



What is Natura?

Natura (or Natura 2000 to give its full name) is a network of nature conservation sites for the 21st century and beyond. In May 1992 the UK and other European Union (EU) governments brought in a new law to protect the most seriously threatened habitats and species across Europe. This EU law is known as the 'Habitats Directive' and it works with the 'Birds Directive' which was introduced in 1979. At the heart of these Directives is the creation of a European network of protected sites. These sites comprise both Special Protection Areas (SPAs) for birds identified under the Birds Directive and Special Areas of Conservation (SACs) for habitats and species listed within the Habitats Directive. Some Natura sites can be both SPA and SAC.

How important is Scotland's contribution to Natura?

From mountain top to deep sea, Scotland is home to many wonderful plants, animals and birds. Some of these, and the habitats they depend on, are threatened; and many are of European importance. Each year more than 300 different species of wild bird are recorded in Scotland, of which around 200 are resident or visit regularly. As well as these wild birds, over 100 threatened species and 60 habitats listed in the Habitats Directive are found in Scotland, including 14 globally threatened 'priority' habitats.

By caring for these and other species, we can make an important contribution to conserving the world's biodiversity. Scotland's Natura sites will help to protect these valuable resources now and for generations to come. We can only provide a brief flavour here of the variety of habitats and species within Scottish Natura sites, but even this is impressive.

Scots pine trees in Caledonian forest, Beinn Eighe, Loch Maree Complex SAC

Beneath the waves

Scotland's marine environment, even in the relatively shallow waters around our coasts, is largely unexplored and has many secrets still to be discovered. Underwater surveys over recent years have greatly added to our knowledge, but much remains to be done to better understand this part of our natural heritage and its wealth of species.

Subtidal sites include rocky reefs and sandbanks. Competition for space is tough; even in deeper waters rock surfaces will be covered by dense turfs of animals. These areas support a huge, varied and colourful range of marine species.

The shallow sandbanks include maerl beds: coral-like accumulations of red algae which have a hard, chalky, outer skeleton that creates a habitat for a very high diversity of marine life. Scotland is home to many of the most extensive maerl beds in Europe, some of which are estimated to be about 8,000 years old!

2 Maerl, component of subtidal sandbanks habitat

3

Jewel anemones, St.Kilda

4 Redshank

Coasts and estuaries

A combination of over 16,000km of coastline and a position at the north-west edge of Europe makes Scotland a very special place for seabirds and wintering waterfowl, as well as a range of maritime plants and habitats.

In winter, internationally important numbers of geese, ducks, grebes and wading birds find rich feeding grounds and safe roosts in the shallow waters, mud-flats and salt-marshes of Scottish estuaries. These include the Moray Firth, the Firth of Tay and the Firth of Forth.



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Coastal cliffs and heaths support a wide range of habitats which reflect the variable exposure to wind and salt spray. High waves and swell combined with the prevailing winds help deliver salt spray to the cliff face and cliff tops. Perhaps the most symbolic of plants that inhabits these areas is the diminutive Scottish primrose which is only found in Scotland.

5 Noss SPA, Shetland 6 Gannet colony on the Bass Rock (part of Forth Islands SPA)



Rocky cliffs and islands also support noisy high-rise 'cities' of nesting seabirds; including over 40% of the world breeding population of gannets. These graceful seabirds, which hunt by plunge-diving, may travel hundreds of kilometres from their breeding colonies to feed far out in the North Sea or the Atlantic Ocean.



Coastal and estuarine areas of Scotland also support a large proportion of the European populations of common and grey seals. Grey seals are rare on a world scale. More than a third of the world's grey seals breed in the UK and over 80% of these breed at colonies in Scotland.

One resident population of the bottlenose dolphin spend much of their time in the Moray Firth, where they are highly valued by the local community and visitors alike.



Bottlenose dolphins in the Moray Firth SAC

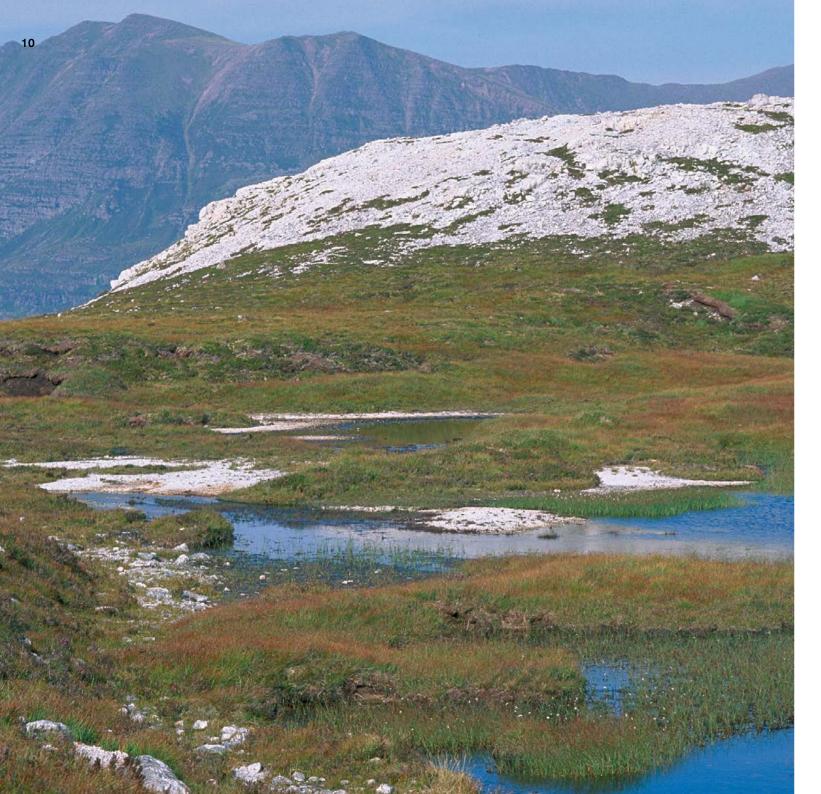
Grey seals hauled out on rocks at low tide, Isle of May SAC

Machair at South Uist Machair SAC and South Uist Machair and Lochs SPA

The coastal machairs

The coastal machairs – or shell-sand meadows – are found nowhere else in the world besides Scotland and the west coast of Ireland. In spring and early summer these areas, which are found mainly on the islands of the Inner and Outer Hebrides, support a profusion of different coloured flowers as well as internationally important populations of breeding waders. The charismatic corncrake – a summer bird visitor which is more often heard than seen - is often associated with such areas.





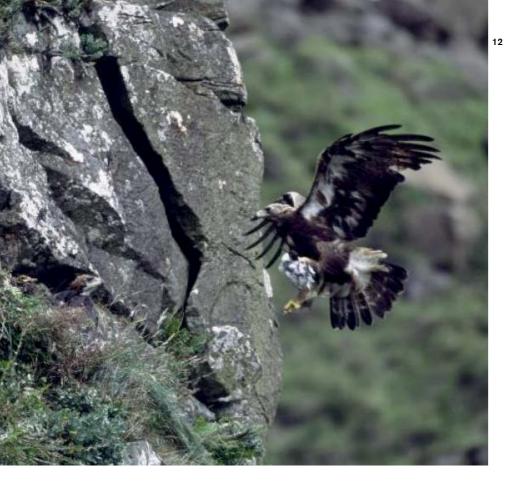
10 Beinn Eighe, Loch Maree Complex SAC

11 Dotterel

Mountains and moorlands

Scotland's rugged upland landscapes are renowned all over the world for their scenic beauty. These areas also support many habitats and species of European importance including extensive areas of dry and wet heath. Most familiar on lower ground are the purple moorlands dominated by heather and other dwarf shrubs. On the higher slopes, heather tends to give way to Alpine and Boreal heaths with blaeberry, bearberry, dwarf juniper and impressive herb covered ledges. The most widespread habitats on the summit zone are the Alpine and Boreal grasslands, often with extensive carpets of woolly fringemoss which can withstand extremes of climate and exposure and long periods of snow-lie. These areas provide habitat for the dotterel; one of only a few waders which breed in montane areas of Scotland.





Moorland and peatland areas hold important populations of upland birds. Rare birds of prey such as hen harrier and golden eagle are especially associated with the Scottish Highlands and Islands. Whimbrel – a close relative of the curlew – and the aggressive great skua or bonxie, are characteristic with the maritime moors of the Shetland Isles.

Blanket and raised bogs

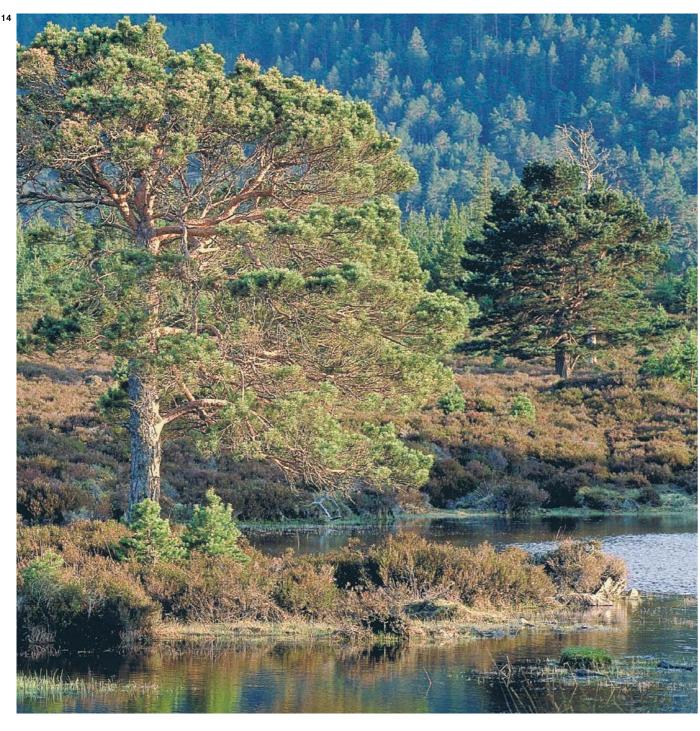
Bog habitats cover almost two million hectares of Scotland. They range from the dramatic, open blanket bog landscapes of the Caithness and Sutherland Peatlands – one of the most extensive peatland areas in Europe – to the smaller, more discrete raised bogs of the lowlands. These peat-dominated areas have a very low fertility, but several species of plants, such as the tiny sundews which live in the peat and bog pools, have overcome this difficulty by trapping and 'eating' insects.

12 Golden eagle returning to its nest, Rum SPA

13 Lichen, blaeberry and heather on raised bog, Flanders Mosses SAC



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Caledonian forest, Rothiemurchus, Cairngorms 15 Twinflower – a rare pinewood plant



Woodlands

The lofty Caledonian pinewoods are the uniquely Scottish variant of the pinewoods that extend across northern Europe. The total area of this habitat in Scotland has increased in recent years due to regeneration, but it still represents a small remnant of the 'Great Wood of Caledon' which grew up after the last ice age. While Scots pine is the main component, other trees like birch and aspen are found with shrubs such as juniper and a ground cover of heather, blaeberry and mosses.

Caledonian forest supports a number of characteristic birds. These include the Scottish crossbill, Scotland's only endemic bird species; and the capercaillie – the world's largest grouse – which is the subject of intense conservation action.



Lochs and rivers

Scotland has many large, clear water lochs which support characteristic assemblages of water plants such as water lobelia and white water-lily, reflecting the low to moderate levels of nutrients in the water. Richer lochs are less common and found mostly in the lowlands.

Large lochs in remote mountain and moorland areas provide breeding areas for the black-throated diver. While Scotland's population is small compared with some other countries, it is important because Scotland lies at the edge of its European breeding range.

Scottish rivers and lochs support an estimated 80% of the UK population of Atlantic salmon and represent a European stronghold for this species.

Fast flowing rivers and streams also provide refuges for important populations of the freshwater pearl mussel. Undisturbed, freshwater pearl mussels can live for over 100 years, but are becoming increasingly rare in mainland Europe.

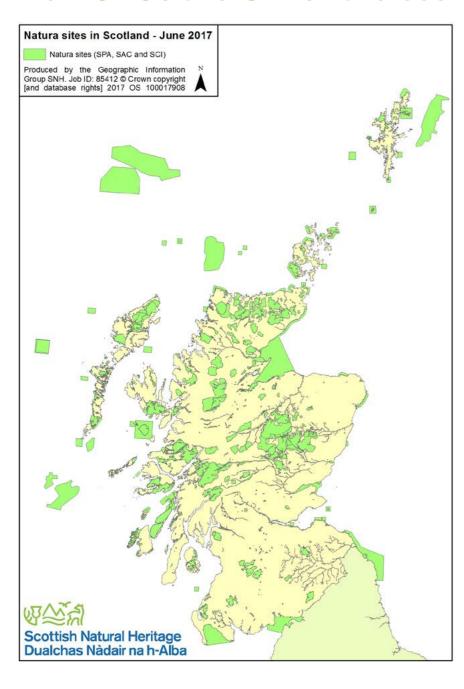


16
Freshwater pearl
mussels
17
Black-throated diver
18
Atlantic salmon, River
Almond (part of River
Tay SAC)



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How SACs and SPAs have been selected



This map shows Natura sites in Scotland. It includes designated Special Areas of Conservation (SACs), classified Special Protection Areas (SPAs) and Sites of Community Importance (SCIs) (candidate SACs that have been adopted by the European Commission). Further information about a particular site, including candidate SACs and proposed SPAs, is available through SNH's SiteLink facility on the SNH website.



Special Areas of Conservation

In Scotland, Special Areas of Conservation (SACs) have been selected for 57 habitat interests and 20 species. Sites selected have to meet the criteria set out in the Habitats Directive – a process of assessment of the conservation value of a site for a habitat or species. The resulting list of sites then needs to be approved by the European Commission before designation can take place. A list of SACs in Scotland can be found on the <u>Joint Nature Conservation Committee</u> website.

Special Protection Areas

Special Protection Areas (SPAs) are classified to protect bird species considered rare or vulnerable in the EU (that are listed on Annex I of the Birds Directive) and migratory bird species which move across national boundaries. Over 80 species of birds are protected within the Scottish SPA suite. The Joint Nature Conservation Committee website includes a list of SPAs in Scotland.

Unlike the Habitats Directive, the Birds Directive contains no specific criteria for site selection, so the UK has developed its own set of guidelines. These are based primarily on the numbers of birds of a given species or groups of species (assemblages of waterfowl and seabirds) which use a site regularly for breeding and/or wintering. The guidelines also take into consideration factors such as population density, breeding success and history of occupancy by a given species. Many classified SPAs in Scotland are wetland areas, such as estuaries or lochs, which are also listed under the Ramsar Convention on Wetlands of International Importance. Further information about selection of SPAs and SACs is available on the Joint Nature Conservation Committee website.

19 Culbin Bar SAC and Moray and Nairn Coast SPA

Consultations

What consultations take place before sites are selected?

Natura sites are selected following wide consultations carried out by Scottish Natural Heritage (SNH) on behalf of the Scottish Government. The aim is to make sure that site designations are based on the best scientific information available. SNH works closely with the Scottish Government to make sure that anyone who has an interest in a proposed Natura site is consulted.

Consultations can begin with informal contact such as a phone call, letter or email. Information is made available outlining the reasons for the proposal and asking for written comments. Meetings and public events can offer an opportunity to discuss any issues relating to the consultation. SNH collates and assesses the written responses to the consultation and submits them to the Scottish Government, who makes the final decision about whether to classify an SPA or submit a proposed SAC to the European Commission.

Natura sites and other designations

How do Natura sites relate to Sites of Special Scientific Interest (SSSIs)?

Most land-based Natura sites (including coastal sites down to the mean low water mark of spring tides) are also notified as Sites of Special Scientific Interest (SSSIs). Natura sites are an additional level of protection which recognises the international importance of these sites for nature conservation. The existing SSSIs will continue to play an important part in conserving different habitats and species.

How do Natura sites relate to Marine Protected Areas?

Marine SPAs and SACs are considered part of the <u>Marine Protected Area (MPA) network</u>. Also included within this network are a suite of sites known as Nature Conservation MPAs. Some of these overlap marine Natura sites and together they contribute to the protection of some of Scotland's most important marine wildlife, habitats, geology and undersea landforms.

Management and protection arrangements



Natura sites are part of a living landscape. Most of the sites which have been chosen have been subject to some form of use by humans for hundreds or thousands of years. Many of the sites reflect the influence of these activities, either now or in the past. People earn a living from farming, forestry and fishing in Natura sites, and many are enjoyed by visitors who appreciate their special qualities. In Scotland, SNH works with owners and occupiers of Natura sites to make sure they are managed sensitively and protected at the same time. However these sites are not intended to be 'no go' areas. In protecting Natura sites, we must allow for economic or social uses of the site which do not conflict with looking after its wildlife interest. We need to agree appropriate management by working with the land managers, local communities, regulating authorities, industries and the public who use the sites. Sources of funding are available to help with this process (see below).

Crofter driving cattle through the machair, North Uist

How does designation affect current site management?

For most sites, designation as a Natura site should not make a great difference to the way the land or water is managed. For some sites, small changes may have to be made to current management because of the enhanced level of protection that these areas now need. Alterations to site management may be made for a number of reasons. We may ask managers to make changes because we believe it will help improve the natural heritage value of the site, or because we want to prevent a site from deteriorating. Managers themselves may want to make changes to make sure that the site is managed efficiently and cost-effectively. Whatever the reason, it is important that we talk to each other. It is normally a straightforward process to agree which outcome is best for both the natural heritage and the management of the site. Further information for land managers regarding site management can be found on SNH's website.



Extracting Sitka spruce by horse, Strontian

22 Muirburn, Southern Uplands

Funding for conservation management

Natura sites may require active management to maintain their interest. Such management is often achieved by the existing land use, which needs to be maintained. In some cases land use needs to be modified or certain management practices encouraged for the benefit of a site's wildlife interest. For example, grassland management specially for corncrakes, or moorland management that is compatible with rare heath habitats.



The 2014-20 Scottish Rural Development Programme (SRDP) offers financial assistance to farmers, crofters, foresters, businesses and community groups to help deliver environmental, social and economic benefits to rural Scotland. It includes a wide range of management measures, mostly with standard payment rates, that can help farmers and other land managers to manage Natura sites for the benefit of their wildlife interest.

The two SRDP schemes that are particularly relevant for Natura sites are the Agri-environment Climate Scheme (AECS) and Forestry Grant Scheme (FGS). The Agri-environment Climate Scheme is run jointly by SNH and Scottish Government Rural Payments and Inspections Division (SGRPID). The Forestry Grant Scheme is run by Forestry Commission Scotland. AECS and FGS have replaced the Rural Priorities scheme which was available under the 2007-13 SRDP. Further information can be found on SNH's website and the Scottish Government website.



LIFE-Nature project: Pearls in Peril

Freshwater pearl mussels are highly endangered long-lived freshwater molluscs that live in unpolluted fast-flowing rivers. Declines have been recorded throughout their range due to habitat degradation, declining water quality and wildlife crime.

The Pearls in Peril project ran from September 2012 to March 2017 and was designed to safeguard the future of the most important pearl mussel populations in Great Britain, including 19 SACs in Scotland. The SNH-lead partnership comprised 14 beneficiaries who worked to deliver three main objectives:

1. To RESTORE habitat for the benefit of both mussels and salmonids (young salmon and trout) by bank-side tree planting, water margin protection, instream restoration recreating riverbed habitat and establishing natural river processes.

Small tree enclosures adjacent to SAC.

- 2. To SECURE populations through the 'Riverwatch' scheme; this raised awareness of the threat of illegal fishing activity. Pearls in Peril also refined a technique to increase the juvenile mussel population. This mimics the mussel's natural lifecycle by introducing larvae onto the gills of wild salmonids which act as hosts.
- 3. To COMMUNCATE to a range of audiences including children through the specially developed 'Pearls in the Classroom' activity.

It will be years before the impact of the work on the pearl mussels can be assessed, but immediate landscape scale habitat improvements have been realised, which should benefit all river species. For more information visit the project website at www.pearlsinperil.scot.

Proposals that could affect Natura sites

The Habitats Directive and Birds Directive have been turned into domestic law through a piece of legislation called 'The Habitats Regulations'. Regulatory bodies such as Planning Authorities, Marine Scotland, SEPA and the Forestry Commission, must carry out their duties to meet the requirements of the Directives. Such authorities cannot permit developments or work that could adversely affect the integrity of a Natura site. The only exception to this is if there is an imperative reason of overriding public interest for the work to be carried out and there are no alternative solutions. In such cases any necessary compensatory measures must be provided to maintain the coherence of the Natura network. Further information on the steps that need considered when a plan or project could affect a Natura site (Habitats Regulations Appraisal) is available on SNH's website.

In exceptional circumstances Scottish Ministers can make Nature Conservation Orders to provide protection to a Natura site, if other regulatory means are not available and voluntary agreements are not achieved. SNH can also make byelaws for sites to regulate activities not controlled by other means.

Natura sites are given protection from the moment they are announced by Ministers as proposed sites. This protection does not only apply within the site itself; it also extends to the consideration of proposals outwith the boundary of the site if these are likely to affect it.

Terrestrial and marine Natura sites are protected in the same way. There are however additional management arrangements that apply to <u>marine SPAs and SACs</u>, including provisions for establishing marine management schemes.





Once sites have been identified the important natural features need to be protected and managed. In order to know the condition of the protected interests of a site, the effects of current or past uses need to be assessed, and good quality information gathered through repeated monitoring. SNH achieves this through a rolling programme of monitoring for designated sites known as Site Condition Monitoring (SCM) which checks the condition of the interests of the sites and the influence of management and wider environmental factors on the nature conservation interest. The results of monitoring are also used to check how effective changes in management have been in improving condition.

SCM is part of a UK-wide programme that has been developed with colleagues in England, Wales and Northern Ireland to make sure that all sites are monitored using common attributes and targets across the UK, to allow consistent reports to be prepared for a variety of purposes. SCM aims to look at the condition of each protected feature every six to eighteen years. We will tell land owners, managers, users and the public about the condition of a protected feature on a site. If we are concerned about the condition of a habitat or species on a site, or a change in the condition, we will work with managers to decide how we can make improvements.



Marine management schemes

The diverse sea areas around Scotland are the focus of considerable human activity. We build and develop industries along the coastlines, use them for transport, reap harvests from them and use them for recreation. All this activity involves a wide range of organisations and individuals, so the sustainable management of our seas and coastlines is invariably a shared responsibility. Because of this, the law makes provision for a management scheme to be developed for each Natura marine site where this is appropriate. Management schemes have been developed for Natura marine sites in busy areas such as estuaries, where there is a need to provide a framework which protects the Natura interests while providing for continued and sustainable use of the area.

The development of marine management schemes involves consultation with all relevant interests. Authorities which have functions relevant to marine conservation along with key stakeholders (including local user groups and interested bodies) are all involved.

24 Underwater reef at St.Kilda

Seabird research, Isle of May (part of Forth Islands SPA)

Natura sites and the public

No form of nature conservation will work unless it has the support of the people who are involved with the land or sea, or who are affected by how it is managed – and that means all of us. That's why it is so important that we raise the profile of Natura, so that everyone can understand what it means and why it matters. We recognise that public support is vital if we are to succeed in maintaining and improving the beautiful natural heritage we have inherited. We aim to encourage people of all ages and from all walks of life to understand, enjoy and respect their natural heritage.

Wildlife tourism is particularly important to rural communities where visitors can provide a valuable boost to local economies. The remarkable cliffs of St Abb's Head, 60km east of Edinburgh, are home to thousands of breeding seabirds. Several thousand visitors come to watch this spectacle each year. There are also less accessible seabird breeding islands such as the Isle of May in the Firth of Forth (part of the Forth Islands SPA) and Handa SPA off the coast of Sutherland. These are tiny areas, but every summer each attracts many visitors to see the huge seabird colonies, providing important income to rural economies. While bird watching is most common, many other types of wildlife are watched, including dolphins, seals and otters. The Scottish Marine Wildlife Watching Code provides advice on how best to watch marine wildlife. It gives guidance on how to minimise disturbance and helps wildlife watchers stay within the law. Further information about wildlife law in Scotland is summarised in the leaflet 'Scotland's Wildlife: The law and you'.

26 Bottlenose dolphins and a dolphin watching boat off Chanonry Point, Moray Firth SAC

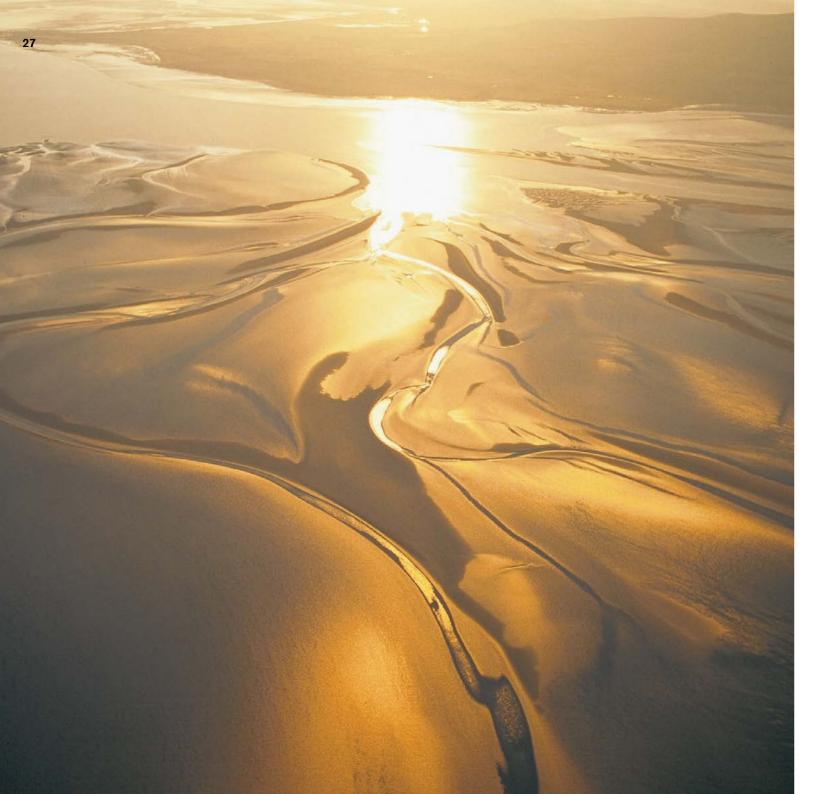


Enjoy Scotland's outdoors responsibly

- take responsibility for your own actions
- respect the interests of other people
- care for the environment.



Everyone in Scotland has the right to be on most land and inland water for recreation, education and enjoyment, providing they act responsibly. The Scottish Outdoor Access Code provides guidance on access rights and responsibilities, including caring for the environment. On any nature reserve or protected area, including Natura sites, special care should be taken to avoid damage to habitats or disturbing wildlife living there. In some cases you may be asked to follow a specific route or avoid a particular area to protect vulnerable habitats or species. Dogs can disturb wildlife and should be kept under proper control, particularly during the bird breeding season (usually April to July) in moorland, forests, grasslands, loch shores and the seashore. Nature conservation legislation gives legal protection against intentional or reckless damage to the qualifying interests of a Natura site.



27 Inner Solway, Solway Firth SAC and Upper Solway Flats and Marshes SPA

The wider context of Natura: managing the wider countryside

Protecting Natura sites is vital for the continued survival of important European habitats and species. But the Natura network is just one part of the whole picture. The Birds and Habitats Directives promote other measures for the sustainable management of the countryside and marine environment outside designated areas, for without this wider approach the task of protecting nature inside the designated areas becomes much more difficult. Sensitive management of this wider countryside will continue to be encouraged, to allow wildlife to thrive, and people to live, work and enjoy recreation in harmony with the natural heritage. The Government's approach to land use planning and agriculture, forestry and fisheries policies also contribute to this wider picture.

The overall aim of the Habitats and Birds Directives is to encourage the conservation of biodiversity in Europe, and Scotland has an important part to play. Scotland is home to many species, some of which are identified in the Habitats and Birds Directives as rare, endangered or vulnerable. Protection of many of these species extends beyond the Natura site network. Birds are protected wherever they are, especially while nesting and rearing young. Some animals and plants, called 'European protected species', are also given special protection wherever they occur. For example, SACs have been identified to protect the otter but it is also a European protected species and is therefore protected outwith SACs too. More information about all kinds of species protection is available on SNH's website.

By caring for wild animals, plants, birds and their habitats, both within and outside protected sites, Scotland can make an important contribution to conserving the world's biodiversity. Scotland's Natura sites will help protect these valuable natural resources for the benefit of generations of people now and in the future.

The <u>2020 Challenge for Scotland's Biodiversity</u> is an ambitious strategy to protect and restore Scotland's biodiversity and together with <u>Scotland's Biodiversity: It's in Your Hands</u> comprises the Scottish Biodiversity Strategy. Our Biodiversity Strategy highlights the need to protect nature for both its own sake and also because the environment underpins our economy, improves our health and helps define our sense of place. This includes our Natura sites. Meeting the 2020 Challenge relies heavily on the active input and support of a wide range of individuals and organisations living or working across the whole of Scotland.

Sources of further information

If you would like further information on Natura sites and related issues, the following websites will provide further details:

Scottish Natural Heritage

<u>SNH's website</u> contains information about Natura sites in Scotland as well as sources of funding for conservation management.

Joint Nature Conservation Committee

The website of the Joint Nature Conservation Committee (JNCC) contains more detailed information on <u>SACs</u> and <u>SPAs</u> in the UK, including site lists, descriptions and an explanation of the selection process.

European Commission

The nature and biodiversity pages from the <u>European Commission's DG Environment website</u> include useful links to information on the Habitats and Birds Directives, the Natura network in Europe and LIFE-Nature funding.

Biodiversity

You can find out more about biodiversity in Scotland on the <u>SNH website</u>.

Alternatively you may wish to contact staff at one of SNH's offices who will be able to help with your query. Contact details for SNH's offices can be found on the SNH website.

www.nature.scot

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Photography

Front cover: Loch Scresort and Kinloch in autumn light from Meall a' Ghoirtein, Rum SAC and SPA by John MacPherson/SNH Inside: all images by Lorne Gill/SNH other than MNCR/SNH 2, 3, 24; Peter Cairns 11; Laurie Campbell/SNH 12,17; Sue Scott/SNH 16; P & A Macdonald/SNH 19, 22, 27; Fiona Grigor-Taylor 23

