



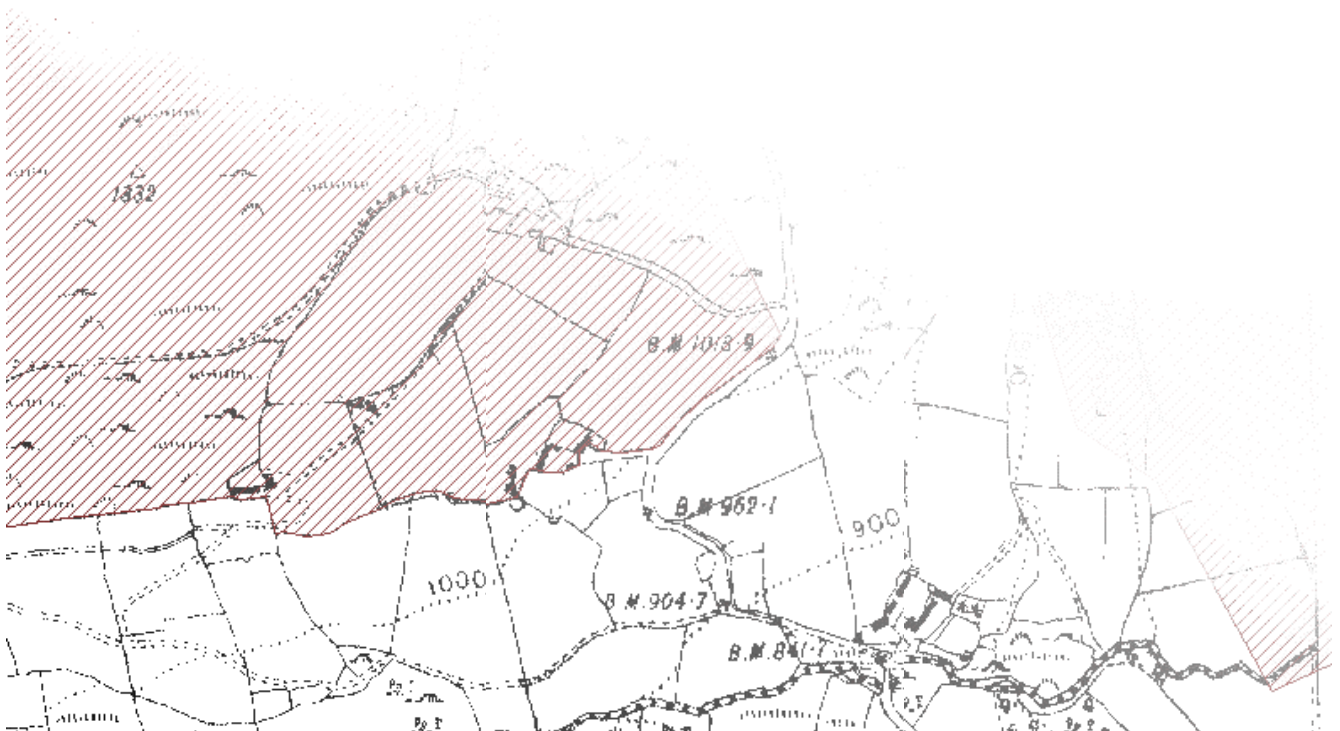
National Parks and Wildlife Service Conservation Plan for 2005-2010



Union Wood cSAC

Site Code 638

Co. Sligo



SUMMARY

Introduction

Union Wood cSAC has been designated as a candidate Special Area of Conservation under the EU Habitats Directive. The site has been listed due to the presence of old sessile oak woods with *Ilex* and *Blechnum* in the British Isles, which is an Annex I habitat listed under the EU Habitats Directive. Union Wood cSAC is one of the best remaining semi-natural oak woodlands in the region.

Description of Union Wood cSAC

Union Wood cSAC is located on the eastern bank of the Ballysadare River, between the villages of Ballysadare and Collooney in Co. Sligo.

Almost 40% of the site consists of fairly pure, mature Sessile Oak dominated woodland, mixed with Downy Birch, Holly and Rowan. 55% of the site comprises mixed woodland and conifer plantation. The soils of the area are acidic. The ground flora is dominated by Greater Wood-rush and is typical of an acidic wood. The semi-natural parts of the wood are typical western Oak wood (Blechno-Quercetum). The site also contains a good range of sub-habitats, including deeper soils supporting Ash and Hazel woodland, streams, and pockets of damp woodland typified by Remote Sedge. The shrub and ground flora is somewhat diminished by grazing but localised areas support a rich diversity of bryophytes and herbaceous plants, such as Enchanter's Nightshade, Pignut and Violets. Hazel, Hawthorn and Blackthorn are also present in the shrub layer.

The presence of an area of wet and dry heath at Union Rock adds diversity to the site. This hilltop is dominated by Heather and has a well-developed moss cover. The wood supports a diverse fauna, including two Red Data Book species Pine Marten and Badger, as well as Fox and Red Squirrel. The site is heavily grazed by a herd of Fallow Deer that frequent the site. Raven, Kestrel and Sparrowhawk also occur. Two rare flies have also been recorded from this area.

The main uses of the site are for commercial forestry, recreation and amenity purposes. The site is a popular amenity area used for walking, horse riding, scrambling/quad biking and occasional orienteering. Deer hunting also takes place on a seasonal basis.

Main conservation objectives

- To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status; Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (38% area of the site)
- To maintain other habitats at favourable conservation status, such as mixed woodland, heath, exposed rock, old walls and streams

- To maintain the populations of notable species on the site at favourable conservation status, such as Pine Marten, Otter, Red Squirrel, Badger and Bats
- To increase public awareness and appreciation of the site
- To establish a Nature Reserve within the cSAC
- To establish effective liaison and co-operation with landowners, legal users and relevant authorities

Main management issues

- Commercial forestry
- Extent of Rhododendron invasion
- Lack of Oak regeneration
- Non-native tree species

Main strategies to achieve objectives

- Continue to liaise with Native Woodland Scheme (NWS) contractors in implementation of woodland management operations
- Implement silviculture operations under the NWS to convert all of the site to native woodland. This work will mainly involve removal of mature trees through clear felling, re-planting with native species, control of deer grazing and removal of Rhododendron, conifers, and non-native hardwoods from the site
- To encourage adjacent landowners to participate in the conversion of surrounding woodland to semi-natural woodland
- Ensure that good forestry practices are adhered to during any forestry operations
- Site monitoring and surveillance by the Conservation Ranger



Red Squirrel (Sciurus vulgaris)

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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 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 Designation of Union Wood cSAC

HABITATS LISTED IN ANNEX I OF THE EU HABITATS DIRECTIVE	CONSERVATION VALUE
<ul style="list-style-type: none"> Old Sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles (EU Habitat Code 91AO) 	Union Wood cSAC is one of the best remaining semi-natural Oak woodlands in the region. Although almost two thirds of the site consists of commercial conifer plantation, the remainder comprises Sessile Oak-dominated woodland over 150 years old, with a good diversity of other native tree species and an intact ground flora.

Implications of Site Designation for Landowners and other Site Users

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

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

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

The designation of the site can be appealed by landowners and legal users on scientific grounds. Details of the appeals procedure are also given in Appendix VI.

SITE DESCRIPTION

Location Including Site Boundaries

Union Wood cSAC is situated in north-east Co. Sligo (Map 1) on the eastern side of the Ballysadare River, which flows north-north-west into the sea at Ballysadare bay. The village of Colooney is 1 km south of the site, and the village of Ballysadare is 2 km to the west.

Grid Ref.: G68 28
Latitude: N 54°11'00"
Longitude: W 08°29'00"
Area: 66 ha
Altitude Range: 30 m to 70 m
Townlands: Union

Site Boundaries

The site boundaries have largely been determined by the original planting scheme of the wood, outlined as individual forestry compartments on the original Forest and Wildlife Service map of 1968. Most of the site boundaries follow forestry tracks or old walls, but the area around Union Rock corresponds to heath habitat, and there are no definite features on the ground to define this area.

Site Infrastructure

The main access to the site is from the south side, along a small road that leads to two houses beside the Ballysadare River. A number of forestry roads and rough tracks provide access through the site.

Legal Status

Ownership

The site is mainly owned by NPWS, with a small part (about 1 ha) at the north of the site owned by Coillte.

Designations of the Site

candidate Special Area of Conservation	Sitecode IE0000638	Published on 1st July 1999.
proposed Natural Heritage Area	Sitecode 638	Unpublished.

Past Status and Designation of the Site

The area was identified as an Area of Scientific Interest (ASI) on botanical and ecological grounds (An Foras Forbartha, 1972).

Rights Pertaining to the Site

Fishing	Rights for fishing on the Ballysadare River belong to the Markree Estate.
Shooting	Shooting rights also belong to the owners of Markree Estate.

Government Departments and Agencies

Department of the Environment, Heritage and Local Government (DEHLG)	DEHLG is the government department with responsibility for the protection and conservation of Ireland's natural heritage.
National Parks & Wildlife Service (NPWS)	NPWS is the section of the DEHLG responsible for maintaining the nature conservation value of the site. Periodic inspection of the site is carried out by the local Conservation Ranger. Regional staff also participate in research and survey projects by collecting data on the site, provide advice to planning authorities on the impacts of development applications and provide an education and advisory service to the public (see Appendix VII) for further details of NPWS regional staff.
Sligo County Council	Sligo County Council is the planning authority for the site. As such they are obliged to ensure appropriate assessment of the implications of developments requiring planning permission that may have an impact, either individually or in combination with other developments on the designated area.
Environmental Protection Agency (EPA)	The EPA is an independent state sponsored body with a wide range of statutory duties including monitoring environmental quality and overseeing the performance by local authorities of their statutory environmental protection functions.
Department of Communications, Marine and Natural Resources (DCMNR)	The DCMNR is responsible for licensing and regulating fishing, aquaculture, commercial and other development below mean high water; and under Regulation 31 of the EU Natural Habitats Regulations, for ensuring that such activities in the cSAC do not adversely affect it. Monitoring functions are carried out by individual divisions of the department and by the executive agencies under its direction namely the Central and Regional Fisheries Boards, The Marine Institute and an Bord Iascaigh Mhara.

The Central Fisheries Board	The Central Fisheries Board is the statutory body responsible for the co-ordination and support of the seven regional fisheries boards. Its responsibilities also include the control of commercial salmon licensing.
Northwest Regional Fisheries Board	The Northwest Regional Fisheries Board is responsible for maintaining and improving environmental quality and developing and protecting the fisheries resource in their region. The Board's responsibilities cover both inland waterways and out to the twelve-mile limit off the coast.
Coillte Teoranta	Coillte Teoranta is the State-owned commercial forestry company, which owns public forests. Coillte own a small part of the site as well as a large amount of property adjacent to the site.
Forest Service	Agency within the Dept. of Communication, Marine and Natural Resources (DCMNR) which is responsible for regulation of commercial forestry operations, issuing of felling licences and administration of the forestry grant schemes.

Local Authority Policy in relation to the Site

The current Sligo County Council Development Plan (2000) is currently up for review. A revised draft version has been published on the internet, and is due to be published in autumn 2003. This plan identifies cSACs, pNHAs and SPAs as important heritage areas. The plan also states that *“where a proposed development is located within or adjoining these areas or is likely to have an injurious impact on the area, The County Council will seek the advice of the relevant statutory agency, i.e. NPWS, Irish Wildbird Conservancy (sic), the Heritage Council, and shall generally be guided by their comments. It is the policy of the County Council to protect the status of these heritage areas and to discourage any development which may be injurious to the special status of the heritage areas”*.

Physical Features

Climate

The climate of the region is characterised by dominant westerly winds, high air humidity and high precipitation. The characteristically mild temperatures are caused by the combined action of the sea winds and the relatively warm waters of the Gulf Stream. There is a relatively small difference between mean summer and winter temperatures. The mean daily air temperatures for January and July are 5.5°C and 15.0°C respectively (Rohan, 1986). Synoptic weather data from Belmullet weather station is provided in Appendix III.

Geology & Geomorphology

The site is underlain by acidic gneiss of Dalradian (of late Pre-Cambrian age). This bedrock is part of the Ox Mountains formation that forms an outlier of older rock, within an area of largely Carboniferous limestone.

Soils & Soil Processes

The site is underlain by acidic podzols and small pockets of glacial till. Soil sampling was carried out as part of the NWS survey (Hawe & van der Sleesen, 2003).

Hydrology & Water Quality

The Ballysadare River forms a small section of the south-east boundary. A number of small streams occur within the site, and these all flow into this river. The site lies within the Unshin River catchment, of which the Ballysadare is a main tributary, flowing into the sea 10km east of Union Wood.

Biological Features

Habitats and Vegetation

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

The following table lists the habitats within the site. The Annex I habitat of the Habitats Directive for which the site was selected is listed, with the relevant Guide to Habitats category also shown. The Indicative Habitat map for the site is presented in Map 2. The percentage area presented for each habitat type is based on the approximate geographic area of each habitat, as shown in Map 2.

Habitats Found within Union Wood cSAC

ANNEX I HABITAT TYPE	HABITAT CATEGORY	% AREA
Old Sessile Oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (91AO)	Oak-birch-holly woodland (WN1)	38%
-	Conifer plantation (WD4)	42%
-	(Mixed) conifer woodland (WD3)	14%
-	Dry siliceous heath (HH1)	6%
-	Depositing/lowland rivers (FW2)	<1%
-	Exposed siliceous rock (ER1)	1%, within woodland habitats
-	Stonewalls and other stonework (BL1)	<1%

Annex I Habitat:

Old Sessile Oak woods with *Ilex* and *Blechnum* in the British Isles (91AO)
(38% of total site area or 25ha)

This habitat consists of fairly pure stands of mature Sessile Oak (*Quercus petraea*) dominated woodland. Forestry records indicate that some of the Oak was planted in 1800s but some may be older than this. The mature Oak canopy contains an understorey of mixed native species including Downy Birch (*Betula pubescens*), Holly (*Ilex aquifolium*) and Rowan (*Sorbus aucuparia*). Conifer saplings are common in places. Hazel (*Corylus avellana*), Hawthorn (*Crataegus monogyna*) and Blackthorn (*Prunus spinosa*) also occur.

The ground flora contains species typical of an acidic wood; including abundant Greater Wood-rush (*Luzula sylvatica*), with frequent Bilberry (*Vaccinium myrtillus*), Wood Sorrel (*Oxalis acetosella*), Bluebell (*Hyacinthoides non-scripta*), Hard Fern (*Blechnum spicant*) and Broad Buckler-fern (*Dryopteris dilatata*). Epiphytes are well developed with Polypody (*Polypodium vulgare* agg.) and numerous lichens occurring.

Old Sessile Oak woods with *Ilex* and *Blechnum* in the British Isles (91AO)
(contd)

Natural regeneration of all species within this habitat is rather poor, even where there are gaps in the high canopy. Rowan and Birch seedlings are occasional, but oak seedlings and saplings are very rare within the site.

In the northern half of the site, Rhododendron (*Rhododendron ponticum*) forms continuous cover in the shrub layer and has almost entirely suppressed the groundflora.

Other Habitats:

Conifer plantation (WD4)	Large blocks of mature Norway Spruce (<i>Picea abies</i>) and Sitka Spruce (<i>Picea sitchensis</i>) comprise 42% of the site. Beech (<i>Fagus sylvatica</i>) and Sycamore (<i>Acer pseudoplatanus</i>) also occur in places, with several large specimen trees over 150 years old. The groundflora is largely suppressed in most areas, but the shrub layer frequently includes native species such as Rowan, Hazel, Birch and to a lesser extent, Holly.
(Mixed) conifer woodland (WD3)	There are also small areas where Beech forms almost pure mature stands, interplanted with Oak. Other species present include Holly, Hazel, Sitka Spruce, Norway Spruce and Rhododendron.
Dry siliceous heath (HH1)	Dry heath occurs on the top of Union Rock. It is dominated by Heather (<i>Calluna vulgaris</i>) amidst bare rock. Rhododendron seedlings are very frequent. There is also a small area below the summit containing wet heath that is typified by Heather and Purple Moor-grass (<i>Molinia caerulea</i>) with a well developed moss understorey (<i>Sphagnum</i> spp. and <i>Hypnum cupressiforme</i>).
Depositing/lowland rivers (FW2)	A number of small streams and damp areas occur throughout the site. The Ballysadare River, a fast moving river with steep banks, forms a small section of the south western boundary of the site.
Exposed siliceous rock (ER1)	Union Rock forms a very large outcrop with steep cliffs. There are also many other areas of exposed rock and steep rock faces within the site, as well as numerous boulders on the forest floor.
Stonewalls and other stonework (BL1)	Old stone walls, including ruins of old buildings, occur within the site.

Notable Flora:

Lower Plants

Several notable lower plant species are present within the site, including:

- Tree Lungwort (*Lobaria pulmonaria*) – locally abundant on Sycamore, Hazel and other trees
- Tunbridge Filmy Fern (*Hymenophyllum tunbridgense*) – present on rock outcrops
- Hay Scented Buckler Fern (*Dryopteris aemula*) – recorded by NWS survey (Hawe & van der Sleesen, 2003). Not common on a national level

Higher Plants

Two notable higher plants were recorded within the site, Wood Horsetail (*Equisetum sylvaticum*) and *Carex strigosa*. Wood Horsetail is locally frequent beside small streams and in damp areas and is frequent in parts of the north, rather rare elsewhere. The rare plant, *Carex strigosa*, was recorded during the NWS survey (Hawe & van der Sleeson, 2003)

Fauna:

Invertebrates

The site hosts a diverse butterfly fauna (see Appendix IV for further data). Two rare flies (Order Diptera) have also been recorded from this area, *Chrysogaster virescens* and *Xylophagus ate* (Ref. Corine printout).

Amphibians and Reptiles

The Common Frog (*Rana temporaria*), a species listed in the Irish Red Data Book and in Annex V of the EU Habitats Directive, occurs within the site.

Birds

Raven (*Corvus corax*), Kestrel (*Falco tinnunculus*) and Sparrowhawk (*Accipiter nisus*) are known to occur in the site. Siskin (*Carduelis spinus*), Goldcrest (*Regulus regulus*) and Spotted Flycatcher (*Muscicapa striata*) have also been recently noted (T. Roderick, *pers. comm.*, 2003).



Kestrel (Falco tinnunculus)

Mammals

The wood supports a diverse mammal fauna, including two Red Data Book species, Pine Marten (*Martes martes*) and Badger (*Meles meles*), as well as Fox (*Vulpes vulpes*) and Red Squirrel (*Sciurus vulgaris*). Fallow Deer (*Dama dama*) are very common throughout the site; Red Deer (*Cervus elaphus*) are also possibly present on occasion.

Land Use

Land use on the site

Nature Conservation	The areas owned by NPWS are managed for nature conservation. The only other usage of these areas is for recreational and amenity use.
Commercial Forestry	The areas owned by Coillte are managed as commercial timber stands.
Recreational and Amenity Use	The site is heavily used by the public for a range of recreational activities. It is a popular spot for walking, horse riding, scrambling, quad biking and orienteering, with scout groups also using the site.
Hunting	Deer hunting also takes place on a seasonal basis.

Land use adjacent to the site

- Commercial Forestry** With the exception of the area south of the site near the village of Colloney, the majority of areas adjacent to the site are developed as conifer plantation. Many of these are mature and in the process of being felled.
- Scattered Residential** There are two cottages on the western side of the site, adjacent to the Ballysadare River. The village of Colloney is 1 km south of the site, while the village of Ballysadare is 2 km west.
- Fishing** Fishing takes place on the Ballysadare River just west of the site, which is a popular spot for fishing of Atlantic Salmon.

Past human use

The site has been established woodland for many generations. Forestry records indicate the site was planted with Oak in the 1880s, and possibly earlier as many of the Oaks are older, at least 200 years old. The site is described as an ancient woodland of semi-natural origins (Hawe & van der Sleesen, 2003).

Recorded Monuments and Other Features

There are no known, recorded monuments from the site.

CONSERVATION VALUE OF UNION WOOD cSAC

Despite lack of natural regeneration of native flora and the extent of exotic species, Union Wood is one of the best remaining Oak woodlands in the region, and is of considerable conservation significance. There are approximately 25ha of oak woodland within this site, some of which is variable in quality. Although this comprises quite a small woodland ecosystem, Union Wood is one of the largest woodlands in the region and represents just under 1% of the national total.

Parts of the wood appear to be in reasonable condition with a typical structure of an oak wood. The bryophyte and lichen floras are also well developed. The woodland fauna also includes several notable species, such as Pine Marten. Planting of commercial forestry and other non-native species such as Beech over 55% of the site, and extensive conifer afforestation in adjacent areas, has reduced the natural character of the wood. The spread of Rhododendron and Cherry Laurel in many parts of the site is also a serious threat. However, the natural woodland elements still are present to allow reversion to oak wood in the long term, providing that issues such as deer grazing and spread of exotic species are controlled.

The site is mainly owned NPWS with a small portion retained by Coillte. NPWS is utilising funding through the NWS for enhancement of the site. In the past, there were plans for NPWS to put the site forward as a Nature Reserve. Therefore, the long-term prospects and management potential for the site are good, as NPWS intends to restore all of the site to native woodland.

With initial ecological survey work for the NWS now completed, there is more complete baseline data on the flora of the site. However, the fauna of the site is still poorly known.

MANAGEMENT FRAMEWORK

Conservation Objectives

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

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

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

The favourable conservation status of a species is achieved when:

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

- | | |
|---------------------|---|
| Objective 1: | To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status; Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles (38% area of the site). |
| Objective 2: | To maintain other habitats at favourable conservation status, such as mixed woodland, heath, exposed rock, old walls and streams. |
| Objective 3: | To maintain the populations of notable species on the site at favourable conservation status, such as Pine Marten, Otter, Red Squirrel, Badger and Bats. |
| Objective 4: | To increase public awareness and appreciation of the site. |
| Objective 5: | To establish a Nature Reserve within the cSAC. |
| Objective 6: | To establish effective liaison and co-operation with landowners, legal users and relevant authorities. |

Management Issues

While many activities in or adjacent to the site have the potential to cause deterioration/disturbance, it is important to determine the significance of such activities relative to the conservation objectives at a particular site. To that end, all known potential environmental effects of the sites principal activities (in alphabetical order) have been listed and the biological and chemical impacts that may cause change to the biological communities present have been described.

- **Commercial forestry and non-native tree species**
- **Extent of Rhododendron invasion**
- **Lack of ecological data**
- **Lack of Oak regeneration**
- **Restoration potential to native woodland**
- **Small size of site**

Commercial forestry and non-native tree species

The high proportion of commercial forestry stands as well as presence of Sycamore and Beech within otherwise semi-natural woodland stands also reduces the site's ecological value. Conifers have been inter- and under-planted amongst old Oak woodland, and regeneration of conifer saplings in 'pure' Oak stands is frequent. In particular, there has been successful regeneration of Grand Fir, Western Hemlock and Western Red Cedar. The very extensive tracts of conifer plantation adjacent to the site are also a threat to the site, as they will provide a continued source of exotic species for spreading into the site.

Although not an issue for the qualifying habitats within Union Wood cSAC, afforestation within this area of predominantly acidic bedrock has the potential to contribute to acidification of surface waters, leading to degradation of water quality in the Ballysadare River and other wetland habitats adjacent to the site.

Extent of Rhododendron invasion

The extent of invasive and exotic species, such as Rhododendron, has reduced the naturalness and species diversity of the qualifying Annex I woodland habitat. It is estimated that an area of 6 to 6.5 ha or almost 10% of the site is moderately to severely infested with Rhododendron (T. Roderick, *pers. comm*, 2003). Of this total area, over 5 ha lies within Oak dominated woodland. Therefore, over 20% of Annex I habitat in the site, ie. Oak woodland, has been invaded by Rhododendron. These areas mainly occur in the northern half of the site where Rhododendron forms continuous cover in the shrub layer and has almost entirely suppressed the groundflora.

Lack of ecological data

There is a historical lack of data on the flora and fauna of the site. However, this has partly been rectified by the ecological survey which was carried out as part of the NWS in summer, 2003. Further botanical and zoological research is required to determine the full importance of the site.

Lack of Oak regeneration

Natural regeneration of Oak within the site is very poor. There are very few seedlings or saplings under the mature canopy. Grazing pressure attributed to the large numbers of Fallow Deer would be classified as moderate; deer tracks and other evidence of grazing are common throughout the site. Deer grazing is likely to be one of the main reasons for poor regeneration within the

woodland. The multi-stem nature of many native species such as Hazel and Rowan in the shrub layer may be an indication of heavy grazing pressure and/or former management.



Fallow Deer (Dama dama)

Restoration potential to native woodland

The site was accepted by the Forest Service for grant funding under the NWS in spring 2003, and a contractor has been commissioned to carry out work to enhance the semi-natural elements in the woodland under the scheme. The primary objectives for the site that hope to be achieved under the scheme include provision of fencing, replacement of mature commercial conifers with native species, and removal of invasive species from the site, primarily Rhododendron.

Small size of site

Over two thirds of the site is currently commercial forest habitat. Under the NWS, all areas of conifer plantation will be converted to semi-natural woodland. The remaining commercially viable section of the wood (approximately 8 ha) will be felled and removed by Coillte as it matures. Other areas of conifers that are not intimately mixed with Oak woodland will be felled to waste. In areas where felling is not feasible, due to proximity to native woodland types, non-native species will be ring-barked and left standing as dead wood (except in areas of high public use, e.g. adjacent to paths used by the public).

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.
- enforcement of Regulations under the Habitats/Birds Directives and the Wildlife Acts.
- enforcement of other relevant legislation such as the Local Government (Planning and Development) Acts and the Environmental Impact Assessment Directive.
- Application of the NWS. This scheme has been developed by the Forest Service with major input from NPWS, Coillte, Woodlands of Ireland, COFORD and the Regional Fisheries Board in consultation with NGOs and other interested parties. Its aim is to conserve and expand Ireland's native woodland resource and associated biodiversity, through the application of appropriate "close to nature" silviculture. The scheme consists of two elements, Native Woodland Conservation and Native Woodland Establishment. Grant aid through this scheme will enable active woodland management for this site. As part of the scheme, an ecological survey will take place prior to any forestry operations, which will identify all species of ecological interest and areas of particular importance, such as rare plants locations and specific wildlife habitats, holts, setts, nests, etc.

Establish a monitoring regime

The monitoring regime for the site will comprise:

Scientific monitoring	Monitoring of the conservation status of the Annex I habitat will be done by, or on behalf of, the staff of the Monitoring Section of the NPWS or staff working to NPWS in accordance with the procedures laid down by that section. Protocols for monitoring Union Wood cSAC will be developed, in consultation with other agencies where appropriate, to determine if the site is being maintained at favourable conservation status.
Site surveillance	Regular inspection of the site by the NPWS staff, with special attention to the monitoring deer grazing, the spread of exotic species, overseeing work forestry operations under the NWS and future tree felling adjacent to the site, will identify any major changes, damaging operations, or threats should they arise.

Enforce notifiable actions

Certain activities may be restricted in SACs. Notifiable Actions for particular habitats and species are listed in Appendix V of this plan. Consent from the Minister may be required before these actions may be carried out within the designated area For woodlands such as Union Wood cSAC, these actions include grazing by livestock, felling of trees (if not covered by a felling licence), removal of foliage, moss or other materials, alteration of banks, bed or flow of watercourses, operation of commercial recreation facilities and introduction into the wild of plants or animal species not currently found in the area.

Specific Strategies

Objective 1.

To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status; Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (38% area of the site).

Strategies:

- | | |
|---|---|
| 1.1. Participate in Woodland Management scheme | Restoration work on the site will commence in 2004, through grant funding under the NWS (Hawe & van der Sleeson, 2003). An ecological survey and preliminary work were carried out in 2003. NPWS will seek to ensure that woodland management is carried out as outlined in the following strategies. |
| 1.2. Remove and control Rhododendron | One of the main priorities under the NWS will be to remove standing invasive Rhododendron, which currently cover approximately 25% or 5 ha of Oak woodland, in 2004 (Year 1 of the NWS). The effectiveness of removal will be monitored by annual site assessment. |
| 1.3. Control spread of other exotic species | With the exception of Coillte-owned property, all blocks of pure conifer will be clear felled from the site, where feasible. Selective felling of other non-native species, such as Beech and Sycamore, will also take place. Felling and removal of these species will be done in a manner that causes minimal impact on any species or habitats of conservation interest. |
| 1.4. Control deer grazing | NPWS will devise a plan for deer culling to control grazing. The entire cSAC will be fenced, incorporating one-way deer leaps. Within the fence, deer will be heavily culled, with agreement of the owners of the sporting rights. |
| 1.5. Ensure retention of biodiversity features | As part of the NWS, the contractor has carried out an ecological survey to identify features of biodiversity interest, such as specimen trees, wildlife dens, foraging areas and other habitats and outlined measures necessary to protect these features. These include protection of soil and existing native flora, including groundflora, epiphytic flora, moss and shrub layer, retention of features of possible value to wildlife, such as small streams and wetland areas, standing dead trees and fallen debris, and specimen trees. |
| 1.6. Facilitate natural regeneration of native species | The main mechanism for achieving this will be determined by the NWS management plan process. However, fencing of the Oak woodland and reducing deer grazing will help to achieve this. NPWS will produce a plan for producing nursery stock from the site, i.e. by collecting any available Oak during mast years and raising them as nursery stock. |
| 1.7. Carry out long-term monitoring | NPWS will continue to monitor selected areas of the site to determine the effectiveness of native woodland conversion by measurement of critical factors such as Rhododendron clearance, native woodland regeneration and changes in the vegetation. |

Objective 2.

To maintain other habitats at favourable conservation status, such as mixed woodland, heath, exposed rock, old walls and streams.

Strategies:

- | | |
|--|--|
| 2.1. Maintain rivers, areas of heath, streams, exposed rock and old walls | Woodland management operations should not interfere with old walls, or take place near known wildlife dens or other habitats, particularly the areas of exposed rock around Union Rock and areas adjacent to the Ballysadare River. |
| 2.2. Management of (mixed) conifer woodland | NPWS will liaise with the Local Authority, Coillte and the Forest Service to ensure that good forestry practices are adhered to during any forestry maintenance, tree felling and/or removal of exotic species. |
| 2.3. Encourage Coillte to participate in woodland restoration work | Once areas of commercial forestry are felled and removed, NPWS will liaise with Coillte to encourage them to convert areas of commercial forestry in the site to semi-natural woodland. This can be achieved through the NWS or other mechanisms, e.g. LIFE funding. |

Objective 3.

To maintain the populations of notable species on the site at favourable conservation status, such as Pine Marten, Otter, Red Squirrel, Badger and Bats.

Strategies:

- | | |
|--|--|
| 3.1. Maintain populations of notable species. | Strategies listed under Objectives 1 and 2 that aim to protect and restore habitats will be the main strategies to protect and conserve Annex II and other species. |
| 3.2. Management for Pine Marten, Red Squirrel, Badger and Otter | The ecological survey that will be carried out (see Strategy 1.4) will help to identify areas of specific wildlife interest within the site and any measures needed for protection of notable species. Areas of existing Scots Pine will be retained and added to new planting schemes for the site to specifically increase Red Squirrel habitat. |
| 3.3. Survey for Bats | The bat fauna of the site is currently unknown. NPWS will undertake a survey of bats and potential roost sites within the site, before any tree felling occurs. |

Objective 4.

To increase public awareness and appreciation of the site.

Strategies:

- | | |
|---|--|
| 4.1. Provide public information on ecology of the site | NPWS will erect an information display board at the main entrance to the wood, providing a map and details of the species and habitats of conservation interest within the site. |
|---|--|

- | | |
|--|--|
| 4.2. Provision of safety notices | Prior to deer culling and woodland management operations, NPWS will inform the public as to when and why this activity is taking place, through provision of signs at key entrances to the site and where necessary, in local newspapers. |
| 4.3. Develop a plan for public access and use of the site | <p>During the period of the management plan, NPWS will devise a public usage and access plan in consultation with the Local Authority. A number of existing user groups could be offered access but according to strict guidelines and liaison with local NPWS staff. These include:</p> <ul style="list-style-type: none"> • Continued access for walkers and horse riders (any commercial equestrian activity would be licensed). Newly erected deer fences should be operable by horse riders without dismounting. • Licensed access for the hunting rights owner • Licensed access for motorised vehicles such as motor bikes/quads |

Objective 5.

To establish a Nature Reserve within the cSAC.

Strategies:

- | | |
|---|---|
| 5.1. To establish a Nature Reserve within the cSAC | NPWS will complete the legal process to establish a statutory Nature Reserve with the cSAC. |
|---|---|

Objective 6.

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

Strategies:

- | | |
|--|--|
| 6.1. Liaise with interested parties | NPWS will strive to initiate and maintain effective liaison with landowners, legal users (particularly through the Liaison Committee), relevant authorities and interested parties on achieving the objectives for conservation of the site. |
| 6.2. Liaise with REPS planners | REPS planners should consult with local NPWS staff when they are developing plans for land within the site. |

Zoning

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

Zone A: A Natural Zone

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

1A: NON-INTERVENTION AREAS

1A1: Rivers and streams, exposed rock and old walls (not mapped)

Strategies 1.5, 2.1 and the general 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: Broadleaved deciduous woodland, heath and mixed woodland where removal of non-native and invasive species should occur

Strategies 1.1-1.7, 2.1-2.3 and the general strategies apply.

B2: Commercial forestry

Strategy 2.3 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: Paths and roads within the site

The general strategies apply.

Zone D: Impact Zone

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

D1: Conifer plantation in adjacent areas

Strategy 6.1 and the general strategies 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	Participate in Woodland Management scheme	Continue to implement Native Woodland Scheme works on the site	NWS contractor/ NPWS			
1.2	Remove and control Rhododendron	Remove approximately 5 ha of Rhododendron from Oak woodland. Monitor annually	NWS contractor			
1.3	Control spread of other exotic species	Remove exotics such as conifers, Beech, Sycamore from NWS application area	NWS contractor			
1.4	Control deer grazing	Erect deer fencing around whole site. Devise plan for deer culling	NPWS/ Coillte			
1.5	Ensure retention of biodiversity features	Continue to implement NWS and protect features of biodiversity interest, such as specimen trees, wildlife dens, foraging areas and other habitats.	NWS contractor			
1.6	Facilitate natural regeneration of native species	(See strategy 1.4). Produce a plan for producing nursery stock from the site	NPWS			
1.7	Carry out long-term monitoring	Continue to monitor selected areas of the site, e.g. to determine the success of Rhododendron clearance, native woodland regeneration and changes in the vegetation.	NPWS			
2.1	Maintain rivers, areas of heath, streams, exposed rock and old walls	Woodland management operations should not interfere with these features	NWS contractor			
2.2	Management of (mixed) conifer woodland	Liaise with the Local Authority, Coillte and the Forest Service to ensure that good forestry practices are adhered to during any forestry maintenance, tree felling and/or removal of exotic species.	NPWS			
2.3	Encourage Coillte to participate in woodland restoration work	Liaise with Coillte to encourage them to convert areas of commercial forestry in the site to semi-natural woodland	NPWS			

TABLE Summary of Specific Strategies CONTINUED.....

	Strategy	Action required	Who to implement	When/Duration/Frequency	Estimated Total Cost	Additional Resources needed
3.1	Maintain populations of notable species.	See Objectives 1 and 2.	-			
3.2	Management for Pine Marten, Red Squirrel, Badger and Otter	Identify areas of specific wildlife interest within the site and any measures needed for protection of notable species through NWS ecological survey (as per Strategy 1.4).	NWS contractor			
3.3	Survey for Bats	NPWS will undertake a survey of bats and potential roost sites within the site, before any tree felling occurs.	NPWS			
4.1	Provide public information on ecology of the site	Erect an information display board at the main entrance to the wood, providing a map and details of the species and habitats of conservation interest within the site.	NPWS			
4.2	Provision of safety notices	Prior to deer culling and woodland management operations, NPWS will inform the public as to when and why this activity is taking place, through provision of signs at key entrances to the site and where necessary, in local newspapers.	NPWS			
4.3	Develop a plan for public access and use of the site	NPWS will devise a public usage plan in consultation with the Local Authority. NPWS will also liaise with the Local Authority to develop a public access plan.	NPWS/Coillte			
5.1	To establish a Nature Reserve within the cSAC	Complete the legal process to establish a statutory Nature Reserve with the cSAC.	NPWS			
6.1	Liaise with interested parties	NPWS will liaise with 'user groups' to ensure they obtain permission prior to using the site; regular activities such as horse riding and game shooting should be licensed through NPWS.	NPWS			
6.2	Liaise with REPS planners	Liaise with user groups to ensure that activities within the site are compatible with the conservation interest of the site. Regular activities such as horse riding and game shooting should be licensed through NPWS.	NPWS			

APPENDIX I: GLOSSARY

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

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

ALTITUDE - Vertical height above sea level.

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.

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

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

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

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.

CANOPY LAYER - The tallest tree layer in a wood.

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.

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.

DCMNR – Department of Communications, Marine and Natural Resources

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

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

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

EPA – Environmental Protection Agency

EPIPHYTE - A plant which uses another plant for physical support, and can be attached to it. However, unlike a parasite, it obtains no nourishment from its host.

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

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

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

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.

FORMATION – A geological term for a body of rocks having easily recognised boundaries that can be traced in the field, and large enough to be represented on a geological map as a practical and convenient unit for mapping and description.

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

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

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

INVERTEBRATES - Animals without backbones.

LEPIDOPTERA - Moths and butterflies.

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

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

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.

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.

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.

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

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

NGOs - Non- Governmental Organisations.

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

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

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

NPWS - National Parks and Wildlife Service

ODONATA – Dragonflies and Damselflies.

ORGANISM - Any living thing.

OS – Ordnance Survey

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

PER-ANNUUM - Each year.

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.

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

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

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

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

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

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

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

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

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

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.

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).

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

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

VERTEBRATES - Animals with backbones.

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

APPENDIX II: REFERENCE MATERIAL

Map References:

O.S. 1/2 inch (1:126,720) map:	7
O.S. Discovery (1:50,000) map:	25
O.S. 6 inch (1: 10,560) map:	SO 20

Databases :

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

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

Photographic Coverage:

Aerial photo No. G329, Date: 1977; Aerial photo No. 744, Date: May 2000. NPWS, The Department of Environment, Heritage and Local Government, 7 Ely Place, Dublin 2.

Relevant Legislation:

S.I. No. 39 of 1976: Wildlife Act 1976.

S.I. No. 38 of 2000: Wildlife (Amendment) Act 2000.

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

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APPENDIX III: CLIMATE

BELMULLET													
monthly and annual mean and extreme values													
1961-1990													
TEMPERATURE (degrees Celsius)	<i>jan</i>	<i>feb</i>	<i>mar</i>	<i>apr</i>	<i>may</i>	<i>jun</i>	<i>jul</i>	<i>aug</i>	<i>sep</i>	<i>oct</i>	<i>nov</i>	<i>dec</i>	<i>year</i>
<i>mean daily max.</i>	8.2	8.3	9.7	11.6	13.7	15.7	16.8	17.2	15.7	13.4	10.3	9	12.5
<i>mean daily min.</i>	3.1	2.9	3.9	4.9	7	9.5	11.1	11.1	9.8	8.2	5.1	4.3	6.7
<i>Mean</i>	5.7	5.6	6.8	8.2	10.3	12.6	14	14.1	12.8	10.8	7.7	6.6	9.6
<i>absolute max.</i>	13	13.8	19.4	23.3	26	27	28.7	27.4	22.4	22.1	15.2	13.5	28.7
<i>absolute min.</i>	-8.1	-6.3	-5.7	-2.6	-0.4	1.4	5.1	3.1	0.8	-0.7	-2.5	-5.2	-8.1
<i>mean no. of days with air frost</i>	5	4.3	2.1	0.9	0	0	0	0	0	0.1	1.3	3.1	16.7
<i>mean no. of days with ground frost</i>	10.5	9.5	7.3	5.4	1.9	0.1	0	0	0.5	1.7	5.5	7.8	50.3
RELATIVE HUMIDITY (%)													
<i>mean at 0900UTC</i>	85	84	82	80	78	81	85	85	84	85	85	85	83
<i>mean at 1500UTC</i>	81	77	75	73	73	77	80	79	78	80	80	83	78
SUNSHINE (hours)													
<i>mean daily duration</i>	1.47	2.41	3.29	5.27	6.14	5.36	4.29	4.63	3.65	2.63	1.74	1.08	3.5
<i>greatest daily duration</i>	7.9	9.8	11.2	14	15.6	15.8	15.4	14	12.5	9.8	8.1	6.7	15.8
<i>mean no. of days with no sun</i>	10	6	5	3	2	3	3	3	4	6	8	12	66
RAINFALL (mm)													
<i>mean monthly total</i>	123.5	80.1	95.8	58.1	68	67.3	67.6	93.7	108	132.9	127.7	119.9	1142.7
<i>greatest daily total</i>	32.2	23.6	25.9	20.4	26.5	35.2	44.9	57.3	56.1	67.8	56.4	40.5	67.8
<i>mean no. of days with $\geq 0.2\text{mm}$</i>	23	19	23	19	18	18	19	20	21	24	23	24	249
<i>mean no. of days with $\geq 1.0\text{mm}$</i>	20	15	18	13	14	12	12	15	16	19	19	19	193
<i>mean no. of days with $\geq 5.0\text{mm}$</i>	9	6	7	4	5	4	4	6	7	9	9	9	80
WIND (knots)													
<i>mean monthly speed</i>	14.7	13.9	14.2	12.2	12.4	11.9	11.6	11.3	13	14.3	13.6	14.3	13.1
<i>max. gust</i>	91	93	88	67	69	73	67	60	84	85	76	89	93
<i>max. mean 10-minute speed</i>	58	61	58	43	47	47	45	44	57	58	50	60	61
<i>mean no. of days with gales</i>	5.5	4.2	3.3	1.1	1	0.4	0.3	0.8	2.3	3.6	3.4	4.5	30.5
WEATHER (mean no. of days with...)													
<i>snow or sleet</i>	4.6	4.4	4	1.6	0.2	0	0	0	0	0	0.7	2.6	18.1
<i>snow lying at 0900UTC</i>	0.8	0.6	0.3	0.1	0	0	0	0	0	0	0	0.4	2.3
<i>hail</i>	8.5	6.2	7.4	4	1.9	0.2	0.1	0.1	0.5	2.8	6.7	6.7	45.1
<i>thunder</i>	0.9	0.6	0.5	0.3	0.4	0.5	0.6	0.2	0.2	0.2	0.4	0.6	5.5
<i>fog</i>	1.1	0.6	0.7	1.7	1.3	2	3.3	2.4	1.1	1.2	0.6	0.6	16.6

Source: Met Eireann

APPENDIX IV: DETAILED INFORMATION ON FLORA AND FAUNA

Flora

Species noted during field work for preparation of this plan (by D. Dunnells, J. Cross and K. Gaynor) and during the NHA survey, 1994, include the following :

TREES & SHRUBS
Alder (<i>Alnus glutinosa</i>)
Ash (<i>Fraxinus excelsior</i>)
Beech (<i>Fagus sylvatica</i>)
Blackthorn (<i>Prunus spinosa</i>)
Cherry-Laurel (<i>Prunus laurocerasus</i>)
Cypress (<i>Cupressus</i> spp.)
Downy Birch (<i>Betula pubescens</i>)
Eared Willow (<i>Salix aurita</i>)
Elder (<i>Sambucus nigra</i>)
Grey Willow (<i>Salix cinerea</i> spp. <i>Olefolia</i>)
Hawthorn (<i>Crataegus monogyna</i>)

(CONTD)
Hazel (<i>Corylus avellana</i>)
Holly (<i>Ilex aquifolium</i>)
Norway spruce (<i>Picea abies</i>)
Rhododendron (<i>Rhododendron ponticum</i>)
Rowan (<i>Sorbus aucuparia</i>)
Scots Pine (<i>Pinus sylvestris</i>)
Sessile Oak (<i>Quercus petraea</i>)
Sitka Spruce (<i>Picea sitchensis</i>)
Sycamore (<i>Acer pseudoplatanus</i>)
Western Hemlock (<i>Tsuga heterophylla</i>)

HERBACEOUS SPECIES
Barren Strawberry (<i>Potentilla sterilis</i>)
Bilberry (<i>Vaccinium myrtillus</i>)
Bluebell (<i>Endymion non-scripta</i>)
Bramble (<i>Rubus fruticosus</i> aggr.)
Bugle (<i>Ajuga reptans</i>)
Bush Vetch (<i>Vicia sepium</i>)
Common Gorse (<i>Ulex europaeus</i>)

(CONTD)
Meadowsweet (<i>Filipendula ulmaria</i>)
Navelwort (<i>Umbilicus rupestris</i>)
Nettles (<i>Urtica dioica</i>)
Pignut (<i>Conopodium majus</i>)
Primrose (<i>Primula vulgaris</i>)
Red Campion (<i>Silene dioica</i>)
Slender St. John's Wort (<i>Hypericum pulchrum</i>)

HERBACEOUS SPECIES
Crowberry (<i>Empetrum nigrum</i>)
Enchanter's Nightshade (<i>Circaea lutetiana</i>)
Foxglove (<i>Digitalis purpurea</i>)
Germander Speedwell (<i>Veronica chamaedrys</i>),
Greater Stitchwort (<i>Stellaria holostea</i>)
Heather (<i>Calluna vulgaris</i>)
Hedge Woundwort (<i>Stachys sylvatica</i>)
Herb Robert (<i>Geranium robertianum</i>)
Honeysuckle (<i>Lonicera periclymenum</i>)
Ivy (<i>Hedera helix</i>)
Lesser Celandine (<i>Ranunculus ficaria</i>)
Lords and Ladies (<i>Arum maculatum</i>)

(CONTD)
Sanicle (<i>Sanicula europaea</i>)
Tutsan (<i>Hypericum androsaemum</i>)
Water Horsetail (<i>Equisetum fluviatile</i>)
Water Mint (<i>Mentha aquatica</i>)
Wavy Bitter-cress (<i>Cardamine flexuosa</i>)
Wild Angelica (<i>Angelica sylvestris</i>)
Wild Garlic (<i>Allium ursinum</i>)
Wood Anemone (<i>Anemone nemorosa</i>)
Wood Sorrell (<i>Oxalis acetosella</i>)
Wood Speedwell (<i>Veronica montana</i>)
Yellow Iris (<i>Iris pseudacorus</i>)
Yellow pimpernel (<i>Lysimachia nemorum</i>)

GRASSES & SEDGES
False Brome (<i>Brachypodium sylvaticum</i>)
Cocksfoot (<i>Dactylis glomerata</i>)
Great Wood-rush (<i>Luzula sylvatica</i>)

(CONTD)
Remote Sedge (<i>Carex remota</i>)
Soft Rush (<i>Juncus effusus</i>)
Wood Sedge (<i>Carex sylvatica</i>)

FERNS
Bracken (<i>Pteridium aquilinum</i>)
Broad Buckler Fern (<i>Dryopteris dilatata</i>)
Common Polypody (<i>Polypodium vulgare</i>)
Hard Fern (<i>Blechnum spicant</i>)
Harts-tongue Fern (<i>Phyllitis scolopendrium</i>)

(CONTD)
Hay-scented Buckler Fern (<i>Dryopteris aemula</i>)
Lady Fern (<i>Athyrium filix-femina</i>)
Male Fern (<i>Dryopteris filix-mas</i>)
Scaly Fern (<i>Dryopteris affinis</i>)

BRYOPHYTES*
<i>Calypogeia asplenoides</i>
<i>Cladonia</i> sp.
<i>Dicranum majus</i>
<i>Dicranum scoparium</i>
<i>Eurhynchium praelongus</i>
<i>Frullania tamarisci</i>
<i>Hypogymnia physodes</i>
<i>Mnium hornum</i>
<i>Neckera crispa</i>
<i>Plagiochila asplenoides</i>
<i>Plagiochila porelloides</i>
<i>Plagiomnium undulatum</i>
<i>Plagiothecium undulatum</i>

(CONTD)
<i>Polytrichum</i> spp.
<i>Rhytidiadelphus triquetrus</i>
<i>Rhizomnium punctatum</i>
<i>Riccardia pulmata</i>
<i>Saccogyna viticulosa</i>
<i>Scapania gracilis</i>
<i>Sphagnum squarrosum</i>
<i>Sphagnum palustre</i>
<i>Sphagnum capillifolium</i>
<i>Sphagnum inundatum</i>
<i>Thamnobryum alopecurum</i>
<i>Thuidium tamariscinum</i>

LICHENS*
Tree Lungwort (<i>Lobaria pulmonaria</i>)
<i>Ramalina</i> sp.
<i>Peltigera</i> sp.

(CONTD)
<i>Physcia</i> sp.
<i>Parmelia</i> sp.
<i>Usnea</i> sp.

* Assistance in identifying bryophytes and lichens was kindly provided by N. Lockhart and C. Douglas.

Fauna

BUTTERFLIES
Orange-tip (<i>Anthocharis cardamines</i>)
Peacock (<i>Inachis io</i>)

(CONTD)
Speckled Wood (<i>Pararge aegeria</i>)
Tortoiseshell sp.

APPENDIX V: NOTIFIABLE ACTIONS

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

- Notifiable Action 3.2 Heath (including Juniper scrub)
- Notifiable Action 5.1 Woodlands
- Notifiable Action 6.1 Rivers and streams
- Notifiable Action 7.1 Ditches, hedges, cereals and intensive grasslands, walls, buildings, waste ground, bare soil, parkland grassland, bracken

HABITAT TYPE 3.2

HEATH (INCLUDING JUNIPER SCRUB)

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

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

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

HEATH (INCLUDING JUNIPER SCRUB)

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

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

HABITAT TYPE 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.

<p><u>SECTION A</u></p> <p>Please note that the activities listed in Section A overleaf are required to be notified to the Minister for The Environment, Heritage and Local Government and should not be undertaken before consent.</p>	<p><u>SECTION B</u></p> <p>Please note that the activities listed in Section B overleaf may, and in most cases do, require a 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>
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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 6.1

RIVERS OR STREAMS

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

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

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

RIVERS OR STREAMS

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

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

HABITAT TYPE 7.1

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

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

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

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

HABITAT TYPE 7.1

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

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

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

APPENDIX VI: COMPENSATION AND APPEALS PROCEDURES

Compensation

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

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

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

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

Rural Environment Protection Scheme (REPS)

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

NPWS Farm Plan Scheme

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

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

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

Appeals Procedure

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

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

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

APPENDIX VII: NATIONAL PARKS AND WILDLIFE SERVICE MANAGEMENT STAFF

Conservation Ranger

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