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Scotland's Nature Agency
Buidheann Nàdair na h-Alba

FAIR ISLE
SPECIAL AREA OF CONSERVATION (SAC)

CONSERVATION ADVICE PACKAGE

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Site Details

Site name:	Fair Isle
Map:	https://sitelink.nature.scot/site/8253
Location:	Highlands and Islands
Site code:	UK0030149
Area (ha):	561.05
Date designated:	17 March 2005

Qualifying features	Assessed condition on this site	SCM visit date	UK overall Conservation Status
Vegetated sea cliffs	Favourable Maintained	30 July 2014	Unfavourable - Bad
Dry heaths	Favourable Recovered	30 July 2014	Unfavourable - Bad

Notes:
Assessed Condition refers to the condition of the SAC feature assessed at a site level as part of NatureScot's Site Condition Monitoring (SCM) programme.
Conservation status is the overall condition of the feature throughout its range within the UK as reported to the European Commission under Article 17 of the Habitats Directive in 2019.

Overlapping Protected Areas:

Fair Isle SAC overlaps with

- Fair Isle Site of Special Scientific Interest (SSSI) https://sitelink.nature.scot/site/620
- part of Fair Isle Special Protection Area (SPA) https://sitelink.nature.scot/site/8496

Key factors affecting the qualifying features

Vegetated sea cliffs

This habitat occurs on steep slopes fringing cliffs which have been created by marine erosion, and support a wide diversity of vegetation types with variable maritime influence. Exposure to the sea and wind, and in particular salt spray blown on to the cliff face and cliff top is a key determinant of the type of vegetation found here. The most exposed areas support mainly maritime grassland vegetation dominated by a range of salt-tolerant plants. The cliff top habitat largely shows short swards, with high salt-spray influence, even at the tops of very large sea cliffs. This may be due to a combination of grazing and exposure. Zoning inland from the cliff tops, with declining salt spray influence, the swards shift to *Plantago* spp maritime grassland (MC10), often occurring as a brighter green band between the parched cliff top vegetation and the heath inland. The northern end of the island (common grazing) has abundant coastal heath (H7), which can extend inland for hundreds of metres at more exposed stretches of coastline, eventually transitioning to dry heath (H10).

The profile and stability of the cliff face is one of the major determinants of cliff vegetation. Near-vertical cliffs support specialist crevice communities, while ledges occupied by breeding seabirds may develop specialist communities comprising plant species which thrive on nitrogen-rich soils and are able to cope with heavy guano deposition.

Further information about vegetated sea cliffs can be found here.

Dry heaths

Dry heaths occur on freely-draining, acidic to almost neutral soils with generally low nutrient content. On this site, there is extreme maritime exposure close to the coast, but there is also considerable exposure to wind and salt where the dry heath habitat is found further inland. Strong winds contribute to keeping the vegetation short (generally <10cm high) and salt spray influences the species that can grow here. Wind-clipped prostrate or dwarfed heather dominates the vegetation. Exposure and natural erosion are probably also largely responsible for the high proportion (up to 40% in places) of bare ground in parts of the site, although historical peat working, which has stripped the ground down to subsoil on which vegetation is unable to re-establish, is also a factor in some areas. Bare ground has been caused by intensive use by sheep and rabbits in the past, although this has currently re-vegetated in parallel with a much reduced rabbit population.

Nearly all dry heath is semi-natural, being derived from woodland through a long history of grazing and burning. On Fair Isle SAC, the areas that are now dry heath may have been wooded in prehistoric times, but are thought to have been heathland for thousands of years. Most of the dry heath on this site is managed as extensive grazing for sheep. Additional influences are the roads, hill tracks, transmitter mast and airstrip, which are found within the dry heath habitat. These were constructed prior to site designation and are currently not causing any additional fragmentation of the habitat.

Further information about dry heath can be found here.

Conservation Priorities

There is unlikely to be any conflict between management of the differing features of Fair Isle SAC because habitat distribution is mainly determined by environmental conditions. This SAC overlaps with the terrestrial part of Fair Isle SPA. Any management for the SAC or assessment of plans or projects will also need to take account of both SAC features as well as the SPA interests.

Conservation Objectives

Overarching Conservation Objectives for both qualifying features of Fair Isle SAC

1. To ensure that the qualifying features of Fair Isle SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
Favourable Conservation Status (FCS) is considered at a European biogeographic level. When determining whether management measures may be required to ensure that the conservation objectives for this site are achieved, the focus should be on maintaining or improving the contribution that this site makes to FCS. When carrying out appraisals of plans and projects against these conservation objectives, it is not necessary to understand the status of the feature in other SACs in this biogeographic

region. The purpose of the assessment should be to understand whether the integrity of the site (see objective 2) would be maintained. If this is the case then its contribution to FCS across the Atlantic Biogeographic Region will continue to be met.
Further details on how these assessments should be carried out in relation to maintaining site integrity is provided by objective 2 (including parts a, b and c). If broader information on the feature is available then it should be used to provide context to the site-based assessment.

Note that "appropriate" within this part of the conservation objectives is included to indicate that the contribution to FCS varies from site to site and feature to feature.

2. To ensure that the integrity of Fair Isle SAC is maintained by meeting objectives 2a, 2b and 2c for each qualifying feature.

The aim at this SAC is to maintain all qualifying features in a favourable condition as a contribution to their wider conservation status. Therefore any impacts on the objectives shown in 2a, 2b, or 2c below for each qualifying feature must not persist so that they prevent the achievement of this overall aim. When carrying out appraisals of plans or projects the focus should be on maintaining site integrity, specifically by meeting the objectives outlined in 2a, 2b and 2c for each qualifying feature. If these are met then site integrity will continue to be maintained. Note that not all of these will be relevant for every activity being considered. Any impacts on the objectives shown in 2a, 2b or 2c below must not persist so that they prevent the maintenance of site integrity. Temporary impacts on these objectives resulting from plans or projects can only be permitted where there is certainty that the features will be able to quickly recover.

This objective recognises that each qualifying habitat is exposed to a wide range of drivers of change. Some of these are natural and are not a direct result of human influences. Such changes in each qualifying habitat's extent, distribution or condition within the site which are brought about by natural processes, directly or indirectly, are normally considered compatible with the site's conservation objectives. An exception to this is when the favourable condition of a habitat is dependent on halting or managing natural succession. An assessment of whether a change is natural or anthropogenic, or a combination of both, will need to be looked at on a case by case basis.

Conservation Objectives for Vegetated sea cliffs of the Atlantic and Baltic coasts [H1230] (Vegetated sea cliffs)

2a. Maintain the extent and distribution of the vegetated sea cliffs habitat within the site

Accurate measurement of the extent of this habitat is hard to achieve due to its location on vertical or near vertical slopes but does include, where appropriate, the clifftop maritime vegetation. The figure within the SAC standard data form (129 ha) is therefore used as a guide, and the objective is that there should be no loss of the habitat within the SAC.

The extent of this habitat is largely determined by topography, being found on vertical or steeply sloping cliffs with exposure to salt spray and the wind. It is found on the ledges and tops of vertical or steeply sloping cliffs where there is exposure to salt spray and the wind. These factors limit the potential for expansion or loss of extent through natural processes. The inland extent of the habitat is limited in some parts of the site by historical agricultural practices, for example at the southern end of the island (which is excluded from the SAC).

There are also localised changes in the natural vegetation around buildings within the SAC.

2b. Maintain the structure, function and supporting processes of the vegetated sea cliffs habitat

The structure of the habitat is influenced by the geomorphological processes, degree of exposure to the wind and sea, and the associated salt spray on the cliff face and cliff tops. Exposed stretches of coast support salt-tolerant maritime grassland vegetation, while more sheltered areas support plant communities transition into maritime heath.

The structure and function of this habitat are dependent on natural marine processes and weather, in particular winter storms and summer droughts.

The natural processes of the sea cliffs and transition to the clifftop areas can be disrupted and the habitats changed by alteration in livestock grazing regimes, application of fertiliser/reseeding or roads/parking areas. In the southern part of the island, where improved land adjoins the SAC, sheep usually have access to the cliffs and have modified the cliff vegetation to some extent. Although light grazing by sheep is important in maintaining the habitat, they can also contribute to localised damage by creating prominent contouring tracks and erosion scarps through rubbing against exposed banks of soil. Grazing levels should be low enough that typical plants (listed in 2c) can grow, flower and set seed.

The natural processes of the sea cliffs and transition to the clifftop areas can be disrupted by coastal defences, roads and /or extraction of rock.

The habitat is also influenced by the presence of breeding seabirds such as fulmar *Fulmarus glacialis*, herring gull *Larus argentatus* and great black-backed gull *Larus marinus*, whose guano fertilises some of the ledges and promotes lush plant growth.

2c. Maintain the distribution and viability of typical species of the vegetated sea cliffs habitat

Maritime cliff vegetation (slope and cliff top) varies according to a number of physical and biological factors, but most important among these are climate, degree of exposure to sea-spray, geology and soil type, level of grazing, and the amount of seabird activity.

Typical species that colonise the cliff slope on this site are: red fescue *Festuca rubra;* thrift *Armeria maritima;* Sea campion *Silene uniflora;* Scot's lovage *Ligusticum scoticum;* Ribwort plantain *Plantago lanceolata;* common sorrel *Rumex acetosa;* sea mayweed *Tripleurospermum maritimum;* scurvygrass sp. *Cochlearia* sp.

The clifftop maritime grassland is dominated by red fescue *Festuca rubra;* thift *Armeria maritima* and sea plantain *Plantago maritima.* Other typical species include Yorkshire fog *Holcus lanatus;* ribwort plantain *Plantago lanceolata;* buckshorn plantain *Plantago coronopus;* common sorrel *Rumex acetosa;* spring squill *Scilla verna;.*

Maritime heath is dominated by heather *Calluna vulgaris*. Other typical species include red fescue *Festuca rubra;* sea plantain *Plantago maritima;* bird's-foot trefoil *Lotus corniculatus;* cat's ear *Hypochoeris radicata;* spring squill *Scilla verna;* crowberry *Empetrum nigrum;* wild thyme *Thymus praecox;* tormentil *Potentilla erecta*.

Light grazing at appropriate times of the year is required to allow flowering and fruiting of cliff top vegetation and maintain the maritime grassland and maritime heath.

Colonisation of the vegetated sea cliffs by invasive native species such as creeping thistle *Cirsium arvense;* spear thistle *Cirsium vulgare;* perennial ryegrass *Lolium perenne;* broad-leaved dock *Rumex obtusifolius;* curled dock *Rumex crispus;* white clover *Trifolium repens;*

stinging nettle *Urtica dioica* could result in loss of the typical species, although this is only likely in areas where the vegetation has already been modified by sheep grazing in the southern part of the site.

The habitat is also used by breeding seabirds such as fulmar *Fulmarus glacialis*, herring gull *Larus argentatus* and great black-backed gull *Larus marinus*.

Conservation Objectives for European dry heaths [H4030] (Dry heaths)

2a. Maintain the extent and distribution of the dry heath habitat within the site

Maintain to approximately 300 ha. The area figure has been taken from the Standard Data Form, and is an estimate based on the fact that dry heaths can form complex mosaics with habitats such as grasslands and wet heaths. There should be no measurable net reduction in the extent of dry heath and its distribution throughout the site.

The habitat is found on freely-drained, nutrient-poor, acidic soils. This can determine the extent and distribution of the habitat throughout the SAC, although it is also dependant on heathland management to maintain its extent including:

- light level of grazing

- avoidance of applying lime, fertiliser or re-seeding

2b. Maintain the structure, function and supporting processes of the dry heath habitat

Dry heaths are normally closely associated with scrub and woodland habitats, which would form the climax habitat without heathland management. However exposure to wind and salt prevents the widespread growth of trees on Fair Isle where, at most, scrub might be able to develop in a few sheltered locations. Therefore maintaining dry heath on Fair Isle only requires that grazing levels are low enough to prevent degrading to grassland as a result of intensive management. Sheep and cattle are the main herbivores on Fair Isle, and appropriate management of their numbers and distribution across the site is important to maintain dry heath habitat and to prevent habitat degradation from under/overgrazing or trampling. Rabbits are also present on the island, and their numbers should be controlled so that they do not have a detrimental effect on the dry heath habitat.

The objectives for maintaining the structure of dry heath on this site are to:

- maintain the height structure of the vegetation (less than 1/3 of the last complete growing season's shoots of dwarf-shrub species should show signs of browsing.
- maintain the ground cover structure of the heath by keeping trampling by livestock low enough that less than 10% of ground cover is disturbed bare ground (with an emphasis on 'disturbed' rather than 'bare').
- 25-90% of vegetation should be dwarf shrub heath species. Heather *Calluna vulgaris* should remain the dominant species and should be present in all phases of growth (pioneer, building, mature and degenerative) to provide a wide range of ecological variety and conservation benefit to a variety of species.

Cover by species that are not typical of this habitat should not increase. Examples of inappropriate species are bracken and non-native species.

2c. Maintain the distribution and viability of typical species of the dry heath habitat

Heather *Calluna vulgaris* is the dominant plant in the dry heath on this site. Other typical species are *Erica* spp.; Crowberry *Empetrum nigrum;* and the moss *Racomitrium*

lanuginosum.

Typical associated birds include golden plover *Pluvialis apricaria* and twite *Carduelis flavirostris*. This habitat is also important for breeding great skua *Stercorarius skua* and Arctic skua *Stercorarius parasiticus*.

Conservation Measures

Fair Isle SAC is notified as a Site of Special Scientific Interest and management changes described on the list of Operations Requiring Consent must have prior consent from SNH (NatureScot).

Current and recommended management for

- **Dry heaths**
- **Vegetated sea cliffs**

Issue	**Measure**	**Responsible party**
Grazing levels	Ensure light grazing levels by a combination of livestock and rabbits. Stocking timing and density, and rabbit numbers, should be low enough to allow flowering and fruiting of typical species whilst not being so low that the vegetation becomes rank enough to cause loss of smaller and annual plants.	Land managers, NatureScot, SGRPID (GEAC)
Excessive tracking/trampling by livestock	Ensure tracking/trampling by livestock is minimal to prevent loss of typical species.	Land managers, NatureScot, SGRPID (GEAC)
Vehicle tracks	Ensure that the site is not damaged by vehicle access.	Land Manager, NatureScot, Shetland Islands Council, Transmitter maintenance company
Stock feeding	Stock feeding should not be introduced within the site to prevent concentration of trampling and dunging by livestock or introduction of invasive plant seeds.	Land managers, NatureScot, SGRPID (GEAC)
Colonisation by vigorous native species	Ensure colonisation by vigorous native species is minimal to prevent loss of the typical species of each habitat. Invasive native species that may need control on dry heath and vegetated sea cliff habitats include bracken and thistles.	Land managers, NatureScot
Colonisation by invasive non-native species	Invasive non-native species should be not introduced to the site.	Land managers, NatureScot
Drainage	Natural hydrology should be promoted by not digging new drains and not clearing the majority of existing drains.	Land managers, SEPA, NatureScot

Recreation	Ensure trampling by visitors is minimal to prevent loss of typical species.	Land managers, Shetland Islands Council, NatureScot
Habitat Management	Other than appropriate livestock management, natural processes should be allowed to continue by a policy of non-intervention.	NatureScot, Land managers.
Research and monitoring	To identify emerging impacts on the habitat and their causes, in order to understand the long term issues, and to inform future management of the habitat across Scotland. Research bodies should have a local contact they can call upon if undertaking field data collection remotely.	NatureScot

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