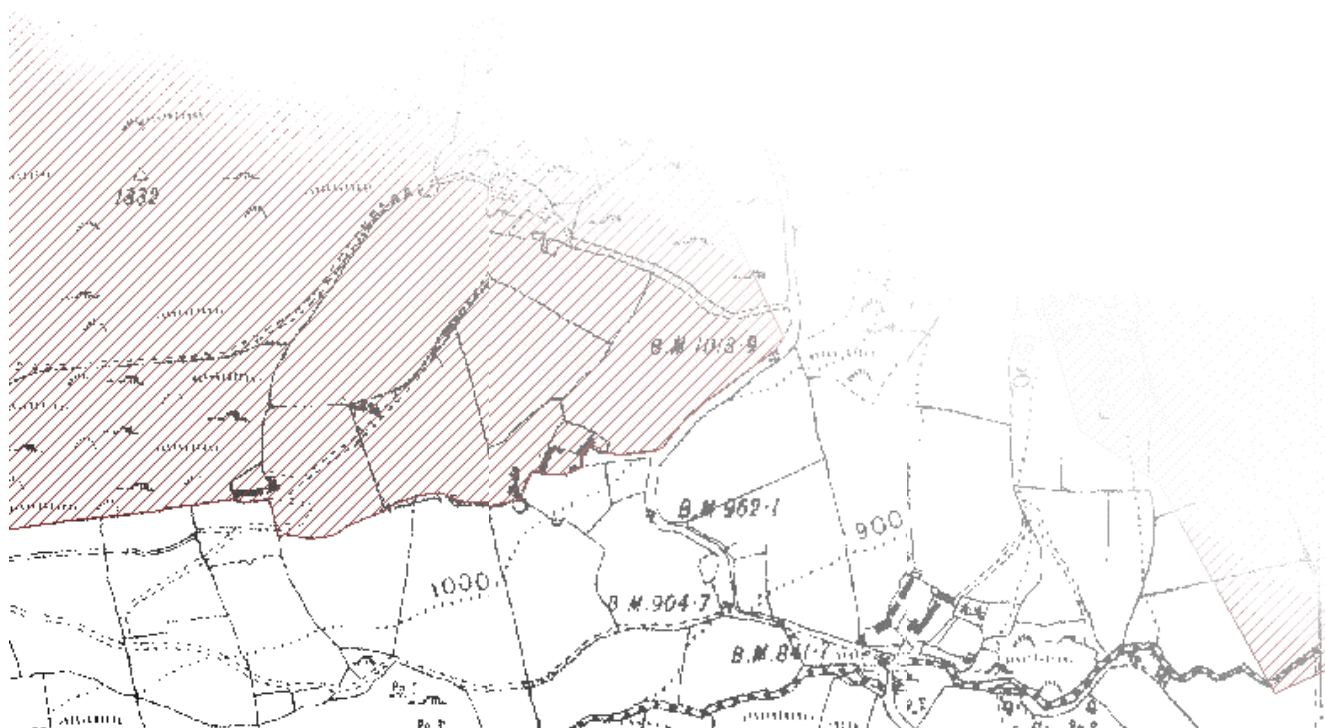




National Parks and Wildlife Conservation Plan for 2005-2010

Cullahill Mountain cSAC

Site Code 831
Co. Kilkenny



SUMMARY

Site Description

Cullahill Mountain candidate Special Area of Conservation (cSAC) is located on a western outlier of the Castlecomer Plateau, 6km north-east of Johnstown, in Co. Kilkenny. The site comprises orchid-rich calcareous grassland (a priority habitat listed in Annex I of the EU Habitats Directive), dry deciduous woodland and scrub habitats.

The orchid-rich calcareous grassland habitat occurs over the majority of the site (72%). Eight species of orchid are known to occur within the priority habitat, including Frog Orchid, Bee Orchid and Green-winged Orchid. In addition, this habitat is notable because of the co-existence of a variety of grasses, sedges and broad-leaved herbs.

Ash and Hazel dominate the dry deciduous woodland habitat present in the south-western portion of the site. Blackthorn and Hazel scrub occurs in the south-west of the site adjacent to the woodland, and also in the south-eastern portion of the site. The Irish Hare is present on the site, and Pheasant is known to nest on the site.

Land Use

The site is located in a rural and agricultural setting and is used for grazing cattle and horses. Supplementary feeding of cattle in some areas occurs on the site during the winter months.

Main conservation issues

Ownership

Grazing

Agricultural practices

Main management objectives

To maintain and, where possible, enhance the quality of the orchid-rich calcareous grassland habitat and the other habitats present on the site, i.e. dry deciduous woodland and scrub

To maintain and possibly increase the populations of rare and important species present i.e. Green-winged, Frog and Bee Orchids

To continue effective liaison between DEHLG, landowner and other interested parties, so as to conserve the cSAC

Main strategies to achieve objectives

Determine the traditional and present grazing numbers and establish a stocking rate and grazing period in line with traditional levels

Control damaging activities and implement the prohibition of particular activities, such as the application of artificial fertilisers

Fence off the woodland and control felling

Monitor the orchid-rich calcareous grassland, orchid populations and general ecological site conditions

ACKNOWLEDGEMENTS

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READER'S GUIDE

The Department of Environment, Heritage and Local Government (DEHLG), has produced this plan to provide ecological information about the site and to outline the main objectives for the conservation of the special features of the site.

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

The **Site description** contains **general information** on the site's boundaries, ownership and organisations involved. It also contains sections on the **physical aspects** of the site such as geology and hydrology as well as the **biological features**, in particular, the habitats and species found there. **Land use** and cultural features are also described.

The **Ecological Assessment** assesses the main ecological attributes of the site.

The **Objectives, Strategies and Zoning section** outlines the management necessary for the conservation of the site. It starts with a set of specific **conservation objectives**. These are followed by the main **management issues** that may impact on the conservation of the site and the **strategies** that will be used to achieve the objectives as outlined. In cases where more information is required, general strategies are usually applied. Where sufficient data and knowledge is available, specific management prescriptions are outlined for the timescale of the plan. In the final section, the site is divided into management **zones** to indicate where each strategy applies.

The appendices include a **glossary** where scientific and technical terms are explained, a list of **notifiable actions** relevant to each habitat within the site, and additional information on the site.

INTRODUCTION

Legal Background for Conservation Plans

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

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

16 Annex I priority habitats that require particular attention – including raised bogs, active blanket bogs, turloughs and machair,

45 other Annex I habitats – such as certain types of heaths, lakes and woodlands,

25 Annex II species – including Otter, Freshwater Pearl Mussel and Killarney Fern.

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

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

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

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

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

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

Sites are legally protected once they are publicly advertised.

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

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

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

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

Reasons for Site Designation

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

HABITATS LISTED IN ANNEX I OF THE E.U. HABITATS DIRECTIVE	
Priority Habitat No. 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Bromethalia</i>) (*important orchid sites)	The site is notable as it supports a rich and diverse herb flora, including eight species of orchid and a large population of the scarce Green-winged Orchid. The site is a good representative sample of orchid-rich grassland, despite its small size.

*indicates priority habitats in Annex I of the Habitats Directive

General Conservation Objectives

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

to maintain the Annex I habitat(s) for which the cSAC is selected

to liaise with the landowners, relevant authorities and interested parties

to increase the scientific knowledge of the site through further scientific research and development of monitoring programmes

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

Implications for landowners and other site users

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

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

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

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

SITE DESCRIPTION

Location including site boundaries

The site lies on a western outlier of the Castlecomer plateau, 6 km north-east of Johnstown, in Co Kilkenny.

Grid Ref.:	S 34 71
Latitude:	N 52° 47' 31"
Longitude:	W 07° 29' 19"
Area:	55 ha
Altitude Range:	228 m to 244 m
Townlands:	Ballylehaun and Coolnacrutta

(Map references are provided in Appendix II).

Site Boundaries

The site is roughly triangular in shape with agricultural lands bounding the site on all sides (Map 1).

Site Infrastructure

The site is approximately 1.5km south-east of the main Dublin to Cork road, between Durrow and Johnstown. A road from Cullahill runs adjacent to the eastern boundary of the site.

Legal Status

Ownership

The site is owned by one private landowner.

Designations of the Site

Candidate Special Area of Conservation	Site Code: IE0000831
Proposed Natural Heritage Area	Site Code: 831

Past Status and Designation of the Site

The site was previously designated by An Foras Forbatha as an Area of Scientific Interest of local ecological importance.

Management Infrastructure

Individuals and Organisations Involved

Landowners	The site is owned by one private landowner.
National Parks & Wildlife (NPW) of the Department of Environment, Heritage and Local Government (DEHLG)	NPW is responsible for maintaining the nature conservation value of the site. The site is patrolled by local Conservation Rangers, with input from other staff as necessary (see Appendix VI for further details of NPW regional staff).
Planning Authorities	Kilkenny County Council is the relevant planning authority for the site.

Local Authority Policy in relation to the Site

The Kilkenny County Development Plan (2002) recognises the educational, scientific, recreational and tourism value of designated sites within the County, including the Cullahill Mountain cSAC. It is the policy of Kilkenny County Council to "*ensure the protection and/or conservation as appropriate of these areas [including Cullahill Mountain cSAC] and to strictly control any development which would be inimical to the preservation or conservation of their essential characteristics*". It is also Council policy to "*ensure that development proposals within or in close proximity to designated sites are referred to Dúchas ... for observations and recommendations and to have regard to such observations and recommendations in the assessment of development proposals*".

Physical Features

Climate

The closest weather station to the site is the Kilkenny station (with the Birr Station referred to for wind direction information), and 30-Year Average information was obtained from the Met Eireann website for the years 1961-1990 (for full details see Appendix III). In summary, the mean daily air temperature at the station is 9.3°C, ranging from an average low of 1.6°C in January to an average high of 19.9°C in July. The average annual rainfall is 823 mm, and the average daily duration of sunshine is 3.51 hours. Winds are predominantly from the south and west, with an average wind speed of 6.5 knots. There is an annual average of 17.3 days with snow or sleet recorded for the Kilkenny station, but only 4.4 days where snow was still lying on the ground by 9 am.

Geology & Geomorphology

Carboniferous limestone is the underlying rock at the site, and this has been exposed relatively recently by the erosion of shales. The rock forms an escarpment with a steep side facing the central plain to the west. On the more gradual slopes to the south-east, beyond the site, shale soon appears.

Soils & Soil Processes

The soil is calcareous and thin in most places. The soil is deeper on the western side of the site, where woodland and scrub occur.

Biological Features

Habitats and Vegetation

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

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

Habitats Found within Cullahill Mountain cSAC

ANNEX I HABITAT TYPE	CORRESPONDING NHA CATEGORY	% AREA
*Orchid-rich Calcareous Grassland	Lowland Dry Grasslands	72%
-	Dry, broadleaved semi-natural woodland	8%
-	Scrub	15%
-	Exposed rock outcrops	5%



Cullahill Mountain cSAC Orchid-rich Calcareous Grassland

Annex I Habitat:

Orchid-rich calcareous grassland (72% of total site area or 39.6ha)

The majority of vegetation on the site comprises a herb-rich grassland over limestone, in which no single species dominates. The co-existence of approximately five grasses, two sedges and 20 broad-leaved herbs is one of the most interesting features of the vegetation. Grasses occurring include Quaking-grass (*Briza media*), Crested Dog's-tail (*Cynosurus cristatus*), Sheep's-fescue (*Festua ovina*), Downy Oat-grass (*Avenula pubescens*) and Yellow Oat-grass (*Trisetum flavescens*). Herb species occurring amongst these grasses include Mouse-ear Hawkweed (*Hieracium pilosella*), Wild Thyme (*Thymus praecox*), Bird's-foot-trefoil (*Lotus corniculatus*), Lady's Bedstraw (*Galium verum*), Carlina Thistle (*Carlina vulgaris*), Hairy Lady's-mantle (*Alchemilla filicaulis* subsp. *vestita*) and Mountain Everlasting (*Antennaria dioica*). The orchid flora of the grassland is notably rich, with Twayblade (*Listera ovata*), Common Spotted Orchid (*Dactylorhiza fuchsii*), Fragrant Orchid (*Gymnadenia conopsea*), Early-purple Orchid (*Orchis mascula*), Greater Butterfly Orchid (*Platanthera chlorantha*), Frog Orchid (*Coeloglossum viride*), Bee Orchid (*Ophrys apifera*) and Green-winged Orchid (*Orchis morio*). The latter three species are the most notable and uncommon species present on the site.

This species-rich limestone grassland, similar to the western limestone grasslands, is unusually large for the midlands and south-east. This habitat type is otherwise mostly confined to small quarry sites in the region.

Other Habitats

Dry, broadleaved Semi-natural Woodland

On its western side, the site extends downslope to some Ash (*Fraxinus excelsior*) and Hazel (*Corylus avellana*) woodland, with Grey Willow (*Salix cinerea*) and Downy Birch (*Betula pubescens*) also occurring. The ground flora includes False Brome (*Brachypodium sylvaticum*), Wood Avens (*Geum urbanum*), Barren Strawberry (*Potentilla sterilis*), Primrose (*Primula vulgaris*), Lords-and-ladies (*Arum maculata*), Bramble (*Rubus fruticosus*) and moss covered rocks. Early-purple Orchid can be found in damp places. This woodland is regenerating well and spreading in an easterly direction up the hill. Woodland on limestone is quite rare in the Midlands. It is distinct from Hazel stands on shale, which can be seen nearby at Spahill.

Scrub

Hazel and Blackthorn (*Prunus spinosa*) scrub is located to the south and east of the woodland. Beneath, Cock's-foot (*Dactylis glomerata*), Bracken (*Pteridium aquilinum*), Devil's-bit Scabious (*Succisa pratensis*) and Bramble is found. Scrub can be seen scattered throughout the site, but is most noticeable on rocky outcrops in the south-eastern portion of the site. In some open areas of grassland, young scrub species are colonising. Scrub is common outside the site, in particular along the western boundary. This habitat is very similar to the scrub vegetation located immediately to the east, and within the site. This area slopes down to green fields with a good embankment/hedge boundary separating the two.

Exposed Rock Outcrop

The soil is generally thin and exposed limestone can be seen throughout the habitats. This habitat class is not shown on the Gross Habitat Map (Map 2) but is included within the other habitat types.

Notable Flora:

The site is particularly notable because of the presence of a large population of the scarce Green-winged Orchid, which is an Irish Red Data Book species. Two other rare species occur on the site, the Frog Orchid and the Bee Orchid. The latter is a rare species in Northern Ireland and only occurs locally in suitable sites in the Republic.



Bee Orchid (*Ophrys apifera*), Photo M. Dromey.

Fauna:

Birds

The Skylark (*Alauda arvensis*), Pipit (*Anthus pratensis*) and Pheasant (*Phasianus colchicus*) are known to nest on the site, while the Kestrel (*Falco tinnunculus*) is known to hunt over the site. The Bullfinch (*Pyrrhula pyrrhula*) has been observed feeding on the site.

Mammals

The main mammal species present on the site is the Irish Hare (*Lepus timidus hibernicus*), with Fox (*Vulpes vulpes*) and Badger (*Meles meles*) also present. The Irish Hare, a race of the Arctic Hare, is endemic to Ireland. There is a Badger sett adjacent to the site, which has outliers that extend into the site. Both the Irish and the Badger are listed as internationally important in the Irish Red Data Book.

Cultural Features

Land use and impacts on the site

Agriculture

The main agricultural use of the site is the grazing of cattle and horses. Controlled grazing is beneficial in maintaining the orchid-rich calcareous grassland as it controls the encroachment of scrub species into the grassland areas. Artificial fertilisation of the lands does not occur. Previous surveys have identified supplementary feeding lots for wintering cattle in the eastern part of the site but they were not present during subsequent surveys. Supplementary feeding of over-wintering cattle has occurred adjacent to the road along the eastern boundary with cattle poached ground noted in this area along the main artery of cattle movement.

Grazing levels on the site have varied in the past with the NPW previously estimating approximately 60 dry cattle and six horses on the site during the November to March period. More recently (i.e. January 1998), approximately 80 cattle and seven horses were observed on the site. The animals have free range to the entire site, including the woodland to the west.

Other

The owner uses the site for horse riding. Small-scale scrub clearance occurs, but this does not appear to pose any threat. Cut birch branches were observed, probably cut for the construction of horse fences.

Land use adjacent to the site

Agriculture

Cattle and sheep grazing are the major land uses in the areas adjacent to the site. Although the semi-natural habitat present on the lands around the site is similar, they are obviously fertilised, which is indicated by the presence of a more uniform sward of greener grass.

Residential and Infrastructure

Scattered residential buildings can also be found in the adjacent area. The main Dublin to Cork road is approximately 1.5km north-west of the site.

Past human use

In the past the site would have been primarily used for cattle grazing. The 6" map for the area indicates that there was a quarry located in the south-eastern portion of the site, presumably used for extracting limestone.

Recorded Monuments and Other Features

There are no recorded national monuments present on the site.

Raths (earthen ring-forts) are located in close proximity to the site, within the parishes of Glashare and Clashare in Coolnacrutta townland.

ECOLOGICAL ASSESSMENT

Note: The following is an assessment of the ecological features of the site. It is largely based on information given in the explanatory notes which accompany the Natura 2000 form (compiled in 1995). Additional information, obtained since these notes were written may also have been used to make the assessment.

The site is an example of a relatively small area (in the national context) of orchid-rich calcareous grassland. The site is notable as it supports a rich and diverse herb flora, including eight orchid species and a large population of the scarce Green-winged Orchid. The site is considered to be a good representative sample of this habitat, despite its small size.

While the size of the habitat is relatively small, the structure of the grassland is well conserved due to the lack of disturbance, which is currently achieved by a sympathetic grassland management regime on the site. This involves moderate grazing levels and the avoidance of the use of artificial fertiliser. The lands are fertilised by natural means by cattle and horse droppings. It is noted that this habitat type is delicate and too much or too little grazing would likely have a deleterious effect on the grassland's structure and floristic diversity. Given that the site is currently under a sympathetic grazing regime and the lack of disturbance to the structure of the habitat on the site, the site is considered to be of good conservation value.

OBJECTIVES, STRATEGIES AND ZONING

Conservation Objectives

The nature conservation objectives for this site are:

- | | |
|---------------------|--|
| Objective 1: | To maintain and enhance the quality of the orchid-rich calcareous grassland (72%). |
| Objective 2: | To maintain the quality of other habitats present i.e. dry deciduous woodland (8%), scrub (15%) and rock outcrops (5%). |
| Objective 3: | To maintain and possibly increase the populations of rare and important species present i.e. Green-winged, Frog and Bee Orchids. |
| Objective 4: | To continue effective liaison between the NPW, the landowner and other interested parties, so as to conserve the cSAC. |

Management Issues

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

- **Private Ownership**
- **Grazing**
- **Agricultural Practices**

Private Ownership

The site is in the ownership of one private individual who farms the lands in a traditional manner. Single ownership simplifies the site's management, with agreement only required from one owner to ensure conservation of the priority habitat, and the other habitats present. The traditional manner of farming currently conducted on the site maintains the scientific interest, integrity and ecological features of this priority habitat.

Grazing

The previous grazing levels of cattle (and some horses) on the site have assisted in conserving the ecological features of the site. Increased grazing pressure may reduce the quality of the orchid-rich calcareous grassland, although some grazing pressure may be required to prevent scrub

encroaching the habitat. The stock on site have access to the woodland area, for grazing and for shelter, and this habitat requires a lower grazing pressure than the grassland areas. Cattle poaching of land may occur as a by-product of grazing, and is more likely to occur in association with winter grazing.

Agricultural Practices

Supplementary feeding of cattle occurs at the site margins during the winter months. Agricultural improvements have not been noted on the site.

Supplementary Feeding

Supplementary feeding of cattle does occur by the roadside along the eastern boundary of the site, in the area which is most affected by cattle poaching. However, this is not considered a threat to the quality of the priority habitat as the poached soil occurs in a localised area, at the base of the hill. Although some localised enrichment of soils may occur, it is unlikely to spread up the hill. Therefore, at worst, a small area at the base of the hill, which is already subject to poaching pressure, may suffer some enrichment.

Agricultural Improvements

Agricultural improvement measures do not appear to be a problem, with no fertilisation or liming known to occur. This is ecologically beneficial to the site. Some minor scrub clearance does occur. This is not considered of note, especially since there is good scrub regeneration.

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 landowner, relevant authorities and interested parties

implementation of REPS or a DEHLG farm plan, which will use this document as a guideline for prescribing management, 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 Act

Establish a monitoring regime

The monitoring regime for the site will comprise:

Scientific monitoring Monitoring of the favourable conservation status of the orchid-rich calcareous grasslands and orchid populations will be done by, or on behalf of, the staff of the Monitoring Section of the NPW or staff working to NPW in accordance with the procedures laid down by that section. The work, if any, to be done on this site in that respect will be prescribed by that section.

Site surveillance Patrolling of the site by the Conservation Ranger, with special attention to the orchid-rich calcareous grasslands 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 IV of this plan. Permission from the Minister is required before these actions may be carried out within the designated area. For example, grazing above sustainable limits is a notifiable action for both dry lowland grassland (orchid-rich calcareous grasslands) and scrub, and adding lime is a notifiable action for all of the habitats occurring on the site.

Specific Strategies

Objective 1.

To maintain and enhance the quality of the orchid-rich calcareous grassland (72%).

Strategies:

- | | |
|--|--|
| 1.1. Determine Traditional Grazing Numbers and Establish Grazing Regime | NPW will determine the traditional and present grazing numbers on the site, and grazing period on the site. Establish a stocking rate and grazing period in line with traditional levels, which is estimated to be 60 cattle. Monitor any increase from the traditional numbers of stock. Ideally, the grassland should be left ungrazed for approximately six months of the year. |
| 1.2. Monitoring Stocking Rate | NPW will monitor the effectiveness of the agreed stocking level (in accordance with the general monitoring strategy), taking note of overgrazing, or excessive scrub colonisation of the grassland indicating undergrazing. Liaise with the landowner regarding adjusting the grazing level accordingly. |

Objective 2.

To maintain the quality of other habitats present i.e. dry deciduous woodland (8%), scrub (15%) and rock outcrops (5%).

In relation to the dry deciduous woodland, NPW will liaise with the landowner with the aim of achieving the strategies 2.1-2.4 via the Native Woodland Scheme. This is a grant package aimed at encouraging proactive protection and expansion of Ireland's native woodland resource and is administered by the Forest Service.

Strategies:

- | | |
|--|---|
| 2.1. Maintain Habitats | See Strategies 1.1-1.2, but specific to the other habitats present on the site – dry deciduous woodland, scrub and rock outcrops. |
| 2.2. Fence off Woodland | Consult with the landowner with a view to fencing off some or all of the dry deciduous woodland for the duration of the plan. |
| 2.3. Control of Felling in Woodland | Prevent felling of wood within the woodland, although some small-scale clearance may be allowed in consultation with the Forest Service and the Wildlife Ranger. Note that tree felling requires a licence from the Forest Service. |
| 2.4. Non Intervention | No intervention is required to maintain the rock outcrops. |

Objective 3.

To maintain and possibly increase the populations of rare and important species present i.e. Green-winged, Frog and Bee Orchids.

Strategies:

- | | |
|--|---|
| 3.1. Maintain Orchid Populations | Protecting the habitats present, in particular the orchid-rich grassland, through the implementation of strategies 1.1-1.2 and 2.1), will substantially achieve this objective. |
| 3.2. Monitoring of Orchid Populations | Monitor the ecological status of the orchid populations and record the changes occurring, in accordance with the general monitoring strategy. |

Objective 4.

To continue effective liaison between the NPW, the landowner and other interested parties, so as to conserve the cSAC.

Strategies:

- | | |
|--|--|
| 4.1. Liaise with interested parties | NPW will strive to maintain effective liaison with the landowner, relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 4.2. Monitor development applications | NPW will continue to monitor applications, including current applications, for planning permission and licenses for lands within and adjacent to the site. Appropriate bodies will be notified if developments are thought to conflict with conservation objectives. |
| 4.3. Liaise with REPS planners | REPS planners are required to consult with NPW staff when they are developing plans for land within the site. |

Zoning

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

Zone A: A Natural Zone

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

2A: MAINTENANCE AREAS WITH LIMITED INTERVENTION

2A1: Orchid-rich calcareous grassland and scrub habitats

Strategies 1.1, 1.2 and 2.1 apply.

2A2: Dry deciduous woodland

Strategies 2.1, 2.2 and 2.3 apply.

Summary of Specific Strategies

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

	Strategy	Action required	Who to implement	When/Duration/Frequency	Estimated Total Cost	Additional Resources needed
1.1	Determine Traditional Grazing Numbers and Establish Grazing Regime	Conduct a survey to determine the traditional and present grazing numbers and grazing period on the site. Once determined establish a stocking rate and grazing period. Monitor any increase from traditional stock numbers.	NPW/ Landowner			
1.2	Monitoring Stocking Rate	Monitor the effectiveness of the agreed stocking rate.	NPW			
2.1	Maintain Habitats	See Strategy 1.1-1.2.	-			
2.2	Fence off Woodland	Consult with the landowner with a view to fencing off some or all of the woodland.	NPW/ Landowner			
2.3	Control of Felling in Woodland	Prevent felling of woodland, although some small scale felling may be allowed.	NPW/ Landowner			
2.4	Non Intervention	No intervention required to maintain rock outcrops.	-			
3.1	Maintain Orchid Populations	Substantially achieved by Strategies 1.1-1.2 and 2.2.	See relevant Strategies.			
3.2	Monitoring of Orchid Populations	Monitor the ecological status of the orchid populations and record the changes occurring.	NPW			
4.1	Liaise with interested parties	Initiate and maintain effective liaison with relevant parties.	NPW			
4.2	Monitor development applications	Monitor development applications for lands within and adjacent to the site. Inform appropriate bodies if developments may be in conflict with conservation objectives.	NPW			
4.3	Liaise with REPS planners	REPS planners are required to consult with NPW staff if developing plans for land within the site.	REPS planners.			

APPENDIX I:

GLOSSARY

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

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

ALTITUDE - Vertical height above sea level.

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

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

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

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

BILATERAL - Affecting or undertaken by two parties; mutual.

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

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

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

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

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

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

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

CONSTRAINT OR MODIFIER - An activity or action which might prevent the site manager from attaining an ideal objective.

DEHLG - Department of Environment, Heritage and Local Government.

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

DIVERSITY - see biodiversity.

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

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

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

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

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

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

EXPOSED ROCK – An NPW habitat classification describing bedrock surfaces, including inland cliffs and crags. These may support a variety of different plants on soil accumulations, but greater than 50% of the rock surface is without vascular plant cover.

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

FAUNA - Animal life.

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

FLORA - plant life.

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

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

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

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

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

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

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

LIAISON - Communication and contact between two groups.

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

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

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

MACHAIR - An NPW habitat classification, as well as a priority habitat listed in Annex I of the EU Habitats Directive. Machairs are coastal grassy plains with damp, shelly/sandy soil. They occur from Galway Bay to Malin Head, and are maintained by livestock grazing. They are nearly level but close enough to the water table that small undulations lead to a mosaic of wet and dry areas. Due to the absence of plant species that bind the soils of sand dunes, the soil surface is quite unstable and may be disturbed in winter gales.

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

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

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

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

National Parks and Wildlife (NPW) – 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.

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

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

NPW - National Parks and Wildlife

ORGANISM - Any living thing.

OS – Ordnance Survey

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

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

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

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.

PRIORITY (setting) - put to determine which objectives, strategies, programmes or tasks will be carried out first, if resources (financial, technological and manpower) are limited, and do not allow all to be carried out.

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

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

PROXIMITY - Nearness in space.

RAISED BOG - An NPW habitat classification characterised by an elevated dome of peat, the surface of which is isolated from the surrounding ground water table and receiving water solely from precipitation. The peat surface is wet, often with pools and hummock hollow systems and is usually dominated by Sphagnum mosses and bushy Heather, with Deer-grass, Bog Cottons and other associated species. Raised bogs can be distinguished from blanket bogs by their paucity of grasses which typify blanket bog.

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

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

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

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

RED DATA BOOK 2 (mammals, birds, amphibians and fish) - identifies those species threatened in Ireland or those species whose populations are considered to be of international importance,

though not necessarily threatened in Ireland. It details the current state of Irish vertebrates and provides a concise summary of the various legislation for each species.

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

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

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

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

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

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

SEMI-NATURAL DRY GRASSLANDS (AND SCRUBLAND FACIES ON CALCAREOUS SUBSTRATES - IMPORTANT ORCHID SITES) - A priority habitat listed under the EU Habitats Directive dry to semi-dry calcareous grasslands of the *Festuco-Brometea*. This habitat in Ireland often supports rich Orchid flora.

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

SITE CONSERVATION ASSESSMENT - A critical examination of the management performance and/or management plan or part of the plan, to measure the quality of the management plan and its implementation, carried out by the management organisation (internal audit) or by an independent "authority" not directly associated with the site ("external audit"), usually at the invitation of the management organisation.

SITE POTENTIAL - The possibilities of the site in ecological, social, cultural and/ or economic terms. This is where management aims, when setting their ideal objectives.

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

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

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

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

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

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

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

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

TASK OR PROJECT - A unit of work which can be costed separately. A number of closely related task's form a programme.

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

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

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

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

APPENDIX II: REFERENCES

Map References:

O.S. 1/2 inch (1:126,720) map:	18
O.S. Discovery (1:50,000) map:	60
O.S. 6 inch (1: 10,560) map:	KK 003, KK 004, KK 008, KK 009

Data Bases :

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

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

Rare Plant Survey (1991). NPW, Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Photographic Coverage:

Department of Environment, Heritage and Local Government, HQ Ely Place, Aerial photo No. 8768, Flight Line 48. Date: 06/1995

GSI S100 (1973)

Relevant Legislation:

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

Local Government (Planning and Development) Regulations, 2000.

Bibliography:

Kilkenny County Council. (2002). *County Development Plan 2002, Volume 1. County-Wide Policies, Objectives and Development Control Standards*. Kilkenny County Council.

National Parks and Wildlife Service. (1996). *Ideal management prescriptions for priority habitats occurring in the proposed candidate SAC sites*. (Draft). NPW, Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

National Parks and Wildlife Service. (1996). *Environmentally Friendly Farming*. (draft 5). NPW, Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Rohan P. K. (1986). *The Climate of Ireland*. Meteorological Office, Dublin.

APPENDIX III: PHYSICAL PROCESSES AFFECTING THE SITE

Climate

KILKENNY monthly and annual mean and extreme values 1961-1990													
TEMPERATURE (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
RELATIVE HUMIDITY (%)													
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)													
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 $\geq 0.2\text{mm}$	19	15	17	15	17	14	13	15	15	18	17	18	192
mean no. of days with $\geq 1.0\text{mm}$	15	11	12	10	12	10	9	11	11	13	12	13	137
mean no. of days with $\geq 5.0\text{mm}$	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...)													
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

APPENDIX IV: NOTIFIABLE ACTIONS

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

Notifiable Action 2.2 – Dry Lowland Grassland (orchid-rich calcareous grassland)

Notifiable Action 5.1 – Woodlands

Notifiable Action 5.2 – Scrub

HABITAT TYPE 2.2

DRY LOWLAND GRASSLANDS

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

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

SECTION A

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

SECTION B

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

If so, these notifiable actions do not apply.

However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 2.2

DRY LOWLAND GRASSLANDS

<u>Section A</u>	<u>Section B</u>
<p>THE MINISTER FOR THE ENVIRONMENT, HERITAGE AND LOCAL GOVERNMENT IS REQUIRED TO BE NOTIFIED IN RELATION TO THE FOLLOWING ACTIVITIES AND SUCH ACTIVITIES SHOULD NOT PROCEED WITHOUT PRIOR CONSENT</p> <p>grazing of livestock above a sustainable density (as defined in approved farm plans)/grazing by livestock treated within the previous week with a pesticide which leaves persistent residues in the dung</p> <p>changing of traditional use from hay meadow (to either grazing or silage making), or from grazing to silage cutting</p> <p>adding lime/adding fertiliser of any sort to areas not previously fertilised/ applying fertiliser which would increase the level of nitrogen in the soil/applying fertiliser which would increase the level of phosphorous in the soil/ applying phosphorous to soils which already have in excess of the REPS index 2 levels mowing grass before the 30th June (<i>Note; if you have been notified that your lands hold breeding corncrakes, or certain rare meadows, special provisions will apply</i>)</p> <p>burning of vegetation /ploughing or cultivation of lands which have not been so managed for the last 20 years</p> <p>reclamation, infilling, or land drainage/ reseeding, planting of trees or any other species use of any pesticide or herbicide</p> <p>dumping, burning or storing any materials</p> <p>alteration of the banks, bed or low of watercourses</p> <p>operation of commercial recreation facilities (e.g. pony trekking)/introduction (or re-introduction) into the wild of plants or animals of species not currently found in the area</p> <p>any other activity of which notice may be given by the Minister from time to time</p>	<p>(NO REQUIREMENT TO NOTIFY IF ALREADY LICENSED BY ANOTHER MINISTER/BODY)</p> <p>developing leisure facilities including golf courses, sports pitches, caravan or camping facilities.</p> <p>removal of soil, mud, gravel, sand or minerals</p> <p>developing roads or car parks</p> <p>construction of fences, buildings or embankments</p> <p>afforestation</p>

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

HABITAT TYPE 5.1

WOODLANDS

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

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

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

HABITAT TYPE 5.1

WOODLANDS

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

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

HABITAT TYPE 5.2

SCRUB

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

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

SECTION A

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

SECTION B

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

If so, these notifiable actions do not apply.

However, if such activities are not regulated by another statutory authority, the said activities are required to be notified to the Minister for The Environment, Heritage and Local Government.

HABITAT TYPE 5.2

SCRUB

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

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

APPENDIX V: COMPENSATION AND APPEALS PROCEDURES

Compensation

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

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

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

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

Rural Environment Protection Scheme (REPS)

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

NPWS Farm Plan Scheme

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

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

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

Appeals Procedure

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

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

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

APPENDIX VI: NATIONAL PARKS AND WILDLIFE MANAGEMENT STAFF

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Divisional Ecologist

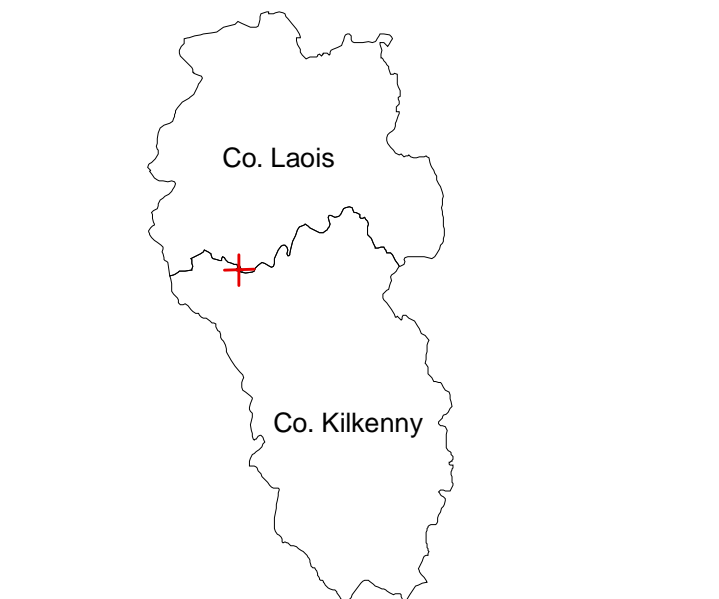
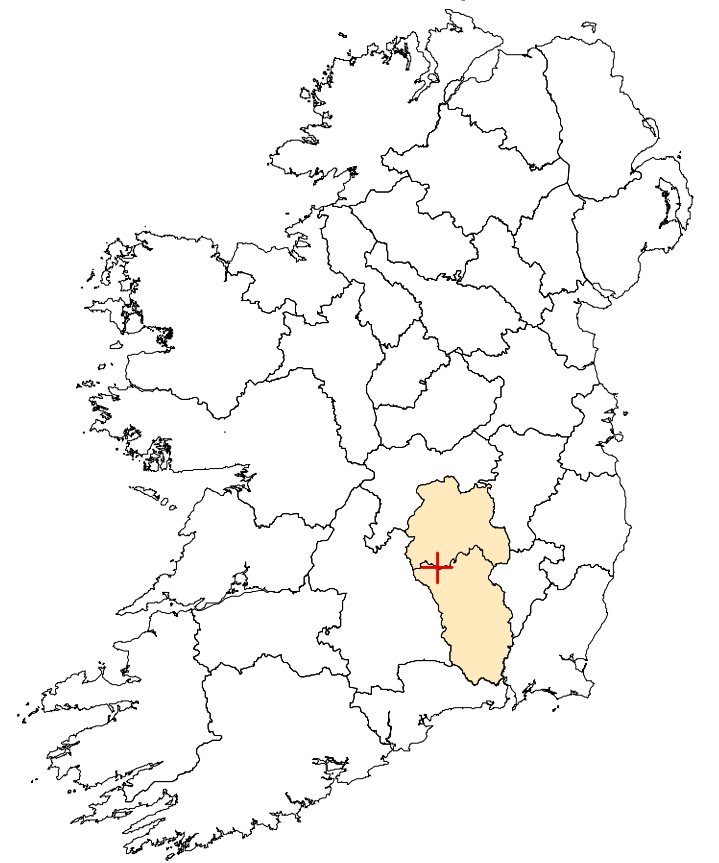
Dr. Linda Patton
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(Old Revenue Comm. Office)
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CEANTAR SPEISIALTA CAOMHNAITHE
CANDIDATE SPECIAL AREA OF CONSERVATION
CULLAHILL MOUNTAIN 000831
Version 1.00

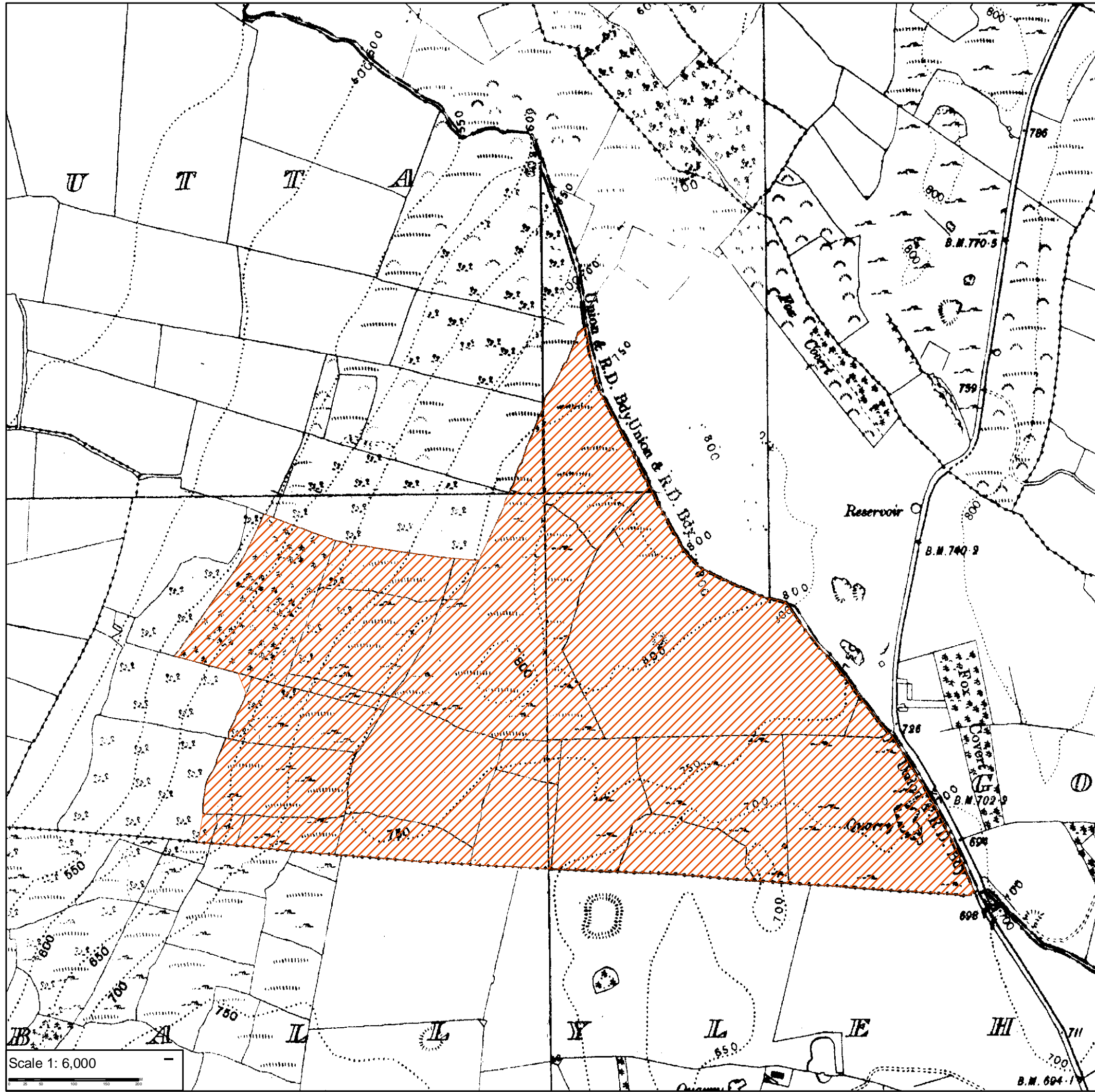
Féadtar athruithe a chur ar an gceantair / Sites subject to revision
(Ní thaispeántar suímh gur de spéis géolaíoch amháin iad) / (Sites solely of geological interest not shown)
Reproduced from Ordnance Survey material by permission of the Government (Permit Number 5953)
Macasamhail d'ábhar na Suirbhéireachta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

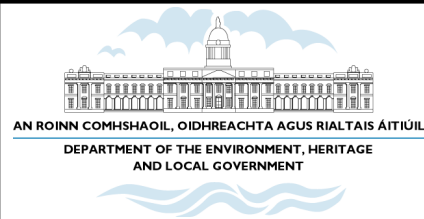
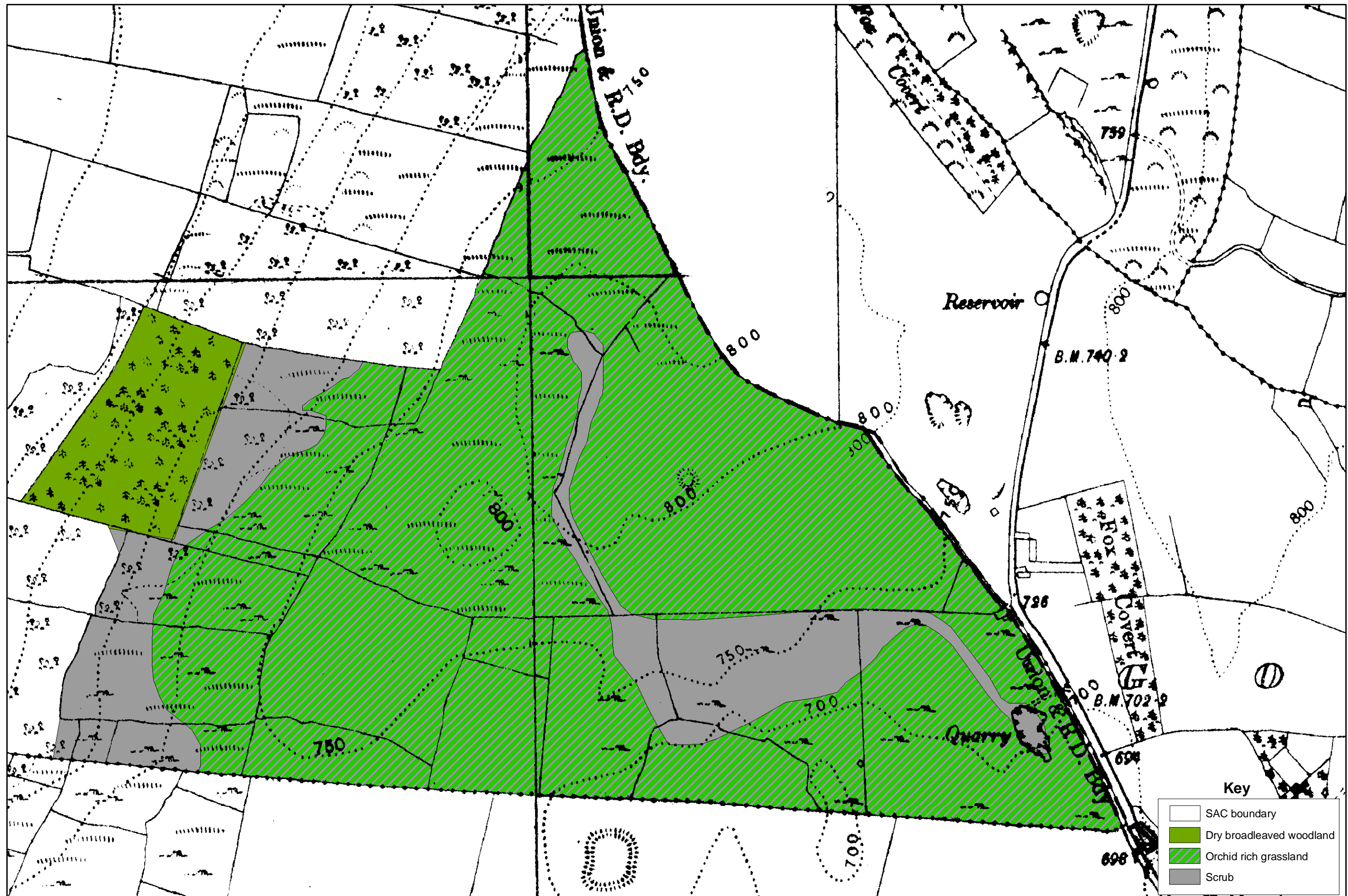


Map 1
LOCATION MAP: CULLAHILL MOUNTAIN cSAC 000831



Department of Environment, Heritage and Local Government
An Roinn Comhshaoil, Oidhreacht agus Rialtais Áitiúil
Co-financed through 'Life' EU funding
Chomh-mhainithe trí chiste 'LIFE' an AE





CEANTAR SPEISIALTA CAOMHNATHE
CANDIDATE SPECIAL AREA OF CONSERVATION

The mapped boundaries are of an indicative and general nature only. Boundaries of designated areas are subject to revision. Reproduced from Ordnance Survey material by permission of the Government (Permit number 5953).

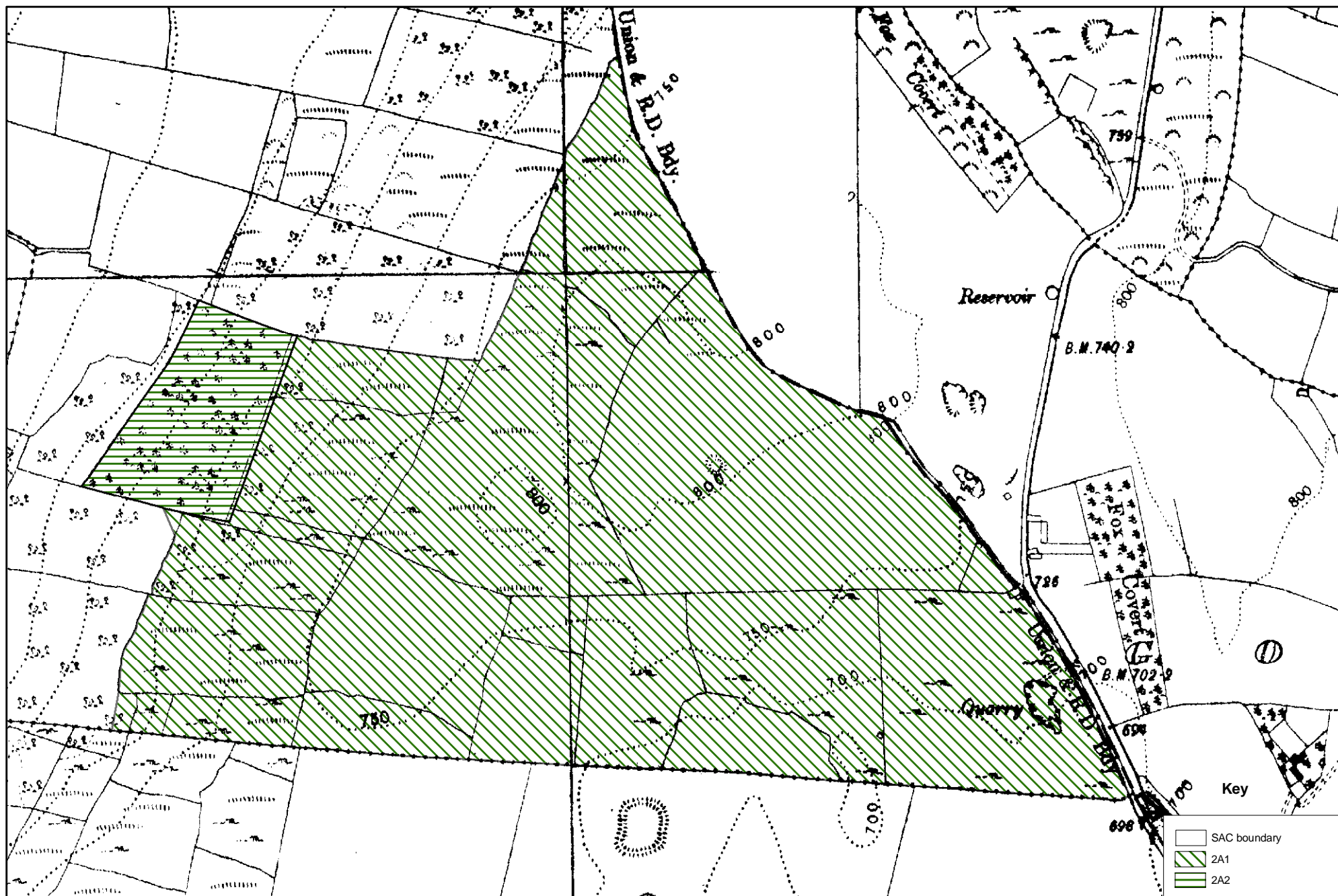
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CULLAHILL MOUNTAIN
6" SHEET KK 003,008,009, LA 034,035

0 55 110 220 M
Scale 1: 4,000

Map 2
INDICATIVE HABITAT MAP
Map to be read in conjunction with conservation plan

SITE CODE
000831
Version 1.00



	<p>CEANTAR SPEISIALTA CAOMHNATHE</p> <p>CANDIDATE SPECIAL AREA OF CONSERVATION</p> <p>Féadtar athruithe a chur ar na gceantair / Sites subject to revision (Ní thaispeántar suímh gur de spéis géolaíoch amháin iad) / (Sites solely of geological interest not shown) Reproduced from Ordnance Survey material by permission of the Government (Permit Number 5953) Macasamhail d'ábhar na Suirbhéireachta Ordonáis le cead ón Rialtas (Ceadúnas Uimh 5953)</p>	<p>CULLAHILL MOUNTAIN</p> <p>6" SHEET KK 003,008,009, LA 034,035</p> <p>0 50 100 200 M</p> <p>Scale 1: 6,000</p>	<p>Map 3 MANAGEMENT ZONING MAP</p> <p>Map to be read in conjunction with conservation plan</p>	<p>— SITE CODE</p> <p>000831</p> <p>Version 1.00</p>
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