Scottish Natural Heritage
All of nature for all of Scotland

DRUMMOND LOCHS
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 539

Battleby,
Redgorton,
Perth
PH1 3EW

Tel: 01738 444177
Email:
Tayside_clackmannanshire
@snh.gov.uk

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

Drummond Lochs Site of Special Scientific Interest (SSSI) lies two kilometres north-west of Muthill, south of Crieff, Perthshire. The site consists of the Pond of Drummond, Bennybeg Pond and Drummond Wood. Both Pond of Drummond and Bennybeg Pond, which lies 0.25km downstream, are at least in part artificially dammed, having been constructed prior to 1863, at their eastern ends at the outflows. The Bowat Burn runs through the Drummond Wood and drains into the Pond of Drummond.

The site was first notified on account of its importance as a roost for internationally important numbers of wintering greylag geese. The SSSI boundary was later extended westwards to include the lowland mixed broadleaved woodland (mostly oak with some ash and alder) and the rich lichen assemblage of Drummond Wood and the parkland south of Pond of Drummond.

The site supports internationally important numbers of wintering greylag geese associated with the Pond of Drummond and Bennybeg Pond. Both water bodies are within the SSSI and form part of the South Tayside Goose Roosts Special Protection Area (SPA). Although not part of the notified features, these two lochs also support important assemblages of breeding and wintering birds typical of open water and associated wetlands. These include a variety of ducks such as wigeon, gadwall, shoveler and ruddy duck as well as other wildfowl such as curlew, snipe and redshank.

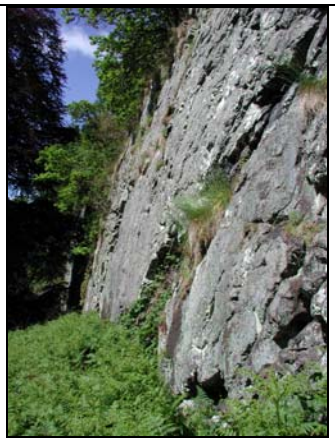
Drummond Wood located to the west of the loch is of particular interest as it consists mainly of pedunculate oak *Quercus robur*, which is very unusual in Tayside where most oakwoods are dominated by sessile oak *Quercus petraea*. This mainly even-aged oak woodland is located largely in the drier areas of the site. Few other trees are present apart from birch species and the occasional exotics including sycamore, horse chestnut, sweet chestnut and beech and several conifer species. There is typically no understory and the ground flora is largely

dominated by grassy species such as Yorkshire fog *Holcus lanatus* and creeping soft grass *Holcus mollis.* Common bluebell *Hyacinthoides non-scripta*, and common wood-sorrel *Oxalis acetosella*, bracken *Pteridium aquilinum* and greater stitchwort Stellaria *holostea* are also locally prominent.

By contrast, the wetter areas around the fringes of the loch, is dominated by an ash-alder (W7) woodland. Ash is locally dominant with birch and alder both locally abundant and oak occasional. Hazel, willow and rowan are occasional in the understory. The varied ground flora includes bugle *Ajuga reptans*, lesser pond sedge *Carex acutiformis*, woodland horsetail *Equisetum sylvaticum*, meadowsweet *Filipendula ulmaria*, yellow pimpernel *Lysimachia nemorum* and reed canary grass *Phalaris arundinacea*. This type of woodland has a more open canopy and several glades.

Drummond Wood and the parkland to the south of Drummond Pond is also recognised for its rich and varied lichen assemblage. This has come about largely as a result of the fact that the broadleaved woodland is situated in the valley of the Bowat Burn which is enclosed between two parallel east-west trending igneous quartz-dolerite dykes north and south of the site. These topographical characteristics result in a high level of humidity and this, coupled with the ancient semi-natural nature of the woodland, results in the woodland being of national importance for its lichen flora. For example the woodland supports an outstandingly high number of epiphytic species, with many characteristic of old woodlands including *Lobarion*[1] species, as well as a large number of national rarities. The volcanic dyke itself also provides many niches for lichens including sunlit and shaded vertical faces, seepage tracks, underhangs and soil or moss ledges.

The Pond of Drummond also forms part of the South Tayside Goose Roosts Ramsar and SPA. Whilst Drummond Wood forms part of Upper Strathearn Oakwoods Special Area of Conservation (SAC). The whole SSSI falls into Drummond Castle Designed Landscape which also includes the castle, its gardens, and the adjacent farmland.

Open ash-alder woodland, which supports the best and most luxuriant examples of the *Lobarion* community within the wood.	Basalt Dyke, Craig More. The south facing vertical face supports the nationally scarce lichen *Caloplaca arenaria*, plus the local *Leprocaulon microscopicum*.
	

[1] The *Lobarion* lichen community consists of epiphytic lichen species (i.e. which grow upon another plant in this case oak and ash) commonly known as oak lungs which are sensitive to air pollution and is also negatively affected by habitat loss and changes in forestry practices.

Current condition of the natural features

Drummond Lochs SSSI has been surveyed as part of SNH's 6-year programme of Site Condition Monitoring.

At the time of condition monitoring in 2008 the wintering greylag goose population recorded a status of unfavourable condition. This was chiefly due to a significant decline in their population numbers. The reduction in numbers of greylag geese has been noted at Drummond Lochs (and indeed else where in the region) over the last 20 years. However, it is not believed to be the result of any site management activity but rather a decline in the southern parts of their wintering range and a shift northward in their wintering distribution. The decline in wintering populations may also be related to the fact that areas like Aberdeenshire and Tayside are traditionally associated with heavy shooting pressures.

The lichen assemblage was last surveyed in 2004 and this feature was recorded as being in unfavourable condition. Although the lichen assemblage itself was observed as being healthy the main reason the site failed was due to the presence of rhododendron and non-native tree regeneration (sycamore) and the potential negative impact these have upon the lichen assemblage due to shading. However a subsequent visit by lichenologists in 2007 recommended that the sycamore (which was only regenerating from cut stumps) be retained as its bark provides a useful substitute for the missing elm. The other recommendations to remove rhododendron and thickets of bird cherry have since been acted upon and the feature is now in favourable condition.

The woodland was last surveyed in 2009 and it was concluded that this feature was in favourable condition.

A summary of the current condition of the natural features is given below:

Natural features of Drummond Lochs SSSI	**Feature condition (date monitored)**	**Other relevant designations**
Greylag goose (*Anser anser*), non-breeding	Unfavourable no change (March 2008)	SPA, Ramsar
Lichen assemblage	Favourable recovered[2] (previously Unfavourable no change February 2004)	-
Lowland mixed broadleaved woodland[3]	Favourable maintained (May 2009)	-

Features of overlapping Natura sites that are not notified as SSSI natural features	**Feature condition (date monitored)**	**SPA or SAC**
Pink-footed goose (*Anser brachyrhynchus*), non-breeding	Favourable maintained (March 2002)	SPA, Ramsar
Waterfowl assemblage, non-breeding	Favourable maintained (March 2002)	SPA
Western acidic oak woodland	Unfavourable no change (May 2009)	SAC

[2] Management undertaken to address issues identified in SCM
[3] This feature was previously described as 'upland oak woodland'

Past and present management

Both the oak and ash-alder woodland areas have a mainly grassy ground flora, a result probably, of a long history of grazing on the site. To the south of the loch there is an extensive area of parkland which has been grazed by cattle and sheep for centuries.

Drummond Loch is stocked with brown trout by Crieff Angling Club to whom the fishing rights are let, but they have no management rights over the natural features of the site.

There is an all abilities access path and nature trail around Bennybeg Pond. This, and easy access from the road, contributes significantly to the public amenity interest of the Bennybeg Smiddy area. The sensitivities of the site to public access need to be, and have been, minimised particularly during the wintering periods and where possible during the breeding season.

Drummond Loch and Bennybeg Pond are at least in part artificially dammed at their eastern ends at their outflows. In the past both dams have been repaired. The retaining dam of Drummond Pond was repaired in February 1994, however, chemicals from the materials used leached into the burn that flows into Bennybeg Pond. Ferric oxide infiltration is known to have occurred but the pollution effects in Bennybeg Pond are as yet unknown. It is thought that some nutrient-enrichment (eutrophication) of the two lochs has occurred which may be related to their use by geese. Straw bales have been used in the past to try to reduce algal blooms.

A Woodland Grant Scheme (WGS) approved by the Forestry Commission involved the selective felling in January 1994 under a shelterwood system of a 4 ha plot, leaving c20 oak standards/hectare. It has since been deer fenced and some natural regeneration has taken place.

Under the LIFE project the coupe was planted using stock of local provenance. Other recent work carried out included removal of non-native conifers, bird cherry, sycamore, and beech (mature and regenerating), bracken treatment in selected areas and control of red and roe deer. The old deer dyke was also restored as part of the LIFE project.

A 21 year Management Agreement due to expire in 2014 includes the water area of Drummond Loch, its dam, and a small area (1.2 ha) of mixed broadleaf wood adjacent to the south-east corner of the loch. This included funding towards dam repairs with the aim of maintaining the lochs' water levels and surrounding riparian habitat as a roost for the internationally important greylag geese that visit the site.

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

The long term goal for Drummond Lochs SSSI is to ensure that the site remains suitable for the wintering bird populations, and to maintain the ancient woodland and the lichen species which it supports.

1. **To maintain conditions suitable for the roosting of internationally important greylag geese numbers as well as other breeding and wintering wildfowl populations by:**
    - ensuring the continued provision of the open expanse of standing water at Drummond Loch and Bennybeg Pond. The maintenance of the Drummond Loch and Bennybeg Pond dams is essential to meet this objective;
    - ensuring that disturbance on the two lochs is minimised particularly during the wintering periods and where possible during the breeding season;

2. **To maintain or improve the condition and variety of the ancient broadleaved woodland and the flora and fauna that its supports through;**
    - control of rhododendron and exotics;
    - maintaining a grazing regime that allows for tree regeneration when necessary;
3. **To maintain and where possible enhance the key lichen interest by:**
    - ensuring the continued provision of a variety of host species. The maintenance of the broadleaved woodland and parkland habitats is the key factor in this objective;
    - maintaining suitable light conditions for the survival of key lichen species. Scrub control is a key factor in this objective, particularly in areas where increasing shading by rhododendron and non-native species (sycamore, cherry and beech) occurs on site.

We wish to work with the owners 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, its natural features and the effectiveness of management.

The EU Habitats and Birds Directives oblige Government to avoid, in SACs and SPAs, the deterioration of natural habitats and the habitats of species, as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of these Directives. The objectives above have been assessed against these requirements. All authorities proposing to carry out or permit to be carried out operations likely to have a significant effect on the European interests of this SSSI must assess those operations against the relevant Natura conservation objectives (which are listed on our website through the SNHi -SiteLink facility).

Other factors affecting the natural features of the site

The numbers of greylag geese roosting on the two lochs are to a large extent related to external factors such as food availability and weather further in the north of Scotland and in the vicinity of the roost.

Date last reviewed: 15 December 2010