CYNGOR CEFN GWLAD CYMRU
COUNTRYSIDE COUNCIL FOR WALES

CORE MANAGEMENT PLAN
(INCLUDING CONSERVATION OBJECTIVES)

for

COEDYDD NEDD A MELLTE SPECIAL AREA OF CONSERVATION (SAC)

The SAC is underpinned by Dyffrynoedd Nedd a Mellte, a Moel Penderyn Site of Special Scientific Interest (SSSI) and Blaen Nedd SSSI. The area covered by these SSSI is greater than that of the SAC. These SSSI are notified for a wide range of biological and geological features, but it is the bulk of the oak and ash woodland which comprises the SAC interests.

Date: 17th April 2008

Approved by: **David Mitchell**

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

Ramsar

Llywodraeth Cynulliad Cymru
Welsh Assembly Government
CORFF NODDEDIG | SPONSORED BODY

CONTENTS

PREFACE

This document provides the main elements of CCW's management plan for the site named. It sets out what needs to be achieved on the site, 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 site. 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 site. It brings together and summarises the Conservation Objectives (part 4) into a single, integrated statement about the site.

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI

Three quarters of the site is covered by woodland, which includes areas of scrub and glades. Large parts of the canopy are dominated by oak and birch, with ash woodland in lime-rich areas and alder on damper soils. The woodland has trees of all ages, with a scattering of standing and fallen deadwood. Regeneration of these tree species is sufficient to maintain the woodland cover in the long term. Gaps in the canopy collectively occupy a significant but small proportion of the total site area.

In most areas of oak woodland there is an understorey of hazel, hawthorn and rowan. The ground flora is diverse, with a wide range of plants, reflecting the varying soil conditions. Large areas are dominated by wavy hair-grass, bilberry and mosses and sometimes by purple moor-grass. Ferns are frequent through most of the woodland and wood sorrel and bluebell are common in some areas. On lime-rich soils, ash is the dominant tree species and in places there is also small-leaved lime. Hazel is generally abundant in the shrub layer, with false brome, dog's mercury, enchanter's-nightshade and hart's-tongue fern common on the woodland floor. Alder woodland occurs on flatter areas of valley floor and some has a ground layer of sphagnum moss. Marsh hawk's-beard is found in wet flushes on the valley sides.

The river valleys and waterfalls are generally well shaded and constantly humid. These areas support a rich plant flora that clothes riverside rocks and cliffs and trunks of trees. Species include wood fescue, a wide variety of ferns such as hay-scented buckler-fern, beech fern, royal fern, green spleenwort, Tunbridge filmy-fern and Wilson's filmy-fern. There is a great variety of mosses and liverworts. The ground layer often has a mossy mat with greater fork-moss, little shaggy-moss and straggling pouchwort and, in the most humid places, scarce turf-moss. Boulders and oak trunks are covered in western earwort, wood-rust plasters fallen tree trunks and the diminutive Heller's notchwort and autumn flapwort grow on oak bark and decaying logs. Brown's four-tooth moss and horsehair threadwort occur in damp crevices in sandstone rock and patches of rock-bristle mosses can be found with a suite of other lime-loving species on damp limestone rocks. Mosses and liverworts are also prominent in rivers and streams, with boulders and waterfalls covered in species like rusty feather-moss and fox-tail feather-moss, and sometimes Hartmann's grimmia, river pocket-moss, beck pocket-moss and Hutchin's hollywort. Some crags have a powdering of the bright yellow lichen Chrysothrix chlorina, with lichens generally draping branches and trunks of less shaded trees.

Trees and dead wood in these humid areas provide a specialised habitat for many plants and insects. The riverbanks are largely unmanaged and human disturbance is minimal. The network of footpaths is well maintained and recreational activities well managed. There are no invasive alien plants such as rhododendron, Himalayan balsam and Japanese knotweed and conifer saplings spreading from nearby plantations are regularly removed.

Open areas are variously dominated by rushes, purple moor-grass, sheep's-fescue, deergrass and cross-leaved heath.

In terms of its geomorphological interest, the site demonstrates the natural processes that have affected the evolution of the landscape. Sections of the Afon Mellte and Afon Hepste show the effects of faulting on the evolution of waterfalls.

Important rock exposures illustrate whole sequences of the Namurian including Basal Grits and Middle Shales and rocks of the oldest Coal Measures. Carboniferous rocks at Moel Penderyn, Craig Y Ddinas and along the Afon Sychryd show folds and fractures associated with the Variscan mountain chain (which includes the hills of Devon and Cornwall and mountains of eastern Europe).

Blaen Nedd SSSI

The habitat features listed should in general not decrease in area and should not decline in quality.

Ash woodland along the Nedd Fechan has associated trees and shrubs such as hazel and rowan and the ground flora includes typical woodland species such as false brome, creeping soft-grass, herb-Robert, enchanter's nightshade and lady-fern. Wooded areas of limestone pavement continue to be actively managed, with some coppicing in places. Oak-dominated woodland along the Nedd Fechan has associated trees and shrubs such as downy birch, hawthorn and hazel, with a ground flora of grasses such as common bent, creeping soft-grass, sweet vernal-grass and wavy hair-grass and herbs including bluebell and wood-sorrel. Small stands of trees and scrub away from the main woodland blocks are maintained as these habitats.

The dry neutral grassland (hay-meadow and pasture) has a range of grasses such as common bent, sweet vernal-grass and crested dog's-tail and herbs including common knapweed, yellow-rattle, great burnet, rough hawkbit, greater butterfly orchid and common spotted-orchid. Plants indicative of disturbance and nutrient enrichment, such as perennial rye-grass, white clover, docks and creeping thistle, and coarse grasses, such as cock's-foot, are not prominent in the sward.

Calcareous grassland has a range of typical species such as sheep's-fescue, wild thyme, salad burnet, common rock-rose, limestone bedstraw, mountain everlasting and moonwort. Where the grassland is more open and rocky, species such as carline thistle and soft-leaved sedge occur. Species indicative of disturbance or enrichment, such as creeping thistle, perennial rye-grass and white clover are not be prominent in the sward.

Areas of open limestone pavement and screes, rock outcrops and quarries should be maintained, mainly in association with the calcareous grassland. These areas support species such as lily-of-the-valley, globe-flower, limestone fern, mossy saxifrage, small scabious and narrow-leaved bitter-cress.

The marshy grassland in general has a high cover of purple moor-grass or rushes. Some of this is species-rich with a prominence of plants such as meadow thistle, tawny sedge, flea sedge, devil's-bit scabious and bog pimpernel. Purple moor-grass and rushes are not overwhelmingly dominant at the expense of other grasses, sedges, herbs and bryophytes. Species indicative of disturbance and nutrient enrichment, such as creeping buttercup and white clover are uncommon, invasive trees and shrubs should are rare or absent and bare ground is kept to a minimum.

Wet heath has a range of typical species including cross-leaved heath, heather, deer-grass, bilberry and lichens. Purple moor-grass or rushes are not dominant at the expense of other heathland species and poaching is kept to a minimum.

Other habitats occupy about 30% of the site. Within this mixture, the best quality acid grassland, dry heath and flush are of good floristic quality. The main remaining habitats are bracken, mat-grass dominated acid grassland and semi-improved acid grassland, together with some semi-improved neutral grassland that is mainly associated with the more species-rich hay-meadows.

There is no diminution of the geological evidence for the formation of the caves, provided underground by the cave passage morphology or included sediments and cave decorations. There is no blocking or in-filling of surface features, such as springs, sink holes, dolines or emergences or leakage into the cave system of materials likely to damage the interests.

2. SITE DESCRIPTION

2.1 Area and Designations Covered by this Plan

Designations covered:	Coedydd Nedd a Mellte SAC; Blaen Nedd SSSI; Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI.
Grid references:	Coedydd Nedd a Mellte SAC (SN919093); Blaen Nedd (SN914135); Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI (SN907100, SN921090, SN937088).
Area (hectares):	Coedydd Nedd a Mellte SAC (378.18 ha); Blaen Nedd (187.7 ha); Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI (418.5 ha).
Unitary authorities:	Neath-Port Talbot County Borough Council; Rhondda Cynon Taf; Powys; Brecon Beacons National Park.

This plan currently only covers the SAC features.

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

For a summary map showing the coverage of this document see Map 1/1 'Location of large scale Unit Maps'.

2.2 Outline Description

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI

This site includes the wooded valleys of the rivers Nedd, Mellte, Pyrddin and Sychryd, and their tributaries above Pontneddfechan, as they pass through a Millstone Grit and limestone plateau, and Moel Penderyn, which lie to the east. The plateau lies at about 300 m, the rivers having eroded deep, narrow valleys with gorges, cliffs, block screes and waterfalls.

There is an extensive and diverse range of semi-natural woodland types, important populations of flowering plants and outstanding assemblages of mosses, liverworts and lichens. The site includes a range of geological features. These include exposures at Moel Penderyn, Craig y Ddinas and Bwa Maen and geomorphological features within parts of the valleys of the Hepste and Mellte.

Blaen Nedd SSSI

Blaen Nedd is situated in the upper valley of the Nedd Fechan, approximately 1km west of the village of Ystradfellte. It consists of a series of contiguous enclosures rising eastwards and north-eastwards from the river towards the lower flanks of Fan Nedd.

The site supports a wide variety of habitat types including oak and ash woodland, neutral grassland, calcareous grassland, limestone pavement, marshy grassland and wet dwarf-shrub heath. Geological features include a cave system and associated karst (classic limestone landscape) surface features.

The SAC habitats are spread across both the above SSSI. The SAC oak woodland habitat is mostly confined to the river valleys where the underlying geology is mainly carboniferous sandstones and coal measures. The SAC ash woodland is less widespread, occurring mainly on the more base rich-sandstones, particularly along tops of crags, and on limestone in the north and south.

2.3 Outline of Past and Current Management

Some of the woodland at the site has been heavily grazed in the past, with parts managed as coppice, and with other areas undoubtedly managed for the production of pit props etc. In the past, quarrying and silica mining were carried out in various parts of the site, particularly in the Pontneddfechan area, where there was also a gunpowder industry. Over the past 10 years many small privately owned areas have been fenced and grazing excluded under S15 or Tir Gofal agreements. A large proportion of the site is owned by the Forestry Commission (FC), with significant areas owned by the Brecon Beacons National Park Authority (BBNPA) and National Trust (NT). Most of the woodland is subject to non-intervention management, but some small areas of ash and hazel are coppiced. The FC have declared their land as Open Access land. The wooded valleys, particularly within Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI ('the Waterfalls' area) are popular with tourists and increasingly so with recreational/outdoor groups. As a result of high levels visitor usage, erosional problems are widespread. Several new projects which potentially will increase visitor numbers to the site have been proposed and a result the BBNPA, FC, CCW and other relevant parties are working on a management plan for the wider area.

Most of the grassland and heathland habitats are managed under Tir Gofal or S15 agreements.

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 on mainly on tenure and the presence of habitat and or geological interest

See maps 1-13 which show the management units referred to in this plan.

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

Unit Ref number	**Unit Name**	**SAC**	**SSSI**	**Other**
Blaen Nedd SSSI				
1	BN1		✔	
2	BN2		✔	
3	BN3		✔	**NT**
4	BN4		✔	**Powys CC**
5	BN5		✔	
6	BN6		✔	
7	BN7	✔	✔	
8	BN8	✔	✔	
9	BN9	✔	✔	**NT**
10	BN10		✔	
11	BN11		✔	
12	BN12		✔	**NT**
13	BN13		✔	

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI				
14	DNM1		✔	
15	DNM2	✔	✔	
16	DNM3	✔	✔	
17	DNM4	✔	✔	**FC**
18	DNM5	✔	✔	
19	DNM6	✔	✔	
20	DNM7	✔	✔	
21	DNM8	✔	✔	**BBNPA**
22	DNM9	✔	✔	
23	DNM10	✔	✔	
24	DNM11	✔	✔	
25	DNM12	✔	✔	
26	DNM13	✔	✔	**Powys CC**
27	DNM14	✔	✔	
28	DNM15	✔	✔	
29	DNM16	✔	✔	

Blaen Nedd SSSI

Unit BN1 - geological interest only (non-SAC)

Unit BN2 - geological interest only (non-SAC)

Unit BN3 - geological interest only (non-SAC)

Unit BN4 - road - apart from a wide verge with habitat this unit is of geological interest only (non-SAC)

Unit BN5 - sinkhole with trees (non-SAC)

Unit BN6 – common land with above ground non-SAC habitats and geology

Unit BN7 – supports geological and biological features and lies within SAC

Unit BN8 - supports geological and biological features and lies within SAC

Unit BN9 - supports geological and biological features and lies within SAC

Unit BN10 – supports non-SAC habitats

Unit BN11 – supports non-SAC habitats and geology

Unit BN12 - supports non-SAC habitats and geology

Unit BN13 - supports non-SAC habitats and geology

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI

All units apart from Unit DNM1 lie within the SAC. Units DNM2, DNM6, DNM7, DNM9, DNM10, DNM11, DNM12, DNM14 are privately owned and some are covered by management agreements.

Unit DNM1 - Moel Penderyn part of the SSSI - mainly of geological interest but some grassland and species of note (non-SAC).

Unit DNM3 – lies within Neath Port Talbot and in CCWs West Region.

Unit DNM4 - Forestry Commission land - the main landowners at this SSSI.

Unit DNM5 - lies within Neath Port Talbot and in CCWs West Region.

Unit DNM8 - BBNPA –owned land.

Unit DNM13 - Powys CC.

Unit DNM15 - various other small parcels of land.

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		
1. *Tilio-Acerion* forests of slopes, screes and ravines	**EU Habitat Code: 9180** Generally referred to as 'Upland Ash Woodland' throughout this document. Semi-natural broad-leaved woodland corresponding to the following NVC types: • W8 *Fraxinus excelsior – Acer campestre-Mercurialis perennis* woodland (sub-communities d-g) • W9 *Fraxinus excelsior – Sorbus aucuparia – Mercurialis perennis* woodland	1

2. Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	**EU Habitat Code: 91A0** Generally referred to as 'Sessile Oak Woodland' throughout this document. Semi-natural broad-leaved woodland corresponding to the following NVC types: • W10e *Quercus robur – Pteridium aquilinum – Rubus fruticosus* woodland, *Acer pseudoplatanus – Oxalis acetosella* sub-community • W11 *Quercus petraea – Betula pubescens – Oxalis acetosella* woodland • W16b *Quercus* spp. – *Betula* spp. – *Deschampsia flexuosa* woodland, *Vaccinium myrtillus – Dryopteris dilatata* sub-community • W17 *Quercus petraea – Betula pubescens – Dicranum majus* woodland	2
SPA features		
Not applicable		
Ramsar features		
Not applicable		
SSSI features		
To be completed		

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 set out the relationship between the special features and management units identified in this plan:

Blaen Nedd	**Management unit**								
	BN1	**BN2**	**BN3**	**BN4**	**BN5**	**BN6**	**BN7**	**BN8**	**BN9**
SAC							✔	✔	✔
SSSI	✔	✔	✔	✔	✔	✔	✔	✔	✔
SAC features									
1. *Tilio-Acerion* forests of slopes, screes and ravines	**x**	**x**	**x**	**x**	**x**	**x**	**KH**	**KH**	**KH**
2. Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	**x**	**x**	**x**	**x**	**x**	**x**	**KH**	**KH**	**KH**
SSSI features									
3.									
4.									
5.									
6.									
7.									

Blaen Nedd continued	**Management unit**			
	BN10	**BN11**	**BN12**	**BN13**
SAC				
SSSI	✔	✔	✔	✔
SAC features				
1. *Tilio-Acerion* forests of slopes, screes and ravines	**x**	**x**	**x**	**x**
2. Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	**x**	**x**	**x**	**x**
SSSI features				
3.				
4.				

5.				
6.				
7.				

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI	**Management unit**								
	DNM1	**DNM2**	**DNM3**	**DNM4**	**DNM5**	**DNM6**	**DNM7**	**DNM8**	**DNM9**
SAC		✔	✔	✔	✔	✔	✔	✔	✔
SSSI	✔	✔	✔	✔	✔	✔	✔	✔	✔
SAC features									
1. *Tilio-Acerion* forests of slopes, screes and ravines	**x**	**KH**	**x**	**KH**	**x**	**x**	**x**	**x**	**KH**
2. Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	**x**	?	**KH**	**KH**	**KH**	**KH**	**KH**	**KH**	**KH**
SSSI features									
3.									
4.									
5.									
6.									
7.									

Dyffrynoedd Nedd a Mellte, a Moel Penderyn SSSI	**Management unit**								
	DNM10	**DNM11**	**DNM12**	**DNM13**	**DNM14**	**DNM15**	**DNM16**		
SAC	✔	✔	✔	✔	✔	✔	✔		
SSSI	✔	✔	✔	✔	✔	✔	✔		
SAC features									
1. *Tilio-Acerion* forests of slopes, screes and ravines	**x**	**KH**	**x**	**x**	**x**	**x**	**KH**		
2. Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	**KH**	**KH**	**x**	**KH**	**KH**	**KH**	**KH**		
SSSI features									
3.									
4.									
5.									
6.									
7.									

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: *Tilio-Acerion* forests of slopes, screes and ravines (EU habitat Code: 9180)

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:

- Upland ash woodland will occupy at least 18 ha of the total site area.
- The canopy should be predominantly ash and the following trees will be common in the woodland:
- Ferns will be common ground flora species.
- Although they may be present in the canopy in small quantities, sycamore and beech should not become dominant at the expense of ash.
- Introduced invasive species will be absent and any conifers seeding in from adjoining plantations will be removed whilst at the seedling/sapling stage.
- Damage to the ground flora and soil erosion due to public pressure will be at a minimum.
- All factors affecting the achievement of these conditions are under control.

Site specific definitions of features and attributes are given in Annex

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 upland as woodland	The extent should not fall below the area mapped in 1996. The maximum extent is governed by the underlying geology and soil types.	*Upper limit*: None (but is naturally limited). *Lower limit*: 18 ha
A2. Distribution	Should be present in the following units: Blaen Nedd: Units BN7, BN8, BN9. Dyffrynoedd Nedd a Mellte: DNM2,DNM4,DNM9,DNM11,DNM16	*Upper limit*: none *Lower limit*: Significant presence in all units indicated in adjoining column.
A3. Canopy cover	Continuous canopy cover to be met with in at least 90% of samples over the whole site.	*Upper limit* : 100% *Lower limit:*90%
A4. Canopy composition and understorey composition	The canopy and understorey composition will consist of at least 95% native woody species typical of the habitat in at least 90% of samples over the whole site.	*Upper limit:* None *Lower limit:*90%
A5. Regeneration	To be met in at least 50% of significant	*Upper limit:* None

	gaps in canopy. Such gaps should be recorded at each monitoring visit. Gaps should be created naturally and a more varied age structure should develop. Evidence of regeneration elsewhere on the site would be a positive sign that any grazing is sufficiently low. There should also be a note made of regeneration of non-native species like sycamore, beech or conifers.	*Lower limit:* Presence of viable saplings at least 1.5m high within 10-15 years of gap appearing.
A6. Woodland structure	To be met in at least 75% of samples over the site as a whole.	*Upper limit:* None *Lower limit:* Presence of understorey and field layer, consisting of locally native species.
A7. Deadwood	To be met in at least 50% of samples over the site as a whole.	*Upper limit:* None *Lower limit:* Presence of standing and/or fallen deadwood with a minimum diameter of 20cm and minimum length of 2m.
A8. Ground flora	At least 80% of woodland flora the cover of typical ground flora woodland plants is 30%. Ferns should be common (see definitions - may need refining).	*Upper limit:* None *Lower limit:* 30 % cover
A9. Bryophytes and lichens.	Bryophytes are often abundant in this type of woodland, but are not as important a component in defining the woodland types as they are in defining 'sessile oakwood'. However, the two woodland types often grow in close proximity and it may be sensible to treat the upland ash woodland in the same manner as for the sessile oakwood until limits can be refined following further study and monitoring. Typical ground covering species should be present at high cover in about 80%? of the woodland. The range of scarcer species of bryophyte and lichens should continue to have viable populations.	*Upper limit:* None *Lower limit:* 80% of woodland ground cover in core areas should have 50 % cover of typical bryophytes (provisional).
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Livestock grazing	Grazing to the extent practiced routinely by the farming community prevents regeneration of woodland and damages the field layer. Cessation of all grazing over a long period, however, may be detrimental to the field layer as these may become shaded out. The ideal may be to mimic the very low level within a natural woodland ecosystem, or to periodically vary grazing pressure. It is something that kept under constant	*Upper limit*: grazing levels likely to be in the region of 0.1 LSU/ha/yr or less. *Lower limit*: None

	review.	
F2. Non-native species	There will be low tolerance of non-native species. Although some sycamore will be tolerated, it should not be allowed to become dominant over ash. A maximum of about 5% of non-native trees and shrubs, including conifers, will be tolerated.	*Upper limits:* 5% cover of non-native trees in the canopy. Sycamore - a limit AND: No invasive non-native shrubs in the understorey or shrub layer *Lower limit:* None.
F3. Woodland Management	Natural ecological processes should be allowed to operate as far as possible. In the majority of units these processes should gradually create greater structural diversity. Any areas can be identified which may benefit from thinning; the thinning should focus on removing the non-native species. As thinning would alter the relative humidity of the site, limits would need to be imposed.	*Upper limit:* *Lower limit:*
F4. Access and visitor management and human and grazing induced bare ground	Poorly maintained footpaths, coupled with increasing visitor numbers have resulted in erosion problems in some areas. In addition, the area has proved to be very popular with outdoor groups engaging in such activities as gorge walking and climbing. Further investigation is required to assess and address impacts from these activities and will be incorporated into a wide ranging management plan for the whole area. Throughout the site the cover of bare soil or denuded rocks due to footpaths, trampling and grazing and other activities undertaken by visitors (but not including natural landslips, naturally bare ground where leaf litter etc), should be less than X % (limit to be determined but likely to be close to the area taken up by footpaths). Additional limits may need to be set to address issues in more sensitive parts of the site.	*Upper limit:* X% (to be determined) bare ground due to human or animal induced activities. *Lower limit:*

4.2 Conservation Objective for Feature 2: Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (EU Habitat Code: 91A0)

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:

- Sessile oak woodland will occupy at least 175 ha of the total site area.
- The canopy should be predominantly oak and locally native trees will be common in the woodland.
- Ferns will be common ground flora species.
- Bryophytes will continue to be abundant and the bryophyte flora will continue to include those western/Atlantic species that mark out this woodland type. A suite of rarer species and species at the edge of their geographical range will continue to be present.
- Heathy species such as bilberry and common heather *Calluna vulgaris* will be common in some areas.
- Introduced invasive species such as rhododendron will be absent and any conifers seeding in from adjoining plantations will be removed whilst at the seedling/sapling stage.
- Damage to the ground flora and soil erosion due to public pressure will be at a minimum.
- All factors affecting the achievement of these conditions are under control.

Site specific definitions of features and attributes are given in Annex

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 sessile oak woodland	The extent should not fall below the area mapped in 1996. The maximum extent is governed by the underlying geology and soil types.	*Upper limit*: None (but is naturally limited). *Lower limit*: 175 ha
A2. Distribution	Should be present in the following units: Blaen Nedd: Units BN7, BN8, BN9. Dyffrynoedd Nedd a Mellte: DNM3-11, DNM13-16	*Upper limit*: none *Lower limit*: Significant presence in all units indicated in adjoining column.
A3. Canopy cover	Continuous canopy cover to be met with in at least 90% of samples over the whole site.	*Upper limit* : 100% *Lower limit:*90%
A4. Canopy composition and	The canopy and understorey composition will consist of at least 95%	*Upper limit:* None *Lower limit:* 90%

understorey composition	native woody species typical of the habitat in at least 90% of samples over the whole site.	
A5. Regeneration	To be met in at least 50% of significant gaps in canopy. Such gaps should be recorded at each monitoring visit. Gaps should be created naturally and a more varied age structure should develop. Evidence of regeneration elsewhere on the site would be a positive sign that any grazing is sufficiently low. There should also be a note made of regeneration of non-native species like beech or conifers.	*Upper limit:* None *Lower limit:* Presence of viable saplings at least 1.5m high within 10-15 years of gap appearing.
A6. Woodland structure	To be met in at least 75% of samples over the site as a whole.	*Upper limit:* None *Lower limit:* Presence of understorey and field layer, consisting of locally native species.
A7. Deadwood	To be met in at least 50% of samples over the site as a whole.	*Upper limit:* None *Lower limit:* Presence of standing and/or fallen deadwood with a minimum diameter of 20cm and minimum length of 2m.
A8. Ground flora	At least 80% of woodland flora the cover of typical ground flora woodland plants is 30%. Ferns should be common (see definitions - may need refining). See also under A9 bryophytes.	*Upper limit:* None *Lower limit:* 30 % cover
A9. Bryophytes, lichens and filmy ferns	Bryophytes define this woodland type - further work is required to be able to set suitable limits, but typical ground covering species should be present at high cover in about 80% of the woodland. The range of scarcer species of bryophyte, lichens and filmy ferns should continue to have viable populations.	*Upper limit:* None *Lower limit:* 80% of woodland ground cover in core areas should have 50 % cover of typical bryophytes (provisional).
Performance indicators for factors affecting the feature		
Factor	***Factor rationale and other comments***	***Operational Limits***
F1. Livestock grazing	Grazing to the extent practiced routinely by the farming community prevents regeneration of woodland and damages the field layer. Cessation of all grazing over a long period, however, may be detrimental to the field layer, especially bryophytes, as these become shaded out. The ideal may be to mimic the very low level within a natural woodland ecosystem, or to periodically vary grazing pressure. It is something that kept under constant review.	*Upper limit*: grazing levels likely to be in the region of 0.1 LSU/ha/yr or less. *Lower limit*: None
F2. **N**on-native	As many of the bryophytes typical of	*Upper limits:* 5% cover of non-

species	this habitat grow on the trunks of the oak trees, there will be low tolerance of non-native species. In particular there will be zero tolerance of invasive species such as Rhododendron, which has not yet got a foothold in the site. A maximum of about 5% of non-native trees and shrubs, including conifers, will be tolerated.	native trees in the canopy. AND: No rhododendron (or other invasive non-native shrubs) in the understorey or shrub layer *Lower limit:* None.
F3. Woodland Management	Natural ecological processes should be allowed to operate as far as possible. In the majority of units these should gradually create greater structural diversity. Any areas can be identified which may benefit from thinning; the thinning should focus on removing the non-native species. As thinning would alter the relative humidity of the site, limits would need to be imposed.	*Upper limit:* *Lower limit:*
F4. Access and visitor management and human and grazing induced bare ground	Poorly maintained footpaths, coupled with increasing visitor numbers have resulted in erosion problems in some areas. In addition, the area has proved to be very popular with outdoor groups engaging in such activities as gorge walking. Further investigation is required to assess and address impacts from these activities and will be incorporated into the management plan for the whole area. Throughout the site the cover of bare soil or denuded rocks due to footpaths, trampling and grazing and other activities undertaken by visitors (but not including natural landslips, naturally bare ground where leaf litter etc), should be less than X % (limit to be determined but likely to be close to the area taken up by footpaths). Additional limits may need to be set to address issues in more sensitive parts of the site.	*Upper limit:* X% (to be determined) bare ground due to human or animal induced activities. *Lower limit:*

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: *Tilio-Acerion* forests of slopes, screes and ravines (EU habitat Code: 9180)

Conservation Status of Feature 1

The conservation status of the feature within the site is **Unfavourable** (2006)

Further monitoring is required to fully assess the condition as the 2006 assessment used slightly different management units to those in the current plan.

The upland ash woodland is considered to be unfavourable largely because of the presence of non-native species and insufficient understorey cover in parts of the site due to heavy grazing in the past - particularly in Unit DNM16 and Units BN7 and BN9.

Negative effects as a result of visitor pressure are also affecting the feature, however at this stage (2008), the significance is not clear and further investigation is required. Following some initial monitoring work in 2007, it appear that the main problem areas are in Units DNM4, DNM11 and Unit BN7.

Management Requirements of Feature 1

Much of Unit DNM16 has now been fenced under a management agreement, however a sufficient understorey will take time to develop and some thinning may be necessary to remove some of the non-native species. Similar fencing has occurred in Units BN7 & BN9, with some thinning and coppicing initiated to reduce the frequency of sycamore.

A management plan covering the wider 'waterfalls area' is being progressed (2008) by the BBNPA, FC and CCW, which amongst other things will be addressing issues arising from increasing numbers of visitors in the SAC and supporting SSSI.

5.2 Conservation Status and Management Requirements of Feature 2: : Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (EU Habitat Code: 91A0)

Conservation Status of Feature 2

The conservation status of the feature within the site is **Unfavourable** (2006)

Further monitoring is required to fully assess the condition as the 2006 assessment used slightly different management units to those in the current plan.

The sessile oak woodland is considered to be unfavourable largely because of the presence of non-native species in management Units DNM4, DNM8, DNM14.

The understorey was also considered to be insufficient in parts of the site, usually due to heavy grazing in the past - particularly in Units DNM2, DNM4, DNM8, DNM11, DNM14, DNM15, DNM16.

Negative effects as a result of visitor pressure are also affecting the feature, however at this stage (2008), the significance is not clear and further investigation is required. Sizeable areas of ground, particularly around waterfalls are heavily trampled and denuded with the prospects for tree regeneration greatly reduced. Ultimately, some areas could lose their canopy cover. Following some initial monitoring work in 2007, it appear that the main problem areas are in Units DNM4, DNM5, DNM7, DNM8, DNM11.

Management Requirements of Feature 2

Units DNM2, DNM11, DNM16 are currently (2008) under management agreement but a sufficient understorey will take time to develop. Some thinning may be necessary to remove some of the non-native species in Unit DNM2.

Units DNM14 & DNM15 are largely unmanaged and ungrazed and an understorey should develop in time. Some thinning of non-native trees may be necessary.

Units DNM4 & DNM8 are largely fenced from grazing, although trespassing sheep do enter the wood from time to time, and an understorey should develop in time. Some thinning of non-native trees may be required.

A management plan covering the wider ‘waterfalls area’ is being progressed (2008) by the BBNPA, FC and CCW, which amongst other things which amongst other things will be addressing issues arising from increasing numbers of visitors in the SAC and supporting SSSI.

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.

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
7	000389	Unit BN7	May be some issues with usage of caves by outdoor activity groups - caving fraternity are in process of producing a monitoring report which should highlight problems if any	Yes
8	000390	Unit BN8	This unit is considered to be under appropriate conservation management.	No
9	000391	Unit BN9	This unit is considered to be under appropriate conservation management.	No
15	000397	Unit DNM2	Under Tir Gofal management	No
16	000398	Unit DNM3	Under Tir Gofal Management	No
17	000399	Unit DNM4	Public pressure and pressure from outdoor activity groups appear to be main issue. Some heavy grazing from trespassing stock, but localised.	Yes
18	000400	Unit DNM5	Some small areas where erosion issues.	Yes
19	000401	Unit DNM6	Under Tir gofal agreement	No
20	000402	Unit DNM7	Recreational pressure causing erosion of habitats. Also some of geological structures being obscured by tree and ivy growth. Some illegal engineering works and tipping in SSSI.	Yes
21	000403	Unit DNM8	Recreational pressure and erosion due to poorly maintained footpaths. Some invasive trees and possibly some thinning required.	Yes
22	000404	Unit DNM9	This unit is considered to be under appropriate conservation management.	No
23	000405	Unit DNM10	This unit is considered to be under appropriate conservation management.	No
24	000406	Unit DNM11	Under Tir Gofal management. Some erosion issues.	Yes
25	000407	Unit DNM12	This unit is considered to be under appropriate conservation management.	No
26	000408	Unit DNM13	This unit is considered to be under appropriate conservation management.	No
27	000409	Unit DNM14	Presence of non-native species and poor understorey	Yes
28	000410	Unit DNM15	Poor understorey	Yes
29	002438	Unit DNM16	Poor understorey	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.

Conservation management Acts or undertaking of all kinds, including but not necessarily limited to **actions,** taken with the aim of achieving the **conservation**

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

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**

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

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**.

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**.

8. ANNEXES

Annex * - Site specific definitions referred to in Conservation Objectives and assumptions used as used during monitoring of the features.

Site specific definitions	
Sample area	A suggested area to sample, is what is likely to be visible from a sample point is within a 25m radius of that point. This equates approximately to 0.2 ha. Use for all attributes (except extent). Samples should not be collected/located with 10m of a path or other public highway or in areas of agreed active management.
Definition of oak woodland	Vegetation composed of locally native tree species, where the tree canopy is at least 50% cover (the location of all areas to be assessed are indicated on the management plan map-to be produced) and is predominantly composed of oak.
Definition of ash wood	Vegetation composed of locally native tree species, where the tree canopy cover is at least 50% cover (the location of all areas to be assessed are indicated on the management plan map-to be produced) and is predominantly composed of ash and/or lime, and potentially elm.
Bryophyte areas	Those areas considered important for bryophytes and/or lichens (many of which are in the gorges), Over much of the site it is important to maintain a humid microclimate for the associated lower plant interests-this applies especially to the oak and *Tilio-Acerion* woodland in and close to ravines, crags and waterfalls. In these areas it will be important to maintain high canopy cover (not withstanding natural events such as landslips and storm damage).
Locally native woody species	Locally native species includes birch, lime, hawthorn, elm, oak, ash, rowan, holly, and hazel.
Non-native woody species	Any woody shrub or tree species not know to be native to the area including rhododendron, beech, spruce and other conifers, sycamore, particularly in reference to understorey composition.
Large and veteran trees	Over mature trees that are entering into the senescent stage of their life cycle, big/old enough to show at least some of the features associated with aged trees including dead wood/boughs, holes created from fallen limbs/damage to trunks, bracket fungus, Generally those trees whose trunks that are greater than 0.5 m diameter at breast height (dbh = *c.* 1.3 m from the ground).
Gap	a gap in the canopy of at least 10m radius.
Dead wood	3 m^3 of dead wood is thought to be equivalent of one extremely large tree or four trunks of >50cm diameter and at least 4 m long
Regeneration	Viable regeneration/saplings includes vegetative re-growth from the base of cut stumps or trees that sprout freely from the base (excluding hazel). This attribute will apply to any broadleaved species, regardless of whether it is site native, so regeneration of species such as sycamore and beech will count when assessing this attribute as evidence that grazing (including deer) is not preventing this natural part of the woodland process

Site specific definitions. Continued	
Regeneration	Viable regeneration/saplings includes vegetative re-growth from the base of cut stumps or trees that sprout freely from the base (excluding hazel). This attribute will apply to any broadleaved species, regardless of whether it is site native, so regeneration of species such as sycamore and beech will count when assessing this attribute as evidence that grazing (including deer) is not preventing this natural part of the woodland process
Viable saplings	Figures used elsewhere suggest that saplings need to be at least 1.5m high for them to be considered viable.
Regeneration (potential?)	Surveillance measure only: there are at least 10 woody species seedlings (<50cm high) present (not to be recorded under dense bracken) to be noted during sampling but not sampled specifically.
Bare soil	Soil/substrate that becomes denuded through trampling/grazing and other damaging activities. Do not include soil/substrate exposed through natural processes eg landslips.
Common species (as applied to ferns)	Common is defined as more that 10 plants visible from the position where the recorder is sampling. (To be tested during sample collection, areas that look good for ferns should be checked to see if this figure is reasonable, and if it is practical to count over a sample area/specified quadrat area etc)