



Scottish Natural Heritage

LOCHS OF BUTTERSTONE, CRAIGLUSH AND LOWES
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 1082

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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

Lochs of Butterstone, Craiglush and Lowes SSSI lies 4 km north-east of Dunkeld alongside the A923 Dunkeld to Blairgowrie road and the unclassified road to Caputh which branches off the A923. These three lochs form part of a chain of five kettle hole lochs that flow between Dunkeld and Blairgowrie. These shallow lochs have a fringe vegetation of woodland, marsh and scrub.

The site was selected as a SSSI for its basin fen and open water transition fen, oligo-mesotrophic open water, wintering birds, principally greylag geese, and assemblage of breeding birds, which includes osprey and great crested grebe. Lochs Butterstone, Craiglush and Lowes are of international importance for their aquatic vegetation, which is exceptionally diverse. The number of pondweed species present is outstanding, with 11 species recorded to date, including slender-leaved pondweed and curly-leaved pondweed. The aquatic plant, slender naiad, which is extremely rare in the UK, is also present in the lochs.

The basin fen (possibly more properly called a sump fen) between Loch of Craiglush and Lowes is virtually undisturbed and intact (ie has not suffered any drainage or obvious impacts from nutrient enrichment). Its vegetation is an unusual combination of open reed, various sedges, bog myrtle, scattered scrub and species such as the insectivorous bladderwort and many-stalked spike-rush. It is likely that this area formed the connection between the two lochs before the drainage canal a little to the east was dug in the 19th century by the Dukes of Atholl.

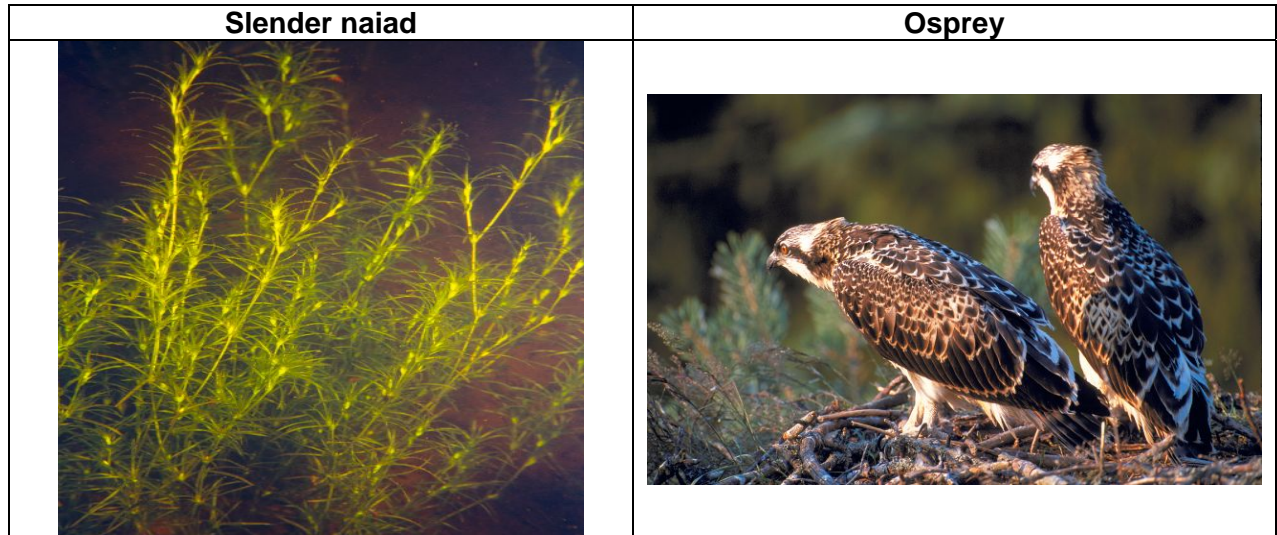
The open water transition fens round the lochs consist of a wide range of different fen types ranging from emergent vegetation through to raised bog between Craiglush and Lowes, and wet woodland of birch and alder.

A range of wildfowl use the lochs in the winter, and Loch of the Lowes is used by roosting Icelandic greylag geese.

The three lochs, and also the Clunie and Marlee lochs, which are also designated an SSSI, are considered of international importance, and have been designated under the EU Habitats

Directive as the Dunkeld - Blairgowrie Lochs Special Area of Conservation (SAC) for

- slender naiad *Najas flexilis*
- clear-water lochs with aquatic vegetation and poor to moderate nutrient levels,
- otters
- very wet mires often identified by an unstable 'quaking' surface.



Current condition of the natural features

Oligo-mesotrophic loch

The oligo-mesotrophic loch feature was monitored in 2004. The feature was found to be in unfavourable condition due to a loss in the diversity of plant species present. However the management scheme established by SNH in the catchment of the lochs has been taken up by most land owners and is believed to be reducing nutrient inputs into the lochs. This feature is now considered to be unfavourable but recovering.

Basin fen

The basin fen feature was monitored as part of SNH's programme of Site Condition Monitoring in 2003. The feature was found to be in unfavourable condition, due to the presence of scrub within the SSSI.

Open water transition fen

The open water transition fen feature was monitored in 2003. The feature was found to be in favourable condition.

Breeding bird assemblage

The breeding bird assemblage feature was monitored in 2007. The feature was found in unfavourable condition due to fewer species being recorded as breeding within the SSSI.

Greylag goose *Anser anser*, non-breeding

Winter roost counts indicate that greylag goose number can fluctuate markedly from year to year, however, there are indications that there has been a steady decline in numbers since around 1992/93. The greylag goose feature was monitored in 2003. The feature was found to be in unfavourable condition as there has been an 81% decline in the population.

Natural features of Lochs of Butterstone, Craiglush and Lowes SSSI	Feature condition (date monitored)	Other relevant designations
Oligo-mesotrophic loch	Unfavourable recovering (September 2004)	SAC
Basin fen	Unfavourable, no change (September 2003)	SAC
Open water transition fen	Favourable maintained (September 2003)	SAC
Breeding bird assemblage	Unfavourable, declining (June 2007)	
Greylag goose <i>Anser anser</i> , non-breeding	Unfavourable, declining (April 2003)	

Features of overlapping Natura sites that are not notified as SSSI natural features	Feature condition (date monitored)	Designation (SAC or SPA)
Slender naiad <i>Najas flexilis</i>	Unfavourable, declining (June 2003)	SAC
Otter <i>Lutra lutra</i>	Favourable, maintained (April 2004)	SAC

Past and present management

Management and Land Use

The lochs originally belonged to the Dukes of Atholl, but have since changed hands several times. The Loch of the Lowes was bought by the Scottish Wildlife Trust in 1969 for its aquatic interest. However, it has since become well known for ospreys, which began to breed close to the loch in the early 1970s. A visitor centre and hide were built in the 1970s, on the southwest side of the Loch of the Lowes just outside the SSSI boundary.

Loch of Craiglush is privately owned, and used for coarse fishing and boating. Loch of Butterstone has been managed as a put and take fishery since 2004; prior to this fish were reared in cages within the loch. Water quality is monitored by the Scottish Environment Protection Agency (SEPA). There has been a notable improvement in water quality since the cages were removed.

Loch of Craiglush can be seen from the A923, but access to Loch of the Lowes is preferred to the visitor centre, hide and unfenced section of the south shore. Other than this the public are not actively encouraged on to the site around Loch of the Lowes and Craiglush. The use of Loch of Butterstone by fishermen throughout most of the year is potentially disturbing to wintering geese and other waterfowl. Use of Loch of Craiglush by fishermen and sailing dinghies has been implicated in disturbance to the ospreys when they nested nearer to the loch. The fact that neither greylag nor pink-footed geese roost on Craiglush and Butterstone at night may be due to disturbance. These are the only lochs in the Lunan Lochs catchment which lack night roosting geese.

It is likely that the fen area to the west of the canal linking Lowes and Craiglush will gradually in-fill as peat naturally accumulates. Within the woodland at the east end of Loch of the Lowes, and other wooded areas of the SWT Reserve there are signs of natural regeneration of several tree species, including sycamore. Elsewhere fallow and roe deer and rabbits restrict tree regeneration.

In the late 1990s the species and habitats of the lochs were considered under threat from nutrient enrichment, with the main causes being soil erosion, and animal and human waste (such as septic tanks and washing detergents). The nutrient enrichment resulted in more algal blooms, lack of sunlight penetration into the water, and changes to the alkalinity of the water. To address this issue, SNH launched the Lunan Lochs Natural Care Scheme in 2004, which was open to all farmers within the catchment. Through the introduction of management practices such as grass margins along water courses, fencing to keep livestock out of water courses and applying fertilisers only where needed SEPA's monitoring data is starting to show an improvement in water quality in all the lochs.

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

To maintain or improve the condition and extent of the lochs and their associated fen and other wetland habitats by:

- Working with SEPA, to ensure that regular monitoring and assessment is undertaken of water quality and aquatic species,
- Encouraging farmers within the catchment to enter SRDP
- Controlling scrub invasion where necessary
- Controlling non-native invasive species such as skunk cabbage at Loch of Butterstone.

To maintain or improve the bird interests of the lochs by:

- Safeguarding the two lochs as sites for roosting greylag geese, primarily by preventing disturbance,
- SNH will continue to encourage the Scottish Wildlife Trust to protect and monitor ospreys, and other rare breeding birds around Loch of the Lowes,
- To maintain the habitats required by the breeding and wintering bird populations.

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

Date last reviewed: #####