



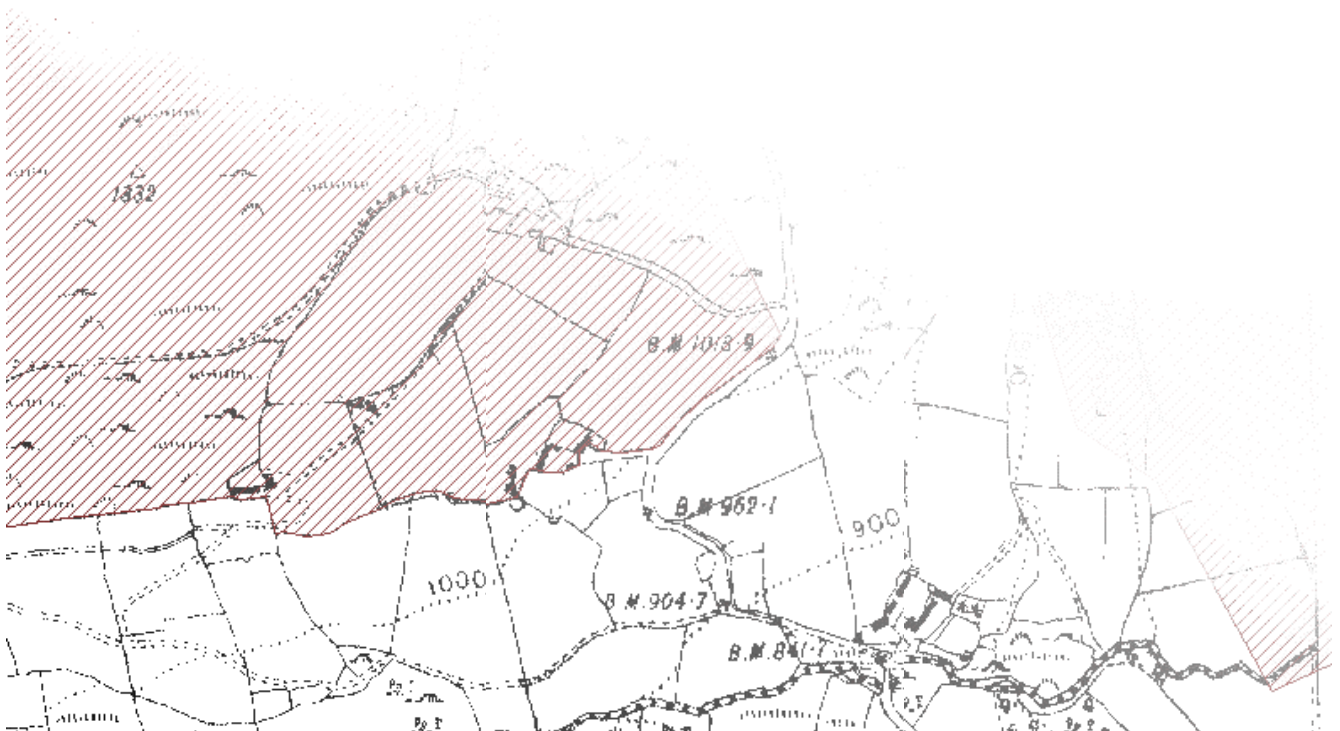
National Parks and Wildlife Service Conservation Plan for 2006-2011



Maulagowna Bog cSAC

Site Code 1881

Co. Kerry



SUMMARY

Introduction

Maulagowna Bog cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site has been designated due to the presence of active blanket bog, which is a priority habitat listed under Annex I of the EU Habitats Directive. It is a good example of a headwater blanket bog, a type of bog that is rare in the south-west of Ireland.

Description of Maulagowna Bog cSAC

Maulagowna Bog is located on the northern edge of the Caha Mountains, Co. Kerry.

The blanket bog is intact and in an apparently natural state. It has the characteristic species for this habitat, including Bog Cotton, Purple Moor-grass, Deer Grass and Ling Heather. In some areas, bog flushes occur, where species such as Sharp-flowered Rush, Bog Pimpernel and Marsh Violet can be found. Blanket bog occurs in association with heath and upland grassland. The heath habitat has similar plant species to the blanket bog, while upland grassland is characterised by the presence of grasses, sedges and mosses. Cummer Lough occurs to the east of the site. This species-poor, corrie lake supports Pipewort, Shoreweed and Water Lobelia. Exposed rock is most noticeable in the cliffs partially surrounding Cummer Lough, where a variety of vegetation types occur. There are several streams within the site.

Chough are present within the site, a species listed under Annex I of the EU Birds Directive.

Sheep and cattle grazing occur. Until recently there was some small-scale turf cutting, north of Cummer Lough. The 'Beara Way' walking route traverses the northern end of the cSAC.

Main conservation objectives

- To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status; Blanket bog (active) (25% area of the site)
- To maintain the extent, biodiversity and species richness of the site
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities

Main management issues

- Grazing
- Lack of information
- Turf cutting
- Walking

Main strategies to achieve objectives

- Manage grazing on commonages
- Maintain/ implement suitable grazing regimes on non-commonage
- Control turf cutting
- Liaise with landowners, Kerry County Council and other relevant bodies

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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 Maulagowna Bog cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> *Active blanket bog (EU Habitat Code 7130) 	This EU priority habitat is intact and in a relatively natural state.

- * denotes Annex I Priority Habitat

Implications of Site Designation for Landowners and other Site Users

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

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

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

SITE DESCRIPTION

Location Including Site Boundaries

The bog is located on the northern edge of the Caha Mountains, overlooking the Kenmare River inlet, Co. Kerry.

Grid Ref.:	V 87 64
Latitude:	N 51°49'00"
Longitude:	W 09°41'60"
Area:	426 ha
Altitude Range:	140 m to 464 m
Townlands:	Derrysallagh, Coornacaragh, Maulagowna, Knocknagorraveela

Site Boundaries

The site is mostly fenced with stream boundaries to the south-west and north-west. The adjacent habitat is mostly mountain heath, but to the north east rough fields adjoin the boundary.

Site Infrastructure

There is a track running through the north-western end of the site. This forms part of the Beara Way walking route.

Legal Status

Ownership

The site is in multiple private ownership, with some unfenced commonage to the south (refer Map 2).

Designations of the Site

candidate Special Area of Conservation	Sitecode IE0001881	Published on 1 st March 1997.
proposed Natural Heritage Area	Sitecode 1881	Published in 1995.

Past Status and Designation of the Site

The site was identified as of ecological interest during the 1991 Blanket Bog Survey.

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 VII) for further details of NPWS regional staff.
Kerry County Council	Kerry County Council is the planning authority for the site. As such they are obliged to ensure appropriate assessment of the implications of developments requiring planning permission that may have an impact, either individually or in combination with other developments on the designated area.
Environmental Protection Agency (EPA)	The EPA is an independent state sponsored body with a wide range of statutory duties including monitoring environmental quality and overseeing the performance by local authorities of their statutory environmental protection functions.
Department of Communications, Marine and Natural Resources (DCMNR)	The DCMNR is responsible for licensing and regulating fishing, aquaculture, commercial and other development below mean high water; and under Regulation 31 of the EU Natural Habitats Regulations, for ensuring that such activities in the cSAC do not adversely affect it. Monitoring functions are carried out by individual divisions of the department and by the executive agencies under its direction namely the Central and Regional Fisheries Boards, The Marine Institute and an Bord Iascaigh Mhara.
Forest Service	The Forest Service is responsible for forest and woodland grants and felling licences. There is commercial forestry directly adjacent to the site to the south-east.

Local Authority Policy in relation to the Site

Cummer Lough (within the site) is mapped as an Area of Secondary Special Amenity in the Kerry County Development Plan (1996). The plan states - *No development will be permitted which would be seriously injurious to the amenities or natural beauty of these areas.* It is not listed as an Area of Ecological Importance because the site was designated after the production of the county development plan. However, the plan states with regard to such areas - *It is the Planning Authority's policy to protect and preserve these and other plants, flowers and animals.*

The draft development plan for Kerry (2003) states *It is the objective to maintain the conservation value of those sites identified....as Special Areas of Conservation as well as any other sites that may be so identified during the lifetime of this plan.*

Physical Features

Climate

The local climate is dominated by the mild Atlantic air-stream that brings mild, moist weather and high rainfall.

The nearest synoptic meteorological station at Valentia Island records (1961-1990) an average daily air temperature of 10.4 °C, an average rainfall of 1430 mm/yr., an average wind speed of 10.9 knots and an average daily sunshine duration of 3.39 hr. A more complete table of meteorological data for Valentia Observatory is given in Appendix III.

Geology & Geomorphology

The underlying bedrock is mostly Old Red Sandstone. There is an amphitheatre of high rocky crags of slatey / schistose rocks enclosing the corrie lake Lough Cummer to its west and south.

Soils & Soil Processes

The blanket bog has significant climatic deep peat areas, (> 1 m) with peaty podzols on the heathy sections and some erosion to mineral soil.

Hydrology & Water Quality

The site is generally waterlogged with small streams emanating from the bog to form larger streams downhill. These eventually flow into Lough Inchiquin in the valley of Glaninchiquin to the west of the site. In the east of the site, small streams flow into and out of Cummer Lough.

Biological Features

Habitats and Vegetation

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

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

Habitats Found within Maulagowna Bog cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
*Active blanket bog (EU Code 7130)	Upland blanket bog (PB2)	25%
-	Wet Heath (HH3)	38%
-	Dry Silicious heath (HH1)	15%
-	Dry humid acid grassland (GS3)	12%
-	Acid oligotrophic lakes (FL2)	5%
-	Exposed siliceous rock (ER1)	3%
-	Eroding/upland rivers (FW1)	1%
-	Dense bracken (>50% cover of bracken) (HD1)	1%

Maulagowna Bog is a small headwater blanket bog in an apparently natural state. The bog lies above (west of) a series of rocky crags that partly surround the corrie lake, Cumber Lough. The core bog area is relatively flat, but towards the north it becomes undulating with rocky outcrops. The core blanket bog occurs in association with heath. Small streams and exposed rock add to the habitat diversity.

Annex I Habitat:

Active blanket bog (EU code 7130) (25% of total site area)

Although the area is small, it is a good example of an intact, head-water blanket bog, a type of bog that is rare in the south-west of Ireland.

The surface is fairly uniform and there are no pools. The peat is soft but not quaking. This habitat is dominated by Bog Cottons (*Eriophorum vaginatum*, *E. angustifolium*), with frequent Purple Moor-Grass (*Molinia caerulea*), Deer Grass (*Trichophorum caespitosus*) and stunted Ling Heather (*Calluna vulgaris*). Also present are Cross-Leaved Heath (*Erica tetralix*), Black Bog-rush (*Schoenus nigricans*), Tormantil (*Potentilla erecta*), Sedges (*Carex* spp.) and occasional Lichen (*Cladonia* spp. including *C. portentosa*), *Sphagnum* mosses (e.g. *S. tenellum*, *S. capillifolium*, *S. cuspidatum*) and Bog Asphodel (*Narthecium ossifragum*). A number of hummocks of the moss *Leucobryum glaucum* and Woolly Hair-moss (*Racomitrium lanuginosum*) occur, and where vegetation is more open, *Campylopus atrovirens* is found.

Active blanket bog (contd)

Flush vegetation occurs amid the areas of blanket bog. Here, Sharp-flowered Rush (*Juncus articulatus*) is common, with Bog Pimpernel (*Anagallis tenella*), Marsh Violet (*Viola palustris*), Marsh St. John's-wort (*Hypericum elodes*), Marsh Thistle (*Cirsium palustre*), Common Yellow Sedge (*Carex demissa*), Pale Butterwort (*Pinguicula lusitanica*) and the mosses *Campylopus atrovirens*, *Sphagnum recurvum* and *Scorpidium scorpioides*.

Other Habitats:**Acid oligotrophic lakes**

Cummer Lough is an oligotrophic corrie lake at an altitude of c. 150 m, while the cliffs to the west and south rise to over 350 m. The lake supports typical flora of Pipewort (*Eriocaulon aquaticum*), Shoreweed (*Littorella uniflora*), Water Lobelia (*Lobelia dortmanna*) and Bulbous Rush (*Juncus bulbosus*). Emergent species include Sharp-flowered Rush, and Common Reed (*Phragmites australis*), with Lesser Spearwort (*Ranunculus flammula*) and Bog Pimpernel occurring commonly at the water's edge.

Dense bracken (>50% cover of bracken)

Areas of dense Bracken are common around the base of the cliffs in the vicinity of Cummer Lough, notably in old fields.

Dry humid acid grassland

Bryophyte-rich acid grassland covers the slopes from Cummer Lough to the base of the nearby cliffs. This grassland is, most likely, in essence dry heath, transformed by past and current grazing and land management practices. Areas of dry heath can still occur here in mosaic with grassland habitat. This grassland is largely dominated by Mat Grass (*Nardus stricta*) with Common Yellow Sedge, Green-ribbed Sedge (*Carex binervis*), Carnation Sedge, Tormentil, Pale Butterwort, Bog Pimpernel, Heath Rush and Sharp Flowered Rush. Other species include Bracken (*Pteridium aquilinum*), Common Bent (*Agrostis tenuis*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Field Woodrush (*Luzula campestris*) and Thistle (*Cirsium* sp.). Mosses present include *Hypnum jutlandicum*, *Sphagnum capillifolium* and Woolly Hair-moss. *Sphagnum*-rich flushes occur commonly in this area.

Dry siliceous heath

To the far north, dry heath is dominated by Ling Heather, which is more profuse than in wet heath and blanket bog habitats. Bilberry (*Vaccinium myrtillus*) can also be found, along with many species already outlined under wet heath. The steeply sloping ground running from the cliff habitat towards Cummer Lough is more grassy. Here, species such as described under upland grassland occur, while Ling Heather is less profuse.

Eroding/upland rivers

A number of small streams occur within the site and form part of both the northern and southern boundaries. They are relatively small and fast flowing. The outflow stream from the lake is fast-flowing and rocky with a series of small waterfalls. Mosses, including *Fontinalis antipyretica*, are abundant on the rocks. Also present are Bulbous Rush, Lesser Spearwort, Pondweed (*Potamogeton* sp.) and Duckweed (*Callitriche* sp.)

Exposed siliceous rock This habitat occurs as rough outcrops of sandstone, notably in the cliffs partially enclosing Cumber Lough. These cliffs support a variety of vegetation types - some areas have a very dense covering of tall Ling Heather and Bell Heather (*Erica cinerea*), while in other areas with water running down the cliffs, dense beds of bryophytes, particularly *Sphagnum* moss, are found. Some sections of the cliffs are dominated by Purple Moor-grass and Woodrush (*Luzula sylvatica*). A few scattered trees of Holly (*Ilex aquifolium*) and Rowan (*Sorbus aucuparia*) grow in cracks and crevices.

Wet heath Wet heath is common throughout the site. It is characterised by Hare's-tail Cotton-grass (*Eriophorum vaginatum*), Purple Moor-grass, Deer Grass, Matgrass (*Nardus stricta*), Autumn Gorse (*Ulex gallii*), Carnation Sedge (*Carex panicea*), Heath Rush (*Juncus squarrosus*), Cross-leaved Heath, Black Bog-rush, some stunted Ling Heather and *Sphagnum* mosses. Greater Butterwort (*Pinguicula grandiflora*) is common, while in more marshy areas, Marsh Pennywort (*Hydrocotyle vulgaris*) occurs. In places, this habitat class occurs as a continuous mosaic with upland grassland and dry heath.

Fauna:

Invertebrates

Three species of damselfly were recorded in 2001 (C. Heardman, *pers. comm.*) i.e. Common Blue (*Enallagma cyathigerum*), Blue-tailed (*Ishnura elegans*) and Large Red (*Pyrrhosoma nymphula*), as well as the dragonfly Four-spotted Chaser (*Libellula quadrimaculata*).

Amphibians and Reptiles

The Common Frog (*Rana temporaria*) occurs. This species is listed under Annex V of the EU Habitats Directive and within the Red Data Book.

Birds

Chough (*Pyrrhocorax pyrrhocorax*), Raven (*Corvus corax*), Wheatear (*Oenanthe oenanthe*), Meadow Pipit (*Anthus pratensis*) and Skylark (*Alauda arvensis*) occur. Chough is listed under Annex I of the EU Birds Directive.



Chough (*Pyrrhocorax pyrrhocorax*)

Peregrine Falcon (*Falco peregrinus*) breed within 3 km of the site within the cliffs above Lough Inchiquin to the west and are likely to utilise the site for hunting and foraging. Peregrine Falcon is also listed under Annex I of the EU Birds Directive.

Mammals

The Irish Hare (*Lepus timidus hibernicus*) is present. This species is listed as internationally important in the Red Data Book and listed under Annex V of the EU Habitats Directive.



Irish Hare (Lepus timidus hibernicus)

Land Use

Land use on the site

Agriculture	Sheep and cattle grazing occurs, mostly on the lower slopes, all year round. Part of the site is commonage (refer Map 2).
Turf cutting	Small-scale, machine turf cutting recently occurred along the northern boundary of the site, above Cumber Lough.
Recreation	The Beara Way, a long distance walking track, passes through the north-western end of the site.

Land use adjacent to the site

Agriculture	Sheep and cattle grazing are the major landuses adjacent to the site.
Forestry	Much of the townland of Inishfoyle is afforested with coniferous trees to the south of Cumber Lough.
Residential and infrastructure	Individual residential dwellings occur in the area. The town of Kenmare is c. 7 km north-east of the site. The main road running along the northern end of the Beara Peninsula is 4 km directly north of the site.
Recreation	The Beara Way long distance walking route continues to the west and east of the site.

Nature conservation Cloonee and Inchiquin Loughs, Uragh Wood cSAC (code 1342) occurs within 3 km west of Maulagowna Bog. This contains the EU Annex I habitats old oak woodland and lowland, oligotrophic lake, as well as the EU Annex II species Killarney Fern (*Trichomanes speciosum*), Slender Naiad (*Najas flexilis*) and Kerry Slug (*Geomalacus maculosus*).

Past human use

Summer cattle grazing of the area was the traditional farming practice. Turf was also cut on a regular basis in places.

Recorded Monuments and Other Features

Two recorded monuments are known from the site, as follows:

MONUMENT NO.	DESCRIPTION	NAT. GRID	TOWNLAND
KE101-016	Enclosure, possible	8798 6376	Derrysallagh
KE101-015	Archaeological complex, including field system and fulacht fia	8764 6467	Derrysallagh Derryvorahig

In the immediate area around Maulagowna Bog, but outside this cSAC, there are a number of other ancient monuments. North of Maulagowna at Derryvorahig and Dromroe there is a stone circle, a cairn, a standing stone and a *fulacht fia* (ancient cooking site). To the west there are two more cairns, two more *fulachta fia* and a megalithic tomb.

CONSERVATION VALUE OF MAULAGOWNA BOG cSAC

The blanket bog on this site is a fairly small headwater bog which is intact and in an apparently natural state. The vegetation has the characteristic species for this habitat. The bog surface is rather uniform, with few hummocks and absence of pools. The bog appears to be hydrologically intact and actively growing. There is no evidence of peat erosion. There are few examples of headwater bogs such as this in the south-west of Ireland.

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 habitat for which the cSAC has been selected at favourable conservation status; Blanket Bog (active) (25% area of the site).

Objective 2: To maintain the extent, biodiversity and species richness of the site.

Objective 3: To establish effective liaison and co-operation with landowners, legal users and relevant authorities.

Management Issues

The following are the main management issues for the site:

- **Grazing**
- **Lack of information**
- **Recreation**
- **Turf cutting**

Grazing

Sheep grazing is causing some localised overgrazing problems on the upland grassland/heath habitat, as evidenced by the condition of the heathers on many of the heathy outcrops. The assessment of Commonage under the Commonage Framework Project (code KE4R) has indicated damage due to overgrazing and has recommended a 37% de-stocking.

Lack of information

Arctic Char (*Salvelinus alpinus*) occurs in corrie lakes similar to Cummer Lough in the region. It may be present within this lake, but has not been surveyed for. The rare alpine species of *Minuartia recurva* is present on cliffs in the Caha Mountains several km to the south-west of this site. Rare arctic-alpine plants / communities may be present on cliffs within the site. However, comprehensive survey work here has not been undertaken.

Recreation

There is the possibility of damage to blanket bog and wet heath habitats as a result of recreational walking. The Beara Way runs through sensitive blanket bog and wet heath habitats.

Turf cutting

There was small-scale cutting of turf, notably north of Cummer Lough. This activity reduces the ecological value of blanket bog and heath habitats.

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.

Establish a monitoring regime

The monitoring regime for the site will comprise:

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

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

Site surveillance Regular inspection of the site by the NPWS staff, with special attention to the active blanket bog will identify any major changes, damaging operations, or threats should they arise.

Enforce notifiable actions

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats and species are listed in Appendix IV of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area. For example, turf cutting, drainage, fertilisation, burning, planting of trees and the construction of tracks are notifiable actions for blanket bog.

Specific Strategies

Objective 1.

To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status; Blanket Bog (active) (25% area 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 Plan (CP) KE4R). These plans recommend de-stocking rates in areas that have been damaged by over-grazing. These rates will be incorporated into REPS plans and /or farm plans produced by DEHLG for each farm and must be achieved within an agreed timescale from the beginning of the REPS/farm planning period

No farmer's stock will be reduced to less than 25 ewes. If the CP specifies a de-stocking level of less than 10%, then no de-stocking is required. If the CP specifies a de-stocking of more than 10%, then de-stocking should occur as indicated. The relevant CP (i.e. KE4R) recommends a de-stocking level of 37% for the agricultural unit (i.e. the single stockproof area of land) concerned. The individual CP should be consulted for further details.

The zoning map (Map 4) reflects the findings of the CP assessment, and these are specified in the prescriptions for each individual zone.

On commonages in six western counties, a stock reduction of 30% was implemented in December 1998 for farmers not already in REPS. This is taken into account when applying Commonage Framework Plans.
- 1.2. **Maintain/ implement suitable grazing regimes on non-commonage**

For non-commonage land, NPWS will seek to ensure that suitable grazing levels are established and/or maintained via liaison with landowners and, if relevant, REPS and NPWS farm plans.
- 1.3. **Control turf cutting**

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

Machine cutting other than the use of 'sausage machines' will normally be permitted, but new banks should not be opened, either by machine or hand.

On particularly sensitive areas of bog, a complete halt to cutting may be required. In such cases compensation will be determined on a case by case basis, but would be in the region of €784.40/ha (£17.43/acre).

Objective 2.

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

Strategies:

- | | |
|---|--|
| 2.1. Grazing management (heath, upland grassland) | See Strategies 1.1 and 1.2 above. |
| 2.2. Control and monitor damaging activities | See general strategies. |
| 2.3. Survey for notable species (lake, exposed rock) | NPWS will seek to commission surveys of Cummer Lough for the presence of Arctic Char and the surrounding cliff habitat for rare arctic / alpine plant species. |

Objective 3.

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

Strategies:

- | | |
|--|--|
| 3.1. Liaise with interested parties | NPWS will strive to initiate and maintain effective liaison with landowners, legal users (particularly through the Liaison Committee), relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 3.2. Liaise with REPS planners | REPS planners should consult with local NPWS staff when they are developing plans for land within the site. |
| 3.3. Liaise with the Forest Service | NPWS will review forestry applications as necessary. |

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

This zone comprises exposed rock, cliffs and Cummer Lough. No intervention is required, but Cummer Lough and the surrounding cliff / exposed rock habitats may be surveyed for Arctic Char and rare arctic / alpine plant species respectively (str. 2.3).

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: This zone comprises privately owned land requiring grazing impact assessment (str. 1.2, 2.1) and control of potentially damaging activities, notably turf cutting (str. 1.3, 2.2).

B2: This zone consists of commonage land. Here a de-stocking of 37% is required based on the grazing impact assessment carried out by the Commonage Framework Plan (KE4R). Strategy 1.1 applies.

Zone C: Intensive use Zone

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

C1: This zone comprises a rough track. Upgrading or alterations should not occur without prior consultation with NPWS.

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 commonages	Implement Commonage Framework Plan KE4R	REPS planners			
1.2	Maintain/ implement suitable grazing regimes on non-commonage	Establish/maintain suitable grazing levels through liaison, REPS/NPWS farm plans.	REPS/Farm planners			
1.3	Control turf cutting	Machine cutting (except the use of 'sausage machines') in areas of current active cutting will normally be permitted.	NPWS / REPS planners			
2.1	Grazing management (heath, upland grassland)	As 1.1, 1.2 above.	-			
2.2	Control and monitor damaging activities	Refer General Strategies	-			
2.3.	Survey for notable species (lake, exposed rock)	Seek to commission surveys of Cummer Lough for Arctic Char and the surrounding cliffs for rare arctic / alpine species.	NPWS			
3.1.	Liaise with interested parties	NPWS will strive to maintain effective liaison with landowners, relevant authorities and interested parties.	NPWS			
3.2.	Liaise with REPS planners	REPS planners should consult with local NPWS staff when they are developing plans for land within the site.	REPS planners			
3.3.	Liaise with the Forest Service	NPWS will review forestry applications as necessary.	NPWS			

APPENDIX I:

GLOSSARY

ABIOTIC FACTORS – Non-living factors such as geology and climate.

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

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

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

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

ALGAE - Simple plants that are not differentiated into roots, stems and leaves and have no true vascular system. They can be microscopic, or very large and are capable of photosynthesis. They can be found in most habitats but the majority occurs in freshwater or marine environments.

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.

ANCILLARY - Related/supplementary matters.

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

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

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

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

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

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

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

AQUATIC ENVIRONMENT – Rivers, streams, lakes, ponds, springs and features that depend on natural waters e.g. marsh, bogs and wetlands.

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

ASSEMBLAGE - A collection of organisms.

ATYPICAL - Not typical/uncommon.

AVIFAUNA – Birds

BASE POOR SOILS - Soils that only slowly release the dissolved chemicals or minerals contained within them.

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

BILATERAL - Affecting or undertaken by two parties; mutual.

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.

BIOTIC FACTORS – The influence of living components of the environment on organisms.

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.

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

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

CENSUS - An official periodic count of a population.

CHEMICAL WEATHERING - The processes of weathering in which chemical reactions transform rocks and minerals into new chemical combinations that are stable under conditions prevailing at or near the Earth's surface.

COARSE FISH - Freshwater fish other than Salmon or Trout.

COLEOPTERA - Beetles.

COLONISATION - The entry and spread of a species into an area, habitat or population from which it was formerly absent.

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.

CONTIGUOUS - Touching along the side or boundary.

CORINE - An information and mapping system, developed within the context of the Commission of the European Communities biotope project, which is used as a tool for the description of sites of importance for nature conservation in Europe. It catalogues recognisable communities of flora and fauna. The primary objective of this catalogue is to identify all major communities whose presence contributes to the conservation significance of a site. Included in this list of communities are interesting but rare natural or near-natural communities as well as the more widespread semi-natural ones.

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

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.

ECOTOPE - The abiotic environment or habitat of a particular biotic system.

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

EPHEMEROPTERA - Mayflies

EMPIRICAL - Derived from or relating to experiment/ observation rather than theory.

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

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

EPA – Environmental Protection Agency

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

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

EUTROPHICATION - The nutrient enrichment of aquatic ecosystems usually by phosphates and nitrates. It may occur naturally but can also be the result of human activity (fertiliser run-off/ sewage discharge/ seepage from silage etc.).

EVALUATION - A considered or measured assessment of available information leading to a ranking or valuing.

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

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

FAUNA - Animal life.

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

FINFISH - the collective term used to describe salmon, trout, arctic charr, eels and turbot.

FLOATING VEGETATION OF RANUNCULUS OF PLAIN (OR SUBMOUNTAINOUS RIVERS) - an Annex I Habitat listed under the EU Habitats Directive. This habitat refers to water courses of plain to montane levels, with submerged or floating vegetation of *Ranunculus fluitans* (Water-crowfoot) and *Callitriche* spp. or aquatic mosses.

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.

FORESHORE – That part of the shore below the high water. The foreshore is in most cases owned by the State.

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.

FRAGILITY - Refers to how robust a site/habitat/species is.

FRY - Fish which are less than 1 year old.

GAME FISH - Salmonoid fish, i.e. Trout and Salmon.

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

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

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

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

HANGING VALLEY - Geological term, describing a U-shaped valley, generally elevated above most of the surrounding landscape.

HERBACEOUS - Seed plants with non-woody green stems.

HERBICIDE - A chemical or biological preparation which kills plants.

HETEROGENEOUS - Consisting of dissimilar parts (the opposite of homogenous).

HOMOGENOUS - Consisting of similar parts (the opposite of heterogeneous).

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

HYDROCHEMICAL MONITORING - Observing the chemical composition of water over a period of time usually carried out for detailed studies of raised bogs.

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.

I-WeBS - Irish Wetland Bird Survey, published by Birdwatch Ireland, summarises winter waterfowl counts from 923 sites in the Republic of Ireland.

IMPEDED DRAINAGE - A limited through flow of water.

IMPERMEABLE - Does not allow the passage of water.

INSECTICIDE - A chemical preparation which kills insects.

INVERTEBRATES - Animals without backbones.

IUCN – World Conservation Union

KNOLL - A small rounded hill.

LAGG - a term used to describe the transition from bog to mineral soil around a raised bog.

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

LEPIDOPTERA - Moths and butterflies.

LEVELLING - A process carried out to establish the gradient of sloping ground.

LIAISON COMMITTEE - This is a special group set up to discuss the contents of a conservation management plan and the implementation of the plan. The committee will include representation of landowners, right-holders and other interest groups. It shall be the function of the committee to advise NPWS managers on the interaction between site conservation management and local interests. The Liaison Committee will nominate a member to the official Appeals Board which will consider appeals against site designation and other issues. The Liaison Committee will be independent from the NPWS .

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

LITTORAL ZONE - A zone at the edge of a lake or ocean that is periodically exposed to the air and is periodically immersed in water.

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

LOCHANS - An aquatic feature which comprises a thin peaty substrate overlying quartzite bedrock, with the only visible vegetation being filamentous green algae. These are commonly used by frogs for spawning.

MACRO INVERTEBRATES - Small aquatic animals such as insects, snails and worms which live in aquatic environments.

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.

MANAGEMENT AGREEMENTS - The Wildlife Act, 1976, enables DEHLG to enter into voluntary management agreements with private landowners. Under these agreements landowners will manage their lands to ensure that desirable wildlife habitats and species are protected. Payment for such responsible management may be agreed. However, the number and type of such agreements will vary depending on the resources available to the National Parks and Wildlife at the time.

MARGINAL VEGETATION - At or near the margin or border, often used to describe the vegetation at the edge of a lake or river.

MARINE - Found in, or relating to the sea.

MARITIME - Relating to, or near the sea.

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).

MECHANICAL WEATHERING - The processes of weathering by which frost action, salt-crystal growth, absorption of water, and other physical processes break down a rock to fragments, involving no chemical change. See also chemical weathering.

MICRO CLIMATE -The climate within a very small area, usually close to the ground, where the ground surface affects the climate.

MICROHABITAT - The precise location within a habitat of an organism, usually distinguished by its own set of environmental conditions.

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

MINEROTROPHIC MIRE - A peatland system that is fed by ground water.

MITIGATE - To make or become less severe or harsh / moderate.

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

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

MUDSTONE - Fine-grained sedimentary rock, formed from mud.

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

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

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

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

NATURALNESS - Refers to how much or little a site/habitat/species has been modified by mankind.

NATURE RESERVES (NRs) - Under National legislation, the Wildlife Act of 1976, a number of sites have been designated as Nature Reserves. These areas are mainly owned by the NPWS and are managed for the purposes of conservation.

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.

NICHE – The functional position of an organism within its environment, i.e. where individuals of a species can survive grow and reproduce.

NO SHOOTING AREAS - These areas are also referred to as Wildfowl Sanctuaries and are areas that have been excluded from the “Open Season Order” so that game birds can rest and feed undisturbed. Shooting of game birds is not allowed in these areas.

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

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

NPWS - National Parks and Wildlife Service

OLIGO – Prefix denoting few or little

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

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

OPEN SEASON – A specified period of time when a specified quarry species may be hunted.

ODONATA – Dragonflies and Damselflies.

ORGANISM - Any living thing.

OS – Ordnance Survey

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

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

PEAT CUTTING BY MACHINE - See mechanical peat extraction.

PER-ANNUUM - Each year.

PERENNIAL - Referring to plants that live for two years at least.

PERIPHERY - Distant from the centre, on the fringe/edge.

PERMEABILITY - The capacity of a rock to transmit fluid.

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

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

PLECOPTERA - Stoneflies.

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.

PRIVATE OWNERSHIP - Land which is owned by one private landowner.

PROGRAMME - When several closely related tasks are grouped together to achieve an objective.

RAISED BOG - A priority habitat listed in Annex I of the EU Habitats Directive. Raised bogs are characterised by an elevated dome of peat, the surface of which is isolated from the surrounding ground water table and receiving water solely from precipitation. The peat surface is wet, often

with pools and hummock hollow systems and is usually dominated by *Sphagnum* mosses and bushy Heather, with Deer-grass, Bog Cottons and other associated species.

RAMSAR CONVENTION - The convention on Wetlands of International Importance especially as Waterfowl Habitat. Ireland ratified in 1984.

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.

RARITY - Refers to how common or scarce a site/habitat/species is.

RECHARGE - The downward movement of water from the soil to the water table.

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

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

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

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

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

REPS - Rural Environmental Protection Scheme. This is an Agri-Environmental programme which seeks to draw up agreements with farmers, according to the type of farming, landscape and features on the land. The overall objectives of REPS are to achieve: the use of farming practices which reduce the polluting effects of agriculture by minimising nutrient loss- an environmentally favourable extensification of crop farming, and sheep farming and cattle farming; - ways of using agricultural land which are compatible with protection and improvement of the environment, the countryside, the landscape, natural resources the soil and genetic diversity; - long-term set-aside of agricultural land for reasons connected with the environment; - land management for public access;- education and training for farmers in types of farming compatible with the requirements of environmental protection and upkeep of the countryside.

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

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."

SALINITY - a measure of the concentration of salt in water in parts per thousand.

SCARCE - This is an ecological term, which is applied to distribution of species when assessed on a national grid reference system. The assessment is made on the basis of the number of occupied 10 km National Grid squares. Scarce applies to 11-25, 10 km squares in this context.

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

SCRAGH - a floating mat of vegetation.

SEDIMENT - Solid particles that can originate by the weathering and erosion of pre-existing rock, by chemical precipitation from water, or by the breakdown of organisms.

SEDIMENTARY - Formed by the deposition of sediment, i.e. rock particles or chemical precipitate, or pertaining to the process of sedimentation.

SEVERELY HANDICAPPED AREA - An EU designation which allows farmers within these areas to avail of extra headage payments and premium payments.

SHALE - Fine-grained sedimentary rock, like mudstone but with an irregular parting.

SHELLFISH - The collective term used to describe mussels, oysters, clams, scallops, abalone and sea urchins.

SLATE - metamorphic rock possessing a well-developed planar cleavage such that it splits into thin slabs or “slates”.

SMOLT - at a particular stage of their development, young Salmon and Sea Trout migrate to the sea, at which stage they are known as smolts.

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.

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

STRATIFICATION - Arrangement in layers: differentiation of horizontal layers in soils.

SUB-LITTORAL - A biological term used to indicate an aquatic zone below the littoral zone. In marine environments this zone is the shallow water from the extreme low tide, level to a depth of approximately 200 m.. In lakes and ponds this zone begins where the depth of water prohibits rooted plants from growing.

SUCCESSION - The non-seasonal, directional continuous pattern of colonisation and extinction on a site by populations.

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

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

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

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

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

TERRAIN - A piece of ground which is usually described by its physical character, i.e. rocky terrain.

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

TILL - Unconsolidated, unsorted glacial deposits.

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

TRADITIONAL MANAGEMENT PRACTICES Land management practices which were carried out prior to the 1950s. These practices were often less intensified than today’s management

practices. In REPS prescriptions traditional means an activity which has been carried out for a specified number of years on a site (usually 10 years).

TRAWL - A large fishing net, usually in the shape of a sock or bag, drawn at deep levels behind special boats called trawlers.

TRICHOPTERA - Caddis-flies.

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

TURBARY – Refers to the right to harvest turf.

TYPICALITY - Assessment of whether a site is typical of the habitat it represents.

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

VASCULAR - Consisting of, or containing vessels adapted for the carriage or circulation of fluid, in plants refers to xylem and phloem.

VERTEBRATES - Animals with backbones.

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

WEATHERING - The process by which rocks are broken down and decomposed by the action of wind, rain temperature changes, plants and bacteria. See also chemical and mechanical weathering.

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

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

APPENDIX II: REFERENCE MATERIAL

Map References:

O.S. 1/2 inch (1:126,720) map:	24
O.S. Discovery (1:50,000) map:	85
O.S. 6 inch (1: 10,560) map:	KE101b

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:

Geological Survey of Ireland (1973): 49V.

Ordnance Survey (1995): 64 - 8693 / 8692

Ordnance Survey (2000): 2482.

Oblique photographs (NPWS): Film 1152, frames 17-19.

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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European Commission. 1999. *Interpretation Manual of European Habitats Eur 15/2*

Fossitt, J.A. 2000. *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny.

Gardiner, M. J. and Ryan, P. 1969. *A new generalised soil map of Ireland and its land-use interpretation*. An Foras Taluntais, Wexford.

Kerry County Council. 1996. *Kerry County Development Plan*.

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

- McGarrigle, M., Bowman, J., Clabby, K., Lucey, J., Cunningham, P., MacCarthaigh, M., Keegan, M., Cantrell, B., Lehane, P., Clenaghan C. and Toner, P. 2002. *Water quality in Ireland 1998 - 2000*. Environmental Protection Agency.
- Rohan, P. K. 1986. *The Climate of Ireland*. (Meteorological Service).
- Webb, D.A., Parnell, J. and Doogue, D. 1996. *An Irish Flora*. Dundalgan Press, Dundalk.
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APPENDIX III: CLIMATE

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

Source: Met Eireann

APPENDIX IV: NOTIFIABLE ACTIONS

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

- Notifiable Action 2.1 Upland grassland, scree, inland cliff
- Notifiable Action 3.1 Blanket bog
- Notifiable Action 3.2 Heath
- Notifiable Action 6.1 Rivers and streams
- Notifiable Action 6.2 Lakes and ponds

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.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in Section B overleaf may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 2.1

UPLAND GRASSLAND, SCREE, AND INLAND CLIFF

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

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

HABITAT TYPE 3.1

BLANKET BOG

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

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

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 3.1

BLANKET BOG

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

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

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

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

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

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density or type of stock (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock, except as defined in REPS guidelines</p> <p>introduction of stock to formerly ungrazed areas</p> <p>adding lime/ 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 6.1

RIVERS OR STREAMS

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

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

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 6.1

RIVERS OR STREAMS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans) within 30m of the river or stream/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream</p> <p>supplementary feeding of stock within 30m of the river or stream/adding lime within 30m of the river or stream/adding fertiliser of any sort within 30m of the river or stream</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/restocking with fish</p> <p>reclamation, infilling, ploughing or land drainage within 30m of the river or stream/ reseeding, planting of trees or any other species within 30m of the river or stream/ removal of trees or any aquatic vegetation within 30m of the river/stream/ use of any pesticide or herbicide in the river or stream or within 30m of the river or stream</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them</p> <p>dumping, burning or storing any materials within 30m of the river/stream including the land spreading of used pesticides (e.g. sheep dip)/alteration of the banks, channel, bed or flow of the river or stream</p> <p>harvesting or burning of reed or willow.</p> <p>causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours)</p> <p>introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>any activity which might cause pollution of the river or stream</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>construction or operation of an aquaculture facility.</p> <p>fishing for eels or salmon</p> <p>bank maintenance and grading</p> <p>creation of weirs and dams</p>

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

HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

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

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

<p><u>SECTION A</u></p> <p>Please note that the activities listed in <i>Section A overleaf</i> are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in <i>Section B overleaf</i> may, and in most cases do, require a license or consent from another statutory authority (e.g. the local planning authority, the Minister for the Marine and Natural Resources, or the Minister for Agriculture and Food).</p> <p>If so, these notifiable actions do not apply.</p> <p>However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.</p>
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HABITAT TYPE 6.2

LAKES, PONDS AND CANALS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density as defined in approved farm plans) within 50m of the lake, pond or canal</p> <p>grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>supplementary feeding of stock within 50m of the lake, pond or canal</p> <p>adding lime within 50m of the lake, pond or canal /adding fertiliser of any sort within 50m of the lake, pond or canal</p> <p>extracting water for irrigation or other purposes</p> <p>operation of boat angling or shore angling business/restocking with fish.</p> <p>within 50m of the lake, pond or canal: reclamation, infilling, ploughing or land drainage</p> <p>reseeding, planting of trees or any other species /removal of trees or any aquatic vegetation/use of any pesticide or herbicide in the lake, pond or canal or within 50m of the lake, pond or canal</p> <p>dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into 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.

APPENDIX V: COMPENSATION PROCEDURES

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

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

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

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

Rural Environment Protection Scheme (REPS)

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

NPWS Farm Plan Scheme

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

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

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

APPENDIX VI: FARMING CONDITIONS UNDER REPS

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

General Provisions

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

Detailed Conditions

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

Stocking Density

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

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

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

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

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

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

Supplementary Feeding

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

Use of Fertilisers and Herbicides

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

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

Water Pollution

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

Restricted and Prohibited Practices

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

Complementary Action

(a) Measures to prevent damage by non REPS participants

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

(b) Evaluating and Monitoring

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

(c) Farmer Education /Advice

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

(d) Seminars for Planners

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

(e) Demonstration Farms

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

(f) Quota Rights

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

(g) Scheme Extension

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

(h) Local Co-ordination

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

APPENDIX VII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

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National Parks and Wildlife Service

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Email: jervis.good@environ.ie

National Parks and Wildlife Service

The Department of the Environment, Heritage
and Local Government

7 Ely Place

Dublin 2

Phone Lo Call 1890 202021, (01) 8882000

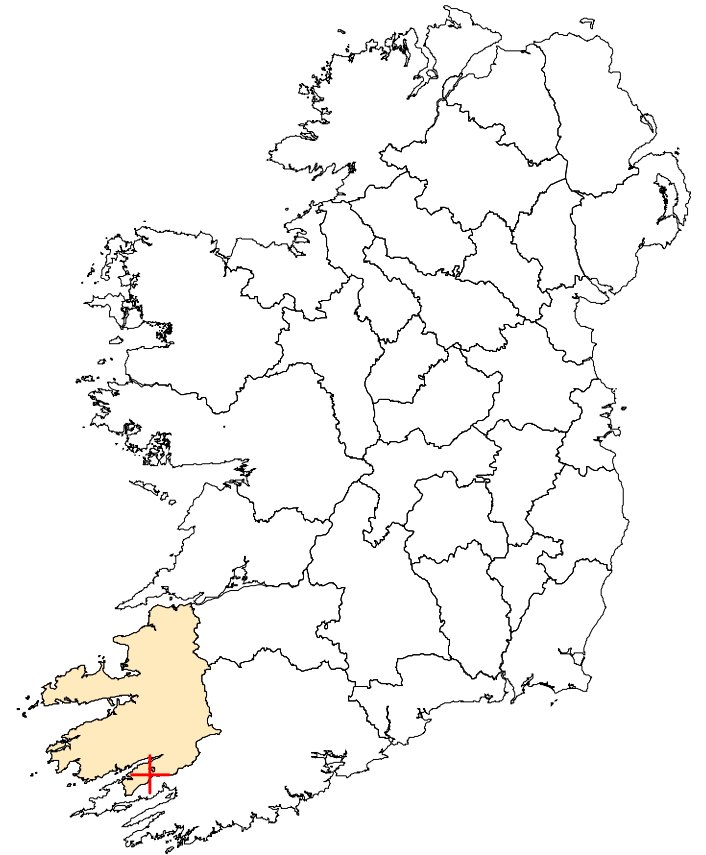
Fax (01) 8883272

www.npws.ie

CEANTAR SPEISIALTA CAOMHNAITHE
CANDIDATE SPECIAL AREA OF CONSERVATION

MAULAGOWNA BOG 001881
Version 1.00 Date: August 2006

Féadtar athruithe a chur an na ceantair / Sites subject to revision
(Ní thaispeántar suímh gur de speis géolaíoch amháin iad) / (Sites solely of geological interest not shown)
Reproduced from Ordnance Survey material by permission of the Government (Permit Number 5953)
Macasamhail d'ábhar na Suirbhéarachta Ordonáis le cead ón Rialtas (Ceadúnas Uimh 5953)

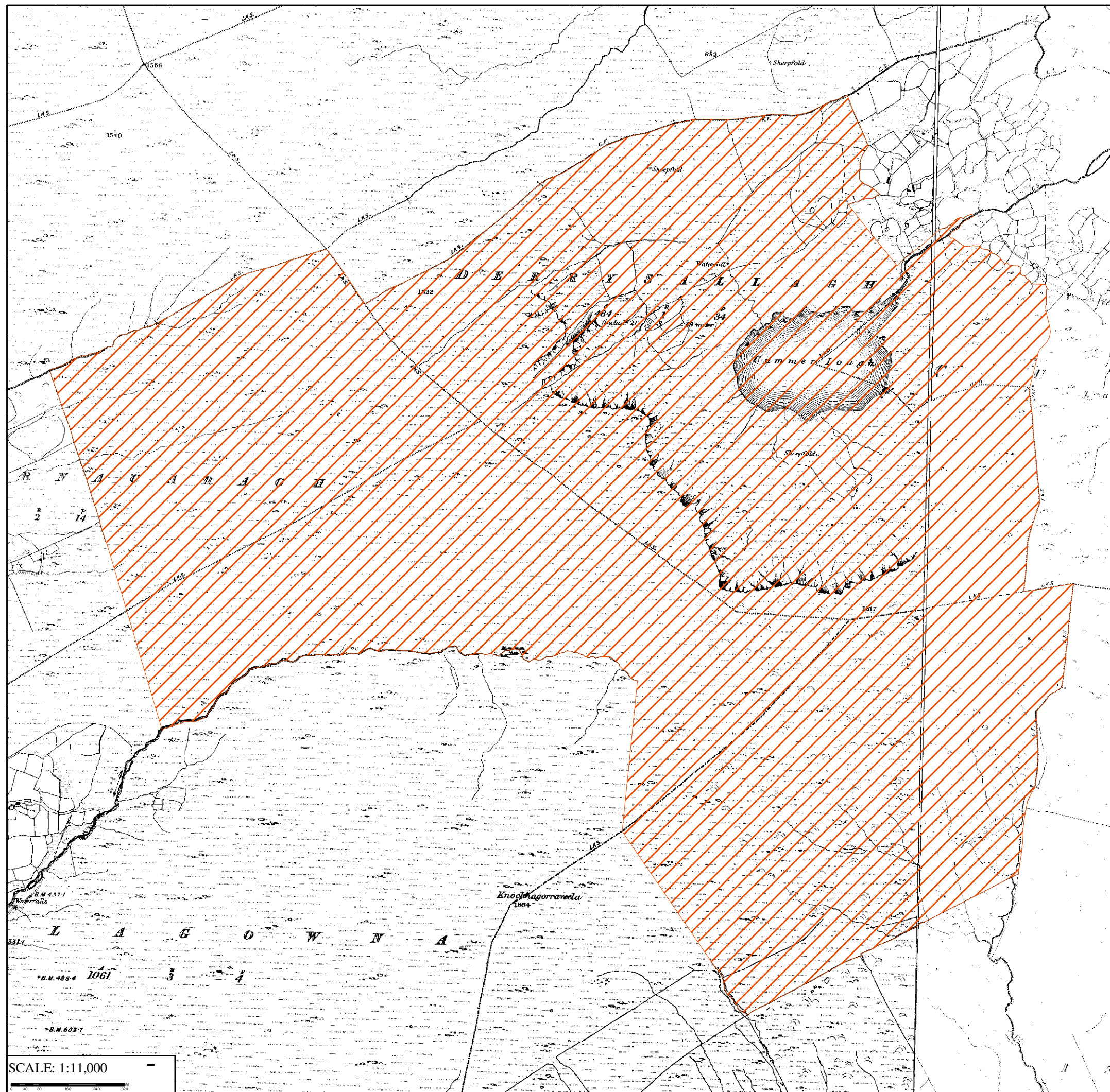


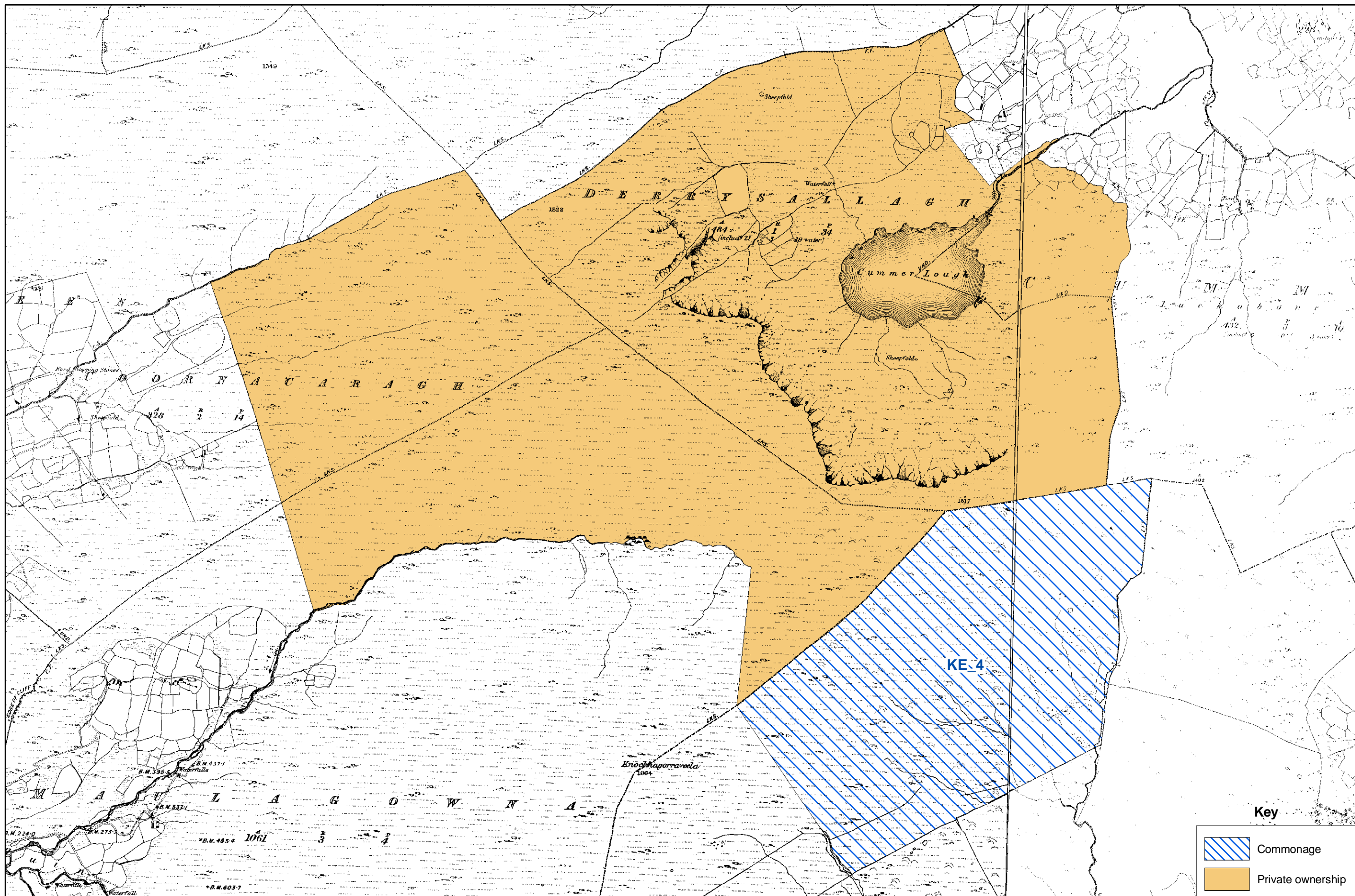
Map 1
LOCATION MAP: MAULAGOWNA BOG cSAC 001881

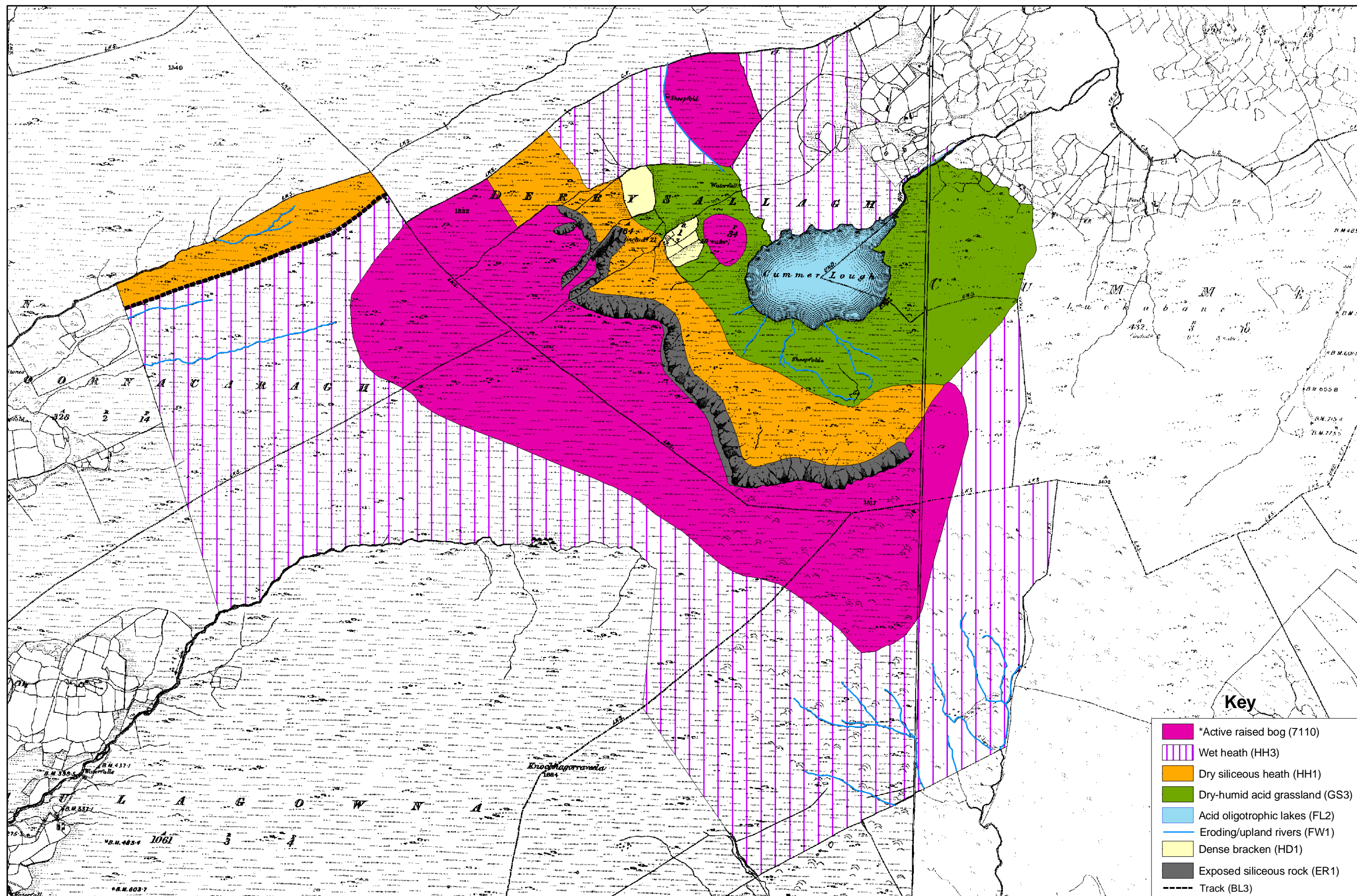


Department of the Environment, Heritage and Local Government
An Roinn Comhshaoil, Oidhreacht agus Rialtais Áitiúil

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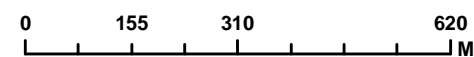
Key

- *Active raised bog (7110)
- Wet heath (HH3)
- Dry siliceous heath (HH1)
- Dry-humid acid grassland (GS3)
- Acid oligotrophic lakes (FL2)
- Eroding/upland rivers (FW1)
- Dense bracken (HD1)
- Exposed siliceous rock (ER1)
- Track (BL3)

CEANTAR SPEISIALTA CAOMHNATHE CANDIDATE SPECIAL AREA OF CONSERVATION

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MAULAGOWNA BOG
O.S. six inch sheets KE- 101, 102



Scale 1: 11,000

MAP 3: INDICATIVE HABITAT MAP

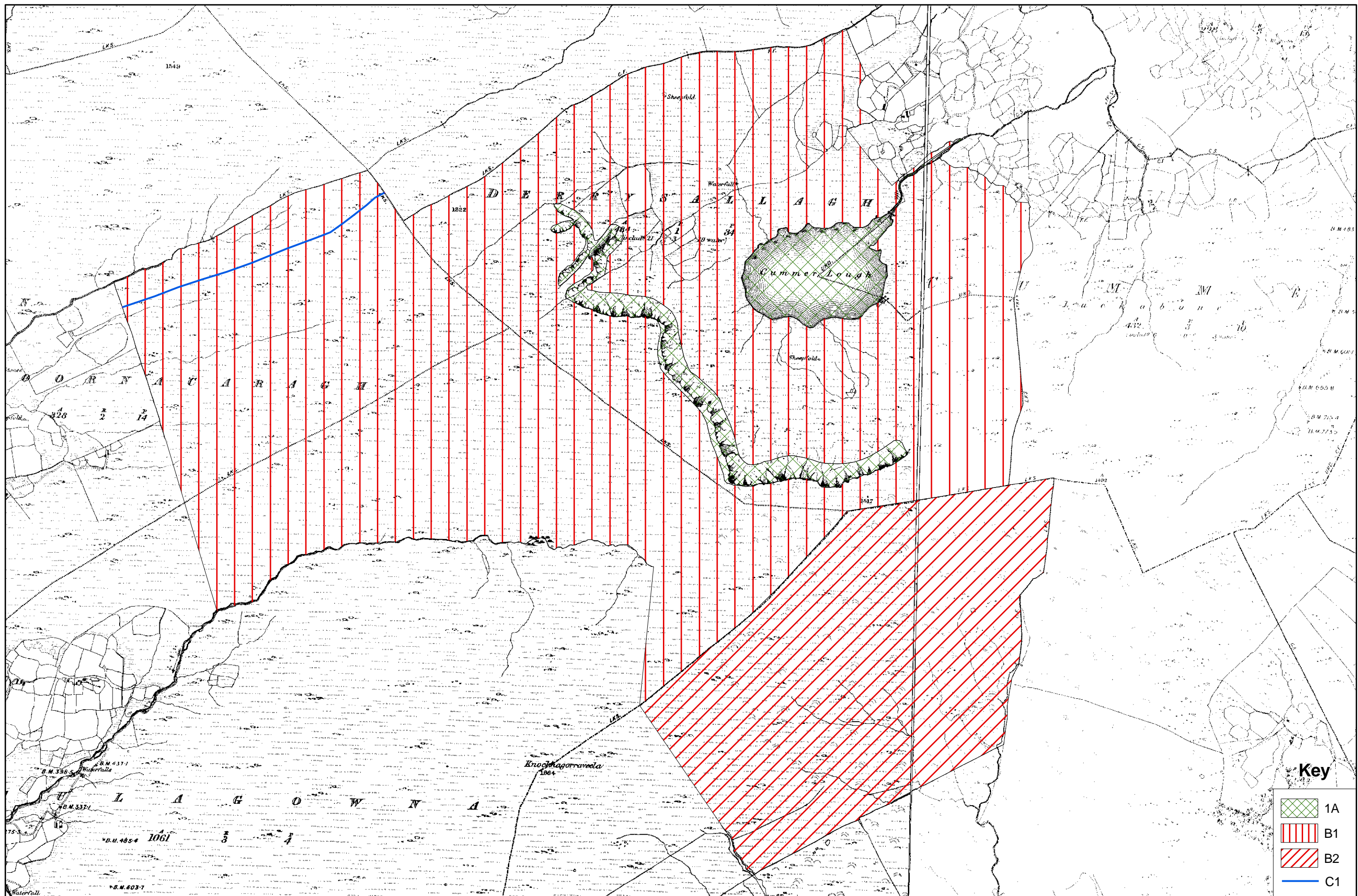
Map to be read in conjunction with the conservation plan

SITE CODE

001881

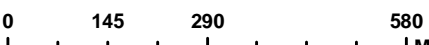
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CEANTAR SPEISIALTA CAOMHNATHE
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MAULAGOWNA BOG
O.S. six inch sheets KE-101, 102

Scale 1: 11,000

MAP 4: ZONING MAP

Map to be read in conjunction
with the conservation plan

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001881
Version 1.00
Date: March 2006