SCOTTISH NATURAL HERITAGE

SITE MANAGEMENT STATEMENT

CALDERWOOD SSSI

Site ref: 294

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Purpose

This is a public statement prepared by SNH for owners and occupiers of the SSSI. It outlines the reasons it is designated as an SSSI and provides guidance on how its special natural features should be conserved or enhanced. This Statement does not affect or form part of the statutory notification and does not remove the need to apply for consent for operations requiring consent.

We welcome your views on this statement.

Description of the site

Calderwood is situated on the south-east edge of Livingston immediately south of the village of Mid Calder. Within the site there are two long, narrow strips of valley woodland, one on the Murieston Water and the other on the Linhouse Water. These two rivers border a raised central plateau which is mainly covered by birch woodland, scattered planted trees and unimproved neutral grassland. It narrows at its northern end as the two rivers merge before joining the River Almond. The southern section of the Linhouse Water is more open and a fen has developed on the flood plain.

The two valley woodlands are mixed, deciduous woodland dominated by ash and wych elm, but also containing oak, hazel, rowan and gean. Mature beech and some sycamore are also present; the beech are regenerating in places. The ground flora of these woodlands contains many plants which are characteristic of old woodland.

Towards the west of the plateau area there is also a birch wood consisting of mostly even-aged trees, but with the occasional scattered older tree and some patches of regeneration. Mixed with the birch there are occasional rowans and a few oak and beech. There are scattered small birch trees around the edge of the woodland, extending into the grassland area on the plateau, and these indicate that the birch woodland is continuing to expand. The ground flora beneath the birch comprises a mixture of ferns, grasses and bracken.

Calderwood is noted in the Nature Conservancy Council Inventory of Ancient and Semi Natural Woodlands as being, in the main, ancient woodland, with a small part of the Murieston Water woodland to the south noted as long established woodland of semi-natural origin. Calderwood is the largest recorded ancient woodland site in West Lothian and long established, deciduous woodland is a restricted and declining habitat in West Lothian.

The site also contains two ponds which are breeding sites for great crested newts. The great crested newt and its habitat are protected by law (listed on Annexes II and IV of

the EC Habitats Directive and Appendix II and is protected under Schedule 2 of the Conservation (Natural Habitats, etc.) Regulations, 1994, (Regulation 38) and Schedule 5 of the WCA 1981) because the species has declined significantly over recent decades, largely due to habitat loss. In order to undertake actions affecting great crested newts which would normally be prohibited by law (such as capturing newts, or management of their breeding ponds), a license is required from Scottish Executive or SNH.

Upland oak woodland	Valley fen
	

Natural features of Calderwood SSSI
Name of natural feature
Upland oak woodland
Valley fen

Current condition of the natural features

Upland oak woodland (results of monitoring in July 2002)
The total area of the woodland was maintained as defined by the National Vegetation Classification Survey (2002).) The woodland shows good age structure and natural processes; natural regeneration is occurring at levels which will maintain the woodland. Although some non-native trees are present (beech and sycamore) these are considered to be within acceptable levels. The conclusion was that the woodland was in favourable condition.

Valley fen (results of monitoring in September 2004)
The total area of the fen was maintained, however there is some concern that areas of meadowsweet and wild angelica are being replaced by yellow flag iris. Nevertheless there are no signs of burning, new drainage channels or invasive species. The conclusion was the fen was in unfavourable condition due to the change in vegetation types.

Past and present management

Many of the trees in the narrow woodland strips are multi-stemmed, indicating that they have regrown from coppiced stumps. However, this cutting may have been on an irregular basis. There are accounts from the 16th century of timber from Calderwood being used in for shipbuilding in Newhaven. In the 19th century records suggest that the wood was "originally a copsewood, the outskirts of which have been filled up with forest and other trees". The first six-inch Ordnance Survey map of around the 1850's shows what appears to be a scrub woodland with standard trees and occasional scattered conifer symbols. There has been horse chestnut and beech planting over part of the plateau and this area was probably formerly parkland.

The site is presently owned by West Lothian Council and forms part of Almondell and Calderwood Country Park. It is managed for quiet recreation and has a number of way-marked trails.

Recently, woodland management by West Lothian Council has sought to reduce the non-native species, removing the sycamore and reducing the numbers of beech. Some local concerns have been expressed over the felling of these trees. Some spraying of bracken has also taken place to allow oak and birch to regenerate.

No active management is taking place on the fen which may be causing the spread of the flag-iris.

In 2005 a third pond was created to provide an additional breeding site for great crested newts.

Objectives for Management (and key factors influencing the condition of natural features)

We wish to work with the owner to protect the site and to maintain and where necessary enhance its features of special interest. SNH aims to carry out site survey, monitoring and research as appropriate to increase our knowledge and understanding of the site and its natural features.

1. To maintain the extent of woodland and fen habitats as defined in the National Vegetation Classification Survey (2002).

2. To ensure that the woodlands have a good age-structure and that natural regeneration of native species is occurring where this is possible. The oak will probably not regenerate under its own canopy therefore we would expect to only see regeneration in gap sites. If natural processes do not produce gaps to create a range of age structures, selective felling may be required.

3. Remove all the beech by 2020, with the exception of a few trees which will be retained as prominent features in the landscape. Remove all the naturally regenerating beech to ensure that the species structure of the woodland does not become dominated by beech and the native ground flora is not shaded out.

4. Remove all sycamore to prevent seedling establishment in the future.

5. Create and maintain significant quantities (20 – 30 cubic metres per hectare) of deadwood, both standing and fallen. Where this does not occur selective cutting and/or ringbarking may be required to achieve this target.

6. Reduce areas of bracken on the plateau area by 2010 to enable natural regeneration of trees.

7. Investigate the cause of the spread of the yellow flag iris within the fen and implement any management to reduce its spread.

8. Manage the ponds and surrounding habitat to protect the great crested newt population, through the removal of over hanging vegetation on the south side and the limited clearing of the ponds where required, preferably August to October to avoid the breeding season.