Acha-bheinn
Phase 1 habitat survey

May 2017

A report for Scottish Woodlands Ltd.

Argyll Woodlanders
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Acha-bheinn Phase 1 habitat survey
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Introduction

This is the report of a Phase 1 habitat survey of 141 ha. of land at Acha-bheinn, Kilbride, Argyll. The report has been produced by Bob Black, Argyll Woodlanders for Scottish Woodlands Ltd. Field work was completed in April, 2017.

The aim of the survey is to provide base-line information for a proposed woodland planting scheme. Habitats have been mapped according to Phase 1 habitat methodology with additional information about NVC communities where relevant. Features of interest are identified on the report map as target notes. Archaeological features have not been identified or mapped.

Physical features

Acha-bheinn is a roughly rectangular upland area, ranging from c. 120 m to 220 m above sea level with south-west to north-east trending ridges and rock outcrops. The direction of these ridges and rock outcrops reflects the lie of the underlying rocks which consist of metamorphosed limestone, basalt and quartzite, part of the Tayvallich Volcanic Formation. Thin peats and peaty gleys are widespread but more mineral-rich brown earths are present, especially associated with the limestone ridges, Small watercourses are present but there is no dominant direction of flow.

The area is currently grazed by sheep and cattle. Red deer are present with a herd of at least 50 individuals seen during the field survey.

Conservation features

The survey area has no conservation designation. Several archaeological remains were observed, all of which are shown on the OS 1:10,000 map and/or recorded on the RCAHMS website.

Fragments of rich ash/elm woodland survive on steep south-east facing slopes and crags. Their field-layer and lower plant species were not investigated. Sedge-rich flushes occur (TN1 & 10). Field work took place too early in the season to identify the dominant species of sedge but it is possibly *Carex acutiformis*, a rare sedge in Scotland but "locally plentiful in the lower River Add drainage area" (*An Annotated Checklist of The Flowering Plants and Ferns of Main Argyll*, Rothero & Thompson, 1994).

Habitats and vegetation communities

The habitat map shows the distribution of habitats, cross-referenced where appropriate to the National Vegetation Community (NVC). Below is an explanation of the habitats shown on the map. Details of the Phase 1 habitat survey methodology are available at http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
Habitat definitions and their recommended colour-coding for mapping described in the Phase 1 handbook have been adapted to fit the habitats present in the survey area.

Wet heath (c. 50.7 ha.)
Wet heath is a major habitat in this survey area, corresponding to the NVC M15 *Trichophorum cespitosum-Erica tetralix* wet heath. It takes two different forms though both have a similar assemblage of plant species. The M15b 'typical' sub-community community is present on thin peats and peaty mineral soils and is found in association with rock outcrops or patches of acid grassland. Species include heather, *Molinia*, cross-leaved heath, blueberry, deer grass, and a scattering of harestail cotton-grass and *Sphagnum capillifolium*.

On gentle slopes, there is a visually distinctive wet heath characterised by well-developed tussocks. Within the tussocks are a similar range of species to the 'typical' community but the blaeberry is more frequent and mosses are conspicuous, especially *Pleurozium schreberei*. Occasional probings with a peat probe indicated that this habitat is growing on peats of varying depth but mostly < 50cm. in depth. Larger areas where peat is >50cm. in depth have been mapped as mire (M17) but there are likely to be small pockets of unmapped peats >50cm. within the mapped wet heath. There is a convergence of plant assemblages between the wet heath and the mires though the latter are characterised by a greater abundance of *Sphagna* and cotton-grass.

Acid grassland and bracken mosaic (c. 31.0 ha.)
This habitat mosaic occurs on mineral soils and peaty gleys. The grassland is closely grazed and representative of U4 *Festuca ovina-Agrostis capillaris-Galium saxatile* grassland. Apart from the grasses, typical species include tormentil and mosses such as *Rhytidiadelphus loreus* and *Hylocomium splendens.*

The habitat as mapped is primarily acid grassland but with variable amounts of bracken, ranging from a scattering of bracken fronds to co-dominant stands. Beneath the bracken is an understorey of grasses.

Wet heath/acid grassland mosaic (c. 15.4 ha)
This habitat mosaic occurs mostly on peaty gleys or thin peats. Small rock outcrops are occasionally associated with the heath, especially on the north-western side of the survey area.

B**racken** (c. 2.0 ha.)
Only the largest area of bracken (U20 *Pteridium aquilum-Galium saxatile* community) has been mapped. As in the acid grassland/bracken mosaic, the bracken has an understorey of grasses.

Marshy grassland (c. 18.0 ha.)
This is a composite habitat containing rush pasture (M23 *Juncus acutiflorus* rush pasture, rush-dominated mire (M6 *Carex echinata-Sphagnum fallax* mire) and *Molinia* grassland (M25 *Molinia caerulea-Potentilla erecta* mire). The M23 rush pasture occurs mainly along the eastern and southern sides of the survey area, often marking out the wetter ground with acid grassland occupying the better drained slopes. Small areas of rush dominant mire, often with *Sphagna* beneath, flank small watercourses on the western side. *Molinia* is particularly abundant in the marshy grassland at the south-western corner of the area.

Mire (c. 21.8 ha.)
This is a habitat with similar species to those found in the wet heath. It is represented by the M17 *Trichophorum cespitosum-Eriophorum vaginatum* blanket mire and is mostly found in

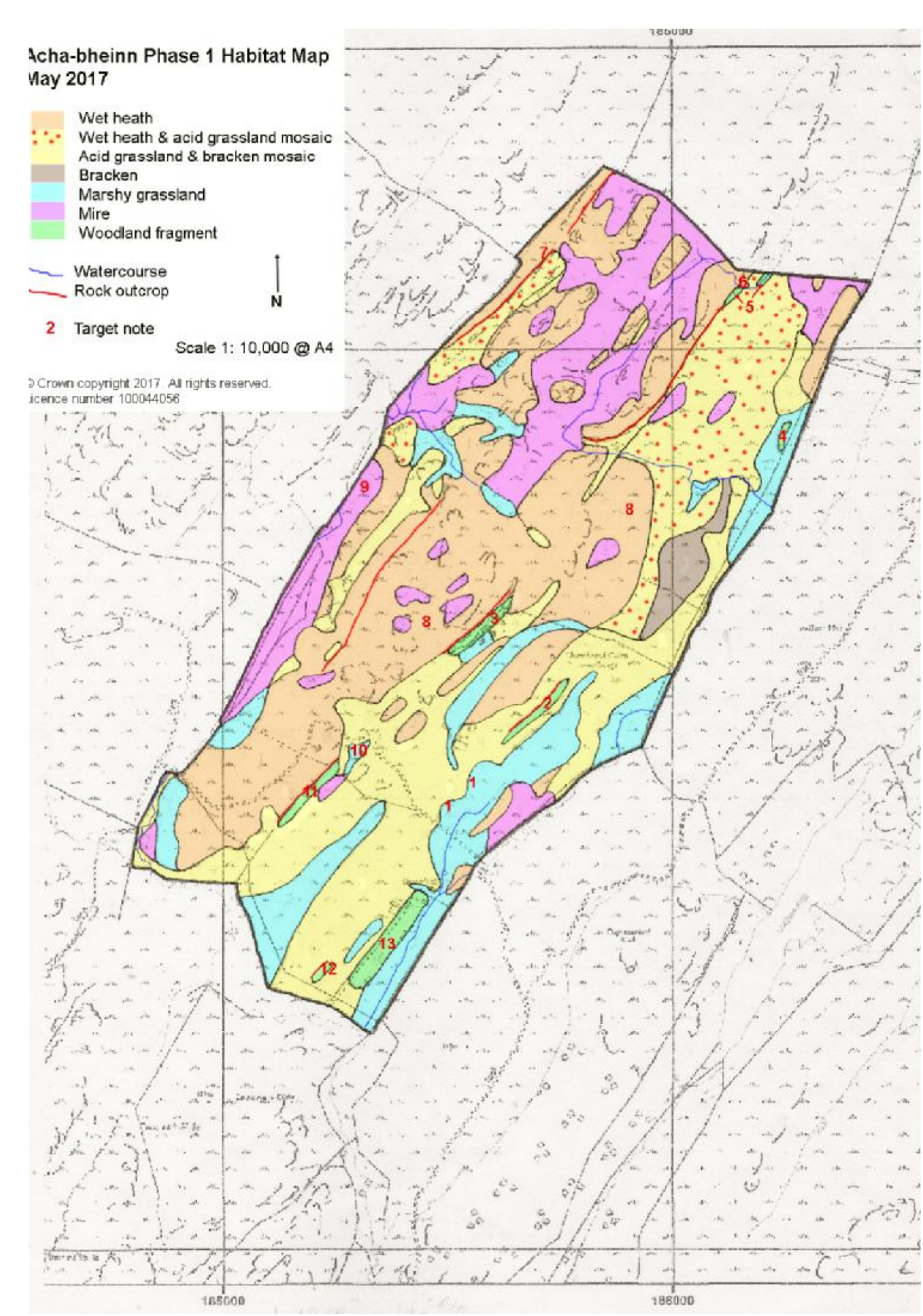
hollows and poorly drained ground where peat is approaching or exceeding 50cm in depth. *Molinia*- dominant habitat has been mapped as mire where it occurs on peat > 50cm along the western edge of the survey area.

Woodland fragments (c. 2.1 Ha)
The mapped woodland fragments include three distinct woodland types. The first is patches of established willow regeneration (TN 4 &5). The second is the remains of a small plantation, comprising post-mature trees and a grassy understorey (TN 13). The third is species-rich mature or post-mature native woodland on crags, scree and steep, grassy slopes (TN 2, 3, 11 & 12).

Target notes

See the habitat map for the locations of target notes.

1. Tall sedge, just emerging, possibly *Carex acutiformis.*
2. Moribund ash, hazel and oak wood on steep slope and rock outcrop.
3. Wooded scree slope with rock outcrops and patches of grassland. Ash, hazel, holly and wych elm. Dog's mercury and scaly male fern between boulders.
4. Willow regeneration.
5. Willow regeneration.
6. Incised burn, dry heath banks. Rowan.
7. Outcrop with dry heath vegetation,
8. Tussocky wet heath with blaeberry, heather and *Molinia*. Peat on gentle slopes, mostly 30-50cm. Unmapped pockets of wetter ground with *Sphagna* .
9. Mire with abundant *Molinia* and deep peat
10. Sedge flush.
11. Wooded crag with ash, hazel, rowan, elm and oak.
12. Outcrop with ash, hazel and rowan.
13. Post-mature plantation with beech, sycamore, larch and ash.


Acha-bheinn Phase 1 Habitat Map
May 2017
Wet heath
Wet heath & acid grassland mosaic
Acid grassland & bracken mosaic
Bracken
Marshy grassland
Mire
Woodland fragment
Watercourse
Rock outcrop
2 Target note
N
Scale 1: 10,000 @ A4
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