



Scottish Natural Heritage

**Lacesston Muir and Glen Burn Gorge
Site of Special Scientific Interest**

**46 Crossgate
Cupar
Fife
KY15 5HS**

SITE MANAGEMENT STATEMENT

**Tel: 01334 654038
Fax: 01334 656924
E-mail: forth@snh.gov.uk**

Site code: 886

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

Lacesston Muir and Glen Burn Gorge Site of Special Scientific Interest (SSSI) is located 3 km south of the village of Gateside on the western face of West Lomond Hill. It represents the most extensive remaining area of 'upland' heath (72.8ha) in North East Fife. The site further contains acid (8.8ha), neutral (4.4ha) and marshy (1.7ha) grasslands, remnant gorge woodland (0.7ha) and flushes (0.5ha) with good sedge, moss and liverwort communities. It supports a particularly diverse vascular plant flora, including outlying populations of typically northern-montane species, such as the nationally rare hairy stonecrop and chickweed willowherb and the regionally rare mossy saxifrage, cowberry and alpine bistort. The site supports a range of other rare or uncommon plant species, including aspen, tea-leaved willow, moonwort, grass-of-parnassus, knotted pearlwort, New Zealand willowherb, common butterwort, tawny sedge, crested hair-grass, deergrass, lemon-scented fern, stag's-horn clubmoss and lesser clubmoss.

Geologically, Lacesston Muir and Glen Burn Gorge is of interest as it represents volcanic upland areas of volcanic and sedimentary rocks. The scarp face contains excellent exposures of a large body of igneous rock known as the Midland Valley Sill, and the sedimentary rocks into which it was intruded. These rocks were formed during the late Devonian and early Carboniferous periods of geological time (around 385-345 million years ago), when the crust of the Midland Valley of Scotland was stretched and thinned, forming a rift valley similar to the present day East African Rift. The sedimentary rocks around the Glen Burn, which formed in this rift valley, include sandstone that shows strong evidence of a wind-blown origin. This is unusual as most rocks of similar age in the Midland Valley formed in river settings. Volcanoes developed within the rift valley and large amounts of magma were erupted onto the Earth's surface. Some of this magma did not reach the surface, but instead spread out within the sedimentary rocks covering the valley floor. This magma cooled to form broad sheets of igneous rock called sills, of which by far the largest was the Midland Valley Sill, which can be clearly seen at Lacesston Muir and Glen Burn Gorge.

In 2002, during the first round of site condition monitoring (SCM), the subalpine dry heath was found to be in 'unfavourable' condition. Due to a lack of muirburn, the heather structure had become uniform and 'leggy'. In areas where burning had previously been carried out circa 1995, heather regeneration and gorse encroachment was recorded despite grazing pressure by rabbits.

The most recent SCM for the feature was completed in 2009. Most of the targets for the assessment were met and the majority of the site is currently in favourable condition. However, due to a distinctive decline in heather cover to bracken along the western part of the site, parallel to Glen Burn, the site is classed as being in 'unfavourable – recovering' condition overall.

The condition of the Carboniferous-Permian Igneous feature was assessed as favourable in 2011. The condition of the Non-marine Devonian feature was assessed as favourable in 2013.

Natural features of Lacesston Muir and Glen Burn Gorge SSSI	Condition of feature (date monitored)
Carboniferous - Permian Igneous	Favourable, maintained (February 2011)
Non-marine Devonian	Favourable Maintained (October 2013)
Subalpine dry heath	Unfavourable, recovering (August 2009)



Past and present management

The site has been grazed at various dates and intensities, although there is little detailed information on grazing regimes. It is thought the site was grazed fairly lightly through the 1980s; however, in 1990, an assessment found the acid grassland to be heavily grazed.

The heath has been burnt at irregular intervals. There are records stating muirburn practices were in operation in 1984 and the late 1980s. In 1995, an area of 2ha was burnt to facilitate access for gassing rabbits, which were causing damage in a nearby vegetable field. As part of this latter operation, some firebreaks were created, without consent, by furrow ploughing. It was thought that bracken had spread following muirburn in 1995 but an assessment through aerial photography indicated that it had been remarkably stable between 1971 and 1997.

A 5-year management plan between the Nature Conservancy Council and the Forestry Commission was concluded in March 1987. Management recommendations focused

on avoiding silvicultural operations within the SSSI and on discouraging conifer regeneration through self-seeding. The poor quality lodgepole pine plantation adjacent to the north-eastern boundary was earmarked for removal, to be replaced with birch and rowan. The Forestry Commission land was, however, sold in 1990 and the subsequent owner did not pursue this option. By 1993, there was significant self-seeding of conifers in this area.

A Rural Development Contract (RDC) covering the main, central part of the site has been in place from 2010 to the end of 2014. This prescribed a grazing regime, controlled muirburn and the removal of bracken and gorse in order to encourage heather regeneration across the site.

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 and to monitor the effectiveness of management.

- 1. To maintain and develop the extent of subalpine heath, by controlling bracken and gorse encroachment and reducing the competitiveness of vigorous grasses through seasonal rotational grazing.**
- 2. To increase the variation in heather structure, through a mixture of controlled muirburn and grazing which will develop areas for seed to establish and prevent heather from becoming 'leggy'.**
- 3. Maintain effective firebreaks to enable safe muirburn practice.**
- 4. Reduce bracken encroachment in areas of muirburn by control through application of herbicide if monitoring identifies a need.**
- 5. To maintain the natural rock exposures at the site by keeping them free from obstruction.**
- 6. To maintain access to the rock exposures throughout the site.**

Other factors affecting the natural features of the site

Most of the site is within Lomond Hills Regional Park. A small carpark and footpath provides access through the SSSI to the Regional Park via Glen Burn and Glen Vale. The site is used recreationally by walkers but this does not have a significant negative impact on the site. During the last SCM assessment, there was evidence that camping was creating an excess of refuse in the area, which would not have a direct impact on the site condition, but could potentially increase the risk of uncontrolled muirburn from fires started by campers.

Date last reviewed: 19 May 2017