CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

CORE MANAGEMENT PLAN

INCLUDING CONSERVATION OBJECTIVES

FOR

BERWYN & SOUTH CLWYD MOUNTAINS SAC
&
BERWYN SPA

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Approved by: **N R Thomas**

More detailed maps of management units can be provided on request.
A Welsh version of all or part of this document can be made available on request.

Cyngor Cefn Gwlad Cymru
Countryside Council for Wales

NATURA 2000

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PREFACE

This document provides the main elements of CCW's management plan for the sites named. It sets out what needs to be achieved on the sites, the results of monitoring and advice on the action required. This document is made available through CCW's web site and may be revised in response to changing circumstances or new information. This is a technical document that supplements summary information on the web site.

One of the key functions of this document is to provide CCW's statement of the Conservation Objectives for the relevant Natura 2000 sites. This is required to implement the Conservation (Natural Habitats, &c.) Regulations 1994, as amended (Section 4). As a matter of Welsh Assembly Government Policy, the provisions of those regulations are also to be applied to Ramsar sites in Wales.

1. VISION FOR THE SITE

This is a descriptive overview of what needs to be achieved for conservation on the sites. It brings together and summarises the Conservation Objectives (part 4) into a single, integrated statement about the sites.

The hillsides, sheepwalks and ridges of the Berwyn & South Clwyd mountains are a mosaic of blanket bog and dry heath, grasslands and escarpments.

The deep peat accumulated over thousands of years along the ridge tops and plateaux support active blanket bog represented by high, stable water tables and actively growing layers of sphagnum moss. Dominated by cotton grasses, cross-leaved heath and heather the blanket bog remains largely unmanaged except for some light grazing during the summer months. In some areas pools of shallow water with sphagnum carpets indicate transition mire habitats. Populations of notable rare plants including bog rosemary and tall bog sedge also thrive here.

The areas of dry heathland comprise a mosaic of different aged dry heath, with a broad age structure. This includes areas of long heather providing nesting habitat for ground nesting birds such as grouse, merlins and hen harriers; and areas of lower young heather, and wet flushes where birds can feed on heather shoots and invertebrates. These latter areas having more diverse plant communities that include lichens, liverworts and mosses as well as other herbaceous species.

Cliffs and screes with their own more sparse vegetation are found in steeper areas, and the limestone screes at Eglwyseg continue to be among the best developed examples in Britain. These fragile landforms are maintained in as natural a condition as possible and scree forming processes are allowed to continue naturally.

Many of the cracks and ledges of the limestone rocks and cliffs provide an ungrazed haven for lime tolerant plants. Some of these, particularly the cracks and fissures provide shelter for species like the ferns maidenhair spleenwort and green spleenwort, which specialise by living in small crevices in the rock face. On the ledges luxuriant vegetation with small scabious, golden rod and harebell add summer colour. In the larger cracks and ledges on the cliff face the powdery grey-green foliage of whitebeam trees stands out from the neighbouring hawthorns and yews. Introduced species of plant such as cotoneaster and clematis are very few in number.

Except for the rare tree species growing on and among the rocks of the Eglwyseg, scrub and trees are found only at the fringes of the site and in some of the lower regions where deeper soils encourage areas of native broadleaved woodland with birch, hawthorn, rowan, oak and ash.

At the moorland edge, native broadleaved woodland with a diverse species and age structure provides sufficient suitable habitat to maintain thriving populations of the Welsh clearwing moth and other characteristic species. However, trees are largely absent from the open heath, with limited numbers of saplings permitted to establish themselves along the moor margins where they provide habitat for moorland-edge birds such as black grouse

The neutral and limestone grassland areas support a variety of plant communities. Though described as grasslands, more than half of the ground cover will consist of herbaceous species. Grazing is practised at levels that allow plants to flower and set seed, while preventing the

spread of trees and scrub. Bracken is found only in isolated patches at the perimeters of the site. There are very few non-native species.

Acid grassland often with rushes is found around the lower edges of the open mountain where this is often enclosed as ffridd grazings. Some bracken may extend beyond the scrub and trees but is not found growing widely in the open moorland or grassland.

This range of habitats supports a characteristic and varied breeding bird community which includes merlin, hen harrier, peregrine falcon, curlew, red and black grouse and short-eared owl. These species rely on the heathland, acid grassland, and rushy pasture of the ffridd supporting an adequate supply of prey species to maintain successful breeding.

The agricultural, forestry, and game management critical to both the economic well-being of the Berwyn & South Clwyd Mountains and the maintenance of its wildlife interest is undertaken on a sustainable basis whereby these activities are compatible with the maintenance of the native habitats and species it supports.

2. SITE DESCRIPTION

2.1 Area and Designations Covered by this Plan

Grid reference: SH 917280

Unitary authorities: Ddinbych/Denbighshire; Gwynedd; Powys; Sir y Fflint/Flintshire; Wrecsam/Wrexham ; Parc Cenedlaethol Eryri/Snowdonia National Park.

Area (hectares): 27,221.21

Designations covered:

1. Berwyn & South Clwyd Mountains SAC
2. Y Berwyn SPA
3. Y Berwyn SSSI
4. Berwyn National Nature Reserve (NNR)
5. Ruabon, Llantysilio Mountains & Minera SSSI
6. Llandegla Moor SSSI
7. Pistyll Rhaeadr SSSI

Each component SSSI may have additional land or features that are not part of the SAC or SPA.

Detailed maps of the designated sites are available through CCW's web site: **http://www.ccw.gov.uk/interactive-maps/protected-areas-map.aspx**

2.2 Outline Description

The Berwyn and South Clwyd Mountains SAC is a large upland site (27,132 ha), the largest area of blanket bog and European dry heath in Wales. It comprises three discrete sites, Berwyn SSSI, Llandegla Moor SSSI and Ruabon and Llantysilio Mountains and Minera SSSI. All of these sites are predominantly a mixture of dry heath and blanket bog vegetation with patches of transition mires and quaking bogs vegetation found as an intricate mosaic, usually on acidic rock types, and can together be described as upland moorland.

Berwyn supports the most extensive tract of near-natural blanket bog in Wales. Much of the blanket bog vegetation is dominated by NVC type M19 *Calluna vulgaris–Eriophorum vaginatum* blanket mire, with crowberry *Empetrum nigrum* and an often extensive hypnoid moss cover; within this community cloudberry *Rubus chamaemorus* is found close to the southernmost limit of its British range. On deeper peats, there are smaller stands of M18 *Erica tetralix–Sphagnum papillosum* mire, some of which exhibit distinctive surface patterning. The mire vegetation shows transitions to heather-dominated dwarf-shrub heath.

Berwyn contains the largest stands of upland European dry heath in Wales. The dry heath is characteristic of Berwyn's more easterly location and less oceanic climate than the other major Welsh uplands, and consists principally of NVC type H12 *Calluna vulgaris–Vaccinium myrtillus* heath, with frequent crowberry *Empetrum nigrum* and occasional cowberry *Vaccinium vitis-idaea*. Other heath vegetation present includes areas of H18 *Vaccinium myrtillus–Deschampsia flexuosa* heath and in some areas stands of damp H21 *Calluna vulgaris–Vaccinium myrtillus–Sphagnum capillifolium* heath. These latter heaths occur in an intermediate position between the drier heaths and blanket mire and support occasional plants of lesser twayblade *Listera cordata.*

Berwyn is the most important upland in Wales for breeding birds. It supports a wide range of species including internationally significant numbers of hen harrier *Circus cyaneus*, merlin *Falco columbarius*, peregrine *Falco peregrinus* and red kite *Milvus milvus*, as well as significant proportions of the Welsh populations of other species including short eared owl *Asio flammeus*, golden plover *Pluvialis apricaria*, red grouse *Lagopus lagopus* and black grouse *Tetrao tetrix*.

The calcareous vegetation communities for which the site is also notified are found on the section of the Ruabon and Llantysilio and Minera SSSI. This area contains carboniferous limestone outcrops on the scarp known as the Eglwyseg Rocks, with its prominent cliffs, screes and grasslands. The calcareous screes in this area support many rare species such as the limestone fern *Gymnocarpium robertianum*, with the rocky slopes or cliffs supporting rigid buckler fern *Dryopteris submontana*, a nationally scarce fern of limestone pavement and scree at the southern edge of its distribution on Ruabon. Eglwyseg Rocks also holds populations of the endemic whitebeam (*Sorbus anglica)* and Welsh Hawkweed *(Heiracium cambricum).*

Calcareous grasslands are also found at the north-eastern end of the Ruabon and Llantysilio mountains and Minera SSSI. This area contains several types of neutral, upland acid and calcareous grassland over areas of acidic and calcareous rock, along with areas of bracken and scrub. This area holds the only Welsh locality for the critically endangered Sedge *Carex muricata* ssp. *muricata*.

Colonies of Welsh clearwing moth *Synanthedon scoliaeformis* are found in several localities, this being the strongest of only three populations on Wales.

2.3 Outline of Past and Current Management

Agriculture, grouse shooting, forestry, mining/quarrying and recreation have shaped the landscape and vegetation. Centuries of grazing by domestic stock, drainage and burning have converted woodlands to heath and blanket bog and these in turn to grassland.

Financial incentives, since the Second World War, led to increased sheep numbers and a decline in dwarf shrubs in favour of grassland. Coupled to this a dramatic increase in afforestation with conifers during the same period has resulted in 39% of heather on the Berwyn Mountain being lost. Stock grazing continues as the primary concern for sustainable management of heather dominated communities.

Shooting estates to the north account for practically all the managed grouse moors remaining in Wales. A combination of various factors, not fully understood, has led to a decline in grouse numbers in Wales even on well managed moors over recent decades. This plus rising costs of labour has meant that grouse shooting is no longer viable.

The mountains have been subjected in the past to mining of heavy metals, principally in the Tanat and its tributaries, and to slate quarrying, particularly in the north, leaving only local effects within the site, principally that of increased diversity for plants, nesting sites for birds and roosts for bats.

Conservation management has been aimed at limiting the grazing pressures on the habitats, through a number of management agreements, tenancy agreements, grazing licences which have resulted in a reduction in grazing pressure.

A EU funded LIFE project based on the Lake Vyrnwy catchment is working to restore areas of blanket bog, which have been subject to intensive drainage systems in the past. Baled heather is used to block the ditches and re-wet areas of peatland and encourage regeneration of

characteristic upland communities.

Similarly the Heather & Hillforts Partnership project is aimed at promoting sustainable moorland management across the Clwydian Range. Education, interpretation and the provision of advice and practical support to land managers are all aimed at increasing understanding of the uplands and promoting heather management essential to sustain these moorland areas for wildlife and agriculture.

2.4 Management Units

The plan area has been divided into management units to enable practical communication about features, objectives, and management. This will also allow us to differentiate between the different designations where necessary. In this plan the management units have been based mainly on tenure, but also with reference to features and land management requirements.

See attached map showing the management units referred to in this plan.

See appendix 1 for a table confirming the relationships between the management units and the designations covered.

3. THE SPECIAL FEATURES

3.1 Confirmation of Special Features

Designated feature	***Relationships, nomenclature etc***	***Conservation Objective in part 4***
SAC features. Annex I habitats that are a primary reason for selection of this site		
Blanket bogs *Priority feature (EU Habitat Code: 7130)	SAC & SSSI feature.	1
European dry heaths (EU Habitat Code: 4030)	SAC & SSSI feature.	2
SAC features. Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site		
6210 Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)	SAC & SSSI feature	3
7140 Transition mires and quaking bogs	SAC feature only	4
8120 Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*)	SAC feature only	5
8210 Calcareous rocky slopes with chasmophytic vegetation	SAC feature only	6
SPA features		
Hen harrier *Circus cyaneus*	SPA & SSSI feature	7
Merlin *Falco columbarius*	SPA & SSSI feature	8
Peregrine *Falco peregrinus*	SPA & SSSI feature	9
Red kite *Milvus milvus*	SPA & SSSI feature	10
Ramsar features		
Not applicable		
SSSI features – Berwyn SSSI (to be addressed at a later date)		
Blanket bog	See SAC Blanket bog feature	1
Dry heath	See SAC European dry heath feature	2
Hen harrier	See SPA Hen harrier feature	7
Merlin	See SPA Merlin feature	8
Peregrine	See SPA Peregrine feature	9
Red kite	See SPA Red kite feature	10
Black grouse	SSSI feature only	
Welsh clearwing	SSSI feature only	
Upland breeding bird assemblage Hen harrier, merlin, peregrine, black grouse, golden plover, dunlin, snipe, curlew, short-eared owl , whinchat, stonechat, wheatear, ring ouzel, raven, chough.	SSSI feature only	
SSSI features – Ruabon/Llantysilio Mountains & Minera SSSI (to be addressed at a later date)		
Dry dwarf shrub heath	See SAC European dry heath feature	2
Calcareous grassland	Includes Semi-natural dry grasslands and scrub facies on calcareous	3

	substrates: SAC feature	
Sub-montane limestone habitats	SSSI feature only	
Neutral grassland	SSSI feature only	
Black grouse	SSSI feature only	
Breeding bird assemblage: Hen harrier, merlin, peregrine, short-eared owl, night-jar, chough, golden plover, curlew, black grouse, red grouse, whinchat, stonechat, wheatear, ring ouzel, raven, buzzard.	SSSI feature only	
Vascular plant assemblage: *Sorbus anglica, S.rupicola, Carex muricata ssp muricata, Marrubium vulgare, Hornungia petraea, Cardaminne impatiens, Dryopteris submontana, Gymnocarpium robertianum*	SSSI feature only	
Bat hibernacula: Lesser horseshoe, brown long-eared, whiskered, Brandt`s, Natterer`s, Daubenton`s.	SSSI feature only	
SSSI features – Llandegla Moor SSSI (to be addressed at a later date)		
Habitat mixture components: Blanket mire	See SAC Blanket bog feature	1
Dry dwarf shrub heath	See SAC European dry heath feature	2
Upland calcareous grassland	SSSI feature	
Bird assemblage of upland moorland & grassland water bodies: Merlin, hen harrier, red grouse, black grouse, curlew, snipe, whinchat, stonechat, wheatear, short eared owl, redshank, twite, goldeneye, buzzard, peregrine, little grebe.	SSSI feature only	
SSSI features – Pistyll Rhaeadr SSSI (to be addressed at a later date)		
Fluvial landform assemblage	SSSI feature only	

3.2 Special Features and Management Units

This section sets out the relationship between the special features and each management unit. This is intended to provide a clear statement about what each unit should be managed for, taking into account the varied needs of the different special features. All special features are allocated to one of seven classes in each management unit. These classes are:

Key Features
KH - a 'Key Habitat' in the management unit, i.e. the habitat that is the main driver of management and focus of monitoring effort, perhaps because of the dependence of a key species (see KS below). There will usually only be one Key Habitat in a unit but there can be more, especially with large units.
KS – a 'Key Species' in the management unit, often driving both the selection and management of a Key Habitat.
Geo – an earth science feature that is the main driver of management and focus of monitoring effort in a unit.

Other Features
Sym - habitats, species and earth science features that are of importance in a unit but are not the main drivers of management or focus of monitoring. These features will benefit from

management for the key feature(s) identified in the unit. These may be classed as 'Sym' features because:

a) they are present in the unit but may be of less conservation importance than the key feature; and/or
b) they are present in the unit but in small areas/numbers, with the bulk of the feature in other units of the site; and/or
c) their requirements are broader than and compatible with the management needs of the key feature(s), e.g. a mobile species that uses large parts of the site and surrounding areas.

Nm - an infrequently used category where features are at risk of decline within a unit as a result of meeting the management needs of the key feature(s), i.e. under Negative Management. These cases will usually be compensated for by management elsewhere in the plan, and can be used where minor occurrences of a feature would otherwise lead to apparent conflict with another key feature in a unit.

Mn - Management units that are essential for the management of features elsewhere on a site e.g. livestock over-wintering area included within designation boundaries, buffer zones around water bodies, etc.

x – Features not known to be present in the management unit.

The tables below sets out the relationship between the special features and management units identified in this plan:

[See separate spreadsheet]

4. CONSERVATION OBJECTIVES

Background to Conservation Objectives:

a. Outline of the legal context and purpose of conservation objectives.

Conservation objectives are required by the 1992 'Habitats' Directive (92/43/EEC). The aim of the Habitats Directives is the maintenance, or where appropriate the restoration of the 'favourable conservation status' of habitats and species features for which SACs and SPAs are designated (see Box 1).

In the broadest terms, 'favourable conservation status' means a feature is in satisfactory condition and all the things needed to keep it that way are in place for the foreseeable future. CCW considers that the concept of favourable conservation status provides a practical and legally robust basis for conservation objectives for Natura 2000 and Ramsar sites.

Box 1
Favourable conservation status as defined in Articles 1(e) and 1(i) of the Habitats Directive

"The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. 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.

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as 'favourable' when:

- population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is 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."

Achieving these objectives requires appropriate management and the control of factors that may cause deterioration of habitats or significant disturbance to species.

As well as the overall function of communication, Conservation objectives have a number of specific roles:

- Conservation planning and management.

  The conservation objectives guide management of sites, to maintain or restore the habitats and species in favourable condition.

- Assessing plans and projects.

  Article 6(3) of the 'Habitats' Directive requires appropriate assessment of proposed plans and projects against a site's conservation objectives. Subject to certain exceptions, plans or projects may not proceed unless it is established that they will not adversely affect the integrity of sites. This role for testing plans and projects also applies to the review of existing decisions and consents.

- Monitoring and reporting.

  The conservation objectives provide the basis for assessing the condition of a feature and the status of factors that affect it. CCW uses 'performance indicators' within the conservation objectives, as the basis for monitoring and reporting. Performance indicators are selected to provide useful information about the condition of a feature and the factors that affect it.

The conservation objectives in this document reflect CCW's current information and understanding of the site and its features and their importance in an international context. The conservation objectives are subject to review by CCW in light of new knowledge.

b. Format of the conservation objectives

There is one conservation objective for each feature listed in part 3. Each conservation objective is a composite statement representing a site-specific description of what is considered to be the favourable conservation status of the feature. These statements apply to a whole feature as it occurs within the whole plan area, although section 3.2 sets out their relevance to individual management units.

Each conservation objective consists of the following two elements:

1. Vision for the feature
2. Performance indicators

As a result of the general practice developed and agreed within the UK Conservation Agencies, conservation objectives include performance indicators, the selection of which should be informed by JNCC guidance on Common Standards Monitoring[1].

There is a critical need for clarity over the role of performance indicators within the conservation objectives. **A conservation objective, because it includes the vision for the feature, has meaning and substance independently of the performance indicators, and is more than the sum of the performance indicators**. The performance indicators are simply what make the conservation objectives measurable, and are thus part of, not a substitute for, the conservation objectives. Any feature attribute identified in the performance indicators should be represented in the vision for the feature, but not all elements of the vision for the feature will necessarily have corresponding performance indicators.

As well as describing the aspirations for the condition of the feature, the Vision section of each conservation objective contains a statement that the factors necessary to maintain those desired conditions are under control. Subject to technical, practical and resource constraints, factors which have an important influence on the condition of the feature are identified in the performance indicators.

[1] Web link: http://www.jncc.gov.uk/page-2199

4.1 Conservation Objective for Feature 1:
Blanket bogs * Priority feature (EU Habitat Code: 7130)

Vision for feature 1

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. There will be no measurable decline in blanket bog; the area of the habitat must be stable or increasing.
2. Dry blanket bog on moisture shedding ridges and slopes will be defined as ericoid (typically *Calluna*) dominated, with clearly subordinate *Erica tetralix*. *Empetrum nigrum, Vaccinium vitis-idaea* and/or *V. myrtilus* will be present at high frequency. *Eriophorum vaginatum* typically constant but sometimes only at low cover – other graminoids are typically scarce. *Vaccinium oxycoccus* may sprawl over the thick bryophyte mat but other elements of "wet" bog such as *Narthecium* and *Drosera* are characteristically sparse. Hypnoid mosses (typically *Hypnum jutlandicum* and *Pleurozium schreberi*) often the dominant bryophyte component, and *Sphagna* where present most often represented by *Sphagnum capillifolium*.
3. Wet blanket bog on plateaux and col areas is characterised by a more even balance between *ericoids* and *graminoids*. *Eriophorum vaginatum* generally achieves a higher cover than in drier situations and *E. angustifolium* is constant. Representation of *Molinia caerulea* and *Trichophorum cespitosum* is variable according to past management and hydrology. Smaller elements such as *Vaccinium oxycoccus, Narthecium* and *Drosera* are typically present. Hypnoids and *Sphagnum capillifolium* may still comprise the main bryophyte element, but often joined by species of Sphagnum sect. Sphagnum.
4. All areas of blanket bog should exhibit a high water table just below the surface of the ground for the majority of the year and this consistent with continued peat formation.
5. In areas of wet bog in particular, the vegetation should develop or retain an irregular pattern with drier hummocks and wetter hollows.
6. The quality of blanket bog (including in terms of ecological structure and function) must be maintained.
7. Areas with habitats classed as degraded or modified blanket bog and bare peat should be restored to a more sustainable state by encouraging the growth of typical blanket bog vegetation and the blocking of drainage ditches.
8. Burning blanket bog will be discouraged as it retards the development of hummock & hollows as well as the development of more sensitive Sphagna.
9. There should be no moor drains or grips draining the peat body.
10. There should be no evidence of damage caused, for example, by active drainage or burning.
11. Any typical species must also be at FCS, as defined below.
12. Non-native plant species should be absent.
13. There should be no decline in the range or abundance of characteristic plant species and vegetation communities.
14. All factors affecting the achievement of these conditions are under control.

Performance indicators for Feature 1

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of blanket bog	Lower limit is based on extent at time of SAC notification being 32.3% of total site area.	*Upper limit*: 100% of peat body *Lower limit*: 8792.45 ha
A2. Vegetation composition – cover of indicator species (within 1m radius)	Within **Dry Blanket Bog** area the cover of *Calluna vulgaris* or *Eriophorum vaginatum* do not exceed 75%.	*Upper limit:* 75% *Lower limit:* None set
	Within **Wet Blanket Bog** area the cover of *Calluna vulgaris, Eriophorum angustifolium* or *E. vaginatum* forms less than 50% cover **And** *Molinia caerulea* forms <25% cover.	*Upper limit:* 50% *Lower limit:* None set *Molinia caerulea*: *Upper limit:* 25% *Lower limit:* None set
A3. Vegetation composition – frequency of indicator species (within 1m radius)	**Dry** blanket bog is defined as stands of vegetation where at least 5 of the following species should be present: *Calluna vulgaris* *Empetrum nigrum* *Erica tetralix* *Eriophorum angustifolium* *E. vaginatum* *Trichophorum cespitosum* *Vaccinium oxycoccos* *Vaccinium vitis-idaea* **And** Any of the following sphagnum species should be present in patches or hummocks: *Sphagnum papillosum* *S. capillifolium* *S. palustre* *S. magellanicum*	*Upper limit:* None set *Lower limit:* At least 5 indicator species present. *Upper limit:* None set *Lower limit:* One or more areas at least 10x10cm^2

	Wet blanket bog is defined as stands of vegetation where at least 4 of the following species should be present: *Empetrum nigrum* *Erica tetralix* *Eriophorum angustifolium* *E. vaginatum* *Trichophorum cespitosum* *Vaccinium vitis-idaea* **And** At least one of the following species should also be present: *Drosera rotundifolia* *Narthecium ossifragum* *Vaccinium oxycoccos* **And** Any of the following sphagnum species should be present in patches or hummocks: *Sphagnum papillosum* *S. capillifolium* *S. palustre* *S. magellanicum*	*Upper limit:* None set *Lower limit:* At least 4 indicator species present *Upper limit*: None set *Lower limit:* At least 1 positive indicator species present *Upper limit:* None set *Lower limit:* One or more areas at least 10x10cm^2
A4. Sward condition – frequency of negative indicator species (within 1m radius)	The following species are all absent from **all** blanket bog: *Juncus effusus* *Juncus squarrosus*	*Upper limit:* Absent *Lower limit:*
A5. Sward condition – frequency of negative indicator species (within 5m radius)	On **all** blanket bog: Trees & scrub (saplings >60cm in height) Bracken *Pteridium aquilinum*	*Upper limit:* Absent *Lower limit:*
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Fire	To maintain peat formation the burning of Blanket Bog is not an option. Fire removes the surface vegetation and exposes the underlying peat to wind, rain and desiccation leading to the loss of peat.	*Upper limit*: No burning of blanket bog. *Lower limit*: N/a
F2. Grazing	The stocking density will be specific to each compartment, dependent on the relative amount of the vegetation types present.	*Upper limit*: Maintenance = 0.33 ewes/ha/yr (0.05LSU/Ha/yr) **Or**

	Ponies or cattle have advantages over sheep due to their tendency to graze coarser grass and rush vegetation without adversely affecting heather/ericaceous cover. Sheep will graze heather intensively in the autumn/winter.	Restoration = 0.1 ewes/ha/yr (0.015LSU/Ha/yr) *Lower limit*: None set at present, may change following 2007 review payment scheme.
F3. Stock distribution	Localised overgrazing due to a concentration of stock in one area can result in erosion of peat surface and loss of important plant species. Shepherding and frequent movement of supplementary food supply ensures even distribution of stock over the forage area.	*Upper limit*: No evidence of concentrated stocking with associated suppressed heather growth forms (drumstick, topiarised and carpet forms). *Lower limit*:
F4. Heather management – burning & mowing	Undertaken to spread grazing pressure around the hill or to reduce fire risk.	*Upper limit*: No burning on blanket bog. *Lower limit*: Mowing may be undertaken in exceptional circumstances subject to assessment on a site-by-site basis.
F5. Tree/Scrub encroachment	The threat comes from increased evapotranspiration that could lead to the peat drying out.	*Upper limit*: Absent *Lower limit*: n/a
F6. Drainage	These drains lower the water table and cause peat loss through runoff and oxidation. Future peat development is hindered.	*Upper limit*: No drains to be left open on the peat body. *Lower limit*: n/a
F7. Peat digging	Historical peat digging has had significant impact on the peat bogs.	*Upper limit*: No peat digging to be undertaken. *Lower limit*: n/a
F8. Human impact recreation	Blanket bog is susceptible to erosion caused by walkers, off road vehicles & mountain bikes etc.	*Upper limit*: No areas of exposed peat greater than $1m^2$. No compaction of blanket bog and no infrastructure on the habitat. *Lower limit*: n/a
F9. Climate change	This factor is outside of our control. The only practical means of mitigating the effects of change is to manage those factors, which are likely to augment the effects of climate change, including burning and drainage.	*Upper limit*: Not possible to set any. *Lower limit*: n/a

F10. Atmospheric deposition (Data & further information from: The Air Pollution Information System (APIS) http://www.apis.ceh.ac.uk)	Acid Deposition Current Deposition: 1.97 keq/ha/yr. Impacts: decomposition rate, sulphate reduction, nitrate uptake, organic acid production, damages the bog vegetation, increases acid leeching of cell membranes in sphagnum thus increasing evapotranspiration and reducing photosynthesis, mobilizes Al3+ (aluminium) causing toxicity to plants, reduce Potassium availability to plants.	Acid Deposition *Upper limit*: Critical Load: 0.35 keq/ha/yr *Lower limit*: n/a
	N deposition Current Deposition at 26.5 kg N/ha/year. Impacts: by shifting the balance from bog mosses to grasses resulting in reduced carbon sequestration potential and probable net emission.	N deposition *Upper limit*: Critical Load Range: 5-10 kg N/ha/year *Lower limit*: n/a
F11. Heather beetle	Both adults and larvae of the heather beetle *Lochmaea suturalis* feed principally on heather *Calluna vulgaris*, although, rarely, *Erica* is also eaten. They can reach plague proportions such that visible damage/death is caused to heather stands.	*Upper limit*: Not possible to set any since there is no way of controlling this species. *Lower limit*: n/a
F12. Invasive species	Rhododendron (*Rhododendron ponticum*) can spread to cover vast areas within the upland landscape. Plants dominate to the exclusion of botanical interest and a reduction in overall diversity.	*Upper limit*: No flowering (seed-bearing) Rhododendron present. *Lower limit*: n/a
F13. Game management	The management requirement for red grouse is in conflict with favourable conservation status for blanket bog. Red grouse management requires that the vegetation be managed to create a mosaic of different age structure within the heather. Game management will be confined to areas of dry heath only.	*Upper limit*: No burning or mowing on blanket bog for game management. *Lower limit*: n/a

4.2 Conservation Objective for Feature 2:
European dry heaths (EU Habitat Code: 4030)

Vision for feature 2
The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. There will be no measurable decline of dry heath area; the area of the habitat must be stable or increasing.
2. The European dry heath consists principally of NVC type H12 *Calluna vulgaris–Vaccinium myrtillus* heath, with frequent *Empetrum nigrum* and occasional *Vaccinium vitis-idaea*. Other heath vegetation present includes areas of H18 *Vaccinium myrtillus–Deschampsia flexuosa* heath and in some areas stands of damp H21 *Calluna vulgaris–Vaccinium myrtillus–Sphagnum capillifolium* heath. These latter heaths occur in an intermediate position between the drier heaths and blanket mire and support occasional plants of *Listera cordat.a*
3. Its quality (including in terms of ecological structure and function) must be being maintained.
4. The areas of heath vegetation should be retained and where possible permitted to re-establish on areas modified or degraded as a result of agricultural improvement, or through inappropriate management.
5. The dry heathland should have a diverse age structure in the heather and other shrubby plants.
6. Management will ensure the development of a mosaic of age structures through pioneer, building, mature to degenerate heather with at least 10% identified for no-management and allowed to develop through to maturity.
7. Management will not be undertaken within sensitive habitat areas.
8. Some native scrub development will be acceptable up to 10% cover with higher densities, up to 20% within e.g. identified black grouse management zones.
9. Heather and other plants should not exhibit signs of suppressed growth forms due to grazing.
10. There should be areas of long heather providing nesting habitat for ground nesting birds such as grouse, merlin and hen harriers; and areas of lower young heather, and wet flushes where birds can feed on heather shoots and invertebrates.
11. Non-native plant species should be absent.
12. Any typical species must also be at FCS, as defined below.
13. All factors affecting the achievement of these conditions are under control.

Performance indicators for Feature 2

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of European dry heath	Lower limit is based on extent at time of SAC notification i.e. 36.67% of total site area.	*Upper limit:* None set *Lower limit:* 9982 ha
A2. Vegetation composition – cover of indicator species (Within 1m radius)	Two or more species of the following ericoids present: *Calluna vulgaris* *Empetrum nigrum* *Erica cinerea* *Vaccinium myrtillus* *V. vitis-idaea*	*Upper limit:* None set *Lower limit:* At least 2 species present

A3. Vegetation composition – dwarf shrub cover (Within 1m radius)	Dwarf shrubs make up at least 50% cover. And *Ulex gallii* or *Vaccinium myrtillus* make up less than 50% of the total dwarf shrub cover.	*Upper limit:* None set *Lower limit:* 50%. *Upper limit:* 50% *Lower limit*: None set
A4. Vegetation composition – positive indicator species (Within 1m radius)	At least five patches of pleurocarpous moss dominated patches are present. 10cm x 10cm patch with > 50% cover of pleurocarpous bryophytes	*Upper limit:* n/a *Lower limit:* Five 10x10cm patches with > 50% cover of pleurocarpous bryophytes.
A5. Sward condition (Within 1m radius)	No suppressed growth forms of *Calluna vulgaris* are present	*Upper limit*: No evidence of concentrated stocking with associated suppressed heather growth forms (drumstick, topiarised & carpet forms) *Lower limit*: none set
A6. Vegetation composition – negative indicator species (Within 1m radius)	Large *Polytrichum* hummocks (>10cm radius) are absent.	*Upper limit:* Patches of *polytrichum* 10cm radius. *Lower limit:* None set
	Large patches of grass-dominated swards (including track-ways) are absent.	*Upper limit:* 20cmx20cm with >50% grass cover. *Lower limit:* None set
	No more than 3 plants of *Juncus squarrosus* are present.	*Upper limit:* 3 plants *Lower limit:* None set
	Juncus effusus is absent.	*Upper limit:* Absent *Lower limit:* None set
A7. Vegetation composition – negative indicator species (Within 5m radius)	Bracken is absent. Non-native trees and scrub are absent.	*Upper limit:* Absent *Lower limit:* None set *Upper limit:* Absent. *Lower limit:* None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Wild Fire	Wild fires will be controlled as soon as practically possible to limit damage to site.	*Upper limit:* No wild fires. *Lower limit:* n/a

F2. Heather management – burning & mowing.	Controlled burning To develop diverse age structure to benefit wildlife interest & spread grazing pressure over the heath. Must comply with the Heather & Grass burning code. Mowing Mowing replaces controlled burning where labour and terrain place constraints on ability to burn. Sensitive habitats: 1. Wet flushes 2. Within 10m of stream & river. 3. Should not burn NVC community H18 or H21 or wet heath communities. 4. Exposed summits, north facing slopes and land over 600m should not be burnt. Heather here is kept short by the wind, re-growth after burning would be slow and the risk of erosion high. 5. Some areas of long heather should always be left, in any one-year, as suitable nesting sites for hen harrier and merlin. 6. Small islands of heather amongst acidic grassland should not be burnt, unless the grazing pattern is sufficiently controlled to allow the regeneration of heather in these areas following the burn. 7. Steep slopes & gullies greater than 1 in 2.	Controlled burning & mowing. *Upper limit:* 0.1-1ha strips burnt on a 15-year rotation **and** Sensitive habitats will be unmanaged **and** Heather cover must be >70% and >30cm tall before its managed. *Lower limit*: 10% of the area will be unmanaged. **and** If burning is initiated on a mostly un-burnt management unit, the area burnt during the first 2-3 years should be sufficient to avoid any detrimental concentration of grazing on the pioneer stage re-growth. Reduced total area would then need to be burnt in the remained of the 15 subsequent years.
F3. Grazing	Grazing is a major influence on the quality of the heath, and the condition of the heather.	*Upper limit*: 1.49 ewes/ha/yr (for all year round grazing on heath) *Lower limit:* 0.5 ewes/ha/yr
F4 Stock distribution	Localised overgrazing due to a concentration of stock in one area can result in erosion of peat surface and loss of important plant species. Shepherding and frequent movement of supplementary food supply ensures even distribution of stock over the forage area.	*Upper limit*: n/a *Lower limit*: No evidence of concentrated stocking with associated suppressed heather growth forms (Drumstick, topiarised & carpet forms) and excessive dunging
F5. Tree/scrub	All conifers should be removed from	*Upper limit*: 10% cover along

encroachment	the heath, but the native scrub species may be allowed to develop within 200m of the moorland edge. Also the possibility of allowing trees along river corridors to create habitats for black grouse, for example.	woodland edge and river corridors. 20% cover in designated Black grouse key leks areas. 2m in height. *Lower limit*: n/a
F6. Human impact recreation	The heath is affected by many human factors such as damage by illegal use of off road vehicles, erosion along public footpaths, litter and unplanned fires.	*Upper limit*: Zero *Lower limit*: n/a
F7. Climate change	Outside of our control. All we can do is record the changes and use the data to inform the government.	*Upper limit*: Not possible to set any. *Lower limit*: n/a
F8. Atmospheric Deposition (Data & further information from: The Air Pollution Information System (APIS) http://www.apis.ceh.ac.uk)	Acid Deposition Current Deposition:	Acid Deposition *Upper limit*: Critical Load: No estimate available *Lower limit*: n/a
	N deposition Current deposition at 26.5 kg N/ha/year Impacts: Changes in species composition, with increased dominance of grasses at the expense of ericoids, mosses, and lichens.	N deposition *Upper limit*: Critical Load Range: 10-20 kg N ha^{-1} $year^{-1}$ *Lower limit*: n/a
F9. Heather beetle	Both adults and larvae of the heather beetle *Lochmaea suturalis* feed principally on heather *Calluna vulgaris*, although, rarely, *Erica* is also eaten. They can reach plague proportions such that visible damage/death is caused to heather stands.	*Upper limit*: Mitigation strategy is to implement good heathland management (see F2) *Lower limit*: n/a
F10. Invasive species	Rhodedendron (*Rhodedendron ponticum*) spread to cover vast areas within the upland landscape. Plants dominate to the exclusion of botanical interest and a reduction in overall diversity.	*Upper limit*: No flowering (seed-bearing) Rhododendron present. *Lower limit*: n/a
	Bracken can threaten the heath directly by changing soil conditions and shading. Bracken in heather will be given a higher priority for treatment than bracken elsewhere on the moor.	*Upper limit*: No increase of Bracken at expense of Heath. *Lower limit*: n/a

4.3 Conservation Objective for Feature 3:
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) (EU Habitat Code: 6210)

Vision for feature 3

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The extent of the calcareous and neutral grasslands should be maintained or increase in size at the expense of bracken, scrub and other more improved grasslands. No loss in extent is acceptable.
2. The calcareous grassland varies floristically. At low altitudes the sward of the calcareous grassland should be rich in calcicolous species such as *Carlina vulgare*, *Briza media* and *Sanguisorba minor*. Locally scarce species such as *Gymnadenia conopsea* and *Blackstonia perfoliata* should also be present. At higher elevations the calcareous sward has more acid species present. Along with the typical indicator species of calcareous grassland, acid loving species such as *Agrostis tenuis* and *Potentilla erecta* are regular. Within the sward, fine leaved grasses and herb species like *Briza media*, *Carlina vulgaris* and *Thymus polytrichus* will be regular, although due to the upland nature of the site other more typically acid-loving herbs like heath *Galium saxatile* and *Campanula rotundifolia* may commonly occur. Though described as grasslands, more than half of the ground cover will consist of herbaceous species.
3. The limestone grassland areas will have a wide variety of plant communities with the limestone grasslands having those typical of thin, lime rich soils.
4. Grazing will be at levels that allow plants to flower and set seed whilst preventing the spread of trees and scrub.
5. Bracken will only be found in a few isolated patches at the perimeters.
6. Within the sward tree and scrub seedlings, and robust or tussock forming grasses such as *Dactylis glomerata*, and *Deschampsia cespitosa* are uncommon or at low cover. While weeds and other agriculturally favoured species such as *Lolium perenne*, *Urtica dioica*, *Cirsium arvensis* and *C. vulgare* are rare or absent.
7. Introduced species should be absent and control measures should be taken if any such species becomes established.
8. High levels of grazing results in localised soil erosion on steeper parts of the escarpment, which degrades some areas. However, grazing pressure should be sufficient to open small transient patches of bare ground within the sward providing a seed bed for the vascular plant species and suitable habitat for the diminutive bryophytes, macro-lichens and short-lived vascular plant species which are particularly characteristic of limestone grassland on the steeper, more exposed slopes.
9. On deeper soils south of the quarry acid grassland develops and in places forms a mosaic of habitats with the calcareous grassland. On these soils the spread of gorse and bracken should be controlled.
10. All factors affecting the achievement of these conditions are under control.

Performance indicators for Feature 3

The performance indicators are <u>part of</u> the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of	Lower limit is based on extent at time of	Upper limit: none set

semi-natural dry grasslands	SAC notification being 0.01% of total site area.	Lower limit: 150ha
A2. Sward condition - frequency of positive indicators	At least 3 of the following species are present: *Campanula rotundifolia* *Carex spp* *Carlina vulgaris* *Scabiosa columbaria* *Sanguisorba minor* *Helianthemum nummularium* *Leontodon hispidus* *Linum catharticum* *Lotus corniculatus* *Pilosella officinarum* *Thymus polytrichus*	Upper limit: At least 3 indicators are present within a 1m radius area of search. Lower limit: None set
	And cover of bare rock does not exceed 75%	**And** cover of bare rock *Upper limit:* 75% *Lower limit:*
A3. Vegetation composition - cover	At least 50% of the vegetation cover should consist of forbs	*Upper limit:* None set *Lower limit:* 50%
A4. Sward condition – frequency of negative indicators	The following negative indicator species should not constitute more than 25% cover: *Bellis perennis* *Ranunculus repens*	Upper limit: 25% Lower limit: None set
A5. Sward condition – frequency of negative indicators	Nettles and thistles (excluding *Carlina vulgaris*) are absent. Coarse grasses are absent e.g. *Datylis glomerata* and *Avenula pubescens.* Introduced species are absent e.g. *Rhododendron ponticum* Bracken is absent Trees, scrub & saplings are absent e.g. *Acer pseudoplatanus* *Betula spp* *Crataegus monogyna* *Fraxinus excelsior* *Prunus spinosa* *Rosa spp* *Rubus fruticosusagg* *Salix spp* *Ulex spp*	Upper limit: zero Upper limit: zero Upper limit: zero Upper limit: 2 fronds Upper limit: 10cm height/length.
A6. Physical structure	Disturbed bare ground should not exceed 10% of ground cover.	Upper limit: 10% Lower limit: None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***

F1. Grazing	Although this grazing is necessary to stop the development of scrub and to maintain an open sward, too much grazing can also be detrimental to the feature.	Upper limit: 0.4 lsu/ha Lower limit: 0.2 lsu/ha
	The steepness of the escarpment results in the erosion of some areas of slope through trampling by sheep. Although some trampling is required by some moss species that require bare earth to survive, this erosion also reduces the quality of the feature. Trampling is a particular issue to the north of the Eglwyseg Escarpment where there are more sheep and the topography is steeper.	Bare ground *Upper limit:* 10% *Lower limit:* None set
	Sheep dung especially when it accumulates in favoured sheltering or feeding areas caused eutrophication of the grasslands and encourages more broad-leaved grasses and weed species into the sward.	*Upper limit:* 0.4 lsu/ha *Lower limit:* 0.2 lsu/ha
	Grazing may encourage the establishment of thistles, docks and *Senico vulgare* through eutrophication and by opening up the sward. Control measures need to be undertaken in these situations.	Upper limit: Zero Lower limit: none set
	Livestock feeding and watering areas should be cited away from areas of good quality grassland to avoid erosion.	*Upper limit*: No feeding or watering of stock on the habitat. *Lower limit:* None set
F2. Invasive species	The removal of bracken to allow a greater extent of calcareous grassland.	*Upper limit:* Control bracken when/where it threatens the feature *Lower limit:* None set.
	Invasive plants could shade and out compete the native flora of the calcareous grassland. In particular Cotoneaster may colonise the thin rocky calcareous soils to the detriment of the feature. Such alien plants should be removed.	*Upper limit:* Zero *Lower limit:* None set
F3. Trees & scrub	Grazing controls scrub development on the escarpment and many of the shrubs show signs of topiarisation from excessive browsing. In the event of reduced grazing pressure scrub may have to be controlled as it reduces the area of calcareous grassland.	Upper limit: no increase from notification. Lower limit: None set

F4. Human disturbance	Erosion caused by walkers using the Offa's Dyke path, which runs along the bottom of the escarpment, illegal use of mountain bikes and off road vehicles has, resulted in paths having to be repaired.	Bare ground *Upper limit:* Limited to the legal public right of way & associated rights. Ensure surface appropriate to use & maintained for use. *Lower limit:* n/a
	Activities which affect the scree feature such the illegal removal of stones, and engineering works to safe guard the road, which runs below the escarpment could also damage the calcareous grassland.	*Upper limit:* No disturbance to scree slopes *Lower limit:* None set

4.4 Conservation Objective for Feature 4:
Transition mires and quaking bogs (EU Habitat Code: 7140)

Vision for feature 4

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. There will be no measurable decline in Transition mires and quaking bogs; the area of the habitat must be stable or increasing.
2. Typically characterised by a range of low-growing sedges over an extensive carpet of *Sphagnum* bog mosses, accompanied by other mosses, rushes and some scattered herbs.
3. The water table is above the surface of the substrate, giving rise to characteristic floating mats of vegetation.
4. The vegetation normally has intimate mixtures of species considered to be acid-lovers and others thought of as lime-lovers.
5. There should be no moor drains or grips draining the mire.
6. There will be no threats to the transition mire habitat from burning or grazing.
7. There is no significant input of nutrient-rich water from ditches and surrounding land.
8. All factors affecting the achievement of theses conditions are under control.

Performance indicators for Feature 4

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of transition mire feature	Lower limit is based on extent at time of SAC notification being 0.01% of total site area.	Upper limit: n/a Lower limit: 78.9 ha (based on % only)
A2. Vegetation composition - frequency	At least 3 of the following positive indicator species are present: *Cardamine pratensis* *Carex nigra* *Carex rostrata* *Equisetum fluviatile* *Eriophorum angustifolium*	Upper limit: At least 3 positive indicator species present within 1m radius of each sampling point. Lower limit: None set

	Galium palustre *Menyanthes trifoliate* *Potentilla palustris* *Sphagnum spp* *Succisa pratensis* *Viola palustris*	
A3. Vegetation composition – cover	At least 25% of the vegetation cover should be made up of positive indicator species as specified in A2.	*Upper limit*: None set *Lower limit:* 25%
A4. Vegetation composition - cover	Non-native species such as *Rhododendron ponticum* and *Epilobium brunnescens* are absent.	*Upper limit:* Non-native & invasive species are absent. *Lower limit:* None set
A5. Vegetation composition - cover	The following negative indicators are absent: *Anthoxanthum odoratum* *Epilobium hirsutum* *Holcus lanatus* *Ranunculus repens*	*Upper limit*: No plants to be found within 1m radius of each sampling plot. *Lower limit:* None set.
A6. Physical structure – indicators of drainage etc.	There should be no signs of drainage.	*Upper limit:* No drains affecting the bog hydrology. *Lower limit:* None set
A7. Physical structure – indicators of drainage etc.	Areas of eroding peat or mineral soil > $1m^2$ are absent.	*Upper limit:* No areas > $1m^2$ within a 5m radius of each sampling point. *Lower limit:* None set
A8. Physical structure – indicators of drainage etc	Areas of disturbed ground > $1m^2$ are absent. Disturbed bare ground consists of hoof, foot or vehicle imprinted bare humus, bare peat, soil covered by algal mats, bare mineral soil, bare gravel. Distinct and clearly defined paths & tracks are excluded.	*Upper limit:* No areas > $1m^2$ within a 5m radius of each sampling point. *Lower limit*: None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Fires	Burning can damage *Carex rostrata-Sphagnum fallax* mire although wetter ground can be most resistant to such damage.	*Upper limit:* No burning of transition mires. *Lower limit:* None set
F2. Grazing	Grazing and more specifically trampling action can damage transition mire. This habitat is of little value for grazing and can be dangerous for stock to venture into due to soft ground.	*Upper limit:* 0.1 ewes/ha/yr (0.015LSU/Ha/yr) *Lower limit:* None set.
F3. Drainage	Drainage is the primary threat to the vegetation. If the hydrology or water table are interfered with, the transition mire soils will dry out. If drainage activities have occurred, the effect of both burning and grazing will be more pronounced, and	*Upper limit:* No drains to be left open on transition mires *Lower limit*: None set

	in some cases may be catastrophic to the habitat.	
F4. Nutrient enrichment	Due to its high dependence on local hydrology transition mires are particular sensitive to the effects of nutrient enrichment which might influence the source of irrigation from neighbouring land resulting in corresponding changes in species composition particularly Sphagna.	*Upper limit:* No supplementary feeding or agricultural improvement on or near transition mire habitat. *Lower limit:* None set
F5. Non-native species	In typical transition mire habitat it is expected that the water table would be too high to allow non natives or invasive species to occur. If they were found to be present they might indicate underlying problems associated with the hydrology of the site suggestive of drying out.	*Upper limit:* No non-native species on transition mires. *Lower limit*: None set
F6. Vehicle damage	The soft wet nature of transition mire habitat renders it particularly susceptible to damage in the form of compaction and erosion and loss of vegetative cover particularly Sphagnum.	*Upper limit:* No vehicle damage to transition mire habitat. *Lower limit:* None set
F7. Atmospheric deposition	N deposition – TM & QB critical load of 5-10 kg/h/ha/yr	*Upper limit:* critical load of 5-10 kg/h/ha/yr *Lower limit:*

4.5 Conservation Objective for Feature 5:

Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*) (EU Habitat Code: 8120)

Vision for feature 5

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. There will be no measurable decline of habitat, the area of the habitat must be stable but due to its nature an increase in extent is unlikely.
2. The feature is typically characterised by sensitive pioneer species including maidenhair spleenwort, and bryophytes that are able to colonise the scree, as the crags and ledges provide shelter from grazing and frost action.
3. The flora representative of this feature reflects the base rich nature of the rocks including limestone, calcareous-schists and the more basic igneous rocks such as serpentine and basalt.
4. The scree community is important for the rich fern flora and acts as refugia for a number of rare species.

5. Light grazing will prevent the succession to scrub and minimise colonisation by species such as ash and hazel whilst not damaging the feature through overgrazing.
6. The scree will remain largely undisturbed by human activity and the depositional slopes will continue to accumulate small amounts of scree. The vegetation is only likely to be truly representative of this feature where it occurs on stable scree on less steep slopes where the vegetation can accumulate.
7. The existing diversity of species in each of the above communities should be maintained.
8. There will be no reduction in extent as a result of undesirable human activity such as afforestation, quarrying, climbing or civil engineering works.
9. The use of herbicides, such as Asulox to control the spread of bracken, should be restricted to areas where they will not adversely impact the feature.
10. Only native species should be present.
11. All factors affecting the achievement of theses conditions are under control.

Performance indicators for Feature 5

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of feature	Lower limit is based on mapped current extent.	*Upper limit:* n/a *Lower limit:* 35.5ha
A2. Vegetation composition – frequency	At least 3 out of the following 4 indicator species: *Geranium robertianum* *Asplenium trichomanes* *Neckera crispa* *Tortella tortuosa*	*Upper limit:* None set *Lower limit:* At least 3 out of the 4 indicator species should be present within $4m^2$ on the stable scree.
A3. Vegetation composition – ground cover	Within the area of search <10% of the ground cover should consist of *Pteridium aquilinum*, shrubs or trees.	*Upper limit:* 10% *Lower limit:* None set
A4. Vegetation compsition – negative indicator species	Within the area of search <1% should consist of, collectively, *Cirsium arvense*, *C. vulgare*, large docks (excluding *Rumex acetosa*), *Rubus fructicosus*, *Senecio jacobea* or *Urtica dioica*.	*Upper limit:* 1% *Lower limit:* None set
A5. Ground cover	Within the area of search >33% of ground cover should be free from overgrowth by vascular plants.	*Upper limit:* None set *Lower limit:* 33%
A6. Vegetation condition	Within the area of search for any species, <50% **(to be reviewed 2008)** of the leaves (forbs) or shoots (dwarf-shrubs) should show signs of having been grazed or browsed.	*Upper limit:* 50% *Lower limit:* None set
A7. Disturbed ground	Within the area of search <10% of ground cover should be disturbed by human or animal paths, scree running or vehicles	*Upper limit*: 10% *Lower limit:* None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***

F1. Grazing	The characteristic species of this community are eliminated by heavy grazing but lack of grazing will also lead to the loss of the community as succession to woodland is inevitable. Light grazing prevents this succession from taking place.	*Upper limit:* 1 ewe/ha *Lower limit:* 0.5 ewe/ha
F2. Scrub/invasive species	Insufficient grazing may lead to succession to ash and hazel woodland which could result in loss of fern species intolerant of shade typical of this community. Invasive species such as bracken, which forms a dense canopy, will have similar consequences for the feature.	*Upper limit*: 10% *Lower limit:* None set *Upper limit*: No expansion in range. *Lower limit:* None set
F3. Quarrying	The community may be threatened by the removal of limestone pavement for commercial/industrial use.	*Upper limit:* 10% *Lower limit:* None set

4.6 Conservation Objective for Feature 6:

Calcareous rocky slopes with chasmophytic vegetation (EU Habitat Code: 8210)

Vision for feature 6

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. There will be no measurable loss of habitat, the area of the habitat must be stable but due to its nature an increase in extent is unlikely.
2. The chasmophytic vegetation will consist of plant communities colonising cracks and fissures of rock faces. The type of plant communities developing will be largely determined by the base-status of the rock face.
3. The chasmophytic vegetation is usually dominated by ferns such as *Asplenium ruta-muraria* and small herbs such as *Thymus praecox* and *Hieracium spp*. The inaccessibility of rock habitats to grazing animals, specially rock ledges provides a refuge for many vascular plants that are sensitive to grazing, including numerous local and rare species.
4. Bryophytes and crustose lichens should form a dominant component in crevices but are also found on open rock surfaces where there is a lack of competition form vascular plants. Ledge communities are recognised as part of the feature on the site due to the spectacular stepped topography.
5. Grass benches should be floristically diverse supporting species characteristic of the feature such as *Campanula rotundifolia, Centaurea nigra and Dryopteris spp*.
6. The existing diversity of species in each of the above communities should be maintained.
7. Only native species should be present.
8. Chasmophytic vegetation and grass benches vegetation will not exhibit signs of overgrazing.
9. There will be no reduction in extent as a result of undesirable activities such as quarrying.
10. Small scale excavations may enhance the interest of the site by providing additional exposures but would be deleterious to the highly vulnerable scree and clitter slopes.
11. The use of herbicides, such as Asulox, to control the spread of bracken should be restricted to areas where they will not adversely impact the feature.

12. All factors affecting the achievement of these conditions are under control.

Performance indicators for Feature 6

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Extent of feature	Lower limit is based on mapped current extent. Due to nature of the habitat an increase in extent is unlikely to occur. Chasmophytic and ledge vegetation should be diverse and abundant in available crevices and ledges.	*Upper limit:* n/a *Lower limit:* 17.7ha
A2. Vegetation composition	Where chasmophytic vegetation occurs one of *Asplenium rutamuraria* or *Asplenium trichomanes* shoud be present in combination with cushion forming mosses.	*Upper limit:* n/a *Lower limit:* 1 spp
A3. Vegetation composition – indicator species	At least 5 of the following locally native chasmophytic species should be present: *Asplenium ruta-muraria, Asplenium trichomanes,* *Campanula rotundifolia,* *Centaurea nigra, Dryopteris spp, Festuca ovina/rubra, Geranium robertianum, Hieracium spp, Mycelis muralis, Oxalis acetosella, Scabiosa columbaria, Solidago viraurea, Teucrium scorodonia, Thymus polytrichus, Viola spp,* plate forming mosses, cushion forming mosses and crustose lichens.	*Upper limit*: n/a *Lower limit:* 5 spp
A4. Vegetation composition **–** positive indicators	*Hieracium cambricum* should be present at previously recorded locations.	*Upper limit:* None set *Lower limit:* No decline in current extent
A5. Vegetation composition	*Sorbus anglica* should be continuous along the length of the escarpment, except in areas where it has not previously been recorded.	*Upper limit* No increase in current extent *Lower limit* None set
A6. Vegetation composition **–** negative indicator species	<1% of the vegetation cover should be made up of non-native species.	*Upper limit:* 1% *Lower limit:*
A7. Vegetation composition **–** negative indicator species	<25% of the vegetation cover should be made up of bracken, trees (excluding *Sorbus* spp) and shrubs (*Crataegus monogyna and Prunus spinosa*).	*Upper limit:* 25% *Lower limit:* None set
A8. Vegetation structure – signs of physical damage e.g. grazing.	<50% of the leaves of forbs or the shoots (dwarf shrubs) should show signs of having been grazed or browsed.	*Upper limit:* 50% *Lower limit:* none set

Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Grazing	The accessibility of most of the ledges to sheep means that the vegetation is frequently subjected to grazing action, which can result in loss of more palatable vascular species.	*Upper limit:* 1 ewe/ha *Lower limit:* 0.5 ewe/ha
F2. Herbicides	Ferns are susceptible to herbicides, particularly Asulox which is used in bracken control. Appropriate buffer zones should be implemented to protect these areas from the effects of drift particularly with regard to aerial applications within the locality.	*Upper limit:* n/a *Lower limit:* Adequate buffer sufficient to remove threat of herbicide drifting onto feature.
F3. Physical disturbance e.g. quarrying, climbing etc.	The nature of this habitat means that chasmophytic communities are at risk from natural processes of weathering and rock fall. Damage may also result from climbing activity where vegetation is removed from cracks and crevices to clear routes up the cliff face.	*Upper limit:* No physical disturbance. *Lower limit:* None set
F4. Air pollution		*Upper limit:* *Lower limit:*
F5. Scrub	Inappropriate grazing may lead to colonisation by ash and hazel resulting in succession to woodland and loss of feature	*Upper limit:* 25% cover scrub species. *Lower limit:* determined by stocking density.
F6. Non-native species	Invasive and non-native species should not be allowed to increase in extent at the expense of the feature.	*Upper limit:* Invasive & non-native species absent *Lower limit:*

4.7 Conservation Objective for Feature 7:
Hen harrier *Circus cyaneus* **(EU Species Code: A082)**

Vision for feature 7

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The size of the population must be being maintained at eleven breeding pairs or increased beyond this.
2. There will be sufficient appropriate habitat to support the population in the long-term including patches of tall heather available for nesting and roosting, areas grasslands, bracken of low trees/scrub for feeding with an adequate supply of prey species in the form of small birds and small mammals to maintain successful breeding.
3. Distribution of species within site is maintained.
4. Distribution and extent of habitats supporting the species is maintained.

5. Developments should not be permitted where they can be shown to have likely adverse impacts upon hen harrier.
6. Populations of legally controllable predator species, such as foxes and carrion crows, will not pose a threat to ground nesting birds.
7. Hunting territories will be managed by controlled grazing to improve structural diversity within the grasslands. This will increase seed production and maximise prey availability e.g. small passerines.
8. There will be no disturbance of any nest location.
9. Illegal human persecution of protected bird species should not occur.
10. All factors affecting the achievement of these conditions are under control

Performance indicators for Feature 7

The performance indicators are <u>part of</u> the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Breeding population size	Generic threshold approach adopted (due to concerns over extent of coverage in some years). Population remains in favourable condition if decline is <25% from the Natura 2000 figure of 14 territorial pairs.	Number of territorial pairs within SPA from a minimum of three counts in each 6-year reporting cycle. *Upper limit*: n/a *Lower limit*: 11 pairs
A2. Breeding success	Successful nests are those, which fledge at least 1 young per season.	*Upper limit*: n/a *Lower limit*: 1 fledged per territorial pair.
A3. Extent of available nesting habitat	Areas of tall mature-rank heather usually on steep slopes in sheltered locations.	*Upper limit:* None set *Lower limit:* extent at notification.
A4. Extent of available foraging territory	Areas of extensive open rough grassland supporting abundant small mammals and passerines.	*Upper limit:* None set *Lower limit:* 1:3 ratio of nesting to foraging habitat in mosaic throughout breeding area.
A5. Disturbance	There should be no disturbance within at least 500 m of the breeding site.	*Upper limit:* Zero *Lower limit:* None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1.Availability of nesting sites.	Frequent patches of tall heather or young forestry (conifers <2m in height).	Ground layer sward height *Upper limit*: 100cm *Lower limit*: Maintain patches of heather at least 40cm deep on flat or gently sloping ground
F2. Prey availability	Abundance of small mammals and birds in open rough grassland with rushes, bracken or low trees/scrub.	*Upper limit:* None set *Lower limit*: Prey availability = Biomass or number m^2 (Insufficient data)
F3. Habitat extent	Assessment once in 6 year period. Areas based on %, of each relevant habitat, of the total SPA area as given on Natura 2000 forms.	*Upper limit*: n/a *Lower limit*: Bogs 8824 ha Heath 9191 ha Grassland 5805 ha Woodland 484 ha

		Rocks/scree 241 ha
F3. Fires	Burning of potential nesting sites, limits nesting territory. Burning season extends into nesting period (1st October to 15th April – Uplands).	*Upper limit*: No fires within traditional nest locations. *Lower limit*: n/a
F4. Persecution	No persecution of schedule 1 species.	*Upper limit*: Zero *Lower limit*: None set
F5. Predation	Natural predation by foxes.	*Upper limit*: Zero *Lower limit*: None set.
F7. Factors out with the site	Damage to their wintering grounds may be having an effect at the meta-population scale.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F8. Disease	Release of captive bred game birds adjacent to site. e.g. Avian Cholera/ Bird Flu	*Upper limit*: No releases on site. *Lower limit*: None set
F9. Weather	Adverse weather can affect the breeding success of the females, e.g. very bad winters affecting the breeding condition of the females before they reach their summer territories, or wet/cold weather chilling the eggs/young chicks.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F10.Development	Upland sites are frequently targeted for windfarm development which generates increased risk of mortality as a result of birds colliding with turbine blades.	*Upper limit*: None set *Lower limit*: Sufficient buffer from nest to ensure zero impact.
F11. Disturbance	Limit all disturbances affecting breeding success. Dogs should be on leads during breeding season.	*Upper limit* None set *Lower limit*: 500m & dogs on lead

Also considered:

Mortality

Rates of mortality should reflect natural dynamics of the population and carrying capacity of available habitat within acceptable limits. Exceptions being made only in years of bad weather e.g. 2007. Excluded because we can't measure it.

4.8 Conservation Objective for Feature 8:

Merlin *Falco columbarius* **(EU Code: A098)**

Vision for feature 8

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The size of the population must be being maintained at 13 breeding pairs or increased beyond this.
2. There will be sufficient appropriate habitat to support the population in the long-term including patches of tall heather available for nesting and roosting, areas grasslands, bracken of low trees/scrub for feeding with an adequate supply of prey species in the form of small birds and small mammals to maintain successful breeding.
3. Distribution of species within site is maintained.
4. Distribution and extent of habitats supporting the species is maintained.
5. Developments should not be permitted where they can be shown to have likely adverse impacts upon merlin.
6. Populations of legally controllable predator species, such as foxes and carrion crows, should not pose a threat to ground nesting birds.
7. Adjoining hunting territories will be managed by controlled grazing to improve structural diversity within the grasslands. This will increase seed production and maximise prey availability e.g. small passerines.
8. There will be no disturbance of any nest location.
9. Illegal human persecution of protected bird species should not occur.
10. All factors affecting the achievement of theses conditions are under control

Performance indicators for Feature 8

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Breeding population size	Known natural fluctuation approach adopted. Population in favourable condition if 13, or more, territorial pairs present based on the Natura 2000 minimum breeding population size recorded from five counts for.1991 to 1995.	Number of territorial pairs within SPA from a minimum of three counts in each 6-year reporting cycle. *Upper limit*: n/a *Lower limit*: 13 pairs
A2. Breeding success	Successful nests are those, which fledge at least 1 young per season.	*Upper limit*: n/a *Lower limit*: 1 fledged per territorial pair
A3. Extent of available nesting habitat	Areas of tall mature-rank heather usually on steep slopes in sheltered locations.	*Upper limit:* None set *Lower limit:* Extent at notification
A4. Extent of available foraging territory	Areas of extensive open rough grassland supporting abundant small mammals and passerines.	*Upper limit*: None set *Lower limit:* 1:3 ratio of nesting to foraging habitat in mosaic throughout breeding area
A5. Disturbance	There should be no disturbance within at least 500 m of the breeding site.	*Upper limit:* Zero *Lower limit:* n/a
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1.Availability of nesting sites	Frequent patches of tall heather plus small clusters of scattered trees of 4-5m in clumps of 0.5-2ha.	Ground layer sward height *Upper limit*: 70cm *Lower limit:* 30cm **with** <30% cover of trees overall.

F2. Prey availability	Abundance of small birds and day flying moths in open rough grassland with rushes, bracken or low trees/scrub.	*Upper limit:* None set *Lower limit*: Prey availability = Biomass or number m^2 ***Insufficient data***
F3. Habitat extent	Assessment once in 6 year period. Areas based on %, of each relevant habitat, of the total SPA area as given on Natura 2000 forms.	*Upper limit*: n/a *Lower limit*: Bogs 8824 ha Heath 9191 ha Grassland 5805 ha Woodland 484 ha Rocks/scree 241 ha
F3. Fires	Burning of potential nesting sites, limits nesting territory. Burning season extends into nesting period (1st October to 15th April – Uplands).	*Upper limit*: No fires within traditional nest locations. *Lower limit*: n/a
F4. Persecution	No persecution of schedule 1 species.	*Upper limit*: Zero *Lower limit*: None set
F5. Predation	Natural predation by foxes	*Upper limit*: Zero *Lower limit*: None set.
F7. Factors out with the site	Damage to their wintering grounds may be having an effect at the meta-population scale.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F8. Disease	Release of captive bred game birds adjacent to site. e.g. Avian Cholera/ Bird Flu	*Upper limit*: No releases on site. *Lower limit*: None set
F9. Weather	Adverse weather can affect the breeding success of the females, e.g. very bad winters affecting the breeding condition of the females before they reach their summer territories, or wet/cold weather chilling the eggs/young chicks.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F10.Development	Upland sites are frequently targeted for windfarm development which generates increased risk of mortality as a result of birds colliding with turbine blades.	*Upper limit*: n/a. *Lower limit*: Sufficient buffer from nest to ensure zero impact.
F11. Disturbance	Limit all disturbances affecting breeding success. Dogs should be on leads during breeding season.	*Upper limit* None set *Lower limit*: 500m & dogs on lead

Also considered:

Mortality

Rates of mortality should reflect natural dynamics of the population and carrying capacity of available habitat within acceptable limits. Exceptions being made only in years of bad weather e.g. 2007. Excluded because we can't measure it.

4.9 Conservation Objective for Feature 9:

Peregrine falcon *Falco peregrinus* **(EU Code: A103)**

Vision for feature 9

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The size of the population must be being maintained at 13 breeding pairs or increased beyond this.
2. Mountainous and moorland terrain with cliffs, crags and quarries for nesting and roosting plus grasslands, bracken of low trees/scrub for feeding with an adequate supply of prey species in the form of small birds and small mammals to maintain successful breeding.
3. The range of the population must not be contracting.
4. Distribution and extent of habitats supporting the species is maintained.
5. Developments should not be permitted where they can be shown to have likely adverse impacts upon peregrine.
6. Populations of legally controllable predator species, such as foxes and carrion crows, should not pose a threat to ground nesting birds.
7. Adjoining hunting territories will be managed by controlled grazing to improve structural diversity within the grasslands. This will increase seed production and maximise prey availability e.g. small passerines.
8. There will be no disturbance of any nest location.
9. Illegal human persecution of protected bird species should not occur.
10. All factors affecting the achievement of theses conditions are under control

Performance indicators for Feature 9

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Breeding population size	Generic threshold approach adopted as Natura 2000 figure based on unsupported data. Population remains in favourable condition if decline is <25% from the Natura 2000 figure of 18 territorial pairs	Number of territorial pairs within SPA from a minimum of three counts in each 6-year reporting cycle. *Upper limit*: n/a *Lower limit*: 13 pairs
A2. Extent of available nesting habitat	Areas of mountainous cliff and crag with ledges suitable for nesting.	*Upper limit*: None set *Lower limit:* SPA boundary
A3. Extent of available foraging territory	Areas of extensive open rough grassland supporting abundant small passerines.	*Upper limit:* None set *Lower limit:* SPA boundary.
A4. Disturbance	There should be no disturbance within at least 500 m of the breeding site.	Upper limit: Zero Lower limit: none set.
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Availability of nesting sites.	Undisturbed cliffs or crags on moorland/mountain. Inter species competition for nest sites i.e. with raven.	*Upper limit*: None set *Lower limit*: Extent at notification. Note majority of nest locations are outside the SPA Boundary and are not in SSSI.
F2. Prey availability	Abundance of small birds in open rough grassland with rushes, bracken or low trees/scrub.	*Upper limit:* None set *Lower limit*: Prey availability = Biomass or number m^2 *Insufficient data*

F3. Habitat extent	Assessment once in 6 year period. Areas based on %, of each relevant habitat, of the total SPA area as given on Natura 2000 forms.	*Upper limit*: n/a *Lower limit*: Bogs 8824 ha Heath 9191 ha Grassland 5805 ha Woodland 484 ha Rocks/scree 241 ha
F4. Persecution	No persecution of schedule 1 species. Eggs and young are taken illegally. Failures due to nest theft could be significant. Some nests fail repeatedly.	*Upper limit*: Zero *Lower limit*: None set
F5. Predation	Predation by crows during breeding season.	*Upper limit*: Zero *Lower limit*: None set.
F6. Factors out with the site	Damage to their wintering grounds may be having an effect at the meta-population scale.	*Upper limit****: Insufficient data*** *Lower limit*:
F7. Disease	Release of captive bred game birds adjacent to site. e.g. Avian Cholera/ Bird Flu	*Upper limit*: No releases on site. *Lower limit*: None set
F8. Weather	Adverse weather can affect the breeding success of the females, e.g. very bad winters affecting the breeding condition of the females before they reach their summer territories, or wet/cold weather chilling the eggs/young chicks.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F9.Development	Upland sites are frequently targeted for windfarm development which generates increased risk of mortality as a result of birds colliding with turbine blades.	*Upper limit*: None set *Lower limit*: Sufficient buffer from nest to ensure zero impact.
F10. Disturbance	Limit all disturbances affecting breeding success. Dogs should be on leads during breeding season.	*Upper limit* None set *Lower limit*: 500m & dogs on lead

Also considered:

Mortality

Rates of mortality should reflect natural dynamics of the population and carrying capacity of available habitat within acceptable limits. Exceptions being made only in years of bad weather e.g. 2007. Excluded because we can't measure it.

Breeding success

Can't measure this as not enough data, therefore not a realistic PI

4.10 Conservation Objective for Feature 10:

Red kite *Milvus milvus* **(EU Code: A074)**

Vision for feature 10

The vision for this feature is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

1. The size of the population must be being maintained at 2 breeding pairs or increased beyond this.
2. Sufficient Broadleaf woodland required for nesting and roosting plus heath and rough grassland for feeding with an adequate supply of prey species in the form of carrion, small birds and small mammals to maintain successful breeding. (NOTE: Red kite do not nest within the SPA.)
3. Developments should not be permitted where they can be shown to have likely adverse impacts upon red kite.
4. Adjoining hunting territories will be managed by controlled grazing to improve structural diversity within the grasslands. This will increase seed production and maximise prey availability e.g. small passerines.
5. There will be no disturbance of any nest location.
6. Illegal human persecution of protected bird species should not occur.
7. All factors affecting the achievement of theses conditions are under control

Performance indicators for Feature 10

The performance indicators are part of the conservation objective, not a substitute for it. Assessment of plans and projects must be based on the entire conservation objective, not just the performance indicators.

Performance indicators for feature condition		
Attribute	***Attribute rationale and other comments***	***Specified limits***
A1. Breeding population size	Generic threshold approach adopted as Natura 2000 figure based on unsupported data.	*Upper limit*: n/a *Lower limit*: 2 pairs or 1.2% of the UK population
A2. Extent of available nesting habitat	Areas of broadleaf woodland for nesting close to open ground including moorland and rough grassland for feeding.	Nest outside of SPA. *Upper limit*: None set *Lower limit:* ***Insufficient data***
A3. Extent of available foraging territory	Areas of extensive open rough grassland supporting carrion, abundant small mammals and passerines.	Upper limit: None set Lower limit: SPA boundary
A4. Disturbance	There should be no disturbance within at least 500 m of the breeding site.	*Upper limit:* Zero *Lower limit:* None set
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Availability of nesting sites.	Many small to large woodlands >1ha amongst open country and representing 20-50% of the area overall, within 5km from good feeding terrain. Predominantly open canopy with abundance of tall trees.	*Upper limit*: None set *Lower limit*: <50% canopy overall with trees of >12m height. **None nest within the site but pairs nesting adjacent to the site boundary forage extensively within the site.**
F2. Prey availability	Abundance of carrion, live mammals, birds and ground surface invertebrates.	*Upper limit:* None set *Lower limit*: ***Insufficient data***
F3. Habitat extent	Assessment once in 6 year period. Areas based on %, of each relevant habitat, of the total SPA area as given on Natura 2000 forms.	*Upper limit*: n/a *Lower limit*: Bogs 8824 ha Heath 9191 ha Grassland 5805 ha Woodland 484 ha Rocks/scree 241 ha
F4. Persecution	Adults poisoned with baited carrion.	*Upper limit*: Zero *Lower limit*: None set

F5. Predation	Predation by crows during breeding season.	*Upper limit*: Zero *Lower limit*: None set
F6. Disease	Release of captive-bred game birds adjacent to site, with risk of, for example, avian cholera or bird flu.	*Upper limit*: No releases on site *Lower limit*: None set
F7. Weather	Adverse weather can affect the breeding success of the females, e.g. very bad winters affecting the breeding condition of the females before they reach their summer territories, or wet/cold weather chilling the eggs/young chicks.	*Upper limit*: ***Insufficient data*** *Lower limit*:
F8. Development	Upland sites are frequently targeted for wind farm development, which generates increased risk of mortality as a result of birds colliding with turbine blades.	*Upper limit*: None set *Lower limit*: Sufficient buffer from nest to ensure zero impact.
F9. Disturbance	Limit all disturbance affecting breeding success.	*Upper limit* None set *Lower limit*: 500m

Also considered:

Mortality

Rates of mortality should reflect natural dynamics of the population and carrying capacity of available habitat within acceptable limits. Exceptions being made only in years of bad weather e.g. 2007. Excluded because we can't measure it.

Breeding success

Can't measure this as not enough data, therefore not a realistic PI

5. ASSESSMENT OF CONSERVATION STATUS AND MANAGEMENT REQUIREMENTS

This part of the document provides:
- A summary of the assessment of the conservation status of each feature.
- A summary of the management issues that need to be addressed to maintain or restore each feature.

5.1 Conservation Status and Management Requirements of Feature 1:
Blanket bogs * Priority feature (EU Habitat Code: 7130)

Conservation Status of Feature 1: Unfavourable declining

Monitoring in 2005, as reported in the document below found that the Berwyn Blanket bog is unfavourable declining. The main causes of poor condition class in 2005 were inappropriate grazing, burning and drainage of the feature.

Ref: A condition assessment of European Dry Heath and Blanket Bog Habitat at the Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains cSAC.
David D. Gray. 2005.

Management Requirements of Feature 1

The impoverished nature of this feature on Berwyn is a direct consequence of historical management practices, which in some cases continue to contribute to the decline in quality of the feature. These include drainage, burning, inappropriate grazing and damage by off-road vehicles.

Grazing
Both under and over-grazing can be damaging. The pattern of grazing should be at a sustainable level, where a proportion of the years heather growth is removed leaving a proportion to flower and seed to ensure future generations of heather plants.
Blanket bog is particularly sensitive to grazing during the autumn and winter months when the growth and palatability of the upland grasses and herbs has decreased and sheep are more likely to concentrate on the heather. It is desirable that stock numbers should be reduced or removed completely from areas between the months of October to March. If there is insufficient grazing the area can very quickly become prone to invasion by conifers & native scrub.
Areas that have been damaged in the past by activities such as large burns or very heavy stocking may need lower, restoration, stocking rates for a period to allow the vegetation to recover.
Shepherding of flocks to ensure even grazing throughout the area of the heft is to be encouraged to avoid damaging concentration of grazing.

Burning
Historically, burning of blanket bog has been extensively practised on the Berwyn and as a result much of the habitat is now degraded, leading to poor species diversity and a loss of more sensitive species such as Sphagnum. Burning damages the surface of the peat body exposing it to the atmospheric oxidation of carbon, desiccation and erosion. All burning of blanket bog and other sensitive areas on the Berwyn will be prohibited. The priority during summer fires will be to protect blanket bog, to ensure the fire doesn't persist and destroy the peat.

Drains
Blanket bog habitat on Berwyn is drying out because of extensive drainage. Existing man-made grips and drains within a peat body should be blocked.

Off road vehicles

Vehicles, particularly 4x4 and trail motorcycles, which can do significant damage to blanket bog, should not be taken off roads and tracks for recreational purposes. Work is required to educate interest groups about the damage caused to the vegetation and peat surface, to consider provision of alternative sites and to prosecute of persistent offenders.

5.2 Conservation Status and Management Requirements of Feature 2: European dry heaths (EU Habitat Code: 4030)

Conservation Status of Feature 2: Unfavourable declining

Monitoring in 2005, as reported in the document below found that the Berwyn dry heath is unfavourable. The main causes of poor condition class in 2005 were lack of species diversity particularly due to fragmentation of the habitat and reversion to grassland as a result of years of overgrazing.

Ref: A condition assessment of European Dry Heath and Blanket Bog Habitat at the Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains cSAC.
David D. Gray. 2005.

Management Requirements of Feature 2

Grazing

Where heather is affected by inappropriate levels of stocking a reduction should be implemented to ensure sustainable grazing i.e. for maintenance 0.33 ewes/ha/yr (0.05LSU/Ha/yr) or for Restoration 0.1 ewes/ha/yr (0.015LSU/Ha/yr). Even if the levels of stocking are within that recommended for the feature overgrazing and damage can still occur due to the accumulation of stock on one area of the hill. It is important that stock are evenly distributed across the area to prevent localised overgrazing. This can be achieved through shepherding or through the provision of feed blocks or mineral licks which are moved around the site on a regular basis to encourage movement of stock.

Burning/mowing

Appropriate burning on dry heath can be a valuable method to promote regeneration of young heather, create the diverse age structure and spread the grazing stock across the hill. The activity is dependent of the availability of trained labour, fire safety equipment, and suitable weather. Burning will be undertaken as specified in a Burning plan agreed with CCW and in compliance with the Heather and Grass Burning Code (WOAD 1992 or as amended).
Over frequent burning, especially if associated with inappropriate grazing can result of loss of heather moorland and its conversion to poor quality grassland. Heather burning should be carried out on a minimum of fifteen-year rotation to allow the vegetation adequate time to recover. Where carried out effectively and in accordance with the guidelines burning heather is a good technique for the spreading stock evenly across the hill.

On areas with insufficient grazing and heather management, scrub soon encroaches. In the absence of any management, succession to woodland would result. In such areas active management is required to cut & clear scrub and implement appropriate grazing to ensure the problem doesn't re-occur.

5.3 Conservation Status and Management Requirements of Feature 3: Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (EU Habitat Code: 6210)

Conservation Status of Feature 3: Unfavourable

Based on a monitoring programme undertaken in 2005 by CCW`s SAC monitoring officer. The majority of the monitoring plots were found to be unfavourable due to the presence of nettles and thistles. These grasslands are more heavily grazed than the surrounding heath and this is reflected in the large numbers of sheep, dung, nettles and thistles found within the feature. 60% of the sampling plots located throughout this feature were found to fail on account of the presence of nettles and thistles indicating that the grazing levels currently being practised are not compatible with achieving favourable condition of this feature.

Management Requirements of Feature 3

Grazing
The stocking density for this feature should be set at a level which the habitat can support and at which levels of dung are not sufficient to encourage undesirable species associated with nutrient enrichment such as thistles and nettles. Stocking density for this feature should therefore not exceed 0.4lsu /ha. The nettles and thistles already present could be managed by cutting or alternatively selective Herbicide application e.g. weed wipe.

5.4 Conservation Status and Management Requirements of Feature 4:
Transition mires and quaking bogs (EU Habitat Code: 7140)

Conservation Status of Feature 4: Unfavourable

Monitoring of the transition mires was undertaken during July of 2006 and the monitoring sampled transition mire vegetation at eight locations (identified from the Upland Survey of Wales (Burn, 1980) maps) to the south of the SAC. Only one plot passed the criteria set for "good quality" habitat and passed the wider drainage impact assessment on the feature. Where monitoring points failed the criteria set for "good quality" habitat it was generally due to an absence of positive indicator species in the sward. Five sample plots had evidence of drainage structures within the vicinity of the sample plot whilst, only two plots had no evidence of drainage structures.

Management Requirements of Feature 4
Further study.
The absence of positive indicator species may be acting as an early warning system that optimal ecological conditions for the transition mire habitat may not be currently maintained within the sample plots. Conversely, the absence of positive indicator species may simply be a reflection of the species-poor nature of the habitat at the site, and absence of specific species is not a good indicator of poor quality habitat. However, until further monitoring/study is undertaken and more is known about the typical sward composition of the transition mires on Berwyn and South Clwyd Mountains SAC, an absence of positive indicator species will be interpreted as an indicator of poor condition habitat.

Drains
Due to a high dependence on the local hydrology by the transition mire, drainage is the primary threat to the vegetation. In areas where the feature is failing on the evidence of drainage, management is required such as ditch blocking with heather bales or the installation of plastic dams to restore the natural water levels within the habitat.

Burning/Grazing
The effects of both are less likely to damage the habitat if it is in pristine condition; however, if drainage activities have occurred, the effect of both burning and grazing will be more pronounced, and in some cases may be catastrophic to the habitat.

5.5 Conservation Status and Management Requirements of Feature 5:
Calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*) (EU Habitat Code: 8120)

Conservation Status of Feature 5: Unfavourable

The monitoring of calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*), at Berwyn and South Clwyd Mountains SCI / SAC took place in September 2003. The sample points along the transects consistently failed due to signs of having been grazed.

Management Requirements of Feature 5

Grazing

Although this plant community thrives in the crevices and crags of the limestone scree where stock are usually unable to reach, the failure of the feature to achieve favourable condition on account of heavy grazing suggests that stock can in fact gain easy access to these areas, and that the numbers of stock doing so are too high for the feature to be maintained. Some grazing is important in preventing colonisation by ash and hazel and subsequent succession to woodland but monitoring suggests that stocking levels should be reduced to below 1 ewe/ha. If due to the contiguous nature of this habitat with neighbouring grassland and heath the stocking levels cannot be reduced sufficiently to allow recovery of the feature then exclosure of stock from these sensitive areas may require consideration.

5.6 Conservation Status and Management Requirements of Feature 6:
Calcareous rocky slopes with chasmophytic vegetation (EU Habitat Code: 8210)

Conservation Status of Feature 6: Unfavourable

The monitoring of calcareous and calcshist screes of the montane to alpine levels (*Thlaspietea rotundifolii*), at Berwyn and South Clwyd Mountains SCI/SAC took place in September 2003. The monitoring revealed that the calcareous rocky slopes are in an unfavourable condition mainly due to a lack of species diversity within the cracks and fissures on the free faces. The conservation objective states that 70% of the calcareous rocky slopes with chasmophytic vegetation should pass the target, however, only 54% of the feature fulfilled the criteria set.

Management Requirements of Feature 6

Grazing

Grazing is highlighted as the main contributing factor to the poor quality of the chasmophytic vegetation. Sheep can gain access to nearly all of the small ledges on the free faces (excluding the climbed areas). A reduction in overall sheep numbers to below 1 ewe/ha may be required for the recovery of this limestone feature which cannot tolerate the grazing pressures to which it is currently exposed. Should a reduction in stock numbers gaining access to these areas not be successful in improving the quality of this feature then complete stock exclusion from these sensitive areas may be required.

Climbing

Climbing occurs at various locations, and was not considered to be having an adverse effect on the feature, since climbing is constrained to a small number of locations, and restrictions on timing and climbing practices are enforced at the site.

5.7 Conservation Status and Management Requirements of Feature 7: Hen harrier *Circus cyaneus* **(EU Code: A082)**

Conservation Status of Feature 7: Unfavourable

SPA monitoring 2002/03/04
Territorial pairs = 9/14/13
Monitoring of Berwyn SPA features undertaken in consecutive years from 2002-2004 (inclusive) revealed that hen harrier only achieved favourable status during 2 of these 3 years over the 6 yearly reporting cycle. Causes of breeding failure were recorded as nest predation, poor weather or unavailability of food (circumstantial evidence) or nest abandonment due to unidentified reasons.

Management Requirements of Feature 7

Persecution
Despite the Berwyn SPA also supporting some of the few remaining grouse shoots in North Wales the hen harrier does not appear to suffer from persecution at the hands on the shooting fraternity within this site.

Destruction nesting territory.
Accidental destruction of nests through poorly planned burning is also becoming a problem of the past since the widespread implementation of burning plans developed with the historical nest locations taken into account during their preparation with shoot co-ordinators.

Grazing.
Loss of moorland habitat to grassland as a result of inappropriate grazing and lack of prey availability in marginal grasslands also through inappropriate management is a problem. Habitat prescriptions are required to target appropriate management of hunting territory such as cattle grazing to improve structural diversity and suitability for prey items. Reductions in stock numbers where the grassland sward is too short to support/attract prey and greater investment in predator control particularly of crows and foxes on the open hill.

Further survey/research
More information is required on:

1. Wintering quarters, both roost and winter-feeding locations need identifying & protecting.
2. Establish precisely where these birds are hunting during breeding season so management can be targeted.

This information is also crucial in informing wider management decisions. Until such information is made available targeting action to improve the conservation status of this feature will be severely restricted.

5.8 Conservation Status and Management Requirements of Feature 8: Merlin *Falco columbarius* **(EU Code: A098)**

Conservation Status of Feature 8: Unfavourable

SPA monitoring 2002/03/04.
Territorial pairs = 17/14/9
Monitoring of Berwyn SPA features undertaken in consecutive years from 2002-2004 (inclusive) revealed that merlin only achieved favourable status during 2 of these 3 years over the 6-yearly reporting cycle. Causes of breeding failure were recorded as nest predation, poor weather or unavailability of food (circumstantial evidence) or unidentified reasons such as nest abandonment due to possible disturbance.

Management Requirements of Feature 8

Persecution
Egg collectors have targeted the Berwyn population in the past. Vigilance is required to monitor progress and implement appropriate surveillance to catch thieves.

Destruction nesting territory.
Accidental destruction of nests through poorly planned burning is also becoming a problem of the past since the widespread implementation of burning plans developed with the historical nest locations taken into account during their preparation with shoot co-ordinators.

The main threats to merlin on Berwyn are the loss of moorland habitat to grassland as a result of inappropriate grazing and lack of prey availability in marginal grasslands also through inappropriate management and predation.
Habitat prescriptions are required to target appropriate management of hunting territory such as cattle grazing to improve structural diversity and suitability for prey. Reductions in stock numbers where the grassland sward is too short to support/attract prey items and greater investment in predator control particularly of crows and foxes on the open hill.
Merlin have been known to nest in woodland at the moorland edge, particularly plantation and although there have been no recorded instances on the Berwyn the comparative success of tree nesting pairs might suggest that predation is a significant limitation on breeding success in this ground nesting species. The tree nesting strategy of merlin in avoiding predation should be taken into account at the forest design planning stage and in focussing monitoring effort.

Further survey/research
Similarities between the ecological requirements of both merlin and hen harrier imply a certain degree of niche overlap between these two species. With no available data relating to prey abundance within the SPA it is difficult to predict whether or not competition for available food is, in some years at least, a limiting factor for one or both species.

5.9 Conservation Status and Management Requirements of Feature 9: Peregrine *Falco peregrinus* (EU Code: A103)

Conservation Status of Feature 9: Unfavourable

SPA monitoring 2002/03/04
Territorial pairs = 10/11/9
Monitoring of Berwyn SPA features undertaken in consecutive years from 2002-2004 (inclusive) revealed that peregrine falcon only achieved favourable status during 1 of these 3 years over the 6-yearly reporting cycle. Causes of breeding failure were recorded as nest predation, poor weather or unavailability of food (circumstantial evidence) or unidentified reasons such as nest abandonment and in occasional cases nests theft.

Management Requirements of Feature 9
Peregrine breed mainly on undisturbed cliffs and crags including disused quarries, most of which are located outside the SPA. The birds use the site for hunting, feeding on small birds. Disturbance of peregrine nests has been recorded on Berwyn in the past but in isolation is unlikely to represent a significant threat to the conservation status of the species on this site.

Persecution
Persecution in any form cannot be ignored and increased vigilance around known nest sites and prevention of disturbance throughout the breeding season is important.

Nesting sites
Availability of suitable nesting sites may be a limiting factor for this species but due to the nature of the habitat required there is no active management that could be implemented to remedy this. Emphasis must therefore be the safeguard of existing sites both current and historical.

5.10 Conservation Status and Management Requirements of Feature 10: Red kite *Milvus milvus* **(EU Code:A074)**

Conservation Status of Feature 10: Unknown

The red kite has not been the subject of any monitoring programmes on the Berwyn SPA.

Management Requirements of Feature 10

The red kite nests in mature woodland, in the steep sided wooded valleys located outside the SPA. The open moorland habitat of the Berwyn is used primarily for hunting. This hunting territory should be maintained and enhanced through appropriate grazing regimes aimed at producing a structurally diverse sward.

Persecution
Reliance upon carrion leaves the red kite vulnerable to persecution by poisoned bait and such incidents have been recorded on the Berwyn. Vigilance should be maintained and prosecutions brought where there is evidence to do so.

Education of land managers in the tolerance of this species should also be emphasised and the continued promotion of the red kite as a flagship conservation species in Wales.
The success of the species over the last 40 years should not be allowed to foster complacency in continuing the conservation effort for this species. Monitoring of this feature is required to establish its current status and to inform decisions regarding its future management needs.

6. ACTION PLAN: SUMMARY

This section takes the management requirements outlined in Section 5 a stage further, assessing the specific management actions required on each management unit. This information is a summary of that held in CCW's Actions Database for sites, and the database will be used by CCW and partner organisations to plan future work to meet the Wales Environment Strategy targets for sites.

Berwyn SAC action Table.

Site Name(s): Berwyn a Mynyddoedd De Clwyd / Berwyn and South Clwyd Mountains (SAC)

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
124	001993	Llandegla Moor 1	Some heather management is undertaken on site. Currenlty the area is grazed with sheep. Large areas of bracken encroachment is in need of management on site. Scrub should also be removed in areas of blanket bog but mangaged in some areas for black grouse.	Yes
123	001994	Llandegla Moor 2	This area is currently under a land registry dispute. Managemetn has been minimal in the past couple of years, but some heather mowing does take place on site.	Yes
125	001996	Shooting School 2	This area of blanket bog has been contaminated over the years by shot from the activities of the shooting ground.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
174	001997	Llantysilio mountain 1	Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders. Bracken follow up work is needed as well as heather management.	Yes
153	001998	Llantysilio fenced	This unit is fenced from the open moorland. Bracken management should be undertaken.	Yes
160	001999	Llantysilio improved	investigation needed to inform management	Yes
178	002000	Coed Drwg 1	This unit needs a site visit to inform management.	No
154	002001	Coed Drwg 2	Bracken management should be undertaken.	Yes
155	002002	Rhydonen Isaf 1	Heather management has been undertaken this year by the grazier on site. However as the area is not within a S15 we are unable to contribute towards the work. Bracken and gorse encroaches into the heather.Follow up bracken work needs to be undertaken after the 08 aerial application. Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders.	Yes
156	002003	Llantysilio mountain 6	Bracken and gorse are a problem in this unit. Follow up work is needed on the bracken after the aerial bracken spray. Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders.	Yes
157	002004	Rhydonen Isaf 2	Bracken and gorse are a problem in this unit. The amount of European gorse is stopping the grazier's sheep from moving up onto the heather further up. Follow up bracken work is needed following the aerial bracken spray	Yes
158	002005	Rhydonen Isaf 3	Currently this unit is not within a Section 15 management agreement but is owned by the Llantysilio Estate. Bracken, heather and scrub management works are needed. Bracken follow up work is needed folllwing from the aerial spray that was undertaken in 08. CCW need to include this area within the Section 15 agreement they hold with the Llantysilio Estate so that works can commence under the agreement terms.Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
159	002006	Llantysilio mountain 5	Currently this unit is not under a Section 15 management agreement. The land is owned by the Llantysilio Estate. The area is in need of heather management and follow up bracken control on the areas that recieved an aerial spray. Through incorporating this with the current management agreement the estate hold, we will be able to try and encourage works to take place. There is a history of gorse burning on the slopes above LLandynan and Llidiart Annie, other methods of controlling gorse should be looked into if it is possible.	Yes
161	002007	Llantysilio mountain 4	Bracken and gorse are a problem in this unit. Historically two of the graziers burn the gorse. They have a time limited consent from CCW for this. Bracken follow up work needs to be undertaken following from the aerial spray.	Yes
172	002008	Berwyn Quarry	Bracken follow up work needs to be carried out on site following from the aerial bracken spray in 2008. The area of heather should also be managed.	Yes
162	002009	Bron Haul	Bracken management needs to be undertaken here.	Yes
173	002010	Maes Gwyn	The area could do with heather management and bracken control	Yes
163	002011	Bwlch Mawr	This unit is comprised of semi natural broadleaved woodland.	No
170	002012	Llantysilio mountain 3	Heather management could be very beneficial on site.Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders.	Yes
169	002013	Nant y Cwm	Site visit is needed to inform management needs	Yes
168	002014	Faraway	Thsi unit is in an appropriate conservation management. Agreement expires March 2011	Yes
171	002015	Cyrn y Brain/Sir Watkins Tower	This unit is under appropriate conservation management. Heather management for black grouse is carried out each year.	Yes
134	002016	Wynnstay Estate	Illegal Motorbike and 4X4 trespass has occurred on the common land and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders. Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes
165	002017	Pentredwr Farm1	Bracken management is needed in this unit. Some scrub could be beneficial for black grouse in the surrounding unit.	Yes
166	002018	The Hawk Trust	This area part of CL68. The area is a mosaic of acid grassland, heath, gorse and bracken. Management should be focussed on bracken control.	Yes
167	002019	World`s End fenced	This area has not been grazed by the owners as it was not stock proof. We are currently in the process of agreeing to help conrtribute to the fence repairs and to get bracken and heather management on site.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
133	002020	Tan y Graig	This unit is mainly comprised of dry heath with areas of bracken. Heather management has been carried out in the past. The area does not fall within the management agreement with the Wynnestay Estate. Land is part of CL70B	Yes
132	002021	Tan y Graig Isa	This unit is mainly comprised of acid grassland/dry heath mosaic with a large area of bracken. The areas requires a site visit to establish what grazing regime is.	Yes
130	002022	Hafod Farm 2	This unit requires a site visit to inform management.	No
129	002023	Hafod Farm 3	This unit requires a site visit to inform management.	No
127.1	002024	Hafod Farm 4	Thsi unit is within a Tir Gofal management agreement. Scrub removal has occured in the past, but grassland areas as still encroached upon. Somne further scrub removal could be carried out to open up the grassland and save it from being shaded.	Yes
144	002025	Cae Llwyd	Needs site investigation	Yes
139	002026	Cefn y Fedw 4	This unit is within a Tir Gofal Management agreement. The 5 year review is to occur in September 2009. The area could do with some heather management and scrub removal as well as some bracken control.	Yes
138	002027	Cefn y Fedw 1	This unit is within a Tir Gofal Management agreement. The 5 year review is to occur in September 2009. The area could do with some heather management and scrub removal as well as some bracken control.	Yes
141	002028	Tan y Castell 3	The area is in need of scrub removal as well as bracken control. A site visit should be carried out to ascertain the impact upon the site features.	Yes
140	002029	Tan y Castell 2	The area is in need of scrub removal as well as bracken control. A site visit should be carried out to ascertain the impact upon the site features.	Yes
137	002030	Tan y Castell 1	The area is in need of scrub removal as well as bracken control. A site visit should be carried out to ascertain the impact upon the site features. Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes
136	002031	Dinbren Isaf	Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes
135	002032	Dinbren Uchaf	This area is within a Tir Gofal management agreement.The 5 year review date will be December 2009. Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes
179	002033	Bryn Cottage	Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes
180	002034	Plas yn Eglwyseg	Dumping or storage of material along the road should be avoided as this can obscure the rock exposures and mass movement features (screes).	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
143	002035	World`s End	Parts of this unit was clear felled. Currently regeneration of mainly birch with gorse is taking over the site and is impeding the efforts to try and restore the area back to heather. The area may enter into a BWW scheme where further felling has been suggested. Grazing the site may help in trying to keep the regen down following treatment.	Yes
164	002049	Pentredwr Farm 2	Bracken management is needed in this unit. Some scrub could be beneficial for black grouse in the surrounding unit.	Yes
147	002050	Moel y Faen Quarry (SAC)	Thsi unit comprises of areas of dry heath within the Moel y Faen Quarry ownership area. Illegal Motorbike and 4X4 trespass has occurred on this unitin the past and causes extensive habitat damage. Organised operations to target illegal off-roading on certain hotspots are currently carried out. The continued investment of resources is required to obtain successful prosecutions of offenders.	Yes
146	002051	Oernant	Site investigation is needed to inform management	Yes
145	002052	Llandegla Forest	This area has been sub divided from the rest of the open moor as it is not classed as common land and not part of CL62. Heather management should continue.	Yes
74.1	002057	c 74.1 Liberty Hall	Requires grazing. Heather management undertaken on 15 year rotation. Bracken control required. Scrub encroachment onto heathland. Off-road vehicles gaining illegal access to hill. Sporting interest.	Yes
85	002058	c 85 FC - Liberty Hall	No control over grazing, heather management required, continue bracken control. Prevent off road vehicle access.	Yes
12	002059	c 12 Rhagatt Mountain	Uncontrolled fire. Bracken. Erosion. Predator control Heather management. Game management.	Yes
74.5	002060	c 74.5 Carrog Uchaf	Wetland plateau in north of unit reqquires grazing preferably with cattle to open up sward for waders etc. Unit grazed sheep at present but stocking levels unknown. Uncontrolled fires in past have resulted in cessation in heather management which should be re-instated. Area subject to game shooting but details unknown. Motorbike trespass causing erosion, habitat damage and disturbance aswell as criminal damage to fenceline..	Yes
88	002061	c 88 Waen Elwyd CL 121	No record of features condition. Requires site visit. One active grazier but grazing levels unknown. Would benefit from cattle grazing.	Yes
36	002065	c 36 Cwm Arddau	Motorcycle and 4x4 trespass. Loss of dry heath and erosion. Removal of conifers encroaching on to heathland more than 200m from forest edge.	Yes
68	002067	c 68 Nantyr Estate CL129	Deliberate wildfire. Fences not stockproof. 3 active graziers but current grazing levels unknown. Bracken encroachment. Scrub encroachment. Motorcycle damage. Erosion. Loss of dry heath.	Yes
71.4	002102	c 71.4 Vivod Estate Common land (CL130)	Heather managment required. 3 active graziers but grazing levels unknown. Extensive bracken encroachment onto heathland. Tick. Illegal off-roading by motorbikes causing habitat loss and erosion to heathland.	Yes
71.1	002105	c 71.1 Vivod Home Farm Moor	Grazing levels. Rotational heather management required. Sporting interest - maintain predator control. Extensive scrub encroachment including trees, gorse and rhododendron.	Yes
71.2	002107	c 71.2 Rhos Pengwern	Grazing levels. Heather management. Sporting interest. Extensive bracken encroachment. Sporting interest.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
71.3	002109	c 71.3 Ffynnon Las	Grazing levels. Heather management. Sporting Interest. Extensive bracken. Scrub encroachment of trees and gorse.	Yes
60	002113	c 60 Dolydd Moor	Extensive uncontrolled fire on blanket bog & dry heath. Grazing restrictions apply pending recovery. Motorcycle and 4x4 damage. Erosion. Heather management. Black grouse key area. Boundary fences not stockproof. Predator control.	Yes
74.3	002116	c 74.3 Gwerclas	Heather management. Sporting interest. Motorcycle and 4x4 damage. Erosion. Bracken control. Predator control. Black grouse area.	Yes
45	002118	c 45 Geufron	No record of features condition. Requires site visit.	Yes
74.6	002120	c 74.7 Moel yr Henfaes	Grazing required on mountain. Re-instatement of rotational heather management. Boundary fences not stockproof.	Yes
6	002121	c 6 Cynwyd Fechan	Grazing - fences not stockproof. Extensive bracken cover. Wet heath area. Predator control	Yes
74.2	002122	c 74.2 Coed Talwrn	No record of features condition. Requires site visit.	Yes
54.1	002123	c 54.1 Mynydd Pantiau	No record of features condition. Requires site visit.	Yes
54.2	002124	c 54.2 Rhydyglafaes	No record of features condition. Requires site visit.	Yes
72.1	002125	c 72.1 Swch Moor	Historic burning of blanket bog. Heather management. Sporting interest.	Yes
72.6	002126	c 72.6 Tanygraig	Historic burning of blanket bog. Heather management. Sporting interest.	Yes
72.2	002127	c 72.2 Tyddyn Bychan	No record of features condition. Requires site visit.	Yes
72.4	002128	c 72.4 Hafod Adams	No record of features condition. Requires site visit.	Yes
72.5	002129	c 72.5 Fodwen	Grazing, heather managed and Motorcycles/4x4 vehicles are a problem.	Yes
72.7	002131	c 72.7 Pen y Bryn	No record of features condition. Requires site visit.	Yes
72.3	002132	c 72.3 Dolwen	No record of features condition. Requires site visit.	Yes
86	002133	c 86 Ty Hwnt i`r Afon	No record of features condition. Requires site visit.	Yes
24	002134	c 24 Pentre	No record of features condition. Requires site visit.	Yes
33	002135	c 33 Mynydd Pentre Bach	Habitat fragmentation resulting from historic grazing levels.	Yes
69	002136	c 69 Blaencwmlla wenog	Blanket bog unfavourable across much of site (especially north section) due to inappropriate management (burning) in recent past. Potential for restoration of acid grassland to heath. Motorcycle and 4x4 damage is a problem along the ridge. Fences not all stockproof.	Yes
21	002137	c 21 Blaen Llynor	Grazing management. Boundary fence not stockproof. Motorcycle and 4x4 damage to the blanket bog along the ridge causing extensive peat damage and erosion.	Yes
29	002138	c 29 Cadair Bronwen	Blanket bog on ridge subject to extensive motorcycle damage by vehicles travelling along the ridge from the Wayfarer where they have legal rights of access. No record of features condition. Requires site visit.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
62.1	002139	c 62.1 Ty`n Twll (South)	Requires site visit.	Yes
48	002140	c 48 Cwm y Geifr	Heather management.	Yes
4	002142	c 4 Ty`n y Fridd	Blanket bog and heath habitat subject to damage from motorcycles accessing the hillside illegally via the public footpath which traverses the unit.	Yes
61.1	002144	c 61.1 Maes, Maengwyned	No record of features condition. Requires site visit.	Yes
51	002145	c 51 Buarth yr e	Damage to peat on the ridge top from motorcycles.	Yes
31	002146	c 31 Buarth yr e (NNR)	No record of features condition. Requires site visit.	Yes
32.1	002147	c 32.1 Hen Fache	No records of feature condition for this unit. Requires site visit.	Yes
22.2	002148	c 22.2 Ty`n y Cae	No records of feature condition for this unit. Requires site visit.	Yes
75.15	002149	c 75.16 Hen Dwr	No record of features condition. Requires site visit.	Yes
75.13	002150	c 75.13 Ty Uchaf	No record of features condition. Requires site visit.	Yes
75.12	002151	c 75.12 Ty Nant Faerdref	No record of features condition. Requires site visit.	Yes
75.9	002152	c 75.9 Syrior	No record of features condition. Requires site visit.	Yes
75.11	002153	c 75.11 Moel is y Goedwig	No record of features condition. Requires site visit.	Yes
75.10	002154	c 75.10 Ty`n Coed	No record of site visit. No data on feature condition. Requires site visit.	Yes
75.18	002155	c 75.18 Syrior	No data on feature condition. Requires site visit.	Yes
75.8	002156	c 75.8 Garthian	Grazing management and Scramble motorbikes using the bridleway & circuit on the mountain.	Yes
75.7	002157	c 75.7 Tyfos	Grazing management and illegal motorbike trespass on the mountain ridge.	Yes
75.5	002158	c. 75.5 Cadwst Mawr	Gorse burning.	Yes
75.6	002159	c 75.6 Branas Uchaf	No action required until summer 2010.	Yes
75.4	002160	c 75.4 Plas Dinam	Grazing management and ditches.	Yes
75.3	002161	c 75.3 Rhyd Gethin	Grazing, drains & Bracken management. Vehicle trespass on the ridge.	Yes
75.2	002162	c 75.2 Blaen Pennant	Grazing management. Illegal motorbike trespass on ridge.	Yes
74.7	002163	c 75.15 Blaen y Cwm	Grazing management. Illegal motorbike trespass on ridge.	Yes
63.1	002164	c 63.1 Ty`n y Pant	Grazing management.	Yes
63.3	002165	c 63.3 Ty Mawr	Grazing management.	Yes
63.2	002166	c 63.2 Cae Siencyn	Grazing management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
101	002167	c 101 Yr Eithin	Insufficient grazing has resulted in a tall, sward with dense thatch developing. Requires introduciton of heavy stock to open up sward and graze out coarse grasses improving structure and di versity. Evidence of historic peat cutting - erosion. Bog pool sequence but limited sphagnum cover. Bracken dominates lower slopes.	Yes
9.1	002168	c 9.1 Llangynog Estate	Requires site visit.	Yes
63.5	002169	c 63.5 Cae Siencyn	Grazing management	Yes
63.4	002170	c 63.4 Ty Mawr	Grazing management	Yes
67.2	002171	c 67.2 Glanhafon Fawr	Requires site visit.	Yes
67.4	002172	c 67.4 Glanhafon Fawr	Requires site visit.	Yes
41.1	002173	c 41.1 Maes y Bwch	Grazing management and Bracken on slower slopes.	Yes
44	002174	c 44 Gwern Feifod	Requires site visit.	Yes
14.1	002175	c 14.1 Ty`n y Wern	Grazing management and Bracken control. Requires site visit.	Yes
56	002181	c 56 Bryniau Gleision	Grazing, Heather management and Significant sitka spruce (conifer) invasion. .	Yes
27	002182	c 27 Rhanneg	Grazing, Heather management and motorvehicle trespass.	Yes
73.2	002183	c 73.2 Ty Cerrig	Grazing management.	Yes
73.1	002184	c 73.1 Plas Isaf	Grazing management.	Yes
13	002185	c 13 Hafod Uchel	Requires a site visit.	Yes
34	002187	c 34 Ty Cerrig	Grazing and Heather management.	Yes
73.3	002188	c 73.3 Blaen y Cwm	Grazing management.	Yes
65.1	002189	c 65.1 Blaen Rhiwarth	Grazing management	Yes
2	002190	c 2 Tyn y pant/Ty Mawr	Grazing management.	Yes
39	002191	c 39 Cefn y Meirch	Grazing & scrub management. Requires site visit to collect feature condition data.	Yes
47	002192	c 47 Dolwen Uchaf	Grazing, heather and scrub management.	No
64.1	002194	c 64.1 Blaen y Cwm	Grazing and scrub management, and possible drains in Blanket bog.	Yes
38	002195	c 38 Hafod Hir	Grazing management.	Yes
105.1	002196	c 105.1 Llechwedd y Garth	Requires site visit to inform management.	Yes
105.2	002197	c 105.2 Vicarage Farm	Requires site visit to inform management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
112	002198	c 112 Maes, Maengwyned d	Requires site visit to inform management.	Yes
111	002199	c 111 Derw Hynafol	Requires site visit to inform management.	Yes
46.1	002200	c 46.1 Pwlliago	Grazing and gorse management.	Yes
76.1	002201	c 76.1 RSPB Vyrnwy	Grazing and heather management, ditches/drains, Rhodendendron and scrub (Conifers) invasion.	Yes
76.4	002202	c 76.4 Pen Bryn y Fawnog	Requires site visit to establish condition of features and inform management.	Yes
35	002203	c 35 Maesafallen	Grazing and Heather management.	Yes
96	002204	c 96 Rhydwen	Requires site visit to establish extent and condition of features present and inform management.	Yes
100	002205	c 100 Craig y Castell	Requires visit to inform management.	Yes
107	002206	c 107 Penllyn Forest	Requires site visit to inform management.	Yes
116	002207	c 116 Afonfechan	Grazing management.	Yes
57	002208	c 57 Ty Nant	Requires site visit to inform management.	Yes
55.1	002209	c 55.1 Tan y Bwlch	Grazing management. Conifer block. Drains in the Blanket Bog.	Yes
15	002211	c 15 Aberhiwlech	Requires site visit to inform management.	Yes
20	002212	c 20 Caethle	Grazing management: Stock numbers and shepherding.	Yes
37	002213	c 37 Cerddin	Grazing management and Rhododendron spreading in compartment.	Yes
95.1	002214	c 95.1 Troed y Foel	Rhododendron invading from ffridd. Requires site visit to establish extent and condition of features within unit and inform management.	Yes
76.9	002215	c 76.9 Maesycarned dau	Grazing management.	Yes
76.3	002216	c 76.3 Creignant	Grazing management.	Yes
76.5	002217	c 76.5 Blaen Cownwy	Grazing and Black grouse management.	Yes
76.2	002218	c 76.2 Bryn Adda	Grazing management.	Yes
70	002219	c 70 Ceirniau	Grazing management. Drains in blanket bog and transition mire, Scrub (conifer) & rhododendron invasion.	Yes
43	002220	c 43 Penygelli (NNR)	Grazing management & drains in Blanket bog.	Yes
84.1	002221	c 84.1 Wern Gau	Requires site visit to establish condition of features present and inform management.	Yes
50	002222	c 50 Erwgaregog	Grazing management.	Yes
82	002223	c 82 Drum Ddu (NNR)	Drains in bog.	Yes
53	002224	c 53 Y Wern	Grazing management, drains in Blanket bog, scrub (Conifer) and rhododendron invasion.	Yes
19	002225	c 19 Pennant Twrch	Requires site visit.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
8	002226	c 8 Pen y Coed	Grazing management.	Yes
5	002227	c 5 Carreg y Fran	Requires site visit to inform management decisions.	Yes
59	002229	c 59 Cefn Brith	Grazing management. Site visit required.	Yes
78	002230	c 78 Mynydd Esgairedda	Requires site visit to establish feature condition and inform management.	Yes
79	002231	c 79 Nant y Dugoed (NNR)	Grazing management and drains in Bog.	Yes
80	002232	c 80 Hen Bwll	Requires site visit to establish condition f features and inform management.	Yes
89	002233	c 89 Braichlwyd	Grazing management. Requires site visit to establish condition of features present and inform management.	Yes
90	002234	c 90 Maes Llymestyn	Requires site visit to establish extent and condition of features present and to inform management.	Yes
91	002235	c 91 Ty Newydd	Grazing and Bracken management. Requires site visit to establish extent and condition of features in unit and to inform management.	Yes
49	002236	c 49 Dolymaen	Grazing, scrub (conifers) and Rhododendron management. Drains in the Bog.	Yes
122	002237	c 122 Dugoed Bach	Requires site visit to inform management.	Yes
28	002238	c 28 Mynydd Nant y Dugoed	Grazing management, drains in Blanket bog.	Yes
98	002240	c.98 Afon Ro	Requires site visit to inform management.	Yes
67.3	002296	c 67.3 Glantanant isaf	Grazing and bracken management.	Yes
22.1	002297	c.22.1 Ty`n Ffridd	Blanket bog and heathland subject to damage by motorcycles which illegally access the hillside on the public footpath which traverses the unit.	Yes
11	002298	c 11 Pentre Pant	Heathland becoming dominated by bracken. Scrub encroachment along moorland edge.	Yes
18	002302	c 18 Cwm Canol	Heathland subject to motorcycle damage and extensive fires in the past.	Yes
42	002305	c 42 Carrog Isaf	Bracken dominates much of the mountain which is being addressed by a regime of annual chemical treatment with Asulox as weather allows. Motor vehicles trespass on to the mountian both from the quarry below the moutnain aswell as along the track running along the ridge to Moel Fferna. Erosion and damage to dry heath are becoming increasingly extensive. During the breeding season there are also impacts for SPA features.	Yes
26.1	002927	c 26.1 Ty`n y Celyn	Grazing and bracken management.	Yes
66.1	002929	c 66.1 Gelligrin		No
76.17	002939	c 76.17 Y Gadfa	Grazing and scrub management.	Yes
74.8	002944	c 74.8 Moel yr Henfaes	Requires a site visit	Yes
30	002946	c 30 Rhiw-Felen	No record of features condition. Requires site visit.	Yes

Berwyn SPA Action Table.

Site Name(s): Berwyn (SPA)

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
74.1	002057	c 74.1 Liberty Hall	Requires grazing. Heather management undertaken on 15 year rotation. Bracken control required. Scrub encroachment onto heathland. Off-road vehicles gaining illegal access to hill. Sporting interest.	Yes
85	002058	c 85 FC - Liberty Hall	No control over grazing, heather management required, continue bracken control. Prevent off road vehicle access.	Yes
12	002059	c 12 Rhagatt Mountain	Uncontrolled fire. Bracken. Erosion. Predator control Heather management. Game management.	Yes
74.5	002060	c 74.5 Carrog Uchaf	Grazing. Heather management. Game management. Motorbike and 4x4 damage to habitats and field boundaries. Erosion.	Yes
88	002061	c 88 Waen Elwyd CL 121	No record of features condition. Requires site visit. One active grazier but grazing levels unknown. Would benefit from cattle grazing.	Yes
36	002065	c 36 Cwm Arddau	Motorcycle and 4x4 trespass. Loss of dry heath and erosion. Removal of conifers encroaching on to heathland more than 200m from forest edge.	Yes
68	002067	c 68 Nantyr Estate CL129	Deliberate wildfire. Fences not stockproof. 3 active graziers but current grazing levels unknown. Bracken encroachment. Scrub encroachment. Motorcycle damage. Erosion. Loss of dry heath.	Yes
71.4	002102	c 71.4 Vivod Estate Common land (CL130)	Heather managment required. 3 active graziers but grazing levels unknown. Extensive bracken encroachment onto heathland. Tick. Illegal off-roading by motorbikes causing habitat loss and erosion to heathland.	Yes
71.1	002105	c 71.1 Vivod Home Farm Moor	Grazing levels. Rotational heather management required. Sporting interest - maintain predator control. Extensive scrub encroachment including trees, gorse and rhododendron.	Yes
71.2	002107	c 71.2 Rhos Pengwern	Grazing levels. Heather management. Sporting interest. Extensive bracken encroachment. Sporting interest.	Yes
71.3	002109	c 71.3 Ffynnon Las	Grazing levels. Heather management. Sporting Interest. Extensive bracken. Scrub encroachment of trees and gorse.	Yes
60	002113	c 60 Dolydd Moor	Extensive uncontrolled fire on blanket bog & dry heath. Grazing restrictions apply pending recovery. Motorcycle and 4x4 damage. Erosion. Heather management. Black grouse key area. Boundary fences not stockproof. Predator control.	Yes
74.3	002116	c 74.3 Gwerclas	Heather management. Sporting interest. Motorcycle and 4x4 damage. Erosion. Bracken control. Predator control. Black grouse area.	Yes
45	002118	c 45 Geufron	No record of features condition. Requires site visit.	Yes
74.6	002120	c 74.7 Moel yr Henfaes	Grazing required on mountain. Re-instatement of rotational heather management. Boundary fences not stockproof.	Yes
6	002121	c 6 Cynwyd Fechan	Grazing - fences not stockproof. Extensive bracken cover. Wet heath area. Predator control	Yes
74.2	002122	c 74.2 Coed Talwrn	No record of features condition. Requires site visit.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
54.1	002123	c 54.1 Mynydd Pantiau	No record of features condition. Requires site visit.	Yes
54.2	002124	c 54.2 Rhydyglafaes	No record of features condition. Requires site visit.	Yes
72.1	002125	c 72.1 Swch Moor	Historic burning of blanket bog. Heather management. Sporting interest.	Yes
72.6	002126	c 72.6 Tanygraig	Historic burning of blanket bog. Heather management. Sporting interest.	Yes
72.2	002127	c 72.2 Tyddyn Bychan	No record of features condition. Requires site visit.	Yes
72.4	002128	c 72.4 Hafod Adams	No record of features condition. Requires site visit.	Yes
72.5	002129	c 72.5 Fodwen	Grazing, heather managed and Motorcycles/4x4 vehicles are a problem.	Yes
72.7	002131	c 72.7 Pen y Bryn	No record of features condition. Requires site visit.	Yes
72.3	002132	c 72.3 Dolwen	No record of features condition. Requires site visit.	Yes
86	002133	c 86 Ty Hwnt i`r Afon	No record of features condition. Requires site visit.	Yes
24	002134	c 24 Pentre	No record of features condition. Requires site visit.	Yes
33	002135	c 33 Mynydd Pentre Bach	Habitat fragmentation resulting from historic grazing levels.	Yes
69	002136	c 69 Blaencwmlla wenog	Blanket bog unfavourable across much of site (especially north section) due to inappropriate management (burning) in recent past. Potential for restoration of acid grassland to heath. Motorcycle and 4x4 damage is a problem along the ridge. Fences not all stockproof.	Yes
21	002137	c 21 Blaen Llynor	Grazing management. Boundary fence not stockproof. Motorcycle and 4x4 damage to the blanket bog along the ridge causing extensive peat damage and erosion.	Yes
29	002138	c 29 Cadair Bronwen	Blanket bog on ridge subject to extensive motorcycle damage by vehicles travelling along the ridge from the Wayfarer where they have legal rights of access. No record of features condition. Requires site visit.	Yes
62.1	002139	c 62.1 Ty`n Twll (South)	Requires site visit.	Yes
48	002140	c 48 Cwm y Geifr	Heather management.	Yes
4	002142	c 4 Ty`n y Fridd	Blanket bog and heath habitat subject to damage from motorcycles accessing the hillside illegally via the public footpath which traverses the unit.	Yes
61.1	002144	c 61.1 Maes, Maengwyned d	No record of features condition. Requires site visit.	Yes
51	002145	c 51 Buarth yr e	Damage to peat on the ridge top from motorcycles.	Yes
31	002146	c 31 Buarth yr e (NNR)	No record of features condition. Requires site visit.	Yes
32.1	002147	c 32.1 Hen Fache	No records of feature condition for this unit. Requires site visit.	Yes
22.2	002148	c 22.2 Ty`n y Cae	No records of feature condition for this unit. Requires site visit.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
75.16	002149	c 75.16 Hen Dwr	No record of features condition. Requires site visit.	Yes
75.13	002150	c 75.13 Ty Uchaf	No record of features condition. Requires site visit.	Yes
75.12	002151	c 75.12 Ty Nant Faerdref	No record of features condition. Requires site visit.	Yes
75.9	002152	c 75.9 Syrior	No record of features condition. Requires site visit.	Yes
75.11	002153	c 75.11 Moel is y Goedwig	No record of features condition. Requires site visit.	Yes
75.10	002154	c 75.10 Ty`n Coed	No record of site visit. No data on feature condition. Requires site visit.	Yes
75.18	002155	c 75.18 Syrior	No data on feature condition. Requires site visit.	Yes
75.8	002156	c 75.8 Garthian	Grazing management and Scramble motorbikes using the bridleway & circuit on the mountain.	Yes
75.7	002157	c 75.7 Tyfos	Grazing management and illegal motorbike trespass on the mountain ridge.	Yes
75.5	002158	c. 75.5 Cadwst Mawr	Gorse burning.	Yes
75.6	002159	c 75.6 Branas Uchaf	No action required until summer 2010.	Yes
75.4	002160	c 75.4 Plas Dinam	Grazing management and ditches.	Yes
75.3	002161	c 75.3 Rhyd Gethin	Grazing, drains & Bracken management. Vehicle trespass on the ridge.	Yes
75.2	002162	c 75.2 Blaen Pennant	Grazing management. Illegal motorbike trespass on ridge.	Yes
75.15	002163	c 75.15 Blaen y Cwm	Grazing management. Illegal motorbike trespass on ridge.	Yes
63.1	002164	c 63.1 Ty`n y Pant	Grazing management.	Yes
63.3	002165	c 63.3 Ty Mawr	Grazing management.	Yes
63.2	002166	c 63.2 Cae Siencyn	Grazing management.	Yes
101	002167	c 101 Yr Eithin	Insufficient grazing has resulted in a tall, sward with dense thatch developing. Requires introduciton of heavy stock to open up sward and graze out coarse grasses improving structure and di versity. Evidence of historic peat cutting - erosion. Bog pool sequence but limited sphagnum cover. Bracken dominates lower slopes.	Yes
9.1	002168	c 9.1 Llangynog Estate	Requires site visit.	Yes
63.5	002169	c 63.5 Cae Siencyn	Grazing management	Yes
63.4	002170	c 63.4 Ty Mawr	Grazing management	Yes
67.2	002171	c 67.2 Glanhafon Fawr	Requires site visit.	Yes
67.4	002172	c 67.4 Glanhafon Fawr	Requires site visit.	Yes
41.1	002173	c 41.1 Maes y Bwch	Grazing management and Bracken on slower slopes.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
44	002174	c 44 Gwern Feifod	Requires site visit.	Yes
14.1	002175	c 14.1 Ty`n y Wern	Grazing management and Bracken control. Requires site visit.	Yes
56	002181	c 56 Bryniau Gleision	Grazing, Heather management and Significant sitka spruce (conifer) invasion. .	Yes
27	002182	c 27 Rhanneg	Grazing, Heather management and motorvehicle trespass.	Yes
73.2	002183	c 73.2 Ty Cerrig	Grazing management.	Yes
73.1	002184	c 73.1 Plas Isaf	Grazing management.	Yes
13	002185	c 13 Hafod Uchel	Requires a site visit.	Yes
34	002187	c 34 Ty Cerrig	Grazing and Heather management.	Yes
73.3	002188	c 73.3 Blaen y Cwm	Grazing management.	Yes
65.1	002189	c 65.1 Blaen Rhiwarth	Grazing management	Yes
2	002190	c 2 Tyn y pant/Ty Mawr	Grazing management.	Yes
39	002191	c 39 Cefn y Meirch	Grazing & scrub management. Requires site visit to collect feature condition data.	Yes
47	002192	c 47 Dolwen Uchaf	Grazing, heather and scrub management.	No
64.1	002194	c 64.1 Blaen y Cwm	Grazing and scrub management, and possible drains in Blanket bog.	Yes
38	002195	c 38 Hafod Hir	Grazing management.	Yes
105	002196	c 105.1 Llechwedd y Garth	Requires site visit to inform management.	Yes
105.2	002197	c 105.2 Vicarage Farm	Requires site visit to inform management.	Yes
112	002198	c 112 Maes, Maengwyned d	Requires site visit to inform management.	Yes
111	002199	c 111 Derw Hynafol	Requires site visit to inform management.	Yes
46.1	002200	c 46.1 Pwlliago	Grazing and gorse management.	Yes
76.1	002201	c 76.1 RSPB Vyrnwy	Grazing and heather management, ditches/drains, Rhodendendron and scrub (Conifers) invasion.	Yes
76.4	002202	c 76.4 Pen Bryn y Fawnog	Requires site visit to establish condition of features and inform management.	Yes
35	002203	c 35 Maesafallen	Grazing and Heather management.	Yes
96	002204	c 96 Rhydwen	Requires site visit to establish extent and condition of features present and inform management.	Yes
100	002205	c 100 Craig y Castell	Requires visit to inform management.	Yes
107	002206	c 107 Penllyn Forest	Requires site visit to inform management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
116	002207	c 116 Afonfechan	Grazing management.	Yes
57	002208	c 57 Ty Nant	Requires site visit to inform management.	Yes
55.1	002209	c 55.1 Tan y Bwlch	Grazing management. Conifer block. Drains in the Blanket Bog.	Yes
15	002211	c 15 Aberhiwlech	Requires site visit to inform management.	Yes
20	002212	c 20 Caethle	Grazing management: Stock numbers and shepherding.	Yes
37	002213	c 37 Cerddin	Grazing management and Rhododendron spreading in compartment.	Yes
95.1	002214	c 95.1 Troed y Foel	Rhododendron invading from ffridd. Requires site visit to establish extent and condition of features within unit and inform management.	Yes
76.9	002215	c 76.9 Maesycarneddau	Grazing management.	Yes
76.3	002216	c 76.3 Creignant	Grazing management.	Yes
76.5	002217	c 76.5 Blaen Cownwy	Grazing and Black grouse management.	Yes
76.2	002218	c 76.2 Bryn Adda	Grazing management.	Yes
70	002219	c 70 Ceirniau	Grazing management. Drains in blanket bog and transition mire, Scrub (conifer) & rhododendron invasion.	Yes
43	002220	c 43 Penygelli (NNR)	Grazing management & drains in Blanket bog.	Yes
84.1	002221	c 84.1 Wern Gau	Requires site visit to establish condition of features present and inform management.	Yes
50	002222	c 50 Erwgaregog	Grazing management.	Yes
82	002223	c 82 Drum Ddu (NNR)	Drains in bog.	Yes
53	002224	c 53 Y Wern	Grazing management, drains in Blanket bog, scrub (Conifer) and rhododendron invasion.	Yes
19	002225	c 19 Pennant Twrch	Requires site visit.	Yes
8	002226	c 8 Pen y Coed	Grazing management.	Yes
5	002227	c 5 Carreg y Fran	Requires site visit to inform management decisions.	Yes
59	002229	c 59 Cefn Brith	Grazing management. Site visit required.	Yes
78	002230	c 78 Mynydd Esgairedda	Requires site visit to establish feature condition and inform management.	Yes
79	002231	c 79 Nant y Dugoed (NNR)	Grazing management and drains in Bog.	Yes
80	002232	c 80 Hen Bwll	Requires site visit to establish condition f features and inform management.	Yes
89	002233	c 89 Braichlwyd	Grazing management. Requires site visit to establish condition of features present and inform management.	Yes
90	002234	c 90 Maes Llymestyn	Requires site visit to establish extent and condition of features present and to inform management.	Yes
91	002235	c 91 Ty Newydd	Grazing and Bracken management. Requires site visit to establish extent and condition of features in unit and to inform management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
49	002236	c 49 Dolymaen	Grazing, scrub (conifers) and Rhododendron management. Drains in the Bog.	Yes
122	002237	c 122 Dugoed Bach	Requires site visit to inform management.	Yes
28	002238	c 28 Mynydd Nant y Dugoed	Grazing management, drains in Blanket bog.	Yes
121	002239	c 121 Ty`n y Graig	Requires site visit to inform management.	Yes
98	002240	c.98 Afon Ro	Requires site visit to inform management.	Yes
10.2	002242	c 10.2 Tanygraig (SPA)	Grazing management	Yes
23.2	002244	c 23.2 Castell Pren (SPA)	Requires site visit to inform management	Yes
10.3	002245	c 10.3 Craig Mwn (SPA)	Grazing management	Yes
64.2	002246	c.64.2 Blaen y Cwm (SPA)	Requires site visit to inform management.	Yes
76.14	002247	c 76.14 Braich yr Owen (SPA)	Grazing and scrub management. Requires site visit to inform management.	Yes
76.13	002248	c.76.13 Nant Llwyn Ynn (SPA)	Requires site visit to inform management.	Yes
62.3	002249	c.62.3 Ty`n Twll (SPA)	Requires site visit to inform management.	Yes
113	002250	c 113 Tan y Pistyll (SPA)	Requires site visit to inform management.	Yes
10.4	002254	c 10.4 Nant y Gaseg		No
46.2	002255	c.46.2 Pwlliago	Grazing and gorse management.	Yes
106	002256	c 106 Nant y Wern (SPA)	Grazing and Bracken management.	Yes
7	002257	c 7 Cyrchynan Uchaf	Grazing management.	Yes
66.2	002258	c 66.2 Gelligrin	Grazing management.	No
55.2	002259	c 55.2 Tan y Bwlch	Grazing management and drains in blanket bog.	Yes
95.2	002260	c 95.2 Troed y Foel	Grazing management.	Yes
84.2	002261	c 84.2 Wern Gau (SPA)	Requires a site visit.	Yes
76.51	002262	c 76.51 Blaencownwy (SPA)	Grazing, scrub and bracken management.	Yes
76.12	002263	c 76.12 Eunant waterfall fields (SPA)	Grazing and scrub management.	Yes
65.2	002264	c 65.2 Blaen Rhiwarth (SPA)	Grazing management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
54.3	002266	c 54.3 Mynydd Pantiau (SPA)	Requires site visit in order to inform future management decisions	Yes
32.2	002267	c 32.2 Hen Fache (SPA)	Grazing, scrub and Gorse management.	Yes
41.2	002268	c 41.2 Maes y Bwch (SPA)	Grazing management.	Yes
14.2	002269	c 14.2 Ty`n y Wern (SPA)	Grazing And Baracken management.	Yes
63.8	002272	c 63.8 Cae Siencyn (SPA)	Grazing management.	Yes
97	002273	c 97 Ffridd Camen (SPA)	Grazing management.	Yes
94	002274	c 94 Penygelli (SPA)	Grazing pressure unevenly distributed throughout sward probably/possibly as a result of density of bracken on mountian . Upper mountain sward tall, dense - requires grazing. SNPA to finance aerial bracken control as part of RTE in summer 2008.Follow up management by owners required to manage the problem. Gorse encroaching onto trackway restricting access. Good ffridd habitat, evidence of heather regeneration but trees/scrub developing dense cover - some selective thinning required to prevent succession to wooodland and maintain open ffridd habitat. Suggest thinning of trees as capital works under new agreement.	Yes
9.2	002276	c 9.2 Craig Rhiwarth/Llangynog Est (SPA)	Grazing management.	Yes
103	002277	c 103 Bryndreniog Mountain (SPA)	Grazing and Bracken management. Illegal motorcycle trespass along bridleway.	Yes
120	002278	c 120 Nant Farm (SPA)	Insufficient grazing resulting in tall sward dominated by coarse grass species, little species diversity, dense thatch and tussocks. Bog pools support limited sphagnum and some young heather - potential for restoration given appropriate grazing regime?	Yes
23.1	002279	c 23.1 Castell Pren	Requires investigation to establish condition of features and action appropriate management.	Yes
67.5	002280	c 67.5 Glantanat Isaf (SPA)	Grazing management.	Yes
10.1	002281	c 10.1 Tanygraig (SPA)	Grazing management. Illegal motorcycle trespass along bridleway.	Yes
67.1	002282	c 67.1 Glantanat Isaf (SPA)	Grazing and bracken management.	Yes
119	002283	c 119 Tre`r Brys	Grazing and bracken management.	Yes
92	002284	c 92 Frongoch (SPA)	Requires site visit to establish extent and condition of features present in unit and to inform management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
93	002285	c 93 Boncyn (SPA)	Requires site visit to inform management.	Yes
76.6	002286	c 76.6 Penisarcwm (SPA)	Grazing mangement and illegal off road vehicle trespass.	Yes
76.8	002287	c 76.8 Tynygarreg	Grazing management.	Yes
76.11	002288	c.76.11 Lake Vyrnwy Hotel (SPA)	Grazing, scrub and recreation management.	Yes
76.7	002289	c 76.7 Nantycoedwr (SPA)	Grazing management and Drains.	Yes
16	002290	c.16 Sarphle	Grazing and Bracken management.	Yes
109	002291	c 109 Ty Mawr (SPA)	Requires site visit to inform management.	Yes
102	002292	c 102 Ty Newydd	Requires site visit to inform management.	Yes
1	002293	c1 Ty`n y Cae (SPA)	Heathland vegetation subject to extensive damage by motorcycles. Requires investigation and enforcement if appropriate.	Yes
26.2	002294	c 26.2 Ty`n y Celyn (SPA)	Grazing and Bracken management.	Yes
61.2	002295	c 61.2 Ty Isaf (SPA)	Grazing management.	Yes
67.3	002296	c 67.3 Glantanant isaf	Grazing and bracken management.	Yes
22.1	002297	c.22.1 Ty`n Ffridd	Blanket bog and heathland subject to damage by motorcycles which illegally access the hillside on the public footpath which traverses the unit.	Yes
11	002298	c 11 Pentre Pant	Heathland becoming dominated by bracken. Scrub encroachment along moorland edge.	Yes
87	002299	c.87 Plas Nantyr (SPA)		No
75.14	002300	c.75.14 Ty`n y Parc	Requires site visit to inofrm management.	Yes
25	002301	c 25 Fridd Ty Draw (SPA)	Requires site visit to inofrm management.	Yes
18	002302	c 18 Cwm Canol	Heathland subject to motorcycle damage and extensive fires in the past.	Yes
71.5	002303	c 71.5 Vivod Estate (SPA)	Grazing required. Boundary fencing. Scrub encroachment. Predator control. Bracken.	Yes
62.2	002304	c 62.2 Ty`n Twll (SPA)	Grazing, heather and scrub management.	Yes
42	002305	c 42 Carrog Isaf	Bracken dominates much of the mountain which is being addressed by a regime of annual chemical treatment with Asulox as weather allows. Motor vehicles trespass on to the mountian both from the quarry below the moutnain aswell as along the track running along the ridge to Moel Fferna. Erosion and damage to dry heath are becoming increasingly extensive. During the breeding season there are also impacts for SPA features.	Yes
26.1	002927	c 26.1 Ty`n y Celyn	Grazing and bracken management.	Yes

Unit No.	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
66.1	002929	c 66.1 Gelligrin		No
66.3	002930	c 66.3 Gelligrin	Grazing management.	No
72.8	002931	c.72.8 Maengwyn	Sheep not grazing mountain evenly giving rise to tall, dense grassland which is becoming rank over time. Stock concentrating on lower ground. Bracken dominating lower slopes. Old fencing left in piles on mountain. Heavier stock required to break up sward.	Yes
76.15	002937	c 76.15 Cwm-Eunant-Fach	No record of features condition. Requires site visit.	Yes
76.16	002938	c 76.16 Ty Uchaf	Grazing, scrub, gorse and game management.	Yes
76.17	002939	c 76.17 Y Gadfa	Grazing and scrub management.	Yes
104.1	002940	c 104.1 Llwyn Onn	Requires site visit	Yes
104.2	002941	c 104.2 Llwyn Onn	Requires site visit	Yes
30	002946	c 30 Rhiw-Felen	No record of features condition. Requires site visit.	Yes

7. GLOSSARY

This glossary defines the some of the terms used in this **Core Management Plan**. Some of the definitions are based on definitions contained in other documents, including legislation and other publications of CCW and the UK nature conservation agencies. None of these definitions is legally definitive.

Action A recognisable and individually described act, undertaking or **project** of any kind, specified in section 6 of a **Core Management Plan** or **Management Plan**, as being required for the **conservation management** of a site.

Attribute A quantifiable and monitorable characteristic of a **feature** that, in combination with other such attributes, describes its **condition**.

Common Standards Monitoring A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to **monitoring** and reporting on the **features** of sites designated for nature conservation, supported by guidance on identification of **attributes** and monitoring methodologies.

Condition A description of the state of a feature in terms of qualities or **attributes** that are relevant in a nature conservation context. For example the condition of a habitat usually includes its extent and species composition and might also include aspects of its ecological functioning, spatial distribution and so on. The condition of a species population usually includes its total size and might also include its age structure, productivity, relationship to other populations and spatial distribution. Aspects of the habitat(s) on which a species population depends may also be considered as attributes of its condition.

Condition assessment The process of characterising the **condition** of a **feature** with particular reference to whether the aspirations for its condition, as expressed in its **conservation objective**, are being met.

Condition categories The **condition** of **feature** can be categorised, following **condition assessment** as one of the following[2]:

Favourable: maintained;
Favourable: recovered;
Favourable: un-classified
Unfavourable: recovering;
Unfavourable: no change;
Unfavourable: declining;
Unfavourable: un-classified
Partially destroyed;
Destroyed.

[2] See JNCC guidance on Common Standards Monitoring http://www.jncc.gov.uk/page-2272

Conservation management Acts or undertaking of all kinds, including but not necessarily limited to **actions,** taken with the aim of achieving the **conservation objectives** of a site. Conservation management includes the taking of statutory and non-statutory measures, it can include the acts of any party and it may take place outside site boundaries as well as within sites. Conservation management may also be embedded within other frameworks for land/sea management carried out for purposes other than achieving the conservation objectives.

Conservation objective The expression of the desired **conservation status** of a **feature,** expressed as a **vision for the feature** and a series of **performance indicators**. The conservation objective for a feature is thus a composite statement, and each feature has one conservation objective.

Conservation status A description of the state of a **feature** that comprises both its **condition** and the state of the **factors** affecting or likely to affect it. Conservation status is thus a characterisation of both the current state of a feature and its future prospects.

Conservation status assessment The process of characterising the **conservation status** of a **feature** with particular reference to whether the aspirations for it, as expressed in its **conservation objective**, are being met. The results of conservation status assessment can be summarised either as 'favourable' (i.e. conservation objectives are met) or unfavourable (i.e. conservation objectives are not met). However the value of conservation status assessment in terms of supporting decisions about **conservation management**, lies mainly in the details of the assessment of feature **condition**, **factors** and trend information derived from comparisons between current and previous conservation status assessments and condition assessments.

Core Management Plan A CCW document containing the conservation objectives for a site and a summary of other information contained in a full site **Management Plan**.

Factor Anything that has influenced, is influencing or may influence the **condition** of a **feature**. Factors can be natural processes, human activities or effects arising from natural process or human activities, They can be positive or negative in terms of their influence on features, and they can arise within a site or from outside the site. Physical, socio-economic or legal constraints on **conservation management** can also be considered as factors.

Favourable condition See **condition** and **condition assessment**

Favourable conservation status See **conservation status** and **conservation status assessment.**[3]

Feature **The species population, habitat type or other entity for which a site is designated. The ecological or geological interest which justifies the designation of a site and which is the focus of conservation management.**

Integrity See **site integrity**

Key Feature The habitat or species population within a **management unit** that is the primary focus of **conservation management** and **monitoring** in that unit.

Management Plan The full expression of a designated site's legal status, **vision**, **features**, **conservation objectives**, **performance indicators** and management requirements. A complete management plan may not reside in a single document, but may be contained in a number of documents (including in particular **the Core Management Plan**) and sets of electronically stored information.

Management Unit An area within a site, defined according to one or more of a range of criteria, such as topography, location of **features**, tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which **conservation management** and **monitoring** can be most effectively organised. They are used as the primary basis for differentiating priorities for conservation management and monitoring in different parts of a site, and for facilitating communication with those responsible for management of different parts of a site.

Monitoring An intermittent (regular or irregular) series of observations in time, carried out to show the extent of compliance with a formulated standard or degree of deviation from an expected norm. In **Common Standards Monitoring**, the formulated standard is the quantified expression of favourable **condition** based on **attributes**.

Operational limits The levels or values within which a **factor** is considered to be acceptable in terms of its influence on a **feature**. A factor may have both upper and lower operational limits, or only an upper limit or lower limit. For some factors an upper limit may be zero.

Performance indicators The **attributes** and their associated **specified limits**, together with **factors** and their associated **operational limits,** which provide the standard against which information from **monitoring** and other sources is used to determine the degree to which the **conservation objectives** for a **feature** are being met. Performance indicators are part of, not the same as, conservation objectives. See also **vision for the feature**.

[3] A full definition of favourable conservation status is given in Section 4.

Plan or project **Project:** Any form of construction work, installation, development or other intervention in the environment, the carrying out or continuance of which is subject to a decision by any public body or statutory undertaker.
Plan: a document prepared or adopted by a public body or statutory undertaker, intended to influence decisions on the carrying out of **projects.**
Decisions on plans and projects which affect Natura 2000 and Ramsar sites are subject to specific legal and policy procedures.

Site integrity The coherence of a site's ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it is designated.

Site Management Statement (SMS) The document containing CCW's views about the management of a site issued as part of the legal notification of an SSSI under section 28(4) of the Wildlife and Countryside Act 1981, as substituted.

Special Feature See **feature**.

Specified limit The levels or values for an **attribute** which define the degree to which the attribute can fluctuate without creating cause for concern about the **condition** of the **feature**. The range within the limits corresponds to favourable, the range outside the limits corresponds to unfavourable. Attributes may have lower specified limits, upper specified limits, or both.

Unit See **management unit.**

Vision for the feature The expression, within a **conservation objective**, of the aspirations for the **feature** concerned. See also **performance indicators.**

Vision Statement The statement conveying an impression of the whole site in the state that is intended to be the product of its **conservation management.** A 'pen portrait' outlining the **conditions** that should prevail when all the **conservation objectives** are met. A description of the site as it would be when all the **features** are in **favourable condition**.

Appendix 1

The following table confirms the relationships between the management units and the designations covered:

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
1993	124	Y	N	Y	N	N	KH	KH	X	X	X	X	X	X	X	X
1994	123	Y	N	Y	N	N	KH	KH	X	X	X	X	X	X	X	X
1995	177	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
1996	125	Y	N	Y	N	N	KH	KH	X	X	X	X	X	X	X	X
1997	174	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
1998	153	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
1999	160	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2000	178	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2001	154	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2002	155	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2003	156	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2004	157	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2005	158	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2006	159	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2007	161	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2008	172	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2009	162	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
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2010	173	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2011	163	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2012	170	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2013	169	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2014	168	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2015	171	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2016	134	Y	N	Y	N	N	KH	KH	KH	X	KH	KH	X	X	X	X
2017	165	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2018	166	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2019	167	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2020	133	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2021	132	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2022	130	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2023	129	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2024	127.1	Y	N	Y	N	N	X	X	KH	X	X	X	X	X	X	X
2025	144	Y	N	Y	N	N	X	KH	KH	X	X	X	X	X	X	X
2026	139	Y	N	Y	N	N	X	KH	KH	X	X	X	X	X	X	X
2027	138	Y	N	Y	N	H	X	KH	KH	X	X	X	X	X	X	X
2028	141	Y	N	Y	N	N	X	KH	KH	X	KH	KH	X	X	X	X
2029	140	Y	N	Y	N	N	X	KH	KH	X	X	X	X	X	X	X
2030	137	Y	N	Y	N	N	X	KH	KH	X	KH	KH	X	X	X	X

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2031	136	Y	N	Y	N	N	X	KH	KH	X	KH	KH	X	X	X	X
2032	135	Y	N	Y	N	N	X	KH	KH	X	KH	KH	X	X	X	X
2033	179	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2034	180	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2035	143	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2036	148	N	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2037	149	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2038	150	N	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2039	151	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2041	175	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2042	128	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2043	125	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2044	131	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2045	152	N	N	Y	N	N	X	X	KH	X	X	X	X	X	X	X
2046	142	N	N	N	N	N	X	X	KH	X	X	X	X	X	X	X
2047	181	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2049	164	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X
2050	147	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2051	146	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2052	145	Y	N	Y	N	N	X	KH	X	X	X	X	X	X	X	X
2053	176	N	N	Y	N	N	X	X	X	X	X	X	X	X	X	X

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2057	74.1	y	y	y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2058	85	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2059	12	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2060	74.5	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2061	88	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2065	36	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2067	68	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2102	71.4	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2105	71.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2107	71.2	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2109	71.3	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2113	60	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2116	74.3	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2118	45	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2120	74.7	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2121	6	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2122	74.2	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2123	54.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2124	54.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2125	72.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2126	72.6	Y	Y	Y	N	N	KH	X	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
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2127	72.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2128	72.4	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2129	72.5	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2131	72.7	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2132	72.3	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2133	86	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2134	24	Y	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2135	33	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2136	69	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2137	21	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2138	29	Y	Y	Y	N	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2139	62.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2140	48	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2142	4	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2144	61.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2145	51	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2146	31	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2147	32.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2148	22.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2149	75.16	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2150	75.13	Y	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2151	75.12	Y	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS
2152	75.9	Y	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS
2153	75.11	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2154	75.1	Y	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS
2155	75.18	Y	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS
2156	75.8	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2157	75.7	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2158	75.5	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2159	75.6	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2160	75.4	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2161	75.3	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2162	75.2	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2163	75.1	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2164	63.1	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2165	63.3	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2166	63.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2167	101	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2168	9.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2169	63.5	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2170	63.4	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2171	67.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2172	67.4	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2173	41.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2174	44	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2175	14.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2181	56	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2182	27	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2183	73.2	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2184	73.1	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2185	13	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2187	34	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2188	73.3	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2189	65.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2190	2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2191	39	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2192	47	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2194	64.1	Y	Y	Y	N	N	KH	KH	X	KH	X	X	KS	KS	KS	KS
2195	38	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2196	105.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2197	105.2	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2198	112	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2199	111	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2200	46.1	Y	Y	Y	N	N	KH	KH	X	KH	X	X	KS	KS	KS	KS
2201	76.1	Y	Y	Y	Y	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2202	76.4	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2203	35	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2204	96	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2205	100	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2206	107	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2207	116	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2208	57	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2209	55.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2211	15	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2212	20	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2213	37	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2214	95.1	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2215	76.9	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2216	76.3	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2217	76.5	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2218	76.2	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2219	70	Y	Y	Y	N	N	KH	KH	X	KH	X	X	KS	KS	KS	KS
2220	43	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2221	84.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2222	50	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2223	82	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2224	53	Y	Y	Y	N	N	KH	KH	X	KH	X	X	KS	KS	KS	KS
2225	19	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2226	8	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2227	5	Y	Y	Y	N	N	KH	X	X	X	X	X	KS	KS	KS	KS
2229	59	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2230	78	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2231	79	Y	Y	Y	Y	Y	KH	KH	X	KH	X	X	KS	KS	KS	KS
2232	80	Y	Y	Y	Y	Y	KH	X	X	X	X	X	KS	KS	KS	KS
2233	89	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2234	90	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2235	91	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2236	49	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2237	122	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2238	28	Y	Y	Y	Y	Y	KH	KH	X	X	X	X	KS	KS	KS	KS
2239	121	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2240	98	Y	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2240	104.1	N	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2242	10.2	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2244	23.2	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2245	10.3	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2246	64.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2247	76.14	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2248	76.13	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2249	62.3	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2250	113	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2251	63.6	N	N	N	N	N	X	X	X	X	X	X	X	X	X	X
2252	63.9	N	N	N	N	N	X	X	X	X	X	X	X	X	X	X
2253	63.7	N	N	N	N	N	X	X	X	X	X	X	X	X	X	X
2254	10.4	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2255	46.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2256	106	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2257	7	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2258	66.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2259	55.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2260	95.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2261	84.2	N	Y	Y	N	N	X	X	X	X		X	KS	KS	KS	KS
2262	76.51	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2263	76.15	N	Y	Y	Y	N	X	X	X	X	X	X	KS	KS	KS	KS
2263	76.15	N	Y	Y	Y	N	X	X	X	X	X	X	KS	KS	KS	KS
2264	65.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2266	54.3	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2267	32.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2268	41.2	N	Y	Y	Y	Y	X	X	X	X	X	X	KS	KS	KS	KS
2269	14.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2272	63.8	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2273	97	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2274	94	N	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2276	9.2	N	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2277	103	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2278	120	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2279	23.1	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2280	67.5	N	Y	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2281	10.1	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2282	67.1	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2283	119	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2284	92	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2285	93	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2286	76.6	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2287	76.8	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2288	76.11	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2289	76.7	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2290	72.8	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2291	109	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2292	102	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2293	1	N	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2294	26.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2295	61.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2296	67.3	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2297	22.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2298	11	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2299	87	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2300	75.14	N	Y	Y	Y	Y	X	KH	X	X	X	X	KS	KS	KS	KS
2301	25	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2302	18	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2303	71.5	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2304	62.2	N	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2305	42	Y	Y	Y	N	N	X	KH	X	X	X	X	KS	KS	KS	KS
2306	3	N	N	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2927	26.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2929	66.1	Y	Y	Y	N	N	KH	KH	X	X	X	X	KS	KS	KS	KS
2930	66.3	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2939	76.17	Y	Y	Y	Y	N	KH	KH	X	X	X	X	KS	KS	KS	KS

							SAC	SAC	SAC	SAC	SAC	SAC	SPA	SPA	SPA	SPA
UNIQUE UNIT ID	COMPART NO	SAC	SPA	SSSI	NNR	CCW LAND	Blanket Bog 7130	Dry Heath 4030	Semi dry grassland and scrubland facies: on calcareous substartes 6210	Transition mires 7140	Calcareous & calcshist screes of the montane to alpine level 8120	Calcareous rocky slopes with chasmophytic vegetation 8210	Hen Harrier	Merlin	Peregrine	Red Kite
2941	104.2	N	Y	Y	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2944	74.8	Y	N	N	N	N	X	X	X	X	X	X	KS	KS	KS	KS
2946	30	Y	Y	Y	N	N	KH	KH	X	KH	X	X	KS	KS	KS	KS
2947	127.2	Y	N	Y	N	N	X	X	X	X	X	X	X	X	X	X