

**CYNGOR CEFN GWLAD CYMRU  
COUNTRYSIDE COUNCIL FOR WALES**

**CORE MANAGEMENT PLAN  
INCLUDING CONSERVATION OBJECTIVES**

**FOR  
MYNYDD CILAN, TRWYN Y WYLFA AC YNYSOEDD  
SANT TUDWAL SPA**

**(including part of CLOGWYNI PEN LLŶN/LLEYN  
SEACLIFFS SAC and PEN LLŶN A'R SARNAU SAC.  
All sites are underpinned by PORTH CEIRIAD, PORTH  
NEIGWL AC YNYSOEDD SANT TUDWAL SSSI)**

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**A Welsh version of all or part of this document can be made available on request.**



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## **PREFACE**

This document provides the main elements of CCW's management plan for the site(s) named. It sets out what needs to be achieved on the site(s), 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(s). 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.

This stunningly beautiful stretch of coast on the Llyn Peninsula includes the bays of Porth Neigwl and Porth Ceiriad, with the heathy headland of Mynydd Cilan between them.

The site should continue to support a strong breeding population of chough with at least 9 pairs of breeding birds present annually. The site should also continue to provide sufficient habitat of sufficient quality to support this increased breeding population. Bracken control and rotational repair of the traditional cloddiau should be undertaken to maximise available feeding habitat.

We would not wish to see any decrease in the areas of heathland present, and we would wish to encourage restoration of the heathland, in terms of its extent and condition, aiming towards re-establishing the areas of heathland that existed (according to mapped evidence) in the early 20<sup>th</sup> century. This could be achieved by managed rotational cutting and/or burning of the dry heath, grazing management and the control of bracken and European gorse. Maintaining an open structure and diverse age-structure will ensure that the heath is available as a feeding habitat for chough.

The pools and associated wet heath which are located within this heathland should also be carefully managed and restored where appropriate. They would benefit from increased grazing with heavy stock and occasional excavation on rotation. The increased area of pool margins will provide additional opportunities for the colonisation for the rare plant species present in this habitat.

The sand dune and dune grassland areas should retain their current extent and provide an abundance of flowering plants, especially bird's-foot trefoil, which is the principal pollen source for the mason bee. The natural drainage from the land above the cliffs should be maintained to protect the seepage areas which are crucial for part of its life cycle.

## 2. **SITE DESCRIPTION**

### 2.1 **Area and Designations Covered by this Plan**

Grid references:

SH2827, SH2826, SH2825, SH2824, SH2927, SH2926, SH2925, SH2924, SH3026, SH3025, SH3024, SH3126, SH3125, SH3227, SH3226, SH3225, SH3327, SH3326, SH3325, SH3427, SH34216.

Unitary authority:  
Cyngor Gwynedd

Area (hectares): 373.55

Designations covered:

Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal Special Protection Area (SPA)

Clogwyni Pen Llŷn/Lleyn Seacliffs Special Area of Conservation (SAC)  
(Part of this larger coastal SAC which is designated for its sea cliff communities is also included within the SPA)

Pen Llŷn a'r Sarnau SAC  
(The intertidal area of the SPA is also part of this very large marine SAC)

Porth Ceiriad, Porth Neigwl ac Ynysoedd Sant Tudwal Site of Special Scientific Interest (SSSI) (This site underpins all of the above sections of European sites. Part of the SSSI extends beyond the area covered by this plan).

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 coast here is exposed to the prevailing south-westerly winds, and the soft cliffs which back the bays are continually eroded and provide the mosaic of bare sediment, seepages and flower-rich maritime and dune grassland habitats. These are important for an impressive assemblage of rare invertebrates, including one of only two British populations of the endangered mason bee *Osmia xanthomelana*, the adults collecting mud for their nest cells from seepages and visiting bird's-foot trefoil *Lotus corniculatus* flowers in the dune grassland for pollen and nectar.

The area is particularly important for a population of chough *Pyrrhonorax pyrrhonorax*. The site is regularly used by 3% of the Great Britain population of this charismatic bird throughout the breeding and non-breeding season. The sea cliffs and caves provide breeding and roosting sites, while the cliffs, heath, maritime grassland, and adjacent pasture and arable fields provide feeding sites throughout the year for these specialist invertebrate feeders.

The resistant rocky headland of Mynydd Cilan is dominated by dry heath with heather *Calluna vulgaris* and western gorse *Ulex gallii*. Other heathland species present include

bell heather, cross-leaved heath, squill, red fescue, thrift and buck's horn plantain, with small pockets of European gorse and bilberry. There is also a distinct area of wetter heath communities and associated shallow pools which contain a number of rare plants including bog hair grass *Deschampsia setacea* at its only remaining site in Wales, chamomile *Chamaemelum nobile*, pillwort *Pilularia globulifera*, pale dog-violet *Viola lactea* and three-lobed water-crowfoot *Ranunculus tripartitus*. The headland cliffs also support dotted sedge *Carex punctata*, Portland spurge *Euphorbia portlandica*, ivy broomrape *Orobancha hederiae* and lanceolate spleenwort *Asplenium obovatum*.

The rocky areas around Porth Ceiriad and the St. Tudwal's islands are of special marine biological interest for their specialised rockpool and overhang habitats, the presence of complete community zonation over the wave-exposed face of Mynydd Cilan, the presence of the nationally rare sponge *Stelletta grubii*, and two nationally important communities: tide-swept rock with serrated wrack *Fucus serratus*, sponges and sea-squirts, and tide-swept rock with oarweed *Laminaria digitata*, sea-squirts and bryozoans.

This coastal site provides outstanding exposures of rocks formed during the Cambrian and early Ordovician periods, some of which contain important fossils that have enabled accurate dating and international comparison of the rocks. The cliffs at Porth Ceiriad are also important for understanding the complex glacial events that took place on Llŷn during the last Ice Age. At Porth Neigwl the geomorphology of the cliff-beach system is determined by wave action on the soft cliffs, while the glacial and fluvio-glacial sediments exposed in the cliffs provide further information on the glacial events that took place on the Llŷn during the last Ice Age.

### 2.3 Outline of Past and Current Management

Much of Mynydd Cilan is common land, and grazing levels have varied historically. It is likely they were much heavier previously. At present Mynydd Cilan is grazed by sheep and horses although the horses appear to graze mainly around the pond area. Cattle have been grazed occasionally on the NT land. There would be an advantage in increasing the number of heavy stock particularly on the NT owned land and the continuing use of cattle grazing here should be encouraged. Grazing should be heaviest in the spring and early summer (April-July) this will encourage livestock to remove young palatable gorse and grass whilst allowing ericoids to regenerate. Stocking levels, particularly sheep grazing, should be reduced in autumn and winter (September-March) as this is the period when livestock tend to do most damage to ericoids. However, there should be some stock present on pasture over winter months to provide a supply of dung and associated dung invertebrates for chough to feed upon over the winter months.

The UK chough population suffered a significant decline in the 20<sup>th</sup> Century as a result of persecution and changing agricultural practice. These pressures led to a contraction of the species' range and the fragmentation and reduction of most remaining populations. This national trend mirrored one seen throughout Europe where the species was estimated to be in decline in 90% of its range (Tucker & Heath, 1994). The past two or three decades have seen the UK chough population as a whole stabilising while populations around the Welsh coast appear to be making a recovery in numbers. Despite the population now stabilising in most of its European range, ongoing declines in some areas mean that it is still regarded as a declining species (Birdlife International 2004).

Mynydd Cilan is an important feeding and breeding area for chough. The current grazing regime provides the suitable short turf for feeding chough on the coastal plateau. Management to open areas of dense heath and clear European gorse should increase the area of feeding habitat. Areas of pasture, arable land and semi-improved and improved pasture which are associated with the coastal strip and within easy reach of the cliff breeding sites have been included in the SPA as they are important feeding areas, and these should continue to be farmed and provide feeding opportunities.

The structure and composition of the heathland habitat varies across the Mynydd Cilan. Some good quality heath is to be found, but in places this has become invaded by bracken. Bracken used to be cut and used for bedding historically, but this practice has not been carried to the modern day. In some places, western gorse dominates – possibly due to climatic change since it is susceptible to frosts which occur less frequently nowadays, and due to localised grazing patterns. Again, young gorse used to be milled locally, and used as nutritious feed, but this practice has died out. Burning is likely to favour bracken and western gorse, so this should not be used as a management tool where these species are likely to invade. Large areas of the cliffs up onto the heath are now dominated by bracken, which limit the areas available for chough to feed and for heathland vegetation to develop. CCW has had some success with a management agreement at Carreg Haul where bracken was sprayed and ponies introduced onto an area of cliff slope which has become very good habitat for chough feeding as a result, and the National Trust has been targeting bracken at its holding at Muriau, but quite large areas remain. A Management Schedule for Mynydd Cilan was drawn up in 2005 involving partners including NT, RSPB, Cyngor Gwynedd and CYMAD and will be implemented here as part of the Llŷn Heaths Project which has just gained Heritage lottery funding.

Where European gorse has spread in some stands of western gorse heath, it will be managed by cutting when it becomes woody and leggy above 120cm in height. Some tall gorse vegetation will be maintained for bird interest.

The ponies tend to concentrate their grazing in the area around the pools where they do a good job in maintaining the wet heath and associated vegetation. Much of the botanical and invertebrate interest is found in and around these pools which are found primarily on the eastern edge of the site. The pools, which are probably man-made, vary in size from 0.06 ha to 0.4 ha. Restoration management will target those pools which have become in-filled with silt and vegetation and a phased programme of pool clearance will be implemented. Three-lobed water-crow's-foot *Ranunculus tripartitus* tends to prefer disturbed damp areas such as poached tracks and would benefit from grazing by heavy stock and more disturbance around the pools. Chamomile *Chamaemelum nobile* is found the largest pool in a short lawn; continued pony grazing is required to maintain the species.

The area is important for its traditional field boundaries, or cloddiau, which can be either simple earth banks or stone-faced earth banks. Historically, the low earth banks had cut material piled onto of them to make a stockproof boundary, and are not an effective boundary on their own. Over time, they become eroded and very compacted in places due to grazing and trampling. Stone-faced banks tend to be much taller, and often have a single fence on top which makes them stockproof and allows continued grazing of their sides. The cloddiau provide a habitat for specialist invertebrates and plants, and are especially important as feeding areas for chough. Older cloddiau are the best for chough, as they begin to disintegrate and improve invertebrate accessibility. However, management on rotation is essential if we are not to lose these features, even if this means that they are less valuable to chough, invertebrates and plants for the first

few years after restoration. We have entered a Management Agreements to pay for clawdd restoration on Mynydd Cilan.

The open fixed-dune grasslands above the cliffs of Porth Neigwl were more heavily grazed in the past, and it may be worth considering a Management Agreement to reintroduce heavier grazing, ideally with mixed stock. The marram grass has become more dense over time, and we have resorted to mechanical and manual clearance of south-facing dune cliffs to provide potential nesting locations for the mason bee. The enclosed short maritime and dune grassland in the fields backing the dunes have been sheep grazed at appropriate levels for many years, allowing the *Lotus corniculatus* to flower to abundantly providing a nectar source for the bees, and sufficiently short to make it good foraging pasture for chough. Since this field is so important, it would be good to secure this management long-term through a management agreement

There are areas to the northern end of the site near Bwlchtocyn which have been mined in the past, and the spoil which remains is contaminated with cadmium, lead and manganese. There are additional manganese trial shafts on Mynydd Cilan. Not much can grow on mine spoil, with the vegetation mostly comprising metal-tolerant species of grass and mosses and a few higher plants. The resulting open vegetation does support invertebrates and is used for feeding by chough.

There is quite a high use of the area for recreation. Both Porth Neigwl and Porth Ceiriad are very good for surfing due to their southwesterly orientation, and are very popular beaches. The Llŷn coastal path runs along the coast here and is well used by walkers. The chough cliff nesting sites are vulnerable to disturbance from climbers, a problem which seems to have been successfully overcome by means of a voluntary climbing ban between February and July, mediated by British Mountaineering Council.

## 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 tenure initially, but these units have also been sub-divided based on broad vegetation types (intertidal, dry heath, wet heath, improved pasture, coastal slope and bracken, dune grassland) and the over-riding importance of four units for their species interest; Units 39 and 31 for mason bee *Osmia xanthomelana*, and Units 40 and 44 for rare vascular plant species associated with the pool and wet heath on Mynydd Cilan.

See attached maps 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 number	SPA	SAC Clogwyni Pen Llŷn	SAC Pen Llŷn a'r Sarnau	SSSI	CCW owned
<i>Porth Ceiriad, Porth Neigwl ac Ynysoedd Sant Tudwal SSSI</i>					
1	✓	✓	X	✓	X
2	✓	✓	X	✓	X
3	✓	✓	X	✓	X
4	✓	X	X	✓	X
5	✓	X	X	✓	X
6	✓	✓	X	✓	X
7	✓	✓	X	✓	X
8	✓	✓	X	✓	X
9	✓	✓	X	✓	X
10	✓	✓	X	✓	X
11	✓	X	X	✓	X
12	✓	✓	X	✓	X
13	✓	✓	X	✓	X
14	✓	✓	X	✓	X
15	✓	✓	X	✓	X
16	✓	X	X	✓	X
17	✓	X	X	✓	X
18	✓	✓	X	✓	X
19	✓	✓	X	✓	X
20	✓	X	X	✓	X
21	✓	✓	X	✓	X
22	✓	X	X	✓	X
23	✓	X	X	✓	X
24	✓	✓	X	✓	X
25	✓	✓	X	✓	X
26	✓	X	X	✓	X
27	✓	✓	X	✓	X
28	✓	X	X	✓	X
29	✓	✓	X	✓	X
30	✓	X	X	✓	X
31	✓	✓	X	✓	X
32	✓	✓	X	✓	X
33	✓	✓	X	✓	X
34	✓	X	X	✓	X
35	✓	✓	X	✓	X
36	✓	✓	X	✓	X
37	✓	✓	X	✓	X
38	✓	✓	X	✓	X
39	✓	✓	X	✓	X
40	✓	✓	X	✓	X
41	✓	X	X	✓	X
42	✓	X	X	✓	X
43	✓	X	✓	✓	X
44	✓	✓	X	✓	X

### 3. THE SPECIAL FEATURES

#### 3.1 Confirmation of Special Features

<i>Designated feature</i>	<i>Relationships, nomenclature etc</i>	<i>Conservation Objective in part 4</i>				
<b><i>SPA features</i></b>						
<p><i>Annex 1 species that are a primary reason for selection of</i></p> <p><b><i>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA</i></b></p> <p>1. The site qualifies under Article 4.1 of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain population of a species listed on Annex 1, in the breeding and non-breeding season:</p> <p><b>Chough <i>Pyrrhocorax pyrrhocorax</i></b></p> <table> <tr> <td>9<sup>p</sup> breeding</td> <td>2.6% GB</td> </tr> <tr> <td>18<sup>i</sup> wintering</td> <td>2.6% GB</td> </tr> </table> <p><sup>p</sup> = pairs  <sup>i</sup> = individuals            Data source = RSPB 2000</p>	9 <sup>p</sup> breeding	2.6% GB	18 <sup>i</sup> wintering	2.6% GB	<p>Includes the arable, semi-improved and improved pasture feeding grounds for chough SSSI feature (see 8 below).</p>	<p>Conservation Objective 1.</p>
9 <sup>p</sup> breeding	2.6% GB					
18 <sup>i</sup> wintering	2.6% GB					
<b><i>SAC features</i></b>						
<p><i>Annex 1 habitats that are a primary reason for selection of</i></p> <p><b><i>Clogwyni Pen Llŷn SAC:</i></b></p> <p><b>2. Vegetated sea cliffs of the Atlantic and Baltic coast</b></p> <p>for which this is considered to be one of the best areas in the United Kingdom  <b>(EU Habitat code : 1230)</b></p>	<p>Due to the mosaic nature of the cliff habitat the coastal dry heath H8 <i>Calluna vulgaris-Ulex gallii</i> lowland heathland (SSSI feature) and the M15/M16 wet heath and associated pools (SSSI feature) will be considered along with the Atlantic Sea Cliff feature</p>	<p>Conservation Objective 2.</p>				

<p><i>Annex 1 habitats that are a primary reason for selection of Pen Llŷn a'r Sarnau SAC:</i></p> <p><b>3. Reefs</b></p> <p>for which this is considered to be one of the best areas in the United Kingdom.</p> <p>(EU Habitat code: 1170)</p>	<p>The intertidal area is used by chough for occasional feeding at low tides and the cliffs include nesting sites.</p>	<p>Conservation Objective 3</p> <p>Conservation Objective 1.</p>
<p><i>Ramsar features</i></p>		
<p>Not applicable</p>		
<p><i>SSSI features</i></p>		
<p><b>4.</b> A population of the endangered mason bee <i>Osmia xanthomelana</i>.</p>	<p>This feature depends on available habitat, and includes the sand dunes, dune grassland and dune heath SSSI feature (see 7 below).</p>	<p>Conservation Objective 4.</p>
<p><b>5.</b> An important area of M15 <i>Scirpus cespitosus</i>- <i>Erica tetralix</i> and M16 <i>Erica tetralix</i>- <i>Sphagnum compactum</i> wet heath with pools and associated rare plant assemblage comprising bog hair grass <i>Deschampsia setacea</i>, chamomile <i>Chamaemelum nobile</i>, pillwort <i>Pilularia globulifera</i>, three-lobed water-crowfoot <i>Ranunculus tripartitus</i> and pale dog-violet, <i>Viola lactea</i>.</p>	<p>This feature includes the pools rare plant assemblage which is an SSSI individually qualifying feature in its own right, but their management is so integral to that of the habitat that they are covered by the same conservation objective.</p>	<p>Conservation Objective 5.</p>
<p><b>6.</b> An important area of H8 <i>Calluna vulgaris</i>- <i>Ulex gallii</i> lowland heathland and H7 <i>Calluna vulgaris</i>- <i>Scilla verna</i> heath , with an associated cliff vascular plant assemblage including dotted sedge <i>Carex punctata</i>, lanceolate spleenwort <i>Asplenium obovatum</i>, ivy broomrape <i>Orobanche hederæ</i>, <i>Hyssopus linarifolium x humifusum</i>, and Southern polypody, <i>Polypodium cambricum</i>.</p>	<p>This feature is covered as part of the Atlantic sea cliff SAC habitat of coastal heath (dry and maritime). This feature includes the cliffs rare plant assemblage which is an SSSI individually qualifying feature in its own right, but their management is so integral to that of the habitat that they are covered by the same conservation objective.</p>	<p>Conservation Objective 2.</p>
<p><b>7.</b> An important area of sand dunes, dune grassland and dune heath.</p>	<p>The population of the endangered mason bee <i>Osmia xanthomelana</i> is dependant on this habitat, and they are covered under the same conservation objective.</p>	<p>Conservation Objective 4.</p>

<p>8. Arable, semi-improved and improved pasture feeding grounds for chough.</p>	<p>Areas of pasture, arable land and semi-improved and improved pasture which are associated with the coastal strip and within easy reach of the cliff breeding sites have been included in the SPA as they are important feeding areas, and are covered by the chough conservation objectives.</p>	<p>Conservation Objective 1.</p>
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## 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:

<b>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA</b>										
<b>Management units:</b>										
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
SPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clogwyni Penllyn SAC	✓	✓	✓	X	X	✓	✓	✓	✓	✓
Penllyn a'r Sarnau SAC	X	X	X	X	X	X	X	X	X	X
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CCW ownership	X	X	X	X	X	X	X	X	X	X

<b>SPA Features</b>										
Chough	KS	KS	KS	KS	KS	KS	KS		KS	KS
<b>SAC Features</b>										
Dry heath (Atlantic Sea Cliff)	KH	KH	KH	x	x	KH	KH	x	KH	KH
Intertidal										
<b>SSSI features</b>										
Mason bee	Sym	Sym	Sym	x	x	x	x	x	x	x
Wet heath and pools	x	x	x	x	x	x	x	x	x	Sym
Pillwort (pools plants)	x	x	x	x	x	x	x	x	x	Sym
Sand dune and dune grassland	Sym	Sym	Sym	x	x	x	x	x	x	x
								Mn		

<b>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA</b>										
<b>Management units:</b>										
	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
SPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clogwyni Penllyn SAC	X	✓	✓	✓	✓	X	X	✓	✓	X
Penllyn a'r Sarnau SAC	X	X	X	X	X	X	X	X	X	X
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CCW ownership	X	X	X	X	X	X	X	X	X	X
<b>SPA Features</b>										
Chough	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS
<b>SAC Features</b>										
Dry heath (Atlantic Sea Cliff)	x	KH	KH	KH	KH	x	x	KH	KH	x
Intertidal										
<b>SSSI Features</b>										
Mason bee	x	x	x	x	x	x	x	x	x	x
Wet heath and pools	x	Sym	x	x	x	x	x	x	x	x
Pillwort (pool plants)	x	Sym	x	x	x	x	x	x	x	x
Bog hair grass (pool plants)	x	Sym	x	x	x	x	x	x	x	x
Chamomile (pool plants)	x	x	x	x	x	x	x	x	x	x
Three-lobed water crowfoot (pool plants)	x	Sym	x	x	x	x	x	x	x	x
Pale dog violet (pool plants)	x	x	x	x	x	x	x	x	x	x
Sand dune and dune grassland	x	x	x	x	x	x	x	x	x	x
<i>Hypericum linarifolium x humifusum</i> (cliff plants)	x	x	x	x	Sym	x	x	x	x	x
Dotted sedge (cliff plants)	x	x	x	x	Sym	x	x	x	x	x
Lanceolate spleenwort (cliff plants)	x	x	x	x	Sym	Sym	x	x	x	Sym
Southern Polypody (cliff plants)	x	x	x	x	Sym	x	x	x	x	x

<b>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA</b>										
<b>Management units:</b>										
	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
SPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Clogwyni Penllyn SAC	✓	X	X	✓	✓	X	✓	X	✓	X
Penllyn a'r Sarnau SAC	X	X	X	X	X	X	X	X	X	X
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>CCW ownership</b>	X	X	X	X	X	X	X	X	X	X
Management Agreement	X	X	X	X	X	X	X	X	X	X
<b>SPA Features</b>										
Chough	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS
<b>SAC Features</b>										
Dry heath (Atlantic Sea Cliff)	KH	x	x	KH	KH	x	KH	x	x	x
Intertidal	x	x	x	x	x	x	x	x	x	x
<b>SSSI Features</b>										
Mason bee	x	x	x	x	x	x	x	x	x	x
Wet heath and pools	x	x	x	x	x	x	x	x	x	x
Pillwort (pool plants)	x	x	x	x	x	x	x	x	x	x
Bog hair grass (pool plants)	x	x	x	x	x	x	x	x	x	x
Chamomile (pool plants)	x	x	x	x	x	x	x	x	x	x
Three-lobed water crowfoot (pool plants)	x	x	x	x	x	x	x	x	x	x
Pale dog violet (pool plants)	x	x	x	x	x	x	x	x	x	x
Sand dune and dune grassland	x	x	x	x	x	x	x	x	x	x
<i>Hypericum linarifolium</i> x <i>humifusum</i> (cliff plants)	x	x	x	x	x	x	x	x	x	x
Dotted sedge (cliff plants)	x	x	x	x	x	x	x	x	x	x
Lanceolate spleenwort (cliff plants)	x	x	x	x	x	x	x	x	x	x
Southern Polypody (cliff plants)	x	x	x	x	x	x	x	x	x	x



<b>Mynydd Cilan, Trwyn y Wylfa ac Ynysoedd Sant Tudwal SPA</b>															
<b>Management units:</b>															
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	
SPA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Clogwyni Penllyn SAC	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	✓	
Penllyn a'r Sarnau SAC	X	X	X	X	X	X	X	X	X	X	X	X	✓		
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
CCW ownership	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>SPA Features</b>															
Chough	x	KS	KS	KS	KS	KS	KS	KS	KS	x	x	KS	K S	KS	x
Dry heath (Atlantic Sea Cliff)	x	KH	KH	x	KH	KH	KH	KH	KH	x	x	x	KH	x	
Intertidal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
<b>SSSI Features</b>															
Mason bee	KS	Sym	Sym	x	x	x	x	x	x	KS	x	x	x	x	x
Wet heath and pools	x	x	x	x	x	x	x	x	x	KH	x	x	x	KH	
Pillwort (pool plants)	x	x	x	x	x	x	x	x	x	KS	x	x	x	KS	
Bog hair grass (pool plants)	x	x	x	x	x	x	x	x	x	KS	x	x	x	KS	
Chamomile (pool plants)	x	x	x	x	x	x	x	x	x	Sym	x	x	x	Sym	
Three-lobed water crowfoot (pool plants)	x	x	x	x	x	x	x	x	x	Sym	x	x	x	Sym	
Pale dog violet (pool plants)	x	x	x	x	x	x	x	x	x	Sym	x	x	x	Sym	
Sand dune and dune grassland	KH	Sym	Sym	x	x	x	x	x	x	KH	x	x	x	x	

<u>Hypericum</u> <u>linarifoliu</u> <u>m x</u> <u>humifusum</u> (cliff plants)	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Dotted sedge (cliff plants)	x	Sym	x	x	x	x	x	x	x	x	x	x	x	x
Lanceolate spleenwort (cliff plants)	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Southern Polypody (cliff plants)	x	x	x	x	x	x	x	x	x	x	x	x	x	x

## 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<sup>1</sup>.

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.

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<sup>1</sup> Web link: <http://www.jncc.gov.uk/page-2199>

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.

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**4.1 Conservation Objective for Feature 1:** Internationally important population (1% or more of the Great Britain population) of breeding and non-breeding season **Chough *Pyrhocorax pyrrhacorax***.

Includes Feature 3 (Pen Llŷn a'r Sarnau SAC): Reefs (intertidal) and Feature 8: Arable, semi-improved and improved pasture feeding grounds for chough.

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**Vision for Feature 1: Chough.**

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

- The breeding population of Chough is at least 9 pairs
- The non-breeding population of Chough is at least 18 individuals
- Sufficient suitable habitat is present to support the populations
- The factors affecting the feature are under control

**Performance indicators for Feature 1: Chough.**

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.

<i>Performance indicators for feature condition</i>		
<i>Attribute</i>	<i>Attribute rationale and other comments</i>	<i>Specified limits</i>
<b>A1.</b> Breeding population	Based on performance indicators and targets as set out in the SPA review site account.	<p><b>Upper limit:</b> None set</p> <p><b>Lower limit:</b> To contribute towards maintaining the Chough population in a favourable condition where, in 3 out of 5 consecutive years:</p> <ul style="list-style-type: none"> <li>• The SPA breeding population is at least 9 pairs</li> <li>• The SPA non-breeding population is at least 18 individuals</li> <li>• The SPA breeding population represents at</li> </ul>

		least 2.6% of the GB breeding and non-breeding populations
<b>A.2.</b> Foraging habitat condition	The foraging habitat for chough will need to be in favourable condition for chough to be favourable.	<p><b>Upper limit:</b> None set</p> <p><b>Lower limit:</b> The coastal dry heath and grassland within Clogwyni Pen Llŷn SAC must achieve favourable condition; &gt;50% of earthbank is suitable for chough feeding.</p> <p>Management Units within the SPA boundary specifically as chough feeding habitat are: Units 4, 5, 11, 16, 17, 20, 22, 23, 26, 28, 30, 34, 41, 42. However, Chough are a Key Species in all Management Units except units 31, 39, 40 and 44.</p>
<b>A.3.</b> Habitat quality	<p>Open heath is defined as vegetation where ericoids or <i>Ulex gallii</i> form &gt;30% cover with &gt;20% open ground (occupied by bare soil, annual plants and/or terricolous macro-lichens) or closely-grazed grassland in any 1m radius.</p> <p>Closely grazed grassland is defined as vegetation in which &gt;50% of the sward is &lt;3cm high in any 1m radius</p>	<p><b>Upper limit:</b> None set (although other interest features on the site need to be considered, and should not be compromised).</p> <p><b>Lower limit:</b> There should be no significant decrease in the proportion of short grazed grassland and open heath relative to that seen in 2003.</p>
<b>Performance indicators for factors affecting the feature</b>		
<b>Factor</b>	<b>Factor rationale and other comments</b>	<b>Operational Limits</b>
<b>F1.</b> Disturbance		<p><b>Upper limit:</b> no breeding attempts to be known to fail because of impact of human disturbance</p> <p><b>Lower limit:</b> None set</p>

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**4.2 Conservation Objective for Feature 2: Vegetated sea cliffs of the Atlantic and Baltic coasts** (MC8 *Festuca rubra* – *Armeria maritima*, MC9 *Festuca rubra* – *Holcus lanatus* and MC10 *Festuca rubra* – *Plantago spp* maritime grassland communities, coastal grassland and maritime cliff and slope). Includes Feature 6: An important area of H8 *Calluna vulgaris*- *Ulex gallii* lowland heath and H7 *Calluna vulgaris*- *Scilla verna* heath with an associated cliff vascular plant assemblage including dotted sedge *Carex punctata*, lanceolate spleenwort *Asplenium obovatum*, ivy broomrape *Orobanche hederæ*, *Hypericum linarifolium x humifusum*, and Southern polypody *Polypodium cambricum*.

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**Vision for Feature 2, Dry coastal heath and grassland**

The vision for this feature includes visions for features 2 and 6 since they are integrally linked. The vision is for it to be in a favourable conservation status, where all of the following conditions are satisfied:

- The aims on this site are to ensure that there is a low sward height and that an open structure is maintained within the cliff top habitats for feeding chough, without causing a decline in the extent or quality of the grassland and heathland.
- Coastal heath will occupy between 23% (area mapped 2003) and 38% (assuming control of bracken and maximum expansion of heathland) of the total site area.
- The remainder of the site will comprise of other semi-natural habitats including dune grassland, maritime grassland, dune heath, marshy grassland, wet heath, mire, maritime cliff and slope, neutral grassland, scrub, and modified habitats such as semi-improved grassland, permanent pasture and arable land.
- The coastal heath will comprise vegetation with *Ulex gallii* present and at least 30% ericoid cover, usually *Calluna vulgaris*, with at least one maritime indicator present such as *Armeria maritima*, *Plantago maritima*, *Plantago coronopus* or *Scilla verna*.
- Healthy populations of the plants which make up the cliff rare plant assemblage will be present.
- Species indicative of rank or unmanaged conditions including the following species should be largely absent: European gorse, *Ulex europeaus*, bracken *Pteridium aquilinum*, foxglove *Digitalis purpurea*, ragwort species *Senecio sp*, dock *Rumex obtusifolius* and nettle *Urtica dioica*.
- Grass species indicative of improvement including creeping bent *Agrostis stolonifera*, cock’s foot *Dactylus glomerata*, perennial rye-grass *Lolium perenne* and Yorkshire fog *Holcus lanatus* should be largely absent.
- All factors affecting the achievement of these conditions, including grazing intensity and burning, will be under control.

**Performance indicators for Feature 2, Dry coastal heath and grassland**

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

<i>Performance indicators for feature condition</i>		
<i>Attribute</i>	<i>Attribute rationale and other comments</i>	<i>Specified limits</i>
<b>A1.</b> Extent of the coastal heath (dry and maritime)	Lower limit is based on 2003 mapped extent.	<i>Upper limit:</i> As limited by other habitats, but not set.  <i>Lower limit:</i> 85.9 ha

		<p>Recording should initially target those Management Units where dry heath is a Key Habitat (KH). These are: Units 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 14, 15, 18, 19, 21, 24, 25, 27, 32, 33, 35, 36, 37 &amp; 38.</p>
<p><b>A2.</b> Condition of the coastal heath (dry and maritime)</p>	<p>At least 75% of coastal heath should be good quality open heath</p> <ul style="list-style-type: none"> <li>• Dwarf-shrubs should make up between 25-75% cover</li> <li>• <i>Ulex gallii</i> cover should be &lt;50% of the dwarf-shrub cover</li> <li>• A quarter of the heathland vegetation will be in early pioneer stage (0-3 years old) at any time (ie. <math>\frac{1}{12}</math> vegetation managed in each year giving a total of <math>\frac{1}{4}</math> in 3 years. Three year old heather is taken to be less than 5cm high).</li> <li>• There should be less than 5% of unbroken stands of bracken, European gorse and other scrub.</li> <li>• There should be no more than 5 fronds bracken or European gorse &gt;50cm tall within a 2m radius in 75% of the habitat.</li> <li>• There should be less than 5% of the following grasses and weedy species indicative of improvement within a 1m radius over 75% of the site: <i>Agrostis stolonifera</i>, <i>Dactylus glomerata</i>, <i>Lolium perenne</i>, <i>Holcus lanatus</i>, <i>Urtica dioica</i> and <i>Cirsium spp.</i></li> <li>• In maritime heath one of the following should be present: <i>Scilla verna</i>, <i>Armeria maritime</i> or <i>Plantago maritima</i>.</li> </ul>	<p><i>Upper limit:</i> Not required <i>Lower limit:</i> At least 75% of coastal heath should be good quality open heath</p> <p>Recording should initially target those Management Units where dry heath is a Key Habitat (KH). These are: Units 1, 2, 3, 6, 7, 8, 9, 10, 12, 13, 14, 15, 18, 19, 21, 24, 25, 27, 32, 33, 35, 36, 37 &amp; 38.</p>



<b>Performance indicators for factors affecting the feature</b>		
<b>Factor</b>	<b>Factor rationale and other comments</b>	<b>Operational Limits</b>
<b>F1.Grazing</b>	Coastal heath and grasslands require grazing to maintain a good open structure and to prevent the heath becoming dominated by scrub, bracken and gorse. Ideally, cattle and ponies are preferable to sheep as they are less-selective grazers. A large proportion of this habitat is Common land, and the number of active graziers has been falling. At present, three graziers manage the land, and they must be encouraged to continue.	Upper limit: Grazing levels will not lead to excessive poaching damage or reduction of dwarf-shrub cover to below 25%.  Lower limit: The site will be lightly grazed by a mixture of stock during the spring and summer.
<b>F2 Burning</b>	Burning is likely to favour bracken and western gorse, so this should not be used as a management tool where these species are likely to invade. Cutting may be more appropriate in these areas. Some cutting or burning management is necessary to maintain a diverse age structure. This should occur as long-term small-patch burning on a 12-year rotation. Burning should not occur unless followed up by grazing.	Upper limit: To maintain open heathland the dwarf-shrub vegetation will be managed by burning or cutting on a 12 year rotation so that $\frac{1}{12}$ of the habitat will be managed each year.  Lower limit: A quarter of the heathland vegetation will be in early pioneer stage (0-3 years old) at any time.
<b>F3 Bracken</b>	Bracken does dominate large areas of the cliffs and has spread up into the heath in places. This has happened due to decreased grazing pressure and a shift away from cattle grazing. Heavy stock control bracken by damaging the	Upper limit: There should be no more than 5 fronds bracken within a 2m radius in 75% of the habitat.  Lower limit: There should no more than 5% of fronds bracken within a 2m radius in 75% of the habitat.
<b>Site-specific habitat definitions</b>		
<b>Open coastal heath</b>	Dwarf-shrub vegetation where $\frac{1}{4}$ of the vegetation has been cut or burnt within the last 3 years and is in early pioneer stage. To maintain open heathland the dwarf-shrub vegetation will be managed by burning or cutting on a 12 year rotation so that $\frac{1}{12}$ of the habitat will be managed each year. On <i>Ulex gallii</i> dominated heath the minimum rotation recommended is 12 years to help break <i>Ulex</i> dominance. On sites with no particular species interest a longer rotation is recommended, however where chough are present there is a need to maintain open vegetation so the minimum 12 year rotation is considered most appropriate. Rapid <i>Ulex</i> re-growth will be controlled by appropriate grazing.	

**4.3 Conservation Objective for Feature 3: Vegetated sea cliffs of the Atlantic and Baltic coasts** (MC8 *Festuca rubra* – *Armeria maritima*, MC9 *Festuca rubra* – *Holcus lanatus* and MC10 *Festuca rubra* – *Plantago spp* maritime grassland communities, coastal grassland and maritime cliff and slope). Includes Feature 5: An important area of M15 *Scirpus cespitosus*-*Erica tetralix* and M16 *Erica tetralix*-*Sphagnum compactum* wet heath with pools and associated rare plant assemblage comprising bog hair grass *Deschampsia setacea*, chamomile *Chamaemelum nobile*, pillwort *Pilularia globulifera*, three-lobed water- crowfoot *Ranunculus tripartitus* and pale dog-violet, *Viola lactea*.

**Vision for Feature 3: Wet heath and plant assemblage**

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

- Wet heath communities and pools will occupy 95% (12ha) of Management Units 40 and 44 as mapped in 2003.
- The following plants will be common in the wet heath: cross-leaved heath *Erica tetralix*, purple moor-grass *Molinia caerulea*, deer grass, *Scirpus cespitosus* carnation sedge *Carex panicea*, Devil’s bit scabious *Succisa pratensis* and tormentil *Potentilla erecta*.
- Healthy populations of the rare species associated with the wet heath and pool communities, comprising bog hair grass *Deschampsia setacea*, chamomile *Chamaemelum nobile*, pillwort *Pilularia globulifera*, three-lobed water- crowfoot *Ranunculus tripartitus* and pale dog-violet, *Viola lactea*, will be present.
- Rushes and species indicative of agricultural modification, such as perennial rye grass *Lolium perenne* and white clover *Trifolium repens* will be largely absent from the wet heath.
- Scrub species such as willow *Salix* and birch *Betula* will also be largely absent from the wet heath.
- All factors affecting the achievement of these conditions are under control.

**Performance indicators for Feature 3, Wet heath and plant assemblage**

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.

<i>Performance indicators for feature condition</i>		
<i>Attribute</i>	<i>Attribute rationale and other comments</i>	<i>Specified limits</i>
<b>A1.</b> Extent of wet heath.	Lower limit is based on 2003 mapped extent.	<i>Upper limit:</i> As limited by other habitats. <i>Lower limit:</i> 95% (12ha) of Management Units 40 and 44 will support wet heath and pool communities
<b>A2.</b> Quality of the wet heath communities.	<ul style="list-style-type: none"> <li>• Dwarf-shrubs should make up between 25-75% cover</li> <li>• Healthy populations of <i>Deschampsia setacea</i>, which is identified as the Key Species (KS) for the wet heath habitat, will be present.</li> <li>• Other rare species associated</li> </ul>	<i>Upper limit:</i> Not required <i>Lower limit:</i> <ul style="list-style-type: none"> <li>• <i>Deschampsia setacea</i> populations will be present in at least 3 discrete locations (ie separated by at least 100m).</li> <li>• Two of the three populations</li> </ul>

	with the wet heath will also be present if the KS is in favourable condition.	must have a minimum of 100 flowering spikes
<b>A3. . Quality of pool communities</b>	<ul style="list-style-type: none"> <li>• Healthy populations of <i>Pilularia globulifera</i> which is identified as the Key Species (KS) for the pools habitat, will be present.</li> <li>• Other rare species associated with the wet heath will also be present if the KS is in favourable condition</li> <li>• No non-native species will be present in the pools</li> </ul>	<p><i>Upper limit:</i> Not required</p> <p><i>Lower limit:</i></p> <ul style="list-style-type: none"> <li>• <i>Pilularia globulifera</i> will be found in a minimum of 5 localities (ditches/pools) separated by at least 100m</li> <li>• <i>Pilularia</i> cover/abundance at these locations will be &gt;2m squared, and will be present within a 2m radius within a 2 x 2m grid</li> </ul>
<b><i>Performance indicators for factors affecting the feature</i></b>		
<b><i>Factor</i></b>	<b><i>Factor rationale and other comments</i></b>	<b><i>Operational Limits</i></b>
<b>F1: Grazing</b>	The ponies do tend to graze open pool areas, but there need to be more heavy stock grazing in this habitat, since disturbance creates opportunities for colonisation of many of the desirable species.	<p>Upper limit: Grazing levels will not lead to a reduction of dwarf-shrub cover to below 25%.</p> <p>Lower limit: The habitat will be grazed by heavy stock during the spring and summer, with sufficient poaching by stock to create colonisation opportunities.</p>
<b>F2: Hydrological regime</b>	The wet heath and pools and their species composition are maintained by a high water table.	<p>No upper limit set.</p> <p>Lower limit: Accepting seasonal variations dependent on the weather, there should be no reduction in the quantity or quality of the water that maintains these communities.</p>
<b>F3: Succession</b>	The open nature of the pools need to be maintained. These are generally quite shallow and are therefore prone to siltation and infilling. If grazing levels are insufficient to prevent successional change, restoration management will be carried out to target those pools which have become in-filled with silt and vegetation and a phased programme of pool clearance will be implemented.	<p>No upper limit set.</p> <p>Lower limit: A minimum of 5 pools will be maintained in an open condition where less than 25% of the pool area is encroached by tall marshy vegetation such as soft rush.</p>

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**4.4 Conservation Objective for Feature 4:** A population of the endangered mason bee *Osmia xanthomelana*. Includes Feature 7: An important area of sand dunes, dune grassland and dune heath

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**Vision for Feature 4, Mason bee.**

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

- Management Units 1, 2, 3, 31, 32, 33 and 39 support habitat which helps maintain sustainable populations of *Osmia xanthomelana*.
- Mason bee is identified as the Key Species (KS) in Management Unit 39 and the conservation objectives below are for this population. In Management Units 1, 2, 3, 31, 32 and 33, chough is the KS, but management should also be sympathetic to the bee.
- The populations will be viable in the long-term, acknowledging normal population fluctuations
- There will be adequate representation of the habitats necessary to support the populations, including:
- Available nesting banks in the dunes comprising low (height of 0.2-2.0m), vertical south to south-west facing sandy banks which are a mosaic of bare and more vegetated sand where the roots of grasses, sand sedge and forbs help to bind the substrate to provide a firmer structure for nest excavation by the mason bee.
- Nearby seepages comprising small, bare muddy trickles with a fine mineral content where water is clearly visible at the surface
- Abundant flowering *Lotus corniculatus* in the dune grassland, cliff slope and cliff top vegetation in early June.
- All factors affecting the achievement of these conditions are under control.

**Performance indicators for Feature 4, Mason bee**

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.

<i>Performance indicators for feature condition</i>		
<i>Attribute</i>	<i>Attribute rationale and other comments</i>	<i>Specified limits</i>
<b>A1.</b> Size of the population	The populations are assessed during single site visits during the first two weeks of June on a calm, sunny day when the air temperature is above 16 degrees centigrade. A search for a maximum of 60 minutes records females at the nest sites, collecting mud or foraging on <i>Lotus corniculatus</i> .	<i>Upper limit:</i> Not required. (Highest record to date 40 females in one visit) <i>Lower limit:</i> Between 1 and 10 females recorded.  Mason bee is identified as the Key Species (KS) in Management Unit 39. In Management Units 1, 2, 3, 31, 32 and 33, chough is the KS, but management should also be sympathetic to the bee.
<b>A2.</b> Condition of the supporting habitat.	To assess the abundance of <i>Lotus corniculatus</i> , a 'W' walk should traverse the enclosed pasture (see Figure 1) and, at 5m intervals, the presence of flowering <i>Lotus</i> within a 50cm radius of	<i>Upper limit:</i> Not required.  <i>Lower limit:</i> <ul style="list-style-type: none"> <li>• 50% of the sampling points should support flowering <i>Lotus</i></li> </ul>

	<p>each sampling point should be recorded. A second 'linear' transect should follow the cliff top path and the presence of flowering <i>Lotus</i> should be assessed in the same manner.</p> <p>To assess the availability of suitable nesting banks (as defined in the vision above), the length of suitable bank within a 25m radius of the following five points (SH28842587, SH28942581, SH28952575, SH28982572 and SH28992575) should be measured, both on the cliff top and cliff slope.</p> <p>Seepages within close vicinity of nesting sites are scarce and are mostly confined to the base of boulder clay cliffs at SH28972572. These comprise small, bare muddy trickles with a fine mineral content where water is clearly visible at the surface. Additional seepages occur at SH28842587 halfway up the cliff face and, whilst mostly bare, do support areas of wet mosses.</p>	<p><i>corniculatus</i>.</p> <ul style="list-style-type: none"> <li>• There should be a minimum of 150m of suitable nesting bank.</li> <li>• There should be a minimum of ten 10x10cm (around hand-sized) patches of suitable seepage.</li> </ul>
<b>Performance indicators for factors affecting the feature</b>		
<b>Factor</b>	<b>Factor rationale and other comments</b>	<b>Operational Limits</b>
<p><b>F1. Livestock grazing</b></p>	<p>The loss of nesting sites as bare banks become vegetated is identified as a threat to the favourable conservation status of the mason bee. The cliff tops at the eastern end of Porth Neigwl are currently ungrazed and the sward is rank with a deep litter layer and supports little <i>Lotus corniculatus</i>. However, <i>Lotus</i> is still abundant in the enclosed pasture, on the eroding cliff face and along the immediate cliff top and so available forage is unlikely to be limiting mason bee numbers at its current abundance. Nesting banks can easily become too vegetated in an absence of grazing and other disturbance at which stage they will be abandoned as nest sites.</p> <p>The reintroduction of grazing to the cliff tops is desirable, but without fencing on difficult terrain, stock would have access to the beach and could wander/be lost. Hardy pony grazing might be negotiated with the landowner.</p> <p>In the absence of grazing, mechanical and manual clearance of south-facing dune cliffs has been undertaken to provide potential nesting locations for the mason bee.</p>	<p><b>Upper limit:</b> Light summer grazing with cattle or ponies (0.6 LSU/ha/year. Tir Gofal rate) on the cliff dune grassland.</p> <p>Moderate sheep grazing on the enclosed pasture and dune grassland to maintain forage from the abundant <i>Lotus corniculatus</i> that occurs here. Overgrazing can prevent the <i>Lotus</i> from flowering and should not occur</p> <p><b>Lower limit:</b> Moderate sheep grazing on the enclosed pasture and dune grassland to maintain forage from the abundant <i>Lotus corniculatus</i> that occurs here.</p>

<p><b>F2. Hydrological regime</b></p>	<p>The seepage area which the bees rely upon to gather mud from to construct their cells are dependent the maintenance of natural drainage from the land above the cliffs. Since much of this is agricultural (and outside the SSSI), drainage improvement works are a threat to the long-term continuation of the seepage areas.</p>	<p><i>Upper limit:</i> Not required.</p> <p><i>Lower limit:</i> There should be a minimum of ten 10x10cm (around hand-sized) patches of suitable seepage available to the bees.</p>

## **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.

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**5.1 Conservation Status and Management Requirements of Feature 1 :** Internationally important population (1% or more of the Great Britain population) of breeding and non-breeding season **Chough *Pyrrhonorax pyrrhonorax***.

Includes Feature 3 (Pen Llŷn a'r Sarnau SAC): Reefs (intertidal), and Feature 8: Arable, semi-improved and improved pasture feeding grounds for chough.

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### **Conservation Status of Feature 1:**

The condition of the chough population at January 2008 is Favourable, Maintained.

The past two or three decades have seen the UK chough population as a whole stabilising while populations around the Welsh coast appear to be making a recovery in numbers. At a local level the breeding population has been stable in recent years and there is no evidence that the area included within the SPA boundary has ever supported significantly higher numbers of breeding birds

The recorded breeding population has been consistently greater than 14 pairs in recent years, and has been described as stable by RSPB. (RSPB data):

<b>YEAR</b>	<b>1982</b>	<b>1990</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1999</b>	<b>1999</b>	<b>2000</b>
<b>TOTAL</b>	7	11	8	7	9	7	9	10	8	6	12

(Note: Some fluctuations in the breeding population probably reflect survey effort).

### **Management Requirements of Feature 1:**

Sufficient breeding, roosting and feeding habitat needs to be available to support the population and allow expansion. Chough require short-grazed grassland, thin soils on rock outcrops and cliffs, open-structure heathland and grazed cloddiau for feeding ; these habitats are all readily available in the SPA. Soil dwelling invertebrates form the principle component of the choughs diet. These invertebrates are most abundant in warm free-draining soils, while chough require short, open swards to feed efficiently. Coprophagus beetle larvae have been shown to be a very important component of the diet of some chough populations but appear to make up only a relatively small part of the diet of the local chough population; on other parts of the Llyn, birds have been showed to forage on strandline arthropods during the winter. The agriculture of the area is predominantly pastoral with sheep, beef and dairy cattle. There are small areas of arable (including some stubble) and widespread silage production. The majority of the pasture is improved permanent pasture. Some fertilising occurs together with liming and occasional reseeding. The silage fields are subject to higher levels of fertiliser application as would be expected. Heathland (dry, wet and maritime heath) and maritime grassland habitats are extensive on the western side of Mynydd Cilan where there is extensive common land and is continuous around the coastal fringe. Additional control of bracken and heathland management will increase available habitat.

The cliffs naturally provide good nesting locations, and disturbance is not a significant factor at present.

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**5.2 Conservation Status and Management Requirements of Feature 2: Vegetated sea cliffs of the Atlantic and Baltic coasts** (H7 *Calluna vulgaris* – *Scilla verna* heath, MC8 *Festuca rubra* – *Armeria maritima*, MC9 *Festuca rubra* – *Holcus lanatus* and MC10 *Festuca rubra* – *Plantago spp* maritime grassland communities, coastal grassland and maritime cliff and slope). Includes Feature 6: An important area of H8 *Calluna vulgaris*- *Ulex gallii* lowland heathland with an associated cliff vascular plant assemblage including dotted sedge *Carex punctata*, lanceolate spleenwort *Asplenium obovatum*, ivy broomrape *Orobanche hederæ*, *Hypericum linarifolium x humifusum*, and Southern polypody *Polypodium cambricum*

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**Conservation Status of Feature 2:**

The condition of the dry coastal and maritime heaths (Atlantic Sea cliff) at January 2008 is Unfavourable, Recovering.

The condition of the feature was assessed by using sample plots placed in key areas of maritime grassland and maritime or coastal heath (SAC Monitoring Report 09/01/04) Overall, the vegetated sea cliffs were recorded to be in an unfavourable condition.

(Note, however, caution regarding dry heath. This is not officially is not a feature of this the Clogwyni Pen Llŷn SAC. Considering that dry heath is makes up a large percentage of this site and it is a notified feature of the component SSSIs it makes little sense that it has not been designated as a SAC feature, and it is intended to rectify this situation).

The assemblage of vascular plants which is supported by this habitat can be considered to be in favourable condition, as they occur on the exposed cliffs and are not impacted by the grazing management.

**Management Requirements of Feature 2:**

The 2004 assessment of condition was based on the fact that habitat was under-grazed in parts and overgrazed in parts. Some good quality western gorse heath is found on the National Trust land but in places this has become invaded by bracken. Bracken encroachment is also a serious problem in some sections of the site. There has been a more active management of the heath since this assessment, including bracken control and rotational cutting of some areas, hence the current qualifier that it is recovering.

A detailed Management Schedule for Mynydd Cilan was drawn up in 2005 involving partners including NT, RSPB, Cyngor Gwynedd and CYMAD and it is intended that this will be implemented as part of the Llyn Heaths Project which has just gained Heritage Lottery funding. This includes grazing regime management, increased emphasis on cattle grazing, long-term small-patch burning of heath and bracken control.



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**5.3 Conservation Status and Management Requirements of Feature 3: Vegetated sea cliffs of the Atlantic and Baltic coasts** (H7 *Calluna vulgaris* – *Scilla verna* heath, H8d *Calluna vulgaris*-*Ulex galli* heath, *Scilla verna* sub-community, MC9 *Festuca rubra* – *Holcus lanatus* and MC10 *Festuca rubra* – *Plantago spp* maritime grassland communities, coastal grassland and maritime cliff and slope). Includes Feature 5: An important area of M15 *Scirpus cespitosus*- *Erica tetralix* and M16 *Erica tetralix*-*Sphagnum compactum* wet heath with pools and associated rare plant assemblage comprising bog hair grass *Deschampsia setacea*, chamomile *Chamaemelum nobile*, pillwort *Pilularia globulifera*, three-lobed water- crowfoot *Ranunculus tripartitus* and pale dog-violet, *Viola lactea*

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**Conservation Status of Feature 3:**

The condition of the wet heath and plant assemblage at January 2008 is Favourable, Unclassified.

**Management Requirements of Feature 3:**

The site is already managed by a mixed grazing regime of ponies, sheep and occasional cattle, and although the vegetation would benefit from a reduction in sheep grazing particularly at the end of the summer/autumn and an increase in cattle, the ponies tend to concentrate their grazing in the area around the pools where they do a good job in maintaining the wet heath and associated vegetation. Much of the botanical interest is found in and around the pools. *Deschampsia setacea* is identified as the key species here. Grazing with heavy stock causes local poaching which provides the plants that specialise in this habitat with new opportunities for colonisation. Some plants prefer disturbed damp areas such as the poached or eroded tracks, and *Ranunculus tripartitus* is identified as the key species in this respect. Again, these species would benefit from grazing by heavy stock and more disturbance around the pools.

The open nature of the pools need to be maintained. They are generally quite shallow and are therefore prone to siltation and infilling. If grazing levels are insufficient to prevent successional change, restoration management will be carried out to target those pools which have become in-filled with silt and vegetation and a phased programme of pool clearance will be implemented. Part of a programme of maintenance occurred in September 2007.

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**5.4 Conservation Status and Management Requirements of Feature 4:** A population of the endangered mason bee *Osmia xanthomelana*. Includes Feature 7: An important area of sand dunes, dune grassland and dune heath

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**Conservation Status of Feature 4:**

The condition of the mason bee *Osmia xanthomelana* at January 2008 is Favourable, Maintained.

Female numbers recorded from 1998 to 2004:

Porth Neigwl – 5 in 2000, 10 in 2001 (3 to 10 recorded [40 from mark- release-recapture studies]), 4 in 2002 (1 to 4), 3 in 2003, 1 in 2004, 2 in 2005.

(Porth Ceiriad – 1 in 1998, 20 in 1999 (1 to 20 recorded), 4 in 2000 (1-4), 3 in 2001).

**Management Requirements of Feature 4**

The conservation objectives are based on information currently available for *Osmia xanthomelana* at Porth Neigwl. Some aspects of the autecology of the mason bee are still unresolved, such as population viability, the number of nesting sites and seepages needed and the density of female forage required, and the objectives should be kept under review as more information becomes available.

Primary management requirements for the site for this species would include the reintroduction of grazing to the cliff slopes above Porth Neigwl, maintenance of moderate grazing of the dune grassland here, and the maintenance of natural drainage to feed the seepage areas. These could potentially be achieved through a management agreement with Ty'n Don, and possibly Towyn.

At Porth Ceiriad, rabbit grazing and natural erosion of the cliffs due to exposure currently maintains the habitat for the bees (Note: Access permission to the perched dunes at Cim Farm has been refused since renotification of the site in 2002, but several eroded areas can be seen from the adjacent footpath and beach which appear suitable for nesting, and forage on the cliff face is plentiful).

## **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.

<b>Unit Number</b>	<b>CCW Database Number</b>	<b>Unit Name</b>	<b>Summary of Conservation Management Issues</b>	<b>Action needed?</b>
001	001099	Towyn (1)	Undergrazing of coastal slope. Issues with landowners not wishing to put stock on land open to the cliffs and beach. Needs pony or cattle grazing.	Yes
002	001100	Ty'n Don (1)	Undergrazing of coastal slope. Issues with landowners not wishing to put stock on land open to the cliffs and beach. Needs pony or cattle grazing.	Yes
003	001101	Ty'n Don (2)	This field is open to Unit 91, where grazing levels have been maintaining a good flower-rich sward, with abundant bird's foot trefoil, which is crucial for the survival of the mason bee. Recent concerns however that grazing levels have been increased, with less flowers available.	Yes
004	001102	Ty Newydd	This unit is considered to be under appropriate conservation management.	No
005	001103	Nant (2)	This unit is considered to be under appropriate conservation management.	No
006	001104	Cilan Fawr (2)	Part of the Carreg y Haul Management Agreement. No outstanding issues	No
007	001105	Cilan Fawr (1)	Carreg Haul. Land within a current Management Agreement. Bracken was controlled and pony grazing introduced. No issues outstanding.	No
008	001106	Castell Cottage	Small outlier unit. No known issues.	No
009	001107	Castell Bach	Small unit associated with properties. No known management issues.	No
010	001108	National Trust (1)	National Trust land. Unit has improved in recent years, and although condition varies, overall, it is very good. The whole of Mynydd Cilan grazed as one unit with ponies and sheep. Ideally, there should be more pony grazing, and control of bracken.	Yes
011	001109	Cilan Fawr (6)	This unit is considered to be under appropriate conservation management.	No
012	001110	Cilan Fawr (4)	The land in this unit is part of a larger management agreement primarily focussed on cough - particularly cloddiau restoration and pony grazing. This area of heath is pony grazed, with occasion very small patch burning. The condition of the heath is quite good, although heavier pony grazing the whole site would be desirable in the long-term. No major issues	No
013	001111	Cilan Fawr (3)	Coastal heath pony grazed and in quite good condition - no major issues. More pony grazing would be desirable long-term.	Yes

<b>Unit Number</b>	<b>CCW Database Number</b>	<b>Unit Name</b>	<b>Summary of Conservation Management Issues</b>	<b>Action needed?</b>
014	001112	Pen y Mynydd	Area of heath managed by cutting on rotation and grazing. Good management. No issues.	No
015	001113	Common (2)	Common land. Condition of the heath and maritime grassland variable over this large open unit, and mostly quite good. Some areas need bracken control, but over all it would benefit from grazing with more heavy stock. Graziers - three active - have sheep, and ponies also graze from adjoining open units.	Yes
016	001114	Tyn Don (6)	This unit is considered to be under appropriate conservation management.	No
017	001115	Penlan (2)	This unit is considered to be under appropriate conservation management.	No
018	001116	Penllan (1)	No known issues.	No
019	001117	National Trust (2)	Traditionally a stronghold for chough, now becoming a bit scrubby and needs clearance in places and paths opening up to allow stock grazing. RSPB may be willing to contribute funding to allow NT to do this work?	Yes
020	001118	National Trust (4)	This unit is considered to be under appropriate conservation management.	No
021	001119	Cae Glas (1)	Undergrazing also an issue here? Scrub invasion? Needs investigation.	Yes
022	001120	Cae Glas (2)	This unit is considered to be under appropriate conservation management.	No
023	001121	Bwlch y Clawdd (2)	This unit is considered to be under appropriate conservation management.	No
024	001122	Bwlch y Clawdd (1)	Undergrazing also an issue here? Scrub invasion? Needs investigation.	Yes
025	001123	Bodlondeb (1)	Undergrazing also an issue here? Scrub invasion? Needs investigation.	Yes
026	001124	Bodlondeb (2)	This unit is considered to be under appropriate conservation management.	No
027	001125	Ceiriad	Undergrazing also an issue here? Scrub invasion? Needs investigation.	Yes
028	001126	Nant y Big (2)	This unit is considered to be under appropriate conservation management.	No
029	001127	Nant y Big (1)	Undergrazing also an issue here? Scrub invasion? Needs investigation.	Yes
030	001128	National Trust (5)	This unit is considered to be under appropriate conservation management.	No
031	001129	Cim Farm	This unit is considered to be under appropriate conservation management.	No
032	001130	National Trust (3)	NT has records that the earth banks supported the mason bee 1996. Not recorded recently. Unmanaged - dense heath with rank gorse and bracken. Needs management - cut paths to allow stock to graze.	Yes

<b>Unit Number</b>	<b>CCW Database Number</b>	<b>Unit Name</b>	<b>Summary of Conservation Management Issues</b>	<b>Action needed?</b>
033	001131	Cim Farm (1)	Unit separated due to importance of mason bee as a priority species. Previous enforcement work here due to damage to perched dunes by owner during rabbit control. Regular monitoring by specialists from Liverpool University on contract to HQ. Condition favourable at present.	No
034	001132	Cim Farm (3)	This unit is considered to be under appropriate conservation management.	No
035	001133	Penrhyn Bach	Small unit includes land which has been contaminated by mine spoil from previous workings. Not core to the features, although sparse vegetation may mean feeding opportunities for chough. Management needs unknown.	Yes
036	001134	Cornish Row	Includes land which has been contaminated by mine spoil from previous workings. Some areas of heath? Parts not core to the features, although sparse vegetation may mean feeding opportunities for chough. Management needs not known.	Yes
037	001135	St Tudwals East	Management issues unknown.	Yes
038	001136	St Tudwals West	Management issues unknown.	Yes
039	001137	Ty'n Don (4)	Grazing levels have been maintaining a good flower-rich sward in this field, with abundant bird's foot trefoil, which is crucial for the survival of the mason bee. In recent years, however, there have been concerns that the grazing levels have increased to the detriment of the flowering species, and the knock-on effects for the bees.	Yes
040	001138	Common (1)	This unit was identified as an area important for the wet heath communities and pools that support an assemblage of rare plants, and management should be tailored for these. Recent management to open up a proportion of the pools and provide colonisation opportunities was very successful. Grazing levels are about right as the ponies tend to congregate about the pools. No outstanding issues.	No
041	001139	Pen y Mynydd	This unit is considered to be under appropriate conservation management.	No
042	001140	Cim Farm (4)	This unit is considered to be under appropriate conservation management.	No
043	001141	Intertidal	Identify any issues and remedies through the updating and revision of the SAC management plan for Pen Llyn a'r Sarnau SAC in 2008-09. This work to be led by the relevant authorities for the SAC (Countryside Council for Wales, Gwynedd Council, Ceredigion County Council, Powys County Council, Snowdonia National Park Authority, North Western & North Wales Sea Fisheries Committee, Environment Agency Wales, Dwr Cymru, Severn Trent Water and Trinity House), working with the SAC Liaison Group and other groups, organisations and individuals.	No

<b>Unit Number</b>	<b>CCW Database Number</b>	<b>Unit Name</b>	<b>Summary of Conservation Management Issues</b>	<b>Action needed?</b>
044	002178	Cilan Fawr (5)	This unit was identified as part as an area important for the wet heath communities and pools which support an assemblage of rare plants. Recent management to open up a proportion of the pools and provide colonisation opportunities was very successful. Grazing levels are about right as the ponies tend to congregate about the pools. No outstanding issues.	No
045	002997	Nant y Big	Part of the site which seems to be only Clogwyni Penllyn and SSSI, and not part of the SPA, as it should be. Needs amending at review. No known management issue. Needs investigation.	Yes

## **7. GLOSSARY**

This glossary defines 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.

<b>Action</b>	A recognisable and individually described act, undertaking or <b>project</b> of any kind, specified in section 6 of a <b>Core Management Plan</b> or <b>Management Plan</b> , as being required for the <b>conservation management</b> of a site.
<b>Attribute</b>	A quantifiable and monitorable characteristic of a <b>feature</b> that, in combination with other such attributes, describes its <b>condition</b> .
<b>Common Standards Monitoring</b>	A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to <b>monitoring</b> and reporting on the <b>features</b> of sites designated for nature conservation, supported by guidance on identification of <b>attributes</b> and monitoring methodologies.
<b>Condition</b>	A description of the state of a feature in terms of qualities or <b>attributes</b> 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.
<b>Condition assessment</b>	The process of characterising the <b>condition</b> of a <b>feature</b> with particular reference to whether the aspirations for its condition, as expressed in its <b>conservation objective</b> , are being met.
<b>Condition categories</b>	The <b>condition</b> of <b>feature</b> can be categorised, following <b>condition assessment</b> as one of the following <sup>2</sup> :  Favourable: maintained; Favourable: recovered; Favourable: un-classified Unfavourable: recovering; Unfavourable: no change; Unfavourable: declining; Unfavourable: un-classified Partially destroyed; Destroyed.
<b>Conservation management</b>	Acts or undertaking of all kinds, including but not necessarily limited to <b>actions</b> , taken with the aim of achieving the

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<sup>2</sup> See JNCC guidance on Common Standards Monitoring <http://www.jncc.gov.uk/page-2272>

**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**.<sup>3</sup>

**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.**

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<sup>3</sup> A full definition of favourable conservation status is given in Section 4.



<b>Integrity</b>	See <b>site integrity</b>
<b>Key Feature</b>	The habitat or species population within a <b>management unit</b> that is the primary focus of <b>conservation management</b> and <b>monitoring</b> in that unit.
<b>Management Plan</b>	The full expression of a designated site's legal status, <b>vision, features, conservation objectives, performance indicators</b> 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 <b>the Core Management Plan</b> ) and sets of electronically stored information.
<b>Management Unit</b>	An area within a site, defined according to one or more of a range of criteria, such as topography, location of <b>features</b> , tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which <b>conservation management</b> and <b>monitoring</b> 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.
<b>Monitoring</b>	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 <b>Common Standards Monitoring</b> , the formulated standard is the quantified expression of favourable <b>condition</b> based on <b>attributes</b> .
<b>Operational limits</b>	The levels or values within which a <b>factor</b> is considered to be acceptable in terms of its influence on a <b>feature</b> . 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.
<b>Performance indicators</b>	The <b>attributes</b> and their associated <b>specified limits</b> , together with <b>factors</b> and their associated <b>operational limits</b> , which provide the standard against which information from <b>monitoring</b> and other sources is used to determine the degree to which the <b>conservation objectives</b> for a <b>feature</b> are being met. Performance indicators are part of, not the same as, conservation objectives. See also <b>vision for the feature</b> .
<b>Plan or project</b>	<b>Project:</b> 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. <b>Plan:</b> a document prepared or adopted by a public body or statutory undertaker, intended to influence decisions on the carrying out of <b>projects</b> . Decisions on plans and projects which affect Natura 2000 and Ramsar sites are subject to specific legal and policy procedures.
<b>Site integrity</b>	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.

<b>Site Management Statement (SMS)</b>	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.
<b>Special Feature</b>	See <b>feature</b> .
<b>Specified limit</b>	The levels or values for an <b>attribute</b> which define the degree to which the attribute can fluctuate without creating cause for concern about the <b>condition</b> of the <b>feature</b> . 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.
<b>Unit</b>	See <b>management unit</b> .
<b>Vision for the feature</b>	The expression, within a <b>conservation objective</b> , of the aspirations for the <b>feature</b> concerned. See also <b>performance indicators</b> .
<b>Vision Statement</b>	The statement conveying an impression of the whole site in the state that is intended to be the product of its <b>conservation management</b> . A 'pen portrait' outlining the <b>conditions</b> that should prevail when all the <b>conservation objectives</b> are met. A description of the site as it would be when all the <b>features</b> are in <b>favourable condition</b> .

## **8. REFERENCES**

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