



Scottish Natural Heritage

LOCHS CLUNIE AND MARLEE
Site of Special Scientific Interest

**Battleby,
Redgorton,
Perth
PH1 3EW**

SITE MANAGEMENT STATEMENT

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

Site code: 1080

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 Clunie and Marlee SSSI lies 5 km to the west of Blairgowrie. These lochs form part of a chain of five kettle hole lochs between Dunkeld and Blairgowrie. These shallow lochs have a fringe vegetation which includes fen and broadleaved woodland.

The site was selected as a SSSI for its open water transition fen, mesotrophic loch and river and wintering birds, principally greylag geese. Lochs Clunie and Marlee are also of international importance for their aquatic vegetation, which is exceptionally diverse. The number of pondweed species present is outstanding, with 9 species recorded to date, including slender-leaved pondweed and 11 species of sedge, including water sedge and lesser tussock sedge. The aquatic plant, slender naiad, which is extremely rare in the UK, is also present in the lochs.

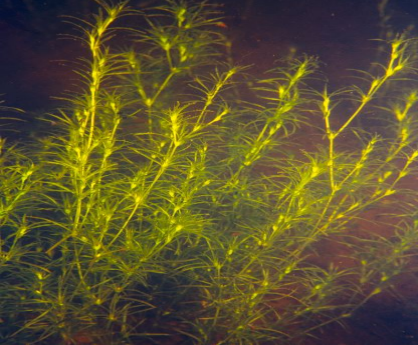

The Lunan Burn, which links the two lochs, is an important example of one of the few uncanalised lowland rivers of its type in Perthshire. It contains a high concentration of excellent otter habitat. Tracks and spraints have been seen suggesting that otters use the Lunan Burn as a secure passage between the lochs.

A range of wildfowl use the lochs in the winter, including Icelandic greylag geese, great crested grebe, coot and little grebe. Ospreys breed in the vicinity and use both lochs for feeding. A number of notable water beetles occur in the two lochs and the Lunan Burn. The notable water weevil *Eubrychius velutus* is found in Loch Clunie.

There are four Historic Scotland Scheduled Monuments situated within and around the shores of Loch of Clunie, namely Loch of Clunie Castle (island); Clunie Castle; and Chapel Hill, Castle Hill and The Ward/Summerhouse.

The lochs, along with the Lochs of Butterstone, Craiglush and Lowes 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) designated for its slender naiad *Najas flexilis*, clear-water lochs with aquatic vegetation and poor to moderate nutrient levels, otters and very wet mires often identified by an unstable 'quaking' surface.

The lochs also overlap part of the River Tay SAC designated for its Atlantic salmon, otters, lampreys (brook, sea, and river) and clearwater lochs

Slender naiad	Otter
	

Current condition of the natural features

Mesotrophic loch

The mesotrophic loch feature was monitored in 2004. The feature was found to be in unfavourable condition due to the amount of sediment in the lochs and the abundance of the non-native species Canadian pondweed. The Lunan Lochs Management Scheme, launched in 2004 by SNH, has been taken up by most land owners in the catchment and early water quality monitoring shows a reduction in sediment loading to the lochs. When the slender naiad was surveyed in 2007 there was noticeably less Canadian pondweed than in previous years.

Mesotrophic river/stream

The mesotrophic river/stream feature was monitored in 2003. The feature was found to be in favourable condition, however, one patch of Japanese knotweed was noted, and this will be monitored in future cycles. Since 2003 the invasive non-native species Himalayan balsam has appeared in places in the site.

Open water transition fen

The open water transition fen feature was monitored in 2009. The feature was found to be in unfavourable condition due to a combination of nutrient enrichment, overgrazing, scrub encroachment and water extraction.

Greylag goose *Anser anser*, non-breeding

The greylag goose feature was monitored in 2003, at this time the population had increased from the 1981 baseline figure of 605 to 2065. This is contrary to the trend in the area where greylag goose winter roost counts have indicated a steady decline in numbers since around 1992/93. The feature was found to be in favourable condition.

Natural features of Lochs Clunie and Marlee SSSI	Feature condition (date monitored)	Other relevant designations
Mesotrophic loch	Unfavourable declining (September 2004)	SAC
Mesotrophic river/stream	Favourable maintained (July 2003)	
Open water transition fen	Unfavourable declining (July 2009)	SAC
Greylag goose <i>Anser anser</i>	Favourable maintained (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
Atlantic salmon <i>Salmo salar</i>	Favourable, maintained (October 2004)	SAC
Brook lamprey <i>Lampetra planeri</i>	Favourable, maintained (November 2007)	SAC
River lamprey <i>Lampetra fluviatilis</i>	Favourable, maintained (November 2007)	SAC
Sea lamprey <i>Petromyzon marinus</i>	Favourable, maintained (November 2007)	SAC

Past and present management

Management and land use

The site has a complex catchment comprising extensive areas of both coniferous and broadleaved woodland, moorland, rough grazings, pasture, arable, open water and small built up areas, which include farms, developed rural land and a caravan park to the northeast of Marlee Loch.

There are small marginal belts of woodland and reed swamp around Loch of Clunie. The pastureland to the west is largely grazed by cattle. Marlee Loch has marginal woodland in places and also willow scrub, reed swamp and tall fen. Both lochs are used recreationally for fishing, with Clunie being a popular coarse fishing location (mainly pike and perch). On Marlee Loch the fishing is officially limited to boats hired from the shore, but occasional fishing from the bank has been noted in the past. Pike and eel netting also occurs and there is an eel trap on the Lunan Burn at Newmill of Kinloch which has been in operation for many years; fyke netting for eels has occurred. Some wildfowling also takes place on Marlee Loch.

An area of fen meadow at Wester Kinloch was fenced off from the adjoining improved field to prevent cattle poaching. Subsequently there has been some willow scrub regeneration which has been cut and the stumps treated with herbicide to prevent regrowth.

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 an increase in algal blooms, lack of sunlight penetration into the water, and changes to the alkalinity of the water. To address the problem, SNH launched the Lunan Lochs Natural Care Scheme in 2004, which was open to all farmers within the catchment of the Dunkeld - Blairgowrie Lochs SAC. 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 through a decrease in the phosphorus loading to the lochs.

There is access to Loch Clunie, particularly to the south shore from the road and Clunie Church, with people picnicking and occasional camp fires. The extent of use is unknown, but is potentially disturbing to birds, and damaging to marginal vegetation. Vandalism is an ongoing issue at the loch. Marlee Loch is much less accessible to the public.

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

To maintain or improve the condition and extent of the lochs, the river/stream 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 proposals under the Scotland Rural Development Programme to reduce sediment and phosphorus run off,
- Controlling scrub invasion where necessary,
- Monitoring non-native invasive species such as Japanese knotweed and Himalayan balsam.

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,
- To maintain the habitats required by the 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: 25 March 2011