

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

**CORE MANAGEMENT PLAN  
INCLUDING CONSERVATION OBJECTIVES**

**FOR**

**Glynllifon SAC**

**Version: 1  
Date: March 2008**

**Approved by: NR Thomas 10th April 2008**

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



## **CONTENTS**

### **Preface: Purpose of this document**

1. **Vision for the Site**
  
2. **Site Description**
  - 2.1 **Area and Designations Covered by this Plan**
  - 2.2 **Outline Description**
  - 2.3 **Outline of Past and Current Management**
  - 2.4 **Management Units**
  
3. **The Special Features**
  - 3.1 **Confirmation of Special Features**
  - 3.2 **Special Features and Management Units**
  
4. **Conservation Objectives**
  - 4.1 **Background to Conservation Objectives**
  - 4.2 **Conservation Objective for Feature 1:**
    - 4.2.1 Lesser horseshoe bat *Rhinolophus hipposideros* (1303).
  
5. **Assessment of Conservation Status and Management Requirements:**
  - 5.1 **Conservation Status and Management Requirements of Feature 1:**
    - 5.1.1 Lesser horseshoe bat *Rhinolophus hipposideros* (1303).
  
6. **Action Plan: Summary**
  
7. **Glossary**
  
8. **References**

## **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.

The population of the lesser horseshoe bat using the Glynllifon mansion and its associated roost sites should remain stable or increase in number. This should be considered in the context of any changes in summer roosts in close proximity, as bats may move between nursery roosts. The data should be compared with any wider changes in the population in Wales as detected by the annual monitoring of summer roosts.

In particular, management should aim to maintain the various structures used as roost sites in optimum condition for use as either summer or winter hibernation sites. The management of the site and surroundings should also maintain, and enhance the areas, which are used by the lesser horseshoe bat as foraging areas and flight routes.

## **2. SITE DESCRIPTION**

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

Grid reference: SH 456 550

Unitary authority: Cyngor Gwynedd

Area (hectares): 189.27

Designations covered: Glynllifon (SAC) is notified as one SSSI – Glynllifon SSSI.

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 Unit Map.

### **2.2 Outline Description**

Glynllifon SAC contains maternity roosts at management units 16 (Glynllifon Mansion), 32 (Melin y Cim) and 36 (Pen y Bont), and two hibernation roosts / areas at management units 16 (Glynllifon Mansion) (which is used both as a hibernation and a maternity roost) and 37 (Simdde – dylluan Copper Mine) old mine workings in the Nantlle Valley. In addition areas of habitat surrounding these roosts have been included; a tree lined stream linking management units 32 and 36 (Melin-y-Cim and Pen y Bont), a large amount of woodland surrounding unit 16 (Glynllifon Mansion) and a small area of hillside unit 37 surrounding the Simdde – dylluan mine levels (Wilkinson, 2006).

Regular data is collected regarding the number of bats that use each of these roosts. Exit counts are carried out twice a year following the standard lesser horseshoe bat monitoring protocol at all three maternity roosts. A data logger is additionally installed at management unit 16 (Glynllifon Mansion). The data logger records the number of bats exiting and returning to the roost, throughout the year. The data is downloaded and analysed by Peter Andrews (Andrews, 2002, 2004a and 2004b).

However, there is only limited data for management unit 37 (Simdde – dylluan mine levels), and further survey is required to establish how and when the bats use these mines (Wilkinson, 2006).

Although some habitat is included within the SAC boundary, the bats use a much wider area for feeding and commuting and there are also known linked roosts outside of the SAC boundary. All these aspects need to be considered when determining the conservation status of the population of lesser horseshoe bats. Radio-tracking work has been undertaken to try to identify the feeding areas and flight lines used. The work was commissioned largely to determine the potential effects of the A487 road scheme. The data needs to be analysed to determine if there are key areas of habitat, flight routes or roosts, which need to be maintained in the landscape in order to support this population of bats. Further research is required to determine how CCW assesses the conservation status of this mobile species (Wilkinson, 2006).

### **2.3 Outline of Past and Current Management**

In the past the only area which has been notified as SSSI for the bats is the mansion house, in particular the cellars and boiler room, which have been frequently used by bats. Very little of the surrounding woodland was previously included in the site, but there has been good co-operation between the private owner of the Mansion, tenant of the Estate (Gwynedd County Council, who run part of the site as an Agricultural College), and CCW, over the management of some of the woodland closest to the mansion house. Apart from the woodland the remainder of the former Glynllifon Estate is primarily used for cattle and sheep grazing by the College farm. Most of the land surrounding the estate is also used for stock grazing and includes some areas of wetter grazing as well as wooded river corridors.

Since CCW became aware of the roost at Glynllifon Mansion the numbers of bats has risen and at present makes it one of the largest known roosts for this species in Europe, however in the last few years there has been a decline in the recorded numbers of lesser horseshoe bats, despite the rising trends for the species in England and Wales. The bats roost in the cellars below the mansion house and use different parts during the summer and winter. One section of the cellars is heated using electric heaters to maintain a steady, warm temperature needed when the bats are pregnant and after the young have been born. During the winter the bats use other parts of the cellars, which are cooler in order to hibernate.

The mansion house, though currently unoccupied, is being maintained with an ultimate aim of being converted to a hotel/ conference centre. This work will ensure the existing bat roost is safeguarded.

Improvements to the A487 trunk road, (which runs in a north – south direction, and is immediately east of the SAC) could be having an adverse effect on the lesser horseshoe bat population at Glynllifon SAC. Lesser horseshoe bat foraging areas were identified (one of which spanned the A487), and in 2000 two important flight corridors were identified which went across the new road route (Stebbing, 2000). A number of mitigation measures were implemented as part of the construction contract. Details of the mitigation can be found in Billington (2008). Furthermore, in accordance with The Conservation (Natural Habitats, &c.) Regulations 1994, the National Assembly for Wales (NAW) are re-appraising the impact of the A487 road scheme and the effectiveness of the mitigation measures (Billington, 2008).

### **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 land ownership details.

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

Table 1 confirms the relationships between the management units and the designations covered:

**Table 1.** Management unit number and designations covered within each management unit.

<b>Glynllifon SSSI</b>				
<b>Unit number</b>	<b>SAC</b>	<b>SSSI</b>	<b>CCW owned</b>	<b>Other</b>
1	✓	✓	x	
2	✓	✓	x	
3	✓	✓	x	
4	✓	✓	x	
5	✓	✓	x	
6	✓	✓	x	
7	✓	✓	x	
8	✓	✓	x	
9	✓	✓	x	
10	✓	✓	x	
11	✓	✓	x	
12	✓	✓	x	
13	✓	✓	x	
14	✓	✓	x	
15	✓	✓	x	
16	✓	✓	x	
17	✓	✓	x	
18	✓	✓	x	
19	✓	✓	x	
20	✓	✓	x	
21	✓	✓	x	
22	✓	✓	x	
23	✓	✓	x	
24	✓	✓	x	
25	✓	✓	x	
26	✓	✓	x	
27	✓	✓	x	
28	✓	✓	x	
29	✓	✓	x	
30	✓	✓	x	
31	✓	✓	x	
32	✓	✓	x	
33	✓	✓	x	
34	✓	✓	x	
35	✓	✓	x	
36	✓	✓	x	
37	✓	✓	x	

### 3. THE SPECIAL FEATURES

#### 3.1 Confirmation of Special Features

**Table 2.** Confirmation of special features at Glynllifon SAC

<i>Designated feature</i>	<i>Relationships, nomenclature etc</i>	<i>Conservation Objective in part 4</i>
<b>SAC features</b>		
<i>Annex II species present that are a primary reason for site selection</i>		
1. Lesser horseshoe bat <i>Rhinolophus hipposideros</i> (1303).	Graded as a “B” feature for the site.	1
<b>SPA features</b>		
Not applicable		
<b>Ramsar features</b>		
Not applicable		
<b>SSSI features</b>		
1. Lesser horseshoe bat <i>Rhinolophus hipposideros</i>	SSSI feature is identical to the SAC feature, and therefore should be treated the same.	1

#### 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.

Tables 3a - d below, set out the relationship between the special features and management units identified in this plan. Tables 3a – d only list the SAC feature, however, it is worth noting that the SSSI feature (lesser horseshoe bat) is deemed as the same feature, and where the SAC feature occurs, the SSSI feature also occurs.

**Table 3a.** Special features and management units at Glynllifon SAC

Glynllifon SAC	Management unit									
	1	2	3	4	5	6	7	8	9	10
SAC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SAC features</b>										
1. Lesser horseshoe bat	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS

**Table 3b.** Special features and management units at Glynllifon SAC

Glynllifon SAC	Management unit									
	11	12	13	14	15	16	17	18	19	20
SAC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SAC features</b>										
1. Lesser horseshoe bat	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS

**Table 3c.** Special features and management units at Glynllifon SAC

Glynllifon SAC	Management unit									
	21	22	23	24	25	26	27	28	29	30
SAC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>SAC features</b>										
1. Lesser horseshoe bat	KS	KS	KS	KS	KS	KS	KS	KS	KS	KS

**Table 3d.** Special features and management units at Glynllifon SAC

Glynllifon SAC	Management unit						
	31	32	33	34	35	36	37
SAC	✓	✓	✓	✓	✓	✓	✓
SSSI	✓	✓	✓	✓	✓	✓	✓
<b>SAC features</b>							
1. Lesser horseshoe bat	KS	KS	KS	KS	KS	KS	KS

## 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.

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.

---

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

---

**4.1 Conservation Objective for Feature 1:  
Lesser horseshoe bat *Rhinolophus hipposideros* (EU Habitat Code 1303).**

---

**Vision for feature 1**

- The natural range of lesser horseshoe bats will not be reduced, nor be likely to be reduced for the foreseeable future.
- There is, and will continue to be, sufficient habitat to maintain the lesser horseshoe bat population on a long-term basis.
- The three maternity roosts will continue to be occupied annually by lesser horseshoe bats and their babies
  - Glynllifon Mansion (Unit 16).
  - Melin y Cim (Unit 32).
  - Pen y Bont (Unit 36).
- There will be a sufficiently large area of suitable habitat surrounding these roosts to support the bat population, including continuous networks of sheltered, broadleaved and coniferous woodland, tree lines and hedgerows connecting the various types of roosts with areas of insect-rich grassland and open water.
- All factors affecting the achievement of these conditions are under control.

**Performance indicators for Feature 1**

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

**Table 4.** Performance indicators for the lesser horseshoe bat at Glynllifon SAC (from Wilkinson, 2006).

<b>Performance indicators for feature condition (2006)</b>			
<b>Attribute</b>	<b>Specified limits</b>		<b>Attribute rationale and comments</b>
<b>A1. Extent (bats) Maternity roosts.</b>	Upper limit:	None set.	The fundamental objective of the site will be to maintain, and if possible, increase the population of lesser horseshoe bats.  Unit 16 pre-breeding count corresponds to the automated count data from 2000.  Units 32 and 36 pre-breeding count corresponds to the automated count data using standard protocol (Halliwell and Matthews, 2002).
	Lower limit:	On at least one occasion between the 29 <sup>th</sup> May and the 17 <sup>th</sup> June of every year, there will be: <ul style="list-style-type: none"> <li>• 580 pre-breeding adults at unit 16 (Glynllifon Mansion).</li> <li>• 30 pre-breeding adults at unit 32 (Melin y Cim).</li> <li>• 40 pre-breeding adults at unit 36 (Pen y Bont).</li> </ul>	
<b>A2. Extent (bats) Hibernacula</b>	Upper limit:	None set.	The fundamental objective of the site will be to maintain, and if

**Performance indicators for feature condition (2006)**

<b>roosts.</b>	Lower limit:	<p>During at least one surveillance visit between 1<sup>st</sup> January and 28<sup>th</sup> February of every year, there will be:</p> <ul style="list-style-type: none"> <li>• 180 bats at unit 16 (Glynllifon Mansion).</li> <li>• Continued use by bats of unit 37 (Simdde – dylluan mine levels).</li> </ul>	<p>possible, increase the population of lesser horseshoe bats.</p> <p>Unit 16 count data corresponds to 2000 data from internal count using NBMP protocol</p>
----------------	--------------	---	---

<b>Performance indicators for factors affecting the feature (2006)</b>			
<b>Factor</b>	<b>Operational Limits</b>		<b>Factor rationale and other comments</b>
<b>F1. Site security (maternity and hibernation roosts).</b>	Upper limit:	None set.	Derived from Common Standards Monitoring advice.  It is essential to minimise disturbance within roosts and potential harm to bats.
	Lower limit:	<ul style="list-style-type: none"> <li>• Access to the site is under the control of the owner / occupier or site secured against unauthorised access.</li> <li>• Doors, gates or security fences in sound condition and able to resist unauthorised access attempts.</li> <li>• Grilles in good condition, with no evidence of forced entry through or around the grille and no damage caused by attempts at entry.</li> <li>• Security fence in sound condition.</li> </ul>	
<b>F2. External condition of the building (maternity roost).</b>	Upper limit:	None set.	Derived from Common Standards Monitoring advice.  Fabric of building sufficient to maintain roost conditions internally.
	Lower limit:	<ul style="list-style-type: none"> <li>• Weatherproof roof. The roof covering materials (slates, tiles etc.) in good condition with no significant gaps, slippage or damage.</li> <li>• No holes large enough to allow soaking of roof timbers, excessive heat loss or high light levels in the roost area.</li> <li>• Walls sound, rainwater goods in adequate condition.</li> <li>• The building is structurally stable. No significant deterioration in overall condition of the building.</li> </ul>	
<b>F3. Roost entrance –</b>	Upper limit:	None set.	Derived from Common Standards Monitoring advice.

**Performance indicators for factors affecting the feature (2006)**

<b>buildings and underground sites (maternity and hibernation roosts).</b>	Lower limit:	<ul style="list-style-type: none"> <li>• Unobstructed roost entrance large enough for bats to fly through unimpeded. Normal minima: 300mm x 200mm.</li> <li>• No artificial lights shining on access or associated flight paths.</li> <li>• No unplanned new entrances causing a change to ventilation.</li> <li>• No change in size sufficient to affect air-flow and internal temperature.</li> </ul>	
<b>F4. External disturbance (maternity and hibernation roosts).</b>	Upper limit:	Disturbance levels acceptable to bats with: <ul style="list-style-type: none"> <li>• No increase since previous visit.</li> <li>• Human access to roost controlled and limited.</li> </ul>	Derived from Common Standards Monitoring advice.
	Lower limit:	None set.	
<b>F5. Internal condition (maternity and hibernation roosts).</b>	Upper limit:	None set.	Derived from Common Standards Monitoring advice.
	Lower limit:	<ul style="list-style-type: none"> <li>• Low light levels with no through draught (maternity).</li> <li>• No toxic substances present, which would adversely affect the health of the bats (e.g. chemical timber treatment with inappropriate substances).</li> <li>• Cool (8 – 12°C) and dark, once beyond the entrance zone (hibernation).</li> <li>• No significant unplanned change to ventilation or temperature regime (hibernation).</li> </ul>	
<b>F6. Temperature of roost area</b>	Upper limit:	None set.	Derived from Common Standards Monitoring advice.

Performance indicators for factors affecting the feature (2006)			
(maternity roost).	Lower limit:	<ul style="list-style-type: none"> <li>• Range of temperatures available to bats with mean temperature in July greater than 20°C.</li> <li>• Maintenance of the heating system within the cellar in unit 16 (Glynllifon Mansion).</li> </ul>	
<b>F7. Internal disturbance (maternity and hibernation roosts).</b>	Upper limit:	<ul style="list-style-type: none"> <li>• Human access to roost area controlled and limited (e.g. grilles on underground sites).</li> <li>• Disturbance is kept to a minimum.</li> </ul>	Derived from Common Standards Monitoring advice.
	Lower limit:	None set.	
<b>A3. Quality (habitat within the SAC boundary).</b>	Upper limit:	None set.	<p><b>Woodland:</b> vegetation dominated (&gt;30% cover) by trees &gt;5m high when mature. The trees can be native or non-native (NCC, 1990).</p> <p><b>Semi-natural broadleaf woodland:</b> vegetation where trees (&gt;30% of trees) do not originate from planting (NCC, 1990).</p> <p><b>Tree lined stream:</b> tree or scrub lined stream corridors with no canopy gaps in the riparian trees and scrub, &gt;5m in length.</p> <p><b>Good condition hedgerow:</b> hedgerows &gt;2m in height with no gaps &gt;5m in length.</p>
	Lower limit:	<ul style="list-style-type: none"> <li>• The extent of the woodland around Glynllifon Mansion (units 6 – 31) is maintained and the extent of the semi-natural broadleaf woodland is at least maintained.</li> <li>• Habitat along the Afon Llyfni between Pen y Bont and Melin y Cim (units 32 – 35) is described as “a tree lined stream”.</li> <li>• Potential flight lines A to G are described as either “tree lined streams” or “good condition hedgerows” (see Map 3 in Wilkinson, 2006).</li> </ul>	

## **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: Lesser horseshoe bat *Rhinolophus hipposideros* (EU Habitat Code 1303).**

---

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

There are three maternity roosts and two hibernation roosts within the SAC and all roosts need to be in favourable condition for the SAC as a whole to be considered in favourable condition. The feature within this site is considered to be in unfavourable condition (based on summer bat counts (2007) and past data from Wilkinson, 2006).

**Table 5.** Assessment of management units at Glynllifon SAC.

<b>Management unit</b>	<b>Unit name</b>	<b>Condition</b>	<b>Date of assessment</b>
Unit 16	Glynllifon Mansion	Unfavourable	2007
Unit 32	Melin y Cim	Unfavourable	2007
Unit 36	Pen y Bont	Favourable	2007
Unit 37	Simdde – dylluan	Unfavourable	2007

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

The three maternity roosts require the most input in terms of active management, as they are buildings and so need regular maintenance. At Glynllifon Mansion (unit 16), the owner has had a Management Agreement with CCW for many years, which entails heating the maternity roost with heaters. There are no management agreements with the owners of Melin y Cim and Pen y Bont maternity roosts, however, it is envisaged that there will be a need for management agreements to be drafted in the future. The hibernation roosts at Simdde – dylluan (unit 37) require very little ongoing management, other than installation of security grilles and monitoring to ensure the entrances are unobstructed and that there is no increase in disturbance.

The management units, which are not maternity or hibernation roosts, will require periodic management, mainly consisting of scrub clearance, hedgerow management and flight path maintenance. The requirement for each management unit where management is deemed necessary is detailed in section 6 of this plan.

Areas outside the SAC, particularly flightlines linking the SAC units are very important to bats and the SAC may need to be extended to include these in the future. Any developments that may affect these will need to go through the Regulation 48 Appropriate Assessment process. Efforts should be made to improve the habitats of these flightlines, through agri-environment schemes and other habitat management opportunities.

In the longer term, it is essential to closely monitor feature condition in all units on an annual basis, both formally and informally, to determine if the feature is in a favourable conservation status. Consideration should also be given to extending the SAC to include more roosts, as there are other very important maternity roosts nearby, and the populations within these are almost certainly linked to those within the SAC.

*Unit 16 (Glynllifon: maternity and hibernation roost) – unfavourable.*

The number of bats counted at the last monitoring visit (2007) was 335 (second count between 8<sup>th</sup> and 17<sup>th</sup> June).

*Unit 32 (Melin y Cim: maternity roost) – unfavourable.*

The number of bats counted at the last monitoring visit (2007) was 0 (first count between 29<sup>th</sup> May and 7<sup>th</sup> June), no counts were recorded in 2006 and 0 for 2005. Melin y Cim has undergone major renovation works and is now in a sound and secure condition. There are a number of small management requirements for the unit, which include planting up a small area to provide a corridor between the Afon Llyfni and the building itself, and to reduce the amount of illumination cast onto the building from a nearby street light, which is an action requiring urgent attention.

*Unit 36 (Pen y Bont: maternity roost) – favourable.*

The number of bats counted at the last monitoring visit (2007) was 52 (second count between 8<sup>th</sup> and 17<sup>th</sup> June). Despite not being the “original” maternity roost, it appears that the new mitigated outbuilding is proving to be a suitable roost for the lesser horseshoe bats. However, the building will require maintenance management in the near future, including roof maintenance, construction of a porch over one of the entrances and some tree planting.

*Unit 37 (Simdde – dylluan: hibernation roost) – unfavourable.*

None of the mine entrances are secure (see F1 in Table 4), and in order for the management unit to be in favourable condition each of the known lesser horseshoe bat hibernacula entrances must be grilled.

## **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>
1	002307	Unit 1	This unit is believed to be in appropriate conservation management	No
2	002308	Unit 2	This unit is believed to be in appropriate conservation management	No
3	002309	Unit 3 Tyddyn Dafydd (a)	This unit is believed to be in appropriate conservation management	No
4	002310	Unit 4 Llwyn Piod (a)	This unit is believed to be in appropriate conservation management	No
5	002311	Unit 5 Tyddyn Dafydd (b)	This unit is believed to be in appropriate conservation management	No
6	002312	Unit 6 Penrallt Villa	This unit is believed to be in appropriate conservation management	No
7	002313	Unit 7 Tyddyn Dafydd (c)	This unit is believed to be in appropriate conservation management	No
8	002314	Unit 8 Coed Gwyddelod	This unit is believed to be in appropriate conservation management	No
9	002315	Unit 9 Lon Cefn Glyn	This unit is believed to be in appropriate conservation management	No
10	002316	Unit 10 Tyddyn Dafydd (d)	This unit is believed to be in appropriate conservation management	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>
11	002317	Unit 11 A499	This unit is believed to be in appropriate conservation management	No
12	002318	Unit 12	This unit is believed to be in appropriate conservation management	No
13	002319	Unit 13 Coleg Glynllifon (a)	This unit is believed to be in appropriate conservation management	No
14	002320	Unit 14 Cyngor Gwynedd	This unit is believed to be in appropriate conservation management	No
15	002321	Unit 15 Coleg Glynllifon (b)	This unit is believed to be in appropriate conservation management	No
16	002322	Unit 16 Coleg Glynllifon (c) [Glynllifon Mansion]	The cellar occupied by the lesser horseshoe bat maternity roost requires maintenance to ensure it remains viable. The electric heaters require annual maintenance. Access to the bat roost must be protected by access grilles.	Yes
17	002323	Unit 17 Coleg Glynllifon (d)	This unit is believed to be in appropriate conservation management.	No
18	002324	Unit 18 Coleg Glynllifon (e)	This unit is believed to be in appropriate conservation management.	No
19	002325	Unit 19 Lon Eifion Cycle Track	This unit is believed to be in appropriate conservation management.	No
20	002326	Unit 20 Garth Dorwen (a)	This unit is believed to be in appropriate conservation management.	No
21	002327	Unit 21 La Baraka	This unit is believed to be in appropriate conservation management.	No
22	002328	Unit 22 Garth Dorwen (b)	This unit is believed to be in appropriate conservation management.	No
23	002329	Unit 23 Dafarn Dudur	This unit is believed to be in appropriate conservation management.	No
24	002330	Unit 24 Uwchlaw'r Rhos	This unit is believed to be in appropriate conservation management.	No
25	002331	Unit 25 Pen Bryn Mawr	This unit is believed to be in appropriate conservation management.	No
26	002332	Unit 26 The Rookery	This unit is believed to be in appropriate conservation management.	No
27	002333	Unit 27 Cae'n Morfa Uchaf (a)	This unit is believed to be in appropriate conservation management.	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>
28	002334	Unit 28 The Stonehouse	This unit is believed to be in appropriate conservation management.	No
29	002335	Unit 29 Cae'n Morfa Uchaf (b)	This unit is believed to be in appropriate conservation management.	No
30	002336	Unit 30 Pant Eithinog Road	This unit is believed to be in appropriate conservation management.	No
31	002337	Unit 31 Pant Eithinog	This unit is believed to be in appropriate conservation management.	No
32	002338	Unit 32 11 Eryri Estate [Melin y Cim]	Further habitat enhancement with appropriately planted trees and resolution of existing external illumination of the building is required.	Yes
33	002339	Unit 33 Welsh Water	This unit is believed to be in appropriate conservation management.	No
34	002340	Unit 34 Llwyn Impiau (a)	This unit is believed to be in appropriate conservation management.	No
35	002341	Unit 35 Eithinog Wen	This unit is believed to be in appropriate conservation management.	No
36	002342	Unit 36 Llwyn Impiau (b) [Pen y Bont]	Important maternity roost. Urgent need for building maintenance including repairs to the roof. Associated tree planting and porch construction required.	Yes
37	002343	Unit 37 Tal y Mignedd Isaf [Simdde-Dylluan]	Need to protect hibernacula site by means of grilles.	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 <b>conservation objectives</b> 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.
<b>Conservation objective</b>	The expression of the desired <b>conservation status</b> of a <b>feature</b> , expressed as a <b>vision for the feature</b> and a series of <b>performance indicators</b> . The conservation objective

---

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

for a feature is thus a composite statement, and each feature has one conservation objective.

<b>Conservation status</b>	A description of the state of a <b>feature</b> that comprises both its <b>condition</b> and the state of the <b>factors</b> affecting or likely to affect it. Conservation status is thus a characterisation of both the current state of a feature and its future prospects.
<b>Conservation status assessment</b>	The process of characterising the <b>conservation status</b> of a <b>feature</b> with particular reference to whether the aspirations for it, as expressed in its <b>conservation objective</b> , 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 <b>conservation management</b> , lies mainly in the details of the assessment of feature <b>condition</b> , <b>factors</b> and trend information derived from comparisons between current and previous conservation status assessments and condition assessments.
<b>Core Management Plan</b>	A CCW document containing the conservation objectives for a site and a summary of other information contained in a full site <b>Management Plan</b> .
<b>Factor</b>	Anything that has influenced, is influencing or may influence the <b>condition</b> of a <b>feature</b> . 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 <b>conservation management</b> can also be considered as factors.
<b>Favourable condition</b>	See <b>condition</b> and <b>condition assessment</b>
<b>Favourable conservation status</b>	See <b>conservation status</b> and <b>conservation status assessment</b> . <sup>3</sup>
<b>Feature</b>	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.
<b>Integrity Key Feature</b>	See <b>site integrity</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</b> , <b>features</b> , <b>conservation objectives</b> , <b>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

---

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

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**

- Andrews, P. T. (2002). Automated monitoring of horseshoe bat nursery roosts in Wales, 2000. CCW Science Report No. 518.
- Andrews, P. T. (2004a). Monitoring of Horseshoe bats through the use of automatic bat counters, 2001 – 2003. CCW Science Report. No. 633
- Andrews, P. T. (2004b). Monitoring of Horseshoe bats through the use of automated bat counters, 2004. CCW Science Report. No. 694.
- Billington, G. (2008). A487 Llanwnda to south of Llanllyfni bat surveys interim report. Period May to September 2007. CONFIDENTIAL. Report 23. Greena Ecological Consultancy.
- Halliwell, E. C. and Matthews, J. E. (2002). Lesser horseshoe bat summer roost surveillance. 29<sup>th</sup> May – 17<sup>th</sup> June 2000 and 29<sup>th</sup> May – 17<sup>th</sup> June 2001. CCW Natural Science Report. 02/91. CCW, Bangor.
- HMSO (1994). Statutory Instrument 1994 No. 2716. Wildlife Countryside. The Conservation (Natural Habitats, &c.) Regulations, 1994. ISBN 0110457161.
- Nature Conservancy Council (NCC). (1990). Handbook for Phase 1 habitat survey – a technique for environmental audit. England Field Unit. Nature Conservancy Council.
- Stebbins, R. E. (2000). A487 (T) Road improvement lesser horseshoe bat mitigation Glynllifon Estate for TCAP.
- Wilkinson, K. (2006). Glynllifon SAC Monitoring report. CCW internal report. CCW (Llys y Bont Office). Available on request.