Mount Farm, Stirling: Archaeological Survey

Data Structure Report

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Executive Summary

- 1. A programme of archaeological assessment and survey works was required by Scottish Woodlands in respect of a series of defined land parcels spread to the south and southeast of Ballikinrain Castle, encompassing a portion of the Balglass burn on the northern slopes of Ballikinrain Muir, Stirling. This land is open ground which is proposed for afforestation. The archaeological survey was designed to establish a sound baseline on the archaeological resource within the landholding and hence inform the management of the ground. The systematic archaeological walkover survey was carried out from the 13th June 2012 to the 18th June 2012, the findings of which are presented in this report.
- 2. Consultation of the RCAHMS Collections (inc. Canmore & Aerial Photograph Collection), and the Stirling Council Archaeology Service Sites and Monuments Record (SMR) did not identify any known archaeological sites within the scope of the catchment area.
- 3. The survey includes a buffer zone of approximately 50 metres out-with the proposed plantation boundary and any sites contained therein were subsequently recorded. This was done to inform on any changes to the boundary alignment. Moreover the study area was walked in transects to optimise coverage of the landscape while main tributaries of rivers and burns were followed to record possible monuments along these waterways.
- 4. Immediately out-with the proposed plantation boundary 4 known sites were identified, one of which comprised the 'Baron's Place' at Balglas (RCAHMS Canmore NMRS: NS58NE 6, Site 15 and 16). The other sites included a quarry at Millstone Wood (Stirling SMR No.:3724.01), a structure at Balglas (Stirling SMR No.: 530, Site 13) and a farmstead at Mount (RCAHMS Canmore NMRS: NS58NE 6, Stirling SMR No.: 3725, Site 15). The farmstead at Mount was included due to its close proximity to the plantation scheme but was found not to encroach within the plantation boundary. Moreover, the farmstead is still in use and therefore the scheme will have little impact on the upstanding archaeological remains noted there.
- 5. A borrow pit at Site 34 was recorded to mark the western extents of the quarry at Millstone Wood (Stirling SMR No.:3724.01). A further 31 new sites were recorded within the proposed plantation and within the 50m buffer surrounding the study area during the site investigation. Most were associated with medieval or later rural settlement; they were, however, varied in their character, representing a variety of monument types including upstanding farm buildings and structures, grouse-butts, cultivation remains, sheepfolds and clearance cairns. None of these archaeological sites are protected through statutory or non-statutory designations.
- 6. A series of exclusion areas from planting and other negative impacts have been recommended as a result of these survey works. These have been designed to protect the more significant monuments in compliance with the best available practice described in the issued Forestry Guidance (FES, 2010).

Introduction

7. A programme of archaeological assessment and survey works was required by Scottish Woodlands in respect of their proposed planting scheme at Mount Farm, Stirling. These archaeological works were designed to inform on the nature, form and extent of any archaeology present within the proposed planting area and hence to enable the development of appropriate mitigation.

Topographic and Geological Background

8. The area concerned comprises several land parcels south of Balfron, Stirling on the lower slopes of Ballikinrain Muir (centred NGR: 256932, 686424). The area averages 3.5km east to west by 2km north to south. The site comprises 6 parcels forming approximately 744.48 hectares of land. The most westerly parcel is the largest and is bounded by existing forestry to the north, at Sir Archibald's Plantation. Immediately to the northeast of this parcel is another smaller parcel at Millstone wood. The remaining parcels are

concentrated around Mount Farm and Balglass burn to the east.

- 9. The site comprises the north-facing slopes of Ballikinrain Muir. It is an upland landscape with bedrock geology comprising sandstone and nodular limestone (cornstone) of the Kinnesswood formation and pebbly (gravelly) sandstone of the Stockiemuir sandstone formation, ranging from 110m OD to 270 OD. The superficial deposits are mainly Devensian Till (Macaulay Institute, 1982).
- 10. The soil make-up of Ballikinrain Muir is generally brown forest soils and some gleys characteristic of undulating lowlands. These support arable and permanent pastures, bent fescue grassland, oak and birchwood (Macaulay Institute, 1982). The vegetation ranges from rough moorland grasses to tussock and bogs. Thistles, heather and bracken were present over portions of the study area (see Figure 4a and 8a). Although in their infancy, they were intrusive enough to cause extensive masking of the topography.
- 11. One section of Ballikinrain Muir is a category IV Site of Special Scientific Interest (SSSI): a habitat/species management area (WDPA ID: 135319) at Balglas Corries. These areas are under protection of the IUCN (International Union for the Conservation of Nature). The protected section is located within 500 metres of the south eastern extents of the proposed plantation boundary.

Project Works

- 12. The programme of works agreed with Scottish Woodlands commenced with a desk based assessment. This consulted resources within:
 - RCAHMS Collections (inc. Canmore & Aerial Photograph Collection);
 - Stirling Council Sites & Monuments Record (known archaeological sites);
 - Historic Scotland records (Scheduled Monuments and other designations);
 - National Library of Scotland (bibliographic records, historic Ordnance Survey and pre-Ordnance Survey mapping); and
 - ❖ Local museums, libraries and other archives (Old & New Statistical Accounts, local history books).
 - FES guidelines and website (aerial photography and details of catchment areas).
- 13. A walkover survey of the planting area was undertaken between 13th to the 18th June, 2012 to assist in the characterisation of those monuments previously identified by the desk-based assessment and to identify any additional upstanding archaeological sites. Site limits surveyed through the use of a DGPS system (Leica GS50) were subsequently identified on 1:2500 base maps.
- 14. All works complied with the FES archaeological survey guidelines, Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.

Findings

15. The desk based assessment did not identify the presence of any sites protected for their archaeological or historical merit under the terms of the Ancient Monuments and Archaeological Areas Act 1979 or buildings protected under the Town and Country Planning Act 1997 (Historic Scotland 1998) within the proposed planting area. There were 2 sites recorded on the RCAHMS Canmore and a further 2 sites recorded on the Stirling Council Archaeology Service's SMR which comprise mainly of medieval and later buildings and associated agricultural activity.



Figure 1a: Extract from Timothy Pont's Map of the East Central Lowlands; Stirling, Falkirk and Kilsyth ca. 1583-1614



Figure 1b: Extract from Blaeu's Map of 1654



Figure 2a: Extract of William Roy's Military Survey of the Lowlands of Scotland, 1752-55

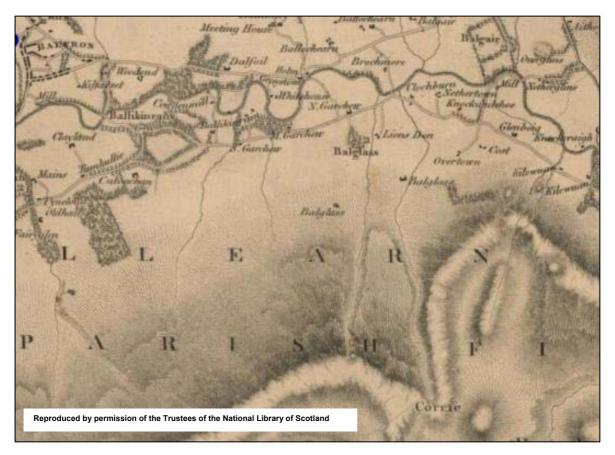


Figure 2b: John Grasson's To the noblemen and gentlemen of the County of Stirling, 1817

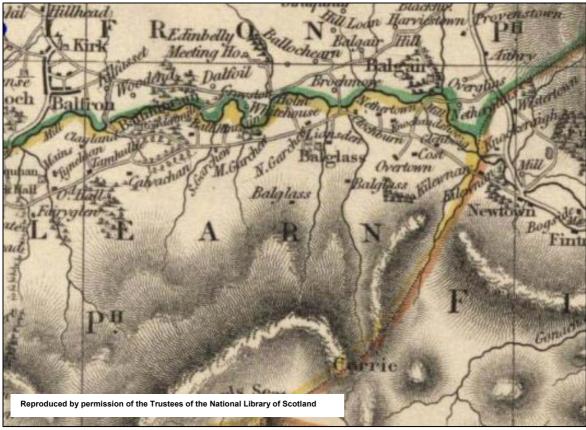


Figure 3a: Extract from John Thompson's Atlas of Scotland, 1832

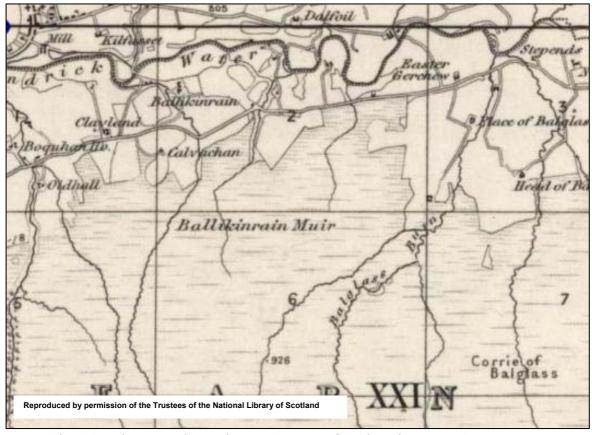


Figure 3b: OS Indexes to the Ordnance Survey of Stirlingshire, 1886

Historic Landuse

- 16. The earliest map coverage available for the proposed plantation is Timothy Pont's Map of 1586-1614 (Figure 1a). This map clearly depicts Balglash (Balglas). Blaeu's Map of 1654 (Figure 1b) depicts Balglas with an associated dwelling surrounded by wooded land. This is likely to be the 'Baron's Place' at Balglas (RCAHMS Canmore NMRS: NS58NE 6, Site 15 and 16). Roy's map (Figure 2a) depicts a place called 'Spittle' on the western periphery of the plantation boundary which disappears from later maps. 'Spittle' is an old word for hospital or place of respite and indicates a previously unknown and seemingly short-lived medical settlement at this location (Robinson 1985, 654).
- 17. Individual structures are defined as early as Roy's 1752-55 map and looking through the map sequence it is clear that little has changed in the past two centuries. Thomson's 1832 (Figure 3a) map lacks the topographical detail of Blaeu's and Roy's earlier examples. There are parish boundary markers located at points marked with a 'Ph' on Thompson's map which may have been marked on the landscape using boundary stones. In Grasson's 1817 map, Balglas (Baron's Place) is depicted and to the south another structure called Balglas is also mapped which is presumably the present-day 'Mount Farm'.

Aerial Photography

- 18. The historic aerial photographs and those provided by the Forestry Commission Scotland's website and RCAHMS collections provide detailed coverage of the proposed planting area. These images were taken on various occasions over a number of years between the 1940s and 1990s. Consultation of these proved valuable in several respects. Firstly it allowed previously recorded sites to be identified and their continuing presence or absence to be noted as appropriate. Secondly, it revealed previously undiscovered sites located within the proposed planting area. Lastly, it yielded an insight into changing land use patterns throughout the late 20th century, which in turn gave an indication of the intensity of land use within the development area. This was useful as it informed on the likelihood of the discovery and long-term survival of upstanding archaeological remains within the area of interest.
- 19. Although several sites had already been located around the proposed planting area using map evidence, close inspection of the aerial photographic evidence did not reveal a significant number of these as visible upstanding remains. In some instances this may have been due to the conditions that were prevalent at the time of the aerial survey, e.g. the location of shadows and low-lying cloud, for example, a quarry noted by Stirling Council Archaeology Service's SMR (Stirling SMR No.:3724.01, Site 34), may be visible, though at this scale that it is hard to be certain of this.
- 20. Throughout the hills of Ballikinrain Muir, land-use appears to have remained largely consistent between the earliest aerial photographic coverage (1940s) and the latest (1990s). The area is currently in use as rough grazing, with the aerial photographic evidence suggesting that only the northern portion from Millstone Wood northwards has been subject to intensive agricultural production. This appears to have been an important factor in the survival and visibility of the upstanding archaeological remains here.
- 21. There is one marked change in field boundaries which is evident from looking at aerial photographs between c.1940s and c.1980s. The present northern boundary between Millstone Wood and Sir Archibald's Plantation seems to have been raised at some point between c.1940-1988 (most recent aerial photograph available). The Forestry Commission Scotland Website aerial photographs depict a small farm complex in the far northeast corner of the plantation scheme prior to this alteration in the field boundaries. The only evidence for structural remains encountered at this location during the survey was a turf bank (Site 29) and a linear arrangement of drystone wall founds and Grouse Butts (Sites 21-28). It is likely that the surviving remains of this complex exist further north within Millstone Wood itself.
- 22. The site at 'Spittle' may be visible on the 1988 aerial photograph as a rectangular clearing within the plantation. It lies beyond the 50m buffer of the plantation boundary

but its location should be considered in future harvesting and planting schemes.

Archaeological Background

- 23. There are no known sites of national importance within the boundary of the plantation scheme however just beyond the boundary limits are several Scheduled Monuments noted for their potential to contribute to the understanding of ancient economy and upland settlement.
- 24. The earliest of these sites is Knockraich Standing Stone 3km away from the site boundary (RCAHMS Canmore NMRS: NS68NW 4, Stirling SMR: 269). There are no further known prehistoric structures within 3km of the plantation catchment area. The relative scarcity of such monuments in the surrounding landscape would suggest a low potential for prehistoric structures to exist within the scope of the plantation.
- 25. The combined evidence from mapping and aerial photography suggests a lack of intensive land use since prehistoric times which would increase the survival of prehistoric remains within the scope of the plantation. Archaeological remains of such fabric and scale would be prominent in an open landscape such as Ballikinrain Muir. However smaller prehistoric structures may be masked by the overgrowth of heather, bracken and other native vegetation. In view of the scarcity of evidence from mapping and aerial photography, it is only with the upstanding or built prehistoric remains that potential for identification exists.
- 26. It can reasonably be inferred that throughout the prehistoric period, the relatively inhospitable heights of the Ballikinrain Hills would have been a place best exploited for hunting game or for rough grazing rather than cultivating crops and founding settlements, and this is reflected by the pattern of monuments in the landscape that we see today.
- 27. One possible Iron Age site is located at Dunbeg Fort (NMRS: NS68NW 7, Stirling SMR: 5681) approximately 4km to the east of Mount Farm. Beyond this there is little other evidence for Iron Age activity in the surrounding landscape. It was therefore unlikely that any Iron Age sites would be found during the walkover survey.
- 28. There are a further two protected sites, of later provenance, within 3km of the site boundary. These are a Dark Age fort at Dunmore (NMRS: NS68NW 10, Stirling SMR: 2575) and a medieval Motte at Woodend (NMRS: NS58NE 1, Stirling SMR: 2239). These are likely to be contemporaneous with the earliest incarnation of the 'Baron's Place' at Site 15 and 16. This suggested a more populated landscape from the early medieval period onwards and there was therefore, high potential for locating medieval remains during the survey.
- 29. The area around Balglas is documented since the mid-1700s as part of the parish of Killearn. The Old Statistical Accounts of Scotland note that at this time Ballikinrain and Balglas were in the ownership of Robert Dunmore of Ballinduloch (Account of 1791-99: Killearn, 1799, 103). The Accounts also note that the Baron's Place at Balglas was of "antiquated construction" and reportedly once well-fortified. Moreover Balglas may have once been a place of shelter for Sir William Wallace of Elerslie. The estates are also noted for their extensive enclosures and plantations at this time (Account of 1791-99: Killearn, 1799, 104).
- 30. The New Statistical Accounts of Scotland note a marked difficulty in the clearance of the land and draining in this locality where farmers would frequently encounter large stones with their attempts at ploughing. (Account of 1834-45: Killearn, 1845, 62). The land improvement took place on the basis of seasonal rotational tillage where only a third of the land yielded crops at any one time, the other two thirds allowed to rest in the interim, a common practice during this period. Although crops were yielded on the lower slopes of the muir this was not the case for the upland areas to the south where arable grazing was the principal activity during this period.
- 31. There is one known post-medieval site located within the plantation boundary: a structure at Mount Wood (Stirling SMR: 3725). However there are several located on the

boundary limits mentioned previously: the 'Baron's Place' at Balglas (NMRS: NS58NE 6, Site 15 and 16, a quarry at Millstone Wood (Stirling SMR No.:3724.01) and a farmstead at Mount (NMRS: NS58NE 6, Stirling SMR No.: 3725, Site 15). These sites suggest localised agricultural activity in action since the medieval period with large areas of unimproved land left for grazing over the south of Ballikinrain Muir.

32. Ballikinrain Castle is located north of Sir Archibald's Plantation (NMRS: NS58NE 17.00). Although a castle, it was built in 1868 for Sir Archibald Orr Ewing, (1847–1893) a Conservative Party politician. Orr Ewing was Member of Parliament for Dunbartonshire from 1868 to 1892, and was created a baronet on 8 March 1886. It is therefore unlikely that any centralised medieval activity would be found near this location.

Site Walkover

- 33. The survey took place from the 13th June to the 18th June 2012. It confirmed the core of the study area as an area of rough grazing (see Figure 4b). There were three elements to the work; firstly, the assessment of sites identified on the available map evidence; secondly, the verification of sites identified previously on field surveys carried out by other organisations, in particular the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS) and Stirling Council/Stirling Council Archaeology Service; and, thirdly, the identification of hitherto unrecorded sites (see the section on Project Works).
- 34. The Site numbers are our own ascription and their full details can be found on our Site Gazetteer (see Figure 6 and Appendix 1). There are a total of 35 recorded sites both in and on the periphery of the plantation scheme.
- 35. There were 4 known sites investigated on the periphery of the plantation scheme: the 'Baron's Place' at Balglas (NMRS: NS58NE 6, Site 15 and 16, see Figure 9b). The other sites included a quarry at Millstone Wood (Stirling SMR No.:3724.01, borrow pit at Site 34), a structure at Balglas (Stirling SMR No.: 530, Site 13) The farmstead at Mount (NMRS: NS58NE 6, Stirling SMR No.: 3725) was not recorded as it is still in use as a working farm and alterations to the proposed fencing were unlikely to affect the upstanding remains therein.
- 36. The survey failed to identify any evidence for the site depicted on Roy's 1752-55 map for 'Spittle' within the plantation boundary. It seems likely that the rectangular site located within Sir Archibald's Plantation and depicted on OS mapping relates to this settlement and it is therefore advisable that this site should be considered within future harvesting and planting schemes for this plantation.
- 37. The survey confirmed the location of all of the remaining 3 known monuments with their condition recorded in full as some of the previous records for these sites were not comprehensive.
- 38. There were 31 new sites recorded within the plantation catchment area and within a 50m buffer of the boundary. These comprise possible medieval terraces at Sites 1-5, an associated turf bank enclosure at Site 6 (see Figure 5b), turf banks at Site 7, 29 and 31, a possible shieling at Site 8, an associated bank at Site 9 (see Figure 7a), a wall along Balglass burn at Site 10, sheepfolds at Site 11 and 35, an agricultural building at Site 12 (see Figure 7b), a pre-war iron fence at Site 13, field clearance at Site 14 (see Figure 8a),17 and 30, a track way at Site 19, a wall at Site 19, Grouse Butts at Sites 21, 23, 25 and 27 and its associated walling at Sites 22, 24, 26 and 28 (see Figure 8b and 9a), a collapsed stone wall at Site 32, and a borrow pit at Site 34.



Figure 4a: View south over Southern portion of Site 20, drystone wall founds with bracken



Figure 4b: Looking towards Balfron, showing rough-grazing south of Sir Archibald's Plantation



Figure 5a: Rough grazing near the southern extents of Balglass burn looking NNW to Mount



Figure 5b: Site 6 Turf Bank Enclosure beside Site 1-5 Terraces from the West

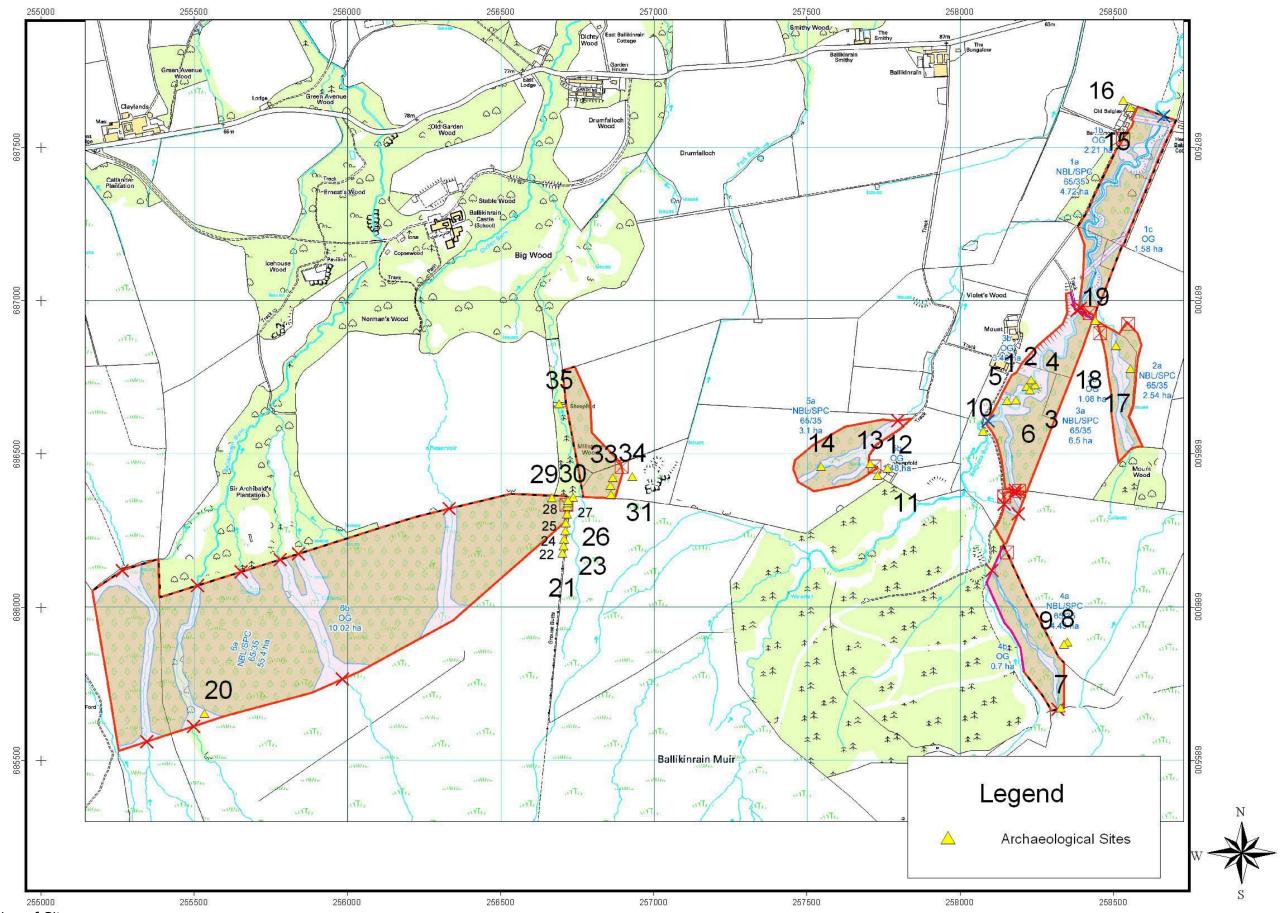


Figure 6: Location of Sites.

Discussion

- 39. The desk-based assessment and walkover survey revealed a total of thirty-five archaeological sites within and immediately surrounding the proposed planting area (Figure 6). The majority of these were examples of post-medieval rural settlement.
- 40. The mapping evidence suggested some attempts had been made at land improvement for agricultural purposes such as the possible terraces at Site 1-5 and field clearance at Sites 14, 17 and 30. There were no examples of visible rig and furrow or attempts at land drainage. This may support the idea that the land was primarily used for grazing purposes due to its rocky nature. All of the features described above survived as upstanding remains.
- 41. The evidence for prehistoric activity from mapping evidence, aerial photography and previous investigations is relatively scarce considering the size of the plantation and its position within the surrounding landscape. It was not surprising then that no possible prehistoric structures were encountered. The field clearance encountered was almost entirely related to nearby post-medieval agricultural structures and was therefore unlikely to be of prehistoric origin. These were the field clearances at Site 14, 17 and 18. They were, however, relatively large in scale and sometimes related to possible damming of waterways (Site 14 especially). They were apparently in use over a long period of time and may be masking older underlying structures. In view of their size and longevity they may warrant further investigation and protection in the long-term.
- 42. The landscape itself may be a reason for the lack of both Iron Age enclosed and unenclosed settlement. The terrain is sometimes very difficult to pass with few areas for protection from inclement weather as well as protection from potentially aggressive neighbours. The land comprising the plantation scheme is also relatively far away from any soils capable of intensive crop-yielding (Macaulay Institute, 1982) as attempts at land improvement have gleaned, this land is not capable of supporting large settlements, especially embryonic Iron Age farming communities.
- 43. The surviving medieval elements are agricultural buildings, concentrated out-with the plantation boundary on the northern portions of the catchment area and continuing in use up to the present day. Although Ballikinrain Muir provides incredible views of all the local high points right up to Loch Lomond it is also very close to several other Medieval defended sites which may have been preferred due to their more topographically propitious positions. Examples of these are a Dark Age fort at Dunmore (NMRS: NS68NW 10, Stirling SMR: 2575) and a medieval Motte at Woodend (NMRS: NS58NE 1, Stirling SMR: 2239).
- 44. The other possible medieval remains may be those sites just east of Mount Farm (Sites 1-6) which may represent agricultural activity relating to the Baron's Place and the enclosures mentioned in the New Statistical accounts of Scotland.
- 45. The abundance of post-medieval activity reflects the general increase in agricultural production at the time. Some 27 of the 35 recorded sites represent possible post-medieval and later agricultural Sites. Moreover, at least 2 of these Sites are known to be later 19th century additions to this farming tradition. Since the medieval period then, the function of much of this landscape has been for the grazing of sheep and cattle. The evidence for permanent settlement is almost completely lacking within the proposed plantation boundary. The only evidence is on the periphery at the 'Baron's Place' at Balglas (NMRS: NS58NE 6, Site 15 and 16), and the farmstead at Mount (NMRS: NS58NE 6, Stirling SMR No.: 3725, Site 15).
- 46. All those monuments identified survived as upstanding remains, in an area which appears never to have been subject to intensive land use, either in recent years or in earlier periods. This would suggest that any substantial archaeological remains which had once been present in the area (e.g. burnt mounds, cairns, hut circles) would still survive as visible features which could be identified in the field (see also Jackson, 1978).



Figure 7a: Possible Shieling and associated Structure at Site 8 and 9 from the east.



Figure 7b: Agricultural Building at Site 12 from the west.

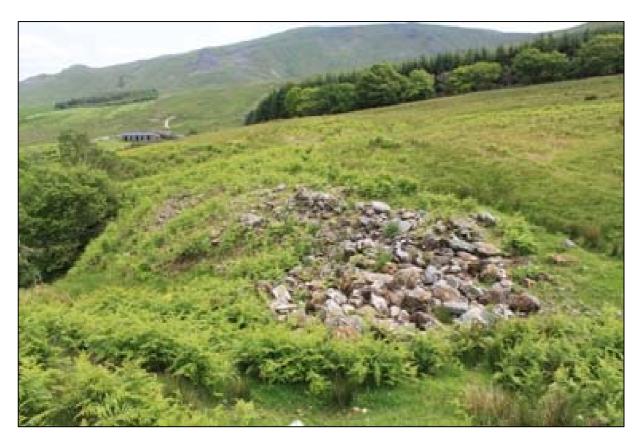


Figure 8a: Field Clearance at Site 14 looking east-north-east to Sites 11-13



Figure 8b: Grouse Butts with associated walls at Sites 21-24 from the NNW



Figure 9a: Grouse Butt at Site 21 and wall (Site 22) beyond from the south.



Figure 9b: The Baron's Place, Balglas at Site 15 and 16 from the west.

Recommendations

47. Presented below are our provisional recommendations for archaeological mitigation in the event of the planting proceeding. Confirmation that these recommendations are acceptable should be confirmed with the appropriate heritage bodies prior to the implementation of any works whose appropriateness may rely on these recommendations.

Value

- 48. All sites located or considered by this survey have been assessed for their Value against the established Forestry Commission Scotland criteria (see FES Archaeological Survey Guidelines).
- 49. None of the monuments identified were judged to be of national importance. Two were of regional importance: Sites 15 and 16, the walls comprising the Baron's Place at old Balglas (NMRS: NS58NE 3, Stirling SMR: 533.01), a known site.

Protection

- 50. Planting design and forestry working practice should meet established industry standards for the integration and maintenance of archaeologically sensitive areas in keeping with FES Archaeological Survey Guidelines (FES Archaeological Survey, 2010).
- 51. Those sites which have been assessed to be of regional value (in the absence of any nationally valuable sites) should be marked out and avoided where possible by any proposed planting scheme. Appropriate guidance has been recommended in Table 1.
- 52. The recommended minimum protection through marking out to ensure preservation of the physical extent of the upstanding archaeological remains is a suggestive 3-5m from the readily visible elements of the site except where a clear topographic feature is present which would warrant the adjustment of this buffer (such as a stream or rocky crag edge/ escarpment etc.).
- 53. This assessment and survey is recommended as a sufficient appraisal of the ground and hence the unmitigated loss of other lesser significant archaeology is an acceptable loss.

Interpretation

54. For some monuments, there is the potential for them to benefit from being placed into larger clearings should there be an amenity need to introduce such clearings into the design of the planting. In particular the possible medieval terracing (Sites 1-6) near Mount Farm constitute an area of concentrated low value monuments which may benefit from voluntary retention within an amenity area.

Table 1: Recommended protection of Archaeological Sites

Site No	Site Name	Value	Mark out and Avoid	Avoid where possible	Stirling SMR	Canmore NMRS	Monument Type
1	Mount Farm	Local	No	Yes	None	None	Terrace
2	Mount Farm	Local	No	Yes	None	None	Terrace
3	Mount Farm	Local	No	Yes	None	None	Terrace
4	Mount Farm	Local	No	Yes	None	None	Terrace
5	Mount Farm	Local	No	Yes	None	None	Terrace
6	Mount Farm	Local	No	Yes	None	None	Embankment/ Enclosure/ Terrace
7	Mount Farm	Local	No	Yes	None	None	Embankment/ Enclosure
8	Mount Wood	Local	No	Yes	None	None	Possible Shieling
9	Mount Wood	Local	No	Yes	None	None	Possible Shieling
10	Mount Farm	Other	No	Yes	None	None	Boundary Wall (out-with boundary)
11	Mount Farm	Local	No	Yes	None	None	Sheepfold
12	Mount Farm	Local	No	Yes	None	None	Building
13	Mount Farm	Other	No	Yes	None	None	Field boundary
14	Mount Farm	Other	No	Yes	None	None	Field Clearance Cairn
15	Balglas, 'Baron's Place'	Regional	Yes	-	533.01	NS58NE 3	Building/Manor
16	Balglas, 'Baron's Place'	Regional	Yes	-	533.01 / 533.02	NS58NE 3	Building/Manor
17	Mount Farm Cairn	Other	No	Yes	None	None	Field Clearance Cairn
18	Mount Farm Plantation	Other	No	Yes	3725	None	Fenced Plantation
19	Mount Farm Road	Local	No	Yes	None	None	Track-way
20	Sir Archibald's Plantation	Other	No	Yes	None	None	Boundary Wall
21	Millstone Wood	Other	No	Yes	None	None	Grouse Butt
22	Millstone Wood	Other	No	Yes	None	None	Wall
23	Millstone Wood	Other	No	Yes	None	None	Grouse Butt
24	Millstone Wood	Other	No	Yes	None	None	Wall
25	Millstone Wood	Other	No	Yes	None	None	Grouse Butt
26	Millstone Wood	Other	No	Yes	None	None	Wall
27	Millstone Wood	Other	No	Yes	None	None	Grouse Butt
28	Millstone Wood	Other	No	Yes	None	None	Wall
29	Millstone Wood	Local	No	Yes	None	None	Turf Embankment
30	Millstone Wood	Other	No	Yes	None	None	Field Clearance Cairn
31	Millstone Wood	Local	No	Yes	None	None	Turf Embankment
32	Millstone Wood	Other	No	No	None	None	Possible stone wall (collapsed)/ foundations
33	Millstone Wood	Other	No	No	None	None	Possible stone wall (or drain (?))
34	Millstone Wood	Other	No	No	3724.01 (Quarry)	None	Borrow Pit
35	Millstone Wood	Local	No	Yes	None	None	Sheepfold

Conclusion

- 55. A programme of archaeological assessment and survey works was required by Scottish Woodlands in respect of a series of defined land parcels on the Ballinkinrain Hills in Stirling (centred NGR: 256932, 686424). This land is largely open ground which is proposed for afforestation. This archaeological survey has been designed to establish a sound baseline on the archaeological resource within the landholding of the Scottish Woodlands and hence inform their management of the ground. The archaeological survey works were carried out during June, 2012.
- 56. Thirty-five potential cultural heritage sites have been identified by the assessment within the study area and within a 50m buffer of the proposed boundary; twenty of which lie within the proposed location for the planting scheme. It is likely that of the thirty-five sites thirty-three are of local or other significance.
- 57. Two sites, both elements of Balglas (Sites 15 & 16), have been assessed to be of regional significance. Given the nature of land use within the development area, these significant sites are still likely to survive in reasonably good condition. Recommendations for the preservation in-situ of these two sites have been made in keeping with best practices. However, these sites currently stand outwith but adjacent to the proposed area for plantation.

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Moll, H	1745	The Shires of Lenox [i.e. Lennox} or Dunbarton
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Macaulay Institute	1982	Soil Survey of Scotland: South West Scotland; Land Capability for Agriculture, Sheet 6, 1:250,000, Macaulay Institute for Soil Research, Aberdeen.
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Appendix 1: Site Details

Presented below are details of the archaeological sites located within, or in immediate proximity to the area proposed for planting (see Figure 6 for location of sites).

Site Number	Site Name	Site Type	Grid Ref. Centre Point	Primary Source	Description	Image No.	FCS Category
1	Mount Farm	Terrace	258217, 686719	F	Curving turf revetment on western banks of Mount Farm. Varies from 0.6m high (maximum) x 0.3m - 0.5m wide x 20m long. Comprises large basalt stones, subrounded and sub-angular at 0.6m x 0.4m x0.3m avg. Heavily truncated by farm tracks and bioturbation, grazing and gorse.	1-3, 6-9	С
2	Mount Farm	Terrace	258232, 686742	F	Curving turf revetment on western banks of Mount Farm. Varies from 0.6m high (north end) truncated at its south end. Retains ground at its north end. Comprises large basalt stones, sub-rounded and sub-angular at 0.6m x 0.4m x0.3m avg. Forms terrace with Site 1, 3, and 4. Is up to 60m long.	1-3, 7-9	С
3	Mount Farm	Terrace	258229, 686709	F	5m long x 0.6m wide x 0.3m high. Turf and stone bank. Heavily truncated. Comprises large basalt stones, sub-rounded and sub-angular at 0.6m x 0.4m x0.3m avg. Retains ground on west side.	1,2,4,5,7,9	С
4	Mount Farm	Terrace	258245, 686724	F	Medieval revetment, one of four walls that create a possible terraced area. The wall face of Site 4 is best preserved at its SW end where stones are visible. As Site 4 curves gently alongside Balglass burn to the east then to the north, the stones are no longer visible but there is a visible embankment of turf. South facing wall face is quite destroyed and overgrown with grasses but appears to be composed of small to large sub-angular and rounded stone 8cm x 10cm - 30cm x 30cm each avg.	1,2,4,5,7,9	С
5	Mount Farm	Terrace	258183, 686677	F	Continuation of revetment on west banks of Mount Farm / Balglass burn. See Sites 1-4. Eroded stones not as exposed, 0.7m high curving north to south. 50m long in total.	1,2,4,5,7,9	С
6	Mount Farm	Embankment/ Enclosure/ Terrace	258154, 686674	F	Possible artificial terrace retained by mixed stone bank, 1m high x 80m long x 6m-12m wide. Southern edge contains turf bank enclosure at Site 6 (25m x 25x x 5m wide)	13-17	С
7	Mount Farm	Embankment/ Enclosure	258329, 685671	F	Turf bank at southern most end of Mount Farm plantation. Runs up to 80m long along boundary and beyond to the east from southernmost tree-line to the west. 4m wide x 0.5m high. Slope runs south to north towards Mount Farm. Maximum length 100m as it runs around hill.	27,28,29	С
8	Mount Wood	Possible Shieling	258352, 685886	F	Sub rounded square mound of turf and rare stone. Truncated by mole burrows. 8.5m long east to west by 5m wide north to south x 0.25m high. Has truncated ancillary structure 2.5m to the west. Grass covered on verge of steep slope that	31.32,36	С

Site Number	Site Name	Site Type	Grid Ref. Centre Point	Primary Source	Description	Image No.	FCS Category
					runs north.		
9	Mount Wood	Possible Shieling	258341, 685880	F	10-12m long by 5-6m wide x 0.3m high turf mound with slight hollow in the centre. Truncated by bioturbation and gorse.	33,34,36	С
10	Mount Farm	Boundary Wall	258076, 686573	F	1.6m wide x 0.3m high x 20m long. Drystone wall with sub rounded and angular basalt stone located on bank of Balglass burn between water and farm track.	42	U
11	Mount Farm	Sheepfold	257764, 686429	F	Drystone walling comprising animal enclosure to the south of Site 12 building. 25m wide x 50m long box and 1.2m high at its best surviving section. Overgrown with thistles. Wall is denuded in places and out of use.	44,45,47,51	С
12	Mount Farm	Stables	257764, 686453	F	Red sandstone and red ashlar sandstone building. 25m x 5m x 0.3m stone blocks (avg.). Full extent is 50m long x 25m wide with 5 lintel widows, empty. Metal sheet roofing replaces an earlier construction. Possible stables.	45,50	С
13	Mount Farm	Fencing (Iron)	257707, 686468	F	Iron fencing with markings: G**vin & Co.; Glasgow and London. Has sections with ad-hoc repairs. It is rusted and warped, 5 rungs high (4 flat and one (top) round), Runs several hundred metres along track. Probably pre-war (WW2).	43,49-52	U
14	Mount Farm	Field Clearance Cairn	257547, 686460	F	25m wide gully filled with mixed stone running down steep slope/ burn. Phased dumps of stone creating a very large area of clear and at the top of a burn. Possibly a ford denuded wall, or damn which had been subsequently dumped over with more stone. Also has modern plastics and metal from recent clearance. Full extents are 50m by 20m by 25m. Covered in bracken.	57-62	U
15	Balglas, 'Baron's Place'	House/Castle	258556, 687630	N	Red sand stone, 25m x 25m in plan, visible extents x 0.6m-2m high. Lies under modern garden at Balglas. Acts as a revetment for interior soils. Also has walling on the interior with a modern flag-pole erected at its central point. Severely truncated by trees growing along its edge and is badly eroded along its north face. This section may be a later 18th century construction and masks the earlier structures.	76-88,90	В
16	Balglas, 'Baron's Place'	House/Castle (Ancillary Revetment Wall)	258534, 687652	N	Wall foundations running east to west from northwest corner of Site 15. 15m long x 0.4m wide x 0.25m high (maximum) with possible lime mortar bonding. Possibly another 18th century addition.	77-78,80	В
17	Mount Farm Cairn	Field Clearance Cairn	258557, 686777	F	Two groups of stone piles or cairns 2m apart. Mixed stone and rubble filling a gully or tributary of Mount Wood river. 15m long x 5m wide (down slope) x 0.5m high. Each roughly 5-6m diameter. RECORDED AS ONE.	91-93,98	U
18	Mount Farm Plantation	Fenced Plantation	258509, 686853	F	Disused fenced plantation on steep eastern slopes of gully located north-north-west from Mount Wood. Measures 10m x 10m x 2.5m maximum height. Composed of	97,99-101	U

Site Number	Site Name	Site Type	Grid Ref. Centre Point	Primary Source	Description	lmage No.	FCS Category
					wooden posts and chicken wire and one door entrance on the west facing elevation. Location of (018) is quite distant from any farm buildings or other agricultural structures, therefore its function is uncertain. Contains no purposely grown vegetation and does contain some modern dumped rubbish. Appears abandoned and disused.		
19	Mount Farm Road	Track-way	258442, 686935	F	Runs NE of Mount Farm in area just east of Balglass burn. A 20m section of its eastern side was recorded by GPS. 6-8 m wide stone construction. Not within plantation boundary scheme.	102-103	С
20	Sir Archibald's Plantation	Boundary Wall	255534, 685653	F	Collapsed / robbed out wall located south of Lord Archibald's Plantation. Orientated North-South and is approximately 100m long x 0.6m wide x 0.2m high. Some stones are very large suggesting local provenance or use of natural in situ stone. Visible extents recorded but it disappears to the north where dense bracken and erosion has made the wall difficult to discern. Follows old OS boundary in this locale.	119-122	U
21	Millstone Wood	Grouse Butt	256703, 686176	F	One of 5 visible near plantation boundary. Linear arrangement runs NNE-SSW with interlinking boundary walls at approx. 30m intervals. Forms an 'H' shape in plan view at $2.2m \times 0.3m$ wide $\times 0.7m$ high. Comprises drystone walling with small- large sub rounded stones.	145-152	U
22	Millstone Wood	Wall	256706, 686200	F	Drystone wall between Site 21 and 23. Small to large sub rounded stones at approx. 30m long x 0.4m wide x 0.25m high.	151-156	U
23	Millstone Wood	Grouse Butt	256708, 686222	F	One of 5 visible near plantation boundary. Linear arrangement runs NNE-SSW with interlinking boundary walls at approx. 30m intervals. Forms an 'H' shape in plan view at 2.2m x 0.5-0.7m wide x 0.3-0.7m high. Comprises drystone walling with small- large sub rounded stones.	157-162,167	U
24	Millstone Wood	Wall	256711, 686248	F	Drystone wall between Site 21 and 23. Small to large sub rounded stones at approx. 30m long x 0.4m wide x 0.25m high.	163	U
25	Millstone Wood	Grouse Butt	256713, 686276	F	One of 5 visible near plantation boundary. Linear arrangement runs NNE-SSW with interlinking boundary walls at approx. 30m intervals. Forms an 'H' shape in plan view at 2.2m x 0.3m wide x 0.7m high. Comprises drystone walling with small- large sub rounded stones. Slightly less well preserved that Site 23.	164-166, 168	U
26	Millstone Wood	Wall	256717, 686304	F	Drystone wall between Site 21 and 23. Small to large sub rounded stones at approx. 30m long x 0.7m wide x 0.4m high.	168,171	U
27	Millstone Wood	Grouse Butt	256719, 686329	F	One of 5 visible near plantation boundary. Linear arrangement runs NNE-SSW with interlinking boundary walls at approx. 30m intervals. Forms an 'Only central walling survives at this Grouse Butt at 2.2m x 0.3m wide x 0.7m high. Comprises drystone	169-170, 172- 174	U

Site Number	Site Name	Site Type	Grid Ref. Centre Point	Primary Source	Description	Image No.	FCS Category
					walling with small- large sub rounded stones.		
28	Millstone Wood	Wall	256721, 686348	F	Drystone wall between Site 21 and 23. Small to large sub rounded stones at approx. 30m long x 0.7m wide x 0.7m high.	173-174	U
29	Millstone Wood	Turf Embankment	256669, 686358	F	100m long x 1.5m wide x 0.25m high orientated east to west. Comprises turf bank near Site 28.	177-180	С
30	Millstone Wood	Field Clearance Cairn	256737, 686358	F	Along field boundary orientated NE-SW. 10m long x 5m wide x 0.2m high. Small to medium sub rounded stones. Overgrown.	181-182	U
31	Millstone Wood	Turf Embankment	256861, 686368	F	100m long x 1.5m wide x 0.25m high orientated east to west. Comprises turf bank near Site 28.	177-180	С
32	Millstone Wood	Possible stone wall foundations	256860, 686398	F	Composed of several large sub angular stones, spread over an area of 11mx 10m x 0.4m high, no discernable relationship.	189-190	U
33	Millstone Wood	Possible stone wall or drain (?)	256866, 686422	F	30m long x 1m wide x 0.2m high drystone, basalt, either rocks from construction of drains or walling.	191-192	U
34	Millstone Wood	Borrow Pit	256931, 686426	F	7m x 15m in plan view x 0.5m high with central hollow. Denotes western extent of Quarry.	193-194	U
35	Millstone Wood	Sheepfold	256692, 686664	F	Drystone walling comprising animal enclosure to the NNW of Site 34 borrow pit. Ad hoc repairs of sheet metal and wood suggest still in use. Within Millstone Wood. 70m x 15m x 1.5m high.	201-209	С

Appendix 2: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	Stirling
PROJECT TITLE/SITE NAME:	Mount Farm Survey
PROJECT CODE:	12037
PARISH:	Killearn
NAME OF CONTRIBUTOR:	Katie Sludden
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Assessment and Survey
NMRS NO(S):	NS58NE 3, NS58NE 6
SITE/MONUMENT TYPE(S):	Wall, Terrace, Shieling, Sheepfold, Boundary, Clearance Cairn, Structure, Building, Field Clearance, Enclosure, farmstead, Balglas, Grouse Butt, Bank, Turf Bank, Borrow Pit.
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 56932, 86424 (centred on)
START DATE (this season)	13 th June 2012
END DATE (this season)	18 th June 2012
PREVIOUS WORK (incl. DES ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A programme of archaeological assessment and survey works was carried out in respect of a series of defined land parcels spread to the south and south-east of Ballinkrain Castle, encompassing a portion of the Balglass burn on the northern slopes of Ballikinrain Muir. This land is open ground which is proposed for afforestation.
	This archaeological survey has been designed to establish a sound baseline on the archaeological resource within the landholding and hence inform the management of the ground.
	Thirty-five potential cultural heritage sites have been identified by the assessment within the study area and within a 50m buffer of the proposed boundary; twenty of which lie within the proposed location for the planting scheme. Recommendations for the preservation in-situ have been made in keeping with best practice.
PROPOSED FUTURE WORK:	None
CAPTION(S) FOR ILLUSTRS:	N/a
SPONSOR OR FUNDING BODY:	Scottish Woodlands

ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
EMAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Reports submitted to the Stirling Council Archaeology Service and archive to RCAHMS Collections

Contact Details

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