



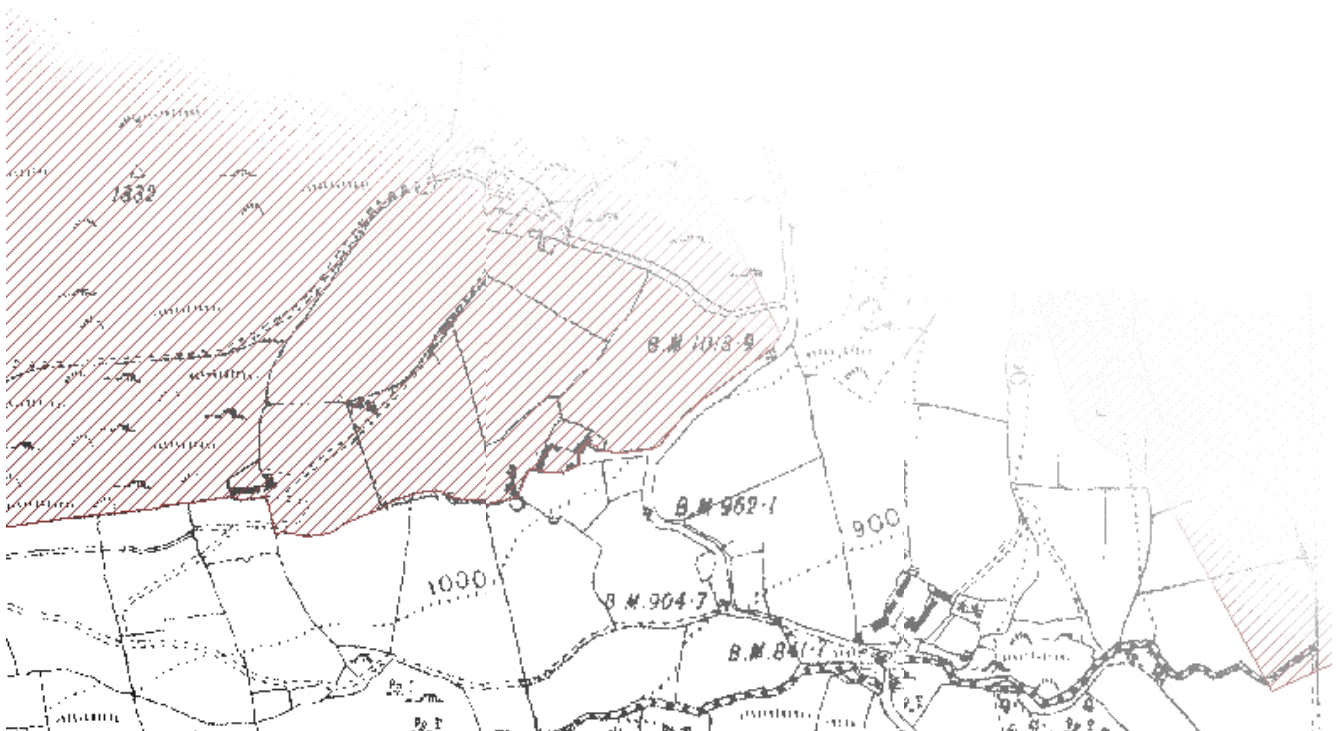
National Parks and Wildlife Service Conservation Plan for 2006-2011



Bricklieve Mountains & Keishcorran cSAC

Site Code 1656

Co. Sligo



SUMMARY

Introduction

Bricklieve Mountains & Keishcorran cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site has been listed due to the presence of Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites), a priority habitat listed on Annex I of the EU Habitats Directive, as well as two other Annex I habitats: Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) and Calcareous and calschist screes of the montane to alpine levels (*Thlaspietea rotundifolii*).

The site has also been selected as a cSAC for Marsh Fritillary, which has been recorded here. This butterfly is scarce in Ireland, and the calcareous grasslands and damp meadows provide suitable habitat for this species.

Description of Bricklieve Mountains & Keishcorran cSAC

The Bricklieve Mountains and Keishcorran cSAC encompasses an area of 1,696 ha. It is located west of Lough Arrow and approximately 6 km north-west of the town of Boyle. The site is a large isolated block of Upper Carboniferous Limestone that reaches a height of approximately 300 m. The typical landscape features associated with a karst topography are present: caves, dry valleys and limestone pavement. A striking feature of the Bricklieve Mountains is that the plateau is divided into four by narrow rift valleys, which run north-north-west and south-south-east. These valleys are flanked by vertical cliffs, which vary between 10 and 30 m in height. During the last ice age the retreating ice left bars of morainic debris across the rifts, and lakes which subsequently developed into bog.

Botanically, the site is rich and varied; this is primarily due to the contrasting floras of the limestone and peat areas.

The dominant habitats are blanket bog, dry and wet heaths and calcareous grasslands. Other habitats found within the site include the Annex I habitats mentioned above, limestone pavement, oak-ash-hazel woodland, limestone/marl lakes and rich fen and flush.

The most botanically diverse community throughout the site is the calcareous grassland dominated by Bent-grasses, Sheep's Fescue and Crested Dog's Tail. Associated species include Blue Moor-grass, Heath-grass, False Oat-grass, Quaking Grass, Lady's Bedstraw, Mouse-ear Hawkweed, Pignut, Woodrush, Self Heal, Yellow Rattle and Fairy Flax. The legally protected (Flora Protection Order 1999) Small White Orchid has recently been recorded from the site, and the Red Data Book species, Hoary Whitlow-grass, also occurs.

The Bricklieve Mountains and Keishcorran together are exceptionally diverse in habitats and species and form a distinct unit of scenic and amenity value. The vegetation of the site has been maintained by grazing animals, a practice which has probably been carried out in this area since prehistory. The site is of geomorphological, geological and archaeological importance. The area

has many megalithic tombs, some of considerable size, which were erected in Neolithic times, 4500 years ago.

Main conservation objectives

- To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) 2 % of the site, Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (2 % of the site) and Calcareous and calschist screes of the montane to alpine levels (*Thlaspietea rotundifolii*) (3 % of the site).
- To maintain the Annex I species for which the cSAC has been selected at favourable conservation status; Marsh Fritillary
- To maintain the extent, biodiversity and species richness of the entire site
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Main management issues

- Burning
- Enrichment of grassland
- Grazing
- Land reclamation
- Supplementary feeding
- Visitor pressure
- Water abstraction and treatment

Main strategies to achieve objectives

- Carry out scientific monitoring and site surveillance
- Manage grazing on commonages
- Maintain suitable grazing regimes on non-commonage land
- Survey Annex I grasslands
- Assess management requirements for Marsh Fritillary
- Survey notable plant species
- Liaise with land owners and interested parties

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READER'S GUIDE

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

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

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

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

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

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

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

Introduction

Legal Background of Conservation Plans

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

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

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

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

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

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

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

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

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

Sites are legally protected once they are publicly advertised.

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

Landowners and other users with a legal entitlement may appeal the designation of lands on scientific grounds, within three months of the designation notification.

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

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

Reasons for Designation of Bricklieve Mountains & Keishcorran cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> *Semi-natural dry grassland and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (EU Habitat Code 6210) 	The site includes areas of species-rich calcareous grassland. Small White Orchid (<i>Pseudorchis albida</i>), a protected species has been recorded.
<ul style="list-style-type: none"> Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) (EU Habitat Code 6510) 	Relatively small areas of lowland grass meadows are present. Both wet and dry meadows occur, exhibiting a good species diversity. These meadows are becoming increasingly rare in Ireland.
<ul style="list-style-type: none"> Calcareous and calcschist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>) (EU Habitat Code 8120) 	Calcareous scree is found on steep slopes and at the bases of limestone cliff terraces. This habitat supports an interesting flora.

*denotes Annex I Priority Habitat

SPECIES LISTED IN ANNEX II OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> Marsh Fritillary (<i>Euphydryas aurinia</i>) 	This butterfly has been recorded in the site which encompasses areas of suitable habitat for this highly mobile species.

Implications of Site Designation for Landowners and other Site Users

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

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

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

SITE DESCRIPTION

Location Including Site Boundaries

The Bricklieve Mountains are located west of Lough Arrow and approximately 10 km north-west of the town of Boyle. Keishcorran (also known as Kesh Corann) lies some 4km further to the north-west (see map 1).

Grid Ref.: G700100

Latitude: N 08°22'25"

Longitude: W 54°03'00"

Area: 1696 ha

Altitude Range: 119 m to 359 m

Townlands: Carrowmaclenany, Whitehill, Doonaveeragh, Carricknahornea east, Knockroe, Aghanagh, Cuilsheeghary More, Cuilsheeghary Beg, Carricknahorna east, Carricknahorna west, Carrickhawna, Brougher, Treanmacmurtagh, Treanscrabbagh, Tully, Treanmore, Murhy, Cross, Cloonagh, Fallougher, Cloghoge Lower, Drumnagranshy, Carnaweeleen, Tonaponra

Site Boundaries

The majority of the site is bounded by land that has been improved for agriculture and most of the boundaries follow features such as fence-lines, walls and tracks.

Site Infrastructure

The N4 Boyle to Sligo road runs to the east of the site. A third class road from Castlebaldwin passes through the site in a south-westerly direction. A number of smaller roads bisect the low-lying parts of the site. A number of tracks allow access to the upper areas of the Bricklieve Mountains.

Legal Status

Ownership

17% of the site is held under commonage (see map 2). The remainder is in multiple private ownership.

Designations of the Site

candidate Special Area of Conservation	Sitecode IE0001656	Published on March 1 st 1997
proposed Natural Heritage Area	Sitecode 1656	Published in 1995

Government Departments and Agencies

Department of the Environment, Heritage and Local Government (DEHLG)	DEHLG is the government department with responsibility for the protection and conservation of Ireland’s natural heritage.
National Parks & Wildlife Service (NPWS)	NPWS is the section of the DEHLG responsible for maintaining the nature conservation value of the site. Periodic inspection of the site is carried out by the local Conservation Ranger. Regional staff also participate in research and survey projects by collecting data on the site, provide advice to planning authorities on the impacts of development applications and provide an education and advisory service to the public (see Appendix X for further details of NPWS regional staff).
Sligo County Council	Sligo County Council is the planning authority for the site. As such they are obliged to ensure appropriate assessment of the implications of developments requiring planning permission that may have an impact, either individually or in combination with other developments on the designated area.
Environmental Protection Agency (EPA)	The EPA is an independent state sponsored body with a wide range of statutory duties including monitoring environmental quality and overseeing the performance by local authorities of their statutory environmental protection functions.
Department of Agriculture and Food (DAF)	DAF is the government department responsible for the development and regulation of agriculture, forestry and the food industry, including the administration of schemes such as the Rural Environment Protection Scheme (REPS), the Native Woodland Scheme (NWS), and Commonage Framework Plans (CFPs).

Department of Communications, Marine and Natural Resources (DCMNR)

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

The Central Fisheries Board

The Central Fisheries Board is the statutory body is responsible for the co-ordination and support of the seven regional fisheries boards. Its responsibilities also include the control of commercial salmon licensing.

North Western Regional Fisheries Board

North Western Regional Fisheries Board is responsible for maintaining and improving environmental quality and developing and protecting the fisheries resource in their region. The Board's area of responsibility includes all inland waters in the counties of Sligo, Mayo and Roscommon entering the sea between Pigeon Point in Clew Bay and Mullaghmore Head; protection of salmon at sea to the twelve-mile limit; oyster fisheries.

Local Authority Policy in relation to the Site

Sligo County Development Plan 2005-2011

Sligo County Council's policy in relation to Conserving Environmental Quality (Chapter 7) includes the following objectives:

7.2.1 Natural environment objectives

A. Seek the conservation and wise management of areas of natural environmental value.

B. Protect and, where possible, enhance the plant and animal species and their habitats that have been identified under the EU Habitats Directive, EU Birds Directive, the Wildlife Act and the Flora Protection Order

7.2.2.4 Objectives for designated nature conservation sites

A. Maintain, and where possible enhance, the conservation value of all pNHAs, cSACs and SPAs, as identified by the Minister for the Environment, Heritage and Local Government, as well as any other sites that may be proposed for designation during the lifetime of this Plan.

B. Discourage development that would destroy or damage any sites of international or national importance, designated for their wildlife/habitat significance, including pNHAs, cSACs and SPAs.

Physical Features

Climate

Regional climatic data is presented in Appendix III for the nearest coastal synoptic weather recording station at Claremorris, 55 km to the south west of the site. The station has an average annual rainfall of 1143 mm (measured between 1961 and 1990). It can be presumed that the Bricklieve Mountains and Keishcorran, by reason of their elevation, receive more rain than this. The prevailing winds are south-westerly. The mean daily air temperature is recorded as 8.9 °C, with a daily average of 3.05 hours of sunshine throughout the year.

Geology & Geomorphology

The site is a large isolated block of Upper Carboniferous Limestone, which reaches an altitude of over 300m. This limestone contains a fair amount of chert both as bands and as nodules. As the chert is harder than the limestone, differential weathering renders the chert prominent.

A striking feature about the Bricklieve Mountains is that the topography is very peculiar and unique in Ireland. Fractures along a series of joints running parallel to the long axis of the hill have led to the formation of a number of rift valleys running north north-west to south south-east. The walls of the valleys are vertical cliffs which reach heights up to 30m although cliffs of 10m are more common. Similar cliffs are found on the steeper parts of the east and west sides, even where rifts have not formed. Three principle rifts can be recognised: a central one which almost divides the central summit plateau into two parts, an easterly rift which separates the steep ridge named Doonaveragh from the summit plateau and a westerly rift valley, which is the longest and broadest. The narrower rifts are V-shaped, but many others are flat bottomed.

Some of the lower slopes (generally below 150m altitude) are covered in glacially derived limestone and sandstone drift. This sometimes reaches an altitude of 200m.

The drainage of the site as a whole is good due to the underlying Carboniferous Limestone. The drainage along the valleys is almost entirely lateral (along fault lines). Frequently, a series of swallow holes can be found along either side of the valleys. Lakes in the site include Lough Labe and Lough Gowra. In 1946, Lough Availe, which was located at the northern end of the largest rift valley was drained.

Soils & Soil Processes

The soil within the site is locally diverse. Calcareous grasslands occur on thin rendzinas. Peat has formed in some areas leading to the establishment of heath and bog vegetation.

Biological Features

Habitats and Vegetation

Note: Throughout the conservation plan, habitats are named and described under two different systems: the Annex I habitats are as listed in the EU Habitats Interpretation Manual Version 25(2003), while all other habitats are as listed according to the classification system of 'A Guide to Habitats in Ireland' (Fossitt, 2000).

The following table lists the habitats within the site. The Annex I habitats of the Habitats Directive for which the site was selected is listed, with the relevant Guide to Habitats category also shown. Annex I priority habitats are denoted by an asterisk (*). The Indicative Habitat map for the site is presented in Map 3. The percentage area presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 3.

Habitats Found within Bricklieve Mountains & Keishcorran cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
*Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (important orchid sites) (6210)	Dry calcareous and neutral grassland (GS1)	2%
Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) (6510)	Dry meadows and grassy verges (GS2)/ Dry calcareous and neutral grassland (GS1)/ Wet grassland (GS4)	2%
Calcareous and calschist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>) (8120)	Calcareous scree and loose rock (ER4)	3%
	Upland blanket bog (PB2)	28% In mosaic with wet heath & grassland
	Dry calcareous and neutral grassland (GS1)	24% and in mosaic with dry heath
	Dry calcareous heath (HH2)	30% and in mosaic with dry grassland
	Exposed calcareous rock (ER2)	7%
	Cutover bog (PB4)	3% and in mosaic with scrub
	Limestone/marl lake (FL3)	<1%
	Oak-ash-hazel woodland (WN2)	<1%
	Rich fen and flush (PF1)	<1%
	Scrub (WS1)	In mosaic with cutover bog
	Wet grassland (GS4)	1% and in mosaic with Upland blanket bog
	Wet heath (HH3)	In mosaic with Upland blanket bog
	Buildings and artificial surfaces (BL3)	<1%
	Dry humid acid grassland (GS3)	<1% Not mapped
	Non-marine caves (EU1)	<1% Not mapped
	Stone walls and other stonework (BL1)	<1% Not mapped

Annex I Habitats:

Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid (6210) (2% of total site area or 35 ha)

This grassland forms a mosaic with patches of dry heath with occasional Hazel (*Corylus avellana*) on the higher ground and rushy fields on the lower ground of valley floors.

The largest area of this habitat can be found on the lower slopes in the southern part of the site. The vegetation here is dominated by grass species such as Bents (*Agrostis* spp.), Sheep's Fescue (*Festuca ovina*), and Crested Dog's Tail (*Cynosurus cristatus*). Associated species include Blue Moor-grass (*Sesleria albicans*), Heath-grass (*Danthonia decumbens*), False Oat-grass (*Arrhenatherum elatius*), Quaking Grass (*Briza media*), Lady's Bedstraw (*Galium verum*), Mouse-ear Hawkweed (*Pilosella officinarum*), Pignut (*Conopodium majus*) Woodrush (*Luzula sylvatica*), Self Heal (*Prunella vulgaris*), Yellow Rattle (*Rhinanthus minor*), Devils-bit Scabious (*Succisa pratensis*), Yarrow (*Achillea millefolium*), Daisy (*Bellis perennis*), Wild Thyme (*Thymus praecox*), Fairy Flax (*Linum catharticum*) and Small White Orchid.

Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (6510) (2% of total site area or 34 ha)

The lowland meadows of this site generally occur in small isolated pockets on valley floors and in some instances drainage is impeded. In these areas there is a graduation from dry to damp grassland which increases the diversity of plant species present.

An area of meadow is found in the townland of Cuilsheeghary More in the east of the site. It is bordered on one side by a cliff which is wooded and by mature woodland on the other. Species present include Yorkshire Fog (*Holcus lanatus*), Bent-grasses, Crested Dog's Tail, White Clover (*Trifolium repens*), Creeping Buttercup (*Ranunculus repens*), Docks (*Rumex* spp.), and Soft Rush (*Juncus effusus*).

Wetter meadows support such species as Soft Rush, Meadowsweet (*Filipendula ulmaria*), Ragged Robin (*Lychnis flocc-cuculi*) and Marsh Bedstraw (*Galium palustre*).

Calcareous and calschist screes of the montane to alpine levels (*Thlaspietea rotundifolii*) (8120) (3% of total site area or 49 ha)

Scree occurs on the steep slopes and at the bases of some of the many limestone cliff terraces that run through the site. Of special interest is the presence of the mosses *Neckera crispa* and *Mnium marginatum* var *marginatum* which have an occasional presence in the country. Other moss species such as *Fissidens gracilifolius* are also present.

The Red Data Book species, Hoary Whitlow-grass (*Draba incana*), as well as other species such as Welsh Poppy (*Meconopsis cambrica*), Mossy Saxifrage (*Saxifraga hypnoides*) and Green Spleenwort (*Asplenium viride*), are characteristic of this rocky habitat. Added interest is given to this habitat as it grades into calcareous rocky slopes and dry heath.



Bricklieve Mountains with Keishcorran in the background. Blanket bog and heaths cover the plateaux, while grasslands, exposed calcareous rock and scrub are found in the valleys. (photo: NPWS)

Other Habitats:

Dry calcareous heath (HH2)

This heath community is dominated by Ling Heather (*Calluna vulgaris*) with some Heath-grass, Creeping Bent (*Agrostis stolonifera*), Fescues, Crested Dog's-tail, Cross-leaved Heath (*Erica tetralix*), Tormentil (*Potentilla erecta*), Woodrush, Devil's-bit Scabious, Bell Heather (*Erica cinerea*), Heath Bedstraw (*Galium saxatile*), Bilberry and Wavy Hair Grass (*Deschampsia flexuosa*).

Moss species present include *Polytrichum commune*, *Pleurozium schreberi*, *Hypnum cupresiforme*, *Rhytidiadelphus loreus*, *Rhytidiadelphus squarrosus*, *Thuidium tamariscinum*, *Aulacomnium palustre*, and occasional Bog Mosses (*Sphagnum* spp.).

Heath is also found in mosaic with upland grassland. These habitats grade into one another in such a way that boundaries between vegetation communities are unclear.

Wet heath (HH3)

Ling Heather is dominant with Tufted Hair-grass (*Deschampsia caespitosa*), Velvet Bent (*Agrostis canina*), Purple Moor-grass (*Molinia caerulea*) and the bog moss *Sphagnum capillifolium* also present.

**Upland blanket bog
(PB2)**

This habitat can be found in a mosaic with heath communities. On the flatter ground the peat reaches a much greater depth, allowing blanket bog formation. The best examples of blanket bog are found in the valleys floors and on the level plateaux. The species found on the wetter areas include Common Cottongrass (*Eriophorum angustifolium*), Deergrass (*Trichophorum cespitosum*), Purple Moor-grass, Bog Asphodel (*Narthecium ossifragum*), Carnation Sedge (*Carex panicea*), Heath Rush (*Juncus squarrosus*), Cross-leaved Heath, Hare's-tail Cottongrass (*Eriophorum vaginatum*) and Bulbous Rush (*Juncus bulbosus*).

Common Cottongrass is dominant in the wetter areas, especially those areas in which the vegetation has been destroyed by burning or turf cutting. Deergrass is dominant over larger areas, both on the plateaux and in the valleys. Hare's-tail Cottongrass is more localised than Common Cottongrass but is sometimes co-dominant with Ling Heather.

Bilberry (*Vaccinium myrtillus*) occurs in drier parts and Purple Moor-grass is found in the intermediate and wetter areas. Marginal species include Woodrush (*Luzula sylvatica*) and Mat-grass (*Nardus stricta*). Species of bog moss (*Sphagnum* spp.) are frequent in the wetter areas, in some places form an important component of the vegetation.

Although active blanket bog is listed in Annex I of the Habitats Directive, it has not been selected as a qualifying interest for this site.

**Dry calcareous and
neutral grassland
(GS1)**

Upland grassland areas include species such as Common Quaking Grass and Blue Moor-grass. Ribwort Plantain (*Plantago lanceolata*) is also common.

The limestone outcrops support distinct pockets of vegetation which include Mossy Saxifrage, Herb Robert (*Geranium robertianum*), Lady's Bedstraw (*Galium verum*), Thyme-leaved Speedwell (*Veronica serpyllifolia*), Germander Speedwell (*Veronica chamaedrys*), Sheep's Fescue and mosses including *Rhytidiadelphus loreus* and *Racomitrium lanuginosum*. Ling Heather dominates the more heathy areas. Mouse-ear Hawkweed (*Pilosella officinarum*), Smooth Lady's Mantle (*Alchemilla glabra*) and scattered Hazel (*Corylus avellana*) are also found here.

Areas of upland grassland also occur in mosaic with outcropping limestone and heath vegetation. Some areas of dry calcareous and neutral grassland in lower parts of the site have been slightly agriculturally improved.

- Exposed calcareous rock (ER2)** The greatest expanse of limestone pavement is found on the level shelf which forms a northward extension of the ridge of Doonaveeragh. Here at an elevation of approximately 228m, it forms a continuous tract of over 8 ha. Although this is the largest area of limestone pavement in the site, it has been somewhat modified by attempts to reclaim some of the land. The application of fertiliser and small scale removal of limestone seems to have been carried out over this area which has led to a decrease in the species diversity of the pavement flora.
- Other areas of limestone pavement occur throughout the site. Although smaller in size these areas are intact and display the features associated with typical limestone pavement vegetation. Species found include Soft Shield Fern (*Polystichum setiferum*), Hart's-tongue Fern (*Asplenium scolopendrium*), Brittle Bladder Fern (*Cystopteris fragilis*), Common Spotted Orchid (*Dactylorhiza fuchsii*), Early-purple Orchid (*Orchis mascula*) and Hoary Whitlow-grass. Other species typical of this habitat include Lady's Bedstraw, Lady's mantle (*Alchemilla vulgaris*), Wood Anemone (*Anemone nemorosa*), False Oat-grass, Glaucous Sedge (*Carex flacca*), Cock's-foot (*Dactylis glomerata*), Herb Robert, Water Aven (*Geum rivale*), Hairy Oat-grass (*Helictotrichon pubescens*), Meadow Vetchling (*Lathyrus pratensis*), Wood Rush, Yellow Pimpernel (*Lysimachia nemorum*), Wood-sorrel (*Oxalis acetosella*), Hard Shield Fern (*Polystichum aculeatum*), Raspberry (*Rubus idaeus*), Stone Bramble (*Rubus saxatilis*), Thyme (*Thymus praecox*), Germander Speedwell (*Veronica chamaedrys*), Common Dog-violet (*Viola riviniana*), Primrose (*Primula vulgaris*) and Tormentil (*Potentilla erecta*).
- The faces of the cliffs are scattered with vegetation. Dogwood (*Cornus sanguinea*), Mossy Saxifrage, Green Spleenwort, Mouse-ear Hawkweed, Mouse-ear Chickweed (*Cerastium diffusum*) are amongst the species to be found here.
- Cutover bog (PB4)** Cutover bog is found in the central part of the Bricklieve Mountains. This generally comprises old turf banks with regenerating vegetation including species such as Ling Heather, Cross-leaved Heath, Common Cottongrass and Purple Moorgrass.
- Dry-humid acid grassland (GS3) (not mapped)** This habitat of upland grassland on peaty soils occurs in a mosaic with heath and blanket bog. The species composition includes Mat-grass, Purple Moor-grass, Bilberry, Heather, Bent-grasses (*Agrostis* spp.), Sweet Vernal Grass (*Anthoxanthum odoratum*) and Fescues.
- Scrub (WS1)** Small patches of scrub are found throughout the site, mostly in cutover bog areas. Common species include Gorse (*Ulex* sp.), Hawthorn (*Crataegus monogyna*), Birch (*Betula pubescens*) and Goat Willow (*Salix capraea*). In some areas, notable on the west of Keishcorran, Gorse is invading areas of species-rich upland grassland.

**Rich fen and flush
(PF1)**

Greenan Fen, located south of Lough Gowra, is of particular interest due to a high diversity of vegetation in such a small area and also due to its resemblance to a turlough, being subject to fluctuating water levels. At an altitude of 118m, this is close to the upper altitudinal limit for this habitat.

At the highest point of the fen there is a spring which feeds into a stand of Iris (*Iris pseudacorus*), Sedges (*Carex* spp.), Water Forget-me-not (*Myosotis scorpioides*), Water-cress (*Rorippa nasturtium-aquaticum*) and Reed-grass (*Phalaris arundinacea*). Further east this composition changes to a mixed sedge community with Common Sedge (*Carex nigra*) and Bottle Sedge (*C. rostrata*), dominated by substantial amounts of Lesser Marsh Sedge (*C. acutiformis*) and Brown Sedge (*C. disticha*). Additional species include Marsh Willowherb (*Epilobium palustre*) and Heath Bedstraw. In the centre, an island of peat remains, suggesting that peat has been cut from this part of the site in the past. This supports occasional Willows (*Salix viminalis* and *S. cinerea*). Tufted Sedge (*Carex elata*) is established beneath the trees and a small amount of Greater Spearwort (*Ranunculus lingua*) Slender Tufted Sedge (*Carex acuta*) grows nearby. The water flows westwards into a pool which is semi-permanent and supports Mare's-tail (*Hippuris vulgaris*), Lesser Marshwort (*Apium inudatum*), Thread-leaved water crowfoot (*Ranunculus trichophyllus*) and Branched Bur-reed (*Sparganium erectum*).

A zone of vegetation above the shore is covered by turlough-type of vegetation with much Amphibious Bistort (*Polygonum amphibium*), Floating Sweet-grass (*Glyceria fluitans*), Water Mint (*Mentha aquatica*), Common Spike-rush (*Eleocharis palustris*), and Marsh Cinquefoil (*Potentilla palustris*). There is a substantial amount of Willow adjacent to the open water. Further away the ground rises and the vegetation changes to a Sedge/Rush community with Carnation Grass (*Carex panicea*), Jointed Rush (*Juncus articulatus*) and Devils-bit Scabious forming important components of the community with the mosses *Calliergon cuspidatum* and *Rhytidiadelphus squarrosus* occurring.

Wet grassland (GS4)

Numerous small areas of this habitat can be found throughout the site. These areas are generally confined to the valley floors and in some cases close to improved grassland around farmsteads, Low levels of agricultural improvement have probably been carried out in the latter areas. This habitat is dominated by Rushes but also includes other species such as Sweet Vernal Grass, Cock's-foot (*Dactylis glomerata*), Marsh Ragwort (*Senecio aquatilis*) and Marsh Cinquefoil.

**Limestone/marl lake
(FL3)**

Lough Labe is situated between the Bricklieve Mountains and Keishcorran. It supports the Freshwater Crayfish (*Austropotamobius pallipes*), a species listed under Annex II of the Habitats Directive. The lake also holds Brown Trout (*Salmo trutta*).

Lough Gowra (Lough Gower) occurs to the south of Lough Labe.

Oak-ash-hazel woodland (WN2)

A linear stretch of this habitat is located on the east of the site with the following species occurring: Goat Willow, Rowan (*Sorbus aucuparia*), Hazel, Ash (*Fraxinus excelsior*), Silver Birch (*Betula pendula*), Holly (*Ilex aquifolium*) and Ivy (*Hedera helix*).

The ground flora includes Wild Garlic (*Allium ursinum*), Wood Sorrel (*Oxalis acetosella*), Wood Anemone (*Anemone nemorosa*), Foxglove (*Digitalis purpurea*) and Primrose (*Primula vulgaris*).

The woodland is located on a steep slope which is divided from the rest of the site by a dry stone wall. The ground flora on the steeper slopes appears intact although the ground flora on the flatter ground appears to be heavily grazed. There is no evidence of natural regeneration of tree species.

Non-marine caves (EU1)

A series of caves pierce a low and conspicuous cliff which is on the south-west slope of Keishcorran in the townlands of Fallougher and Cloonagh. The caves are said to contain bones of bears and other extinct animals. There is also a much larger cave on the opposite side of Keishcorran.

Stone walls and other stonework (BL1)

Old walls with rich fern flora including Brittle Bladder Fern, Polpody (*Polypodium spp.*) and Green Spleenwort. A number of moss species are also present.

Buildings and artificial surfaces (BL3)

A third class road passes in a north-south direction through the centre of the site. There are a number of other roads and tracks within the cSAC boundary.

A new pump house belonging to the Keash Group Water Scheme (GWS) is situated on the western side of Lough Labe. This supplies water to a nearby storage reservoir/pressurised sand filtration unit located on the hillside at Treamore.

Notable Flora:**Lower Plants**

A number of moss species that only have an occasional occurrence in Ireland, have been recorded in this site. They include: *Fissidens gracilifolius*, *Mnium marginatum var marginatum*, *Rhizomnium pseudopunctatum*, *Cinclidium stygium*, *Plagiochila britannica*, *Scapania aequiloba* and *Ulota drummondii*. (Hodgetts, 2004, Warburg, 1963 and Warburg, 1964)

Higher Plants

The legally protected Small White Orchid (Flora Protection Order 1999) occurs in the site (Cotton *et al.*, 1994). It is classified in the Red Data Book as vulnerable (Curtis and McGough, 1988).

The Red Data Book plant, Hoary Whitlow-grass has also been recorded at the site. This plant is recorded from a total of eight counties. It is typically found in the north west of the country but is rare elsewhere (Webb *et al.*, 1996).

Fauna:

Invertebrates

The site supports the scarce Marsh Fritillary, a species listed in Annex II of the Habitats Directive. Information on the presence of this species within the site comes from Dr Don Cotton who has recorded it in the site. The butterfly occurs in association with its food plant Devil's-bit Scabious, which occurs in calcareous grassland, heath and fen habitats in the site.



Marsh Fritillary (Photo: Eddie Dunne)

A population of Freshwater Crayfish is recorded in Lough Labe. This species is also listed in Annex II of the Habitats Directive.

Fish

As already mentioned, Lough Labe holds Brown Trout. It was also stocked with Rainbow Trout (*Oncorhynchus mykiss*) by the NWRFB in the past. However, was discontinued due to site management difficulties, but may recommence at some stage in the future.

Birds

Peregrine Falcon (*Falco peregrinus*), nests in the site. Hen Harrier (*Circus cyaneus*) forages throughout the site. Both these species are listed in Annex I of the Birds Directive. The latter is listed on the Red List in the “Birds of Conservation Concern in Ireland” (BoCCI) report (Newton *et al.*, 1991) while Peregrine is on the Amber List. Short-eared Owl (*Asio flammeus*), also listed on the Amber List has been recorded in the site.

Lapwing (*Vanellus vanellus*), a BoCCI Red List species, nests at Greenan Fen as do Snipe (*Gallinago gallinago*), which is on the Amber List

Teal (*Anas crecca*) and Wigeon (*Anas penelope*), also listed on the Amber List have been recorded during the Irish Wetland Bird Survey (IWeBS) at Greenan Fen and Lough Labe. Moorhen (*Gallinula chloropus*) and Mallard (*Anas platyrhynchos*) have also been recorded by IWeBS.

Land Use

Land use on the site

Grazing

The main agricultural use of the site is for cattle and sheep grazing.

17% of the site is under commonage. The impacts of grazing on the commonage areas of this site were assessed by the Commonage Framework Planning Project. The relevant commonage agricultural units are SL7N, SL7P, SL7R, SL7S, SL7T and SL7Z (see map 2). The findings of the commonage plans for these units are reflected in the Management Strategies and Zoning sections of this Conservation Plan and presented in the Management Zoning Map (Map 4).

Recreation / Tourism

The cSAC is within an area of national archaeological importance which attracts visitors to the cairns and other features that are located on the plateau (recorded monuments are listed in Appendix IV).

The development of a tourist information centre and village north-east of the site in Castle Baldwin is expected to significantly increase the numbers of people visiting the site. The National Monuments Section of DEHLG is currently investigating procedures for protecting the cairns and limiting the damage caused by visitor pressure.

Sligo County Council has commissioned a Carrowkeel Conservation Plan for the area around the Carrowkeel tombs. The aim of the plan is to put a framework in place to ensure the conservation and long term protection of the site. Part of the plan will address ecology and visitor management.

Water abstraction and treatment

There are two group water schemes with infrastructure within the site: Keash and Corrick. Both have been upgraded under design/ build /operate contracts to comply with The European Communities (Drinking Water) Regulations 2000. Corrick supplies Ballinafad village and the adjacent area. The Keash scheme serves all except the north-east of the parish.

Work is incomplete as yet on the distribution network upgrade on the Keash scheme and water continues to be supplied by the original 1975 scheme (Keash village has temporarily been linked to a supply of untreated water from the new reservoir at Treanmore due to leaks on the old scheme). The 1975 scheme is fed by gravity flow from Lough Labe via a storage reservoir south of the lake at Treanmacmurtagh. A water main runs down the valley from the reservoir and under the bed of Lough Gowra towards the road at Greenan. A break pressure tank is situated at Toomour near Keash village.

	<p>The Corrick upgrade is now (June 2006) almost fully operational.</p> <p>The Corrick scheme sources its water from a series of six springs within the cSAC at Carricknahorna East. Water is piped from the springs to a reservoir/pressurised sand filtration unit sited outside the cSAC boundary to the south. Four of the springs have a tendency to dry. In low flow water is pumped up to the scheme reservoir from Lough Arrow via a pumphouse at Ballinafad village.</p> <p>Treatment Systems Services Ltd. Kilkenny are contracted to operate the treatment plant for both of the above schemes over a 20 year period.</p> <p>The group water scheme committee members are responsible for protecting their water source and for maintenance of their distribution networks. Sligo County Council test water quality in group schemes at least once per year.</p> <p>It is likely that some farms in the cSAC are served by spring wells.</p>
Electricity Supply	<p>A 3-phase powerline has been installed to provide electricity to the newly-constructed Keash GWS infrastructure. This line runs in a southwesterly direction across the northern end of the cSAC towards Lough Labe.</p> <p>All medium voltage lines within the cSAC have been renewed under the Network Renewal Project which has been running for the past five years. All low voltage lines within the cSAC will be renewed sometime over the course of the next five to ten years (2007 - 2017). A certain level of disturbance to habitats can be expected as a result.</p> <p>ESB Networks manage electricity supply lines.</p>
Burning	<p>In the larger valleys, burning has modified the vegetation. Burning of heath is used to encourage new growth for grazing.</p>
Mowing/cutting	<p>Lowland meadows are cut for hay/silage.</p>
Supplementary feeding	<p>Supplementary feeding was noted in several areas of the site during Winter 2005/2006. These feeding sites are mainly located on the periphery of the cSAC.</p>
Agricultural improvements	<p>Land improvements have been carried out within the site. In the townlands of Doonaveragh and Knockroe, the vegetation has been extensively modified by the use of fertiliser and due to grazing pressure.</p>

Land use adjacent to the site

Agriculture	<p>Improved fields surround this site. Most of these are grazed and fertilised.</p>
Forestry	<p>Forestry is a major land use in the Curlew Mountains to the south of the cSAC and at Hollybrook between the cSAC and Lough Arrow. There are scattered plantations elsewhere in the surrounding district.</p>
Water treatment	<p>As mentioned previously, Corrick GWS reservoir/pressurised sand filtration unit is situated at Carricknahorna East, outside the site boundary in the south (see Map 4 for Zone D). The three reservoirs of the Castlebaldwin GWS are sited to the north and north-east of the site at Clohoge Upper, Clohoge Lower and Mullaghfarna.</p>

Past human use

The Bricklieve Mountains and Keishcorran have been subject to human occupation for more than 4,500 years. The site contains 17 passage-graves in total; 14 on the Bricklieve Mountains and 3 on Keishcorran. The remains of a Bronze Age village comprising approximately fifty round huts are located on Doonaveragh in the north-east of the Bricklieves. This megalithic complex is known as Carrowkeel.

Excavations have yielded mushroom-headed bone instruments, stone hammer pendants, beads and pottery and ornaments typical of Irish passage-graves. These findings suggest that the tombs are from the late Stone Age era of about 2 500 – 2 000 BC, although some of the tombs were still in use up to about 1500 BC. On Doonaveragh plateau, the remains of a series of round huts can be found.

Keishcorran too is an important archaeological site and is crowned by a large cairn. On a spur on the north face of Keishcorran there is a passage-grave. Between Keishcorran and Carrowkeel there is a promontory which at its northern end is a more or less circular cairn of limestone blocks. Part of a cap stone can be seen under the cairn. Early Bronze Age pottery and burials relics have been found (Harbison, 1970).



Some of the Carrowkeel cairns situated at the northern end of the Bricklieve Mountains. The vegetation comprises a mosaic of heaths, blanket bog and grasslands. (photo: NPWS)

Recorded Monuments and Other Features

A list of monuments recorded on the site is found in Appendix IV.

CONSERVATION VALUE OF BRICKLIEVE MOUNTAINS & KEISHCORRAN cSAC

The site includes good examples of three habitats listed in Annex I of the Habitats Directive; orchid rich grasslands, Lowland hay meadows and calcareous scree. Although scattered in small pockets throughout the site, Bricklieve and Keishcorran cSAC is considered to support some of the more northerly examples of orchid rich grasslands in the country. Lowland hay meadows are an increasingly rare habitat in Ireland. Excellent examples of scree are found on the steep slopes and at the base of the limestone cliff terraces.

Botanically, the site is rich and varied. This is primarily due to the contrasting floras of the limestone and peat areas. Communities of lime-loving plants are well developed on the limestone areas, whereas communities of plants intolerant of lime have developed on the peat.

There is a diversity of other habitats found within the site. Upland blanket bog, dry calcareous and neutral grasslands and dry calcareous heath dominate, but exposed calcareous rock, cutover bog, lakes, woodlands, rich fen and flush, scrub and wet grassland also occur. A number of rare mosses are found within the site. Small White Orchid, a Red Data Book species and protected by the Flora Protection Order (1999) is recorded from limestone heath fields. The red Data Book species Hoary Whitlow-grass is also found in the site.

Marsh Fritillary, a butterfly listed in Annex II of the Habitats Directive, has been recorded in the site which contains suitable habitat for this scarce species. Lough Labe supports a population of Freshwater Crayfish, a species also listed in Annex II of the Habitats Directive.

MANAGEMENT FRAMEWORK

Conservation Objectives

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

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

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

The favourable conservation status of a species is achieved when:

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

Objective 1: To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) 2 % of the site, Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) (2 % of the site) and Calcareous and calschist screes of the montane to alpine levels (*Thlaspietea rotundifolii*) (3 % of the site)

Objective 2: To maintain the Annex I species for which the cSAC has been selected at favourable conservation status; Marsh Fritillary

Objective 3: To maintain the extent, biodiversity and species richness of the entire site

Objective 4: To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Management Issues

The following management issues have been identified for the site. They are listed in alphabetical order:

- **Burning**
- **Enrichment of grassland**
- **Grazing**
- **Land reclamation**
- **Supplementary feeding**
- **Visitor pressure**
- **Water abstraction and treatment**

Burning

Heath in the valleys has been burned for grazing purposes. Inappropriate burning of heath can cause damage to vegetation, leading to a loss of species diversity.

Enrichment of grassland

The use of fertiliser within the site is widespread, particularly on the lower lying fields. This increases the nutrient level of the soil which reduces the species diversity of the sward.

Grazing

Grazing occurs throughout the site and parts of the site are being heavily grazed. The impact of grazing on the commonage areas of the site were assessed by the Commonage Framework Planning Project. The Commonage Plans (CPs) produced recommend up to 40% destocking in places. The CP describes the area requiring this level of destocking as a '*a small area of commonage fenced off from a larger adjacent area of commonage. Consists entirely of unimproved wet grassland*'. The CP objectives for this area are 'to improve vegetation cover and quality'. The CP recommendation is '*to reduce the damage category by one level over five years*'.

Land reclamation

Field reclamation involving the removal of limestone pavement and the removal of old dry stone walls to enlarge fields has occurred within the site.

Supplementary feeding

Poaching is evident at supplementary feeding sites. Supplementary feeding is a cause of nutrient enrichment.

Visitor pressure

The visitor pressure around the areas of historical and cultural interest is causing localised erosion.

Water abstraction and treatment

The presence of the new Keash GWS pumphouse at Lough Labe and the reservoir on the hillside at Treanmore will result in increased traffic to these areas. There is now road access to the shore of Lough Labe. The landowner has locked the gate off the public road in an effort to limit access to the lake. Lake water abstraction points are located below the pumphouse on the western shore and at the gravity intake on the southern shore. The scheme committee have to make a decision on the level of decommissioning of the old gravity-fed network once the upgrade becomes fully operational.

There may be impacts on crayfish through increased rates of water abstraction as a result of the above factors.

General Strategies

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

Implement plan

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

- liaison with the landowners, relevant authorities and interested parties.
- implementation of REPS or NPWS farm plans, which will use this document as a guideline for prescribing management on a farm by farm basis, and also will ensure that the agreed prescriptions for the relevant habitats are adhered to
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts.
- enforcement of other relevant legislation such as the The Planning and Development Act, 2000

Establish a monitoring regime

The monitoring regime for the site will comprise:

Scientific monitoring Monitoring of the conservation status of the Annex I habitats and Annex II species will be done by, or on behalf of, the staff of the Monitoring Section of the NPWS or staff working to NPWS in accordance with the procedures laid down by that section.

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

Site surveillance Regular inspection of the site by NPWS staff, with special attention to the Annex I habitats and Annex II species will identify any major changes, damaging operations, or threats should they arise.

Enforce notifiable actions

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats and species are listed in Appendix V of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area. For example, changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting is a notifiable action for grasslands.

Specific Strategies

Objective 1.

To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; *Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)* (2% of the site), *Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)* (2% of the site) and *Calcareous and calschist scree of the montane to alpine levels (Thlaspietea rotundifolii)* (3% of the site).

Strategies:

- 1.1 Manage grazing on commonages** The impacts of grazing on commonage areas of the site have been assessed by the Commonage Framework Planning Project (Commonage Plans (CPs) SL7N, SL7P, SL7R, SL7S, SL7T and SL7Z). 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 NPWS for each farm and must be achieved within an agreed timescale from the beginning of the REPS/farm planning period.
- If the CP specifies a de-stocking of more than 10%, then de-stocking should occur as indicated. The relevant CPs recommend de-stocking levels between 0% and 40%. This is prescribed at 0% (Cloonagh & Carricknahorna East), 1.2% (Cross & Cloonagh), 2.7% (Tully), 9.5% (Treanmacmurtagh), 35% (Carnaweeleen & Drumnagranshy) and 40% (Treanmacmurtagh). The individual CPs should be consulted for further details.
- The zoning map (Map 4) reflects the findings of the CP assessments and these are specified in the prescriptions for each zone.
- 1.2 Maintain suitable grazing regimes on non-commonage land** NPWS will liaise with landowners regarding the implementation and maintenance of suitable grazing levels on non-commonage grasslands, preferably through implementation of REPS or NPWS farm plans.
- 1.3 Minimise effects of supplementary feeding** Supplementary feeding is a notifiable activity. Levels of supplementary feeding should not be increased. Effects of supplementary feeding, where it occurs, will be monitored by NPWS as part of site surveillance.
- 1.4 Maintain hay meadows** Mowing of meadows for hay should continue where it has been traditionally carried out. NPWS will liaise with landowners in this regard.
- 1.5 Survey Annex I grasslands** NPWS will survey the grasslands within the site to gather further information on their species composition and to assess their conservation status.

Objective 2.

To maintain the Annex I species for which the cSAC has been selected at favourable conservation status; Marsh Fritillary.

- | | |
|--|--|
| 2.1 Maintain habitats for Marsh Fritillary | Strategies that protect and enhance the habitats used by Marsh Fritillary as per strategies under objectives one and three will contribute to the maintenance of this species at the site. |
| 2.2 Assess management requirements for Marsh Fritillary | NPWS will investigate what management is required to produce optimum conditions for the butterfly and will liaise with landowners to implement these as appropriate. |

Objective 3.

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

Strategies:

- | | |
|---|--|
| 3.1 Maintain other habitats | Strategies 1.1, 1.2 and 1.3 also apply to the other habitats within the cSAC. |
| 3.2 Survey notable plant species | NPWS will re-survey known rare plant locations within the site to ascertain current status of these species. |
| 3.3 Facilitate the conservation of the archaeological and interest of the site | The responsibility for the cultural and historical interest of the site lies with the National Monuments Section of DEHLG. NPWS staff will liaise with the Monuments Section as necessary to ensure that both nature conservation and conservation of archaeological features occur in tandem. |

Objective 4.

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

Strategies:

- | | |
|---|---|
| 4.1 Liaise with interested parties | NPWS will strive to initiate and maintain effective liaison with landowners, legal users, relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 4.2 Liaise with REPS planners | REPS planners should consult with local NPWS staff when they are developing plans for land within the site. |

Zoning

Note: Zoning is the division of a nature conservation site and neighbouring areas into a number of sub-units. Four types of zones are identified (not necessarily all occurring within a site): A, B and C are zone types within the site (see Map 4). D is a zone type outside the site where activities may have an impact on the site. The relevant strategies are listed for each site.

Zone A: A Natural Zone

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

1A: NON-INTERVENTION AREAS

1A1: Calcareous and calcschist screes, exposed calcareous rock and non-marine caves

Strategies 3.2, 4.1, 4.2 and the general strategies apply.

1A2: Limestone/marl lake

Strategies 4.1, 4.2 and the general monitoring strategies apply.

1A3: Oak-ash-hazel woodland

Strategies 3.1, 4.1, 4.2 and the general strategies apply.

2A: MAINTENANCE AREAS WITH LIMITED MANAGEMENT INTERVENTION

2A1: Commonage- agricultural units SL7P, SL7R, SL7S and SL7T- Lowland hay meadows, calcareous and calcschist screes, dry calcareous grassland, dry heath, exposed rock, upland blanket bog and wet heath

These areas have been identified in Commonage Plans as being undamaged to moderately undamaged (categories U and MU). See CPs for further details.

Strategies 1.1, 1.3, 1.4, 1.5, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2 and the general strategies apply.

2A2: Non-commonage- Semi-natural grasslands and scrubland facies, lowland hay meadows, dry calcareous grassland, upland blanket bog, wet grassland, wet heath, cutover bog, scrub, dry heath, fen and flush

Strategies 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2 and the general monitoring strategies apply.

Zone B: Active Management

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

B1: Commonage- agricultural units SL7N, SL7Z- Lowland hay meadows, dry heath, dry calcareous grassland

These areas have been identified in CP as being between moderately undamaged to severely damaged (categories MU, M, MS and S). See CP for further details.

Strategies 2.1, 2.2, 3.1, 3.2, 3.3, 4.1, 4.2 and the general monitoring strategies apply.

Zone C: Intensive use Zone

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

C1: Group water scheme infrastructure (pumphouse and filtration plant)

Strategy 4.1 and the general monitoring strategies apply.

Zone D: Impact Zone

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

D1: Group water scheme treatment plant

The reservoir and pressurised sand filtration unit for the Corrick GWS are located at Carricknahorna East, outside the site to the south.

Strategy 4.1 applies.

D2: Slatted shed

Just outside the boundary at Treanmore.

Strategies 4.1 and 4.2 apply.

Summary of Specific Strategies

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

	Strategy	Action required	Who to implement	When/Duration/ Frequency	Estimated Total Cost	Additional Resources needed
1.1	Manage grazing on commonage	Implement Commonage Plan recommendations	DAF/ Landowners NPWS			
1.2	Maintain suitable grazing regimes on non-commonage land	Implement & maintain suitable grazing levels	Landowners/NPWS			
1.3	Minimise effects of supplementary feeding	No increase in levels of supplementary feeding. NPWS to monitor effects	Landowners/NPWS			
1.4	Maintain hay meadows	Traditional mowing should continue	Landowners/NPWS			
1.5	Survey Annex I grasslands	Carry out survey	NPWS			
2.1	Maintain habitats for Marsh Fritillary	Implement strategies for habitat protection & enhancement	Landowners/ NPWS			
2.2	Assess management requirements for Marsh Fritillary	Investigate management required to produce optimum conditions & implement	NPWS/ landowners			
3.1	Maintain other habitats	As per strategies 1.1, 1.2 & 1.3	DAF/ Landowners/NPWS			
3.2	Survey notable plant species	Carry out survey	NPWS			
3.3	Facilitate conservation of archaeological interest of the site	Co-operate with liaison with National Monuments staff	NPWS/ National Monuments			
4.1	Liaise with interested parties	Carry out liaison with landowners, legal users, relevant authorities	NPWS/ Landowners/ other parties			
4.2	Liaise with REPS planners	REPS planners to consult with NPWS staff	REPS planners/ NPWS			

APPENDIX I: GLOSSARY

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.

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

ARABLE LAND – Farmland that includes all areas growing cereals or other crops, ploughed and planted annually.

ASIs - Areas of Scientific Interest. Areas that were identified in the 1970s as being of conservation interest. The NHA designation developed from ASIs.

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

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

BLANKET BOG - Bogs which carpet the landscape, following the underlying topography. They can cover extensive areas along the west coast and on uplands throughout the country.

CAIRN –A mound of stones erected as a memorial or marker, some of which are of historical significance.

CALCAREOUS - Made of or containing calcium carbonate (CaCO₃) and therefore alkaline. limestone for example

CALCICOLE – A plant that requires a lime rich soil

CALCIFUGE – A plant that cannot tolerate lime in the soil and flourishes only on acid soils.

CHERT – A hard siliceous rock that is black or dull in colour, splinters easily, fractures along flat planes and occurs as a band in sedimentary rock such as limestone.

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 – 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.

DCMNR – Department of Communications, Marine and Natural Resources

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

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

EPA – Environmental Protection Agency

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

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

FAUNA - Animal life.

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

FLORA - plant life.

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

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.

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.

HYDROSERE – That succession of vegetation that commences on a soil submerged by fresh water on a lake or river margin. Accumulation of decayed matter eventually raises the soil surface above water level and enables marsh and fen plants to become established.

INVERTEBRATES - Animals without backbones.

IUCN – World Conservation Union

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

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.

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

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

NGOs - Non- Governmental Organisations.

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

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

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

NPWS - National Parks and Wildlife Service

ORGANISM - Any living thing.

PEAT CUTTING BY HAND. - See hand cutting of peat.

PEAT CUTTING BY MACHINE - See mechanical peat extraction.

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.

PTERIDOPHYTE – A phylum of vascular plants that reproduces from spores instead of seeds e.g. ferns, mosses and horsetails.

QUALIFYING INTEREST – Reason for designating the site as a SAC

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

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

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

RENDZINA – Name given to a group of soils that develop on calcareous parent material and have weathered to provide a layer of limestone or chalky fragments.

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.

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."

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

SPAs - Special Protection Areas for Birds are areas 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 NPWS is responsible for ensuring that such areas are protected from significant damage.

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

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).

SWALLOW HOLES - These are holes in a karstic landscape which allow water to drain from the surrounding land when groundwater levels are low, or conversely release water to the surrounding lands when the water table is high. They are often found in association with Turloughs. In some areas they are referred to as Sluggaras.

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

TAXON – Any grouping within the classification of organisms (plural = taxa)

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.

TURLOUGH – A priority habitat listed in Annex I of the Habitat Directive describing temporary lakes in limestone areas which fill and empty through underground passages. Usually filling during the Winter and drying out in the Summer, but often with more rapid fluctuations in response to local rainfall. They are mainly found in counties Clare, Galway and Roscommon. The vegetation of their basins is a mixture of aquatic, terrestrial and especially amphibious plants, usually forming a distinct and characteristic concentric zonation pattern.

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

APPENDIX II: REFERENCE MATERIAL

Map References:

- O.S. 1/2 inch (1:126,720) map: 7
O.S. Discovery (1:50,000) map: 33, 25
O.S. 6 inch (1: 10,560) map: SL 034, SL 039, SL 040

Databases :

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

Photographic Coverage:

- Aerial photo No. 683, 684, Flight Line 24. Date: 05.05.00. NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Relevant Legislation:

- S.I. No. 39 of 1976: Wildlife Act 1976
S.I. No. 38 of 2000: Wildlife (Amendment) Act 2000
S.I. No. 94/1997: European Communities (Natural Habitats) Regulations 1997.
Local Government (Planning and Development) Acts 1963-2002.

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APPENDIX III: CLIMATE

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

Source: Met Éireann

APPENDIX IV: RECORDED MONUMENTS

MONUMENT NO.	DESCRIPTION	NAT. GRID	TOWNL ND
SL06472	Hut site	E171687/N313198	Carnaweeleen
SL05656	Enclosure	E171700/N313209	Carnaweeleen
SL05654	Archaeological complex	E171695/N313213	Carnaweeleen
SL05655	Passage tomb	E171699/N313229	Carnaweeleen
SL05657	Cave	E171698/N313199	Carnaweeleen
SL05936	House	E171770/N313402	Carnaweeleen
SL05653	Hut site	E171826/N313245	Carnaweeleen
SL05917	Limekiln	E174173/N309768	Carrickhawna
SL05778	Passage tomb	E175558/N311368	Carricknahorna East
SL06485	Hut site	E176871/N309851	Carricknahorna East
SL05783	Court tomb	E176378/N310238	Carricknahorna East
SL05779	Passage tomb	E175589/N311284	Carricknahorna East
SL05850	Ringfort - cashel	E175471/N309160	Carricknahorna West
SL05787	Non-monument	E175041/N309870	Carricknahorna West
SL05784	Standing stone	E175299/N311329	Carricknahorna West
SL05782	Cairn	E175557/N309185	Carricknahorna West
SL06483	Enclosure	E175557/N309182	Carricknahorna West
SL05762	Passage tomb	E174837/N312072	Carrowkeel (Ed Templevanny)
SL05764	Passage tomb	E175320/N311940	Carrowkeel (Ed Templevanny)
SL05763	Passage tomb	E175270/N311950	Carrowkeel (Ed Templevanny)
SL05766	Field wall	E175320/N311870	Carrowkeel (Ed Templevanny)
SL05765	Passage tomb	E175320/N311870	Carrowkeel (Ed Templevanny)
SL05767	Megalithic structure	E175344/N311839	Carrowkeel (Ed Templevanny)
SL05769	Passage tomb	E175339/N311735	Carrowkeel (Ed Templevanny)
SL05786	Ringfort - cashel	E175750/N312170	Carrowkeel (Ed Templevanny)
SL05770	Passage tomb	E175311/N311716	Carrowkeel (Ed Templevanny)
SL05771	Passage tomb	E174940/N311600	Carrowkeel (Ed Templevanny)
SL05772	Passage tomb	E174940/N311392	Carrowkeel (Ed Templevanny)
SL05768	Cist	E175360/N311746	Carrowkeel (Ed Templevanny)
SL05923	Hut site	E175830/N312110	Carrowkeel (Ed Templevanny)
SL05761	Passage tomb	E174830/N312098	Cloghogue Lower
SL05553	Ringfort - rath	E170759/N311740	Cloonagh (Corran Barony)
SL05499	Cave	E170594/N312199	Cloonagh (Corran Barony)
SL05868	Ringfort - cashel	E177562/N309702	Cuilsheeghary Beg
SL05867	Hut site	E177573/N309750	Cuilsheeghary Beg
SL05865	Ringfort - rath	E177490/N310070	Cuilsheeghary Beg

SL05866	Ringfort - cashel	E177573/N309750	Cuilsheeghary Beg
SL06537	Children's burial ground	E177570/N309794	Cuilsheeghary Beg
SL06536	Enclosure	E177570/N309794	Cuilsheeghary Beg
SL05864	Enclosure	E177003/N309697	Cuilsheeghary More
SL05919	House	E177018/N309753	Cuilsheeghary More
SL05861	Enclosure	E176945/N309826	Cuilsheeghary More
SL05863	Sweathouse	E176990/N309900	Cuilsheeghary More
SL05862	Non-monument	E176899/N309921	Cuilsheeghary More
SL05859	Hut site	E176996/N310029	Cuilsheeghary More
SL05856	Ringfort - cashel	E176996/N310029	Cuilsheeghary More
SL05858	Hut site	E177001/N310030	Cuilsheeghary More
SL05857	Souterrain	E177000/N310030	Cuilsheeghary More
SL05855	Ringfort - cashel	E176843/N310033	Cuilsheeghary More
SL05854	Ringfort - cashel	E176792/N310129	Cuilsheeghary More
SL03859	Hut site	E176940/N310420	Cuilsheeghary More
SL05794	Ringfort - rath	E177347/N310636	Cuilsheeghary More
SL05803	Enclosure	E176900/N310450	Cuilsheeghary More
SL05860	Ringfort - cashel	E176918/N309873	Cuilsheeghary More
SL05776	Passage tomb	E175943/N311765	Doonaveeragh
SL05788	Hut site	E176800/N311340	Doonaveeragh
SL05777	Cairn	E176055/N311593	Doonaveeragh
SL05913	Road	E176780/N311160	Doonaveeragh
SL05659	Passage tomb	E171289/N312633	Drumnagranshy
SL05727	Ringfort - cashel	E172433/N311103	Greenan
SL05730	Kerb circle	E172483/N311076	Greenan
SL05729	Souterrain	E172438/N311112	Greenan
SL05731	Non-monument	E172520/N310980	Greenan
SL05728	Enclosure	E172463/N311102	Greenan
SL05789	Ringfort - cashel	E177024/N311139	Knockroe (Ed Aghanagh)
SL05792	Ringfort - cashel	E176899/N310807	Knockroe (Ed Aghanagh)
SL05793	Souterrain	E176903/N310807	Knockroe (Ed Aghanagh)
SL05920	Hut site	E176903/N311065	Knockroe (Ed Aghanagh)
SL03860	Ringfort - rath	E176743/N310538	Knockroe (Ed Aghanagh)
SL05801	Field system	E176869/N310500	Knockroe (Ed Aghanagh)
SL05800	Archaeological complex	E176870/N310500	Knockroe (Ed Aghanagh)
SL05922	House	E177087/N311081	Knockroe (Ed Aghanagh)
SL05802	Hut site	E176850/N310450	Knockroe (Ed Aghanagh)
SL05921	Hut site	E176959/N311131	Knockroe (Ed Aghanagh)
SL05790	Souterrain	E177024/N311136	Knockroe (Ed Aghanagh)
SL05785	Settlement	E175800/N311990	Mullaghfarna
SL03848	Cairn	E171306/N311269	Murhy
SL05955	Wedge tomb	E171532/N311836	Murhy
SL05660	Hilltop enclosure	E171290/N312610	Murhy
SL05672	Short cist	E173089/N312184	Treanmacmurtagh
SL05744	House	E173000/N311750	Treanmacmurtagh
SL05741	House	E173000/N311750	Treanmacmurtagh
SL05743	House	E173000/N311750	Treanmacmurtagh
SL05742	Enclosure	E173000/N311750	Treanmacmurtagh
SL05740	Enclosure	E173000/N311750	Treanmacmurtagh
SL05737	Archaeological complex	E172990/N311750	Treanmacmurtagh
SL06535	Limekiln	E172968/N311723	Treanmacmurtagh
SL05934	Hut site	E172960/N311718	Treanmacmurtagh
SL05738	Settlement - deserted	E173010/N311760	Treanmacmurtagh
SL05739	Enclosure	E173000/N311750	Treanmacmurtagh
SL05747	Hut site	E173272/N311587	Treanmacmurtagh

SL06541	Cist	E172853/N312180	Treanmacmurtagh
SL05673	Fulacht fia	E173553/N312111	Treanmacmurtagh
SL05670	Cairn	E172853/N312180	Treanmacmurtagh
SL05929	House	E172949/N311426	Treanmacmurtagh
SL05748	Field system	E173330/N311550	Treanmacmurtagh
SL05930	Field system	E172901/N311651	Treanmacmurtagh
SL05745	Archaeological complex	E173340/N311570	Treanmacmurtagh
SL05933	Enclosure	E172924/N311678	Treanmacmurtagh
SL05749	Enclosure	E173297/N311593	Treanmacmurtagh
SL05746	Cliff-edge fort	E173267/N311594	Treanmacmurtagh
SL06481	Limekiln	E173252/N311594	Treanmacmurtagh
SL05671	Passage tomb	E173094/N312185	Treanmacmurtagh
SL05931	Souterrain	E172901/N311650	Treanmacmurtagh
SL05932	Cultivation ridge	E172901/N311651	Treanmacmurtagh
SL05924	Road	E172790/N311660	Treanmacmurtagh
SL03858	Settlement - deserted	E172257/N311727	Treanmore (Corran Barony)
SL05806	Mill	E172680/N311930	Treanmore (Corran Barony)
SL05807	Quarry	E172640/N312030	Treanmore (Corran Barony)
SL05935	House	E172224/N312047	Treanmore (Corran Barony)
SL05668	Cairn	E172511/N312131	Treanmore (Corran Barony)
SL05927	Hut site	E172431/N311793	Treanmore (Corran Barony)
SL05925	House	E172403/N311488	Treanmore (Corran Barony)
SL05663	Archaeological complex	E172244/N312301	Treanmore (Corran Barony)
SL05665	Hut site	E172240/N312306	Treanmore (Corran Barony)
SL05664	Ringfort - cashel	E172244/N312301	Treanmore (Corran Barony)
SL06578	Enclosure	E172480/N311320	Treanmore (Corran Barony)
SL05662	Enclosure	E172116/N312308	Treanmore (Corran Barony)
SL05666	Hut site	E172235/N312294	Treanmore (Corran Barony)
SL05661	Cairn	E172126/N312403	Treanmore (Corran Barony)
SL05721	Enclosure	E172257/N311727	Treanmore (Corran Barony)
SL05667	Souterrain	E172240/N312294	Treanmore (Corran Barony)
SL03854	Souterrain	E172451/N311746	Treanmore (Corran Barony)
SL05658	Ringfort - rath	E172000/N313019	Treanmore (Corran Barony)
SL03857	Cairn	E172333/N311713	Treanmore (Corran Barony)
SL05720	Hut site	E172257/N311727	Treanmore (Corran Barony)
SL05926	Cairn	E172480/N311340	Treanmore (Corran Barony)
SL03856	Hut site	E172340/N311730	Treanmore (Corran Barony)
SL03855	Hut site	E172444/N311740	Treanmore (Corran Barony)
SL03853	Ringfort - cashel	E172447/N311744	Treanmore (Corran Barony)
SL05687	Quarry	E174170/N312210	Treanscrabbagh
SL05938	Limekiln	E174140/N311200	Treanscrabbagh
SL05758	Ringfort - cashel	E174450/N311131	Treanscrabbagh
SL06482	Enclosure	E174442/N311132	Treanscrabbagh
SL05759	Hut site	E174456/N311136	Treanscrabbagh
SL05760	Hut site	E174463/N311138	Treanscrabbagh
SL05752	Ringfort - cashel	E174380/N311590	Treanscrabbagh
SL05756	Archaeological complex	E174410/N311170	Treanscrabbagh
SL05773	Passage tomb	E174480/N311600	Treanscrabbagh
SL05939	House	E174281/N311231	Treanscrabbagh
SL05757	Enclosure	E174270/N311270	Treanscrabbagh
SL05937	House	E174178/N311308	Treanscrabbagh
SL05755	Enclosure	E174360/N311370	Treanscrabbagh
SL05751	Non-monument	E173930/N311410	Treanscrabbagh
SL05753	Field wall	E174380/N311590	Treanscrabbagh
SL05774	Short cist	E174480/N311600	Treanscrabbagh

SL05750	Ringfort - rath	E173860/N311330	Tully (Corran Barony)
SL05940	Hut site	E174140/N310990	Tully (Corran Barony)
SL05754	Enclosure	E173880/N310770	Tully (Corran Barony)
SL05781	Non-monument	E174560/N310710	Tully (Corran Barony)
SL05780	Cairn	E174256/N310656	Tully (Corran Barony)
SL05928	Non-monument	E172801/N311221	Tully (Corran Barony)

APPENDIX V: NOTIFIABLE ACTIONS

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

- Notifiable Action 2.2 Dry lowland grasslands
- Notifiable Action 2.3 Wet lowland grasslands
- Notifiable Action 2.4 Limestone pavements
- Notifiable Action 3.1 Blanket bog
- Notifiable Action 3.2 Heath (including juniper scrub)
- Notifiable Action 4.1 Raised bog, cutaway bog, bog woodland
- Notifiable Action 4.2 Fens, transition mires, petrifying springs
- Notifiable Action 5.1 Woodlands
- Notifiable Action 5.2 Scrub
- Notifiable Action 6.2 Lakes, ponds, canals
- Notifiable Action 7.1 Ditches, hedges, cereals and intensive grasslands, walls, buildings, waste ground, bare soil, parkland grassland, bracken

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.

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

HABITAT TYPE 2.1

UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting/adding lime</p> <p>adding fertiliser of any sort to areas not previously fertilised applying fertiliser which would increase the level of nitrogen in the soil/ applying fertiliser which would increase the level of phosphorous in the soil applying phosphorous to soils which already have in excess of the REPS index 2 levels</p> <p>using fertiliser on slopes over 25 degrees creation of new tracks or paths</p> <p>burning of vegetation</p> <p>reclamation, infilling, ploughing or land drainage reseeding, planting of trees or any other species rock removal/use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/ introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>commercial turf cutting</p> <p>erecting or operating a windfarm</p>

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

HABITAT TYPE 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.

<u>SECTION A</u>	<u>SECTION B</u>
<p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a Minister for the Marine and Natural licence or consent from another statutory authority (e.g. the local planning authority, the Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>

HABITAT TYPE 2.2

DRY LOWLAND GRASSLANDS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting</p> <p>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 (<i>Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply</i>)</p> <p>burning of vegetation /ploughing or cultivation of lands which have not been so managed for the last 20 years</p> <p>reclamation, infilling, or land drainage/ reseeding, planting of trees or any other species use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p>

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 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.

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

HABITAT TYPE 2.3

WET LOWLAND GRASSLANDS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting</p> <p>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 (<i>Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply</i>)</p> <p>burning of vegetation</p> <p>reclamation, infilling, ploughing or land drainage/ reseeded, planting of trees or any other species use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p>

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 2.4

LIMESTONE PAVEMENT

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.

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

HABITAT TYPE 2.4

LIMESTONE PAVEMENT

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>rock removal or blasting of rock</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>grazing of stock from 1st April to 31st October, except as defined in REPS guidelines</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting/ supplementary feeding of stock, except as defined in REPS guidelines</p> <p>removal of scrub by bulldozer or similar machinery (cutting scrub is permitted)/grazing by sheep</p> <p>adding lime/adding fertiliser or organic material of any sort/ creation of new tracks or paths/</p> <p>burning of vegetation/ reclamation, importing of soil, infilling, ploughing or land drainage/ reseeding, planting of trees or any other species/ use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

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

HABITAT TYPE 3.1

BLANKET BOG

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

Please note that where a landowner has a current approved plan under the Rural Environmental Protection Scheme or any scheme 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.

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 3.1

BLANKET BOG

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines/ introduction of stock to formerly ungrazed areas</p> <p>adding lime/adding fertiliser of any sort</p> <p>creation of new tracks or paths/burning of vegetation/ reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip/ dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

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

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

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

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

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

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines</p> <p>introduction of stock to formerly ungrazed areas</p> <p>adding lime/ adding fertiliser of any sort</p> <p>Creation of new tracks or paths</p> <p>burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>rock removal/cutting turf except from existing banks; no cutting from intact (uncut) areas</p> <p>commercial peat moss or turf extraction</p> <p>use of any pesticide or herbicide, including sheep dip</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area/any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

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

HABITAT TYPE 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.

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

HABITAT TYPE 4.1

RAISED BOG, CUTAWAY BOG AND BOG WOODLAND

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>adding lime/adding fertiliser of any sort</p> <p>creation of new tracks or paths</p> <p>burning areas of vegetation reclamation, infilling, or ploughing /reseeding, planting of trees or any other species/cutting trees or removing timber</p> <p>drainage works on the bog or within the local water catchment area</p> <p>cutting turf or peat moss extraction</p> <p>use of any pesticide or herbicide, including sheep dip</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. botanical tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p> <p>erecting or operating a windfarm</p>

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

HABITAT TYPE 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.

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

HABITAT TYPE 4.2

FENS, TRANSITION MIRES, PETRIFYING SPRINGS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting</p> <p>adding lime within 50m of the fen or a water course running into it</p> <p>adding fertiliser of any sort within 50m or a water course running into it</p> <p>extracting water for irrigation or other purposes</p> <p>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)</p> <p>supplementary feeding of stock</p> <p>operation of boat angling or shore angling business</p> <p>restocking with fish.</p> <p>reclamation, infilling, ploughing or land drainage within 50m of the fen</p> <p>reseeding, planting of trees or any other species within 50m of the fen</p> <p>use of any pesticide or herbicide within 50m of fen</p> <p>dumping, burning or storing any materials within 50m of the fen</p> <p>alteration of the banks, bed or flow of watercourses within the fen or running into or out of it</p> <p>harvesting reed or willow</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the fen</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p>

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.

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

HABITAT TYPE 5.1

WOODLANDS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing by livestock</p> <p>adding lime</p> <p>adding fertiliser of any sort</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>felling of trees, removal of timber</p> <p>removal of foliage, moss or other materials</p> <p>killing ivy</p> <p>use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which may cause pollution of the woodland</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>felling trees or reafforestation</p>

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

HABITAT TYPE 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 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.

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 5.2

SCRUB

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock (as defined in approved farm plans)</p> <p>adding lime /adding fertiliser of any sort</p> <p>reclaiming land covered by scrub; if scrub is cut it must be allowed to regrow</p> <p>reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species</p> <p>felling of trees, removal of timber</p> <p>removal of foliage, moss or other materials</p> <p>killing ivy</p> <p>use of any pesticide or herbicide /dumping, burning or storing any Materials</p> <p>alteration of the banks, bed or flow of watercourses</p> <p>operation of commercial recreation facilities (e.g. walking tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which may cause pollution of the site</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>felling trees or reafforestation</p>

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

HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

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

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

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

HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density as defined in approved farm plans) within 50m of the lake, pond or canal</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock within 50m of the lake, pond or canal</p> <p>adding lime within 50m of the lake, pond or canal /adding fertiliser of any sort within 50m of the lake, pond or canal</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/ restocking with fish.</p> <p>within 50m of the lake, pond or canal: reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species /removal of trees or any aquatic vegetation/use of any pesticide or herbicide in the lake, pond or canal or within 50m of the lake, pond or canal</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them.</p> <p>dumping, burning or storing any materials within 50m of the lake pond or canal including the land spreading of used pesticides (e.g. sheep dip).</p> <p>alteration of the banks, channel, bed or flow of the lake, pond or canal or of watercourses running into or out of it</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the lake, pond or canal</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture Facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

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

HABITAT TYPE 7.1

DITCHES, HEDGES, CEREALS AND INTENSIVE GRASSLANDS, WALLS, BUILDINGS, WASTE GROUND, BARE SOIL, PARKLAND GRASSLAND, BRACKEN, CAVES, OR QUARRIES

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.

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

HABITAT TYPE 7.1

DITCHES, HEDGES, CEREALS AND INTENSIVE GRASSLANDS, WALLS, BUILDINGS, WASTE GROUND, BARE SOIL, PARKLAND GRASSLAND, BRACKEN, CAVES, OR QUARRIES

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>disturbance of bats</p> <p>operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including sports pitches, caravan or camping facilities.</p> <p>developing roads or car parks</p> <p>construction of fences, buildings and embankments</p> <p>afforestation</p>

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

APPENDIX VI: COMPENSATION PROCEDURES

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

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

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

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

Rural Environment Protection Scheme (REPS)

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

NPWS Farm Plan Scheme

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

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

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

APPENDIX VII: FARMING CONDITIONS UNDER REPS

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

General Provisions

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

Detailed Conditions

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

Stocking Density

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

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

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

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

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

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

Supplementary Feeding

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

Use of Fertilisers and Herbicides

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

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

Water Pollution

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

Restricted and Prohibited Practices

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

Complementary Action

(a) Measures to prevent damage by non REPS participants

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

(b) Evaluating and Monitoring

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

(c) Farmer Education /Advice

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

(d) Seminars for Planners

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

(e) Demonstration Farms

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

(f) Quota Rights

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

(g) Scheme Extension

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

(h) Local Co-ordination

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

APPENDIX VIII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

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National Parks and Wildlife Service

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Phone Lo Call 1890 202021, (01) 8882000

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www.npws.ie

CEANTAR SPEISIALTA CAOMHNAITHE
CANDIDATE SPECIAL AREA OF CONSERVATION

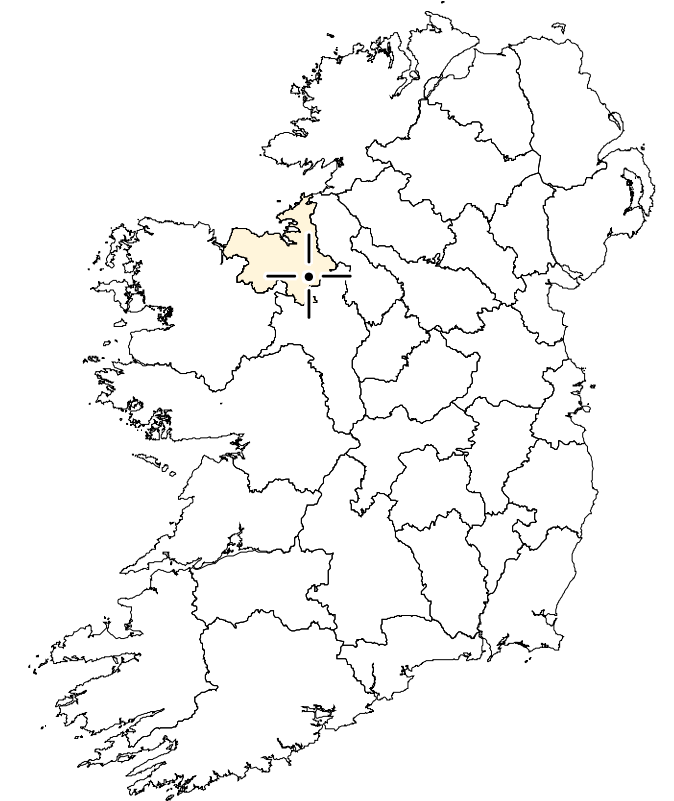
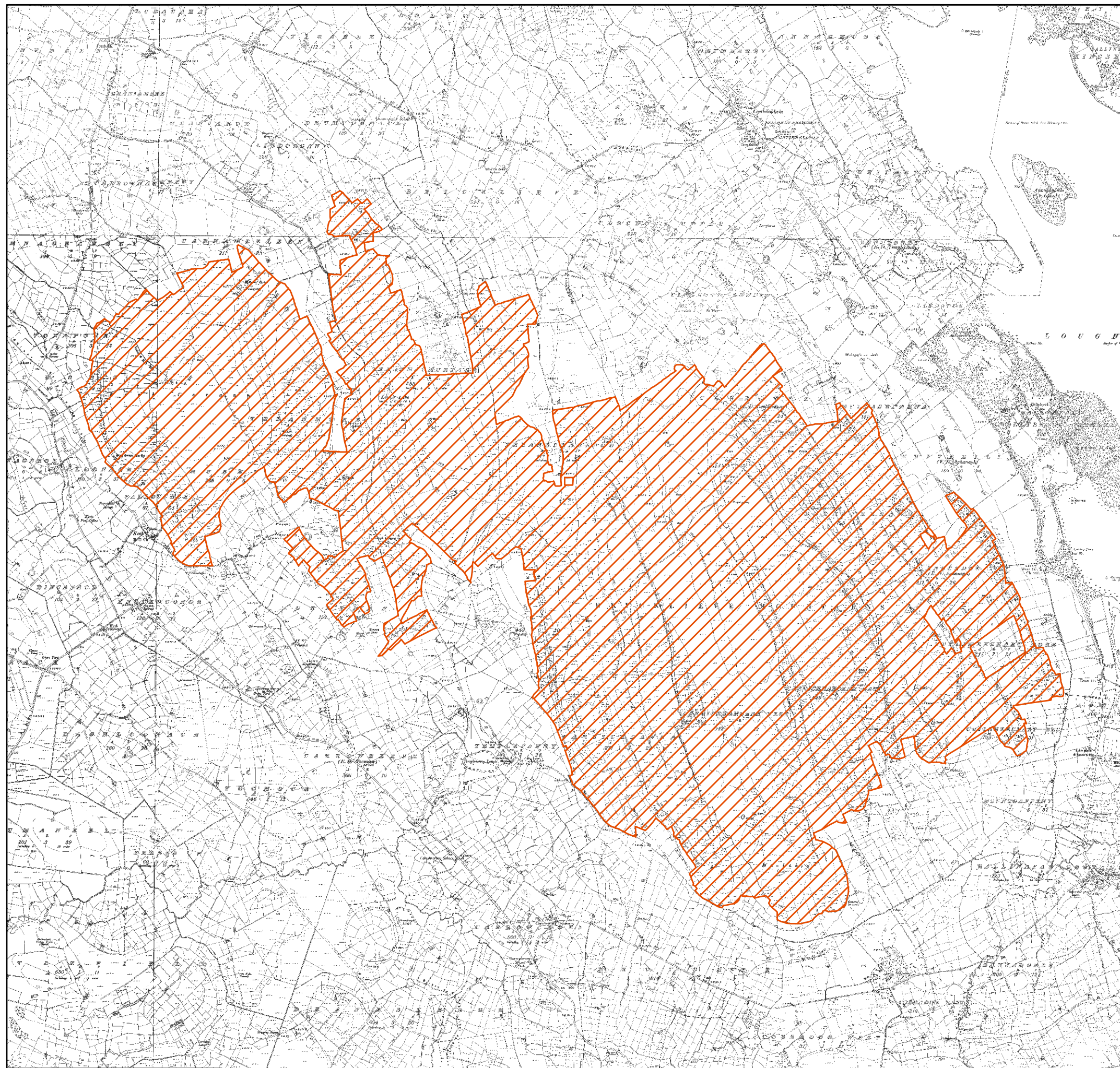
**BRICKLIEVE MOUNTAINS
& KEISHCORRAN 001656**

Boundary Version 1.01
Date: October 2006

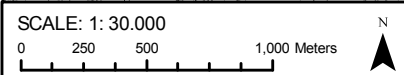
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Féadfar athbheithníthe a déanamh ar theorainneacha na gceantar comharthaithe.
Macasamhail d'ábhar na Suirbhéaracha Ordonáis le chead ón Rialtas (Ceadunas Uimh. 5953)

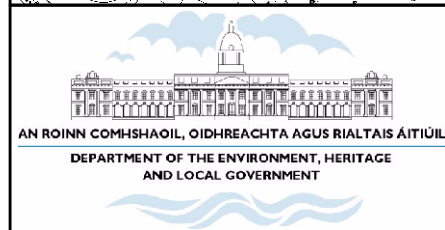
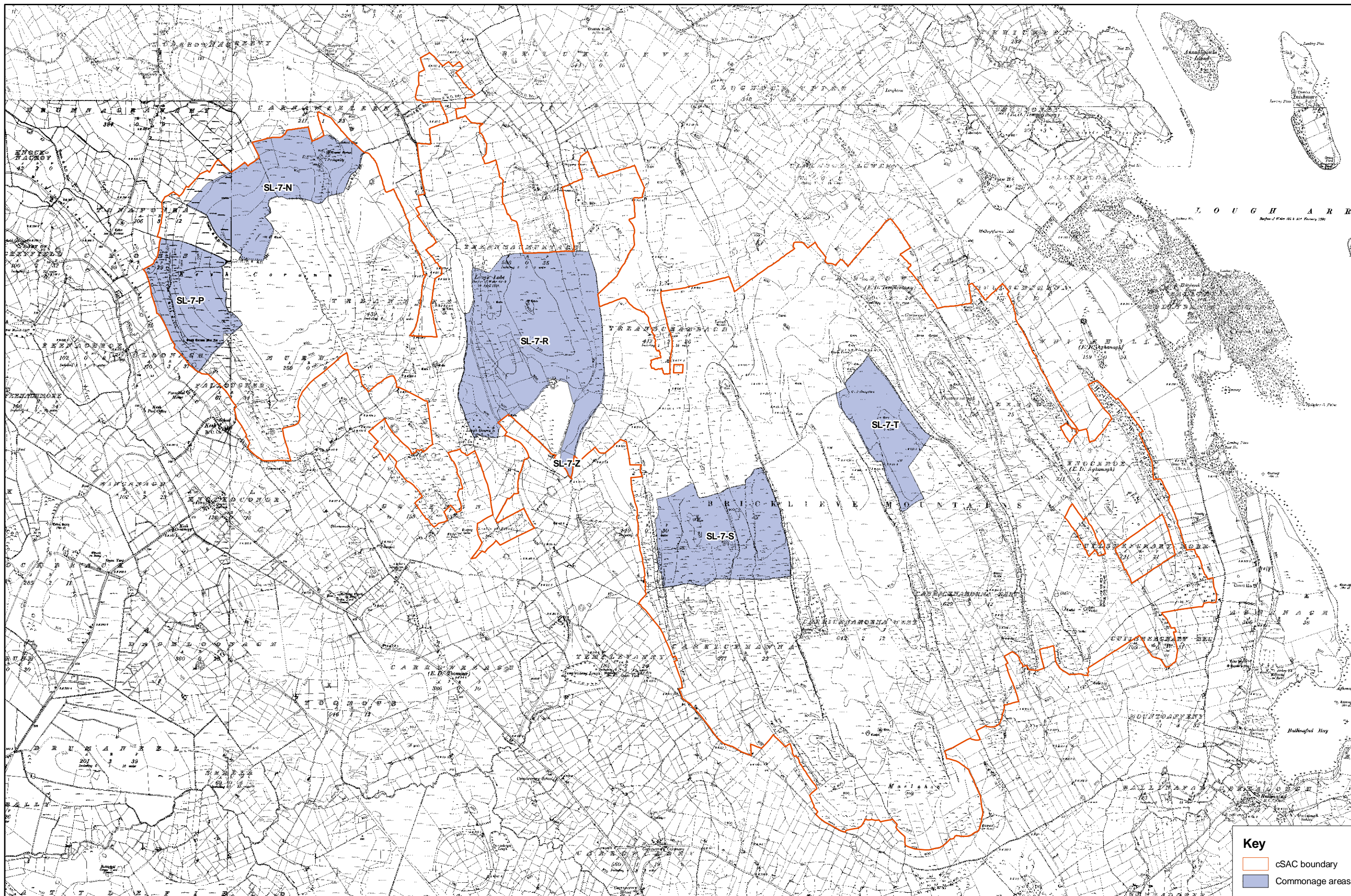


**MAP 1
SITE LOCATION AND BOUNDARY**



Department of Environment, Heritage and Local Government
An Roinn Comhshaoil, Oidhreachta agus Rialtais Áitiúil

Co-financed through 'Life' EU funding
Chomh-mhacoinithe trí chiste 'LIFE' and AE



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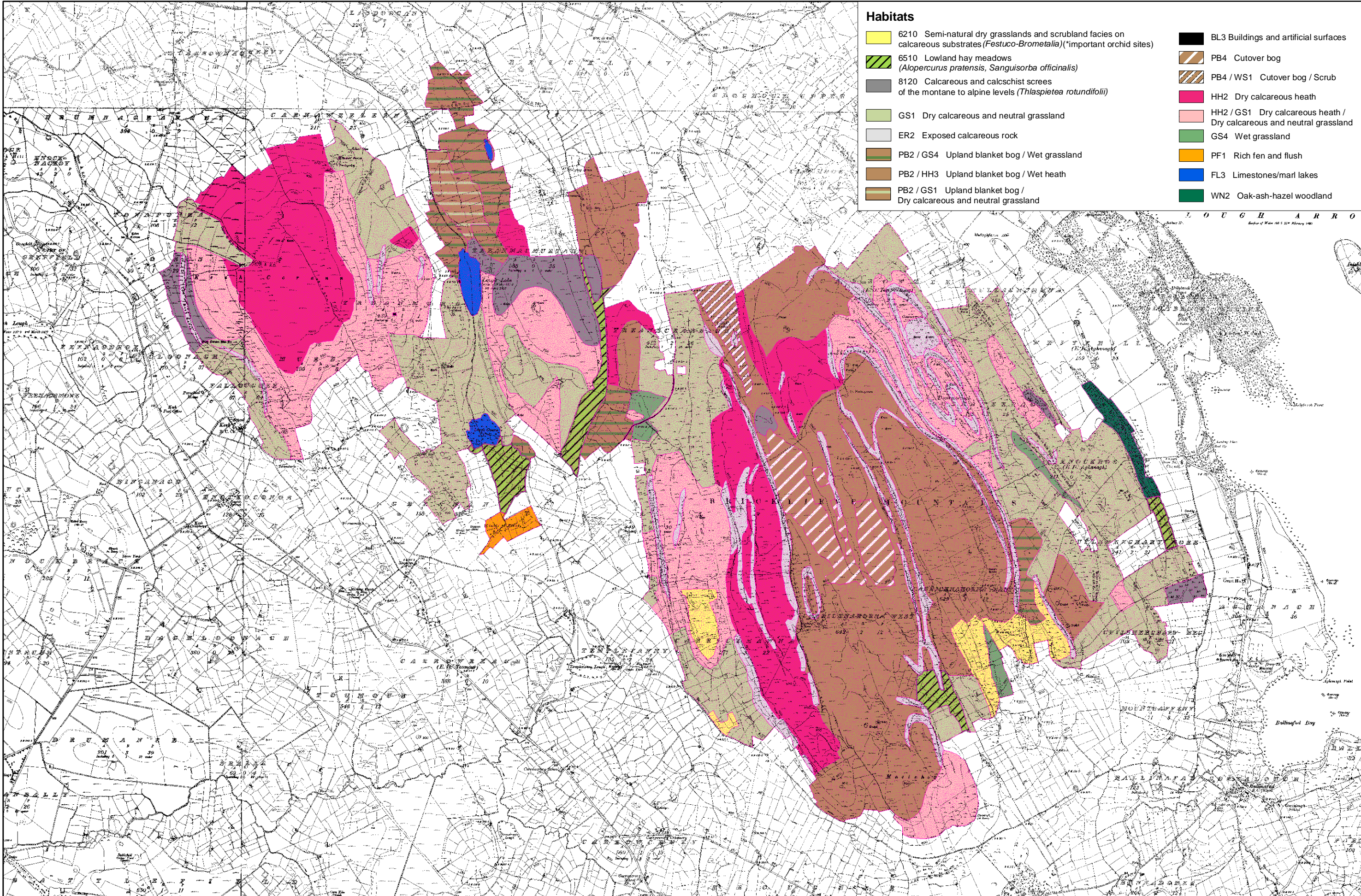
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**MAP 2:
 COMMONAGE**

Map to be read in conjunction with the conservation plan.

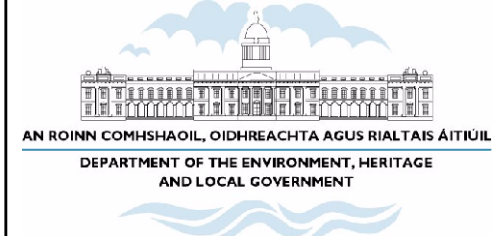
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Date:
 October 2006



Habitats

	6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites)		BL3 Buildings and artificial surfaces
	6510 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)		PB4 Cutover bog
	8120 Calcareous and calcschist screes of the montane to alpine levels (<i>Thlaspietea rotundifolii</i>)		PB4 / WS1 Cutover bog / Scrub
	GS1 Dry calcareous and neutral grassland		HH2 Dry calcareous heath
	ER2 Exposed calcareous rock		HH2 / GS1 Dry calcareous heath / Dry calcareous and neutral grassland
	PB2 / GS4 Upland blanket bog / Wet grassland		GS4 Wet grassland
	PB2 / HH3 Upland blanket bog / Wet heath		PF1 Rich fen and flush
	PB2 / GS1 Upland blanket bog / Dry calcareous and neutral grassland		FL3 Limestones/marl lakes
			WN2 Oak-ash-hazel woodland



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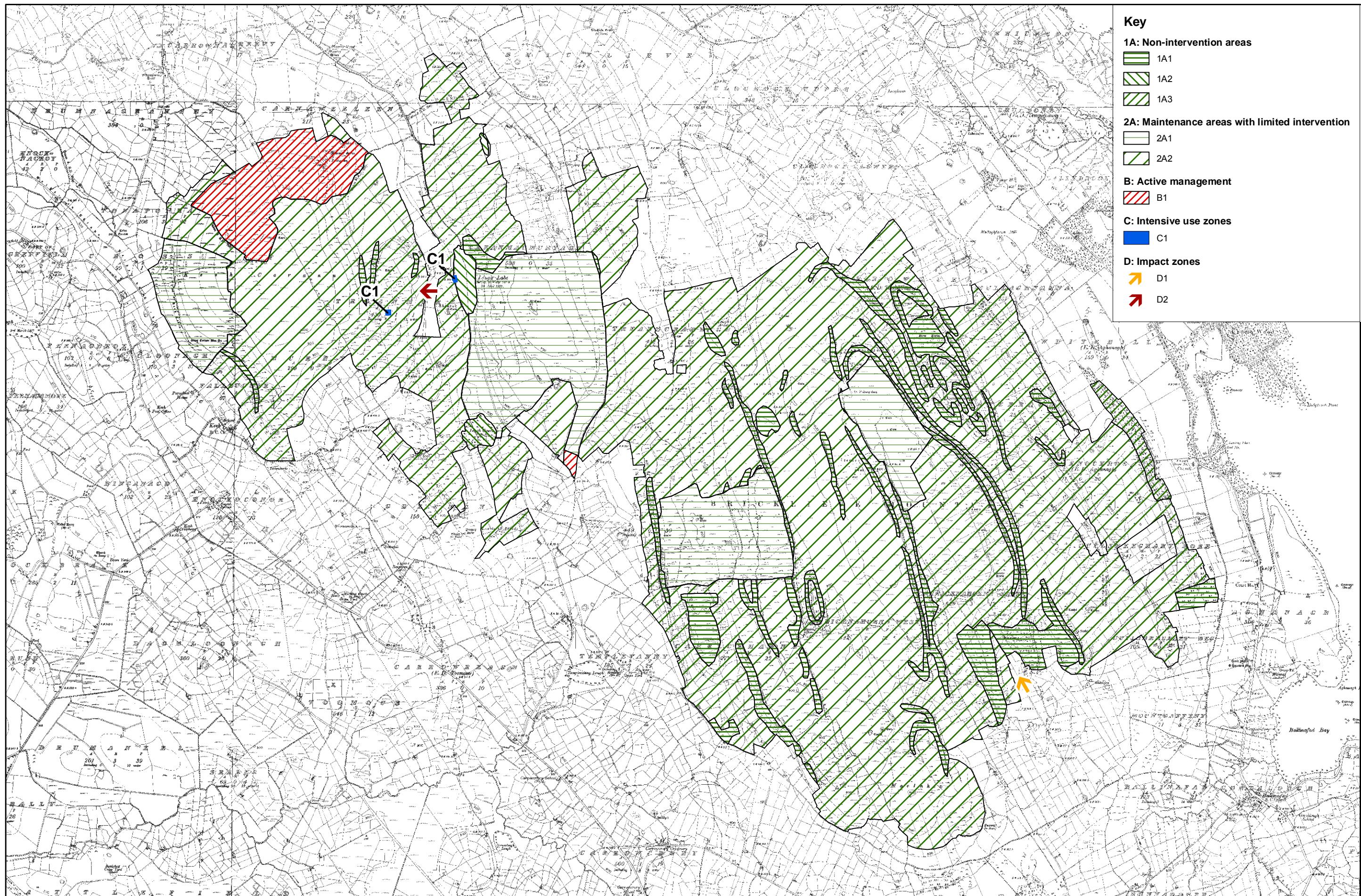
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**MAP 3:
 INDICATIVE HABITAT MAP**

Map to be read in conjunction with the conservation plan.

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Key

1A: Non-intervention areas

- 1A1
- 1A2
- 1A3

2A: Maintenance areas with limited intervention

- 2A1
- 2A2

B: Active management

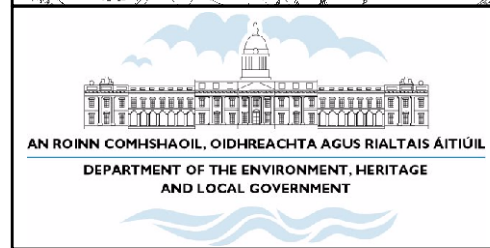
- B1

C: Intensive use zones

- C1

D: Impact zones

- D1
- D2



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MAP 4:
MANAGEMENT ZONES

Map to be read in conjunction with the conservation plan.

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