





# Lough Golagh & Breesy Hill cSAC

**National Parks and** 

# Site Code 2164 Co. Donegal



# SUMMARY

### **Site Description**

Lough Golagh and Breesy Hill candidate Special Area of Conservation (cSAC) is located in south Donegal, to the east north-east of Ballyshannon. The site consists of uplands with wet heath and active blanket bog (a priority habitat listed on Annex I of the EU Habitats Directive). There are a number of lakes within the site. The site adjoins the border with northern Ireland and the Pettigo Plateau cSAC (a Northern Ireland designated conservation area. The site is under multiple private ownership with approximately 60% under commonage.

Isolated, wet areas occur within the bog. One of these areas is located at the southern edge of Lough Lee and has quaking flushes with an Atlantic blanket bog pool system characterised by very tall Purple Moor Grass with an excellent complete understorey of bryophytes and Bog Mosses. Elsewhere the bog grades to drier, more heathy vegetation and there are tracts of dominant Ling Heather and Heath Rush on steeper slopes and towards the south of the site. The lakes are also of conservation interest. In particular, Lough Golagh is noteworthy in that it has two contrasting types of bedrock and has developed fringing fen with Sedge swards and other wetland plants due to a drop in water level. Small areas of both wet and dry broad-leaved semi-natural woodland also occur.

An island in Lough Golagh has been used on an irregular basis by breeding seabirds including Common Gull, Black-headed Gull, Arctic Tern and Common Tern. A flock of Greenland White-fronted Geese is centred in the Ballintra area. This flock is likely to use the wetland and blanket bog habitats on an occasional basis. Otter are known to use wetlands in the site as part of their feeding territory. Red Grouse is found on the open hill, but whether breeding occurs has not yet been established.

#### **Land Use**

The site is used for sheep and cattle grazing, with parts of the site damaged by overgrazing. Supplementary feeding is also noted, with cattle accessing parts of Lough Golagh as a drinking source. The hand cutting of turf is permitted at two locations within the site boundary. There are signs of occasional burning, with several large fires occurring recently.

Lough Unshin, located in the south-west of the site supplies Ballyshannon with water. Lough Golagh is occasionally used for boating and fishing, with shore-based angling also occurring. Some Grouse shooting occurs in the site. The locals hold an annual walk to the summit of Breesy Hill. Quarrying occurs at various locations within the site, including south of Behy River, west of Lough Unshin and in Cashelard townland. There is a minor quarry within the site in the Croaghbreesy area. Sporadic small scale dumping occurs.

#### Main conservation issues

- · Peat cutting
- Overgrazing
- Spread of exotic species
- Afforestation adjacent to site
- Failure of breeding seabird populations

# Main management objectives

- Maintain and, where possible, enhance the ecological integrity of priority and semi-natural habitats: active blanket bog/heath/flush mosaics, wetland (lake/fen/wet woodland) complexes, grasslands and woodlands
- Maintain and, where possible, increase populations of Annex I and Annex II species, as well as noteworthy species of flora and fauna
- Initiate and continue effective liaison with landowners/managers, Northern Ireland conservation organisations and relevant interest groups

# Main strategies to achieve objectives

- Minimise threat from peat extraction
- Regulate stock levels on active blanket bog/heath/flush mosaic
- Minimise threat from drainage, erosion, burning, afforestation and quarrying
- Encourage removal of Rhododendron
- Monitor important bird populations
- Liaise/consult with landowners and interested parties

# **ACKNOWLEDGEMENTS**

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3

# **TABLE OF CONTENTS**

Summary	1
Acknowledgements	3
Table of Contents	4
Reader's Guide	6
Introduction	7
Legal Background for Conservation Plans	7
General Conservation Objectives	
Implications for landowners and other site users	
Site Description	
Location including site boundaries	10
Legal Status	
Management Infrastructure	12
Physical Features	12
Biological Features	
Cultural Features	21
Ecological Assessment	25
Objectives, Strategies and Zoning	26
Conservation Objectives	26
Management Issues	
General Strategies	
Specific Strategies	
Zoning	32
Summary of Specific Strategies	35

Table of Contents 5

# **APPENDICES**

Appendix I:	Glossary	36
Appendix II:	References	43
Appendix III:	Physical Processes Affecting the Site	45
Appendix IV:	Breeding Birds on Lough Golagh	46
Appendix V:	Notifiable Actions	47
Appendix VI:	Compensation and Appeals Procedures	73
Appendix VII:	Summary of Farming Conditions under REPS	75
Appendix VIII:	National Parks and Wildlife Management Staff	78

# **MAPS**

Map 1 Boundary & Location Map (Version 1.01	Map 1	Boundary	/ & Location	Мар (	(Version	1.01
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Map 2 Indicative Habitat Map

Map 3 Management Zoning Map

# READER'S GUIDE

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

The **Site description** contains **general information** on the site's boundaries, ownership and organisations involved. It also contains sections on the **physical aspects** of the site such as 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 **Ecological Assessment** assesses the main ecological attributes of the site.

The **Objectives, Strategies and Zoning 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 will be used to achieve the objectives as outlined. In cases where more information is required, general strategies are usually applied. Where sufficient data and knowledge is available, specific management prescriptions are outlined for the timescale of the plan. 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, a list of **notifiable actions** relevant to each habitat within the site, and additional information on the site.

# INTRODUCTION

# **Legal Background for Conservation Plans**

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

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

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

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

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

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

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

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

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

Sites are legally protected once they are publicly advertised.

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

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

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

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

### **Reasons for Site Designation**

The reason for the proposal to designate this site as an SAC is the presence of:

	HABITATS LISTED IN ANNEX I OF THE E.U. HABITATS DIRECTIVE				
•	Active blanket bog (EU Habitat	This is an Annex I priority habitat. The site is a			
	Code 7130)	significant example of lowland blanket bog in			
		the north-west, with a small area of well			
		developed pool/hummock system.			

<sup>\*</sup> Listed as a priority habitat in Annex I

As part of his responsibility in relation to biodiversity and wildlife under the Wildlife Acts, the Minister's objective is to protect important habitats and species even though they may not appear in the Annexes of the Habitats Directive. This may mean that they are included in SAC conservation plans.

# **General Conservation Objectives**

Under Article 6 of the EU Habitats Directive, Member States are required to ensure the favourable conservation status of all Annex I habitats and Annex II species within cSACs. By preparing, implementing and reviewing this plan on a five year basis, DEHLG aims to achieve the objectives of the Habitats Directive in relation to this site. The general objectives DEHLG will apply to achieve this are:

- to maintain the Annex I habitat for which the cSAC is selected
- to liaise with the landowners, relevant authorities and interested parties
- to increase the scientific knowledge of the site through further scientific research and development of monitoring programmes

Introduction 9

Specific conservation objectives and strategies are outlined in the section, **Objectives, Strategies and Zoning**.

# Implications for landowners and other site users

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

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

If an owner, occupier or user of a site wishes to carry out certain activities within the designated area (that are not covered by licence or consent from another statutory body), they must consult with, and get consent from, the Minister for the Environment, Heritage and Local Government. These activities are listed as "Notifiable Actions" for each habitat (see Appendix V). Local Authorities are obliged to ensure appropriate assessment of the implications of any development permission sought that may have an impact on a designated area.

The designation of the site or any conservation actions can be appealed by landowners or rightowners on a scientific basis. Details of the appeals procedure are also given in Appendix VI.

# SITE DESCRIPTION

# Location including site boundaries

The site is located in south Co. Donegal, approximately 8 km east north-east of Ballyshannon, on the south-western end of the Pettigo Plateau (Map 1).

**Grid Ref.:** G 965 662

**Latitude:** N 54° 32′ 00″ **Longitude:** W 08° 03′ 30″

**Area:** 785 ha

**Townlands:** Carricknahorna,

Cashelard, Croaghbreesy,

Derrykillew,

Ballymagrorty and Tober.

(Map references are provided in Appendix II).

#### Site Boundaries

The boundary adjoins the border of Northern Ireland in places. The site is an amalgamation of two "subsites": Lough Golagh and Lough Lee (site code 1164), for which the boundary was surveyed in 1993 and Breesy Hill (site code 2164), surveyed in 1995. Three areas (total 163 ha) within the original site boundaries have been excluded since these surveys. See Map 1 for current boundaries.

#### Site Infrastructure

Access to the site is via minor roads, bog roads and tracks. The minor road from Cavangarden East to Tullynasiddagh Lough separates Lough Golagh from the core area of the site at Cashelard and Breesy. In the south, Lough Finn and Croaghbreesy are separated from the core area by the bog road running under Breesy Hill.

A bog road runs south onto Crumnalannav Hill from Lough Golagh Bridge in the north of the site. An old track, marked on the O.S. six inch map, runs south-east by Lough Sallagh to Lough Fisla. Lough Finn and Croagh Bog are served by bog roads.

A small wooden pier, now decaying and beyond use, is located at the south of Lough Golagh. A concrete platform, piping and an electric pumping station are found at the west of Lough Unshin. These are used for water abstraction. There are few drainage ditches within the site. A triangulation point is found at the summit of Breesy Hill.



Breesy Hill

# **Legal Status**

# **Ownership**

Part of the site is commonage (approximately 60%), with the remainder under multiple private ownership.

### **Designations of the Site**

candidate Special Area of Conservation Site Code: IE0002164

proposed Natural Heritage Area

Site Code: 2164

# **Management Infrastructure**

### **Individuals and Organisations Involved**

**Landowners** Part of the site is commonage, with the remainder under multiple private

ownership.

National Parks & Wildlife (NPW) of the Department of Environment, Heritage and Local

NPW is responsible for maintaining the nature conservation value of the site. The site is patrolled by the local Conservation Ranger, with input from other staff as necessary (see Appendix VIII for further details of

NPW regional staff).

Heritage and Local Government (DEHLG)

**Planning Authorities** Donegal County Council is the relevant local planning authority.

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

The site is a proposed Natural Heritage Area. The Donegal County Development Plan (2000) states that "The proposed Natural Heritage Areas reflect the rich and diverse heritage resource which survives in the County... The Council will work with relevant authorities, voluntary and community groups, to optimise the contribution of these and other heritage resources to the sustainable development of the county".

# **Physical Features**

#### **Climate**

The closest synoptic weather station to the site is at Malin Head, and 30-Year Average information for this weather station was obtained from the Met Eireann website (see Appendix III for full details). In summary, the mean daily air temperature at the station is 9.3°C, ranging from an average low of 5.2°C in February to an average high of 14.0°C in July. The average annual rainfall is 1060.6 mm, and the average daily duration of sunshine is 3.4 hours per day. Winds are predominantly from the south and the west, with an average wind speed of 16.3 knots. There is an annual average of 25.8 days with snow or sleet recorded, and only 3.3 days where snow is still lying on the ground by 9am. The nearest rainfall recording station at Pettigo (Meensheefin) has recorded an annual mean rainfall of 1455 mm from 1961 to 1990.

# **Geology & Geomorphology**

Limestone, presumably part of the Ballyshannon Limestone Formation, is found along the north-western edge of the site and on the shore of Lough Golagh. Dunnells and Leach (1993) refer to gneiss bedrock along the north and east shores of the lough.

Much of the site consists of rolling, blanket bog landscape in the slopes and valleys surrounding Breesy Hill and Crumnalannav Hill, with lakes in some of the deeper hollows. Glacial till deposition has formed a drumlin type landscape west of the site.

#### Soils & Soil Processes

Hammond (1979) has largely ascribed the peat soils in this site to the low level Atlantic type blanket bog. These are described as occurring below 152 m O.D., being extremely wet and very acid, with low permeabilities and having variable peat depth according to underlying topography. Though some upland blanket bog also occurs, areas above the 152 m contour line generally have shallow peat soils. Mineral soils are found at the north and west on glacial till. These soils are deep and show signs of podzolization.

# **Biological Features**

### **Habitats and Vegetation**

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

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

#### Habitats Found within Lough Golagh & Breesy Hill cSAC

ANNEX I HABITAT TYPE	CORRESPONDING NHA CATEGORY	% AREA
*Active Blanket Bog	Blanket bog	42%
-	Heath	30%
-	Fens and flushes	1%
-	Reedbeds and other swamps	<1%
-	Lakes and ponds	16%
-	Non-marine islands	1%
-	Rivers and streams	<1%
-	Cutover bog	9%
-	Upland grassland on peaty soil	1%
-	Lowland dry grassland	<1%
-	Lowland wet grassland	<1%
-	Scrub	<1%
-	Dry broad-leaved woodland	<1%
-	Wet broad-leaved woodland	<1%
-	Roads/tracks	<1%

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

Active blanket bog (bog/heath/flush with predominantly bog - 42% of total site area or 332ha)

Blanket bog occurs in a mosaic with heath and flush habitats. The most extensive area of blanket bog is found in the rolling, open landscape to the west of Breesy Hill. Over much of the area there is low growing vegetation of mainly Purple Moor Grass (*Molinia caerulea*), Deer Grass (*Trichophorum caespitosum*), Hares-tail Cottongrass (*Eriophorum vaginatum*), Cross-leaved Heath (*Erica tetralix*) and patches of the black moss *Campylopus atrovirens*. Small hummocks of the red moss *Sphagnum capillifolium* are occasional throughout.

# Active blanket bog (contd)

In two isolated and uncut areas of bog, there are flats with Atlantic blanket bog pool complexes and lawns of quaking *Sphagnum* moss vegetation. One such area, to the south-west of Lough Lee, is described by Dunnells and Leach (1993) as an undisturbed area of basin blanket bog, quaking flushes and Atlantic blanket bog pool system characterised by very tall Purple Moor Grass. The area has an excellent, complete understorey of bryophytes and *Sphagnum* mosses, including *S. capillifolium*, *S. palustre*, *S. papillosum*, *S. tenellum*, *S. compactum*, *S. auriculatum* var. *auriculatum* and occasional *S. imbricatum* forming low hummocks. Another such area of wet vegetation occurs in a hollow north of Lough Finn and has a core of pool/hummock vegetation with some *Sphagnum imbricatum* hummocks (Eakin, 1995). These areas, occurring in small hollows, could be described as "upland raised bog".

Black Bog Rush (*Schoenus nigricans*) occurs in some of the plain type areas. Isolated Rhododendron (*Rhododendron ponticum*) is present in some areas of blanket bog.

#### Other Habitats

Heath (bog/heath/flush mosaic with predominantly heath-30% or 236ha)

Heath occurs in a mosaic with active blanket bog and flush habitats, generally coinciding with steeper slopes and thinner peat soils. Areas of heath predominate on the slopes of Breesy Hill and along a ridge extending westwards from Crumnalannav Hill. Ling Heather (Calluna vulgaris) is abundant in this habitat, as are Heath Rush (Juncus squarrosus), Mat Grass (Nardus stricta) and Deer Grass. Fir Clubmoss (Huperzia selago) is occasionally present, particularly at higher elevations. Rock escarpments are common on the slopes of Breesy Hill and here Tormentil (*Potentilla erecta*) and Hard Fern (*Blechnum spicant*) find shelter. Along the north-western edge of the site, Gorse (Ulex europaeus) thickets are found on the lower heathy slopes. Lichen populations are scarce around Breesy Hill where evidence of burning is found, but further south and west lichens are more common. Dunnells and Leach (1993) describe an area south of Lough Lee as having excellent lichen cover and diversity, with species including Cladonia ciliata var. tenuis, C. arbuscula, C. rangeriferina and C. uncialis. Juniper (Juniperus communis subsp. nana) is scattered around the west of the site and is quite common near Lough Unshin.

Fens and Flushes (bog/heath/flush mosaic with predominantly heath/bog-1%) Flushes occurring in mosaic with blanket bog and heath habitats generally consist of tracts of Purple Moor Grass and Bog Cotton (*Eriophorum* spp.) in terraced flats, hollows and along drainage features. Bog Myrtle (*Myrica gale*) and Bog Asphodel (*Narthecium ossifragum*) are frequent in some of the flushes and Black Bog Rush is also occasionally present. Small areas occurring in mosaic are not mapped or shown in the percentage area given above. However, some extensive Purple Moor Grass flats with *Sphagnum* moss communities are mapped, such as the example in the extreme east of the site. In this, Eakin (1995) describes Black Bog Rush and pools dominating the core area, with Horsetails (*Equisetum* spp.), Pondweeds (*Potamogeton* spp.), Marsh Cinquefoil (*Potentilla palustris*) and the moss *Sphagnum auriculatum* also present.

# Fens and Flushes (contd)

Fen communities have developed on the shores of Lough Golagh, coincidental with a drop in the water level of the lake. Dunnells and Leach (1993) record Glaucous Sedge (*Carex flacca*), Tufted Sedge (*Carex elata*), Spearwort (*Ranunculus flammula*), Water Mint (*Mentha aquatica*), Willows (*Salix repens* and *S. caprea*), Jointed Rush (*Juncus articulatus*) and Soft Rush (*Juncus effusus*) on thin peat and limestone bedrock areas. Black Bog Rush, Marsh Cinquefoil, Meadowsweet (*Filipendula ulmaria*), Butterwort (*Pinguicula vulgaris*), Devils-bit Scabious (*Succisa pratensis*), Marsh Pennywort (*Hydrocotyle vulgaris*) and Carnation Sedge (*Carex panicea*) occur on the deeper peat areas.

Reedbeds and other swamps (<1%)

Stands of generally quite sparse Reeds (*Phragmites australis*) occur along the edges of some parts of the larger lakes, particularly at stream confluences. The Reeds are frequently accompanied by Bottle Sedge (*Carex rostrata*), Saw Sedge (*Cladium mariscus*), Marsh Horsetail (*Equisetum palustre*) and Sharp-flowered Rush (*Juncus acutiflorus*). Due to limitations of scale, these areas are not shown on Map Set 2.

Lakes and ponds (16% or 127ha)

Five large lakes are found within the site; Lough Golagh, Lough Lee, Lough Unshin, Lough Cam and Lough Finn. The water levels in Lough Golagh have dropped at some time since the drawing of the Ordnance Survey six inch map (1906/07). This lake has a fringing substrate varying from sandy to pebbly, Dunnells and Leach (1993) point out the likelihood of interesting water chemistry due to the two types of bedrock found here (limestone and gneiss). Fringing vegetation includes Shoreweed (Littorella uniflora), Water Horsetail (Equisetum fluviatile), Bottle Sedge, Spiked Water-milfoil (Myriophyllum spicatum), Pondweeds and Water Lobelia (Lobelia dortmanna). Lough Golagh has three islands, see below. Lough Lee has similar fringing vegetation though there is no fen development and no islands.

Lough Unshin is used as a water source for Ballyshannon. This may account, due to fluctuating water levels, for the lack of fringing vegetation and the shoreline substrate consisting largely of bare boulders. Lough Unshin and Loughs Cam and Finn would appear to have more acidic and oligotrophic (nutrient poor) conditions than the two above mentioned lakes, as evidenced by the fringing bog and heath vegetation communities. Loughs Cam and Finn have some fringing flush type vegetation with abundant Purple Moor Grass.



Lough Unshin

Rivers and streams (<1% or 1ha)

A number of small streams drain the blanket bog/heath/flush mosaic vegetation, these generally have peat or pebble/cobble substrates and are fast flowing. The bank consists of flush type vegetation with Soft Rush and Bent Grass (*Agrostis* sp.). Both the stream draining Lough Unshin and a larger stream draining the western edge of the site are tributaries of the Behy River. The latter stream is wider than others in the site, being up to 2 m wide, and has a pebble/cobble substrate with much sand in places.

Non-marine islands (1%)

Of the three islands in Lough Golagh, one has low growing grassy vegetation with clumps of Black Bog Rush (Dunnells and Leach, 1993). Some scrub also grows on the island. Nesting seabirds sometimes use this island. The other two islands have a dense woodland cover of Willow, Rowan (*Sorbus aucuparia*) and Sycamore (*Acer pseudoplatanus*), and one has dense Birch (*Betula* sp.) scrub. These islands are mapped as per vegetation cover on Map Set 2.

**Cutover bog** (9% or 71ha)

Areas of previously cut cutover bog are found in this site. Areas, including the area north of Lough Finn), have very spongy peat with sparse vegetation of predominantly Deer Grass, Bog Cotton and Purple Moor Grass. The hand cut banks have more heathy vegetation with generally dominant Ling Heather, though some cut-over flats have wetter vegetation.

Upland grassland on peaty soil (1% or 10ha)

**Lowland dry** grassland (<1% or 1ha)

**Lowland wet** grassland (<1% or 3ha)

**Scrub** (<1% or 4ha)

Dry, broad-leaved semi-natural woodland (<1% or 2ha)

Wet, broadleaved semi-natural woodland (<1% or <1ha)

**Roads/tracks** (<1% or <1ha)

Some small areas of reclaimed peaty soils have grassy vegetation with Soft Rush, Bent Grass and Mat Grass. These areas are generally well grazed and vegetation is low growing.

Dry grassland vegetation types have developed on the limestone bedrock around the western shores of Lough Golagh. Sweet Vernal Grass (Anthoxanthum odoratum), Ribwort Plantain (Plantago lanceolata) and Black Knapweed (Centaurea nigra) are common in these small areas. Dunnells and Leach (1993) refer to an abundance of Early Purple Orchid (Orchis mascula) in places.

Wet grassland is found fringing the fen areas around Lough Golagh. Rushes including Soft Rush, Sharp-flowered Rush and Toad Rush (*Juncus bufonus*) are found, along with Sweet Vernal Grass, Wavy-hair Grass (*Deschampsia flexuosa*), Purple Moor Grass, Water Mint and Common Sedge (*Carex nigra*).

On some small peninsulas extending into Lough Lee, scrub vegetation with Gorse, Birch, Rowan and Holly (*Ilex aquifolium*) is found. Birch, Alder (*Alnus glutinosa*) and Holly scrub also grows at the abandoned farmstead near Lough Sallagh. Lodgepole Pine (*Pinus contorta*) windbreaks have been planted in this area. Some Rhododendron is present in both of these areas.

An Oak (Quercus sp.) woodland is growing on the steep, south facing slope over the Behy River at the north-west of the site. Eakin (1995) describes the trees as generally of a uniform size and tall stature, most having trunks c. 30 cm in diameter. The understorey has Hazel (Corylus avellana), this tree also forms a dominant canopy at the west end of the wood. Holly, Blackthorn (Prunus spinosa), Ash (Fraxinus excelsior) and Hawthorn (Crataegus monogyna) are also present. The ground flora includes a rich growth of Ivy (Hedera helix), Bramble (Rubus fruticosus), Common Dog-violet (Viola riviniana), Primrose (Primula vulgaris), Wild Strawberry (Fragaria vesca), Wood Sanicle (Sanicula europaea), Wood Avens (Geum urbanum) and Honeysuckle (Lonicera periclymenum). Bryophytes include the mosses Thuidium tamariscum and Thamnobryum alopecurum, Hard Fern and Male Fern (Dryopteris spp.). Eakin (1995) also notes the presence of a large land slip in the middle of the wood.

A narrow band of wet woodland is found along the south shore of Lough Golagh. Alder is the most common tree but Willow and Ash are also found, the last primarily on the upper slopes of the wood. Dunnells and Leach (1993) describe the ground flora as consisting of Meadowsweet, Marsh Marigold (*Caltha palustris*), Water Mint and Sharp-flowered Rush, with localized Sedge swards (*Carex flacca*, *C. nigra* and *C. rostrata*). Most of the woodland is enclosed on the terrestrial side by stock-proof barriers, but stock gain access to one area at the west end. Here the ground flora is sparse.

The site is served by minor roads, bog roads and tracks.

#### **Notable Flora:**

No comprehensive surveys have been carried out on the flora of this site, neither have the habitats and vegetation been examined in habitat surveys in the region. However, detailed descriptions of the flora of habitats encountered are given in Dunnells and Leach (1993) and in Eakin (1995). Both

record the moss *Sphagnum imbricatum* as occurring in blanket bog pool systems, this is a locally occurring species in the region.

#### Fauna:

#### **Fish**

Lough Unshin holds a population of Trout (*Salmo trutta*). Lough Golagh contains both Pike (*Esox lucius*) and Perch (*Perca fluviatilis*). Salmon (*Salmo salar*) were found as far as Ballywara Bridge, until a quarrying incident on the heath south of the Oak wood in January 2000.

### **Amphibians and Reptiles**

The Common Frog (*Rana temporaria*), a species protected under the Wildlife Act (1976) and listed as an Internationally Important Irish Red Data Book species (Whilde, 1993), occurs in peatland and wetland habitats in the site.

#### **Birds**

Common Terns (*Sterna hirundo*) and Arctic Terns (*Sterna paradisaea*), both species listed in Annex I of the EU Birds Directive, have nested on the most southerly island in Lough Golagh in the past, along with Black-headed Gulls (*Larus ridibundus*) and Common Gull (*Larus canus*). Hannon (1997) checked the site in 1995 but found no Terns present. Failure of Terns and Gulls to breed in 1998 was attributed to predator attack on nests and adults. Mink (*Mustela vison*) is likely to have been responsible. An inventory of seabird breeding colonies is given in Appendix IV.



Arctic Tern (Sterna paradisaea). Photo R. Mills.

A number of wintering birds were noted on, or near, Lough Golagh during March, 1998, including Lapwing (*Vanellus vanellus*), Mallard (*Anas platyrhynchos*), Goldeneye (*Bucephala clangula*) and Great-crested Grebe (*Podiceps cristatus*). Red Grouse (*Lagopus lagopus*) were noted on the slopes of Breesy Hill. Tufted Duck (*Aythya fuligula*) has been sighted on Lough Lee.



Lapwing (Vanellus vanellus). Photo R. Mills.

It is thought likely that the Ballintra flock of Greenland White-fronted Geese (*Anser albifrons flavirostris*) may occasionally feed in wetland/peatland habitats in the site. A Hen Harrier (*Circus cyaneus*) was sighted in the east of the site. Also, local knowledge indicates that Peregrines (*Falco peregrinus*) are seen in the area. All three of these species are listed in Annex I of the EU Birds Directive.

#### **Mammals**

Irish Hare (*Lepus timidus hibernicus*), Badger (*Meles meles*) and Otter (*Lutra lutra*), all protected under the Wildlife Act (1976), have been recorded in the site. Otter is listed in Annex II of the EU Habitats Directive. Fox (*Vulpes vulpes*) and Mink also occur.

# **Cultural Features**

### Land use and impacts on the site

Agriculture

Cattle graze the blanket bog areas south-west of Breesy Hill and are also over-wintered in this area. Supplementary feeding is evident within parts of the site. Bare peat is exposed along the slopes of Breesy Hill, with some erosion noted possibly a result of overgrazing.

Livestock are kept on the enclosed lands at the extreme east and west of the site. A number of landowners are known to be participating in the Rural Environment Protection Scheme (REPS).

Cattle have access to parts of the western shore of Lough Golagh and use the lake as a source of drinking water. The stock access the lake via the wet woodland, wet grassland and fen communities, and a small amount of trampling damage can be seen.

The impacts of grazing on the commonage areas of this site have been assessed by the Commonage Framework Planning Project. The relevant framework plans are DG19 and DG22. The findings of these plans are reflected in the management strategies and zoning sections of this conservation plan.

**Peat extraction** 

No turf cutting occurred within the site during 2002. Boundary amendments have resulted in the exclusion of most of the actively cut areas from the site. Some peat extraction is allowed to continue inside the site boundary (see Zoning section and Map Set 3).

Water abstraction

A small water abstraction scheme operates at Lough Unshin. A concrete platform and pipes extend into the lake from the western edge and a small concrete building houses an electric pump. It is operated by the County Council and provides a water supply for Ballyshannon.

Quarrying

Fill deposits are quarried occasionally to the west of Lough Unshin, south of the Behy River (near the disused limestone quarry) and from Cashelard townland (approx. grid ref. G 947 643); this latter quarry appears to have been in existence for some time but is no longer used. There is a minor quarry (probably disused) within the site boundary in the Croaghbreesy area.

Fishing/boating

There has been some speed boating activity on Lough Golagh in the past and boating activity is believed to occur occasionally. A small track and wooden jetty for boat access are found at the south of the lake. However, the jetty is now dilapidated. Some shore-based angling occurs.

**Hunting/shooting** 

Some Grouse shooting occurs in the site. No gun club signs were seen in the area. The open, upland areas are used for training gun dogs.

Amenity use

Locals hold a regular hike to the summit of Breesy Hill on the second Sunday of June in each year. It is believed to have originated as a pilgrimage of sorts. The Cashelard Community Development Association hopes to organise the signage of a long distance walking route in the near future, in conjunction with the promotion of the area as a tourist destination.

#### **Burning**

Burning of Heather is occasionally practised, although there are no records of the location and extent of fires in the past. Burnt Heather was noted on the north-eastern slopes of Breesy Hill during March, 1998, and probably indicated that a fire had occurred within the previous two years. Also, in the southern block, vegetation showed evidence that an intense fire (one that burnt deeply into the peat) happened in previous years. In April 2002, there was a major fire that affected the Carricknahorna and Breesy Hill areas.

#### **Dumping**

Dumping of rubbish occurs at various locations, including a small dump site at the south-east edge of Lough Lee. Dumping incidents appear to be sporadic.

### Land use adjacent to the site

#### **Agriculture**

The drumlin landscape and limestone based soils of the surrounding areas are well suited to pasture management, and sheep and cattle are generally kept. There are also small numbers of dairy herds, although few in close proximity to this site. Some land is suited to intensive pasture management coupled with silage production, although these lands tend to be further west and distant from the site.

#### Forestry

Much of the land in the area is given to commercial forestry. A number of older plantations are found directly adjacent to the site, particularly in the Lough Golagh, Lough Cam and Lough Unshin areas. Many of these have firebreaks excavated along the boundaries, one such firebreak runs through an area included in the site (north-east of Lough Unshin). Forests have been planted directly adjacent to Lough Unshin, Lough Golagh and Lough Cam in the past. However, there have been several clear fells in these areas, and replanting has followed environmental guidelines. More recent planting in the vicinity of Lough Golagh has been kept at least 50 m from the shore. A further afforestation proposal in the same area is also to leave a buffer zone between the shore of the lake and the planting of coniferous trees.

A large area in the Croaghbreesy townland (originally included within the cSAC, but now excluded after boundary amendments) has recently been planted with a commercial plantation. The area has been drained, mounded, fenced off and firebreaks have been excavated along the edge.

#### **Peat extraction**

Peat extraction occurs at a number of locations outside the site. "Sausage machines" are used, generally within areas previously cut by hand, but in some places (southern slope of Crumnalannav) the machines have extended beyond cut-over areas into the cSAC. Peat deposits in these areas are mostly shallow to medium (c. 1 m), and plots can sustain only a limited number of cuttings by the sausage machine.

# Peat extraction (contd)

Some hand cutting of peat continues at the south of Breesy Hill. The banks appear to have been in existence for some time as some of the cutover areas have a well developed vegetation cover.

Intensive peat harvesting occurs in areas to the south of and adjacent to the site, particularly around Breesy Bog and Croagh Bog. The boundary of the site in these areas generally follows the innermost line of intensive cutting and is difficult to identify in places.

#### Quarrying

A large, disused limestone quarry is found outside the site in Carricknahorna townland, west of Lough Lee and north of the Behy River (approximate grid ref. G 952 652). Plant and machinery associated with the operation also lie disused in the quarry. Nearby, sand and gravel deposits have been exploited south of the river and material is still taken from time to time at this location. A large sand and gravel quarry is in operation outside the site and to the west of Lough Unshin (approx. grid ref. G 943 641). This activity poses a minor but ongoing threat.

#### **Hunting/shooting**

Clay pigeon shoots take place on the turf banks south-west of Breesy in Cashelard townland outside the cSAC. This area is also used for zeroing hunting rifles.

**Dumping** 

Dumping occurs in Croagh Bog and at the quarry west of Lough Unshin. Cars have been dumped by the bog road south-west of Breesy Hill.

Residential

There are two mobile homes at the south-east of Breesy Hill.

Conservation management

An area of 1270 ha to the east of this site, in Co. Fermanagh in Northern Ireland, is designated as Pettigoe Plateau Area of Special Scientific Interest (Dept. of the Environment, N.I., 1985). It is also a Ramsar site and a candidate Special Area of Conservation (Pettigoe Plateau, site code 16607) due to the presence of active blanket bog, considered to be one of the most extensive areas of this habitat in Northern Ireland. The area (ASSI/cSAC) also supports breeding Golden Plover (*Pluvialis apricaria*), breeding Dunlin (Calidris alba), wintering Greenland White-fronted Geese and has on occasions supported up to two pairs of breeding Hen Harriers. A lake and adjacent tract of land within the ASSI/cSAC is proposed for designation as a National Nature Reserve. (Wallwork, 1995.) Detailed studies have been carried out on the breeding waders in the ASSI/cSAC.

#### Past human use

The main past land uses are likely to have been extensive grazing of sheep and cattle, as well as hand cutting of peat. The annual walk to the summit of Breesy Hill is known to be traditional. Local knowledge indicates that formerly, groups climbing to the top of this and the nearby Bradlieve Mountain, lit fires on the night of the walk. A spa well is marked at the south of Lough Lee on the Ordnance Survey six inch map. Water from this type of well was generally used for baths and was thought to have healing/regenerative properties.

#### Recorded Monuments and Other Features

There are no archaeological sites or recorded monuments listed for the area in the Sites and Monuments Record of the Archaeological Survey of Ireland.

# **ECOLOGICAL ASSESSMENT**

**Note:** The following is an assessment of the ecological features of the site. It is largely based on information given in the explanatory notes which accompany the Natura 2000 form. Additional information, obtained since these notes were written may also have been used to make the assessment.

The intact blanket bog at the site is found between an altitude of 97 and 137 m and is classified as lowland blanket bog. The peat is dominated by large amounts of Purple Moor Grass. It displays some variation in type, microtopography and vegetation due to the occurrence of small, wet, quaking areas, two well-developed inter-connecting pool/hummock systems and numerous flushes. Close to the very south of the site is a rare bog type, which in several respects is intermediate between blanket and raised bog. This bog has good prospects for conservation provided damage by peat cutting and grazing is monitored and reduced or prevented.

# OBJECTIVES, STRATEGIES AND ZONING

# **Conservation Objectives**

The nature conservation objectives for this site are:

**Objective 1:** Maintain and, where possible, enhance the ecological integrity of the

priority and semi-natural habitats present within the site, including active blanket bog/heath/flush mosaics, wetland (lake/fen/wet woodland)

complexes, grasslands and woodlands.

Objective 2: Maintain and, where possible, increase populations of Annex I and

Annex II species, as well as noteworthy species of flora and fauna.

Objective 3: Continue effective liaison with landowners/managers, Northern Ireland

conservation organisations and relevant interest groups.

# **Management Issues**

**Note:** The main issues that may impact on the conservation of the site are outlined below. The constraints that these may pose and the management potential for the site are discussed.

- Grazing
- Peat extraction
- Seabird breeding population
- Spread of exotic species
- Afforestation
- Fencing
- Dumping
- Burning

### Grazing

Sheep and cattle grazing occur on the site and there is evidence of overgrazing and trampling, which have caused damage in some areas. Stock levels on the areas of commonage have been set by Commonage Framework Plans. The relevant framework plans for this site are DG19 and DG22.

#### **Peat extraction**

Peat extraction leads to a reduction in the area of intact blanket bog. Large areas of bog have already been cut over. While much of the old, hand-cut areas of cut-over bog are re-vegetated, the advent of the "sausage" machine has led to intrusion of cutting onto the tops of existing banks and into intact areas such as the southern slope of Crumnalannav Hill. Any turbary activities can lead to hydrological impacts on intact areas adjacent to cutting. Most of the actively cut areas have now been excluded from the site as a result of boundary amendments, however peat extraction outside the site can also have hydrological impacts within the site.

### Seabird breeding populations

Although records for seabirds breeding on the island in Lough Golagh are incomplete, it is known that breeding birds have been absent in certain years and have failed to breed in other years. The island is now almost entirely covered by scrub. In relation to absences, Terns are known to be generally fickle in their selection of nesting sites, and the species present has changed from Common Tern to Arctic Tern. There may be some cause for desertion/failure to breed at this site. Predator attack caused failure to breed in 1998. Other possible causes include disturbance and flooding of the nest site. The latter seems unlikely in this case. Common/Arctic Terns breeding on an irregular basis is sufficient cause for full attention to be paid to the breeding site, and for any work to be carried out that may be necessary to improve it. Any threat of predation or disturbance should be minimised.

### **Spread of exotic species**

Small stands of Rhododendron are found in the site, generally in low lying areas and around some of the old, abandoned buildings. This isn't a major problem at the present time, however Rhododendron is establishing on the heath south of Lough Lee and on the bog north of Lough Finn. There are established clumps in the forestry at Lake Unshin and other areas outside the site. These act as a seed source for the spread of this invasive plant into peatland habitats. There is a small amount of Gunnera (Gunnera tinctoria) at the dumpsite south-east of Lough Lee.

#### Afforestation

Firebreaks created by excavation can act as drainage channels and lead to increasing drying out of nearby peatland habitats. The planting of coniferous forests directly adjacent to lakes can have implications for water quality through acidification and mobilisation of toxic metals and through silt loads in run-off during harvesting. Much afforestation has occurred in the vicinity of Lough Golagh and it is possible that the associated drainage and the increase in vegetation transpiration resulting from this has led to a decrease in water supply to the lake, causing the lake's water level to drop. The planting of a large coniferous forest has destroyed a large area of blanket bog which acted as an overland peatland habitat connection to blanket bog in Northern Ireland and has decreased the conservation value of this area.

# **Fencing**

Erection of fencing can lead to stock congregation along fence lines, causing trampling and subsequent erosion. While the enclosure of private land is acceptable, any fencing of areas of previously open hill would be incompatible with conservation of upland habitats.

# **Dumping**

The dumping of rubbish at various locations (e.g. Lough Lee) could lead to a number of undesirable effects, including attraction of scavengers and production of nutrient rich run-off. NPW can liaise with Donegal County Council regarding halting any illegal dumping on the site.

### **Burning**

Fires are not required to maintain the ecological value of blanket bog and wet heath habitats. Instead, fires may have a number of negative side effects; the destruction of bryophyte and lichen communities, soil erosion if burning occurs too often and destruction of birds' nests if burning is too late in the season.

# **General Strategies**

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

### Implement plan

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

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

# Establish a monitoring regime

The monitoring regime for the site will comprise:

# Water quality monitoring

Water quality is monitored at regular intervals by the local authorities. NPW staff will liaise with Donegal County Council, and will collate and review this information on a regular basis. NPW will also liaise with relevant bodies (n.b. the EPA and local authority) in relation to compliance with the EU Water Framework. In particular:

- To establish reference conditions necessary for monitoring the status of the qualifying habitat
- To ensure that the sampling regime is adequate to detect changes in the conservation status of the designated area

NPW will liaise with the local authority and other relevant agencies in ensuring that the full ecological importance and sensitivity of the site is taken into account during the production of the River Basin District Management plan. In addition, NPW will liaise with the Local Authoritiy in ensuring that sewerage disposal systems for all new (and existing) dwellings within the lake catchment area are of appropriate standards.

#### **Scientific monitoring**

Monitoring of the favourable conservation status of the Annex I priority habitat and the Annex I/II species will be done by, or on behalf of, the staff of the Monitoring Section of the NPW or staff working to NPW in accordance with the procedures laid down by that section. The work, if any, to be done on this site in that respect will be prescribed by that section.

#### Site surveillance

Patrolling of the site by the Conservation Ranger, 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 are listed in Appendix V of this plan. Permission from the Minister is required before these actions may be carried out within the designated area. For example, commercial peat moss or turf extraction is a notifiable action for blanket bog.

# **Specific Strategies**

### Objective 1.

Maintain and, where possible, enhance the ecological integrity of the priority and seminatural habitats present within the site, including active blanket bog/heath/flush mosaics, wetland (lake/fen/wet woodland) complexes grasslands and woodlands.

### **Strategies:**

**1.1.** Manage grazing on commonage

The impacts of grazing on commonage areas of the site have been assessed by the Commonage Framework Planning Project (Commonage Plans (CPs) DG19 and DG22). These plans recommend de-stocking rates in areas that have been damaged by over-grazing. These rates will be incorporated into REPS plans and /or farm plans produced by DEHLG for each farm and must be achieved within an agreed timescale from the beginning of the REPS/farm planning period.

No farmer's stock will be reduced to less than 25 ewes. If the CP specifies a de-stocking level of less than 10%, then no de-stocking is required. If the CP specifies a de-stocking of more than 10%, then destocking should occur as indicated. The relevant CPs (i.e. DG19 and DG22) recommend de-stocking levels between 0.9 and 40.5%, depending on the agricultural unit (i.e. the single stockproof area of land) concerned. The individual CPs should be consulted for further details.

The zoning map (Map 3) reflects the findings of the CP assessments, and these are specified in the prescriptions for each individual zone.

On commonages in six western counties, a stock reduction of 30% was implemented in December 1998 for farmers not already in REPS. This is taken into account when applying Commonage Framework Plans.

1.2. Manage grazing on privately owned land

For non-commonage land, NPW will seek to ensure that sustainable grazing levels are established via REPS and DEHLG farm plans, using a similar methodology applied to commonage areas.

1.3. Minimise impacts of peat cutting

Most areas of active turf cutting are not included in the cSAC. Where areas of active cutting lie within the less sensitive areas of the site, cutting may continue.

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

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 €317.43 per acre.

1.4. Minimise threat from drainage, erosion, burning, afforestation and quarrying

Drainage, erosion, burning and afforestation are damaging activities in bog/heath/flush habitats. NPW will strive to ensure, through notifiable actions and liaison with landowners, that no new drains are created within the site and that maintenance of existing drains is confined to roadside drains. No areas of previously open mountain should be fenced off. Prevention of fires is a difficult task; public information and education may be the only long-term solution. Any fire incidents occurring will be recorded and mapped for future reference. No further afforestation should occur in the site or on lands adjacent to wetland habitats. Ideally, existing conifer plantations would be removed from a 50 m strip adjacent to wetlands. Failing this the area should be left unplanted in the next rotation. Quarrying activity at the west of the site should be kept at a small scale, no escalation to commercial levels should occur. NPW will strive to ensure that quarrying activity outside of, and adjacent to, the site does not encroach onto the site.

1.5. Encourage removal of Rhododendron

Stands of Rhododendron act as seed sources for the spread of the plant. It is desirable that farm plans include provisions for removal of any Rhododendron in the site. The presence of small numbers of self seeded Rhododendron in peatland habitats indicates that invasion of these habitats is possible and indeed likely. For effective removal, Rhododendron should be cut and treated with a systemic herbicide such as "Roundup" to prevent re-growth. This could be achieved through REPS plans or NPW farm plans. Rhododendron was noted in areas of scrub (see Map Set 2) and in the cut-over bog south of Breesy Hill.

1.6. Maintain water quality in wetland complexes

Efforts will be made to ensure that a high standard of water quality is maintained in wetland complexes (lakes, fens/flushes, reedbeds and wet woodland), and that no acidification or pollution (either nutrient enrichment or chemical pollution) occurs. Any afforestation with coniferous trees in the vicinity of watercourses should be kept at least 50 m back from the edge of the watercourse, as has been done with recent planting near Lough Golagh. Any harvesting work in forests adjacent to waterbodies should be carried out in a manner that prevents silt and nutrient run-off flowing into waterbodies. NPW will liaise with organisations involved in the monitoring of water quality, in particular the local Fisheries Board. Angling interests may also provide a good source of information on any decrease in water quality.

1.7. Minimise threat from alteration in hydrological management in lakes

Should any increase in the size of the water abstraction scheme in Lough Unshin be planned, a full Environmental Impact Assessment (EIA) will be necessary. Similarly, if any hydrological management is proposed on other lakes/wetlands, a full EIA should be carried out. Reclamation, infilling, ploughing and land drainage within 50 m of fen or lake habitats should not occur.

1.8. Maintain grasslands by grazing

See strategy 1.1 or 1.2, as relevant.

1.9. Maintain areas of dry, broad-leaved woodland and scrub

Areas of dry, broad-leaved woodland in this site are too small to consider any woodland management regime. No active management is needed to retain conservation value, though some fencing of the perimeter of woodlands may be recommended if trampling damage from trespassing stock is excessive.

**1.10.** Minimise threat from dumping

NPW will liaise with Donegal County Council on the issue of halting any illegal dumping of commercial and domestic rubbish.

# **Objective 2.**

Maintain and, where possible, increase populations of Annex I and Annex II species, as well as noteworthy species of flora and fauna.

### **Strategies:**

2.1. Patrol monitor important bird populations

The island in Lough Golagh will be checked on at least an annual basis by the local Conservation Ranger to establish any presence of breeding seabirds. Records will be kept of any sightings of Hen Harrier, Peregrine Falcon or Red Grouse.

2.2. Improve nesting conditions on island

NPW will strive to ensure that disturbance to seabirds during the breeding season (e.g. boating, shooting) is kept to a minimum. Any birds present in the breeding season will be monitored and the cause of any breeding failure investigated. If ground based predators (e.g. Mink) continue to be found to prey upon eggs or chicks, some control measures may be needed. Scrub may need to be controlled, or sand imported to create nesting habitat.

### Objective 3.

Continue effective liaison between NPW and landowners/managers, Northern Ireland conservation organisations and relevant interest groups.

### **Strategies:**

3.1. Liaise with interested parties

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

3.2. Monitor development applications

NPW will continue to monitor applications, including current applications, for planning permission and licences for lands within and adjacent to the site. Appropriate bodies will be notified if developments are thought to conflict with conservation objectives.

3.3. Liaise with REPS planners

REPS planners are required to consult with NPW staff when they are developing plans for land within the site.

# **Zoning**

**Note:** Zoning is the division of a nature conservation site and neighbouring lands into a number of sub-units. There are four types of zones identified (not necessarily all occurring within a site): A, B and C within the site and D outside the site but impacting on it. The relevant strategies are listed for each zone.

#### Zone A: A Natural Zone

Areas of high conservation value, which require no or little intervention (see Map Set 3).

1A: NON-INTERVENTION AREAS

1A1: Wetland (lake/reedbed/ fen/stream/pool/wet woodland)

No active management regime is needed to maintain the conservation value of wetland complexes. However prevention of pollution, infilling, drainage and reclamation is required (strategies 1.5 and 1.6).

#### 1A2: Dry, broad-leaved semi-natural woodland

No active management regime is needed to maintain woodland, though fencing of the perimeter may be specified at a later date if trampling damage is severe (strategy 1.1).

#### 2A: MAINTENANCE AREAS WITH LIMITED INTERVENTION

# 2A1: Blanket bog/heath/flush/cut-over bog/grassland mosaic (Commonage, agricultural units DG22k)

These areas have been identified in the Commonage Framework Plan as being undamaged (category U), see strategy 1.1. See Commonage Framework Plan for full details.

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

Areas of high conservation value where high management input is needed to maintain, rehabilitate, restore to a more desirable state (see Map Set 3).

# B1: BLANKET BOG/HEATH/FLUSH/CUT-OVER BOG/GRASSLAND MOSAIC (Commonage, agricultural unit DG19 R1 and DG22l)

These areas have been identified in the Commonage Framework Plan as being moderately to severely over-grazed (categories M/U, MM, M/S, S and S\*) and requiring stock reductions (see strategy 1.1). See Commonage Framework Plan for full details.

# B2: BLANKET BOG/HEATH/FLUSH/CUT-OVER BOG/GRASSLAND MOSAIC (Privately owned)

Grazing assessments have yet to be done for these privately owned areas. (see strategy 1.2).

#### **B3:** ISLAND IN LOUGH GOLAGH

Patrol monitor use by breeding seabirds, minimise threat from disturbance, implement predator control and scrub removal if necessary (strategies 2.1 and 2.2).

#### **B4:** PEAT CUTTING AREAS

Turf cutting has ceased in areas in this zone and should not recommence (see strategy 1.3).

#### Zone C: Intensive use Zone

Intensively used areas/infrastructure which form an integral part of a nature conservation site (see Map Set 3).

#### C1: LOUGH UNSHIN

Water abstraction can continue, otherwise maintain water quality (strategy 1.6).

#### **C2: PEAT CUTTING AREAS**

Some peat extraction using bank cutting techniques can continue in these areas (strategy 1.3).

# Zone D: Impact Zone

Areas outside the site, which may have an impact on the site (see Map Set 3).

#### D1: OUARRIES

Prevent encroachment of quarrying activity on the site (strategy 1.4).

#### D2: FORESTS ADJACENT TO WATERBODIES

Prevent impacts through acidification/siltation during harvesting (strategy 1.4).

#### D3: TURBARY AREAS ADJACENT TO BLANKET BOG

Prevent encroachment of peat extraction into site (General strategies).

### **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	Ensure stock levels set by CFP are adhered to.	Dept of Ag/ NPW/ Landowners			
1.2.	Manage grazing on privately owned land	Conduct grazing assessments.	NPW/ Landowners			
1.3.	Minimise impacts of peat cutting	Phase out peat cutting in sensitive areas, although some peat cutting may be permitted in less sensitive areas.	NPW/ Landowners			
1.4.	Minimise threat from drainage, erosion, burning, afforestation and quarrying	No new drains created, no areas of previously open mountain fenced off, public information and education available regarding fires, no further afforestation in the site or on lands adjacent to wetland habitats.	NPW/ Landowners			
1.5.	Encourage removal of Rhododendron	Remove Rhododendron in site.	Landowners/ NPW			
1.6.	Maintain water quality in wetland complexes	Any afforestation kept at least 50m from edge of watercourse. Any harvesting work near waterbodies done in such a way that there is no run-off.	Forest Service & Forestry companies			
1.7.	Minimise threat from alteration in hydrological management in lakes	EIA carried out if any changes to hydrological management are proposed.	NPW			
1.8.	Maintain grasslands by grazing	See Strategies 1.1 or 1.2 as relevant.	-			
1.9.	Maintain areas of dry, broad-leaved woodland and scrub	Fencing may be required if trampling damage by stock is excessive.	NPW/ Landowners			
1.10.	Minimise threat from dumping	NPW to liaise with Donegal Co. Co. to halt any illegal dumping.	NPW/ Donegal Co. Co.			
2.1.	Patrol monitor important bird populations	Island in Lough Golagh checked by Conservation Ranger to establish presence of breeding seabirds. Records will be kept of sightings of Hen Harrier, Peregrine Falcon or Red Grouse.	NPW			
2.2.	Improve nesting conditions on island	Disturbance to seabirds kept to a minimum. Reasons for breeding failure investigated.	NPW			
3.1.	Liaise with interested parties	Maintain effective liaison with interested parties on achieving conservation objectives.	NPW			
3.2.	Monitor development applications	Monitor applications for planning permission and licences for lands within and adjacent to site.	NPW			
3.3.	Liaise with REPS planners	REPS planners must consult with NPW when developing plans for land within the site.	REPS planners			

# APPENDIX I: GLOSSARY

ABSTRACTION - The process of taking water form a river, stream, spring pond or lake or from ground water.

ACIDIC - When applied to soils, refers to soils which are of a low pH i.e. below 7. The term is often used in relation to the plant communities that an acid soil may support e.g. acidic grassland.

ACIDIFICATION - The detrimental effect of acid rain on soils and freshwater.

AFFORESTATION - The planting of trees (usually conifers) over an area of previously unplanted ground.

ALKALINE - When applied to soils it refers to soils of a calcareous nature and of a high pH, i.e. above 7. The term is often used to describe plant communities associated with such soils e.g. Alkaline Fens.

ALTITUDE - Vertical height above sea level.

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

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

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

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

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

ANNEX III - of the EU Habitats Directive gives the criteria for selecting sites to be designated as SACs.

ANNEX IV - of the EU Habitats Directive lists animal and plant species of Community interest in need of strict protection.

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

BASIN - A depressed area of the Earth's surface, in which sediments accumulate.

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

Glossary 37

conserve wetlands, especially those of international importance and regulates the hunting and trading of wildbirds. It was transposed into Irish legislation by the EU (Natural Habitats) Regulations, 1997.

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

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

CANOPY LAYER - The tallest tree layer in a wood.

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.

COMMERCIAL FOREST - An NPW habitat classification which applies to plantations of coniferous trees, primarily Sitka Spruce, Lodgepole Pine, Douglas Fir, Japanese Larch and Norway Spruce. More than 90% of the canopy is formed by coniferous trees, although there may be broadleaved trees, especially Birch present along the plantation edges.

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.

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

DEHLG - Department of Environment, Heritage and Local Government

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

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.

DRAINAGE DITCHES - An NPW habitat classification which refers to water channel systems with moving or stagnant water bodies, artificial in origin. Most ditches are cleared cyclically, although this category also includes ditches that are overgrown with wetland plants.

DRY, BROAD-LEAVED SEMI-NATURAL WOODLAND – An NPW habitat classification which refers to woodland which reaches a height more then 5 m in most places. If the cover of exotic trees within a block is more than 10%, the woodland should be classified as mixed woodland. Also see wet broad-leaved semi-natural woodland.

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

ELEVATION - The height of something above a given place, usually above sea level.

ENCROACHMENT - The invasion of a species (usually plants) into areas previously uncolonised. This term is often used when an undesirable species advances at the expense of a desirable species or habitat.

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.

EXOTIC SPECIES - Are those species which are considered to be non native.

FACILITATOR - A person who, in consultation with others, assists NPW staff in the production of a conservation or management plan.

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.

FENS AND FLUSHES - An NPW habitat classification. Fens are peatlands fed by calcium rich water, either from groundwater or from inflowing surface water. Flushes are wet areas maintained by the seepage of water down slopes of various gradient, and are usually local features. Both are characterised by an abundance of small Sedge forming species-rich mosaics with other species. Orchid species are particularly noticeable in fens and Butterworts are more typical of flushes.

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 slean or spade.

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

HERBICIDE - A chemical or biological preparation which kills plants.

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.

Glossary 39

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

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

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 NPW 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 NPW.

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

LIMESTONE - Sedimentary rock composed predominantly of calcium carbonate, often containing fossils.

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.

LOWLAND DRY GRASSLAND - An NPW habitat classification describing grasslands which normally are below the 100m contour, on well drained soils and characteristically with a fairly complete cover of grasses.

LOWLAND WET GRASSLAND - An NPW habitat classification which refers to grasslands which normally below the 100m contour, with a vegetation characteristic of waterlogged soil. This category also includes rushy fields.

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).

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 (NPW) – the section of the Environment Infrastructure and Services division of the Dept. 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.

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.

NPW - National Parks and Wildlife

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.

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.

pH - A quantitative expression for the acidity or alkalinity of a solution or soil. The scale ranges from 0-14: pH 7 is neutral, less than 7 is acidic and greater than 7 is alkaline.

PLATEAU - A wide, mainly level area of elevated land.

POACHING - Damage caused to the vegetation by excessive numbers of large grazers.

PRECIPITATION - Water moving from the atmosphere to the ground in the form of rain, fog, mist, snow or hail.

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.

RECLAIMED LAND - this is applied to lands which have been modified from there natural state by intervention in the form of: a) drainage, b) bulldozed, c)clearance of scrub, d) infilling of wetland, e) ploughed and reseeded.

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

RED DATA BOOK (lower plants) - This Red Data Book deals with Stoneworts which are recognised as a separate class, Characea, of the Green Algae Chlorophyta). Many of these species are threatened by loss of habitat or pollution.

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

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

REEDBEDS AND OTHER SWAMPS - An NPW habitat classification. This habitat comprises tall, species poor, usually emergent vegetation, often found in a narrow fringe at the edge of open

Glossary 41

water or occupying more extensive areas in shallow basins which may become dry in Summer. The vegetation is species poor and overwhelmingly dominated by a single species, typically Common Reed (*Phragmites australis*).

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

REPTILES - Cold-blooded vertebrates, most of which are terrestrial, having dry horny skin with scales or plates. Most reptiles lay eggs that have a leathery skin, although some are ovoviviparous.

RIVERS AND STREAMS - An NPW habitat classification describing linear channels of moving water. These are natural features that distinguish them from ditches and drainage channels.

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

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 NPW, whose function here is to ensure that the favourable conservation status of the site is maintained and where possible improved.

SCRUB – An NPW habitat classification which comprises areas with more than 50% cover of shrubs or small trees. There may be scattered standard trees, but in general the canopy height is 5 m or less. This category does not apply to stands of young trees which will eventually grow to a height of more than 5 m.

SPAs - Special Protection Areas for Birds are areas which 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 NPW 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).

SWARD - Refers to the vegetation cover of low growing plants communities, such as grasslands.

TERRESTRIAL - A term used to refer to living on land. The opposite of aquatic.

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

TRADITIONAL MANAGEMENT PRACTICES Land management practices which were carried out prior to the 1950s. These practices were often less intensified than today's management practices. In REPS prescriptions traditional means an activity which has been carried out for a specified number of years on a site (usually 10 years).

TROPHIC STATUS - The nutrient status (i.e. a measure of the availability of nutrients).

TURBARY – Refers to the right to harvest turf.

UNDERSTOREY - The plant layer below the tree canopy in a woodland.

UPLAND GRASSLAND ON PEATY SOIL - An NPW habitat classification describing species poor grassland which develops over, dark, acidic, peaty soils, normally at altitudes which exceed 100m. Common acidic upland grassland types in Ireland include those dominated by *Nardus stricta* (Mat grass), the narrow leaved *Agrostis* spp. (Bent grasses) and *Molinia caerulea* (Purple Moor Grass).

VERTEBRATES - Animals with backbones.

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 subunits. Within each zone the management prescriptions will be reasonably uniform and will differ in type or intensity from the other zones in the plan.

# APPENDIX II: REFERENCES

#### **Map References:**

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

O.S. Discovery (1:50,000) map: 11 and 16 (partial coverage), 17 (full coverage).

O.S. 6 inch (1: 10,560) map: DL 104 and DL 108.

#### Data Bases:

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

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

#### **Photographic Coverage:**

Department of Environment, Heritage and Local Government, HQ Ely Place, Aerial photo No. 3115, Flight Line 14 and Aerial photo No. 3138, Flight Line 15. Date: 1995.

#### **Relevant Legislation:**

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

Local Government (Planning and Development) Regulations, 2000.

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# APPENDIX III: PHYSICAL PROCESSES AFFECTING THE SITE

### **Climate**

TEMPERATURE (degrees Celsius)	•	C . 1.				•	:1			4		1	
,	jan	<i>u</i>	mar		may			aug	_				year
mean daily max.	7.6	7.5	8.7	10.3	12.7	15	16.2	16.6	15.3	13	9.8	8.4	11.8
mean daily min.	3.2	2.9	3.7	5	7.1	9.6	11.4	11.4	10.1	8.3	5.2	4.2	6.8
mean	5.4	5.2	6.2	7.6	9.9	12.3	13.8	14	12.7	10.7	7.5	6.3	9.3
absolute max.	13.9	13.8	19	19.5	24.7	25	27	25.3	23.2	19.6	16	15.1	27
absolute min.	-6.2	-6.2	-4.4	-1.8	-0.5	2.6	5.6	5.2	2	1	-2.5	-5.5	-6.2
mean no. of days with air frost	3.4	3.3	1.6	0.4	0	0	0	0	0	0	0.4	1.8	11
mean no. of days with ground frost	9.6	9.8	7.4	4.3	1	0	0	0	0.1	0.3	3.7	6.7	42.9
RELATIVE HUMIDITY (%)													
mean at 0900UTC	83	82	81	79	79	81	84	84	83	83	82	83	82
mean at 1500UTC	80	77	76	76	76	78	80	79	78	78	79	81	78
SUNSHINE (hours)													
mean daily duration	1.2	2.2	3.1	5.1	6.2	5.7	4.3	4.3	3.5	2.4	1.5	0.9	3.4
greatest daily duration	7.5	9.2	11.1	14.1	15.5	16.2	16.1	14.8	11.9	9.4	7.6	6.7	16.2
mean no. of days with no sun	11	7	6	3	2	2	3	3	4	6	8	12	67
RAINFALL (mm)			1			1							.4
mean monthly total	114.4	76.3	85.9	58.4	59.2	64.4	72.4	91.3	102.1	118	114.9	103.2	1060.6
greatest daily total	36.9	24.1	26.3	36.1	29.8	32.5	26.2	41.5	53.5	63.2	56.1	33.5	63.2
mean no. of days with >= 0.2mm	22	17	21	17	17	18	19	20	21	22	22	23	237
mean no. of days with >= 1.0mm	19	13	16	12	12	13	13	15	16	18	18	18	182
mean no. of days with >= 5.0mm	9	6	7	4	4	4	5	6	7	8	8	7	76
WIND (knots)		1	I			ı		ı		1	ı		
mean monthly speed	19	18.4	17.9	15.1	14.2	13.2	13.2	13.2	15.7	17.5	18.3	19	16.3
max. gust	91	86	90	69	71	74	74	67	98	76	76	88	98
max. mean 10-minute speed	64	57	67	47	49	52	55	45	66	57	56	59	67
mean no. of days with gales	11.2	8.6	8	3.4	2.3	1.3	0.8	1.5	3.8	6.7	8.7	9.7	66
WEATHER (mean no. of days with)	,		1	•		1			,		1		*
snow or sleet	6.6	6	4.6	2.4	0.2	0	0	0	0	0.1	1.9	3.9	25.8
snow lying at 0900UTC	0.9	1	0.5	0.1	0	0	0	0	0	0	0	0.8	3.3
hail	8.6	5.8	7.9	4.7	1.9	0.4	0.1	0.1	0.6	3.1	7.9	7.3	48.4
thunder	0.6	0.4	0.4	0.3	0.4	0.8	0.6	0.4	0.4	0.6	0.6	0.6	5.9
fog	0.4	0.5	0.7	1.9	1	2	2.2	1.3	0.6	0.4	0.2	0.4	11.8

# APPENDIX IV: BREEDING BIRDS ON LOUGH GOLAGH

An inventory of seabird breeding colonies from Lloyd (1982) and records on internal NPW memos give the figures shown in the table below.

Species	Year	Source	Number
Common Tern	1984	Whilde, 1985	40 pairs
(Sterna hirundo)	1992	Internal memo	9 nests
	1997	Internal memo	unknown number nesting
Arctic Tern	1998	Internal memo	<10 nests, failed to breed
(Sterna paradisaea)			
Black headed Gull	1977	Whilde, 1978 (in Lloyd,	700 individuals
(Larus ridibundus)	1984	1982)	2000 individuals
	1992	Internal memo	256 nests
	1998	Internal memo	50 nests, failed to breed
		D. Duggan, pers. comm.	
Common Gull	1984	Internal memo	3 pairs
(Larus canus)			

## APPENDIX V: NOTIFIABLE ACTIONS

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

- Notifiable Action 2.1 Upland grassland, scree, inland cliff
- Notifiable Action 2.2 Dry lowland grassland
- Notifiable Action 2.3 Wet lowland grassland
- Notifiable Action 3.1 Blanket bog
- Notifiable Action 3.2 Heath
- Notifiable Action 4.1 Raised bog, cutaway bog and bog woodland
- Notifiable Action 4.2 Fens
- Notifiable Action 5.1 Woodlands
- Notifiable Action 5.2 Scrub
- Notifiable Action 6.1 Rivers or streams
- Notifiable Action 6.2 Lakes, ponds, canals
- Notifiable Action 6.3 Marshes and reedbeds

#### **HABITAT TYPE 2.1**

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

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 2.1**

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

#### Section A

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

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

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

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

using fertiliser on slopes over 25 degrees creation of new tracks or paths

burning of vegetation

reclamation, infilling, ploughing or land drainage reseeding, planting of trees or any other species rock removal/use of any pesticide or herbicide

dumping, burning or storing any materials alteration of the banks, bed or flow of

watercourses

operation of commercial recreation facilities (e.g. pony trekking)/ introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

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

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

afforestation

commercial turf cutting

erecting or operating a windfarm

#### **HABITAT TYPE 2.2**

#### DRY LOWLAND GRASSLANDS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 2.2**

#### DRY LOWLAND GRASSLANDS

#### Section A

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

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

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

adding lime/adding fertiliser of any sort to areas not previously fertilised/ applying fertiliser which would increase the level of nitrogen in the soil/applying fertiliser which would increase the level of phosphorous in the soil/ applying phosphorous to soils which already have in excess of the REPS index 2 levels mowing grass before the 30th June (Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply)

burning of vegetation /ploughing or cultivation of lands which have not been so managed for the last 20 years

reclamation, infilling, or land drainage/ reseeding, planting of trees or any other species use of any pesticide or herbicide

dumping, burning or storing any materials

alteration of the banks, bed or low of watercourses

operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

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

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

afforestation

#### **HABITAT TYPE 2.3**

#### WET LOWLAND GRASSLANDS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 2.3**

#### WET LOWLAND GRASSLANDS

#### Section A

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

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

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

adding lime/adding fertiliser of any sort to areas not previously fertilised/ applying fertiliser which would increase the level of nitrogen in the soil/applying fertiliser which would increase the level of phosphorous in the soil/ applying phosphorous to soils which already have in excess of the REPS index 2 levels mowing grass before the 30th June (Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply)

burning of vegetation

reclamation, infilling, ploughing or land drainage/ reseeding, planting of trees or any other species use of any pesticide or herbicide

dumping, burning or storing any materials

alteration of the banks, bed or low of watercourses

operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area

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

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

afforestation

#### **HABITAT TYPE 3.1**

#### **BLANKET BOG**

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 3.1**

#### **BLANKET BOG**

#### Section A

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

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

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

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

adding lime/adding fertiliser of any sort

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

reseeding, planting of trees or any other species

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

commercial peat moss or turf extraction

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

alteration of the banks, bed or flow of watercourses

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

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

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

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

afforestation

erecting or operating a windfarm

#### **HABITAT TYPE 3.2**

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

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 3.2**

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

#### Section A

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

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

supplementary feeding of stock, except as defined in REPS guidelines

introduction of stock to formerly ungrazed areas

adding lime/ adding fertiliser of any sort Creation of new tracks or paths

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

reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species

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

commercial peat moss or turf extraction

use of any pesticide or herbicide, including sheep dip

dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

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

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area/any other activity of which notice may be given by the Minister from time to time

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

afforestation

erecting or operating a windfarm

#### **HABITAT TYPE 4.1**

#### RAISED BOG, CUTAWAY BOG AND BOG WOODLAND

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 4.1**

#### RAISED BOG, CUTAWAY BOG AND BOG WOODLAND

#### Section A

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

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

adding lime/adding fertiliser of any sort

creation of new tracks or paths

burning areas of vegetation reclamation, infilling, or ploughing /reseeding, planting of trees or any other species/cutting trees or removing timber

drainage works on the bog or within the local water catchment area

cutting turf or peat moss extraction

use of any pesticide or herbicide, including sheep dip

dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

operation of commercial recreation facilities (e.g. botanical tours)

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

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

#### Section B

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

afforestation

erecting or operating a windfarm

#### **HABITAT TYPE 4.2**

#### FENS, TRANSITION MIRES, PETRIFYING SPRINGS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 4.2**

#### FENS, TRANSITION MIRES, PETRIFYING SPRINGS

#### Section A

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

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

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

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

adding lime within 50m of the fen or a water course running into it

adding fertiliser of any sort within 50m or a water course running into it

extracting water for irrigation or other purposes

mowing grass before the 30th June (Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply)

supplementary feeding of stock

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

reclamation, infilling, ploughing or land drainage within 50m of the fen

reseeding, planting of trees or any other species within 50m of the fen

use of any pesticide or herbicide within 50m of fen

dumping, burning or storing any materials within 50m of the fen

alteration of the banks, bed or flow of watercourses within the fen or running into or out of it

harvesting reed or willow

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

introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area any other activity of which notice may be given by the Minister from time to time

#### Section B

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

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

any activity which might cause pollution of the fen

removal of soil, mud, gravel, sand or minerals developing roads or car parks

construction of fences, buildings or embankments

afforestation

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 5.1**

#### WOODLANDS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 5.1**

#### WOODLANDS

#### Section A

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

grazing by livestock

adding lime

adding fertiliser of any sort

reclamation, infilling, ploughing or land drainage

reseeding, planting of trees or any other species

felling of trees, removal of timber

removal of foliage, moss or other materials

killing ivy

use of any pesticide or herbicide

dumping, burning or storing any materials

alteration of the banks, bed or flow of watercourses

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

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

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

#### Section B

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

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

any activity which may cause pollution of the woodland

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

felling trees or reafforestation

#### **HABITAT TYPE 5.2**

#### **SCRUB**

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 5.2**

#### **SCRUB**

#### Section A

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

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

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

adding lime /adding fertiliser of any sort

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

reclamation, infilling, ploughing or land drainage

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

removal of foliage, moss or other materials

killing ivy

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

alteration of the banks, bed or flow of watercourses

operation of commercial recreation facilities (e.g. walking tours)

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

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

#### **Section B**

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

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

any activity which may cause pollution of the site removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or

embankments

felling trees or reafforestation

#### **HABITAT TYPE 6.1**

#### RIVERS OR STREAMS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 6.1**

#### RIVERS OR STREAMS

#### **Section A**

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

grazing of livestock above a sustainable density

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

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

extracting water for irrigation or other purposes

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

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

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

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

harvesting or burning of reed or willow.

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

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

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

#### **Section B**

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

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

any activity which might cause pollution of the river or stream

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

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

fishing for eels or salmon

bank maintenance and grading

creation of weirs and dams

#### **HABITAT TYPE 6.2**

#### LAKES, PONDS AND CANALS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

#### **HABITAT TYPE 6.2**

#### LAKES, PONDS AND CANALS

#### **Section A**

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

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

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

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

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

extracting water for irrigation or other purposes

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

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

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

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

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

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

harvesting or burning of reed or willow.

causing siltation

operation of commercial recreation facilities

(e.g. bird watching tours)

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

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

#### **Section B**

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

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

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

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

construction or operation of an aquaculture Facility.

fishing for eels or salmon

bank maintenance and grading

creation of weirs and dams

Notifiable Actions 71

#### **HABITAT TYPE 6.3**

#### MARSHES AND REEDBEDS

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

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

#### **SECTION A**

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

#### **SECTION B**

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

If so, these notifiable actions do not apply.

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.

#### **HABITAT TYPE 6.3**

#### MARSHES AND REEDBEDS

#### **Section A**

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

grazing of livestock above a sustainable density (as defined in approved farm plans) within 50m of the marsh or reedbed

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

supplementary feeding of stock within 50m of the marsh or reedbed

adding lime within 50m of the marsh or reedbed

adding fertiliser of any sort within 50m of the marsh or reedbed

extracting water for irrigation or other purposes

operation of boat angling or shore angling Business

restocking with fish.

reclamation, infilling, ploughing or land drainage within 50m of the marsh or reedbed

reseeding, planting of trees or any other species within 50m of the marsh or reedbed

removal of trees or any aquatic vegetation within 50m of the marsh or reedbed

use of any pesticide or herbicide in the marsh or reedbed or within  $50\mathrm{m}$  of the marsh or reedbed

dumping rubbish or other materials or disposing of any chemicals or wastes in marsh or reedbed or into water-courses Running into them.

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

alteration of the banks, channel, bed or flow of the marsh or reedbed or of watercourses running into or out of it

harvesting or burning of reed or willow.

causing siltation

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

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

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

#### **Section B**

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

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

any activity which might cause pollution of the marsh or reedbed

removal of soil, mud, gravel, sand or minerals

developing roads or car parks

construction of fences, buildings or embankments

construction or operation of an aquaculture facility.

fishing for eels

bank maintenance and grading creation of weirs and dams

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 VI: COMPENSATION AND APPEALS PROCEDURES

# Compensation

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

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

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

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

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

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

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

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

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

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

# **Appeals Procedure**

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

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

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

# APPENDIX VII: SUMMARY OF FARMING CONDITIONS UNDER REPS

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

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

#### **General Provisions**

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

#### **Detailed Conditions**

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

#### **Stocking Density**

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

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

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

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

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

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

#### **Supplementary Feeding**

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

#### **Use of Fertilisers and Herbicides**

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

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

#### **Water Pollution**

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

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

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

#### **Complementary Action**

#### (a) Measures to prevent damage by non REPS participants

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

#### (b) Evaluating and Monitoring

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

#### (c) Farmer Education /Advice

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

#### (d) Seminars for Planners

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

#### (e) Demonstration Farms

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

#### (f) Quota Rights

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

#### (g) Scheme Extension

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

#### (h) Local Co-ordination

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

# APPENDIX VIII: NATIONAL PARKS AND WILDLIFE MANAGEMENT STAFF

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