



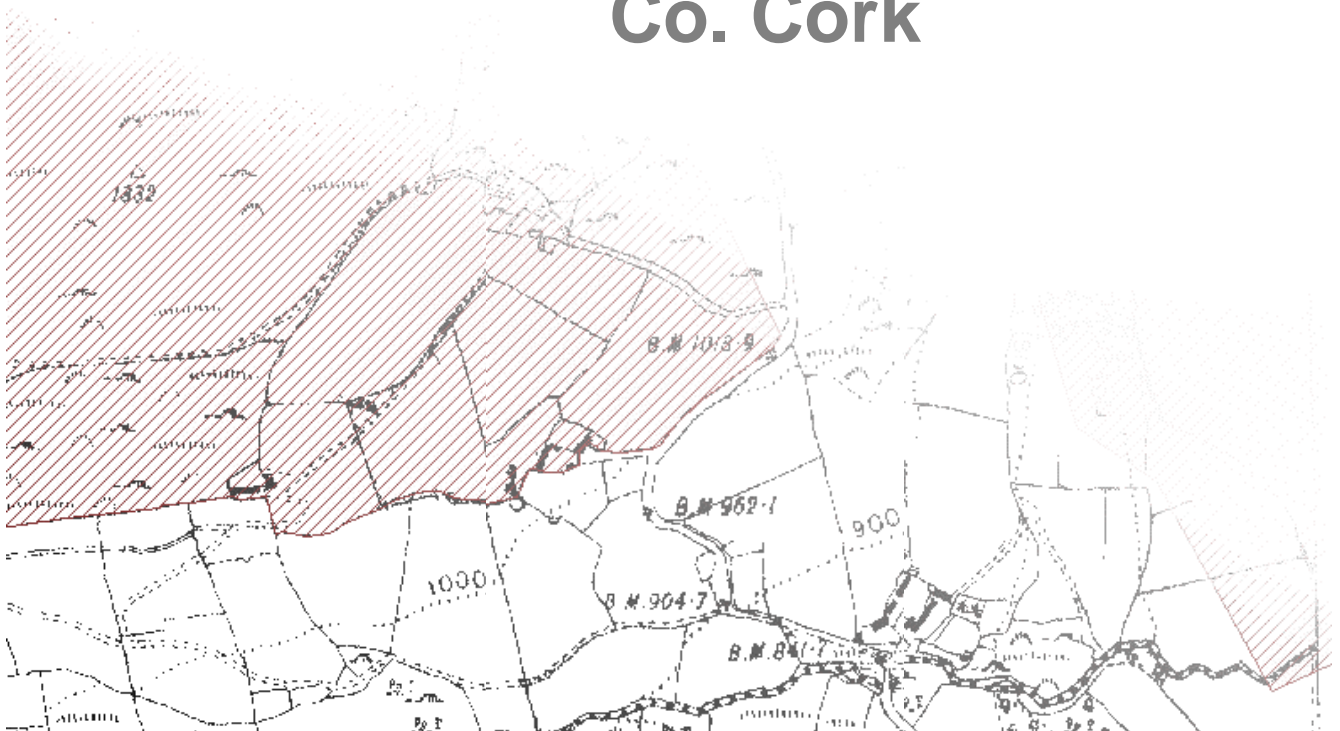
National Parks and Wildlife Service Conservation Plan for 2006-2011



Derryclogher (Knockboy) Bog cSAC

Site Code 1873

Co. Cork



SUMMARY

Introduction

Derryclogher (Knockboy) Bog cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site has been designated as a cSAC due to the presence of Blanket Bog (active), a priority habitat listed in Annex I of the EU Habitats Directive.

Description of Derryclogher (Knockboy) Bog cSAC

Derryclogher Bog candidate Special Area of Conservation (cSAC) is a large upland site lying on the south to north-east slopes of Knockboy Mountain (Cnoc Buí), approximately 8km north-east of Glengarriff in Co. Cork. The majority of site lies above 150m, with the highest point being 707m.

There are two main areas of active blanket bog within the site, to the south of Curramore Lough and to the north-east of Knockboy summit. A number of interconnected smaller bogs occur on a series of gently sloping shelves across the mountainside, forming a complex mosaic with flushes, wet heath, dry heath, upland acid grassland, exposed rock and open water. The site is a good example of intact mountain blanket bog with the typical microtopography of hummocks and linear pools in some areas. It supports characteristic blanket bog species, including a variety of bog mosses and other bryophyte species, in addition to Deer-grass, Bog-cotton, Purple Moor-grass and Cross-leaved Heath. White-beaked Sedge, Bulbous Rush and Bog-bean occur in flushed areas with *Sphagnum palustre*. Derryclogher Bog is one of the most extensive areas of this habitat in south-west Ireland, and the gradations between upland habitats hold much ecological interest.

Wet and dry heath covers the majority of the site where the slope is steeper than 3 degrees. These areas are dominated by well-grazed Heather and Cross-leaved Heath, with Bilberry, Sheep's Fescue, Tormentil and Heath Bedstraw. The upland grassland is similar in composition to dry heath, but is dominated by Mat-grass and Common Bent instead of heathers. Grassy areas occur principally at the western margin of the site and on steep slopes where mineral soil is exposed.

In addition, the site has many oligotrophic lakes including Curramore Lough and Lough Nambrackderg, which lies at the foot of steep cliffs in a glacial corrie. These lakes are drained by small streams that form the headwaters of the Cummeendarrig (Coomhola) and Derryduff Rivers.

The site supports breeding pairs of three Annex I bird species, Peregrine Falcon, Merlin and Chough. Other notable species include Red Grouse, Snipe and Woodcock. The Annex II species Otter and Kerry Slug and the internationally important Red Data Book Species Irish Hare are present on the site. The Red Data Book species Arctic Char may occur in Lough Nambrackderg.

Land use on the site consists of extensive grazing by sheep and occasionally cattle. Most of the site is in good ecological condition. The grassland on the western boundary is overgrazed, and small areas of bog have been trampled by stock. A few fields on the south-east boundary have been reclaimed and fertilised; supplementary feeding occurs in some areas. Peat cutting is restricted to two small areas on the site boundary. There are two small hydroelectric schemes on Curramore

Lough and Cummeendarrig River. The site is surrounded by forested areas and land used for grazing.

Main conservation objectives

- To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; Blanket Bog (active) (13% area of the site)
- To maintain the extent, biodiversity and species richness of the site
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Main management issues

- Grazing
- Lack of site data
- Peat cutting & erosion
- Water abstraction / Hydroelectric schemes

Main strategies to achieve objectives

- Manage grazing on commonage
- Maintain/ implement suitable grazing regimes on non-commonage
- Minimise impacts of peat cutting
- Minimise peat erosion
- Minimise impacts of burning
- Commission surveys of breeding Annex I bird species and Arctic Char

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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 of 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 semi-natural 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.

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, within three months of the designation notification.

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 Derryclogher Bog cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> *Active blanket bog (EU Habitat Code 7130) 	Derryclogher Bog is a good example of intact mountain blanket bog and is one of the most extensive areas of this habitat in the south-west of Ireland.

* denotes Annex I Priority Habitat

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. See Appendix V for further information.

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 IV).

SITE DESCRIPTION

Location Including Site Boundaries

This site is situated to the south and north-east of the summit of Knockboy Mountain (707m), which is known locally as Cnoc Buí. It is approximately 8km north-east of Glengarriff, Co. Cork (see Map 1).

Grid Ref.: W 01 62

Latitude: N 09°25'49"

Longitude: W 51°48'06"

Area: 1715 ha

Altitude Range: 146 m to 707 m

Townlands: Carran, Corranore, Derreencollig, Derryclogher, Derryduff Beg, Derryduff More and Derrynakilla

Site Boundaries

The north-western boundary runs along the county boundary marked by two ridges that meet at Knockboy summit. One runs northwards to a subsidiary summit (695m) and the second runs westwards to Lough Boy (578m), and then to Priest's Leap road which forms the western boundary of the site. The northern boundary is a ridge running east, north of Lough Nambrackderg, while the south-eastern boundary is formed by the upper limit of enclosed land (see Map 1).

Site Infrastructure

The Priest's Leap Road forms the western boundary of the site. Roads also occur close to the eastern boundary. There are few tracks within the site.

There is a small hydroelectric scheme on Curramore Lough and on the stream south of the Lough. Additionally, another hydroelectric scheme is situated on the Cummeendarrig stream with a generating station just within the eastern boundary of the site.

Legal Status

Ownership

Three quarters of the site is held as commonage, with the rest in multiple private ownership (see Map 2).

Designations of the Site

candidate Special Area of Conservation	Sitecode IE0001873	Published on 1 st March 1997.
proposed Natural Heritage Area	Sitecode 1873	Published in 1995

Government Departments and Agencies

Department of the Environment, Heritage and Local Government (DEHLG)	DEHLG is the government department with responsibility for the protection and conservation of Ireland's natural heritage.
National Parks & Wildlife Service (NPWS)	<p>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.</p> <p>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 VII) for further details of NPWS regional staff.</p>
Cork County Council	Cork 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.
Electricity Supply Board	The ESB and its subsidiary Hibernian Hydro are responsible for the operation and maintenance of two hydroelectric power schemes operating on the site.

Local Authority Policy in relation to the Site

Cork County Council does not have any specific policies relating to Derryclogher Bog. The Cork County Development Plan (2003) has policies relating to the natural environment in general, and cSACs in particular, as follows:

“ENV 2-1: It is a general objective to seek the conservation and wise management of areas of natural environmental value.

ENV 2-2: It is an objective generally to seek the conservation and protection of features of natural interest such as woodlands, hedgerows, wetlands, unspoilt uplands and known habitats.

ENV 2-4: It is a particular objective to protect plant, animal species and habitats which have been identified by the Habitats Directive, Birds Directive, Wildlife Act (1976) and the Flora Protection Order (S.I. No. 94 of 1999).

ENV 2-5: It is an objective to maintain the conservation value of all Natural Heritage Areas proposed for designation by Duchas the Heritage Service [now NPWS], either before or during the lifetime of this plan.

ENV 2-6: It is an objective to maintain the conservation value of those sites identified by Duchas the Heritage Service [now NPWS] as candidate Special Areas of Conservation as well as any other sites that may be so designated during the lifetime of this plan”.

Additionally, the County Council also aims to apply the precautionary principle to developments in environmentally sensitive areas and to work with landowners, NPWS and other stakeholders to contribute to the effective management of sites of nature conservation value (ENV 2-10 and 2-11).

Physical Features

Climate

The Atlantic airstream that brings mild, moist weather and high rainfall dominates the local climate. The mean annual temperature is 10.4 degrees centigrade. There is an average of 239 rain days per year with a mean annual rainfall of 1430mm. There is an average of 1300 hours of direct sunlight per year. The prevailing wind comes from the south-west and the average annual wind speed is 6 metres per second (11 knots).

Valentia Island is the closest synoptic meteorological station to Derryclogher Bog. Further climate data for this station is presented in Appendix III.

Geology & Geomorphology

The underlying rock type is Devonian sandstone. The landscape is undulating, being composed of a series of gently sloping shelves with many exposed ‘humpbacks’ of bedrock, grading into steep cliffs to the east of the site, where a glacial corrie lake occurs.

Soils & Soil Processes

The soil is largely peaty, base-poor and waterlogged throughout the site. There are some significant areas of deep peat, peaty podzols and some areas of exposed mineral soil. Peat erosion on site is limited to a few regularly used trackways and areas where livestock gather.

Hydrology & Water Quality

The site is composed of a series of waterlogged zones with some free draining areas. There are a number of lakes within the site, which are all drained by eroding upland streams. There are two small artificial dams at L. Curramore and further downstream from the Lough on the stream. Additionally, the Cumeendarrig stream valley has natural pools, of which one has an intake pipe for a hydroelectricity scheme.

Biological Features

Habitats and Vegetation

Note: Throughout the conservation plan, habitats are named and described under two different systems: the Annex I habitat as listed in the EU Habitats Interpretation Manual Version 15/2(1999), while all other habitats are as listed according to the classification system of 'A Guide to Habitats in Ireland' (Fossitt, 2000).

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 Guide to Habitats category also shown. The Annex I priority habitat is marked with an asterisk (*). The Indicative Habitat map for the site is presented in Map 3. The percentage area presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 3.

Habitats Found within Derryclogher (Knockboy) Bog cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
*Active blanket bog (EU Code 7130)	Upland blanket bog (PB2)	13%
-	Wet heath (HH3) / Dry humid acid grassland (GS3)/ dry calcareous and neutral soil (GS1) mosaic	70%
-	Exposed siliceous rock (ER1)	12%
-	Acid oligotrophic lakes (FL2)	3%
-	Eroding/upland rivers (FW1)	1%
-	Poor fen and flush (PF2)	<1%
	Oak-birch-holly woodland/Scrub mosaic (WN1/WS1)	<1% Not mapped
	Improved agricultural grassland (GA1)	<1% Not mapped

N.B. Other habitats occupy too small an area to map onto the Indicative Habitat Map (Map 3). A description of their location and species is provided below.



The mosaic of blanket bog, wet heath, flush and exposed rock below the summit of Knockboy Mountain (C. Heardman)

Annex I Habitat:

Active blanket bog (EU code 7130) (13% of total site area or 223ha)

The main interest of the site is the active blanket bog, a priority habitat listed on Annex I of the EU Habitats Directive. The bogs occur in a complex mosaic with other upland habitats, namely upland grassland and heath, lakes and ponds and exposed rock. There are two large bogs to the south of Curramore Lough and to the north-east of Knockboy summit, and a series of small bogs (1-2 ha.) occurring with regularity on a series of nearly level shelves (slope $<3^\circ$) across the mountainside which are virtually interconnected. The habitat description below is drawn principally from Mooney & Goodwillie's 1991 survey of the central part of the site.

Slope angle appears to locally define the composition of the bog vegetation, with the flattest areas being the wettest. The ombrotrophic (rain-fed) vegetation is dominated by Deer-grass (*Trichophorum caespitosus*), Purple Moor-grass (*Molinia caerulea*), Bog-cotton (*Eriophorum angustifolium* and *E. vaginatum*) and Cross-leaved Heath (*Erica tetralix*). There is a good diversity of bryophytes including the black moss *Campylopus atrovirens*, Silver-haired Moss (*Racomitrium lanuginosum*), the liverwort *Pleurozia purpurea* and a variety of bog mosses including *Sphagnum capillifolium*, *S. recurvum* and *S. compactum*. Silver-haired Moss forms hummocks in the drier places. Some linear pools occur, with *Sphagnum cuspidatum* and *S. tenellum*, and White Beak-sedge (*Rhynchospora alba*) around the margins.

The enriched flush areas that often surround the bogs are dominated by Purple Moor-grass often with *Sphagnum palustre*, Soft Rush (*Juncus effusus*), Star Sedge (*Carex echinata*) and the moss *Polytrichum commune*. Within the areas of the many streams, the bogs merge into well-developed flushes (see below).

Other Habitats:

Acid oligotrophic lakes (FL2)	There are two main lakes within the site (Curramore Lough and Lough Nambrackderg) together with a number of smaller lakes. Curramore Lough is used as a reservoir and has a small hydroelectric pilot scheme. Lough Nambrackderg is a corrie lake with classic glacial geof ormation. Both lakes are oligotrophic, supporting a typical flora of Water Lobelia (<i>Lobelia dortmanna</i>), Shoreweed (<i>Littorella uniflora</i>), Bulbous Rush (<i>Juncus bulbosus</i>) and occasional Common Reed (<i>Phragmites australis</i>).
Eroding/upland rivers (FW1)	There are numerous rivers and streams throughout the site, mainly fast-flowing rocky mountain streams with little vegetation except mosses (e.g. <i>Fontinalis</i> sp.). Some of the smallest peaty streams support Bog Pondweed (<i>Potamogeton polygonifolius</i>).
Exposed siliceous rock (ER1)	Exposed rock occurs both as high cliffs in the eastern part of the site around Lough Nambrackderg and Cumeendarrig valley and as rocky outcrops over the rest of the site. These areas often support a community of Great Wood-rush (<i>Luzula sylvatica</i>), St Patrick's Cabbage (<i>Saxifraga spathularis</i>) and a variety of ferns including Common Polypody (<i>Polypodium vulgare</i>), Male Fern (<i>Dryopteris filix-mas</i>), Hard Fern (<i>Blechnum spicant</i>) and Wilson's Filmy Fern (<i>Hymenophyllum wilsonii</i>).
Oak-birch-holly woodland/Scrub mosaic (WN1/WS1)	<p>Along part of the eastern margin of the site there is a thin strip of woodland grading into Gorse (<i>Ulex europaeus</i>) scrub. Downy Birch (<i>Betula pubescens</i>) dominates the woodland; other species present including Ash (<i>Fraxinus excelsior</i>), Willow (<i>Salix</i> spp.), Rowan (<i>Sorbus aucuparia</i>), and Holly (<i>Ilex aquifolium</i>).</p> <p>The ground flora features abundant ferns including Hard Fern, Male Fern and Lady Fern (<i>Athyrium filix-femina</i>), mosses, Ivy (<i>Hedera helix</i>) and herbs such as Wood Sorrel (<i>Oxalis acetosella</i>), Wood Speedwell (<i>Veronica montana</i>), St. Patrick's Cabbage and Goldenrod (<i>Solidago virgaurea</i>).</p>
Improved agricultural grassland (GA1)	An improved field occurs at the confluence of the Cummeendarrig and the Coomhola Rivers. Species present include Perennial Rye-grass (<i>Lolium perenne</i>), Creeping Bent (<i>Agrostis stolonifera</i>), Creeping Buttercup (<i>Ranunculus repens</i>), White Clover (<i>Trifolium repens</i>) and Dock (<i>Rumex</i> sp.).
Poor fen and flush (PF2)	The bog mosses <i>Sphagnum auriculatum</i> , <i>S. recurvum</i> and <i>S. palustre</i> are a feature of many of the flushed areas as are Bulbous Rush (<i>Juncus bulbosus</i>) and White Beak-sedge, particularly at the lower levels. As nutrients increase towards stream banks species such as Sharp-flowered Rush (<i>Juncus acutiflorus</i>), sedges (<i>Carex demissa</i> , <i>C. echinata</i> , <i>C. nigra</i> , <i>C. paniculata</i>), Sweet Vernal Grass (<i>Anthoxanthum odoratum</i>) and Common Sorrel (<i>Rumex acetosa</i>) appear. Other species include Blinks (<i>Montia fontana</i>), Bog-bean (<i>Menyanthes trifoliata</i>), Bog Pimpernel (<i>Anagallis tenella</i>) and mosses <i>Polytrichum commune</i> , <i>Drepanocladus revolvens</i> and <i>Calliergon sarmentosum</i> . The moss <i>Campylium stellatum</i> occurs close to springs, and the Kerry Butterwort (<i>Pinguicula grandiflora</i>) is present locally.

**Wet heath/Dry humid
acid grassland/dry
calcareous and
neutral grassland/
mosaic
(HH3/GS3/GS1)**

Between the rock outcroppings, wet heath predominates, grading into small areas of dry heath, upland grassland on mineral/peaty soil and blanket bog at different scales to form a mosaic. Wet heath supports Cross-leaved Heath, Heather (*Calluna vulgaris*), Deer-grass, Heath Rush (*Juncus squarrosus*), Bilberry (*Vaccinium myrtillus*), Purple-Moor grass and sedges (*Carex* sp.). It shares many species with *blanket bog, making it difficult to distinguish boundaries between the two habitats. Bracken (*Pteridium aquilinum*) is occasional here. Heather dominates the dry heath areas, together with Sheep's Fescue (*Festuca ovina*), Tormentil (*Potentilla erecta*) and Heath Bedstraw (*Galium saxatile*). The composition of upland grassland is similar to dry heath, but is dominated by Mat-grass (*Nardus stricta*) and Common Bent (*Agrostis capillaris*), with Heather cover less than 25%. The grassland areas occur principally at the western margin and on very steep slopes where a little mineral soil is exposed.

Fauna:

Invertebrates

Kerry Slug (*Geomalacus maculosus*) is present on the site (as recorded by J Conroy, C Heardman and D O'Donnell) – this species is listed on Annex II of the Habitats Directive.



Kerry Slug (*Geomalacus maculosus*)

The following dragonfly species have recorded from Lough Beg (on eastern edge of site near Lough Nambrackderg): Common Blue Damselfly (*Enallagma cyathigerum*), Large Red Damselfly (*Pyrrosoma nymphula*), Four-spotted Chaser (*Libellula quadrimaculata*), Black Darter (*Sympterygum danae*) and Common Darter (*S. striolatum*) (C. Heardman, *pers comm* December 2003).

Fish

It is possible that Lough Nambrackderg, to the eastern edge of the site, may support the vulnerable Red Data Book species, Arctic Char (*Salvelinus alpinus*), as recorded on the NHA form (Wilde 1993). While no survey has been done, as a deep lake with a stony shoreline it provides suitable habitat similar to other lakes in the south-west where the species does occur, such as Gougane Barra (Dr F Igoe, ICCG, *pers comm*). The name Nambrackderg – literally “red trout” in Irish – is thought to indicate lakes where char have occurred historically.

Birds

Chough (*Pyrrhocorax pyrrhocorax*), Merlin (*Falco columbarius*) and Peregrine Falcon (*Falco peregrinus*) are present in the area; all of these species are listed on Annex I of the Birds Directive, protected under the Wildlife Act (1976) and noted as Internationally Important in the Irish Red Data Book (Whilde, 1993). Over 100 Golden Plover (*Pluvialis apricaria*) were recorded during the NHA survey in 1991, but were likely to be migrants. Red Grouse (*Lagopus lagopus*), Raven (*Corvus corax*), Dipper (*Cinclus cinclus*), Meadow Pipit (*Anthus pratensis*), Skylark (*Alauda arvensis*), Snipe (*Gallinago gallinago*) and Woodcock (*Scolopax rusticola*) have also been recorded from the site.

Notable bird species recorded from site.

Species name	Birds Directive	RDB	Protected	Ecological requirements
Peregrine Falcon	Yes	Internationally important	Yes	One pair occasionally breeds on cliffs at eastern side of site
Merlin	Yes	Rare	Yes	Breeds on site (M. Scottham, <i>pers comm</i>).
Golden plover	Yes	Vulnerable	Quarry species	Migrant feeding on bog
Red grouse	No	-	Quarry species	Feeds on heather moorland
Chough	Yes	Internationally important	Yes	Recorded regularly – may be breeding 1-2 pairs.

Mammals

Otter (*Lutra lutra*) are known to utilise the site, although an upland site is unlikely to provide core or breeding habitat. This species is listed under Annex II of the Habitats Directive and protected under the Wildlife Act (1976). The endemic Irish Hare (*Lepus timidus hibernicus*) occurs on the site; it is listed under Annex V of the Habitats Directive. Both species are noted as Internationally Important in the Irish Red Data Book (Whilde, 1993).

Land Use

Land use on the site

Agriculture

Sheep grazing takes place all year round with some seasonal cattle grazing. Supplementary feeding has been recorded on site (Commonage Framework Plan, 2000), this may occur along the Priests Leap Road.

Farmers use quad bikes to manage stock. These have caused localised erosion damage to the active blanket bog where tracks have been repeatedly used.

Burning

Burning has been recorded on site (1991 NHA survey), as noted from areas dominated by Bog-cotton and with an even age structure of Heather. More recently, no burning has been recorded, although it may occur on the fringes of the site.

Peat cutting

Small-scale peat cutting occurs sporadically on two face banks adjacent to the Priest's Leap road at the western edge of the site.

Electricity generation

There are two hydroelectric schemes operating on site.

A small scheme, owned by the E.S.B., consists of two dams. One is on Curramore Lough and the other is further down the Derryduff stream, close to the southern site boundary. Some water abstraction may occur.

A second scheme is located on the Cumeendarrig river towards the east of the site. This was built in 2001 by Hibernian Hydro (a subsidiary of ESB) and has an intake from a natural pool at around 225m altitude and a small generating station in a green field at the edge of the site (115m).

- Hill-walking** As part of a tourism-related project, a number of footpaths have been constructed by one landowner on private land at Derryclogher. Within the site as a whole, the number of hill-walkers is low; this activity does not appear to be having any impact on the blanket bog.
- Shooting** A number of orange disks, similar to those used in clay pigeon shooting, have been found on the western part of the site, close to the area of peat cutting (C. Heardman, *pers comm*, December 2003).



Face bank for domestic peat cutting, Priest's Leap Road (C. Heardman).

Land use adjacent to the site

- Forestry** Some forestry occurs to the south and east of the site, including one plantation close to the shores of Lough Nambrackderg. However, the afforested areas lie downstream from the site, and are unlikely to impact of the site's hydrology.
- Agriculture** Sheep grazing occurs over a wide area outside the site.

Past human use

Cattle and sheep have long grazed the area. Small-scale hand cutting of peat occurred until relatively recently just to the north of Cummeendarrig River. A small area of bog in the north-west of the site has been affected by hand-cut drains (now collapsed).

Recorded Monuments and Other Features

A wedge tomb is recorded on the site boundary (National Grid Ref.: W035616) in the townland of Derryclogher. The Monument Number is CO091-002.

CONSERVATION VALUE OF DERRYCLOGHER (KNOCKBOY) Bog cSAC

Derryclogher Bog has been designated for the priority habitat, active blanket bog, which occurs in a complex mosaic with flushes, wet heath, dry heath, upland acid grassland, exposed rock and open water. Derryclogher Bog is a good example of intact mountain blanket bog and is one of the most extensive areas of this habitat in the south-west of Ireland.

The available information suggests that the site is hydrologically intact and active. Limited human impact has left it in an apparently natural state, with low-density sheep grazing and no recent burning. There is evidence of peat erosion from a limited area south of Curramore Lough only. The active blanket bog vegetation has the characteristic species for this habitat, with the typical microtopography of hummocks and linear pools occurring in some areas. Of particular interest are the gradations from bog into other related upland habitats of heath, acid grassland and exposed rock.

No rare plants have been recorded from the site, but it supports a large number of typical blanket bog species. The main threat to the system would appear to be further overgrazing in the area. Although the area of bog is relatively small, this site is in more or less a natural state, and has much ecological interest.

The site is important for upland birds. It supports breeding pairs of three Annex I bird species; Peregrine Falcon, Merlin and Chough (unconfirmed breeder). The site is also utilised by Otter and Kerry Slug, two species listed in Annex II of the Habitats Directive and important in an EU context, in addition to the Internationally Important Red Data Book species Irish Hare. The vulnerable Red Data Book species Arctic Char may also be present on the site.

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; Blanket Bog (active) (13% area of the site). |
| Objective 2: | To maintain the extent, biodiversity and species richness of the site. |
| Objective 3: | To establish effective liaison and co-operation with landowners, legal users and relevant authorities. |

Management Issues

The following are the main management issues for the site:

- **Burning**
- **Grazing**
- **Lack of site data**
- **Peat cutting**
- **Peat erosion**
- **Water abstraction/Hydroelectric dams**

Burning

The site has not been burned in the recent past. Uncontrolled burning would be detrimental to the active blanket bog and heath vegetation. However, controlled burns can have a positive impact on Red Grouse populations by providing young re-growth for browsing. Grouse populations on the site should be assessed prior to any burns being planned.

Grazing

Sheep grazing occurs throughout the site at a low density, although some areas of heath and grassland to the west of the site along the Priest's Leap road have been damaged by heavy grazing according to the Commonage Framework Plan for the site. There is some localised trampling damage to an area of the *active blanket bog south of Lough Curramore that could lead to erosion. The site appears to be close to its carrying capacity for sheep, judging by the condition and growth form of the heather in heath areas – any increase in stocking rate could damage the active blanket bog.

Lack of site data

The site has never been fully surveyed. A full site survey would provide an accurate baseline from which to monitor vegetation changes in the site, via an accurate habitat map.

Peat cutting

There are two small areas of peat cutting within the site, of which only one (on the western corner of the site alongside the Priest's Leap Road) is active. These have a limited impact on the bog as a whole, but could affect the value of the site if they expand.

Peat erosion

Small areas of peat on site have become eroded due to overgrazing and the creation of tracks by quad bikes used for stock management purposes and for the maintenance of the hydroelectric schemes.

Water abstraction/Hydroelectric dams

Abstraction or hydroelectrical power generation may affect the water level in Lough Curramore. However, there is no evidence to suggest that this is having a negative impact on the qualifying interests of the site.

The Cummeendarrig river is now also part of a hydroelectric scheme, and damage and repairs to associated pipeline have negatively impacted on a small area of bog.

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 NPWS 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.
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts.
- enforcement of other relevant legislation such as the Water Framework Directive.

Establish a monitoring regime

The monitoring regime for the site will comprise:

Water quality monitoring

Water quality is monitored at regular intervals by the EPA and/or local authorities.

Under the Water Framework Directive local authorities are obliged to establish River Basin District plans covering all inland and coastal waters that will lead to the identification and implementation of effective measures for improved water management.

NPWS will liaise with the EPA, the local authorities and other relevant statutory agencies and research organisations to:

- determine the quality and quantity of waters associated with water dependent habitats
- establish reference conditions necessary for monitoring the status of the habitats and species and to
- ensure that the sampling regime is adequate to detect changes in their conservation status

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 Derryclogher (Knockboy) 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 active blanket bog 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 IV of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area. For example, peat cutting, drainage, fertilisation and burning are Notifiable Actions relevant to this site.

Specific Strategies

Objective 1.

To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; Blanket Bog (active) (13% area of the site).

Strategies:

- | | |
|--|---|
| 1.1. Manage grazing on commonage | <p>The impacts of grazing on commonage areas have been assessed by the Commonage Framework Planning Project (Commonage Plan (CP) CO-2).</p> <p>As the CP (CO-2a) specifies a de-stocking rate of less than 10% (i.e. 8.6%), then no de-stocking is required. The CP recommends that cattle should not be outwintered (November to April inclusive). However, these restrictions do not apply to sheep. The individual CP should be consulted for further details.</p> <p>The zoning map (Map 4) reflects the findings of the CP assessments.</p> <p>Supplementary feeding on the site should be discontinued, as specified in the CP.</p> |
| 1.2. Maintain/implement suitable grazing regimes on non-commonage | <p>For non-commonage land, NPWS will seek to ensure that suitable grazing levels are established and/or maintained via liaison with landowners and, if relevant, REPS and NPWS farm plans.</p> |
| 1.3. Minimise impacts of peat cutting | <p>Most areas of active turf cutting are not included in the cSAC. Where areas of active cutting lie within less sensitive areas of the site, hand cutting may continue. Machine cutting will not be permitted.</p> <p>On particularly sensitive areas of bog, a complete halt to cutting may be required. In such cases compensation will be determined on a case-by-case basis, but would be in the region of €784.40 per hectare (€317.43 per acre).</p> |
| 1.4. Minimise peat erosion | <p>Peat erosion due to over-grazing is covered by Strategies 1.1 and 1.2. The Conservation Ranger will liaise with farmers to encourage responsible quad bike use, i.e. to avoid sensitive parts of the site, as well as damaged areas and to refrain from repeated use of 'tracks'.</p> <p>The Conservation Ranger will liaise with Hibernian Hydro to ensure that ongoing maintenance work does not cause further damage to the small area of active blanket bog by Cummeendarrig River (see Strategy 2.3).</p> |
| 1.5. Minimise impacts of burning | <p>Burning has not occurred recently on this site. Burning an area of land larger than 5ha is a Notifiable Action (see Appendix IV). The ranger will record any fires on site, including area affected and degree of damage.</p> <p>Controlled burns can improve the food availability for Red Grouse by encouraging young heather shoots. A comprehensive survey of the Grouse population using the site should be undertaken to decide whether such management is necessary.</p> |

Objective 2.

To maintain the extent, biodiversity and species richness of the site

Strategies:

- | | |
|---|---|
| 2.1. Manage grazing on the site | See Strategies 1.1 and 1.2. |
| 2.2. Minimise impact of burning | See Strategy 1.5. |
| 2.3. Maintain other habitats | The flowing and still water bodies on the site and the areas of exposed rock, including the cliffs around Lough Nambrackderg, do not require active management intervention to maintain their conservation status. |
| 2.4. Maintain water levels and quality | NPWS will liaise with Hibernian Hydro and ESB regarding the operation of the two hydroelectric schemes to ensure that abstraction levels remain sustainable and do not negatively affect lake, stream, or other habitats. |
| 2.5. Commission site survey | NPWS will commission a survey to identify, map and characterise all habitats occurring within the site. |
| 2.6. Maintain and protect important species within the site, particularly those listed on Annex I of the Birds Directive | <p>Strategies that safeguard the habitats, breeding and feeding sites of Annex I and II species will contribute to the maintenance of their populations using the site (see Strategies 1.1 and 1.2). Populations, breeding status and nest locations will, where possible, be recorded on an annual basis. This will be achieved by regular patrolling of the site by the Conservation Ranger (Peregrine Falcon) and by the monitoring and research section of NPWS (other species). Liaison with interest groups and other relevant people is necessary in order to co-ordinate work on bird counts and information gathering on breeding birds.</p> <p>Breeding surveys of Merlin, Chough and Red Grouse are necessary to establish their status on site.</p> |
| 2.7. Management of Arctic Char | NPWS will seek to encourage a survey for Arctic Char in Lough Nambrackderg. NPWS will liaise with the Irish Char Conservation Group in this regard. |

Objective 3.

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

Strategies:

- | | |
|---|--|
| <p>3.1. Liaise with interested parties</p> | 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. |
| <p>3.2. Liaise with REPS planners</p> | 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. See Map 4 for management zones. 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: Lakes & ponds, rivers & streams, exposed rock

Strategies 2.3-2.7 and general monitoring strategies apply.

2A: MAINTENANCE AREAS WITH LIMITED MANAGEMENT INTERVENTION

2A1: Blanket bog, heath, upland grassland and flushed areas

This area has been identified in the Commonage Framework Plan as being undamaged (category U). See Commonage Framework Plan for full details.

Strategies 1.1, 1.3-1.5, 2.1-2.2, 2.5, 2.6 and 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: Blanket bog/Heath/Upland grassland on privately owned land

Grazing assessments are required for these privately owned areas.

Strategies 1.2, 1.4-1.5, 2.1-2.2, 2.5, 2.6 and the general monitoring strategies apply.

B2: Blanket bog affected by Cummeendarrig River Hydroelectric Scheme

Regular patrol monitoring and liaison with Hibernian Hydro is required for this area.

Strategies 1.4, 2.4 and the general monitoring strategies apply.

Zone C: Intensive use Zone

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

C1: Active peat cutting areas

Strategy 1.3 and the 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 commonage	Implement Commonage Framework Plan de-stocking rate.	REPS planner			
1.2	Maintain/ implement suitable grazing regimes on non-commonage	Ensure sustainable grazing levels via liaison with landowners and/or REPS/NPWS farm plans.	REPS/farm planner			
1.3	Minimise impacts of peat cutting	Existing hand cutting may continue with monitoring.	NPWS			
1.4	Minimise peat erosion	Erosion due to over-grazing - see Strategies 1.1 & 1.2. Liaise with farmers prevent quad bike damage. Liaise with Hibernian Hydro to protect blanket bog by Cummeendarrig River (see Strategy 2.3).	NPWS			
1.5	Minimise impacts of burning	Record any fires on site	NPWS			
2.1	Manage grazing on the site	See Strategies 1.1 and 1.2.	-			
2.2	Minimise impact of burning	See Strategy 1.5.	-			
2.3	Maintain other habitats	Maintain water bodies and exposed rock by non-intervention	-			
2.4	Maintain water levels and quality	Liaise with Hibernian Hydro and ESB.	NPWS			
2.5	Commission site survey	Survey and map all habitats.	NPWS			
2.6	Maintain and protect important species within the site, particularly those listed on Annex I of the Birds Directive	Maintain habitats on site (see Strategies 1.1 and 1.2). Record populations, breeding status annually. Liaise with interest groups.	NPWS / REPS planner			
2.7	Management of Arctic Char	Liaise with the ICCG re. Lough Nambrackderg survey.	NPWS/ICCG			
3.1	Liaise with interested parties	Maintain effective liaison with landowners, relevant authorities, and interested parties regarding the site.	NPWS			
3.2.	Liaise with REPS planners	REPS planners are required to consult with NPWS staff when they are developing plans for land within the site.	REPS planner/ NPWS			

APPENDIX I:

GLOSSARY

ABSTRACTION - The process of taking water from a river, stream, spring pond or lake or from ground water. This process is “abstracting” water or making an “abstraction”.

ALTITUDE - Vertical height above sea level.

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 Habitats Directive is a list of species for which SACs have to be designated.

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 wild birds. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

BLANKET BOG - 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.

COMMUNITY - a well-defined assemblage of plants and/or animals, clearly distinguishable from other such assemblages.

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.

CORRIE - A circular hollow on a hillside formed by glacial scouring.

DEHLG - Department of Environment, Heritage and Local Government

DEVELOPMENT PLANS - Local Authorities (Co. Councils & Corporations) are obliged under statute to produce a document that 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.

DIVERSITY - see biodiversity.

DOMESTIC PURPOSES - Used in relation to the cutting of peat. Peat that is cut for domestic purposes is not for commercial sale and is cut at the rate of one year's supply for a household per year.

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.

EPA – Environmental Protection Agency

EROSION - The processes whereby the materials of the Earth's crust are dissolved, or worn away and simultaneously moved from one place to another by natural agencies which include weathering, solution, corrosion and transportation.

EUROPEAN BIRDS DIRECTIVE (79/ 409/ 2nd April 1979) - See Birds Directive.

FAUNA - Animal life.

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.

FORMATION – A geological term for a body of rocks having easily recognised boundaries that can be traced in the field, and large enough to be represented on a geological map as a practical and convenient unit for mapping and description.

GEOMORPHOLOGY – The study of the form and structure of the landscape, which is shaped by the underlying geology.

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 sleane or spade.

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 inputs, water level changes and drainage mechanisms that are all influenced by the underlying geology.

IMPEDED DRAINAGE - A limited through flow of water.

LATITUDE – The angular distance measured in degrees north or south of the equator.

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.

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.

MANAGEMENT - a) Controlling processes within a site (this can be actively carrying out work or can be doing nothing), preferably in accordance with a conservation plan. - b) The practical implementation of the management plan. - c) Undertaking any task or project identified in the management plan, including the identification of new opportunities.

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.

MOSAIC - Used to describe habitats that occur together and cannot easily be mapped separately.

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.

NATURAL HABITAT - Can be aquatic or terrestrial areas distinguished by geographic, abiotic and biotic features, whether entirely natural or semi-natural.

NHAs - Proposed Natural Heritage Areas. These are areas that are important for wildlife conservation. Some of these sites are small, such as roosting areas for rare bats; others can be large such as a blanket bog or a sand dune system.

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.

NPWS - National Parks and Wildlife Service

OLIGO – Prefix denoting few or little

OLIGOTROPHIC - Applied to waters that are relatively low in nutrients, as in lakes which are low in dissolved minerals and which can only support limited plant growth.

OMBROTROPHIC - A system (often used when describing raised bogs) which relies solely on precipitation for inputs to the system.

ORGANISM - Any living thing.

OS – Ordnance Survey

PATROL MONITORING - Regular monitoring of a site usually carried out by the Conservation Ranger to check for damaging activities and to carry out other activities such as to assess the vegetation, to assess the effectiveness of the management regime on the condition of the site, etc.

PEAT CUTTING BY HAND - See hand cutting of peat.

PEAT CUTTING BY MACHINE - See mechanical peat extraction.

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 – A register of threatened species that includes definitions of degrees of threat.

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 legislation for each species.

REPS - Rural Environmental Protection Scheme. This is an Agri-Environmental programme that 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 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 public 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). SACs have also been known as cSACs which stands for “candidate Special Areas of Conservation”, and pcSACs which stands for “proposed candidate Special Areas of Conservation.”

SCARCE - This is 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. Scarce applies to 11-25, 10 km squares in this context.

SCIENTIFIC MONITORING - this is carried out by the monitoring section of the NPWS, whose function here is to ensure that the favourable conservation status of the site is maintained and where possible improved.

SPAs - Special Protection Areas for Birds are areas that have been designated to ensure the conservation of certain categories of birds. Ireland is required to conserve the habitats of two categories of wild birds under the European Birds Directive (Council Directive 79/ 409/ 2nd April 1979). The NPWS is responsible for ensuring that such areas are protected from significant damage.

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 how 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).

TOPOGRAPHY - the study or detailed description of the surface features of a region.

VERTEBRATES - Animals with backbones.

VERY RARE - an ecological term that 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.

WETLAND - An area habitually saturated with water, and which may be partially or wholly covered permanently, occasionally, or periodically by fresh or salt water up to a depth of 6 m, and which includes bogs, fens, marsh, shallow ponds, river estuaries, and intertidal mud flats.

ZONING - The division of a nature conservation site (& neighbouring lands) into a number of sub-units. 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:	24
O.S. Discovery (1:50,000) map:	85
O.S. 6 inch (1: 10,560) map:	CO 80, CO 91, CO92

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 No. 2443, Flight Line 61; and Aerial photo Nos. 4015 and 4016, Flight Line 60. Date: 2000. NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Colour photographs were taken as part of the NHA survey, 1994.

Colour oblique aerial photos are kept in the NHA file, NPWS.

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.

Local Government (Planning and Development) Acts 1963-2002.

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Mooney, E. and Goodwillie, R.N. 1991. *Mountain Blanket Bog Survey, 1991*. Draft report to the National Parks and Wildlife Service.

Whilde, A. 1993. *Threatened Mammals, Birds, Amphibians and Fish in Ireland. Irish Red Data Book 2: Vertebrates*. HMSO, Dublin.

APPENDIX III: CLIMATE

VALENTIA OBSERVATORY													
Monthly and annual mean and extreme values 1961-1990													
TEMPERATURE (<i>degrees Celsius</i>)	<i>jan</i>	<i>feb</i>	<i>mar</i>	<i>apr</i>	<i>may</i>	<i>jun</i>	<i>jul</i>	<i>aug</i>	<i>sep</i>	<i>oct</i>	<i>nov</i>	<i>dec</i>	<i>year</i>
<i>Mean daily max.</i>	9.3	9.3	10.5	12.2	14.3	16.4	17.9	18	16.6	14.3	11.4	10.1	13.4
<i>Mean daily min.</i>	4.2	3.9	4.6	5.5	7.5	10.1	11.7	11.6	10.3	8.6	6	5	7.4
<i>Mean</i>	6.8	6.6	7.6	8.9	10.9	13.3	14.8	14.8	13.5	11.5	8.7	7.6	10.4
<i>Absolute max.</i>	13.6	15.1	20.3	24	26.9	25.7	29.7	28.4	25.9	22.5	19.8	15.3	29.7
<i>Absolute min.</i>	-5.9	-7.3	-5.1	-1.6	0.5	2.8	5.3	3.3	2.8	-1.4	-4	-5.3	-7.3
<i>Mean no. of days with air frost</i>	3.4	3.3	2.2	0.6	0	0	0	0	0	0.1	1.3	3	13.9
<i>Mean no. of days with ground frost</i>	7.5	7.1	6.1	4.3	1.1	0.1	0	0	0.2	1.1	4.5	6.8	38.7
RELATIVE HUMIDITY (%)													
<i>Mean at 0900UTC</i>	84	83	83	79	78	81	84	85	85	86	84	85	83
<i>Mean at 1500UTC</i>	80	77	75	73	73	77	79	79	78	80	79	81	78
SUNSHINE (hours)													
<i>Mean daily duration</i>	1.41	2.16	3.05	5	5.81	5.12	4.53	4.5	3.61	2.53	1.72	1.17	3.39
<i>Greatest daily duration</i>	7.5	9	11.1	13.5	15.1	15.8	15.6	14.4	12.1	9.6	8.1	6.4	15.8
<i>Mean no. of days with no sun</i>	11	7	6	3	2	4	4	4	4	7	9	13	75
RAINFALL (mm)													
<i>Mean monthly total</i>	166.6	123	122.9	76.2	89.6	79.2	74	110.8	123.8	156.4	148.3	159.2	1430.1
<i>Greatest daily total</i>	45.6	46.2	37.1	52.7	37.5	58.3	32.4	85.6	55.6	64.6	86.6	62	86.6
<i>Mean no. of days with ≥ 0.2mm</i>	23	19	21	17	18	17	17	19	19	22	22	24	239
<i>Mean no. of days with ≥ 1.0mm</i>	20	16	16	12	14	13	12	15	15	19	18	19	187
<i>Mean no. of days with ≥ 5.0mm</i>	11	8	8	5	7	5	5	7	8	11	10	10	95
WIND (knots)													
<i>Mean monthly speed</i>	13.1	12.6	12.1	10.1	10.3	9.1	8.5	8.9	10	11.4	11.8	12.6	10.9
<i>max. gust</i>	87	79	67	63	61	58	53	60	88	75	70	82	88
<i>max. mean 10-minute speed</i>	54	49	40	38	39	40	31	36	58	49	45	47	58
<i>mean no. of days with gales</i>	2.5	2	1.3	0.3	0.4	0	0	0.1	0.5	0.8	1.5	1.8	11.2
WEATHER (mean no. of days with...)													
<i>snow or sleet</i>	1.5	1.7	1.1	0.3	0.1	0	0	0	0	0	0.1	0.8	5.6
<i>snow lying at 0900UTC</i>	0.2	0.4	0	0	0	0	0	0	0	0	0	0.1	0.8
<i>hail</i>	5.1	4.2	4.6	2.5	1.1	0.1	0	0.1	0.3	0.9	2.9	3.6	25.5
<i>thunder</i>	1.2	0.8	0.6	0.2	0.3	0.3	0.6	0.4	0.5	0.7	0.8	0.7	7.1
<i>fog</i>	0.4	0.4	0.2	0.9	0.9	1.2	1.5	1.2	0.7	0.6	0.4	0.4	8.9

Source: Met Eireann

APPENDIX IV: 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 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 that the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>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.</p>	<p><u>SECTION B</u></p> <p>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).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 2.1

UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

<u>Section A</u>	<u>Section B</u>
<p>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</p> <p>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</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting/adding lime</p> <p>adding fertiliser of any sort to areas not previously fertilised applying fertiliser which would increase the level of nitrogen in the soil</p> <p>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</p> <p>using fertiliser on slopes over 25 degrees</p> <p>creation of new tracks or paths</p> <p>burning of vegetation</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>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</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>commercial turf cutting</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

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 that the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 3.1

BLANKET BOG

<u>Section A</u>	<u>Section B</u>
<p>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</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines/ introduction of stock to formerly ungrazed areas</p> <p>adding lime/adding fertiliser of any sort</p> <p>creation of new tracks or paths/burning of vegetation/ reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip/ dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

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 that the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

<u>Section A</u>	<u>Section B</u>
<p>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</p> <p>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</p> <p>supplementary feeding of stock, except as defined in REPS guidelines</p> <p>introduction of stock to formerly ungrazed areas</p> <p>adding lime / fertiliser of any sort</p> <p>creation of new tracks or paths</p> <p>burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>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</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

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 that the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 6.1

RIVERS OR STREAMS

<u>Section A</u>	<u>Section B</u>
<p>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</p> <p>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</p> <p>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</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/restocking with fish</p> <p>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</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them</p> <p>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</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the river or stream</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

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 that the Minister considers to be equivalent s/he need only notify the Minister of activities not covered in the plan.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> 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).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

<u>Section A</u>	<u>Section B</u>
<p>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</p> <p>grazing of livestock above a sustainable density as defined in approved farm plans) within 50m of the lake, pond or canal</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock within 50m of the lake, pond or canal</p> <p>adding lime within 50m of the lake, pond or canal /adding fertiliser of any sort within 50m of the lake, pond or canal</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/ restocking with fish.</p> <p>within 50m of the lake, pond or canal: reclamation, infilling, ploughing or land drainage</p> <p>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</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into watercourses running into them.</p> <p>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).</p> <p>alteration of the banks, channel, bed or flow of the lake, pond or canal or of watercourses running into or out of it</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the lake, pond or canal</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

In a very limited number of cases it may be necessary for the Minister for The Environment, Heritage and Local Government to restrict existing activities. In these cases compensation will be payable for actual losses arising out of any such restriction. In the event of restrictions being imposed by the Minister for The Environment, Heritage and Local Government, an appropriate appeals procedure will be put in place.

APPENDIX V: COMPENSATION PROCEDURES

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.

APPENDIX VI: 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 VII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

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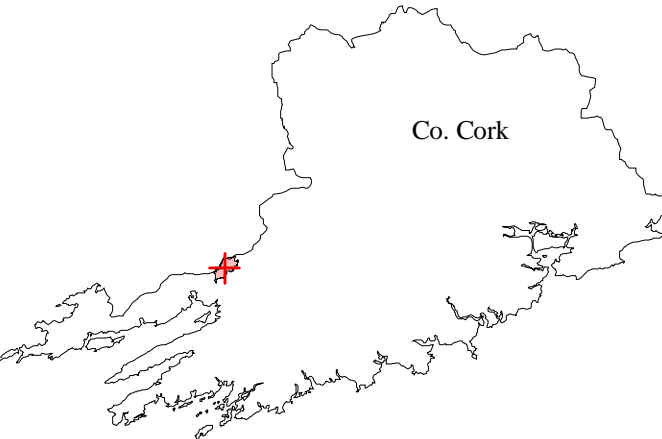
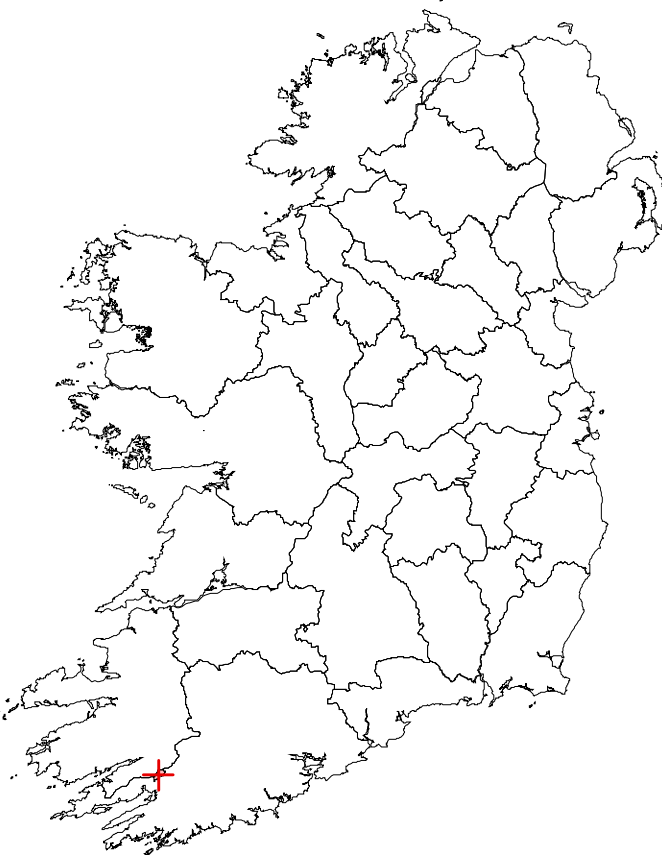
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CEANTAR SPEISIALTA CAOMHNAITHE
CANDIDATE SPECIAL AREA OF CONSERVATION

DERRYCLOGHER BOG 001873
Version 1.01

The mapped boundaries are of an indicative and general nature only.
Boundaries of designated areas are subject to revision.
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Nil sna teorainneacha ar na léarscáileanna ach nod garshuíomhach ginearálta.
Féadfar athbhreithnithe a déanamh ar theorainneacha na gceantar comharthaithe.
Macasamhail d'ábhar na Suirbhéarachta Ordonáis le chead ón Rialtas (Ceadúnas Uimh. 5953)



Map 1
LOCATION MAP: DERRYCLOGHER BOG cSAC 001873
Date: September 2006

