------------------|------------------|--|--------------------|-------------------------|-----------|
| 01 | East-West | 52 x 2m 104m² | 400m | Orange brown sand and gravel (002), Dark brown sand and gravel (003) and Yellow Brown sand and gravel (004). | None | None | None |
| 02 | Northwest- Southeast | 100 x 2m 200m² | 450- 1000mm | Orange brown sand and gravel (002), Dark brown sand and gravel (003) | None | None | None |
| 03 | Northeast- Southwest | 96 x 2m 192m² | 330- 655mm | Orange brown sand and gravel (002), Dark brown sand and gravel (003) | None | None | None |
| 04 | East Northeast-West Southwest | 110.1 x 2m 220.2m ² | 200- 730mm | Orange brown sand and gravel (002), Dark brown sand and gravel (003) | None | None | None |
| 05 | Northwest- Southeast | 102.6 x 2m 205.2m ² | 240- 640mm | Yellow Brown sand and gravel (004). | None | None | None |

Context Register

| Context No. | Area/ Trench | Туре | Description | Interpretation |
|----------------|-----------------|---------|---|--------------------|
| 1 | ALL | Deposit | Thin layer of vegetation and topsoil. Loose to moderate compaction, middark brown silt composed of roots and low vegetation with inclusions of sub angular stones 2-13cm size with a 2-3cm depth of moss at top of tumble (002) Overlies entire site. | Turf / Topsoil |
| 2 | ALL | Deposit | General number used prior to trench specific number being allocated | Tumble |
| 3 | 3 | Deposit | Spread of grey angular and sub angular stones in NE corner. Covers wall of hut-circle and surrounding interior and exterior areas in Trench 3. Stones | Tumble in Trench 3 |

| Context No. | Area/ Trench | Туре | Description | Interpretation |
|----------------|-----------------|---------|---|--------------------------------|
| | | | range from 7cm x 6cm x 10cm to 23cm x 33cm x 50cm in size. | |
| 4 | ALL | Wall | General number used prior to trench specific number being allocated | Wall of Hut-circle |
| 5 | 3 | Wall | Stone wall with larger stones defining outer face and small stone infill. Wall exposed in Trench 3 comprised medium to large sized grey angular and sub angular stones (from 34cm x 34cm x 13cm size to 45cm x 48cm x 24cm size). Internal face is not clearly defined, possibly disturbed by tumble, this section survives to a width of 1.2m x 0.44m high on exterior, one course high. | Wall of Hut-circle in Trench 3 |
| 6 | 3 | Deposit | Dark reddish brown moderately compact silty clay. Extends 2.3m NE-SW x 1m NW-SE where it has been exposed in Trench 3. It is likely to extend further. Deposit covers SW half of Trench 3on internal side of wall (005) and below tumble (003). Contains abundant fine roots (turf) and frequent small grey angular and sub angular stones. Up to 0.25m thick. | Deposit |
| 7 | 3 | Deposit | Loosely compacted light grey sandy silt. Located in N Corner of Trench 3. 0.5m x 0.6m and extends further out of sides of trench. Contains frequent small stones and abundant fine roots (turf vegetation) with rare small lateral tree roots. Partially covered by tumble (003) and by topsoil / turf (001). | Possible Natural |
| 8 | 3 | Deposit | Loose yellowish red silty clay, located in trench 3 sitting NE to wall (005) abutting its external edge. 1m x 1.25m in extent although extends beyond trench limits. Unknown depth. | Possible Natural |
| 9 | 2 | Deposit | Firm light mid brown sandy clay abundant roots (tree roots and grass) occasional charcoal. Abundant small to large angular stones, occasional small to medium sandstones chunks. Located in Trench 2 (SE end) depth ranges from 0.12m -0.16m. | Deposit |
| 10 | 2 | Wall | Solid, grey wall. Consists of rounded and angular stones, not mortared. Stones range from small to very large. Largest is 0.35m x 0.76m. Runs NW-SE. 0.98m long as visible in trench. 1.1mwide. Possibly previously truncated by machinery. 0.33m high at highest point. | Hut-circle wall Trench 2 |
| 11 | 2 | Deposit | Assemblage of medium to large angular rounded stones. Not mortared, below (009) stones sit in (008). 0.07m - 0.76m deep. | Tumble from (010) |
| 12 | 1 | Deposit | Moderate compaction. Stones in dark red-brown silty sand. 2m x 0.95m | Tumble |

| Context No. | Area/ Trench | Туре | Description | Interpretation |
|----------------|-----------------|---------|--|--------------------------|
| | | | maximum extent. 40% roots. Stone inclusions range from 0.35m -0.5m constitute about 30% deposit.140mm thick maximum. | |
| 13 | Void | Void | Void | Void |
| 14 | 1 | Deposit | Spread of burnt material and reddened sand. Compact with inclusions; sub round and sub angular stones 0.07m- 0.2m size covering 60%. Some burnt stones present. 1.45m x 0.45m in size but extends beyond Trench 1. | Possible area of burning |
| 15 | 1 | Deposit | Friable yellowish red silty clay. Frequent rootlets and medium stones. Extends 2m x 3mwithin trench. | Natural |
| 16 | 1 | Deposit | Firm pinkish grey silty clay. Frequent medium stones and sandstone. 0.5m x 0.3m within NE corner of Trench 1. | Natural |
| 17 | 4 | Deposit | Firm reddish brown silty clay. Frequent rootlets. 0.6m x 0.4m within trench. | Natural |
| 18 | 4 | Deposit | Very compact light grey, medium stones in mid brown silt. $0.2m \times 0.10m$ size. Extends $1m \times 0.9m$. | Tumble |
| 19 | 4 | Wall | Grey Stone wall. Aligned NE-SW within trench, 0.8m wide x 1m long within trench. One large boulder 0.65m x 0.45m x 0.27m and large to medium stones at $0.2m \times 0.15m$. | Wall |
| 20 | 4 | Tree | Degraded small tree trunk on top of wall. 0.7m x 0.5m x 0.27m | Trunk |
| 21 | 4 | Deposit | Medium to large stones on blackish brown matrix of silty clay. Very frequent rootlets and roots. | Tumble |

Photographic Register

| Image | Print | | Slide | | Digital | Description | From | Date |
|-------|-------------|----------|-------------|----------|---------|-----------------|------|------------|
| No. | Film No. | Neg. No. | Film No. | Neg. No. | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | Pre Ex Trench 1 | SSW | 08/08/2011 |
| 2 | | | | | 2 | Pre Ex Trench 1 | SSW | 08/08/2011 |
| 3 | 1 | 2 | 1 | 2 | 3 | Pre Ex Trench 1 | ESE | 08/08/2011 |

| Image | Print | | Slide | | Digital | Description | From | Date |
|-------|-------------|----------|-------------|----------|---------|---|------|------------|
| No. | Film No. | Neg. No. | Film No. | Neg. No. | | | | |
| 4 | 1 | 3 | 1 | 3 | 4 | Pre Ex Trench 2 | WNW | 08/08/2011 |
| 5 | 1 | 4 | 1 | 4 | 5 | Pre Ex Trench 2 | SE | 08/08/2011 |
| 6 | 1 | 5 | 1 | 5 | 6 | Pre Ex Trench 3 | SW | 08/08/2011 |
| 7 | 1 | 6 | 1 | 6 | 7 | Pre Ex Trench 3 | NE | 08/08/2011 |
| 8 | 1 | 7 | 1 | 7 | 8 | Pre Ex Trench 4 | WSW | 08/08/2011 |
| 9 | 1 | 8 | 1 | 8 | 9 | Pre Ex Trench 4 | WNW | 08/08/2011 |
| 10 | 1 | 9 | 2 | 1 | 10 | Shot of Trench 3 (Tumble) | SSW | 08/08/2011 |
| 11 | 1 | 10 | 2 | 2 | 11 | Shot of Trench 3 (Tumble) | NNE | 08/08/2011 |
| 12 | 1 | 11 | 2 | 3 | 12 | Shot of Trench 3 (Tumble) central section | SE | 08/08/2011 |
| 13 | 1 | 12 | 2 | 4 | 13 | Tree stump remains at NE end of trench 3 | NE | 08/08/2011 |
| 14 | | | | | 14 | Tree stump remains at NE end of trench 3 | ENE | 08/08/2011 |
| 15 | 1 | 13 | 2 | 5 | 15 | Trench 2 NE Facing Section | NE | 08/08/2011 |
| 16 | | | | | 16 | Trench 2 NE Facing Section | NE | 08/08/2011 |
| 17 | | | | | 17 | Trench 2 NE Facing Section | NE | 08/08/2011 |
| 18 | 1 | 14 | 2 | 6 | 18 | Trench 2 Deturfed | NW | 08/08/2011 |
| 19 | 1 | 15 | 2 | 7 | 19 | Trench 2 Deturfed | SE | 08/08/2011 |
| 20 | 1 | 16 | 2 | 8 | 20 | Trench 3 Tumbled removed, wall (005) exposed | SSW | 08/08/2011 |
| 21 | 1 | 17 | 2 | 9 | 21 | Trench 3 Tumbled removed, wall (005) exposed | NNE | 08/08/2011 |
| 22 | 1 | 18 | 2 | 10 | 22 | Trench 3 Tumbled removed, outer face of (005) | NNE | 08/08/2011 |
| 23 | | | | | 23 | Trench 3 Tumbled removed, outer face of (005) | NNE | 08/08/2011 |
| 24 | 1 | 19 | 2 | 11 | 24 | Trench 3 Tumbled removed, (005) from above | Vert | 08/08/2011 |
| 25 | | | | | 25 | Trench 3 Tumbled removed, (005) from above | Vert | 08/08/2011 |
| 26 | 1 | 20 | 2 | 12 | 26 | Trench 3 Tumbled removed, inner face of (005) | WSW | 08/08/2011 |

| Image | Print | | Slide | | Digital | Description | From | Date |
|-------|-------------|----------|-------------|----------|---------|---|------|------------|
| No. | Film No. | Neg. No. | Film No. | Neg. No. | | | | |
| 27 | | | | | 27 | Trench 3 Tumbled removed, inner face of (005) | WSW | 08/08/2011 |
| 28 | | | | | 28 | Working shot | NW | 09/08/2011 |
| 29 | | | | | 29 | Working shot | SW | 09/08/2011 |
| 30 | | | | | 30 | Working shot | WNW | 09/08/2011 |
| 31 | | | | | 31 | Working shot | WNW | 09/08/2011 |
| 32 | | | | | 32 | Working shot | S | 09/08/2011 |
| 33 | 1 | 21 | 2 | 13 | 33 | Trench 3 deposit (007) | NE | 09/08/2011 |
| 34 | | | | | 34 | Working shot | NE | 09/08/2011 |
| 35 | 1 | 22 | 2 | 14 | 35 | Trench 3 General Post Ex shot | SW | 09/08/2011 |
| 36 | 1 | 23 | 2 | 15 | 36 | Trench 3 General Post Ex shot | NE | 09/08/2011 |
| 37 | 1 | 24 | 2 | 16 | 37 | Trench 3 SE Facing Section | ENE | 09/08/2011 |
| 38 | 1 | 25 | 2 | 17 | 38 | Trench 3 NE Half | SE | 09/08/2011 |
| 39 | 1 | 26 | 2 | 18 | 39 | Trench 3 SW Half | SE | 09/08/2011 |
| 40 | 1 | 27 | 2 | 19 | 40 | Trench 3 NW Facing Section | W | 09/08/2011 |
| 41 | 1 | 28 | 2 | 20 | 41 | Trench 3 NW Facing Section | N | 09/08/2011 |
| 42 | 1 | 29 | 2 | 21 | 42 | Trench 3 NW Facing Section (NE half) | NW | 09/08/2011 |
| 43 | 1 | 30 | 2 | 22 | 43 | Trench 3 NW Facing Section (SW half) | NW | 09/08/2011 |
| 44 | 1 | 31 | 2 | 23 | 44 | Trench 3 SE facing section of wall (005) | SE | 10/08/2011 |
| 45 | | | | | 45 | Trench 3 SE facing section of wall (005) | SE | 10/08/2011 |
| 46 | 1 | 32 | 2 | 24 | 46 | Trench 3 NW facing section of wall (005) | NW | 10/08/2011 |
| 47 | | | | | 47 | Trench 3 NW facing section of wall (005) | NW | 10/08/2011 |
| 48 | 1 | 33 | 2 | 25 | 48 | Oblique of NE facing section Trench 2 | NNW | 11/08/2011 |
| 49 | 1 | 34 | 2 | 26 | 49 | Trench 2 | NW | 11/08/2011 |

| Image | Print | | | Slide | | Digital | Description | From | Date |
|-------|-------------|---|----------|-------------|----------|---------|--|------|------------|
| No. | Film No. | | Neg. No. | Film No. | Neg. No. | | | | |
| 50 | | 1 | 35 | 2 | 27 | 50 | NE facing sectionTrench 2 west end | NE | 11/08/2011 |
| 51 | | 1 | 36 | 2 | 28 | 51 | NE facing sectionTrench 2 mid section | NE | 11/08/2011 |
| 52 | | 2 | 1 | 2 | 29 | 52 | NE facing sectionTrench 2 east section | NE | 11/08/2011 |
| 53 | | 2 | 2 | 2 | 30 | 53 | Trench 2 | SE | 11/08/2011 |
| 54 | | 2 | 3 | 2 | 31 | 54 | Trench 2 Detail of wall | NE | 11/08/2011 |
| 55 | | | | | | 55 | Working shot of Trench 1 | SE | 11/08/2011 |
| 56 | | 2 | 4 | 2 | 32 | 56 | General shot of Trench 4, showing tumble | ESE | 11/08/2011 |
| 57 | | 2 | 5 | 2 | 33 | 57 | General shot of Trench 4, showing tumble | ESE | 11/08/2011 |
| 58 | | 3 | 1 | | | | General shot of Trench 4, showing tumble | ESE | 11/08/2011 |
| 59 | | 3 | 2 | 2 | 34 | | General shot of Trench 4, showing tumble | SW | 11/08/2011 |
| 60 | | 3 | 3 | 2 | 35 | 58 | General shot of Trench 1, showing tumble | SW | 11/08/2011 |
| 61 | | 3 | 4 | 2 | 36 | 59 | General shot of Trench 1, showing tumble | SSE | 11/08/2011 |
| 62 | | 3 | 5 | 2 | 37 | 60 | General shot of Trench 1, showing tumble | NNE | 11/08/2011 |
| 63 | | 3 | 6 | 3 | 1 | 61 | General shot of Trench 1, showing tumble | SE | 11/08/2011 |

Drawing Register

| Drawing No. | Sheet No. | Area/ Trench | Drawing Type | Scale | Description | Drawn By | Date |
|-------------|--------------|-----------------|-----------------|-------|-------------------------------------|-------------|------------|
| 1 | 1 | 3 | Plan | 1:20 | Plan of Trench 3 showing Wall (005) | CM | 09/08/2011 |
| 2 | 2 | 3 | Plan | 1:20 | Plan of Trench 3 showing Wall (008) | CM | 10/08/2011 |
| 3 | 1 | 3 | Section | 1:10 | SE Facing Section of Trench 3 | CW / CM | 10/08/2011 |
| 4 | 2 | 2 | Plan | 1:20 | Plan of Trench 2 showing wall (010) | DG/ DIG | 10/08/2011 |
| 5 | 3 | 2 | Section | 1:10 | NE Facing Section of Trench 2 | DG/ DIG | 10/08/2011 |

RA11031 Torrachilty Hut-Circle, Highland – Archaeological Investigation

| Drawing No. | Sheet No. | Area/ Trench | Drawing Type | Scale | Description | Drawn By | Date |
|-------------|--------------|-----------------|-----------------|-------|---|-------------|------------|
| 6 | 4 | 4 | Plan | 1:20 | Plan of Trench 4 | DIG | 11/08/2011 |
| 7 | 5 | 1 | Plan | 1:20 | Plan of Trench 1 after (012) removed | CW / CM | 11/08/2011 |
| 8 | 6 | 1 | Plan | 1:20 | Overlay of Drawing 7 showing Post-ex removal of (014) | CW | 12/08/2011 |
| 9 | 4 | 1 | Section | 1:10 | SE Facing Section of Trench 1 | DIG | 12/08/2011 |

Appendix 2: Discovery & Excavation in Scotland

| LOCAL AUTHORITY: | Highland |
|---|--|
| PROJECT TITLE/SITE NAME: | Torrachilty Hut-Circle |
| PROJECT CODE: | RA11031 |
| PARISH: | Contin |
| NAME OF CONTRIBUTOR: | Claire Williamson, Douglas Gordon & Thomas Rees |
| NAME OF ORGANISATION: | Rathmell Archaeology Limited |
| TYPE(S) OF PROJECT: | Archaeological Survey & Evaluation |
| NMRS NO(S): | NH45NW 12 |
| SITE/MONUMENT TYPE(S): | Enclosure |
| SIGNIFICANT FINDS: | None |
| NGR (2 letters, 6 figures) | NH 441 588 |
| START DATE (this season) | 3 rd August 2011 |
| END DATE (this season) | 12 th August 2011 |
| PREVIOUS WORK (incl. DES ref.) | Ross, DW 1991 'Survey of Forestry Commission Land, Rogie by Contin', in <i>Discovery and Excavation in Scotland 1991</i> , Council for Scottish Archaeology 43 |
| MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields) | The on-site works commenced with a survey to record the Torrachilty hut-circle in detail and to identify any additional related monuments in its immediate landscape. The hut-circle appeared to be a broad penannular grass, heather and bracken clad bank that was spread between 4m and 6.2m broad. The outer limits of the visible bank followed a circular shape in plan some 18.5m in diameter, while the inner break of slope also enclosed a circular area roughly 12m in plan. A break in the circuit, 3.5m wide, lay in the southeast. The broader survey identified two linear banks that connected into the eastern side of the monument. |
| | Four targeted areas within the monument were hand excavated to recover information on the monument's date and form as well as examining the nature of any damage from forestry operations. These showed the bank to be a slight rubble wall, 1.2m broad, encircling a hollow in the natural subsoil slope. The interior showed no evidence for a superstructure having been present or for substantive occupation of this space. |
| | On balance, the excavators are of the view that the most likely explanation for the Torrachilty monument is that this was a purpose-built animal fold that may relate to the use of the area as shieling grounds within the medieval to post-medieval period. The interior of the monument has suffered progressive erosion as a result of this use, leaving its bowl-shaped form. The two banks associated with this enclosure may have been used to funnel stock into the entrance as they were driven upslope from the Black Water. At some point either at the end of its use of significantly after its use the enclosure was reused, evidenced by a burnt deposit from an <i>in situ</i> fire. |
| | These on-site works have given information that has allowed us to explain the importance of the surviving monument including the consequences, both positive and negative, of its long-term presence within woodland. Some recommendations have been made to inform future best practice in managing sites that emerge from harvested |

| | forestry. |
|---------------------------------------|---|
| PROPOSED FUTURE WORK: | No |
| CAPTION(S) FOR ILLUSTRS: | None |
| SPONSOR OR FUNDING BODY: | Forestry Commission Scotland |
| ADDRESS OF MAIN CONTRIBUTOR: | Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU |
| E MAIL: | contact@rathmell-arch.co.uk |
| ARCHIVE LOCATION (intended/deposited) | Report to Highland Council Historic Environment Team and archive to RCAHMS Collections. |

Contact Details

138. Rathmell Archaeology can be contacted at our Registered Office or through the web:

Rathmell Archaeology Ltd www.rathmell-arch.co.uk

Unit 8 Ashgrove Workshops

 Kilwinning
 t.:
 01294 542848

 Ayrshire
 f.:
 01294 542849

KA13 6PU e.: contact@rathmell-arch.co.uk

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