

### National Parks and Wildlife Service Conservation Plan for 2005-2010



# Lough Nabrickkeagh Bog cSAC

Site Code 634 Co. Sligo



# SUMMARY

#### Introduction

Lough Nabrickkeagh Bog cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site has been designated due to the presence of active blanket bog, a priority habitat listed under Annex I of the EU Habitats Directive.

#### **Description of Lough Nabrickkeagh Bog cSAC**

Lough Nabrickkeagh Bog cSAC is located in the south-western corner of Co. Sligo, 0.7 km north-west of Lough Talt in the Ox Mountains, mid-way between Tubbercurry and Ballina.

The bog overlays a substratum of metamorphic schist and gneiss, which is typical of blanket bogs in the Ox Mountains. A large expanse of forestry divides the site into two separate areas, one area in and around Lough Nabrickkeagh, and a smaller area west of this main block.

The areas of active blanket bog support a good diversity of vegetation communities and microtopographic features typical of this habitat, including interconnecting pool systems, Atlantic blanket bog pools, wet flats, peat moss lawns, well developed hummocks and flushes. White Beak Sedge is often dominant in these areas and is found in association with Cranberry and other important Bog Moss species. The higher ground supports a different community to that found on the lower ground, including Ling Heather, Bog Cotton and Cranberry and a carpet of Bog Moss species.

There are areas of old cutover blanket bog, which have regenerated, and some old drainage channels flow into small streams that dissect the bog. Other habitats found on this site include lowland wet grassland, cutover blanket bog, lake, exposed rock and streams.

Notable animal species found on the site include Otter, a species listed in Annex II of the EU Habitats Directive. Merlin, Peregrine Falcon and Greenland White-fronted Geese, which are listed in Annex I of the EU Birds Directive, have been recorded on the site including. Both raptor species use this site as a hunting ground. Other notable bird species include Curlew, Common Gull, Common Sandpiper and Red Grouse.

There are some areas within the eastern section around Lough Nabrickkeagh, where peat extraction by machine has recently occurred (during the past five years). However, peat cutting on the site has now ceased. Drainage channels were cut in an area to the north of Lough Nabrickkeagh. Old tracks are present throughout the main block of the site, which were used in the past for transporting peat. Sheep graze the majority of the site. Burning has been carried out within the site in the past. The local Tubbercurry and District Gun Club currently control shooting in the area.

#### Main conservation objectives

- To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; active blanket bog (88% area of the site)
- To maintain other habitats at favourable conservation status, cutover blanket bog (6%), lowland wet grassland (2%), lakes and ponds (2%), exposed rock (1%) and streams (<1%)
- To maintain the populations of notable species on the site at favourable conservation status, including Recurved Bog Moss, Sphagnum imbricatum, Peltigera membranaceae, Reindeer Moss, Cranberry, Common Frog, Greenland White-fronted Goose, Peregrine Falcon and Merlin
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities

#### Main management issues

- Burning
- Dumping
- Grazing
- Peat cutting and drainage on the active blanket bog and sensitive cutover blanket bog areas
- Water extraction

#### Main strategies to achieve objectives

- Maintain grazing at sustainable levels
- Continue the control of peat cutting
- Block active drains
- Increase control of other damaging activities such as dumping and burning
- Monitor potential damaging activities to all the habitats and the status of notable plant and animal species
- Liaise with various organisations and groups regarding the management of the site

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# READER'S GUIDE

The National Parks and Wildlife Service (NPWS) of the Department of the Environment, Heritage and Local Government (DEHLG) has produced this plan to provide ecological information about the site and to outline the main objectives for the conservation of the special features of the site. The purpose of this draft is to provide stakeholders the opportunity to input into the development of the plan.

The **Introduction** section outlines the **policy background** to the site's designation and the relevant legislation.

The **Site Description** section contains **general information** on the site's boundaries and ownership and on the statutory bodies with responsibility for its conservation. It also contains sections on the **physical aspects** of the site such as the geology and hydrology as well as the **biological features**, in particular, the habitats and species found there. **Land use** and cultural features are also described.

The **Conservation Value** section assesses the main ecological attributes of the site.

The **Management Framework** section outlines the management necessary for the conservation of the site. It starts with a set of specific **conservation objectives.** These are followed by the main **management issues** that may impact on the conservation of the site and the **strategies** that are proposed to achieve the conservation objectives. In the final section, the site is divided into management **zones** to indicate where each strategy applies.

The appendices include a **glossary** where scientific and technical terms are explained, **reference material** consulted in the preparation of the plan and a list of **notifiable actions** relevant to each habitat within the site.

By preparing, implementing and reviewing this plan on a five-year basis, DEHLG aims to achieve the objectives of the EU Habitats Directive in relation to this site.

# INTRODUCTION

### **Legal Background for Conservation Plans**

The legal basis for selection and designation of **Special Areas of Conservation** (SACs) is the **EU Habitats Directive**, which was adopted in 1992. Focusing on the conservation of natural and seminatural habitats and species of flora and fauna, the Habitats Directive seeks to establish "Natura 2000", a network of protected areas throughout the European Community. The Habitats Directive includes a list of habitats that require SAC designation and specific conservation measures. This list is known as Annex I and the habitats are referred to as Annex I habitats. On this list, habitats that require special attention because they are in danger of disappearance, are termed 'priority habitats'. A second list, Annex II in the Habitats Directive comprises species that must be afforded special protection.

In Ireland, the habitats and species that must be afforded protection under the Habitats Directive include:

- 16 Annex I priority habitats that require particular attention including raised bogs, active blanket bogs, turloughs and machair,
- 45 other Annex I habitats such as certain types of heaths, lakes and woodlands,
- 25 Annex II species including Otter, Freshwater Pearl Mussel and Killarney Fern.

It is the responsibility of each member state to designate SACs to protect the Annex I habitats and Annex II species. These sites, together with the **Special Protection Areas** (SPAs) designated under the **EU Birds Directive** (1979), form the European "Natura 2000" network.

The Birds Directive contains annexes, which are lists of birds that require particular conservation measures (Annex I), and also species that may be hunted, and species that may be sold. There are 28 Annex I species regularly occurring in Ireland including Whooper Swan, Greenland White-fronted Goose, Peregrine Falcon, Corncrake and Terns. Member states are also required to protect sites that are important for migratory species such as ducks, geese and waders.

The Habitats Directive was transposed into Irish law through the **European Communities** (Natural Habitats) Regulations 1997. The Wildlife Act 1976 is the main statute governing the protection of wildlife in Ireland and was amended in 2000 to take account of European law, particularly the Habitats and Birds Directives. The Wildlife (Amendment) Act 2000 also makes legal provision for the designation and protection of a national network of Natural Heritage Areas (NHAs). Over 1,100 proposed NHAs were published in 1995 and almost 400 of these are also selected as candidate SACs.

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The European Communities (Natural Habitats) Regulations 1997 include the following points:

The Minister for the Environment, Heritage and Local Government must transmit a candidate list of sites to the European Commission for consideration.

Following adoption of this list by the Commission, the Minister will formally designate the sites as SACs.

Sites are legally protected once they are publicly advertised.

Landowners and other users with a legal entitlement should be notified of designation, and the Minister must make all reasonable efforts to do so. Notification also includes a list of activities that may alter, damage, destroy or interfere with the integrity of the site. A person who illegally damages a site may be prosecuted or required to repair damage.

Landowners and other users with a legal entitlement may appeal the designation of lands on scientific grounds.

Landowners and other users with a legal entitlement will be compensated for actual loss of income arising from restrictions imposed as a result of designation.

DEHLG is the government department with responsibility for the designation and protection of wildlife habitats, species and areas of conservation interest. As part of their responsibility in relation to biodiversity and wildlife under the Wildlife Acts (1976 and 2000), the Minister's brief extends far beyond the habitats and species listed in the annexes of the Habitats and Birds Directives. For this reason, cSAC conservation plans may deal with species that are not mentioned in these annexes.

#### Reasons for Designation of Lough Nabrickkeagh Bog cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
Blanket Bog (*active only) (EU Habitat Code 7130)	This site is notable due to the presence of intact *active highland blanket bog in two separate sections. Overgrazing is not a significant problem on this site. A range of habitats and vegetation community types are present with interconnecting pool systems, areas of Bog Moss hummocks and Bog Moss lawns. The notable species Peregrine, Merlin, Greenland-White-fronted Geese, Curlew and Otter frequent this site.

# Implications of Site Designation for Landowners and other Site Users

In most areas designated as cSACs, current practices will not have to change significantly.

In cases where users with a legal entitlement are required to change practices or restrict activities to protect the wildlife interest of the site, compensation will be payable based on actual loss of income.

If a user with a legal entitlement wishes to carry out certain activities, not covered by licence or consent from another statutory body, within the designated area, they must consult with, and get consent from, the Minister for the Environment, Heritage and Local Government. These activities are listed as "Notifiable Actions" for each habitat (see Appendix V).

The designation of the site can be appealed by landowners and legal users on scientific grounds. Details of the appeals procedure are also given in Appendix VI.

# SITE DESCRIPTION

# **Location Including Site Boundaries**

Lough Nabrickkeagh Bog cSAC is located in the south-western corner of Co. Sligo, 0.7km north-west of Lough Talt in the Ox Mountains, mid-way between Tubbercurry and Ballina (just off the R294) (Map 1). The site comprises two areas of \*active blanket bog that are separated by a conifer plantation.



\*Active blanket bog in Lough Nabrickkeagh Bog cSAC (photo by Robert Lundy)

**Grid Ref.:** G 42 15

**Latitude:** N 54°04'46" **Longitude:** W 08°53'00"

**Area:** 271 ha

**Altitude Range:** 150 m to 260 m

**Townlands:** Gortersluin, Gleneask, Ounagh, Largen, Tullaghaglas and Castlerock

#### **Site Boundaries**

Some of the site boundaries coincide with several streams, the edges of conifer plantations, field boundaries, a lane on the eastern side and townland boundaries. Some boundaries are unmarked on the ground. The adjacent land includes conifer plantations, blanket bog and grassland.

#### Site Infrastructure

A track is located on the eastern section of the site on the south-eastern corner, giving access to some old cutover blanket bog areas.

# Legal Status

#### **Ownership**

The site is held under multiple private ownership.

#### **Designations of the Site**

candidate Special Sitecode IE0000634

Published on 1st March 1997

**Area of Conservation** 

proposed Natural Heritage Area Sitecode 634 Unpublished

#### **Past Status and Designation of the Site**

This site was designated as a cSAC in 1999. There were some boundary changes to the northern end of the eastern section in 1999, with an inclusion of one area to bring the boundary adjacent to the conifer plantation and the exclusion of another area where peat cutting is active.

#### **Rights Pertaining to the Site**

**Rights of turbary** Local people have turbary rights on this bog.

# **Government Departments and Agencies**

Department of the Environment, Heritage and Local Government (DEHLG)

National Parks & Wildlife Service (NPWS)

DEHLG is the government department with responsibility for the protection and conservation of Ireland's natural heritage.

NPWS is the section of the DEHLG responsible for maintaining the nature conservation value of the site. Periodic inspection of the site is carried out by the local Conservation Ranger.

Regional staff also participate in research and survey projects by collecting data on the site, provide advice to planning authorities on the impacts of development applications and provide an education and advisory service to the public (see Appendix VIII) for further details of NPWS regional staff.

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**Sligo County Council** 

Sligo County Council is the planning authority for the site. As such they are obliged to ensure appropriate assessment of the implications of developments requiring planning permission that may have an impact, either individually or in combination with other developments on the designated area.

Environmental Protection Agency (EPA) The EPA is an independent state sponsored body with a wide range of statutory duties including monitoring environmental quality and overseeing the performance by local authorities of their statutory environmental protection functions.

Department of Communications, Marine and Natural Resources (DCMNR) The DCMNR is responsible for licensing and regulating fishing, aquaculture, commercial and other development below mean high water; and under Regulation 31 of the EU Natural Habitats Regulations, for ensuring that such activities in the cSAC do not adversely affect it. Monitoring functions are carried out by individual divisions of the department and by the executive agencies under its direction namely the Central and Regional Fisheries Boards, The Marine Institute and an Bord Iascaigh Mhara.

**Coillte Teoranta** 

Coillte Teoranta is the State-owned commercial forestry company, which owns public forests.

#### **Local Authority Policy in relation to the Site**

The relevant local authority for this area is Sligo County Council. The County Development Plan for Sligo (2002) states that "it is an objective of the Council to restrict development on all designated or proposed natural heritage Areas (NHAs), Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). Development infringements of these areas will only be considered where there is an overriding public interest in doing so, associated with significant public infrastructure, where the development would not detract from the main attributes of the site and where adequate mitigation measures are put in place".

# **Physical Features**

#### **Climate**

The closest synoptic weather station to the site is at Claremorris and the 30 year (1961-1990) average data from this station are displayed in Appendix III. This station receives a mean annual rainfall of about 1143mm. The mean daily air temperature at this station is 8.9°C, ranging from a mean low of 4.3°C in January to 14.3°C in July. The average daily duration of sunshine is 3.1 hours. Mean monthly wind speeds range between 7.3-10.2 knots. There is an annual average of 24 days with sleet or snow recorded, but only six days where snow is still lying on the ground by 09.00 am.

#### **Geology & Geomorphology**

Lough Nabrickkeagh bog cSAC overlays a substratum of metamorphic schist and gneiss, which is typical of the bogs in the Ox Mountains.

#### Soils & Soil Processes

Deep peat covers most of the site. On the steeper slopes and higher ground the peat is shallower.

#### **Hydrology & Water Quality**

A freshwater lake (Lough Nabrickkeagh) occurs on the eastern section of the site. This lake has an outflow into a small stream that drains into the Owenaher River. Water is being drawn from this stream for a domestic water supply. There are several other small streams that form parts of the boundary of the site, including the Lenyvee River, which drains from Lough Talt. The water quality has been monitored downstream of the site on both the Owenaher River and the Lenyvee River, with the Q value being 4-5 (unpolluted) (see the website, www.epa.ie, river water quality).

There are also some artificial drainage channels that have been cut to drain areas north of Lough Nabrickkeagh (Map 2), where peat cutting is active. These channels are draining an area of Atlantic blanket bog pools.

# **Biological Features**

#### **Habitats and Vegetation**

**Note:** Throughout the conservation plan, habitats are named and described under two different systems: the Annex I habitat is as listed in the EU Habitats Interpretation Manual Version 15/2(1999), while all other habitats are as listed according to the NPWS NHA classification system.

The following table lists the habitats within the site. The Annex I habitat of the Habitats Directive for which the site was selected is listed, with the relevant NHA habitats category also shown. Annex I priority habitats are marked with an asterisk (\*). The Indicative Habitat map for the site is presented in Map 2. The percentage area presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 2.

#### Habitats Found within Lough Nabrickkeagh Bog cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
Blanket bog (*active only) (EU Code 7130)	Upland blanket bog	88%
-	Cutover blanket bog	6%
-	Lowland wet grassland	2%
-	Lakes and ponds	2%
-	Exposed rock	1% (not mapped)
-	Rivers and streams	<1%
-	Drainage ditches	<1%
-	Buildings and roads	<1% (not mapped)
	Old walls	<1% (not mapped)

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#### **Annex I Habitat:**

Blanket bog (Active only) (7130) (88% of total site area or 239ha)

The two \*active (peat-forming) blanket bog areas support a good diversity of vegetation communities and microtopographical features typical of blanket bog. The vegetation is typically dominated by Ling Heather (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*) and Deer-grass (*Trichophorum caespitosum*), with a good cover of Bog Mosses (*Sphagnum* spp.) underneath. This site supports an excellent Bog Moss flora both in terms of the cover and number of species. There is some variation in species abundance with altitude. In places, extensive areas feature systems of shallow, interconnecting pools colonised by White Beak-sedge (*Rhynchospora alba*), Common Cotton-grass (*Eriophorum angustifolium*) and occasional Bog Sedge (*Carex limosa*), with Round-leaved Sundew (*Drosera rotundifolia*) and Great Sundew (*D. anglica*) lining pool margins.

Hummocks formed by Bog Mosses (including *Sphagnum imbricatum* and *S. fuscum*) are scattered throughout. These provide a slightly drier habitat for species such as Bilberry (*Vaccinium myrtillus*) and often have good growth of lichens, including the uncommon species, *Cladonia rangiferina*.

Elsewhere, pools are more defined and somewhat deeper. These are frequently colonised by Bogbean (*Menyanthes trifoliata*) and Bog Moss (*S. cuspidatum*). Other areas have wet and quaking Bog Moss lawns with abundant White Beak-sedge.

Several flushes occur on the site, mostly associated with streams and some of which are iron-stained. The latter tend to be species-rich, with Bog Pimpernel (*Anagallis tenella*), Water Mint (*Mentha aquatica*) and Lesser Spearwort (*Ranunculus flammula*). Cranberry (*Vaccinium oxycoccos*) occurs in some of the flushes, and Eared Willow (*Salix aurita*) is an occasional coloniser.

A more detailed description is given in Appendix IV.

#### Other Habitats:

Cutover blanket bog

This habitat includes areas of old cutover bog which have regenerated and are dominated by Ling Heather with some occasional Cranberry, as well as some active areas of peat extraction that have a severely depleted species diversity.

Lowland wet grassland

Most of this habitat occurs on the periphery of \*active blanket bog on the northern boundaries of both areas of the site. These small areas are dominated by Soft Rush (*Juncus effusus*), with the occasional tussock of Purple Moor-grass (*Molinia caerulea*).

Lakes and ponds

Lough Nabrickkeagh is a large rock bottomed lake situated in the eastern section of the site. Aquatic species recorded from this lake include Bulbous Rush (*Juncus bulbosus*), Yellow Water-lily (*Nuphar lutea*), White Water-lily (*Nymphaea alba*), Shoreweed (*Littorella uniflora*), and Water Horsetail (*Equisetum fluviatile*). Shore species include Soft Rush, Heath Rush (*Juncus squarrosus*), Bog Moss species and Common Yellow Sedge (*Carex demissa*). On the banks Ling Heather and Bracken (*Pteridium aquilinum*) occur.

**Exposed rock** This habitat is found mainly on the higher ground, but is also scattered

throughout the site. The rocky outcrops have a covering of Lichens. These small outcrops occur in mosaic with the \*active blanket bog and so have been included with the \*active blanket bog for the purpose of

habitat mapping and management prescriptions.

**Rivers and streams** Several streams are present within the site.

**Drainage ditches** There are several drainage ditches on the site.

**Buildings and roads** There are some old tracks on the site and a derelict building is located in

the south-east corner of the eastern section.

**Old walls** There are some old stone walls around the edge of the site.



Bog Moss (Sphagnum sp.) (photo by Marie Dromey)

#### **Notable Flora:**

#### **Lower Plants**

Two moss species, Recurved Bog Moss (*Sphagnum recurvum var. tenue*) and *Sphagnum imbricatum*, and one lichen species, *Peltigera membranaceae*, were recorded new to this region in 1989 (Douglas *et al.*, 1989). The presence of *Sphagnum fuscum* and *S. imbricatum* is also notable.

A lichen, Reindeer Moss (*Cladonia rangiferina*), was also recorded in 1989, which is known from less than 10 Vice County records in Ireland.

#### **Higher Plants**

No particularly rare species occur, but the presence of Cranberry (*Vaccinium oxycoccus*), a species commonly found on raised bogs in the midlands, is noteworthy.

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#### Fauna:

#### **Fish**

Some Brown Trout (*Salmo trutta*) occur in Lough Nabrickkeagh ('the lake of the blind trout') although it is not noted as a fishery.

#### **Amphibians and Reptiles**

Common Frog (*Rana temporaria*), a species listed in Annex V of the EU Habitats Directive and listed as 'Internationally Important' (Whilde, 1993), is breeding on the site.

#### **Birds**

Several bird species listed in Annex I of the EU Birds Directive have been recorded using the site. Lake and pools have been used occasionally by Greenland White-fronted Goose (*Anser albifrons flavirostris*). Peregrine Falcon (*Falco peregrinus*) and Merlin (*Falco columbarius*) both use the site for hunting and there was a known Peregrine breeding ground in close proximity to the site.

Merlin is listed as 'Rare', and both Greenland White-fronted Goose and Peregrine Falcon are listed as 'Internationally Important' in the Irish Red Data Book (Whilde, 1993).



Peregrine Falcon

Curlew (*Numenius arquata*) a species listed in Annex V of the EU Birds Directive (Wintering) was recorded breeding on the site.

Other notable species include Common Gull (*Larus canus*) with 12 pairs (1997) recorded breeding on the shore of Lough Nabrickkeagh, and this species is still breeding in 2003. Common Sandpiper (*Tringa hypoleucos*) is also breeding around the lake. Red Grouse (*Lagopus lagopus*) is also present. Raven (*Corvus corax*), (there are two known breeding grounds for this species in close proximity to the site), Teal (*Anas crecca*) (wintering), Sparrowhawk (*Accipiter nisus*), Kestrel (*Falco tinnunculus*), Meadow Pipit (*Anthus pratensis*), Snipe (*Gallinago gallinago*), Woodcock (*Scolopax rustticola*) and Mallard (*Anas platyrhynchos*) also use the site.

#### **Mammals**

Otter (*Lutra lutra*), a species listed in Annex II of the EU Habitats Directive, frequents the site around Lough Nabrickkeagh. Otter is listed as 'Internationally Important' in the Irish Red Data Book (Whilde, 1993).

Other notable species include Irish Hare (*Lepus timidus hibernicus*) and Badger (*Meles meles*), which are both listed as 'Internationally Important' in the Irish Red Data Book (Whilde, 1993). Fox (*Vulpes vulpes*) also frequents the site.

### **Land Use**

#### Land use on the site

**Peat extraction** Machine cutting (Hopper machine) was carried out under licence in the

area to the south of Lough Nabrickkeagh. This has now finished and has

not been carried out for the past three years.

Small scale hand cutting of peat was carried out on one bank in the western side of the western section of the site. However this has ceased

(2003).

**Agriculture (Grazing)** Seasonal sheep grazing is practised in almost all parts of the site. Most of

the land within the cSAC is unfenced so livestock are generally free to

move around.

**Burning** Burning has been carried out within the site in the past. There is no

evidence of this practice being carried out recently.

**Hunting** Shooting in the area is currently controlled by the local Tubbercurry and

District Gun Club. The gun club does not currently hunt Red Grouse on

the site, though members may exercise dogs on the site.

Water abstraction Water is abstracted from the stream draining Lough Nabrickkeagh for a

domestic water supply.

**Spread of exotic** 

species

There is a small plantation of Daisy Bushes (Olearia spp.) within the site

on the western boundary. However, these bushes are not spreading.

Roads/trackways Old tracks are present throughout the eastern section, many of which

were used in the past for transporting turf.

#### Land use adjacent to the site

**Forestry** The site has been divided into two by a forestry conifer plantation, which

was planted after the Douglas et al. (1989) survey. Some sections of the

land surrounding both portions have also been planted.

**Agriculture** Sheep grazing is practised on much of the land adjoining the cSAC.

**Peat-cutting** Peat-cutting using sausage machines is being carried out on an area to the

north of the eastern section. There is very little vegetation cover in the

area. This area was formally in the site but has now been excluded.

**Infrastructure** A phone mast has been erected in an area of forestry to the south of the

eastern section of the site.

**Roads/Pathways** The site is in close proximity to the R294, which is the Tubbercurry to

Ballina road.

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Present human settlement patterns

The area around the cSAC is sparsely settled. There are a small number of private dwellings outside the boundary of the site.

#### Past human use

Peat extraction was once carried out in numerous parts of the site. Old trackways are still visible today, which lead up to many of the flat areas where the peat is quite deep.

#### **Recorded Monuments and Other Features**

There are no recorded monuments or archaeological features known within this site.

# CONSERVATION VALUE OF LOUGH NABRICKKEAGH BOG CSAC

Lough Nabrickkeagh cSAC is significant due to the presence of \*active blanket bog, a priority habitat listed in Annex I of the EU Habitats Directive. This site contains one of the best quality highland \*active blanket bogs left in the Ox Mountains that has not been afforested and is rated as being a good representative of this habitat in Ireland. The site supports a good diversity of vegetation communities and has a well-developed microtopography. This site supports an excellent Bog Moss flora both in terms of the cover and number of species. This site contains > 2% of the total area of \*active blanket bog designated in Ireland.

The intact parts of the site are not damaged significantly. Peat cutting was being carried out recently around the eastern side of Lough Nabrickkeagh and on a small portion at the south-western end of the western section, but this has now ceased.

Lough Nabrickkeagh cSAC provides habitat used by Merlin, Peregrine, Greenland White-fronted Geese, species listed in Annex I of the EU Birds Directive. The site is also used by Otter, a species listed in Annex II of the EU Habitats Directive.

# **MANAGEMENT FRAMEWORK**

## **Conservation Objectives**

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as candidate Special Areas of Conservation. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, is stable or increasing, and
- the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable as defined below.

The favourable conservation status of a species is achieved when:

- population data on the species concerned indicate that it is maintaining itself, and
- the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

**Objective 1:** To maintain the Annex I habitats for which the cSAC has been selected at

favourable conservation status; \*active blanket bog (88% area of the

site).

**Objective 2:** To maintain other habitats at favourable conservation status, cutover

blanket bog (6%), lowland wet grassland (2%), lakes and ponds (2%),

exposed rock (1%) and streams (<1%).

**Objective 3:** To maintain the populations of notable species on the site at favourable

conservation status, including Recurved Bog Moss, *Sphagnum imbricatum*, *Peltigera membranaceae*, Reindeer Moss, Cranberry, Common Frog, Greenland White-fronted Goose, Peregrine Falcon and

Merlin.

Objective 4: To establish effective liaison and co-operation with landowners, legal

users and relevant authorities.

## **Management Issues**

While many activities in or adjacent to the site have the potential to cause deterioration/disturbance, it is important to determine the significance of such activities relative to the conservation objectives at a particular site. To that end, all known potential environmental effects of the sites principal activities (in alphabetical order) have been listed and the biological and chemical impacts that may cause change to the biological communities present have been described.

- Burning
- Dumping
- Grazing
- Peat cutting
- Presence of Daisy bushes (Olearia spp.)
- Water extraction

#### **Burning**

Small scale burning of vegetation has been practised in some parts of the site in the past. However, there was no evidence of recent burning.

#### **Dumping**

Car wrecks and other rubbish have been dumped within the site along the road on the eastern side of the eastern section of the site.

#### Grazing

Sheep grazing is practised in almost all parts of the site. Most of the land within the cSAC is unfenced so livestock are generally free to move around. The land is privately owned by multiple parties. In order to maintain the ecological value of the \*active blanket bog, grazing intensity must be kept below the level which causes excessive damage to the vegetation. At present (2003) most of the site is not subjected to overgrazing, and the current REPS prescriptions and de-stocking is having the desired impact. However, mild overgrazing is occurring in some sections of the northern end of the eastern section, where sheep are moving into the site from adjacent un-fenced areas.

#### Peat cutting

The blanket bog within the site has been subject to peat extraction. Machine cutting was carried out around Lough Nabrickkeagh using hopper machines, however, this has ceased and the damaged areas are re-vegetating. Machine cutting (sausage) has led to extensive damage within the site to the north of Lough Nabrickkeagh, but these areas are now excluded from the cSAC.

Drainage channels/turbary boundaries were excavated in the area to the north of Lough Nabrickkeagh, potentially having a drying-out effect on the surrounding peat. This is of concern as the Atlantic blanket bog pools are close to these drainage channels. However, peat cutting has ceased in plots adjacent to this area and the drains are slowly being re-filled with vegetation and peat.

#### Presence of Daisy bushes (Olearia spp.)

There is a small plantation of exotic Daisy bushes (*Olearia* spp.) within the site. However, these bushes are not currently spreading.

#### Water extraction

The water level of Lough Nabrickkeagh has fallen. Water abstraction is taking place within the site.

# **General Strategies**

Specific strategies that relate to the above objectives are outlined below. However, there are a number of strategies that relate to the site as a whole. These are as follows:

#### Implement plan

DEHLG will seek to ensure that the aims of this conservation plan are achieved through:

- liaison with the landowners, relevant authorities and interested parties
- implementation of REPS or DEHLG farm plans, which will use this document as a guideline for prescribing management on a farm by farm basis, and also will ensure that the agreed prescriptions for the relevant habitats are adhered to (Appendix VII)
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts

#### Establish a monitoring regime

The monitoring regime for the site will comprise:

**Scientific monitoring** 

Monitoring of the conservation status of the \*active blanket bog will be done by, or on behalf of, the staff of the Monitoring Section of the NPWS or staff working to NPWS in accordance with the procedures laid down by that section.

Protocols for monitoring Lough Nabrickkeagh Bog cSAC will be developed, in consultation with other agencies where appropriate, to determine if the site is being maintained at favourable conservation status.

Site surveillance

Regular inspection of the site by the NPWS staff, with special attention to the peat extraction and associated drainage around Lough Nabrickkeagh will identify any major changes, damaging operations, or threats should they arise.

#### **Enforce notifiable actions**

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats and species are listed in Appendix V of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area For example, the grazing of livestock above a sustainable level or cutting turf from intact areas are notifiable actions for the \*active blanket bog habitat present on the site.

# **Specific Strategies**

#### Objective 1.

To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; \*active blanket bog (88% area of the site).

#### **Strategies:**

1.1. Manage grazing on privately owned lands

For non-commonage land, NPWS will seek to ensure that sustainable grazing levels are maintained/established via REPS and DEHLG farm plans, using a similar methodology applied to commonage areas under the Commonage Framework Planning Project.

1.2. Control and minimise impacts of peat cutting

NPWS will monitor the site to continue the control of peat cutting or new drainage on intact \*active blanket bog areas.

Cutting may continue in less sensitive areas (some cutover bog areas).

Machine cutting other than the use of 'sausage machines' will normally be permitted.

Small-scale hand cutting of peat is permitted where it is already practised.

On particularly sensitive areas of cutover bog, a complete halt to cutting may be required. In such cases condensation will be determined on a case by case basis, but would be in the region of €784.40 per ha (€317.43 per acre).

Where bank cutting is being carried out, the Conservation Ranger should encourage the traditional practise of covering cut-over bog with vegetated sod from the surface of the bank as this encourages the recovery of bog vegetation.

1.3. Maintain hydrology (block active drains)

NPWS will ensure that any active drains occurring around Lough Nabrickkeagh, which are negatively affecting the hydrology of the blanket bog, are blocked to maintain the hydrology of the areas. No new drainage works should be instigated.

1.4. Control burning

Uncontrolled burning is not desirable. The burning of areas greater than five ha is a notifiable action.

1.5. Remove dumped material

NPWS will liaise with Sligo County Council and the local community group (Lough Talt Development Committee) to ensure that waste material such as old cars, etc is removed from this site.

**1.6.** Prevent further dumping

NPWS will liaise with Sligo County Council to erect a 'no dumping' sign at several locations around the site near access roads and track.

#### **Objective 2.**

To maintain other habitats at favourable conservation status, cutover blanket bog (6%), lowland wet grassland (2%), lakes and ponds (2%), exposed rock (1%) and streams (<1%).

#### Strategies:

**2.1.** Manage grazing See strategy 1.1.

**2.2. Maintain** See s hydrology

See strategy 1.3.

2.3. Maintain rivers, streams and lakes

No intervention is necessary to manage rivers and streams and lakes that are present on the site or on the boundaries. Refer to the notifiable actions for such areas. Modification of the streams that border the site should not be carried out without consultation with NPWS.

2.4. Remove dumped material

See strategy 1.5.

2.5. Prevent further dumping

See strategy 1.6.

2.6. Prevent further planting of *Olearia* bushes

NPWS will see to ensure that no further planting of Daisy (*Olearia* spp.) bushes takes place.

#### Objective 3.

To maintain the populations of notable species on the site at favourable conservation status, including Recurved Bog Moss, *Sphagnum imbricatum*, *Peltigera membranaceae*, Reindeer Moss, Cranberry, Common Frog, Greenland White-fronted Goose, Peregrine Falcon and Merlin.

#### Strategies:

3.1. Monitor status of notable species

NPWS will conduct surveys of numbers and breeding status of notable breeding and wintering bird species (e.g. Greenland White-fronted Geese, Curlew and Red Grouse) and the extent of other notable species (e.g. Reindeer Moss), were possible, on an annual basis. This will be achieved by regular patrolling of the site by a Conservation Ranger and liaison with other interest groups.

3.2. Maintain notable species

Implementation of the general and specific strategies will also protect the notable plant and animal species found on this site.

#### **Objective 4.**

To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

#### **Strategies:**

**4.1.** Liaise with interested parties

NPWS will strive to initiate and maintain effective liaison with landowners, legal users (particularly through the Liaison Committee), relevant authorities and interested parties on achieving the objectives for conservation of the site.

4.2. Liaise with REPS planners

REPS planners should consult with local NPWS staff when they are developing plans for land within the site.

## **Zoning**

**Note:** Zoning is the division of a nature conservation site and neighbouring areas into a number of sub-units. Four types of zones are identified (not necessarily all occurring within a site): A, B and C are zone types within the site. D is a zone type outside the site where activities may have an impact on the site. The relevant strategies are listed for each site.

#### Zone A: A Natural Zone

Areas of high conservation value, that require no or little management intervention.

1A: NON-INTERVENTION AREAS

1A1: Rivers, streams and lakes

Strategies 2.3, 3.1, 3.2, 4.1, 4.2 and the general monitoring strategies apply.

2A: MAINTENANCE AREAS WITH LIMITED MANAGEMENT INTERVENTION

2A1: \*Active blanket bog, old cutover blanket bog, lowland wet grassland, lake and exposed rock

Grazing assessments are required for these privately owned areas. Sustainable levels of grazing will be maintained/established. Strategies 1.1, 1.2, 1.4-1.6, 2.1, 2.4, 2.5, 3.1, 3.2, 4.1, 4.2 and the general monitoring strategies apply.

#### **Zone B: Active Management**

Areas of high conservation value where high management input is needed to maintain, rehabilitate, restore to a more desirable state.

**B1:** \*Active blanket bog and cutover blanket bog damaged by drainage channels Strategies 1.1-1.6, 2.1-2.2, 2.4, 2.5, 3.1, 3.2, 4.1, 4.2 apply.

#### **Zone C: Intensive use Zone**

Intensively used areas/infrastructure, which form an integral part of a nature conservation site.

C1: Exotic Daisy bushes
Strategy 2.6 applies.

#### Zone D: Impact Zone

Areas outside the site where activities may have an impact on the site.

#### D1: Peat cutting

Peat cutting is still being carried on outside the northern side of the eastern section. This area was previously within the cSAC but has now been excluded. This cutting should be monitored to ensure peat cutting does not spread over the cSAC boundary. General monitoring strategies apply.

#### D2: Forestry

Some of the adjoining forestry is planted on very wet blanket bog. Coillte may have attempted to redrain and replant some of these areas. This may pose a significant threat to the adjoining pool systems inside the site. However, Coillte have now been informed of the ecological and hydrological importance of these areas. General monitoring strategies apply.

# **Summary of Specific Strategies**

**Note:** It is implicit with all the strategies presented that their implementation is dependent on availability of adequate resources in terms of staff, expertise and financial resources. Also, that cooperation with landowners and other key stakeholders is key to achieving the stated objectives.

	Strategy	Action required	Who to implement	When/Duration/ Frequency	Estimated Total Cost	Additional Resources needed
1.1.	Manage grazing on privately owned lands	Conduct grazing assessments.	NPWS/ landowners			
1.2.	Control and minimise impacts of peat cutting	Prevent peat cutting affecting intact *active blanket bog.	NPWS			
1.3.	Maintain hydrology (block active drains)	Block active drains and prevent new drainage.	NPWS/ Contractor			
1.4.	Control burning	Prevent burning of large areas greater than 5ha.	NPWS			
1.5.	Remove dumped material	Dumped material should be removed from this site.	NPWS/ Contractor			
1.6.	Prevent further dumping	Erect 'no dumping' signs around the site.	NPWS/ Sligo Co. Co.			
2.1.	Manage grazing	See strategy 1.1.	-			
2.2.	Maintain hydrology	Block active drains and prevent new drainage.	NPWS/ Contractor			
2.3.	Maintain rivers, streams and lakes	No intervention is necessary.	-			
2.4.	Remove dumped material	See strategy 1.5.	-			
2.5.	Prevent further dumping	See strategy 1.6.	-			
2.6.	Prevent further planting of Olearia bushes	No further planting of <i>Olearia</i> bushes should take place.	NPWS			
3.1.	Monitor status of notable species	Surveys of populations and breeding status of notable species on an annual basis.	NPWS			
3.2.	Maintain notable species	Implement general and specific strategies.	NPWS			
4.1.	Liaise with interested parties	Initiate and maintain effective liaison with relevant parties.	NPWS			
4.2.	Liaise with REPS planners	REPS planners are required to consult with NPWS staff if developing plans for land within the site.	REPS planners			

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# APPENDIX I: GLOSSARY

ALTITUDE - Vertical height above sea level.

AMPHIBIANS – A vertebrate group whose members spend part of their life cycle in water and part on land e.g. Frog.

ANNEX I - of the EU Birds Directive, lists birds that are strictly protected so that they cannot be killed, captured, disturbed or traded.

ANNEX I - of the EU Habitats Directive, lists habitats including priority habitats for which SACs have to be designated.

ANNEX II - of the EU Birds Directive lists birds which may be hunted.

ANNEX II - of the EU Habitats Directive is a list of species for which SACs have to be designated.

ANNEX V - of the EU Habitats Directive lists animal and plant species of Community interest whose taking in the wild and exploitation may be subject to management measures.

BIODIVERSITY – A general term used to describe all aspects of biological diversity, including: the number of species present in a given environment; the genetic diversity present within a species; the number of different ecosystems present within a given environment.

BIRDS DIRECTIVE (Council Directive 79/ 409/ 2nd April 1979) - Under this Directive Ireland is required to conserve the habitats of two categories of wild birds: 1) Listed rare and vulnerable species and 2) Regularly occurring migratory species. The Directive also obliges Ireland to conserve wetlands, especially those of international importance and regulates the hunting and trading of wildbirds. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

BLANKET BOG - An NPWS habitat classification which refers to bogs which carpet the landscape, following the underlying topography. They can cover extensive areas along the west coast and on uplands throughout the country.

BRYOPHYTES - A group of simple non-vascular spore-bearing green plants comprising the mosses, liverworts and hornworts.

CATCHMENT - An area of land draining to a defined point. The term river catchment refers to the area of land that drains into a particular river system.

COMMONAGE – An area of land which are undivided but are owned by more than one person / or the rights to use the land are owned by more than one person.

CONSERVATION STATUS - The sum of the influences acting on a habitat and its typical species that may affect its long term distribution, structure and functions. Also refers to the long-term survival of its typical species within the European territory of the Member States.

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CUTOVER BOG – An NPWS habitat classification that describes areas of bog which have been previously cut, although not down to the marl layer or bedrock. Cutover areas are normally a mosaic of cut areas, face banks, pools, drainage ditches, uncut areas of peat, scrub, grassland etc.

DEHLG - Department of Environment, Heritage and Local Government

DEVELOPMENT PLANS - Local Authorities (Co. Councils & Corporations) are obliged under statute to produce a document which sets out the planned development of their areas for a given number of years. In the future Local Authorities will be asked to incorporate designated NHAs, SACs and SPAs classifications into their development plans.

ECOLOGY - The study of the interactions between organisms, and their physical, chemical and biological environment.

ENVIRONMENT – The biological and physical conditions in which an organism lives.

FAVOURABLE CONSERVATION STATUS - The conservation status of a natural habitat will be taken as "favourable" when: its natural range and areas it covers within that range are stable or increasing, and the specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable.

FLORA - plant life.

FLORA PROTECTION ORDER - under the 1976 Wildlife Act, particular plants can be protected under a Flora Protection Order. Under such an order it becomes an offence to cut, uproot or damage these plants unless under licence from the Minister. The same order prohibits damage to the habitats of these species.

HABITAT - Refers to the environment defined by specific abiotic and biotic factors, in which a species lives at any stage of its biological cycle. In general terms it is a species home. In the Habitats Directive this term is used more loosely to mean plant communities and areas to be given protection.

HABITATS DIRECTIVE - (Council Directive 92/43/EEC). The Directive on the conservation of Natural Habitats and of Wild Flora and Fauna. This Directive seeks to legally protect wildlife and its habitats. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

HAND CUTTING OF PEAT. - Refers to traditional cutting of peat using a slean or spade.

HEATH – An NPWS habitat classification comprises vegetation on relatively dry acidic mineral or peat soil usually dominated by Ericaceous shrubs, which include *Calluna vulgaris* (Heather), all Heathers (*Erica* spp.), *Vaccinium myrtillus* (Bilberry), *Empetrum nigrum* (Crowberry), *Arctostaphylos uva-ursea* (Bearberry), *Daboecia cantabrica* (St Dabioc's Heath), or dwarf, cushion forming *Ulex* spp. These shrubs must form a minimum cover of 25% to fall into the heath category. This habitat is frequently found in mosaic with other upland habitats.

HUMMOCK - A small hillock/mound. Often used to describe the surface of active bogs where the ground forms a pattern of mounds, hollows and pools. Such hummocks commonly comprise bog mosses.

HYDROLOGY - The movement of water through a catchment area including freshwater and seawater imputs, water level changes and drainage mechanisms which are all influenced by the underlying geology.

LAKES AND PONDS - An NPWS habitat classification describing enclosed bodies of fresh water, or semi-enclosed bays of larger bodies of fresh water. Only the open water body itself is included, so areas of standing with tall emergent vegetation are not included here but should be assigned to reedbeds and other swamps.

LIAISON COMMITTEE - This is a special group set up to discuss the contents of a conservation management plan and the implementation of the plan. The committee will include representation of landowners, right-holders and other interest groups. It shall be the function of the committee to advise NPWS managers on the interaction between site conservation management and local

interests. The Liaison Committee will nominate a member to the official Appeals Board which will consider appeals against site designation and other issues. The Liaison Committee will be independent from the NPWS.

LICHENS – An organism that consists of a fungus growing in close association (symbiosis) with an alga.

LOCAL – A term used in ecology which is applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. Local applies to 26-75, 10 km squares in this context.

MECHANICAL PEAT EXTRACTION - Refers to the use of machinery to cut peat. This includes extrusion cutting such as by sausage machine (e.g. Difco) or any other type of mechanical cutter (e.g. Hopper).

MICROTOPOGRAPHY - Very small-scale variations in the height and roughness of the ground surface.

MONITORING – A repeat or repeats of a survey using the same methodology. Designed to look for or measure specific changes and the rate or extent of change. Used to check the "health" quantity or quality of a habitat or species.

MULTIPLE PRIVATE OWNERSHIP- Lands that are divided into areas which are privately owned. There must be more than one private landowner under this heading. (lands in commonage are not described under this heading).

NATIONAL PARKS AND WILDLIFE SERVICE (NPWS) – the section of the Environment Infrastructure and Services division of the Department of Environment, Heritage and Local Government with responsibility for nature conservation and implementation of Government conservation policy as enunciated by the Minister for the Environment, Heritage and Local Government.

NATURA 2000 - A network of sites across the European Community, selected for the purpose of conserving natural habitats and species of plants and animals which are rare, endangered or vulnerable in the European Community. SACs and SPAs form the Natura 2000 network.

NOTABLE SPECIES - Plants or animals which are worthy of mentioning either because they are particularly typical of a habitat, or because they are rare/ scarce/ atypical.

NOTIFIABLE ACTIONS - Actions specified under the cSAC regulations and are listed in the appendices of a conservation plan. These are actions which could cause damage to the site, and for which prior approval is required before they can be carried out.

PRIORITY HABITAT - A subset of the habitats listed in Annex I of the EU Habitats Directive. These are habitats which are in danger of disappearance and whose natural range mainly falls within the territory of the European Union. These habitats are of the highest conservation status and require measures to ensure that their favourable conservation status is maintained.

RARE - An ecological term applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. A species is described as rare if has been recorded in to 3-10, 10 km squares.

RED DATA BOOK 1 (vascular plants) This Red Data Book deals with rare and threatened flowering plants and ferns of Ireland with an account of their present distributions and conservation status.

RED DATA BOOK 2 (mammals, birds, amphibians and fish) - identifies those species threatened in Ireland or those species whose populations are considered to be of international importance, though not necessarily threatened in Ireland. It details the current state of Irish vertebrates and provides a concise summary of the various legislation for each species.

REPS - Rural Environmental Protection Scheme. This is an Agri-Environmental programme which seeks to draw up agreements with farmers, according to the type of farming, landscape and features on the land. The overall objectives of REPS are to achieve: the use of farming practices which

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reduce the polluting effects of agriculture by minimising nutrient loss- an environmentally favourable extensification of crop farming, and sheep farming and cattle farming; - ways of using agricultural land which are compatible with protection and improvement of the environment, the countryside, the landscape, natural resources the soil and genetic diversity; - long-term set-aside of agricultural land for reasons connected with the environment; - land management for pubic access; education and training for farmers in types of farming compatible with the requirements of environmental protection and upkeep of the countryside.

SACs - Special Areas of Conservation have been selected from the prime examples of wildlife conservation areas in Ireland. Their legal basis from which selection is derived is The Habitats Directive (92/43/EEC of the 21st May 1992). SAC's have also been known as cSAC's which stands for "candidate Special Areas of Conservation", and pcSAC's which stands for "proposed candidate Special Areas of Conservation."

SPECIES - the lowest unit of classification normally used for plants and animals.

STRATEGY - A course of action or a broad approach towards achieving an objective. It is the general thrust of management towards achieving an objective. It is a description of <u>how</u> the objective is to be achieved.

SUPPLEMENTARY FEEDING - The practice of providing livestock with additional food, usually carried out in Winter. This term is most often used when hay, silage or other foods are brought into a site to supply Cattle or Sheep with food during times when growing conditions are poor.

SURVEY - a) Study/visit to produce an inventory of what is present / record a situation.- b) Establishing a baseline (study).

SUSTAINABLE - The highest rate at which a renewable resource can be used without reducing its supply (without causing damage to the resource).

TURBARY - Refers to the right to harvest turf.

VERY RARE - an ecological term which is applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. Very Rare applies to 1-2, 10 km squares in this context.

ZONING - The division of a nature conservation site (& neighbouring lands) into a number of subunits. Within each zone the management prescriptions will be reasonably uniform and will differ in type or intensity from the other zones in the plan.

# APPENDIX II: REFERENCE MATERIAL

#### **Map References:**

O.S. 1/2 inch (1:126,720) map: 65

O.S. Discovery (1:50,000) map: 7

O.S. 6 inch (1: 10,560) map: SO 30, SO 31

#### **Databases:**

NHA database, NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Natura 2000 database, NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

#### **Photographic Coverage:**

Aerial photo Nos. 4461 and 4462, Flight Line 45. Date: 2000. NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

#### **Relevant Legislation:**

S.I. No. 39 of 1976: Wildlife Act 1976

S.I. No. 38 of 2000: Wildlife (Amendment) Act 2000

S.I. No. 94/1997: European Communities (Natural Habitats) Regulations 1997.

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# APPENDIX III: CLIMATE

CLAREMORRIS													
monthly and annual mean and extr	eme value	s											
1961-1990	1.		1	1	1	T _		1	1	ı	ı	T _	ı
TEMPERATURE (degrees Celsius)	jan	feb	mar		may	jun	,	aug	sep	oct	nov		year
mean daily max.	7.2	7.6	9.6	12	14.5	17	18.4	18.2	16.1	13.2	9.5	7.9	12.6
mean daily min.	1.4	1.3	2.3	3.3	5.5	8.2	10.2	9.8	8.1	6.3	3	2.3	5.1
mean	4.3	4.5	5.9	7.6	10	12.6	14.3	14	12.1	9.8	6.2	5.1	8.9
absolute max.	13.1	13.3	20.1	22.3	25.1	29.8	30.5	27.2	23.3	19.9	15.4	14.3	30.5
absolute min.	-11.7	-17.1	-8	-5.5	-3.1	-0.4	0.6	1.1	-1.2	-4	-5.3	-8.3	-17
mean no. of days with air frost	9.7	8.9	6.8	3.9	0.8	0	0	0	0	1.1	6.1	8.3	45.6
mean no. of days with ground frost	16	14.9	13.2	11.5	5.9	1	0.2	0.3	2	4.4	13.1	14.5	97
RELATIVE HUMIDITY (%)									ı				ı
mean at 0900UTC	91	91	88	84	80	81	84	87	89	92	92	92	88
mean at 1500UTC	86	79	74	69	68	72	73	75	77	81	85	88	77
SUNSHINE (hours)									ı				ı
mean daily duration	1.45	2.11	2.87	4.4	5.08	4.64	3.79	3.81	3.1	2.39	1.81	1.11	3.05
greatest daily duration	7.8	9.2	11.7	13.7	15.1	15.6	14.8	13.7	12.3	10.1	8.6	7	15.6
mean no. of days with no sun	11	8	6	3	2	2	3	3	4	6	9	12	69
RAINFALL (mm)					ı				ı				ı
mean monthly total	120.8	83.2	95.5	62.3	77.9	71.1	63.8	96.6	104.3	124.6	118.8	124.1	1143
greatest daily total	33.1	27.9	27.5	19.8	42	74.6	38.8	55	41.6	59.5	49.2	41	74.6
mean no. of days with >= 0.2mm	22	17	21	17	18	16	17	19	19	22	21	22	230
mean no. of days with >= 1.0mm	18	14	17	12	14	12	11	14	15	17	17	17	178
mean no. of days with >= 5.0mm	9	6	7	4	6	4	4	6	7	8	8	8	78
WIND (knots)													ı
mean monthly speed	10	10	10.2	8.7	8.3	7.9	7.5	7.3	8	9	8.7	9.7	8.8
max. gust	96	85	74	57	62	54	66	54	91	70	70	79	96
max. mean 10-minute speed	59	48	45	36	41	36	39	33	60	46	40	51	60
mean no. of days with gales	1.2	0.9	1	0.1	0.1	0.1	0	0	0.2	0.4	0.5	0.7	5.2
WEATHER (mean no. of days with)					1								
snow or sleet	6.5	5.4	4.7	1.9	0.3	0	0	0	0	0.1	1.7	3.5	24.1
snow lying at 0900UTC	2.6	1.4	0.7	0.2	0	0	0	0	0	0	0.3	1.1	6.3
hail	4.2	3.3	5.7	3.6	1.9	0.4	0	0	0.7	1	3	2.7	26.5
thunder	0.4	0.2	0.2	0.3	0.5	0.9	0.9	0.4	0.2	0.4	0.3	0.5	5.1
fog	4.4	2.7	1.9	2.4	1.7	2.3	2.3	4.1	4.1	4.6	3.6	3.7	37.9

Source: Met Eireann

# APPENDIX IV: DETAILED INFORMATION ON ACTIVE BLANKET BOG

# **Active Blanket Bog**

The areas of active blanket bog display a range of different communities. There are several interconnecting pool systems with White Beak Sedge dominating the flats, together with Common Cotton-grass. There are also areas of Bog moss carpets, which mostly consist of *Sphagnum cuspidatum*, *S. auriculatum v. auriculatum* and *S. recurvum v. tenue* (new Vice County Record (VCR)).

There are numerous small flushes on the site, most of which drain into small streams found throughout the site. The flushes are found in a mosaic with the blanket bog and have been included in with the blanket bog for the purpose of habitat mapping. Some of the streams are iron stained and contain species such as Bog Pimpernel, Water Mint, Lesser Spearwort, Common Sorrel (*Rumex acetosa*), and Meadowsweet (*Filipendula ulmaria*).

More detailed information is available on descriptions of plant communities which have been mapped and are divided into areas described below. (See Map 2 for location of these areas). This information found in Douglas *et al*, (1989).

#### Area 1

A low ridge plateau with large Atlantic blanket bog pools supporting Bogbean, and Bog Moss carpets (including Recurved Bog Moss *Sphagnum recurvum v. tenue* (new VCR)) at the pool margins. Some of the pools have low islands. On the flats there is a lot of White Beak Sedge, Common Cotton-grass and Bog Asphodel (*Narthecium ossifragum*), with some localised *Sphagnum imbricatum* hummocks. There are occasional species indicative of flushed areas, such as Soft Rush, and the mosses *Breutelia chrysocoma* and *Aulacomnium palustre*.

#### Area 2

This is an area of shallow pools and low hummocks. The pools are relatively species poor with Bogbean, Common Cotton-grass, and *Sphagnum cuspidatum*. The Bog Sedge is also found at this location. There is some algal growth perhaps due to the fluctuating water table. The area between the pools is soft and quaky, but a reduced Bog Moss cover may indicate that burning has occurred here.

#### Area 3

This is similar to Area 2 above but is wetter. *Sphagnum magellanicum* is more frequent and there are well developed *Racomitrium* spp. topped hummocks. White Beak Sedge, Common Cottongrass and Deer-grass dominate the flats.

#### Area 4

This area is slightly flushed due to the runoff from an adjacent ridge. The vegetation is dominated by Purple Moor-grass, Deer-grass and Tormentil (*Potentilla erecta*). There is good Bog Moss cover in the form of small *Sphagnum* carpets mostly of *S. papillosum*, *S. capillifolium and S. tenellum* with *S. recurvum v. tenue*.

During the period of this survey June 1997, this area was subject to machine cutting and the vegetation was severely depleted.

#### Area 5

This is a narrow drainage flush, with a central channel, which has local iron stained areas. The flush has a long species list with flush species such as Bog Pimpernel, Yorkshire Fog (*Holcus lanatus*), Water Mint and Lesser Spearwort. It is locally dominated by Bottle Sedge (*Carex rostrata*), Greater Tussock Sedge (*Carex paniculata*) and Soft Rush. There is evidence of Sheep grazing and eutrophication may have taken place.

#### Area 6

This is a wet flush which leads into a small stream. The banks leading into it have high Ling Heather. The flush itself is quite trampled and enriched by Cattle and Sheep manure. The area has a number of small iron flushes running off the hillside (similar to Area 6 above). Cranberry and Willow were recorded in one of these flushes.

#### Area 7

This is an interconnecting pool system with shallow pools containing *Sphagnum cuspidatum*. The hummocks comprise *S. subnitens, S. capillifolium* and *S. papillosum* and all are colonised by Silver-haired Moss (*Racomitrium lanuginosum*). The area is quite wet but firm underfoot and there are signs of grazing and trampling. Bilberry was found on some of the hummocks. The flats are dominated by White Beak Sedge, Deer-grass, Common Cotton-grass and Hairstail Cotton-grass (*E. vaginatum*), with small amounts of Purple Moor-grass.

# APPENDIX V: NOTIFIABLE ACTIONS

The notifiable actions relating to the habitats that occur within the site are listed below:

- Notifiable Action 2.1 Upland grasslands, scree, inland cliff
- Notifiable Action 3.1 Blanket bog
- Notifiable Action 3.2 Heath (including juniper scrub)
- Notifiable Action 5.2 Scrub
- Notifiable Action 6.1 Rivers or streams
- Notifiable Action 6.2 Lakes, ponds, canals

#### **HABITAT TYPE 2.1**

#### UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in Section B overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 2.1**

#### UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung

changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting/adding lime

adding fertiliser of any sort to areas not previously fertilised applying fertiliser which would increase the level of nitrogen in the soil/applying fertiliser which would increase the level of phosphorous in the soil applying phosphorous to soils which already have in excess of the REPS index 2 levels

using fertiliser on slopes over 25 degrees

creation of new tracks or paths

burning of vegetation

reclamation, infilling, ploughing or land drainage reseeding, planting of trees or any other species

rock removal/use of any pesticide or herbicide

dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

operation of commercial recreation facilities (e.g. pony trekking)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### Section B

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

afforestation

commercial turf cutting

erecting or operating a windfarm

#### **HABITAT TYPE 3.1**

#### **BLANKET BOG**

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in *Section A overleaf* are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in *Section B* overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 3.1**

#### BLANKET BOG

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)

grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung

supplementary feeding of stock, except as defined in REPS guidelines/ introduction of stock to formerly ungrazed areas

adding lime/adding fertiliser of any sort

creation of new tracks or paths/burning of vegetation/ reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species

rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas

commercial peat moss or turf extraction

use of any pesticide or herbicide, including sheep dip/dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

operation of commercial recreation facilities (e.g. pony trekking)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### Section B

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments afforestation

erecting or operating a windfarm

#### **HABITAT TYPE 3.2**

#### **HEATH (INCLUDING JUNIPER SCRUB)**

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in *Section A overleaf* are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in *Section B* overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 3.2**

#### **HEATH (INCLUDING JUNIPER SCRUB)**

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung

supplementary feeding of stock, except as defined in REPS guidelines

introduction of stock to formerly ungrazed areas adding lime/adding fertiliser of any sort

Creation of new tracks or paths

burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years

reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species

rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas

commercial peat moss or turf extraction

use of any pesticide or herbicide, including sheep dip

dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

operation of commercial recreation facilities (e.g. pony trekking)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### Section B

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

afforestation

erecting or operating a windfarm

#### **HABITAT TYPE 5.2**

#### **SCRUB**

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in *Section B* overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 5.2**

#### **SCRUB**

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung

supplementary feeding of stock (as defined in approved farm plans)

adding lime /adding fertiliser of any sort

reclaiming land covered by scrub; if scrub is cut it must be allowed to regrow

reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species felling of trees, removal of timber

removal of foliage, moss or other materials

killing ivy

use of any pesticide or herbicide /dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses operation of commercial recreation facilities (e.g. walking tours)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### Section B

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities any activity which may cause pollution of the site removal of soil, mud, gravel, sand or minerals

construction of fences, buildings or embankments felling trees or reafforestation

developing roads or car parks

#### **HABITAT TYPE 6.1**

#### RIVERS OR STREAMS

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in *Section A overleaf* are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in *Section B* overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 6.1**

#### RIVERS OR STREAMS

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density

(as defined in approved farm plans) within 30m of the river or stream/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream

supplementary feeding of stock within 30m of the river or stream/adding lime within 30m of the river or stream/adding fertiliser of any sort within 30m of the river or stream

extracting water for irrigation or other purposes

operation of boat angling or shore angling business/restocking with fish

reclamation, infilling, ploughing or land drainage within 30m of the river or stream/ reseeding, planting of trees or any other species within 30m of the river or stream/ removal of trees or any aquatic vegetation within 30m of the river/stream/

use of any pesticide or herbicide in the river or stream or within 30m of the river or stream

dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them

dumping, burning or storing any materials within 30m of the river/stream including the land spreading of used pesticides (e.g. sheep dip)./alteration of the banks, channel, bed or flow of the river or stream

harvesting or burning of reed or willow

causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### Section B

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities

any activity which might cause pollution of the river or stream

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments construction or operation of an aquaculture facility

fishing for eels or salmon

bank maintenance and grading creation of weirs and dams

#### **HABITAT TYPE 6.2**

#### LAKES, PONDS AND CANALS

Under STATUTORY INSTRUMENT 94 of 1997, made under the EUROPEAN COMMUNITIES ACT 1972 and in accordance with the obligations inherent in the COUNCIL DIRECTIVE 92/43/EEC of 21 May 1992 (the Habitats Directive) on the conservation of the natural habitats and species of wild fauna and flora, all persons must obtain the written consent, (in circumstances prescribed at section A and B below) of the Minister for The Environment, Heritage and Local Government before performing any of the operations on, or affecting, the following habitats where they occur on lands / waters within the candidate Special Area of Conservation.

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme which the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

#### **SECTION A**

Please note that the activities listed in *Section A overleaf* are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.

#### **SECTION B**

Please note that the activities listed in *Section B* overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 6.2**

#### LAKES, PONDS AND CANALS

#### Section A

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT

grazing of livestock above a sustainable density as defined in approved farm plans) within 50m of the lake, pond or canal

grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung

supplementary feeding of stock within 50m of the lake, pond or canal

adding lime within 50m of the lake, pond or canal /adding fertiliser of any sort within 50m of the lake, pond or canal

extracting water for irrigation or other purposes

operation of boat angling or shore angling business/restocking with fish.

within 50m of the lake, pond or canal: reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species /removal of trees or any aquatic vegetation/use of any pesticide or herbicide in the lake, pond or canal or within 50m of the lake, pond or canal

dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them

dumping, burning or storing any materials within 50m of the lake pond or canal including the land spreading of used pesticides (e.g. sheep dip)

alteration of the banks, channel, bed or flow of the lake, pond or canal or of watercourses running into or out of it

harvesting or burning of reed or willow

causing siltation

operation of commercial recreation facilities

(e.g. bird watching tours)

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

any other activity of which notice may be given by the Minister from time to time

#### **Section B**

(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)

developing leisure facilities including golf courses, sports pitches, caravan or camping facilities

any activity which might cause pollution of the lake, pond or canal

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

construction or operation of an aquaculture facility

fishing for eels or salmon

bank maintenance and grading creation of weirs and dams

# APPENDIX VI: COMPENSATION AND APPEALS PROCEDURES

# Compensation

The Government is committed, as part of the social partnership process, to the payment of a fair and proper level of compensation to landowners who have lands proposed as part of an SAC or SPA and to other users who have a legal entitlement in the site.

A landowner or user with a legal entitlement may seek compensation for actual losses incurred due to restrictions imposed as a result of designation. Eligible persons should submit to NPWS details of the losses incurred as a result of the inclusion of lands in an SAC/SPA and outlining the basis for the calculations. Documentary evidence of past earnings and the activities that produced these should be included with the claim. Should the applicant be dissatisfied with a compensation offer, the case may be referred to an independent arbitrator who will review the matter and make a final decision.

Where a landowner or user with a legal entitlement is restricted in carrying out an activity on their land or licensed area, the compensation due will exclude any payments that have been attracted under grant schemes.

For farmers, there are two options available for receiving compensation for possible restrictions to their farming practices. Farmers may also receive payments for carrying out actions that enhance a nature conservation area.

### **Rural Environment Protection Scheme (REPS)**

Lands within SACs, SPAs, NHAs or commonages are defined as 'Target Areas' under this scheme. A REPS plan usually covers an entire farm, but a farmer with land in a target area receives a higher payment for that area. Farmers with small areas of land in a designated area can get REPS payments for that part of their farm. In either case, the farmer is subject to certain conditions regarding farming and land use practices, set out in the REPS plan for the farm. REPS is administered by the Department of Agriculture, Food and Forestry.

#### **NPWS Farm Plan Scheme**

Where a farmer chooses not to participate in REPS, and NPWS seeks to change the farm operation in some way or to restrict a particular activity, NPWS will pay for preparation of a farm plan. This scheme also applies to land within SACs, SPAs, NHAs and commonages.

An NPWS farm plan will normally be confined just to the designated land and will address the conservation requirements, as well as any costs arising. Payment may also be made for work carried out that enhances the nature conservation value of the designated area. The farmer will have a substantial input into the plan.

A list of trained and approved farm planners is available for farmers to choose from. For further information, contact NPWS.

# Appeals Procedure

Objection or appeal can be made against the inclusion of a piece of land in a cSAC or SPA. A person can only make objections if they have a legal interest in the site (i.e. an owner or legal user). They must be made on scientific grounds, e.g. a landowner would show that the relevant habitats/species/geological features were not present in such a condition as to warrant designation. Appeals can also be made for the inclusion of lands. Appeals should be accompanied by a map of the area of concern and be as informative as possible. There are two stages to the appeals process:

**Internal Appeals** are initially dealt with by regional staff. If necessary, they may refer the case to other NPWS staff. If there is no agreement following the internal appeal, the case becomes an external appeal.

The option of an **External Appeal** is available only where an internal appeal is unsuccessful. If so, the appellant may have the case referred to an Appeals Advisory Board, which is independent of NPWS. A grant to defray the cost of an expert scientific report is available to the appellant. The Board is comprised of equal representation of landowners/users and conservationists, with an independent chairperson. The Board makes a recommendation on each appeal to the Minister who then decides on the outcome of the appeal.

# APPENDIX VII: FARMING CONDITIONS UNDER REPS

# Conditions for the conservation of blanket bogs, heaths and upland grasslands to be applied under REPS

#### **General Provisions**

The conditions for specific habitat types are supplementary to the agri-environmental plan requirements of the general REPS programmes. The conditions for the target areas under Supplementary Measure A apply. Planners may seek a derogation from the Regional Inspector to vary these conditions in individual cases. All REPS plans in respect of NHAs must be approved and signed by the Planning Agency's environmentalist/ecologist.

#### **Detailed Conditions**

The conditions applicable to Supplementary Measure A apply; the guidelines set out below are complementary to these conditions.

#### **Stocking Density**

In all cases an environmentally sustainable plan must be prepared and adhered to for the total area of the farm. Sustainable optimum stocking rates must be set down by the REPS planner following careful assessment of the environmental conservation needs of the lands.

Where the stocking levels set down by the planner require a reduction in stock, this must be achieved within one year of the commencement of the plan.

There can be no increase in stocking levels, no introduction of stock to new areas and no changes in stock type during the period of the REPS plan without the prior approval of DAF.

The maximum number of sheep that may be kept on the farm as a whole must be set down in the REPS plan. The conditions set out for Supplementary Measure A areas must be followed. The following parameters apply:

- Where there is no damage, the current stocking levels are acceptable.
- If the level of damage is moderate, a stocking reduction must be prescribed by the planner at a level related to the damage and sufficient for the vegetation to recover
- If the level of damage is severe, a stocking reduction of between 70 % and 100 % of ewe numbers on the damaged area must be prescribed for a specified period.
- At the review of the REPS plan, the conservation status of the areas will be reviewed. A change in the stocking levels (increase or decrease) may be appropriate depending on progress.

Stocking levels apply to Scottish Blackface sheep or similar medium sized sheep breeds. Stocking levels for cattle or other stock should be at livestock unit applicable rates taking account of DAF conversion rates for the various stock types. The stocking levels recommended in this document are maximum sustainable rates for year round grazing. If shorter periods of grazing are used, the number of animals may be increased, though not necessarily pro rata.

#### Supplementary Feeding

Supplementary feeding is permitted only on areas where it is currently practised. Locations of feeding points must be specified. To reduce heavy grazing, trampling, poaching and erosion problems, 'feeding points' should be moved every three weeks and sited on ground with least habitat and wildlife value, preferably on grassland well away from stands of heather. Feeding on steep slopes and on peaty soils should be avoided where possible. The total amount of feed used must not be increased.

#### Use of Fertilisers and Herbicides

Neither organic nor inorganic fertilisers or lime can be applied on bogs, heaths or upland grasslands where they have not been used before. Fertilisers must not be used as a means of regenerating eroded areas. In the case of upland grasslands, fertilisers can only be applied on the basis of the results of a soil test. Where fertilisers are being applied, the initial soil sampling should be relatively intensive, with at least one sample per 2-4 ha. Target soil phosphate levels must not exceed the Index 2 level set out in the REPS specification.

Spraying or broadcast application of herbicides must be avoided. Spot application and wipe-on treatments to eradicate docks, thistles, ragwort and similar noxious weeds may be used. Rhododendron may be removed by cutting and herbicide treatment. Bracken control may be by rolling, cutting and/or by controlled cattle trampling in early summer. In exceptional circumstances, control of bracken by herbicides may be permitted.

#### **Water Pollution**

The greatest care should be taken to observe the statutory requirements on water pollution. The hydrology of bogland areas is characterised by extremely nutrient poor surface waters which contain flora and fauna adapted to these conditions. These species would be adversely affected by nutrient enrichment. New sheep dip sites must be listed and located away from streams and flushes to reduce the possibility of water pollution and damage to flora and fauna.

#### **Restricted and Prohibited Practices**

- The following practices must not be carried out on blanket bogs, heaths or upland grasslands
- The areas must not be drained, ploughed, cultivated or reseeded.
- There must be no infilling or rock removal.
- Turf cutting on unexploited bogs is not permitted. Turf cutting for domestic use is permitted on existing banks.
- Planting of trees or other crops is not permitted.
- No new tracks or paths can be created.
- Burning is only allowed as a planned management practice.
- Gorse may be controlled by cutting, spot spraying or exceptionally by burning outside of the bird nesting season (March 1st to August 31st).

#### **Complementary Action**

(a) Measures to prevent damage by non REPS participants

DAF should take measures to ensure that the environmental benefits achieved in degraded areas under REPS are not negated or diminished by non-participants in the Scheme

(b) Evaluating and Monitoring

Monitoring and evaluating the effects of REPS on blanket bogs, heaths and upland and unimproved grassland is essential in determining the environmental impact of REPS on these habitats so that appropriate modifications can be identified and effected where necessary. The effect of the grazing regime on vegetation and wildlife should be monitored to assess recovery as well as any damage being caused by animals. To this end, DAF and NPWS of DEHLG, in consultation with Teagasc and private planners, will monitor the environmental impact of REPS on these habitats on an ongoing basis. Progress in this regard will be reported to the Consultative Committee on REPS.

(c) Farmer Education /Advice

A REPS promotional campaign will be undertaken as soon as is practicable to inform farmers of the conservation needs of these areas and of the provisions of REPS. This campaign will be undertaken by DAF. Farming and environmental organisations will also be invited to assist in this promotional campaign.

(d) Seminars for Planners

Seminars for REPS planners shall be held to advise on the interpretation of these conditions at ground level.

(e) Demonstration Farms

A number of REPS participant demonstration farms will be set up in selected areas. Research work could also be carried out at these farms to assess the ability/rate of recovery of an area under different stocking conditions.

(f) Quota Rights

Any REPS participant farmer is guaranteed that their quota rights are protected and in the event of a possibility of increasing numbers arising, such farmers would be allowed to do so, subject to the environmental condition of the participant farm.

(g) Scheme Extension

The application of REPS in the target areas will apply for periods of five years renewable for 15 years.

(h) Local Co-ordination

DAF will encourage co-ordination, at local level, of efforts to rejuvenate damaged areas.

# APPENDIX VIII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

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