



National Parks and Wildlife Service Conservation Plan for 2006-2011

Blackstairs Mountains cSAC

Site Code 770 Cos. Carlow & Wexford



# SUMMARY

## Introduction

The Blackstairs Mountains cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive due to the presence of 'European dry heath' (4030) and 'Northern Atlantic wet heath with *Erica tetralix*' (4010), both listed on Annex 1 of the EU Habitats Directive. European Dry Heath dominates the site, which stretches approximately 22 km along the border between Co. Carlow and Co. Wexford in a northeast-southwest direction.

## **Description of Blackstairs Mountains cSAC**

The site includes the uplands of Blackstairs Mountains and extends down the hill-sides, incorporating semi-natural habitats, until it reaches the first field boundaries and forestry plantations. The cSAC occurs in two main portions that are separated by a valley (Scullogue Gap). There are also several smaller portions separated from the main body of the cSAC. The site covers several distinct geological formations, including the Blackstairs granite (granite and gneiss) and the Maulin Formation (Slates, siltstones, sandstones and schists).

Dry heath covers most of the site and this habitat is characterised by Ling Heather dominance. The amount of Ling Heather cover in a particular area depends on the burning history, with sites that have been burned recently having less Ling Heather. Other common species are Mat-grass, Crowberry, Bilberry, Bell Heather, Cross-leaved Heath, Common Bent, Heath Bedstraw and several moss species. This habitat often occurs in mosaic with other habitats found on the site, including exposed rock outcrops and upland grassland.

Wet heath occurs in a mosaic with Dry heath on some steep slopes and at lower levels where deeper peat has accumulated. The Wet heath is dominated by Bog moss, Cross-leaved heath and Ling heather. Some flushed areas occur in the Wet heath and these are dominated by Purple Moorgrass.

Blanket bog occurs in the upper and lower parts of the site. Many rivers and streams flow through the site. A small area of wet, broad-leaved, semi-natural woodland and adjacent marsh occurs along the River Urrin in the east of the site.

Several notable plant species have been recorded on the site including Bird's-foot, a species listed in the Red Data Book as 'Rare' and Cranberry, which is scarce in County Wexford and Carlow. Some alpine heath species including Stiff Sedge, Starry Saxifrage and Club-moss occur on some of the summits. Notable bird species that have been recorded on the site include Golden Plover, Hen Harrier and Peregrine Falcon, all listed in Annex I of the EU Birds Directive and Red Grouse, a species of conservation concern in Ireland. Notable mammal species include Irish Hare and Badger.

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## Main conservation objectives

- To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; European dry heaths (all sub-types) (84% area of the site in mosaic with Dry Grassland and Exposed Rock) and North Atlantic Wet Heaths with *Erica tetralix* (1% 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

- All terrain vehicles (ATVs)
- Burning
- Decline of the Red Grouse population
- Grazing
- Erosion
- Group water schemes

## Main strategies to achieve objectives

- Maintain sustainable levels of grazing
- Control burning
- Control use of All terrain vehicles
- Monitor status of Red Grouse population
- Maintain notable species within the site
- Liaison with stakeholders

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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 seminatural habitats and species of flora and fauna, the Habitats Directive seeks to establish "Natura 2000", a network of protected areas throughout the European Community. The Habitats Directive includes a list of habitats that require SAC designation and specific conservation measures. This list is known as Annex I and the habitats are referred to as Annex I habitats. On this list, habitats that require special attention because they are in danger of disappearance, are termed 'priority habitats'. A second list, Annex II in the Habitats Directive comprises species that must be afforded special protection.

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

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

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

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

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

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

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

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

Sites are legally protected once they are publicly advertised.

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

Landowners and other users with a legal entitlement may appeal the designation of lands on scientific grounds, 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 official government department with responsibility for the designation and protection of wildlife habitats, species and areas of conservation interest. As part of his 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, SAC conservation plans may deal with species that are not mentioned in these Annexes.

## **Reasons for Designation of Blackstairs Mountains cSAC**

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
• European dry heaths (EU Habitat Code 4030)	This site is important due to the presence of extensive areas of dry heath that are largely undisturbed and intact and represent a typical example of this habitat. This site contains a significant portion (17%) of the total area of this habitat in Ireland.
Northern Atlantic wet heaths with Erica tetralix (EU Habitat Code 4010)	The site contains smaller portions of this Annex I habitat. It is associated with steep gradients, especially at the base of slopes and at lower levels in mosaic with dry heath and other habitats. This site represents an important south-eastern outlier for wet heath habitat in Ireland.

# Implications for Landowners and other Site Users

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

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

If an owner, occupier or user of a site wishes to carry out certain activities within the designated area (that are not covered by licence or consent from another statutory body), they must consult

with, and get consent from, the Minister for the Environment, Heritage and Local Government. These activities are listed as "Notifiable Actions" for each habitat (see Appendix V). Local Authorities are obliged to ensure appropriate assessment of the implications of any development permission sought that may have an impact on a designated area.



Photo taken from Blackstairs Mountain looking north towards Mt. Leinster and Knockroe (P. Comerford)

# **SITE DESCRIPTION**

## **Location Including Site Boundaries**

The Blackstairs Mountains cSAC stretches approximately 22km along the border between Co. Carlow and Co. Wexford in a northeast-southwest direction (see Map 1). The site covers the uplands of the Blackstairs Mountains with six peaks over 520 m. This cSAC is in two main portions, separated by a valley (Scullogue Gap) through which the R702 passes connecting Kiltealy (Co. Wexford) to Ballymurphy (Co. Carlow). There are also several smaller portions separated from the main body of the cSAC. These include a strip of wet broadleaved woodland and freshwater marsh occurring along the upper section of the Urrin River above Ballycrystal Bridge (Co. Wexford). The nearest village to the centre of the site is Kiltealy, Co. Wexford.

Grid Ref.:	S 820 470 (approximately centre of the site)		
Latitude:	N 52° 36' 10"		
Longitude:	W 6° 46' 20"		
Area:	5052 ha		
Altitude Range:	90 m to 795 m		
Townlands:			
Co. Carlow	Aghnaglear, Ballybeg Big, Ballycrinnigan, Ballyglisheen, Ballyglisheen, Coolasnaghta, Coonogue, Crannagh, Dranagh, Gowlin, Kilbrannish South, Knockendrane, Knockroe(idrone east by), Knockymullgurry, Raheendarragh, Raheenkyle, Raheenliegh, Rathanna, Rathgeran, Rathnageeragh, Seskinnamadra and Walshstown or Ballynabranagh		
Co. Wexford	Askinvillar Upper, Ballycrystal, Bantry Commons (ed Killann), Blackstairs Commons, Boladurragh, Camteige, Cloroge Beg, Cloroge More, Corrageen, Craan (ed St Mary's), Cullentragh, Kiltealy, Knockatober, Kyle, Mandoran, Mullaunnasmear, Rossard, Slievebaun, Slievegar and Springmount		

(Map references are provided in Appendix II).

## Site Boundaries

The site takes in the uplands of the Blackstairs Mountains and extends down the hill-side incorporating semi-natural habitats until the first field boundaries in most cases, or forestry plantations. The site boundaries coincide with the routes of rivers and streams, the edges of forestry plantations, field boundaries and roads and tracks. Some boundaries are unmarked on the ground.

### Site Infrastructure

RTE operates a television mast and associated buildings on the summit of Mount Leinster. This area is excluded from the cSAC (but surrounded by it).

## **Legal Status**

## **Ownership**

Most of the site is held in commonage (approx. 90%) (see Map 2). The remainder of the site is held in multiple private ownership.

## **Designations of the Site**

candidate Special Area of Conservation	Site code IE0000770	Published on 01/07/99
proposed Natural Heritage Area	Site code 770	Published in 1995

## **Rights Pertaining to the Site**

**Rights of way** A right of way leads to the summit of Mount Leinster and provides access to the RTE mast. Parts of the South-Leinster Way, a way-marked trail, occur within the site at the northern end. Coillte also has some rights of way on the lower slopes.

## **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 NPWS staff.	
	Regional staff also participate in research and survey projects by collecting data on the site, provide advice to planning authorities on the impacts of development applications and provide an education and advisory service to the public (see Appendix VIII) for further details of NPWS regional staff.	
Local Authorities	Carlow County Council and Wexford County Council are the planning authorities 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.	
Department of Agriculture and Food (DAF)	DAF is the government department responsible for the development and regulation of agriculture, forestry and the food industry, including the administration of schemes such as the Rural Environment Protection Scheme (REPS), the Native Woodland Scheme (NWS), and Commonage Framework Plans (CFPs).	

#### **Coillte Teoranta**

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

### Local Authority Policy in relation to the Site

It is stated in the Wexford County Development Plan (2003) that the County Council will:

"• prohibit development which would damage or threaten the integrity of sites of international or national importance, designated for their habitat/wildlife or geological/geomorphological importance including the proposed Natural Heritage Areas, candidate Special Areas of Conservation, Special Protection Areas and Statutory Nature Reserves unless the County Council is satisfied that: - there is no alternative solution – there are strong reasons of over-riding public interest for the development.

• work together with statutory bodies and voluntary conservation groups and landowners to increase the number, size, quality and diversity of natural habitats to be safeguarded and managed for their nature conservation importance by identifying new sites, as resources allow, and during the consideration of development proposals.

• ensure that details of development proposals within or in proximity to designated sites of national or international importance are referred, on receipt, to Duchas – The Heritage Service [now NPWS], for observations and recommendations and to have regard to such observations and recommendations and to have regard to such observations and recommendations and those of other interested bodies before arriving at a planning decision.

• encourage and assist individuals, environmental organisations and community groups in the conservation of nature."

It is stated in the Carlow County Development Plan (2003) that:

"It shall be an objective of the planning authority to maintain and where possible enhance the conservation value of Special Areas of Conservation, Natural Heritage Areas and Wildfowl Sanctuaries. The local authority will ensure that any development proposal in the vicinity of, or affecting in any way a designated SAC provides sufficient information showing how its proposals will impact on the habitat of the SAC and appropriate amelioration."

## **Physical Features**

### Climate

The closest synoptic weather station to the site is at Kilkenny and the 30 year (1961-1990) average data from this station are displayed in Appendix III. This station receives a mean annual rainfall of 823 mm. The mean daily air temperature at this station is 9.3 °C ranging from a mean daily low of 5.2 °C in February to 13.4 °C in August. The average daily duration of sunshine is 3.5 hours. Mean monthly wind speeds range between 5.6-7.7 knots. There is an annual average of 17 days with sleet or snow recorded, but only four days where snow is still lying on the ground by 09.00 am.

A rainfall station located approximately in the centre of the site, at Knockroe Mountain, Co. Carlow receives a mean annual rainfall of 1425 mm, indicating a higher rainfall than at the synoptic weather station (more details are given in Appendix III).

## **Geology & Geomorphology**

The site covers several distinct geological formations (see Map 5). The site contains formations of the Lower Palaeozoic era that stretches from approximately 570-410 million years ago. These formations include the Blackstairs granite (granite and gneiss) and the Maulin Formation (slates, siltstones, sandstones, and schists) (more details are given in Appendix III).

The principal mountain peaks within the site are (from north to south): Slievebaun (520 m), Mount Leinster (785 m), Black Rock Mtn (599 m), Knockroe (540m), Blackstairs Mtn (735m), Slievebaun (444 m), Carrigalachan (463 m) and Carrigroe (495 m) (Tietzsch-Tyler *et a*l, 1994).

### **Soils & Soil Processes**

On the Co. Carlow side of the cSAC, hill peat is found around the summits of Mount Leinster, Knockroe and Blackstairs Mountain (Conroy & Ryan, 1967). A peaty ironpan podzol is found around the northern parts of the site, especially the summit of Slievebawn and on the slopes of Mount Leinster. A lithosol is found on the western slopes of Mount Leinster, and the entire western spine of the south portion of the site. The soils of the County Wexford side of the cSAC are made up of peaty podzols on the highest elevations, and sandy acid brown earths and acid brown earths on the lower slopes on the boundaries of the site (Royal Irish Academy, 1979) (more details are given in Appendix III).

## Hydrology & Water Quality

A large number of rivers and streams have their headwaters and upper reaches within the site and flow through the site. Rivers and streams on the eastern side (Co. Wexford) eventually meet with the River Slaney. These include the Urrin River, Askinvillar Stream, Rathduff Stream and River Clody. Rivers and streams on the western side (Co. Carlow) eventually meet with the River Barrow. These include the Aughnabrisky River, Kiledmond River, Burren River, Mountain River and Aughavaud River. Both the Aughnabrisky River and the Mountain River, downstream of this site, have been designated as part of the River Barrow cSAC, due to the presence of large populations of Pearl Mussel (*Margaritifera margaritifera*). The water quality of some of these rivers and streams has been tested at sites downstream of the cSAC, by the EPA. Generally the water quality is rated as unpolluted with Q values of 4-5 (see Appendix IV for more details).



Blackstairs Mountain (P. Comerford)

## **Biological Features**

## **Habitats and Vegetation**

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

The following table lists the habitats within the site. The Annex I habitats of the Habitats Directive for which the site was selected is listed, with the relevant Guide to Habitats category also shown. 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.

ANNEX I HABITAT TYPE	CORRESPONDING HABITAT CATEGORY	% AREA
European dry heath (all subtypes) (4030)	Dry siliceous heath (HH1)	84% (in mosaic with Dry grassland & Exposed rock)
Northern Atlantic wet heath with <i>Erica</i> <i>tetralix</i> (4010)	Wet heath (HH3)	1%
-	- Exposed siliceous rock (ER1)	
-	Blanket bog (PB2/PB3)	1%
-	Dry-humid acid grassland (GS3)	
-	Riparian woodland (WN5)	<1%
-	- Eroding/upland rivers (FW1)	
Marsh (GM1)		<1%
-	Scrub (WS1) (not mapped)	<1%
-	Stone walls and other stonework (BL1) (not mapped)	
-	Buildings and artificial surfaces (BL3)	<1%

#### Habitats Found within Blackstairs Mountains cSAC

### Annex I Habitats:

European dry heaths (4030) (84% of total site area in mosaic with Dry grassland and Exposed rock) This is the dominant habitat type within the site. Dry heath dominated by tall Ling Heather (*Calluna vulgaris*) can be found around much of the site. The amount of the Ling Heather cover in a particular area depends on the burning history.

Areas that have not been burned for a number of years generally have a 100% vegetation cover and are dominated by Ling Heather. Other species found include Mat-grass (*Nardus stricta*), Crowberry (*Empetrum nigrum*), Bilberry (*Vaccinium myrtillus*), Bell Heather (*Erica cinerea*), Cross-leaved Heath (*Erica tetralix*), Common Bent (*Agrostis capillaris*) and Heath Bedstraw (*Galium saxatile*). Moss species found in these areas include *Hypnum cupressiforme*, *Polytrichum commune*, *Hylocomium splendens* and *Rhytidiadelphus squarrosus*.

Areas that have been more recently burnt (i.e. during the last three years) contain patches and strips of tall Ling Heather. The burnt areas are dominated by Common Bent and Mat-grass, with Heath Bedstraw, Tormentil (*Potentilla erecta*), Bilberry and the mosses; *Polytrichum commune*, *Hylocomium splendens*.

Some areas of dry heath within the site contain a mixture of Bracken (*Pteridium aquilinum*), Ling Heather, Bilberry, Mat-grass, Bent-grass (*Agrostis*) species, *Polytrichum commune* and other moss species.

Some areas have substantial Common Gorse (Ulex europaeus) cover.

Northern Atlantic wet heath occurs in mosaic with dry heath on some of the steeper slopes and at lower levels in places where deeper peat has accumulated. The wet heath areas within the site contain Bog Moss species (*Sphagnum spp.*), Cross-leaved Heath and Ling Heather which forms tall clumps or occurs as individual plants. Some Mat-grass, Hard Fern (*Blechnum spicant*), Bilberry, Cottongrass species (*Eriophorum spp.*), Rush species (*Juncus spp.*) and the moss *Polytrichum commune* also occur. Occasional species occurring in these areas include Cranberry (*Vaccinium oxycoccus*), Sedge (*Carex*) species, Common Gorse and Autumn Gorse (*Ulex gallii*).

Wet, flushed areas occur in conjunction with these wet heath areas and these areas are dominated by Purple Moor-grass (Molinia caerulea). Other species that occur include Blunt-flowered Rush (Juncus subnodulosus), Bulbous Rush (Juncus bulbosus), Sharp-flowered Rush (Juncus acutiflorus), Soft Rush (Juncus effusus), Star Sedge (Carex echinata), Carnation Sedge (Carex panicea), Devil's-bit Scabious (Succisa pratensis), Bog Asphodel (Narthecium ossifragum) and Deergrass (Trichophorum caespitosum). Bog Moss species found in these areas include Sphagnum cuspidatum, S. subnitens, S. capillifolium, S. palustre and S. papillosum. Other moss species found include Polytrichum commune, Rhytidiadelphus squarrosus, Dicranum scoparium, Hylocomium splendens and Racomitrium lanuginosum.

Northern Atlantic wet heaths with *Erica tetralix* (4010) (1% area of the site, mapped with Dry heath and in mosaic with other habitats)

## **Other Habitats:**

Blanket bog (Upland PB2 and Lowland PB3)	This habitat consists of both lowland and upland blanket bog. This habitat (Active Blanket Bog) is listed in Annex I of the EU Habitats Directive. However, at this site, it is not of sufficient quality to merit it being a qualifying interest for the site.
	The lowland bog areas are found at Ballycrystal, south-west of Black Rock Mountain, where the highest feeders of the Urrin River rise. It is also found at Coolasnagtha, north of where the Burren River rises. Considerable populations of Cranberry occur in these lowland bogs. Other small areas of this habitat are found in the south-west of the site at Aghnaglear.
	Species found in the wetter areas include, Purple Moor-grass, Sharp-flowered Rush, Cross-leaved Heath, Bog Asphodel and Marsh Lousewort ( <i>Pedicularis palustris</i> ). Bracken is found in the drier areas. Other species include the Lemon-scented Fern ( <i>Oreopteris limbosperma</i> ) and Pale Butterwort ( <i>Pinguicula lusitanica</i> ).
Dry humid acid grassland (GS3)	This habitat was formerly dry heath and has been altered through grazing. This habitat occurs at several locations throughout the site, in conjunction with areas of heath and exposed rock. In general it consists of grassland with Soft Rush, Mat-grass, Creeping Bent-grass ( <i>Agrostis stolonifera</i> ), Cross-leaved Heath, Tormentil, Heath Bedstraw, Foxglove ( <i>Digitalis purpurea</i> ) and Bracken. Moss species found in these areas include some Bog Moss species, as well as <i>Polytrichum commune</i> , <i>Rhytidiadelphus squarrosus</i> , <i>Hylocomium splendens</i> , <i>Racomitrium lanuginosum</i> and <i>Dicranum scoparium</i> .
Eroding/upland rivers (FW1)	Many rivers and streams rise in and flow out of the site. They generally contain no aquatic vegetation and are generally narrow, fast-flowing and clear. Vegetation along the banks is dominated by the habitat through which the stream or river flows.
Exposed siliceous rock (ER1)	This habitat occurs throughout the site. Some isolated rock outcroppings are located within areas of dry heath. These areas are largely unvegetated, but they do support some lichens.
	Scree and shattered rocks also occur on the upper slopes of some of the peaks, most notably the western slope of Blackstairs Mountain, Black Rock Mountain, the western and southern slopes of Mount Leinster and all the slopes of Knockroe.
	Arctic-alpine plants are found on the summits of Mount Leinster and Blackstairs Mountain. These species include Starry Saxifrage ( <i>Saxifraga stellaris</i> ), Stiff Sedge ( <i>Carex bigelowii</i> ) and Stag's-horn Clubmoss ( <i>Lycopodium clavatum</i> ).
Marsh (GM1)	This habitat occurs adjacent to the River Urrin with wet areas dominated by Soft Rush and Purple-moor Grass in mosaic with scrub and heath.
Riparian woodland (WN5)	This habitat occurs along the Urrin River. It comprises Alder ( <i>Alnus glutinosa</i> ), Downy Birch ( <i>Betula pubescens</i> ), Willow ( <i>Salix</i> ) species, Hazel ( <i>Corylus avellana</i> ), Holly ( <i>Ilex aquifolium</i> ), Sessile Oak ( <i>Quercus petraea</i> ) and Rowan ( <i>Sorbus aucuparia</i> ). Ivy-leaved Bellflower ( <i>Wahlenbergia hederacea</i> ) and Lemon-scented Fern occur along the banks of the river.
Scrub (WS1) (not mapped)	Only a little of this habitat type occurs within the site. It comprises Hawthorn ( <i>Crataegus monogyna</i> ), Rowan, Downy Birch, Willow species and Common Gorse.

Buildings and artificial surfaces (BL3)	<ul><li>A road within the site leads to the RTE mast on the summit of Mount Leinster.</li><li>An unpaved track leads from a carpark at The Nine Stones to the summit of Slievebawn. There are also many unpaved tracks throughout the site that are used by hillwalkers.</li></ul>
Stone walls and other stonework (BL1) (not mapped)	Old walls occur throughout the site, especially along the edges of commonages. This habitat within the site also consists of the many cairns which are found within the site (see the Recorded Monuments section for details).



Carrigal Chan and Carrigroe (showing exposed rock/heath) (P. Comerford)

## **Notable Flora:**

The site is the location of several species of flora which are notable in a regional context. This includes Bird's-foot (*Ornithopus perpusillus*), a species listed in the Red Data Book as 'Rare' (Curtis & McGough, 1998). Cranberry, a species which is scarce in County Carlow and Wexford occurs in the site. Cranberry has been recorded in the isolated section at Ballycrystal in Co Wexford and isolated blanket bog areas at the north of the site.

Other notable species are Ivy-Leaved Bellflower, Marsh St. John's Wort (*Hypericum elodes*), Pale Butterwort, Many-stalked Spike-Rush (*Eleocharis multicaulis*), Lesser Skullcap (*Scutellaria minor*), Wood Horsetail (*Equisetum sylvaticum*), Stiff Sedge, Starry Saxifrage and Stag's Horn Clubmoss.

## Fauna:

## **Birds**

Four species listed in Annex I of the Birds Directive have been recorded at the site; Golden Plover (*Pluvialis apricaria*), Hen Harrier (*Circus cyaneus*), Merlin (*Falco columbarius*) and Peregrine Falcon (*Falco peregrinus*). Hen Harrier, which feeds over the site, is listed as a bird of high conservation concern in Ireland (Newton *et al.*, 1999). Golden Plover (*Pluvialis apricaria*) stage on the mountain during passage migration.

The site hosts a population of Red Grouse (*Lagopus lagopus*), however, this population has fallen into decline in the recent past. Red Grouse is a bird of high conservation concern in Ireland (Newton *et al.*, 1999).



Golden Plover (Pluvialis apricaria). Photo by R. Mills.

Wheatear (*Oenanthe oenanthe*) and Stonechat (*Saxicola torquata*) breed within the site, while Kestrels (*Falco tinnunculus*) are common and hunt over the site. Other notable bird species recorded include Snow bunting (*Plectrophenax nivalis*), Skylark (*Alauda arvensis*), Meadow Pipit (*Anthus pratensis*) and Raven (*Corvus corax*). Snow buntings are recorded as winter visitors around Mount leinster.

### **Mammals**

Irish Hare (*Lepus timidus hibernicus*), a species listed in Annex V of the EU Habitats Directive is found within the site. Other mammal species found within the site include Fox (*Vulpes vulpes*), Badger (*Meles meles*) and Stoat (*Mustela erminea*). Irish Hare and Badger are listed as 'Internationally Important' in the Irish Red Data Book (Whilde, 1993). Sika deer (*Cervus nippon*) are found at low densities in the site and small herds of feral goat (*Capra hircus*) are present throughout the commonage.

## Land Use and other Human Impacts

## Land use and impacts on the site

Agriculture	Most of the site is under commonage. Agricultural use within the site consists mainly of grazing by sheep which is carried out year-round. The Commonage Framework Plans (CFPs) for the site (CW1 and WX2) report that grazing pressure over the site is moderate to undamaged. Localised damage by overgrazing has occurred in some areas around ring feeders.	
Burning	It appears that most of the site burnt on a rotational basis is by sheep farmers aiming to improve grazing for sheep. However, some areas appear to be burnt every year. Large areas were burnt during the summer of 2003.	
	Some patches of Common Gorse are also burnt.	
Hill-walking	Hill-walking occurs over much of the site. Parts of the South-Leinster Way, a way-marked trail, occur within the site at the northern end.	
	The Wayfarer's Association holds an annual Blackstairs Walk in May which is about 27 km in length, from Killanure in Wexford to Glynn in Carlow.	
ATV and Motorcycle Use	All-terrain-vehicles (ATVs) and motorcycles are driven across areas of the site. These areas show track damage caused by the vehicles.	
Hang-gliding	Hang-gliding and para-gliding take place within the site.	
Rock abstraction	Non-commercial stone removal by local people has taken place on the Blackstairs Mountains on an on-going basis for many years. This	

## Land use adjacent to the site

Agriculture	Agricultural use adjacent to the site is similar in nature to that carried out within the site, i.e. grazing. This activity is mainly carried out on improved fields adjacent to the site.		
Application for windfarms	An application has been made to erect some wind turbines on land adjacent to the site.		
Forestry	Large areas adjacent to the site contain mature commercial coniferous forest plantations.		
Group water schemes	A number of group water schemes are located outside and adjacent the site, such as at Ballycrinnigan in the south-west and Corrageen in the south-east.		
RTE Transmitting Station	A transmitter and associated buildings, which are operated by RTE, occur on the summit of Mount Leinster, but are excluded from the site.		

domestic activity is not having a significant ecological impact.

### Past human use

Peat extraction has occurred within the site. Feehan and O' Donovan (1996) state that most of the accessible turf on the Blackstairs Mountains had been harvested during the 19<sup>th</sup> Century. However, during World War II, a road was built 3.5 miles up to the summit of Mount Leinster, to an area known as Moneer Bog. By 1943 up to 160 people were working here and the bog was completely removed. Many abandoned 18<sup>th</sup> and 19<sup>th</sup> century farmhouses are found near Knockroe, indicating that parts of the site were farmed during this era.

A patron mass was held in the Meetings area of the Carlow part of the site up until the 1990s.

## **Recorded Monuments and Other Features**

Many recorded monuments are found on the site. These are listed below:

MONUMENT NO.	NAT. GRID	TOWNLAND	CLASSIFICATION
CW020-016	8064 / 5481	Raheenkyle Rathnageeragh	Cairn
CW020-017	8175 / 5462	Coolasnaghta	Stone Alignment
CW020-018	8260 / 5408	Raheenleigh	Enclosure - Possible
CW023-007	8266 / 5253	Crannagh Kilbrannish South Rahenndarragh Rathanna	Cairn
CW023-011	81960 / 49650	Knockroe (Idrone East By)	Non Antiquity
CW023-012	8235 / 4960	Knockroe (Idrone East By.)	Megalithic Tomb
CW023-027	8199 / 5155	Crannagh	Rock Scribing / Art
CW025-003	8008 / 43795	Ballyglisheen	Non Antiquity
CW026-019	7667 / 3842	Dranagh Ballycrinnigan	Cairn (s)
CW026-020	7756 / 3820	Dranagh	Settlement - Possible
CW026-026	7644 / 3828	Dranagh	Standing Stone
CW026-029	7679 / 3835	Dranagh	Enclosure

#### **Recorded Monuments of County Carlow**

#### **Recorded Monuments of County Wexford**

MONUMENT NO.	NAT. GRID	TOWNLAND	CLASSIFICATION
WX009-01101	8621 / 5253	Boladurragh	Cairn
		Mandoran	
		Rossard	
WX009-01102	8261 / 5253	Boladurragh	Cairn
WX009-012	8624 / 5257	Kyle (Sc. By.)	Cairn
		Mandoran	
		Rossard	
WX013-004	84550 / 4870	Cloroge More	Standing Stone
WX013-005	84490 / 4840	Cloroge More	Standing Stone
WX018-03401	78850 / 4034	Bantry Commons (Ban. By.)	Miscellaneous
WX18-034	7886 / 4034	Bantry Commons (Ban. By.)	Cairn
		Barrack Village	

# CONSERVATION VALUE OF BLACKSTAIRS MOUNTAINS CSAC

The Blackstairs Mountains cSAC supports extensive areas of dry heath, a habitat listed in Annex I of the EU Habitats Directive. This site is an excellent example of this habitat, which is of high quality and covers an extensive area. The site contains an estimated 17% of the total area of this habitat found in Ireland so this site is very important in a national context. The dry heath is largely undisturbed and intact with tall Ling Heather occurring in many places. However, the amount of Ling Heather varies with burning history.

The site also supports wet heath, an EU Habitats Directive Annex I habitat. This habitat is found in mosaic with the more extensive dry heath. Although rather small in area, the wet heath in the Blackstairs Mountains supports typical species for this habitat and is in good ecological condition.

Other habitats such as grasslands, rivers and streams and woodlands add diversity to the site and support several notable species including Bird's-foot, a plant species listed as 'Rare' in the Red Data Book (Curtis & McGough, 1998). The site provides habitat for Golden Plover, Hen Harrier, Merlin and Peregrine Falcon which are listed on Annex I of the EU Birds Directive.

# **MANAGEMENT FRAMEWORK**

## **Conservation Objectives**

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

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

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

The favourable conservation status of a species is achieved when:

• population data on the species concerned indicate that it is maintaining itself, and

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

Objective 1:	To maintain the Annex I habitats for which the cSAC has been selected at favourable conservation status; European dry heath (all sub-types) (84%) and North Atlantic Wet Heath with <i>Erica tetralix</i> (1%)
<b>Objective 2:</b>	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;

- All terrain vehicles (ATVs)
- Burning
- Decline of the Red Grouse population
- Erosion
- Grazing
- Group water schemes

## All terrain vehicles (ATVs)

The use of ATVs, especially quad bikes is becoming an increasingly significant issue in the site. Recreational use of these vehicles is causing damage to the bog and heath habitats.

## **Burning**

Areas within the site have been burnt and parts of the site have been damaged by excessive burning. Vegetation burning is often carried out on a short-term rotation, with some areas being burned in successive years. Ling Heather is regenerating in some of the burnt areas. Uncontrolled burning is detrimental to the conservation of upland habitats. Burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years are both notifiable actions. Substantial areas were burnt during 2003 and burning is a significant problem every spring.

## **Decline of the Red Grouse population**

The population of Red Grouse has declined over the past ten years. Goodwillie (1979) stated that "populations of Grouse and other mountain birds are relatively high". However, by the time of the NHA Survey in 1999, the numbers had declined dramatically with local farmers stating that no Red Grouse had been found within the site recently. NPWS staff reported hearing a single male Grouse calling during spring 1999. Some Red Grouse were heard calling on the Co. Carlow side during 2003. However, no Red Grouse were heard on the Co. Wexford side in 2003. The Regional Game Council of Co. Wexford and Co. Carlow introduced some Red Grouse onto the Blackstairs Mountains in 2003 and has erected signs stating that there is a voluntary no shooting arrangement regarding the Red Grouse.

## **Erosion**

Erosion is occurring on the summit of Mount Leinster. This takes the form of peat hagging. This was possibly caused by the construction of the RTE mast and transmitting station, but it is possible that erosion is a natural phenomenon. Fire damage and/or overgrazing may also have exacerbated this erosion.

Motorcycle and ATV use is an increasing activity within the site, particularly on Slievebaun and along side adjacent areas of forestry. Damage to vegetation caused by vehicles is evident in many parts of the site.

## Grazing

The impacts of grazing on the commonage areas of this site have been assessed by the Commonage Framework Planning Project (CFPP). The relevant plans are CW1 and WX2. The plans' stated

objectives for the site are to 'improve overall condition' for the commonage areas and to 'increase vegetation cover over the coming years'. The findings of these plans are reflected in the management strategies and zoning sections of this conservation plan.

Localised areas within the site have been moderately damaged, most notably due to poaching and through the use of ringfeeders.

## **Group water schemes**

A number of group water schemes are located outside but directly adjacent the cSAC e.g. Ballycrinnigan in the south-west and Corrageen in the south-east. Tracks and paths have been dug within the cSAC for access to these schemes and other associated damaging activities are occurring such as digging holes within the cSAC for pipe laying.

## **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 favourable conservation status of the heath will be done by, or on behalf of, the staff of the Monitoring Section of the NPWS or staff working for NPWS in accordance with the procedures laid down by that section. The work, if any, to be done on this site in that respect will be prescribed by that section. Aerial monitoring of scrub encroachment will take place.
- **Site surveillance** Patrolling of the site by NPWS, with special attention to grazing levels and burning, will identify any major changes, damaging operations, or threats should they arise.

## **Enforce notifiable actions**

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats are listed in Appendix V of this plan. Permission from the Minister is required before these actions may be carried out within the designated area. For example the grazing of livestock above a sustainable level or burning areas of vegetation over 5 ha are notifiable actions for heath habitats.

## **Specific Strategies**

## **Objective 1.**

To maintain the Annex I habitats for which the cSAC has been selected, at favourable conservation status; European dry heaths (84%) and Northern Atlantic wet heaths with *Erica tetralix* (1%).

## **Strategies:**

1.1. Manage grazing on commonages The impacts of grazing on commonage areas of the site have been assessed by the Commonage Framework Planning Project (Commonage Plans (CP) CW1 & WX2). These plans recommend de-stocking rates in areas that have been damaged by over-grazing. These rates will be incorporated into REPS plans and/or farm plans produced by NPWS for each farm and must be achieved within an agreed timescale from the beginning of the REPS/farm planning period.

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 CPs (CW1 & WX2) recommend de-stocking rates of between 0 - 24.3%, depending on the agricultural unit (i.e. the single stockproof area of land) concerned. The individual CPs should be consulted for further details.

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

- **1.2.** Manage grazing on privately owned lands For non-commonage land, NPWS will seek to ensure that sustainable grazing levels are maintained/established via REPS and NPWS farm plans, using a similar methodology applied to commonage areas (see Strategy 1.1).
- **1.3. Control burning** NPWS will seek to limit uncontrolled burning. Burning areas of vegetation over 5 ha, or burning any area more often than once every 15 years are both notifiable actions. Controlled burning may be allowed in certain circumstances but must take place only on the advice of NPWS staff.

Rights holders on commonage will not be penalised en-block for uncontrolled burning where the person responsible is unknown.

1.4. Control use of All terrain vehicles NPWS will seek to control access of motorised vehicles (in particular quad bikes, four-wheel drives and motorbikes) to the site by the erection of signage. These signs will be placed at access points to the site. Emergency vehicles and landowners will be allowed to access the land on such vehicles.

## **Objective 2.**

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

## Strategies:

- **2.1. Maintain other** habitats Strategies listed under Objective 1 above also apply to other habitats within the cSAC.
- 2.2. Monitor status of Red Grouse NPWS will record and monitor, where possible and as resources permit, numbers, breeding status and nest locations of Red Grouse on an annual basis.

## **Objective 3.**

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

## **Strategies:**

- 3.1. Liaise with NPWS will strive to maintain effective liaison with landowners interested parties (particularly through the Liaison Committee), group water scheme participants, relevant authorities and interested parties on achieving the objectives for conservation of the site. 3.2. Monitor NPWS will continue to monitor applications, including current development applications, for planning permission and licenses for lands within and applications adjacent to the site. Appropriate bodies will be notified if developments are thought to conflict with conservation objectives. 3.3. Liaise with REPS
- **3.3.** Liaise with REPS REPS planners are required to consult with NPWS staff when they are developing plans for land within the site.

## Zoning

**Note:** Zoning is the division of a nature conservation site and neighbouring lands into a number of sub-units. There are four types of zones identified (not necessarily all occurring within a site): A, B and C within the site and D outside the site but impacting on it. See Map 4 for management zones. The relevant strategies are listed for each site.

## Zone A: A Natural Zone

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

#### **1A: NON-INTERVENTION AREAS**

1A1: Eroding/upland rivers, Riparian woodland, Scrub and Stone walls & other stonework .

Non-intervention (see Strategies 2.1 & 3.1-3.2)

- 2A: MAINTENANCE AREAS WITH LIMITED INTERVENTION
- 2A1: European dry heath, Exposed siliceous rock, Dry humid acid grassland in commonage; agricultural units CW1h, WX2b, WX2e & WX2f.

These areas have been identified in the Commonage Framework Plan as being undamaged (Category U). No de-stocking is required. See relevant CPs for full details. (Strategies 1.1, 1.3, 1.4, strategies under objectives 2 and 3 and the general monitoring strategies apply.)

## Zone B: Active Management

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

B1: European dry heath, Dry humid acid grassland and Exposed siliceous rock in commonage; agricultural units CW1i, CW1f & WX2a.

These areas have been identified in the Commonage Framework Plan as being moderately overgrazed and require stock reductions (see Strategy 1.1 & 2.1). See relevant CPs for full details. (Strategies 1.3, 1.4, strategies under objectives 2 and 3 and the general monitoring strategies also apply.)

B2: European dry heath, Dry humid acid grassland, Blanket bog, Marsh, Blanket bog, and Exposed siliceous rock in private land.

Grazing assessments are required for these privately owned lands (see Strategy 1.2). In addition, strategies 1.3, 1.4, strategies under objectives 2 and 3 and the general strategies apply.

## Zone C: Intensive use Zone

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

C1: Buildings and artificial surfaces

Alterations to roads/tracks should not be made without prior consultation with NPWS.

2: Spoil and bare ground

A track has been created within the cSAC to allow access to a group water scheme outside the boundary at Ballycrinnigan.

## Zone D: Impact Zone

Areas outside the site, which may have an impact on the site.

#### Forestry

Large areas of forestry plantation occur adjacent to this site. These may impact on the water quality of adjacent rivers and streams and other habitats (See Map 4).

#### Group water schemes

A number of group water schemes occur outside but adjacent to the site e.g at Ballycrinnigan and at Corrageen. Associated activities such as laying tracks and pipelaying may impact the site. (See Map 4).

## **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 sustainable grazing.	DAF/ NPWS/ Grazing rights holders			
1.2.	Manage grazing on privately owned lands	Conduct grazing assessments.	NPWS/ Landowners			
1.3.	Control burning	Prevent burning of large areas greater than 5 ha.	NPWS			
1.4.	Control use of All terrain vehicles	Prevention of recreational use of ATVs in site.	NPWS			
2.1.	Maintain other habitats	See strategy 1.11.4	NPWS/ Grazing rights holders			
2.2.	Monitor status of Red Grouse	Surveys of numbers, breeding status and nest locations of Red Grouse on an annual basis.	NPWS			
3.1.	Liaise with interested parties	Initiate and maintain effective liaison with relevant parties.	NPWS			
3.2.	Monitor development applications	Monitor applications for planning permission and licenses for lands within and adjacent to the site. Notify appropriate bodies if developments are thought to conflict with conservation objectives.	NPWS			
3.3.	Liaise with REPS planners	REPS planners are required to consult with NPWS staff if developing plans for land within the site.	REPS planners			

# APPENDIX I: GLOSSARY

ALTITUDE - Vertical height above sea level.

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

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

ATV – All terrain vehicle

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

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

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

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

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

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

DEHLG - Department of Environment, Heritage and Local Government

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

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

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

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

FLORA - plant life.

G.S.I. – Geological Survey of Ireland

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.

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

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

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

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

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

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

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

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

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

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

RED DATA BOOK 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.

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

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

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

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

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

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

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

# APPENDIX II: REFERENCES

#### **Map References:**

O.S. 1/2 inch (1:126,720) map:No. 19O.S. Discovery (1:50,000) map:No. 68O.S. 6 inch (1: 10,560) maps:CW20,

CW20, CW23, CW24, CW25, CW26, WX08, WX09, WX13, WX14, WX18, WX24

#### Data Bases :

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

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

#### **Photographic Coverage:**

Aerial photo Nos. 1883, 3556, 3578, 3579, Flight Line 9/10. Date: 2000. NPWS, Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

#### **Relevant Legislation:**

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

Local Government (Planning and Development) Regulations, 2000.

The Wildlife Act 1976 and The Wildlife (Amendment) Act 2000.

#### **Bibliography:**

- Archaeological Survey of Ireland 1995a. Recorded Monuments Protected under Section 12 of the National Monuments Amendment Act, 1994 - County Carlow. Archaeological Survey of Ireland, OPW, Dublin.
- Archaeological Survey of Ireland 1995b. Recorded Monuments Protected under Section 12 of the National Monuments Amendment Act, 1994 - County Wexford. Archaeological Survey of Ireland, OPW, Dublin.
- Carlow Council 1997. County Carlow Development Plan 2003. Carlow Council.
- Conroy, M.J. & Ryan, P. 1967. Soils of County Carlow. An Foras Talúntais, Dublin.
- Curtis, T. & McGough, H. 1988. Vascular Plants: The Irish Red Data Book 1. Stationary Office, Dublin.

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

Fahy, E. 1975. A Preliminary Report on Areas of Scientific Interest in County Carlow Unpublished report to Carlow County Council. An Foras Forbartha, Dublin.

- Feehan, J. & O' Donovan, G. 1996. *The Bogs of Ireland*. Environmental Institute, University College Dublin, Dublin.
- Fitzgerald, D. & Forrestal, F. 1996. Monthly and Annual Averages of Rainfall for Ireland 1961 1990. Meteorological Service, Dublin.
- Fossitt, J.A. 2000. A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.
- Goodwillie, R.N. 1979. A Preliminary Report on Areas of Scientific Interest in County Wexford Unpublished Report to Wexford County Council. An Foras Forbartha, Dublin.
- Newton, S., Donaghy, A., Allen, D., Gibbons, D. 1999. Birds of Conservation Concern in Ireland, Irish Birds <u>6</u>
- (3): 333-344, BirdWatch Ireland, Monkstown, Co. Dublin.
- Norriss, D.W., Marsh, J., McMahon, D. & Oliver, G.A. 2002. A national survey of breeding Hen Harriers Circus cyaneus in Ireland 1998-2000. Irish Birds 7 (1):1-12.
- O'Connell, C. 1987. The IPCC Guide to Irish Peatlands. Fodhla Printing, Dublin.
- Rohan, P.K. 1986. The Climate of Ireland. Meteorological Service, Dublin.
- Royal Irish Academy 1979. Atlas of Ireland. Newman, Dublin.
- Scannell, M.J.P. & Synnott D.M. 1987. *Census Catalogue of the Flora of Ireland*. Government Publications Office, Dublin.
- Tietzsch-Tyler, D. & Sleeman, A.G. 1994. *Geology of Carlow Wexford*. Geological Survey of Ireland, Dublin.
- Webb, D.A., Parnell, J. & Doogue, D. 1996. An Irish Flora. Dundalgan Press, Dundalk.
- Wexford County Council 2003. County Wexford Development Plan. Wexford County Council.
- Whilde, A. 1993. Irish Red Data book 2: Vertebrates. Threatened Mammals, Birds, Amphibians and Fish in Ireland. HMSO, Belfast.

## APPENDIX III: PHYSICAL PROCESSES AFFECTING THE SITE

## Climate (from Met Éireann)

KILKENNY monthly and annual mean and extr 1961-1990	eme value	5											
<b>TEMPERATURE</b> (degrees Celsius)	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	year
mean daily max.	7.7	7.9	10	12.4	15.1	18.1	19.9	19.6	17.2	13.9	10.1	8.4	13.4
mean daily min.	1.4	1.6	2.3	3.4	5.6	8.4	10.4	9.9	7.9	6.1	2.8	2.1	5.2
mean	4.6	4.8	6.1	7.9	10.3	13.3	15.2	14.7	12.6	10	6.4	5.3	9.3
absolute max.	14.1	15.1	18.5	23.5	26	31.5	31.4	30.5	25.6	22.2	17.4	14.8	31.5
absolute min.	-14.1	-11.1	-7.9	-5.4	-3.7	0.5	2.3	1.2	-1.6	-4.4	-7	-10.8	-14
mean no. of days with air frost	10.8	8.7	7.4	4.1	0.8	0	0	0	0.4	2	8.4	10.5	53
mean no. of days with ground frost	18.2	14.9	14.3	12.4	7.3	2	0.4	0.8	3.4	6.8	14.2	16.8	112
<b>RELATIVE HUMIDITY</b> (%)							1	1		1			
mean at 0900UTC	88	87	85	79	76	76	78	82	85	88	89	89	84
mean at 1500UTC	80	74	68	64	64	65	65	66	69	76	78	82	71
SUNSHINE (hours)											1	1	
mean daily duration	1.71	2.29	3.32	4.85	5.47	5.15	4.65	4.5	3.82	2.71	2.22	1.48	3.51
greatest daily duration	8.2	9.7	12.1	14	15.8	16.3	16	14.2	11.8	10.2	9	7.3	16.3
mean no. of days with no sun	11	8	6	3	2	2	2	2	3	6	9	12	65
RAINFALL (mm)													
mean monthly total	86.3	66.1	63.9	51.4	61.9	50.5	52.5	69.4	73.5	84.9	73.8	88.6	823
greatest daily total	31.5	32.3	29.9	24.5	23.9	30	66.4	49.8	30	34.6	29	45.8	66.4
mean no. of days with $\geq 0.2mm$	19	15	17	15	17	14	13	15	15	18	17	18	192
mean no. of days with $>= 1.0mm$	15	11	12	10	12	10	9	11	11	13	12	13	137
mean no. of days with $\geq 5.0mm$	7	5	5	4	5	4	3	4	5	6	5	6	58
WIND (knots)													
mean monthly speed	7.4	7.4	7.7	6.7	6.4	5.8	5.6	5.6	5.9	6.4	6.4	7.1	6.5
max. gust	77	72	60	53	54	45	46	56	65	74	56	65	77
max. mean 10-minute speed	44	39	36	33	32	28	27	29	40	45	35	40	45
mean no. of days with gales	0.5	0.3	0.1	0	0	0	0	0	0	0.1	0.1	0.3	1.4
WEATHER (mean no. of days with)	<b>ļ</b>		1				,						
snow or sleet	5.1	5	3.1	0.8	0.1	0	0	0	0	0	0.5	2.6	17.3
snow lying at 0900UTC	1.7	1.5	0.4	0.1	0	0	0	0	0	0	0.1	0.4	4.1
hail	1.1	1	2.7	2.4	1.3	0.5	0.1	0.1	0.1	0.3	0.4	0.3	10.4
thunder	0.1	0.1	0.2	0.4	0.8	0.9	1.1	0.8	0.3	0.2	0	0.1	5
Fog	4.6	2.9	2.3	2	2.4	2.3	2.6	4.6	5.6	5.9	4.3	4.9	44.4

There is one Rainfall Station located approximately in the centre of the site, at Knockroe Mountain, Co. Carlow. Monthly and annual rainfall averages (in mm.) for this rainfall station for the years 1961 - 1990 are given below.

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Annual
170	120	112	83	102	85	84	105	125	141	133	164	1425

## **Geology and Geomorphology**

### **Solid Geology**

The site contains several distinct geological formations (Geological Survey of Ireland, 1994). The site contains formations of the Lower Palaeozoic era which stretches from approximately 570 - 410 million years ago. These formations are as follows (see Map 5: Site Geology for locations):

#### 1: Blackstairs Granite :

Grey, usually even-grained granite and subordinate granodiorite, locally porphyritic.

This contains four sub-types:

- (a) Granite fine grained granodiorite to granite.
- (b) Equigranular Granite Pale, fine to coarse-grained granite.
- (c) Microcline Porphyritic Granite Granite with microcline phenocrysts.
- (d) Graguenemanagh Granite Gneiss Highly foliated, 'gneissic' granodiorite.

#### 2: Maulin Formation :

Dark blue-grey slates, commonly laminated with pale siltstones; metamorphosed to phyllites and schists with sillimanite, garnet staurolite, and alusite and biotite in granite aureole.

Also found within the site are the following sub-types of the Maulin Formation:

- (a) Ballybeg Member Dark grey semi-peltic, psammitic schist.
- (b) Monaughrim Member Dark grey semi-peltic, psammatic schist.
- (c) Kilcarry Member Often porphyritic andesitic amphibolites.

## **Soils and Soil Processes**

The soils of County Carlow were surveyed by Conroy & Ryan, (1967). The following soil types are found within the site:

#### **Type 2 : Hill Peat**

This soil type is found around the summits of Mount Leinster, Knockroe and Blackstairs Mountain.

#### **Type 17 : Black Rock Mountain Series**

Found on the northern parts of the site, especially the summit of Slievebawn.

#### **Type 24 : Blackstairs Series**

Found at a lower elevation than Cariighvahanagh Series on the slopes of Mount Leinster, The Black Banks and western slopes of the southern portion of the site.

#### **Type 102 : Carrigvahanagh Series**

Found between Hill Peat and Blackstairs Series on the western slopes of Mount Leinster, and entire western spine of the south portion of the site.

Soil characteristics of these types are shown below:

Series	Topography	Slope	Alt.	Drainage	Parent Material	Great Soil Group
Hill Peat	-	-	-	-	-	Peat
Type 17	Steeply Rolling	15-18°	1150f	Impeded	Shale Bedrock	Peaty Ironpan Podzol
			t			
Type 24	Steeply Rolling	15-18°	900ft	Impeded	Granite Bedrock	Peaty Ironpan Podzol
Type 102	Steeply Sloping	0°	900ft.	Imperfect	Granite Bedrock	Lithosol

The soils of County Wexford are made up of Peaty Podzols on the highest elevations and Sandy Acid Brown Earths and Acid Brown Earths on the lower slopes on the boundaries of the site (Royal Irish Academy, 1979).

Summary information on these soils is shown below (After Royal Irish Academy, 1979).

Principal Soil	Associated Soils	Parent Material
Peaty Podzols	Climatic Peats and Lithosols	Granite, Old Red Sandstone
Sandy Acid Brown Earths	Brown Podzolics and Regosols	Granite, Moranic Sands
Acid Brown Earths	Brown Podzolics	Ordovician – Silurian Shale Till

## **APPENDIX IV:** WATER QUALITY

Results of EPA monitoring of water quality at sites on some rivers located within the cSAC are shown below (taken from the website www.epa.ie, river quality section).

River	River Code	Station	Location	<sup>1</sup> Q value
Urrin	12U01	0050	Ballycrystal Bridge	5 (1998)
Askinvillar Stream	12A03	0020	Askinvillar Bridge	4-5 (1998)
Aughnabrishy	14A05	0200	Aughnabrisky	4 (2000)
Carlow Bridge	14A05	0200	Killedmed Bridge	4 (2000)
Clody	12C03	0080		4-5 (1998)
Burren	14B05	0020	Burren Bridge (Coolanaghin)	4-5 (1997)

 $^{1}$ Q-value is a system used to measure riverine quality. Q values occur in a scale of Q1-Q5 in which the biological composition of the water (i.e. macroinvertebrates present in a sample) is related to water quality.

#### Q value

5 (diversity high)
4 (diversity slightly reduced)
3 (diversity significantly reduced)
2 (diversity low)
1 (diversity very low)

#### Water quality

Good Fair Doubtful Poor Bad

## APPENDIX V: NOTIFIABLE ACTIONS

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

- Notifiable Action 2.1 Upland grasslands, scree, inland cliff
- Notifiable Action 3.1 Blanket bog
- Notifiable Action 3.2 Heath (including juniper scrub)
- Notifiable Action 5.1 Woodlands
- Notifiable Action 5.2 Scrub
- Notifiable Action 6.1 Rivers or streams
- Notifiable Action 7.1 Ditches, hedges, cereals and intensive grasslands, walls, buildings, waste ground, bare soil, parkland grassland, bracken, caves, or quarries

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#### 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.

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

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

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

#### **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.

SECTION A	SECTION B
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.	<ul><li>Please note that the activities listed in <i>Section B</i> 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).</li><li>If so, these notifiable actions do not apply.</li><li>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.</li></ul>

### **BLANKET BOG**

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

#### 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.

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

#### HEATH (INCLUDING JUNIPER SCRUB)

#### WOODLANDS

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

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

#### WOODLANDS

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

#### 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.

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

### SCRUB

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

#### **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.

SECTION A	SECTION B
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.	<ul> <li>Please note that the activities listed in <i>Section B</i> 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).</li> <li>If so, these notifiable actions do not apply.</li> <li>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.</li> </ul>

### **RIVERS OR STREAMS**

THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT grazing of livestock above a sustainable density (as defined in approved farm plans) within 300 of the river or stream/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream supplementary feeding of stock within 30m of the river or stream/adding fireiliser of any sort within 30m of the river or stream extracting water for irrigation or other purposes operation of boat angling or shore angling business/ restocking with in 30m of the river or stream or within 30m of the river or stream removal of trees or any quatic vegetation within 30m of the river or stream or within 30m of the river or stream or within 30m of the river or stream or within 30m of the river or stream removal of trees or any aquatic vegetation within 30m of the river or stream dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them dumping, burning or storing any materials within 30m of the river/stream harvesting or burning of reed or willow causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours) introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area	Section A	Section B
SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT grazing of livestock baove a sustainable density (as defined in approved farm plans) within 30m of the river or stream/grazing by livestock treaded within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream/grazing by livestock treaded 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/adding for shore angling business/ restocking with fish reclamation, infilling, ploughing or land drainage within 30m of the river or stream/ reseeding, planting of trees or any other species within 30m of the river or stream/ removal of trees or any aquatic vegetation within 30m of the river/stream/ use of any pesticide or herbicide in the river or stream or within 30m of the river or stream dumping, burning or storing any materials within 30m of the river/stream including the land spreading of used pesticides (e.g. sheep dip)/alteration of the banks, channel, bed or flow of the river or stream harvesting or burning of reed or willow causing siltation/ operation of commercial recreation facilities (e.g. bird watching tours) introduction (or re-introduction) into the wild of plants or animals of species not currently found in	HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION	ALREADY LICENSED BY ANOTHER
grazing of livestock above a sustainable density (as defined in approved farm plans) within 30m of the river or stream/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung within 30m of the river or stream supplementary feeding of stock within 30m of the river or stream/adding lime within 30m of the river or stream/adding fertiliser of any sort within 30m of the river or stream extracting water for irrigation or other purposes operation of boat angling or shore angling business/ restocking with fish reclamation, infilling, ploughing or land drainage within 30m of the river or stream/ use of any pesticide or herbicide in the river or stream or within 30m of the river stream dumping rubbish or other materials or disposing of any chemicals or wastes in streams/rivers or into water-courses running into them dumping of used pesticides (e.g. sheep dip)./alteration of the banks, channel, bed or flow of the river or stream harvesting or burning of reed or willow causing siltation/ operation of commercial recreation for cellities (e.g. bird watching tours)	SUCH ACTIVITIES SHOULD NOT PROCEED	sports pitches, caravan or camping facilities
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any other activity of which notice may be given by the Minister from time to time In a very limited number of cases it may be necessary for the Minister for The Environment	the Minister from time to time	

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

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

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

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

Section A	Section B
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 disturbance of bats operation of commercial recreation facilities (e.g. bird watching tours) introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area any other activity of which notice may be given by the Minister from time to time	(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY) developing leisure facilities including sports pitches, caravan or camping facilities developing roads or car parks construction of fences, buildings and embankments afforestation

## APPENDIX VI: COMPENSATION PROCEDURES

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

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

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

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

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

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

## **NPWS Farm Plan Scheme**

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

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

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

## APPENDIX VII: SUMMARY OF FARMING CONDITIONS UNDER REPS

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

### **General Provisions**

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

## **Detailed Conditions**

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

### **Stocking Density**

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

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

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

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

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

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

#### Supplementary Feeding

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

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

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

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

#### Water Pollution

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

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

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

#### **Complementary Action**

(a) Measures to prevent damage by non REPS participants

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

(b) Evaluating and Monitoring

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

(c) Farmer Education /Advice

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

(d) Seminars for Planners

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

(e) Demonstration Farms

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

(f) Quota Rights

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

(g) Scheme Extension

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

#### (h) Local Co-ordination

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

## APPENDIX VIII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

### Conservation Ranger (Wexford)

Patrick O'Sullivan Kitestown Crossabeg Co. Wexford Phone: (053) 20967 Email: <u>PatrickG.O'Sullivan@environ.ie</u>

### Conservation Ranger (Carlow) VACANT

### District Conservation Officer (Carlow and Wexford)

Lorcan Scott National Parks and Wildlife Service 2 Patrick St. Kilkenny Phone (056) 7722135 Fax (056) 7760072 Email: <u>lorcan.scott@environ.ie</u>

## **Deputy Regional Manager**

Pádraig Comerford National Parks and Wildlife Service 2 Patrick St. Kilkenny Phone (056) 7760070 Fax (056) 7760072 Email: Padraig.Comerford@environ.ie

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## **Regional Manager**

Wesley Atkinson Wicklow Mountains National Park Kilafin Laragh Co. Wicklow Phone (0404) 45802 Fax (0404) 45055 Email: <u>wesley.atkinson@environ.ie</u>

## **Divisional Ecologist**

Dr. Linda Patton

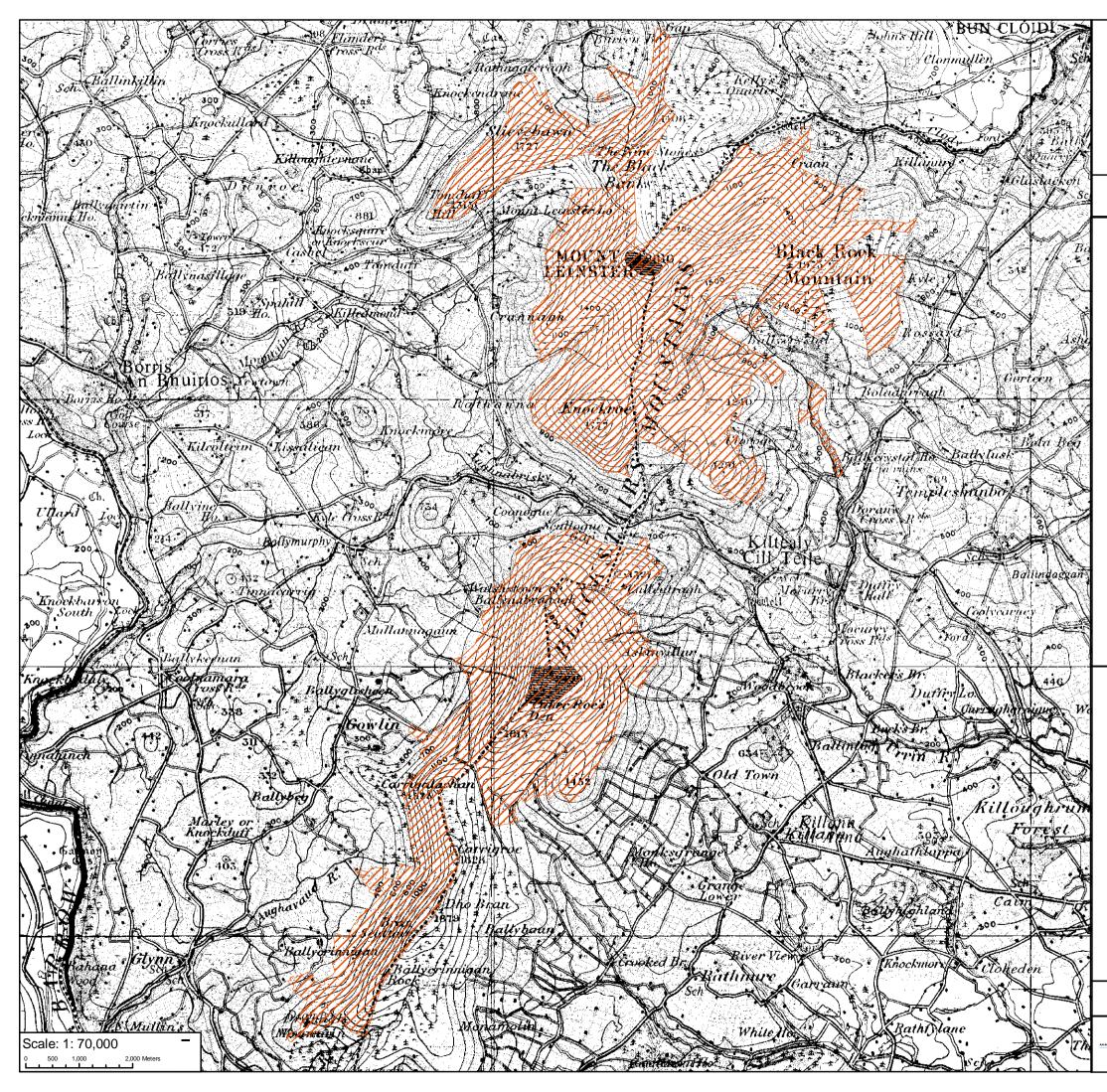
4 Claremont Rd. (The Old Revenue Comm. Office) Sandymount Dublin 4 Phone (01) 6678256 Email: <u>Linda.Patton@environ.ie</u>

## **Divisional Manager**

## National Parks and Wildlife Service

The Department of the Environment, Heritage and Local Government

7 Ely Place Dublin 2 Phone Lo Call 1890 321 421, (01) 8882000 Fax (01) 8883272 Website: <u>www.npws.ie</u>



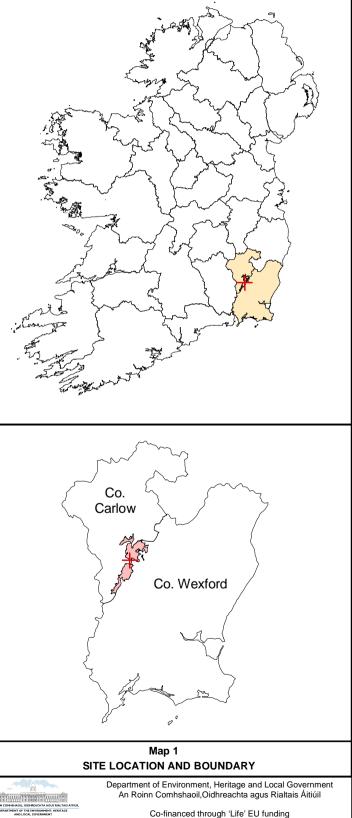
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### **BLACKSTAIRS MOUNTAINS 000770**

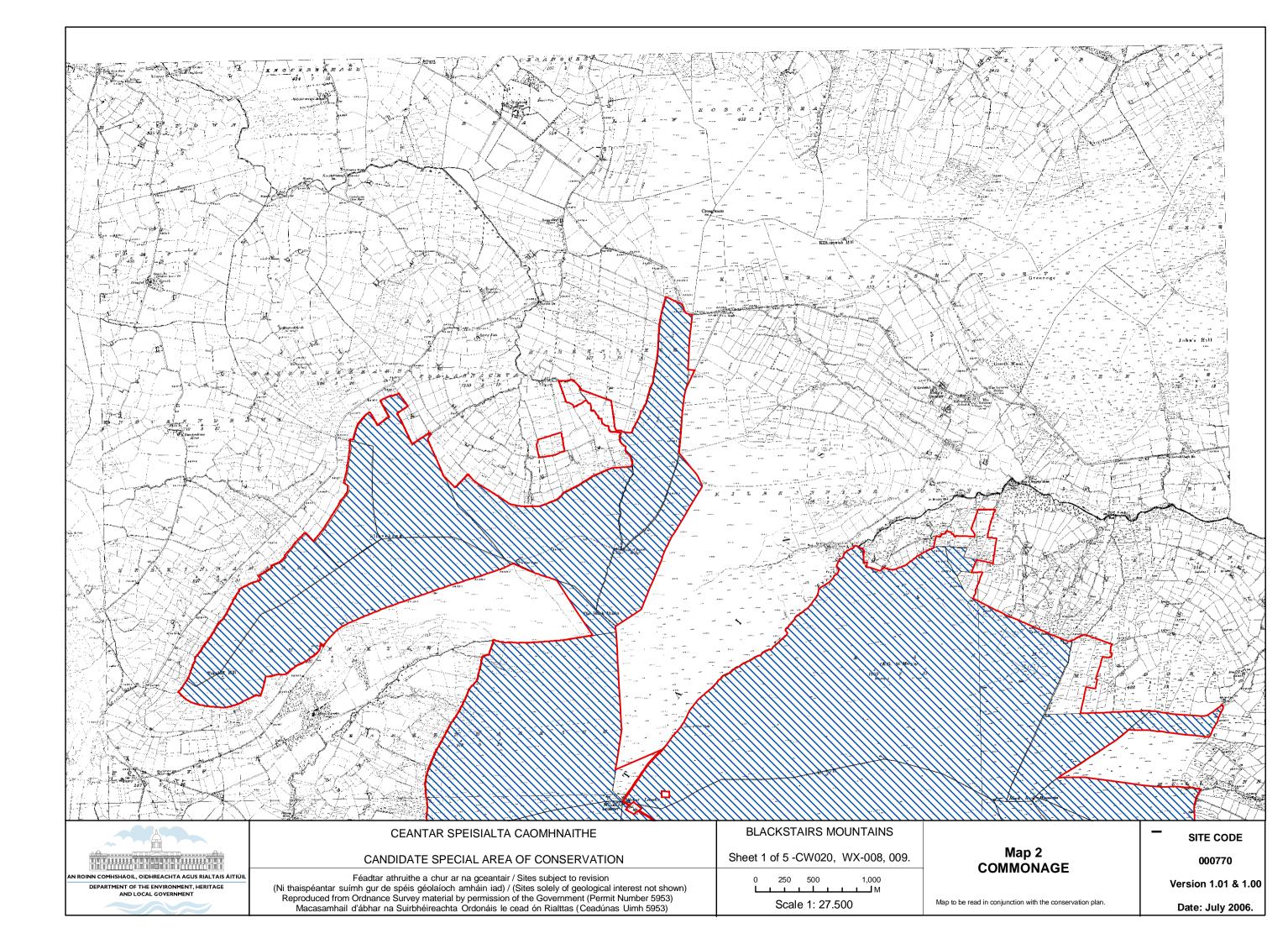
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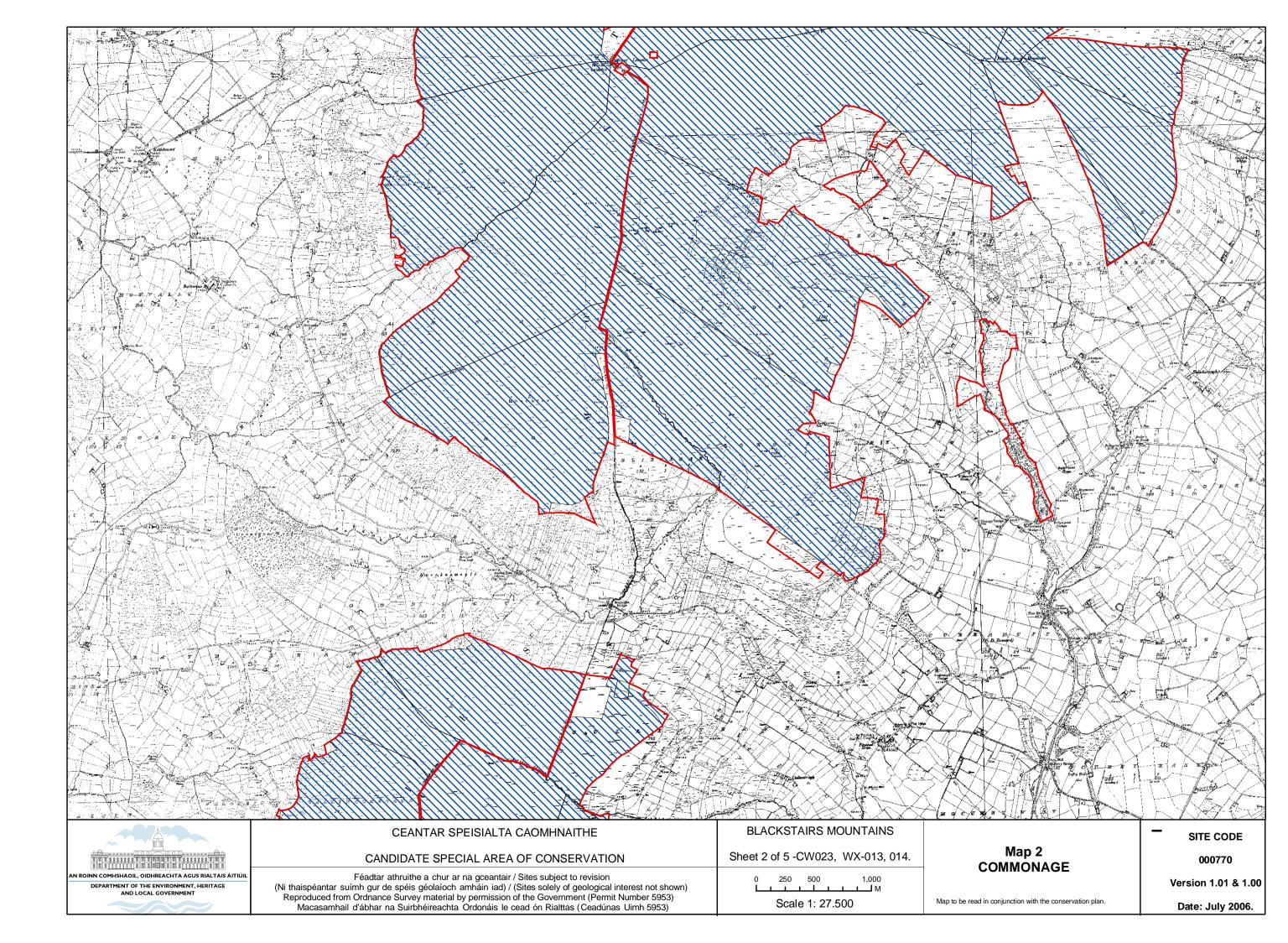
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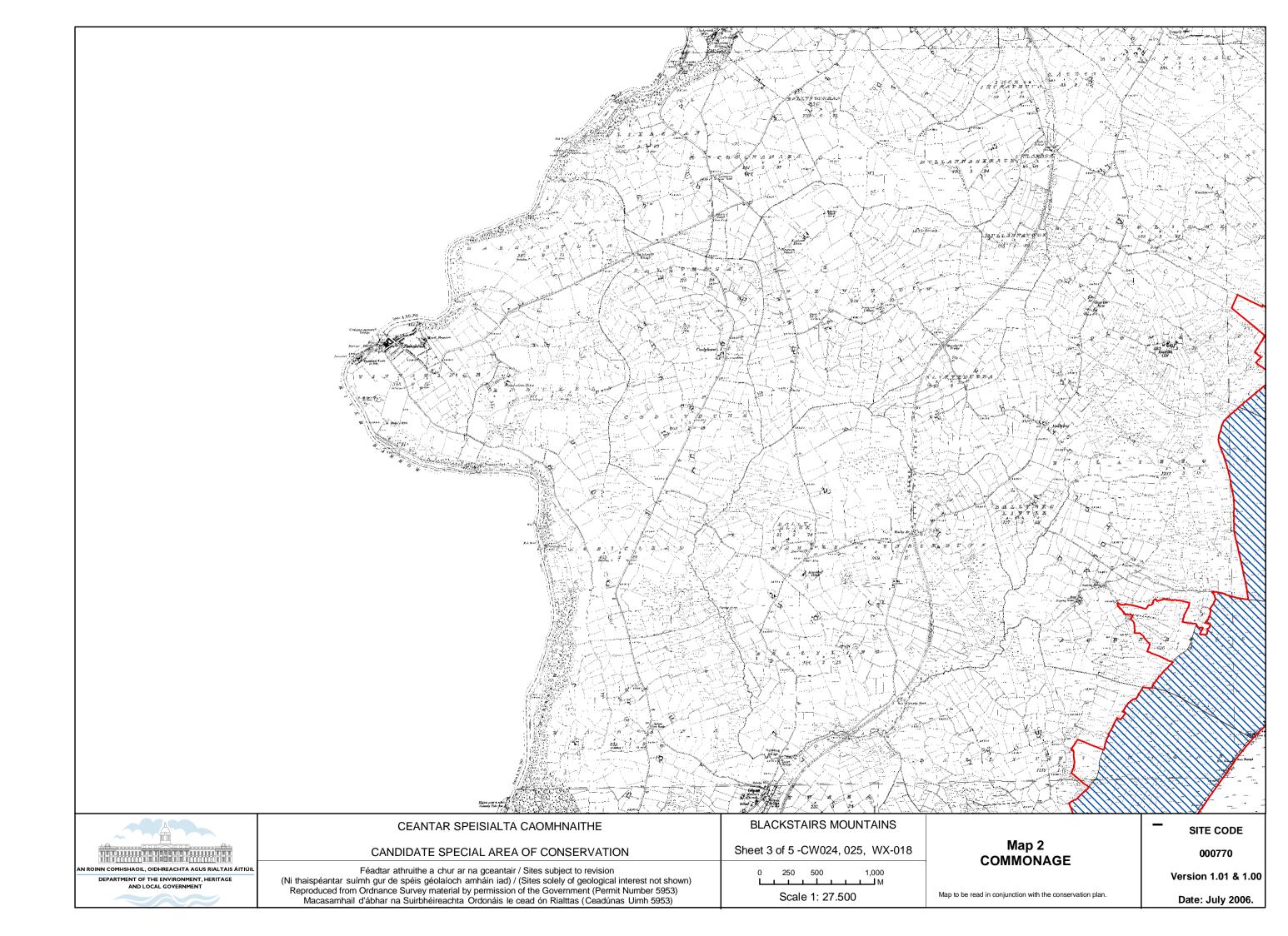
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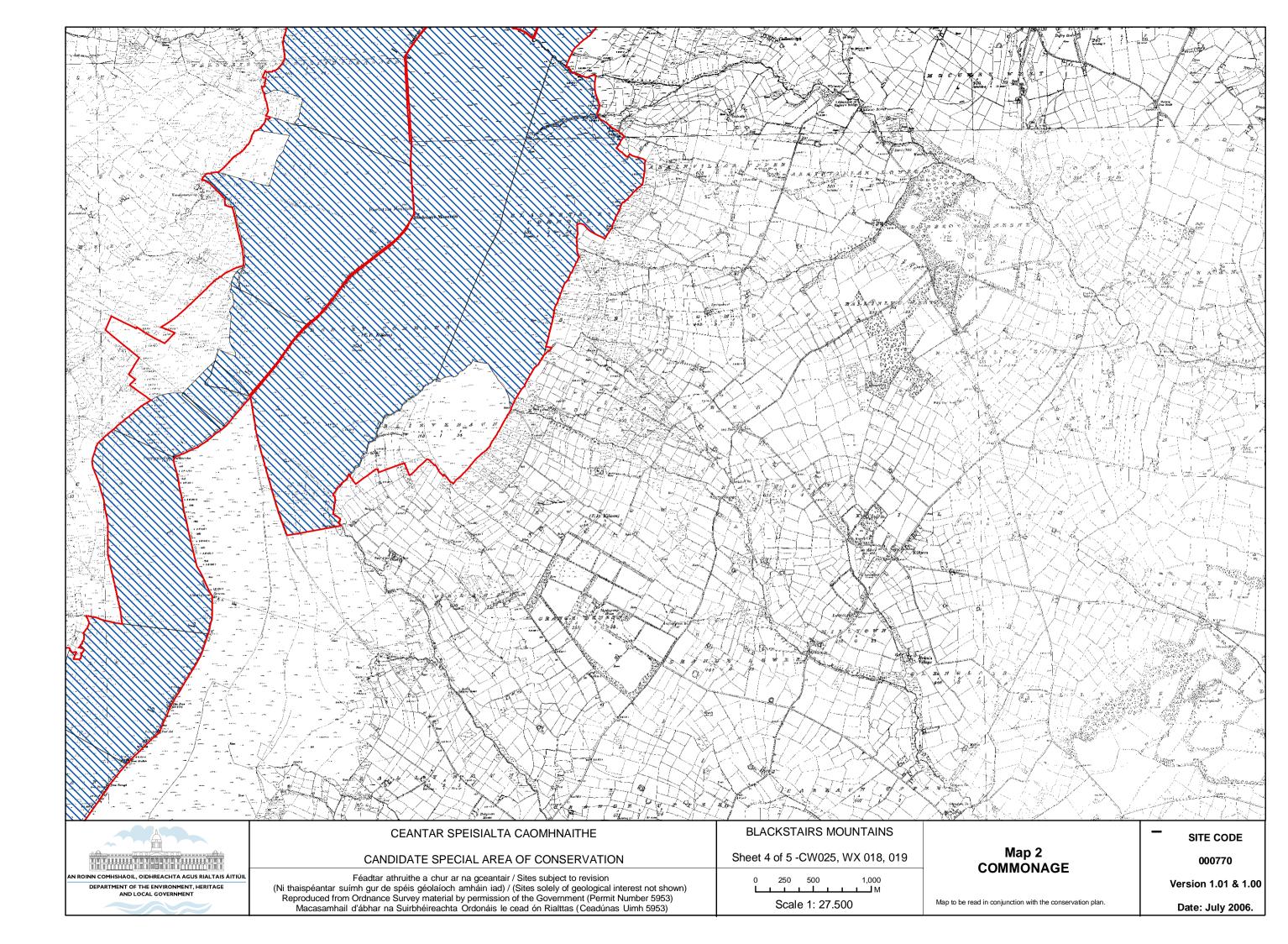


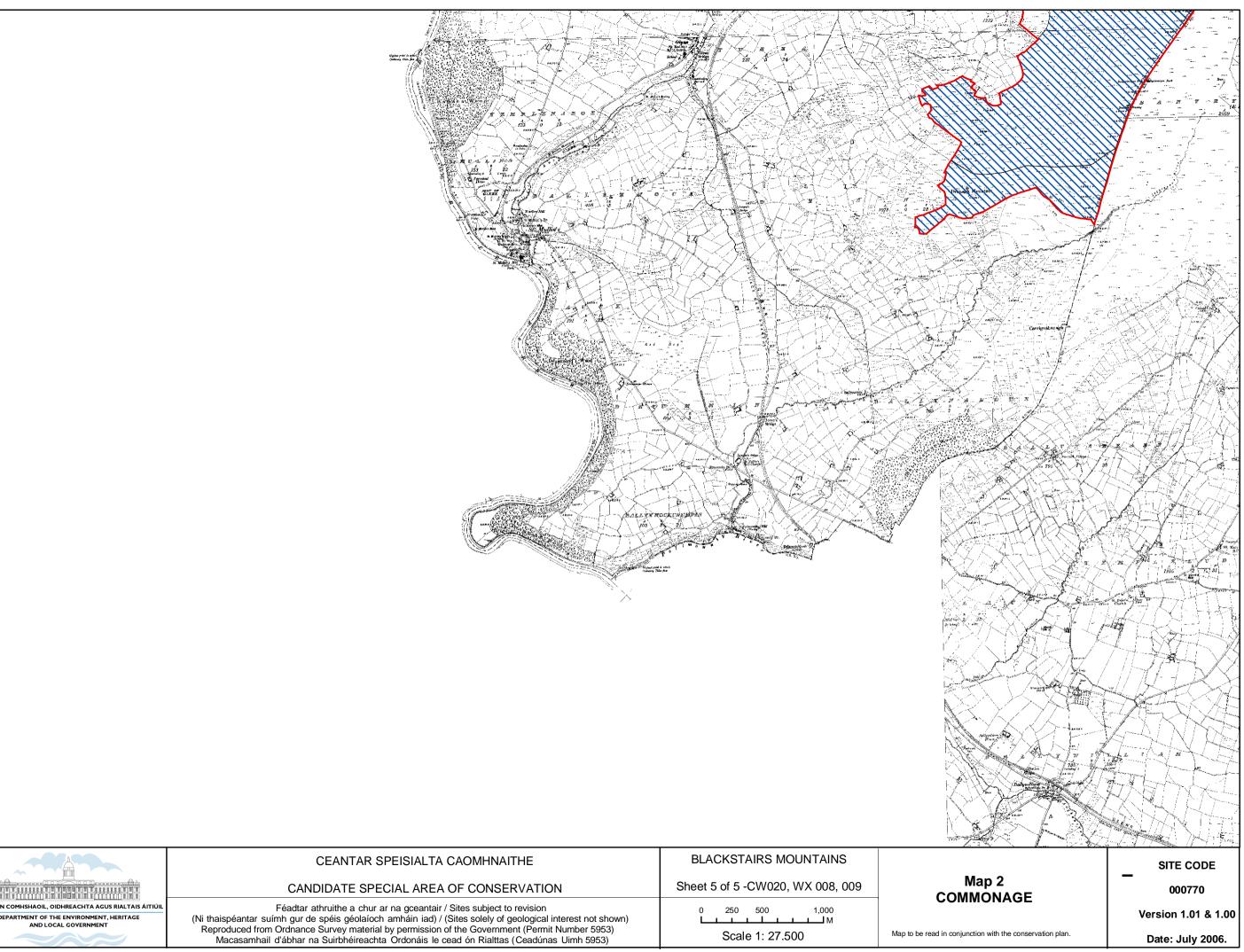
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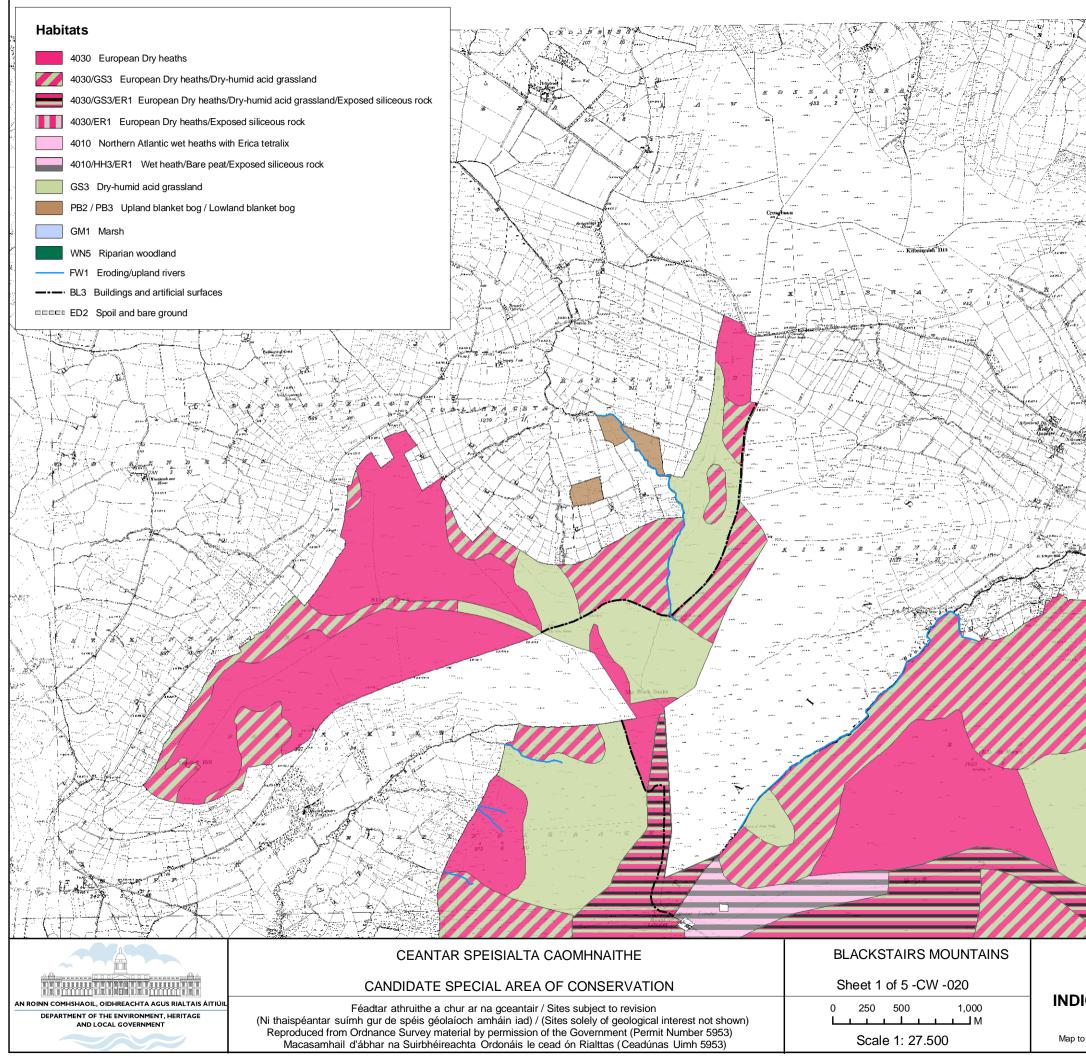






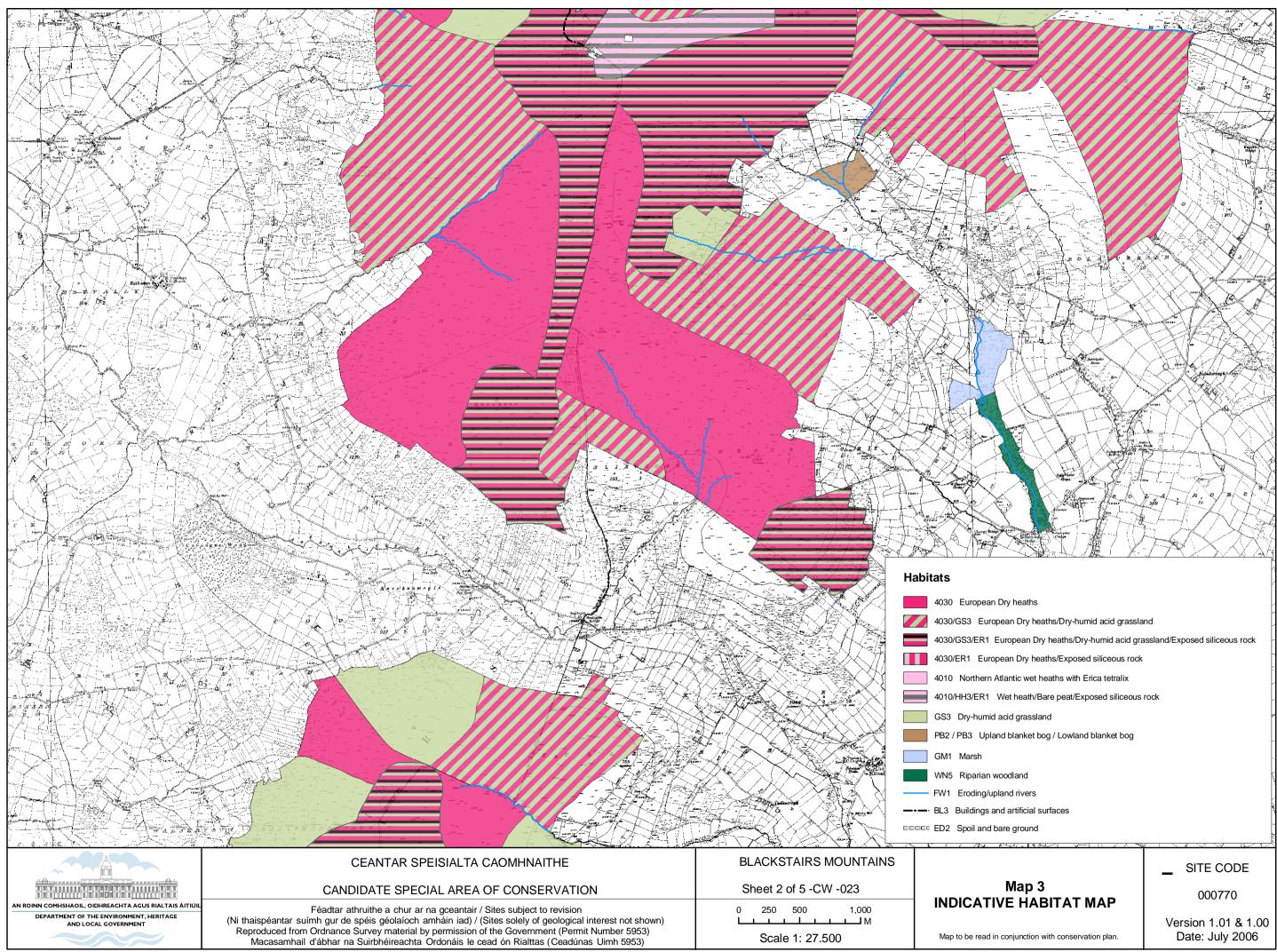


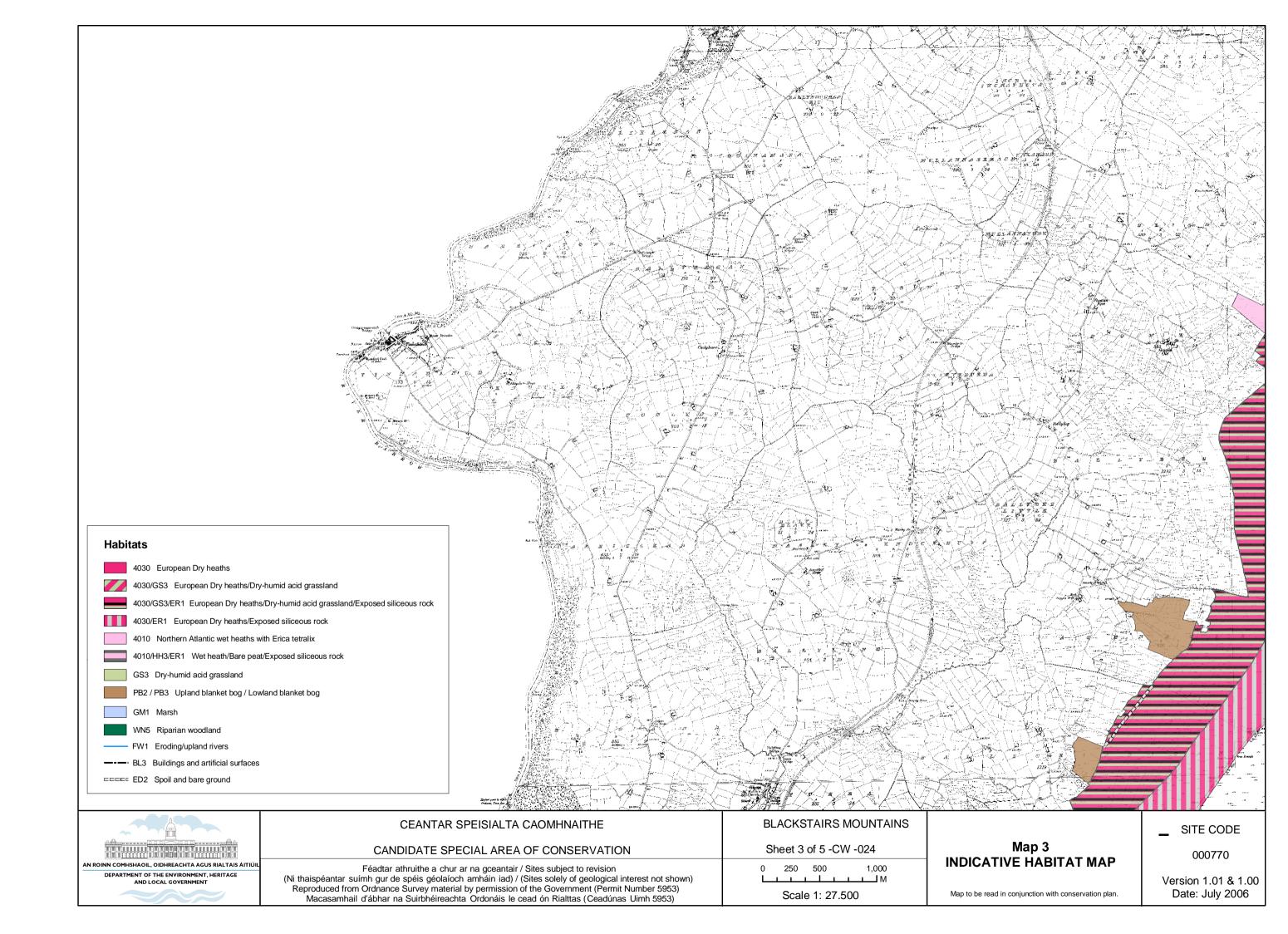
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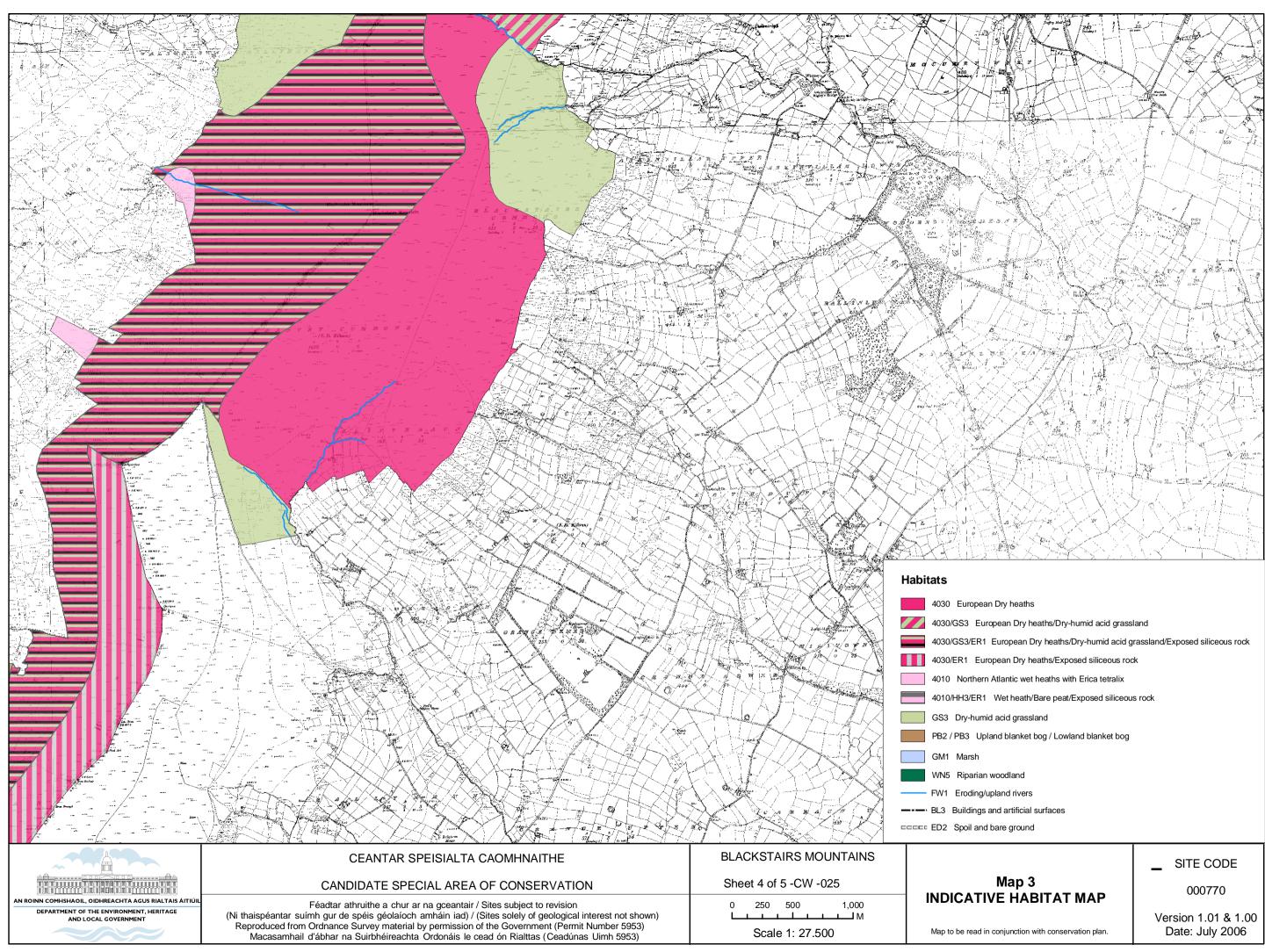


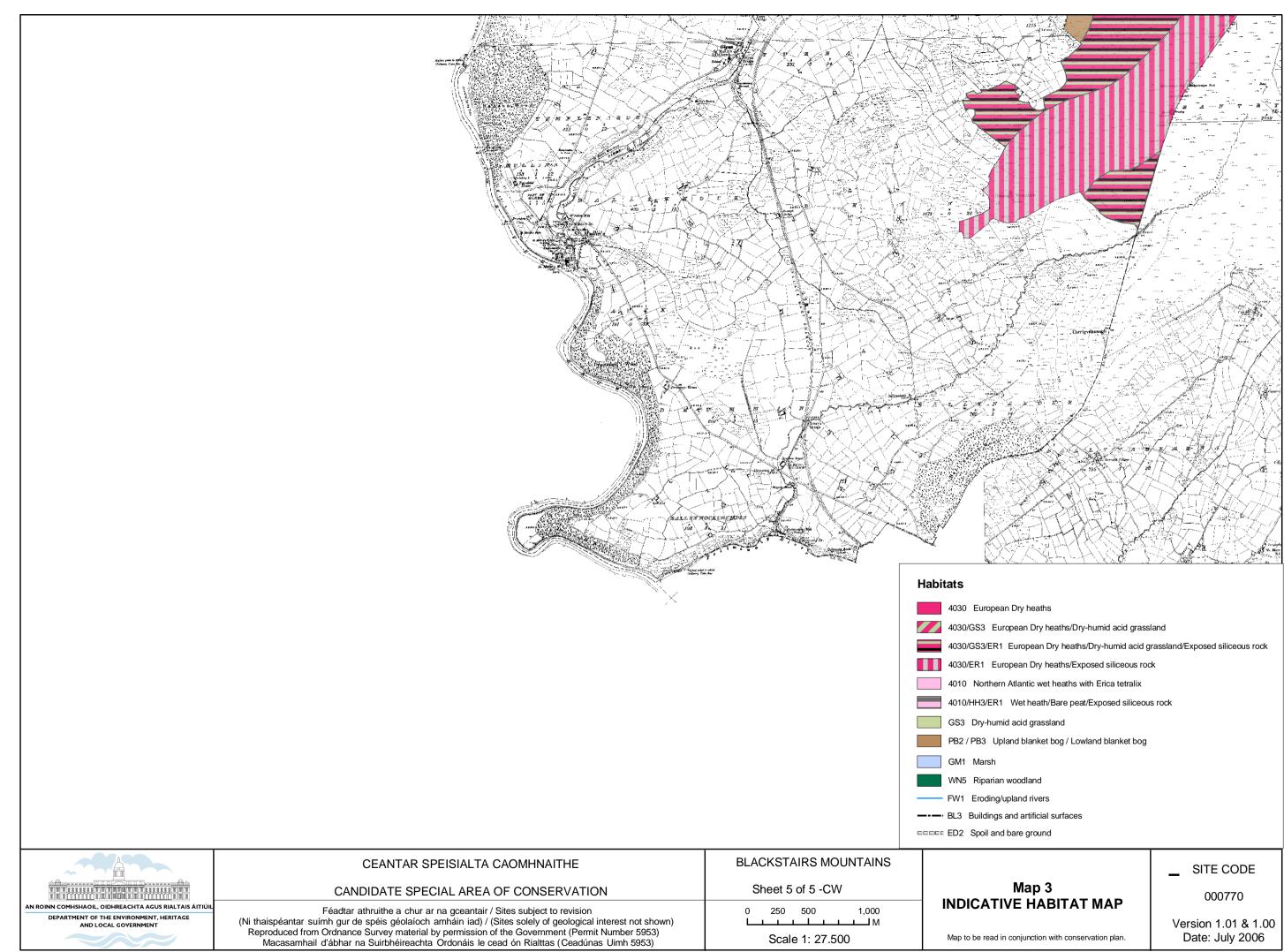
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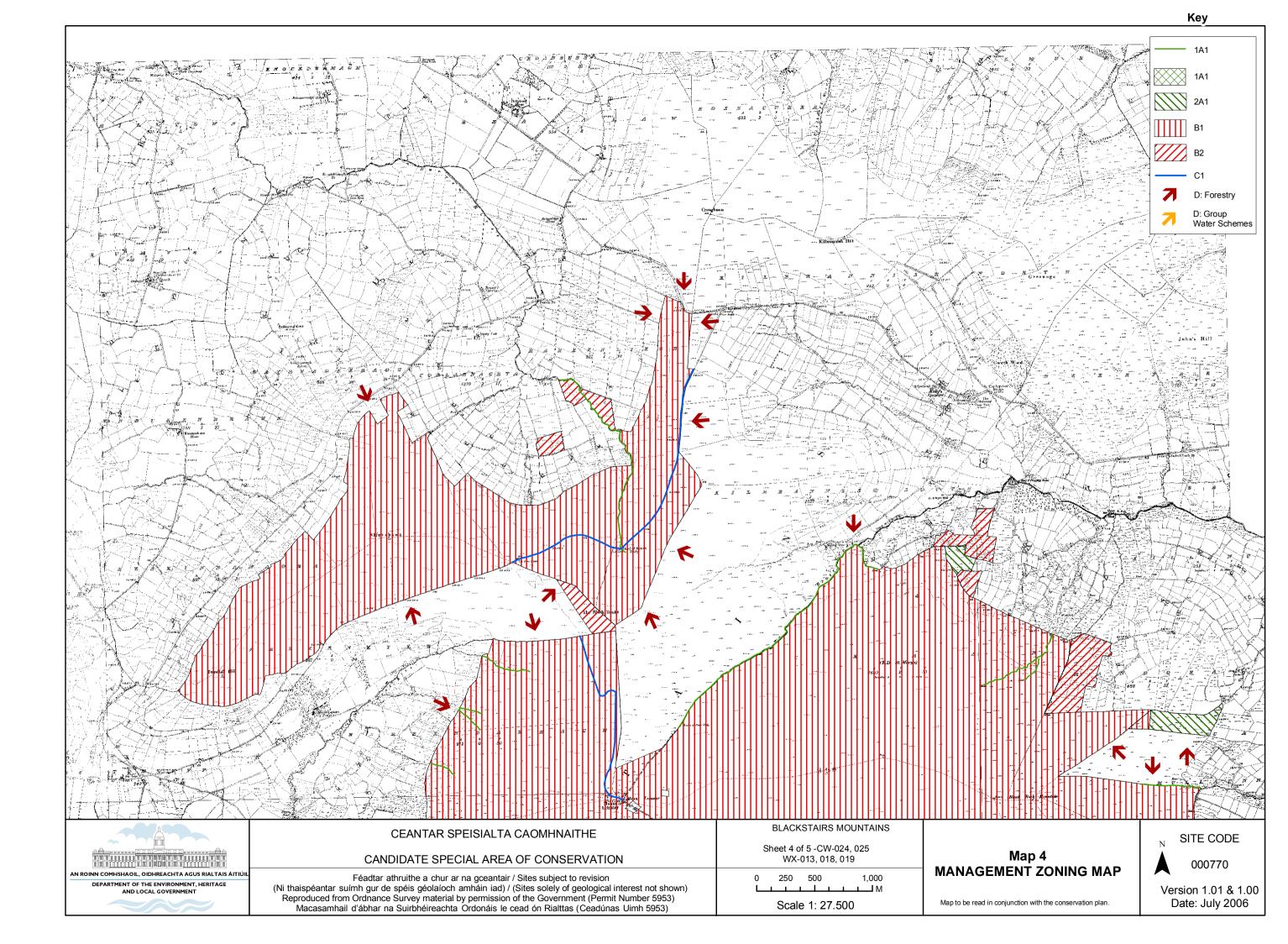
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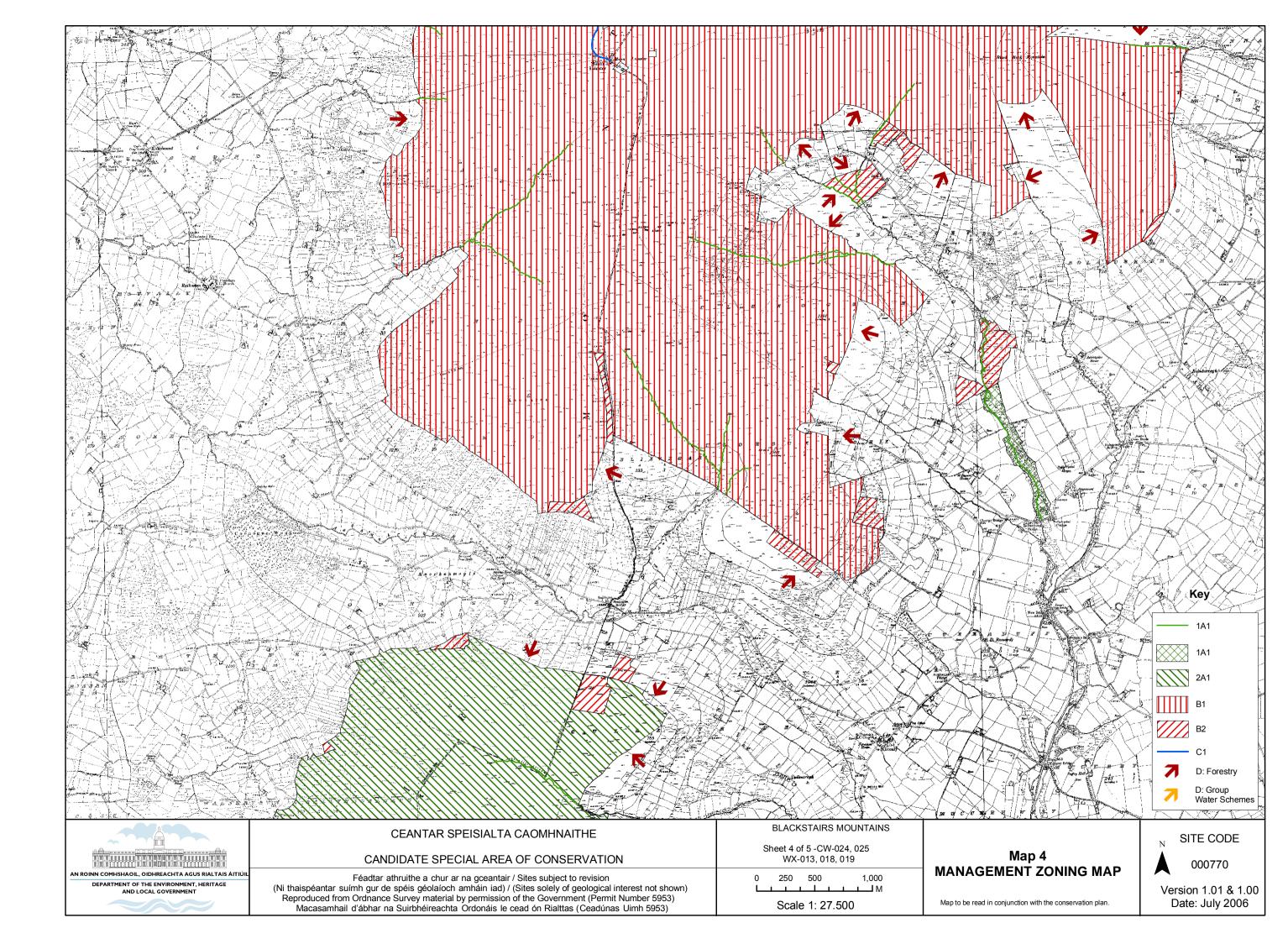


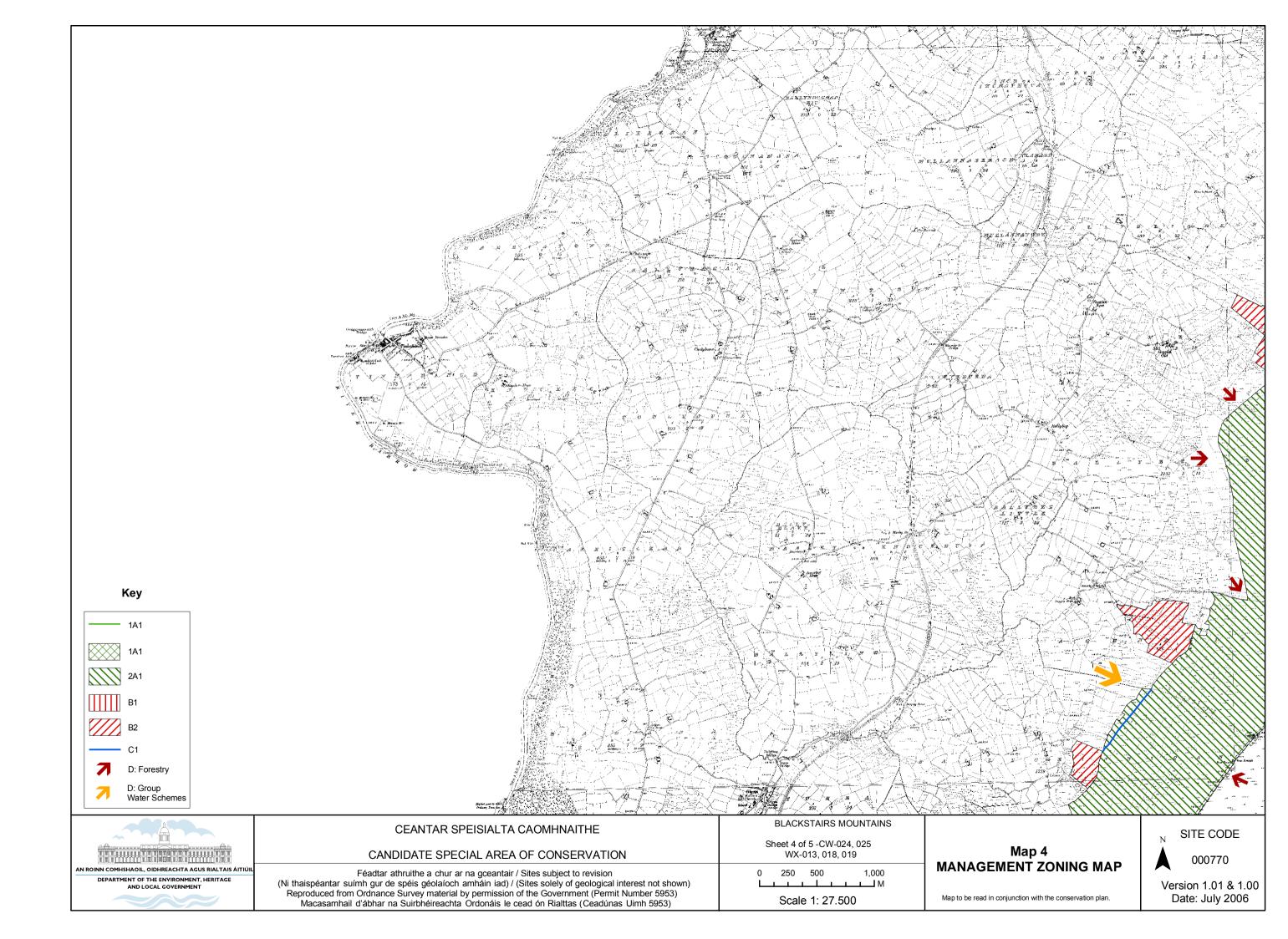


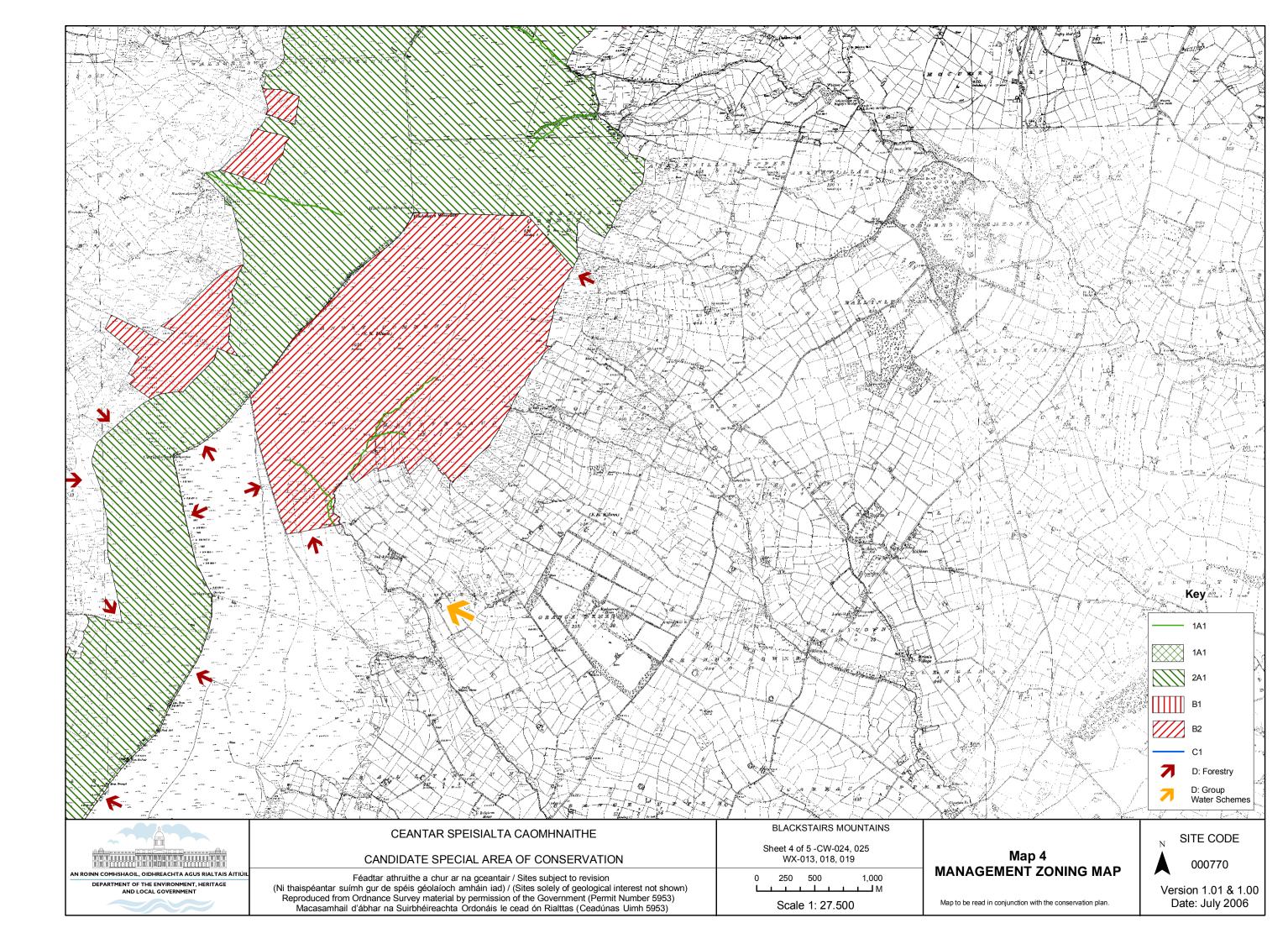


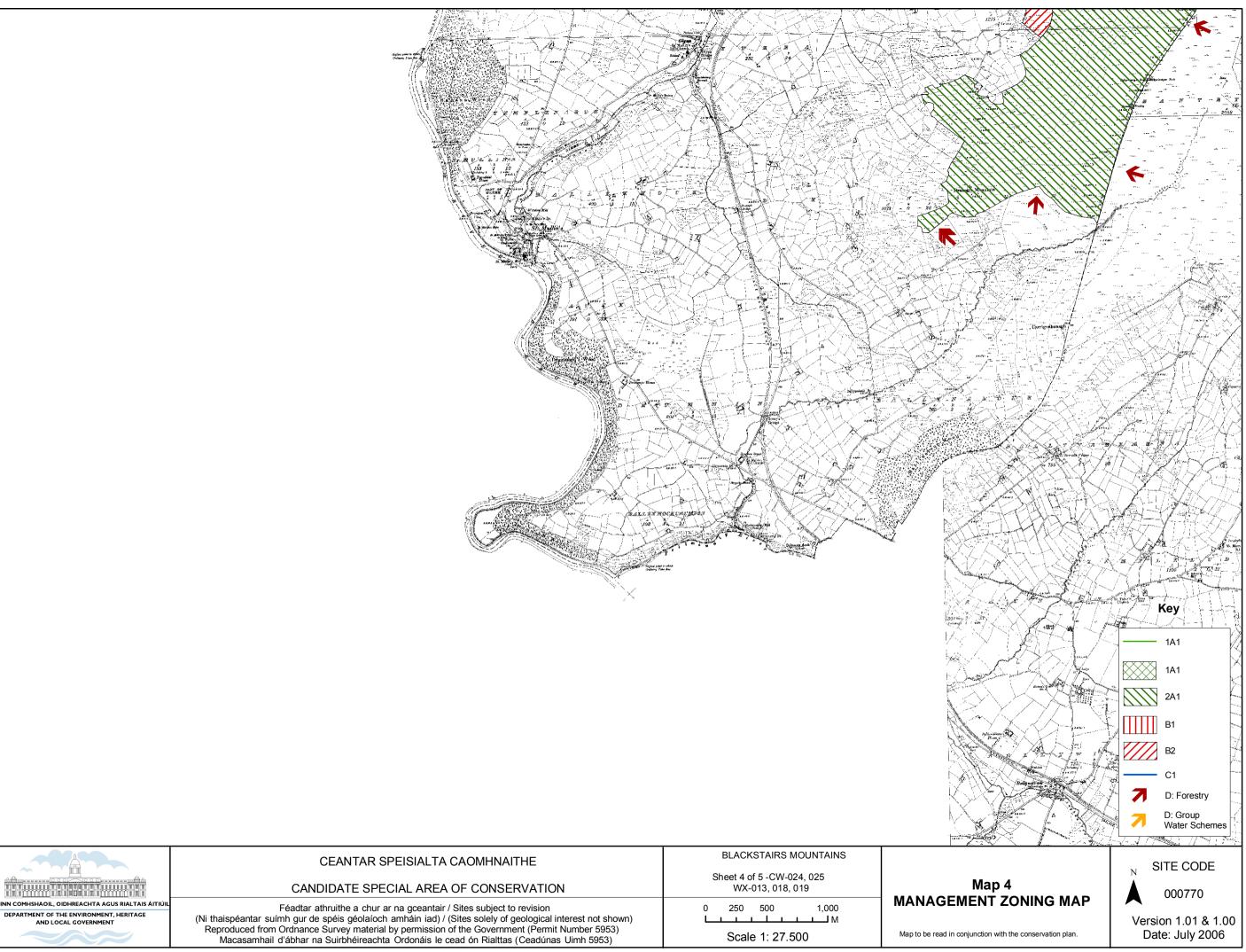




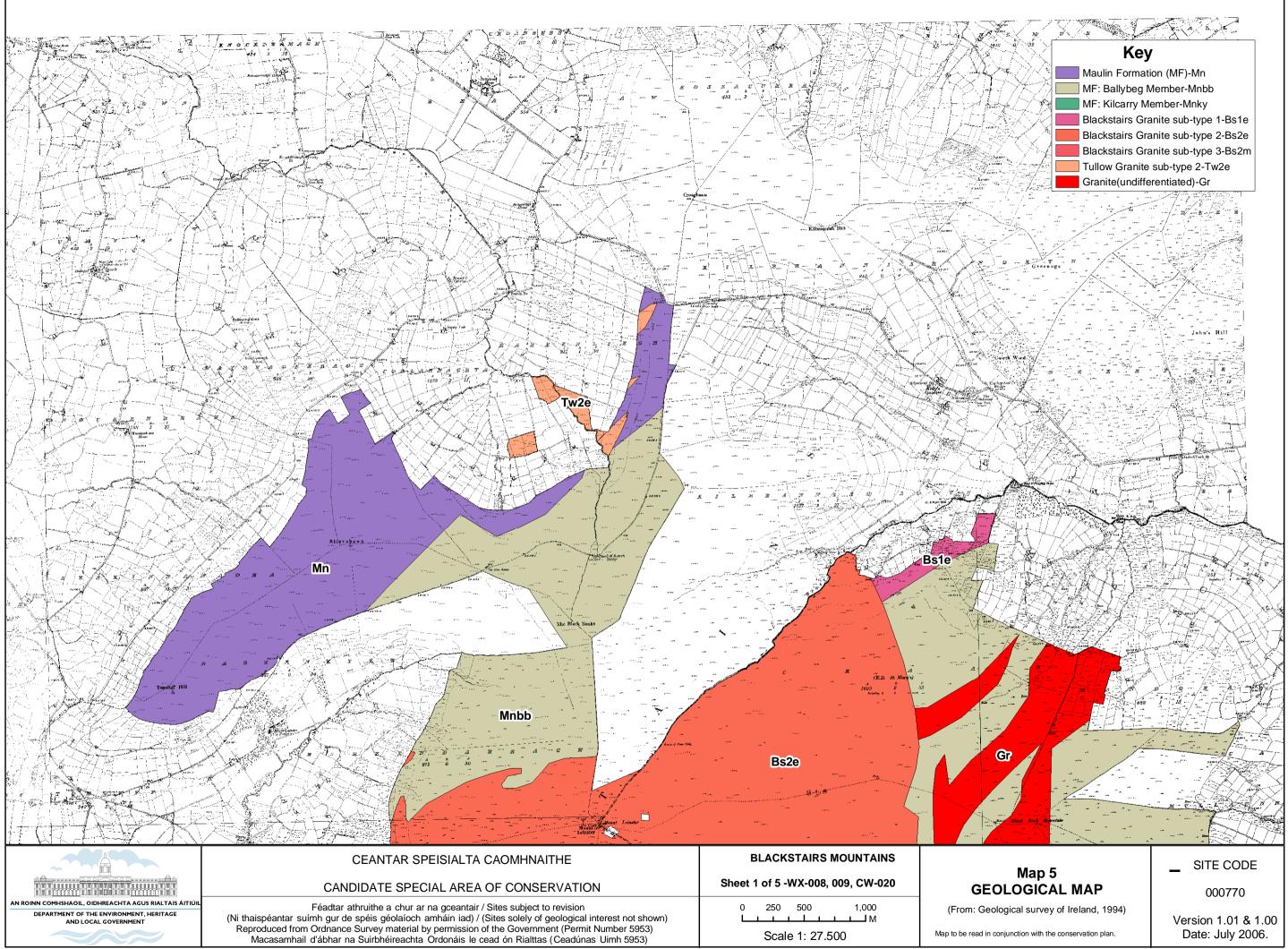


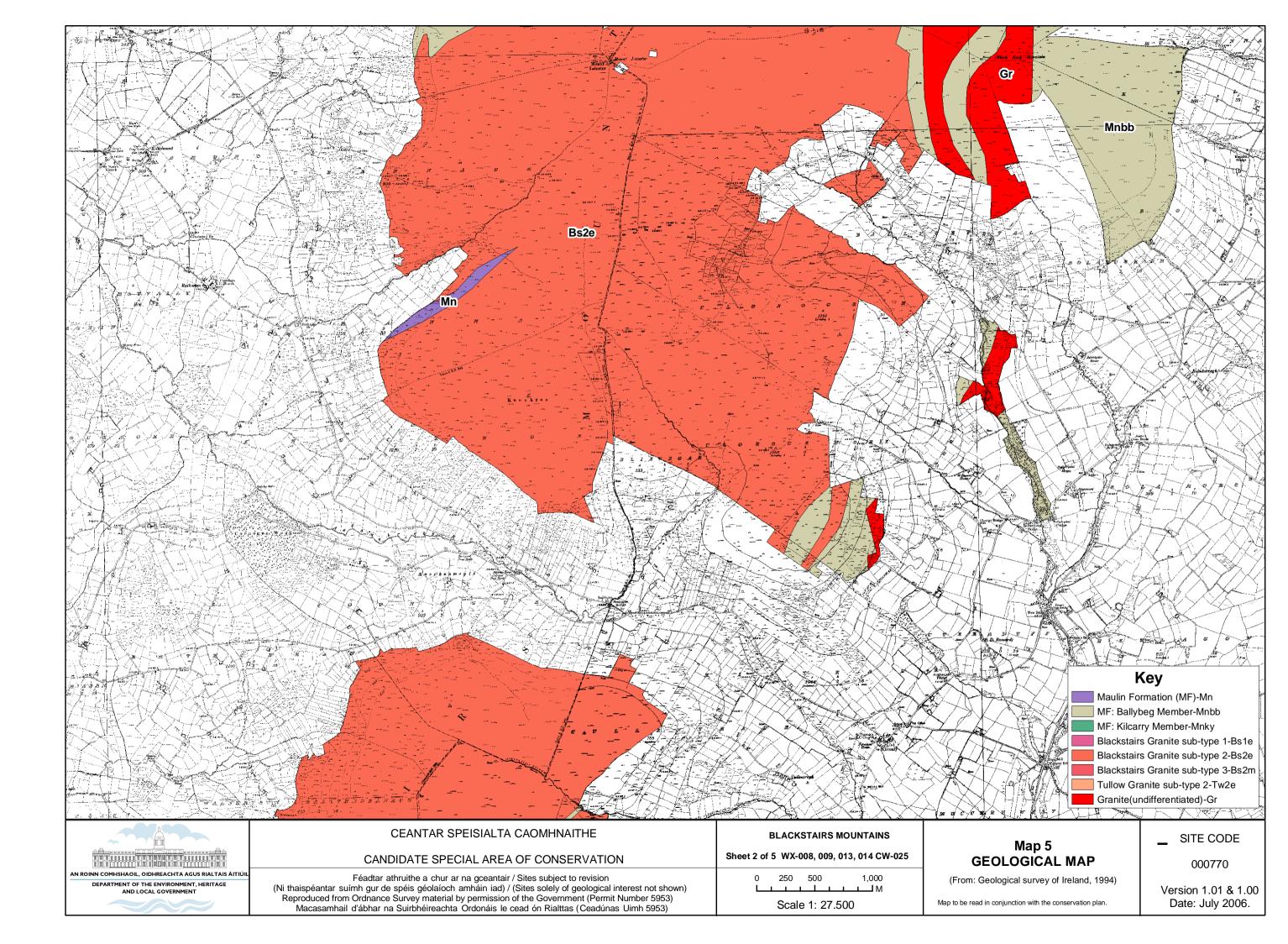


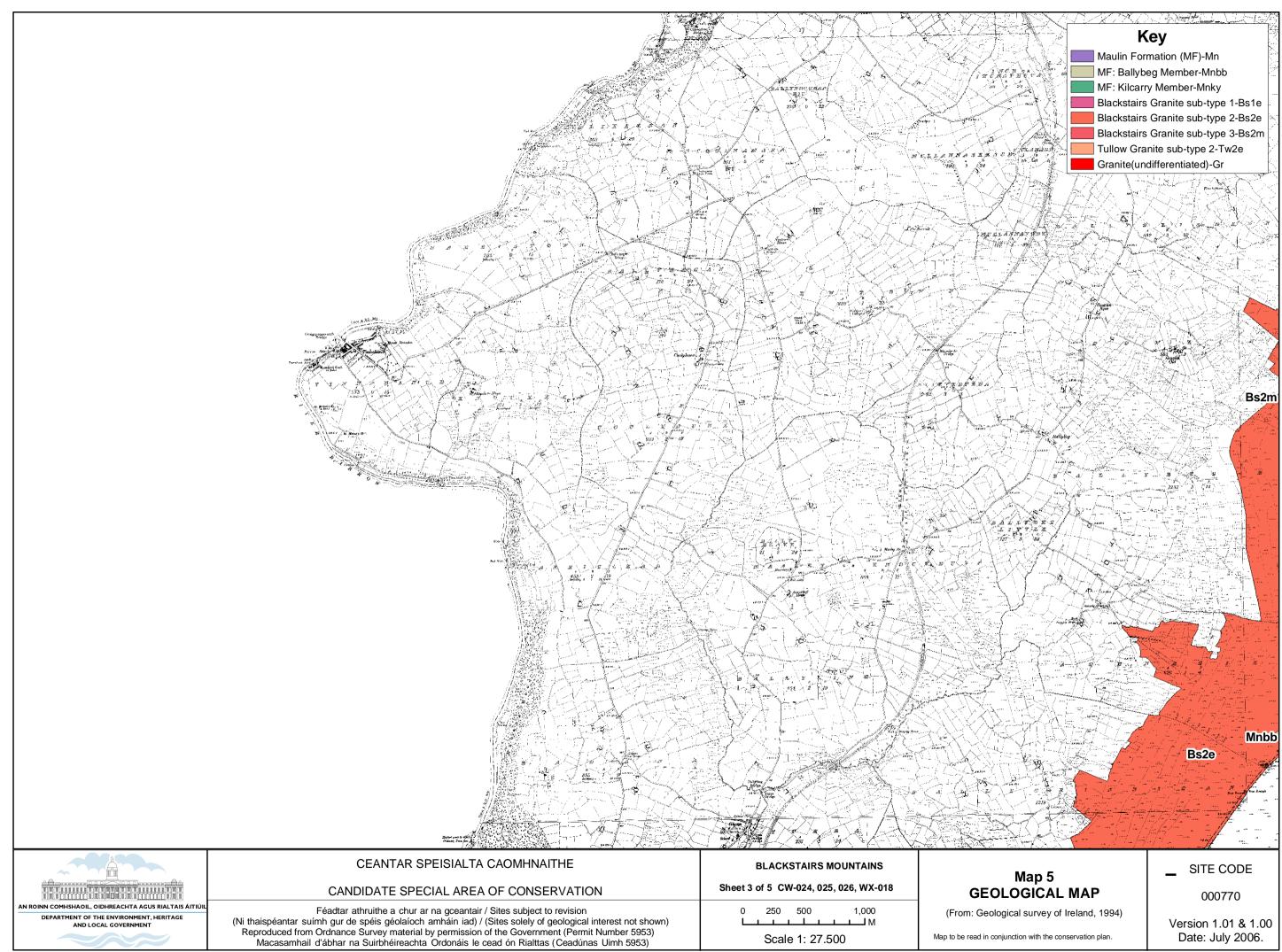


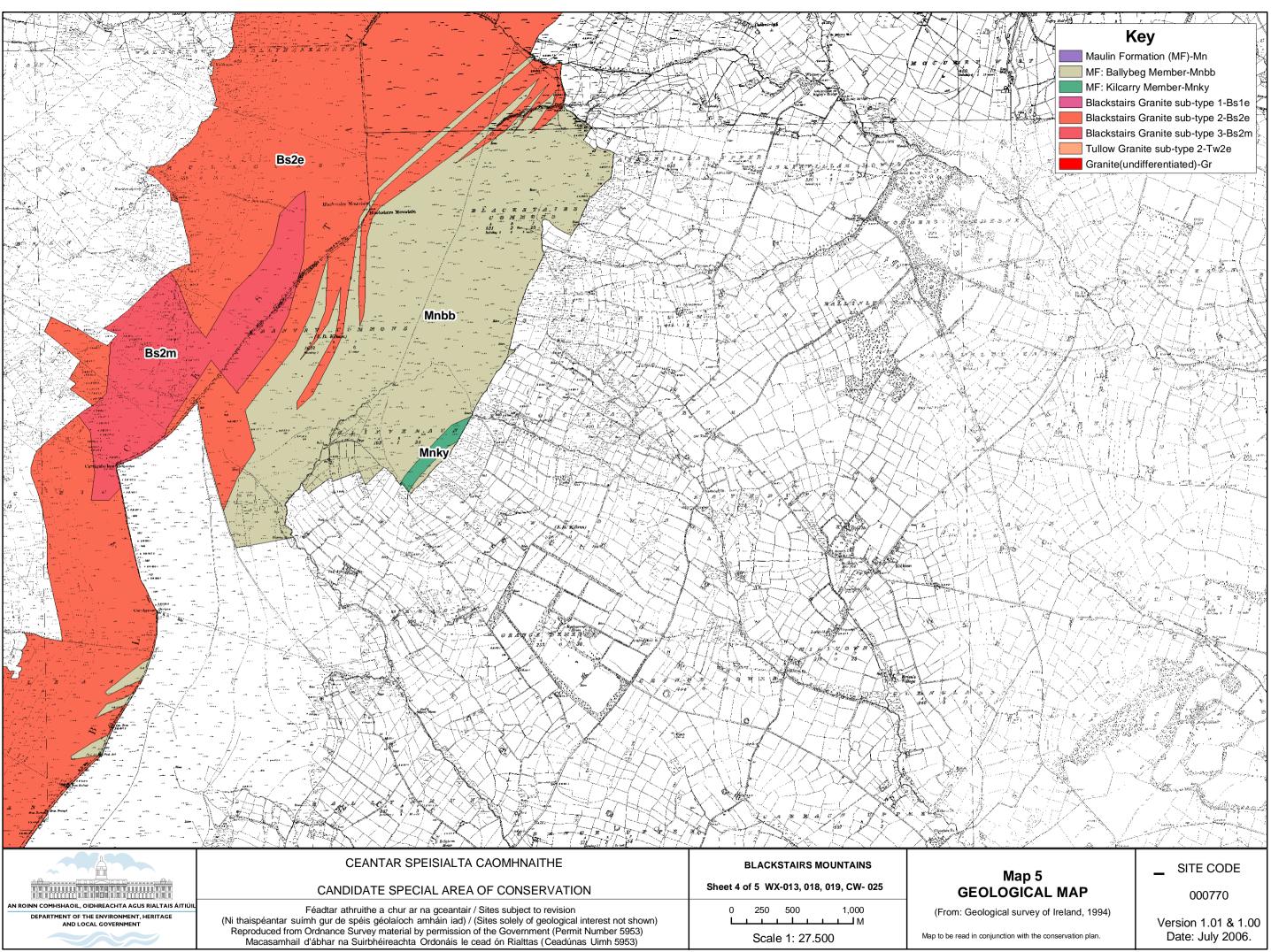


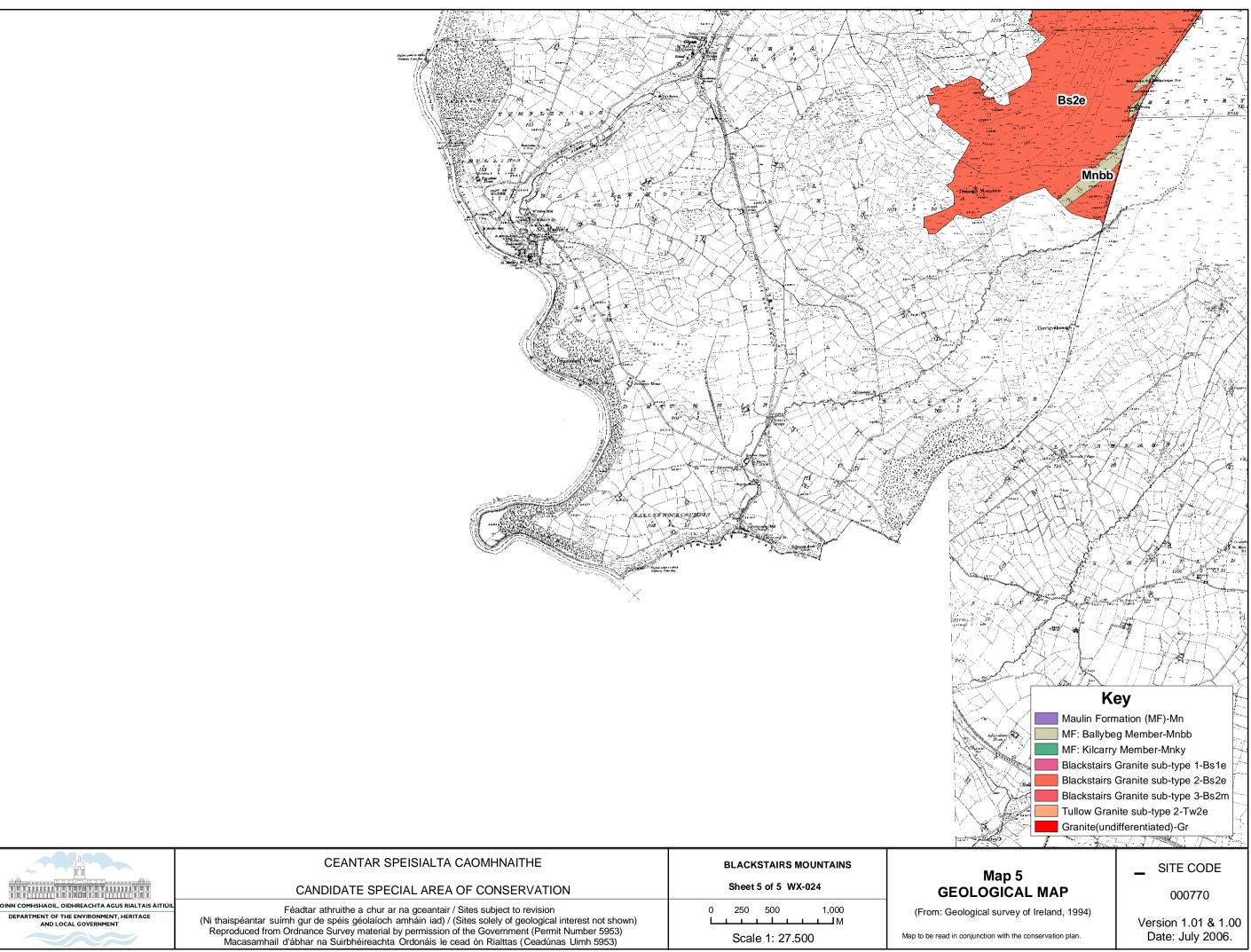
Â	CEANTAR SPEISIALTA CAOMHNAITHE	BLACKSTAIRS MOUNTAINS	
	CANDIDATE SPECIAL AREA OF CONSERVATION	Sheet 4 of 5 -CW-024, 025 WX-013, 018, 019	
AN ROINN COMHSHAOIL, OIDHREACHTA AGUS RIALTAIS ÁITIÚIL DEPARTMENT OF THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT	(Ni thaispéantar suímh gur de spéis géolaíoch amháin iad) / (Sites solely of geological interest not shown)	0 250 500 1,000	MANA
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	CEANTAR SPEISIALTA CAOMHNAITHE	BLACKSTAIRS MOUNTAINS	
	CANDIDATE SPECIAL AREA OF CONSERVATION	Sheet 5 of 5 WX-024	
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