SCOTTISH NATURAL HERITAGE

ASHGROVE LOCH
SITE OF SPECIAL SCIENTIFIC INTEREST

SITE MANAGEMENT STATEMENT

Site code: 93

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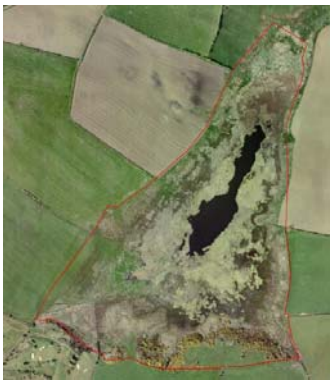
Purpose



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

Ashgrove Loch Site of Special Scientific Interest (SSSI) lies approximately 2km north of Stevenston and encompasses a mesotrophic loch (a loch containing a medium level of nutrients) and an area of open water transition fen, which is the habitat occupying the transitional area between the open water and the drier land around it. Only about ten percent of the surface of the loch remains as open water. A floating raft of vegetation that comprises a variety of tall-herb fen and swamp communities covers the remaining surface. These fen and swamp communities are the best example of their type in North Ayrshire.

The loch supports a large variety of plant species, including tufted loosestrife and cowbane (both of which are nationally scarce), greater bladderwort, water sedge and lesser pond sedge. The edges of the loch support marshy grassland, with dry grassland and scrub at the southern end of the site.

The site receives water from a spring on the west side, a burn running into the north end of the site and by ground water from surrounding fields. The small catchment includes arable land and improved grazing pasture. The Stevenson Burn, a small outlet, drains the site.

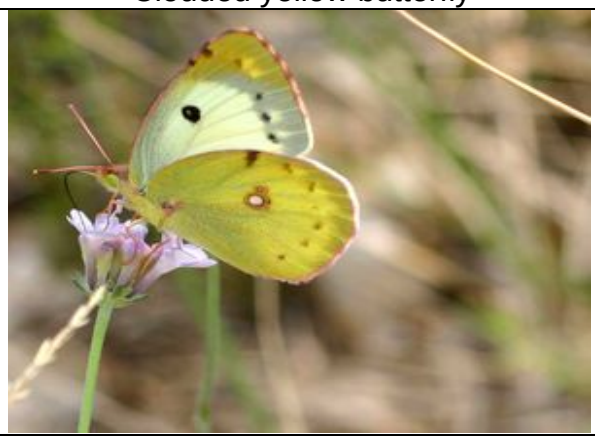
The mesotrophic loch is in a favourable condition. The water quality has been maintained and no invasive or unfavourable plant species were recorded. The extent of the open water has decreased, likely due to the natural process of succession (to reed communities), which, although not significant, could gradually lead to the drying out of the loch.

The open water transition fen has had no significant decline in the extent of the habitat, and no significant change in the proportion of swamp to tall-herb fen communities. Targets for vegetation composition were largely met, however the occurrence of reed

canary grass at the inflow and outflow of the site indicated that the water entering the site was bringing some nutrient enrichment. There was some damage to sedge tussocks by cattle grazing, however this was not significant. Overall the condition of this feature was found to be favourable.

Also of interest but not a feature for which the site is notified is the variety of birds that have been recorded within the site, including grasshopper warbler (which is on the RSPB Birds of Conservation Concern red list due to its dramatic population decline nationally), sedge warbler and several species of wildfowl, including whooper swan. In addition, the site is important for invertebrates in the local context and those recorded within the site include clouded yellow butterfly, Silver Y moth and black darter dragonfly. Otters are also known to occur within the site.

Natural features of Ashgrove Loch SSSI	**Condition of feature** (date monitored)
Mesotrophic loch	Favourable, maintained (June 2004)
Open water transition fen	Favourable, maintained (June 2003)

Sedge warbler	Clouded yellow butterfly
	

Past and present management

Past management has included draining of the loch, which is evident by the onset of taller reedswamp at the former edge of the loch. An area in the south western corner, adjacent to the loch shore, was ploughed and compound fertiliser applied. Slurry was also sprayed on the grassland beside the crags in the south of the site.

Current management includes the periodic clearance of ditches and maintenance of fences. Much of the site is inaccessible to livestock, particularly the loch shore, however cattle graze the southwest of the site from April/May to October, and sheep graze the southeast of the site all year round. Stock feeding occurs periodically. Cowbane, which is present on the site, contains the convulsant poison cicutoxin, which

can be fatal to cattle. A small flighting pond has been constructed in the south east corner of the site.

The site receives water from intensively managed agricultural land, including silage and cereal fields with high nutrient inputs, both organic and chemical. There is a water treatment works to the west of the site. The effects of the drainage outfalls from this water treatment works are unknown.

The crannog situated in the east of the site (NS 2759 4431) is of archaeological importance.

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

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. 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 the mesotrophic loch** by slightly raising the water level and removing scrub encroachment, which is causing the loch to dry out. Open water is often colonised by vegetation from the water's edge, forming floating rafts on which peat can accumulate.

2. **To maintain the extent and composition of the open water transition fen** by controlling the spread of reed canary grass and preventing scrub and trees encroaching near to the loch side. This would require the hand removal of vegetation to ensure the notified features are not damaged.

3. **To maintain the water quality** by controlling nutrient enrichment and preventing pollution from run-off from the surrounding areas as natural succession from wet to dry habitats is often hastened by the introduction of nutrients either in water, or delivered as agricultural fertiliser or manure. The application of fertilisers (including farmyard manure or slurry) and pesticides, and supplementary stock feeding should be avoided close to the loch margin. Waterside buffer strips could be created to intercept run-off.

Other factors affecting the natural features of the site

<u>Grazing</u>

Sections of the site open to cattle grazing have shown evidence of damage to sedge tussocks and contain species indicative of disturbance, such as floating sweet grass. Excessive grazing can reduce species diversity and result in invasion of rushes, thistles and other undesirable species and it can also cause erosion and bare patches.

However, cattle grazing can be beneficial by helping to slow succession and if grazing

is prevented altogether it could result in further encroachment of scrub. Limited access or continual low level grazing by cattle to waterside margins may benefit the site by helping to prevent domination by more invasive plants, and limited poaching can help to produce muddy areas beneficial for seedling establishment.

Front-page photograph: Aerial photograph of Ashgrove Loch SSSI.

Date last reviewed: 21 January 2008