



Scottish Natural Heritage Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

<p>PABBAY</p> <p>Site of Special Scientific Interest</p> <p><i>SITE MANAGEMENT STATEMENT</i></p> <p>Site code: 1265</p>	<p>SNH, Lewis and Harris office Western Isles Area 32 Francis Street Stornoway HS1 2ND</p> <p>Tel: 01851 70 5258 e: western_isles@snh.gov.uk</p>
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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.

This statement is available in Gaelic on request.

Natural features of Pabbay SSSI	Condition of feature (and date monitored)	Other relevant designations
Coastal Geomorphology of Scotland	Favourable, maintained (18 March 2009)	
Breeding bird assemblage	Favourable, maintained (22 June 2010)	SPA (includes most of SPA breeding birds below)
Greenland barnacle goose, non-breeding	Favourable, maintained (17 March 2008)	SPA
Machair	Monitored 2010, condition assessment report pending	
Springs (including flushes)	Monitored 2010, condition assessment report pending	
Bryophyte assemblage	Not selected for monitoring to date	

Features of overlapping Natura sites that are not notified as SSSI natural features	Condition of feature (date monitored)	SPA or SAC
Corncrake, breeding	Favourable, maintained (30 June 2008)	SPA
Dunlin, breeding	Favourable, maintained (26 June 2007)	SPA
Oystercatcher, breeding	Favourable, maintained (18 June 2007)	SPA
Purple sandpiper, non-breeding	Favourable, maintained (31 March 2004)	SPA
Redshank, breeding	Favourable, maintained (16 June 2003)	SPA
Ringed plover, breeding	Favourable, maintained (16 June 2003)	SPA
Ringed plover, non-breeding	Favourable, maintained (31 March 2004)	SPA
Turnstone, non-breeding	Favourable, maintained (31 March 2004)	SPA

Description of the site

Pabbay lies 3km northwest of Berneray in the Sound of Harris. The site comprises of a complex dune and machair system that holds uncommon spring and flush plant communities that support many rare and notable bryophytes (mosses and liverworts). The range of habitats also supports nationally important numbers of wintering barnacle geese and a notable variety of breeding birds

The Pabbay machair is the largest expanse of hill machair or 'climbing dune' in the Outer Hebrides and exhibits a range of representative examples of Hebridean dune and machair landforms. It faces the south east rather than to the west and has several important features including unusual conical dunes, some interesting flushes and several rare or scarce mosses.

The breeding bird assemblage (machair and saltmarsh birds) includes shelduck, eider, oystercatcher, ringed plover, lapwing, dunlin, snipe, redshank, black headed gull, Arctic tern, little tern and wheatear. Pabbay regularly supports a wintering barnacle geese population of between 400 and 800, 2-3% of the British wintering population.

The machair and springs (including flushes) were selected for monitoring for the first time in 2010. Monitoring results will be available in 2011 and will be circulated to owners and occupiers once complete.

Past and present management

Pabbay was occupied by crofting communities until 1842 when the inhabitants were cleared to Scalpay on Harris. Prior to the 19th century the island was fairly extensively cultivated for corn. During the last 100 years the area has been used mainly for grazing sheep and cattle. Cattle numbers declined over the last few decades and none are kept on the island today. Red deer were introduced to Pabbay in 1880 and are

currently present in high numbers (approximately 120). Rabbits are absent from the island.

Although Pabbay is now no longer permanently inhabited, there are two houses which are used by the owners and the farm manager. The houses are occupied at different times of year by people visiting for recreation, sheep management or deer management.

The machair and maritime grasslands on Pabbay provide pasture for the wintering population of barnacle geese. These geese prefer to graze on short-cropped coastal pasture. Sheep grazing at an appropriate stocking density can help to maintain the machair in a suitable condition for the geese.

Sheep and deer currently have access to most of the machair areas throughout the year with few, short, or no grazing breaks. This does not give the machair plants time to grow, flower and set seed and can reduce cover for birds to nest and chicks to shelter. Concentrated sheep grazing over time can cause acidification (sheep manure is slightly acidic) and can convert machair into less species-rich forms of grassland. Previous machair surveys suggest the machair was already showing signs of change and found some trampling damage to the important black bog rush flushes.

It may be that the combined sheep and deer stocking levels are too high on these areas. A reduction in overall grazing pressure or the introduction of seasonal grazing breaks to some areas may alleviate these problems.

SNH encourages applications to relevant schemes such as Rural Development Contracts – Rural Priorities that aim to deliver positive management consistent with site objectives, for example, management of machair grassland or appropriate sheep and deer management.

Pabbay is accessible by private or chartered boat and visitor pressure is considered to be relatively low.

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

We wish to work with the owners, crofters and tenants 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 any management arrangements.

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 below 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).

1. To maintain the condition and extent of the geomorphology of the site

The dunes are being maintained by natural processes of erosion and accretion as sand moves around the site. Ensure any management activities do not adversely affect natural coastal processes.

2. To maintain the condition and extent of the machair habitat

A reduction in overall grazing pressure or the introduction of seasonal grazing breaks in some areas may alleviate the problems of increased machair soil acidification and trampling. This would also help to maintain machair plant diversity by allowing plants to grow, flower and set seed.

3. To maintain the condition and extent of the important springs (including flushes).

A reduction in overall grazing pressure or the introduction of seasonal grazing breaks in areas where there are flushes may alleviate the problems of increased soil acidification and trampling and allow the condition of the flushes to improve.

4. To maintain the condition and diversity of the rare bryophyte community

A reduction in overall grazing pressure or the introduction of seasonal grazing breaks in areas would help to maintain conditions which support the diversity of rare and scarce bryophytes and prevent trampling of these important plant communities.

5. To maintain the population of wintering barnacle geese and avoid significant disturbance of the population.

Sheep and deer grazing at an appropriate density can help to maintain the machair in a suitable condition for the geese. Grazing for part of the year is essential to prevent the grass becoming overgrown and rank. Barnacle geese would not be adversely affected by grazing management to benefit machair habitats and plants.

6. To maintain the population and distribution of the important breeding and wintering birds and avoid significant disturbance of the populations.

Sheep and deer grazing at an appropriate density would help to maintain areas of vegetation cover throughout the breeding season for breeding ground nesting birds such as redshank and dunlin.

Other factors affecting the natural features of the site:

Introduced mammals

Mink can have a significant impact on ground nesting birds populations by predated eggs and chicks. There have been reported sightings so continued monitoring is important

Climate change:

Global climate change is predicted to lead to changes in weather patterns and sea-level rise which could cause increased coastal erosion and threaten low-lying dune and machair systems. Habitats may be modified in response to climate change.

Date last reviewed: 31 March 2011

Photo: barnacle geese