

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

**CORE MANAGEMENT PLAN
INCLUDING CONSERVATION OBJECTIVES**

FOR

DYFI ESTUARY / ABER DYFI SPA

Version: 9

Date: 15 April 2008

Approved by: Tracey Lovering

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



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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 site will continue to provide a safe refuge, with all of the environmental conditions necessary to sustain nationally important numbers of over-wintering Greenland white-fronted geese in the long-term.

2. SITE DESCRIPTION

2.1 Area and Designations Covered by this Plan

Grid reference: SN6696
Latitude: 52 32 39 N
Longitude: 03 59 00 W

Unitary authorities: Dyfed, Gwynedd, Powys.

Area (hectares): 2048.11

Designations covered:

The Dyfi SPA extends over part of each of the Dyfi NNR, Dyfi SSSI, Dyfi & Cors Fochno Ramsar site and the Penllyn a'r Sarnau SAC.

Conservation features (other than Greenland white-fronted goose), occurring within the SPA are/will be addressed in Penllyn a'r Sarnau SAC or the Dyfi SSSI/ Ramsar plans.

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 attached Unit Map.

2.2 Outline Description

The Dyfi Estuary is located on the west coast of Wales on the boundary between Ceredigion, Gwynedd and Powys. The SPA comprises the estuary, with adjoining saltmarsh, marshy grassland and improved grassland. The estuarine complex is of outstanding physiographic interest. It includes sandbanks, mud-flats, saltmarsh, peatbogs, river channels and creeks, with an extensive sand dune complex across the mouth of the estuary. The estuary itself is a feature of the Penllyn a'r Sarnau marine SAC.

The site is of importance as a traditional wintering area for Greenland White-fronted Goose *Anser albifrons flavirostris* – the most southerly regularly used area for this population in the UK. Until the early 1980s the geese roosted on the estuary and flew inland either to the Cambrian mountains or to the raised bog of Cors Fochno to feed. The geese now use the saltmarsh and grasslands for feeding and roost on the sandbanks and mud-flats.

A general decline in Greenland white-front populations is reported due to the birds having a delayed age of first breeding, leading to a reduction of young birds. It appears that something is stopping the birds from achieving breeding condition and therefore very few geese are surviving long enough to breed (Fox A.D. pers.comm. 2008). Interspecific competition with Greater Canada Geese on the breeding grounds in Greenland, and poor weather, have been cited as possible reasons but the influential factors are not fully understood. Worldwide numbers have declined from a high of 35,600 in 99/00 to an estimated 24,895 in 2006 with poor numbers of young recorded in that period. This is reflected in the Dyfi wintering flock, which has contained very few young geese in recent years, and where wintering numbers have declined steadily from 167 in 1998/99 to a maximum of 102 in the last three winters (2005-6 to 2007-8). The decline is also mirrored at other sites such as in SW Scotland and at Wexford. The Dyfi Estuary is the sole remaining wintering site in Wales and the most southerly in the UK. It is both a roosting and feeding area, and is particularly important in the context of maintaining the traditional wintering range within the UK. However, evidence of past range contraction suggests that small isolated populations are particularly vulnerable.

2.3 Outline of Past and Current Management

The wintering geese at Dyfi have been subject to a range of current and past conservation measures to enhance their status. The site has a long history of occupancy (Fox & Stroud 1985) and the geese use both semi-natural habitat as well as agriculturally improved grassland for feeding and roosting. The inner part of the estuary is managed as a wildfowl sanctuary zone with the RSPB and the Montgomery Wildlife Trust owning significant areas of marsh, and management agreements in place elsewhere. To the west however, from the Afon Leri eastwards to beyond the Afon Ddu inflow, over half of the SPA intertidal zone is subject to wildfowling. The wildfowling rights are controlled by CCW under lease from the Crown Estate Commissioners, with local management administered through the Dyfi Wildfowl Management Advisory Panel, which includes representatives of wildfowling and nature conservation interests. Wildfowlers invoked a voluntary ban on the shooting of Greenland white-fronts over 30 years ago, and have continued to observe the ban. In spite of this protection measure wildfowling takes place close to whitefront feeding and roosting areas, and some disturbance is inevitable. Furthermore, the geese also use areas of farmland where no form of protection exists, and where further disturbance can occur.

Public rights of fishing and navigation apply to the tidal area, but have not had significant impact on the SPA feature to date. The saltmarshes within the SPA are grazed predominantly with sheep, though cattle are also grazed over part of the area. Much of the saltmarsh is now owned and managed by RSPB, who are grazing to maintain relatively short swards suitable for grazing wildfowl.

2.4 Management Units

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

A map showing the management units referred to in this plan is attached separately.

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

Unit number	SAC	SSSI	NNR	CCW leasehold	RSPB/ Wildlife Trust Reserve
1	✓	✓	✓	✓	
2	✓	✓	✓		
3.1, 3.2	✓	✓			
4.1	✓	✓			
Unit number	SAC	SSSI	NNR	CCW leasehold	RSPB/ Wildlife Trust Reserve
4.2, 4.3		✓			✓
4.4	✓	✓			✓
4.5		✓			✓
5.1	✓	✓	✓		
5.2		✓			
6	✓	✓			
7	✓	✓			✓
8.1	✓	✓			
8.2		✓			

NB. Units 1, 4.4, 8.1 and most of units 2 and 5.1 are also designated Ramsar site. However, the boundary has been reviewed and will in future match that of the SSSI.

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>
<i>SPA features</i>		
Greenland White-fronted Goose <i>Anser albifrons flavirostris</i>	SPA and SSSI feature	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:

- they are present in the unit but may be of less conservation importance than the key feature; and/or
- 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
- 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 table below sets out the relationship between the special features and management units identified in this plan:

Dyfi SPA	Management unit								
	1	2	3.1	3.2	4.1	4.2	4.3	4.4	4.5
SAC	✓	✓	✓	✓	✓			✓	
SSSI	✓	✓	✓	✓	✓	✓	✓	✓	✓
NNR/CCW lease	✓								
SPA feature									
Greenland white-fronted goose	KS	Mn	Mn	Mn	Mn	KS	KS	KS	Mn
SAC feature									
Inter-tidal mudflats & sandflats	KH	Sym	X	X	Sym	X	X	Sym	X
<i>Salicornia</i> and other annuals	KH	KH	X	X	Sym	X	X	Sym	X
Atlantic salt meadow	Sym	KH	Sym	Sym	KH	X	X	KH	X
SSSI feature									
Higher plant assemblage	X	Sym	Sym	Sym	Sym	X	X	Sym	X
European wigeon	Sym	Sym	X	X	X	Sym	Sym	Sym	Sym
Breeding waders	Sym	Sym	Mn	Mn	Sym	KS	KS	Sym	Sym
Otter	Sym	Sym	Sym	Sym	Sym	Sym	Sym	Sym	Sym
Invertebrate assemblage	X	Sym	Sym	Sym	Sym	X	X	Sym	X

Dyfi SPA	Management unit									
	5.1	5.2	6	7	8.1	8.2				
SAC	✓		✓	✓	✓					
SSSI	✓	✓	✓	✓	✓	✓				
NNR/CCW lease										
SPA feature										
Greenland white-fronted goose	KS	KS	Mn	KS	KS	KS				
SAC feature										
Inter-tidal mudflats & sandflats	Sym	X	Sym	X	X	X				
<i>Salicornia</i> and other annuals	Sym	X	X	X	X	X				
Atlantic salt meadow	KH	X	Sym	KH	KH	X				
SSSI feature										
Higher plant assemblage	Sym	X	X	Sym	Sym	X				
European wigeon	Sym	Sym	X	Sym	Sym	Sym				
Breeding waders	Sym	KS	Mn	KS	KS	Sym				
Otter	Sym	Sym	Sym	Sym	Sym	Sym				
Invertebrate assemblage	Sym	X	Sym	Sym	Sym	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 Monitoring¹.

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

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

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

4.1 Conservation Objective for Feature 1: Greenland white-fronted goose *Anser albifrons flavirostris*

Vision for Feature 1

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

- The Dyfi wintering population attains national importance level (ie.1% of the national (UK) population), annually.
- Winter mortality levels are <1% annually.
- Juvenile/ sub-adult birds comprise > 5% of the wintering population annually.
- All site-specific factors affecting the achievement of these conditions (eg. avoidable disturbance), are under control

Performance indicators for Feature 1

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

Performance indicators for feature condition		
Attribute	Attribute rationale and other comments	Specified limits
A1. Population size	The number of geese in the wintering flock is a key indicator of population health. 1% of the national population is regarded as the level at which 'national importance' threshold is met. See: http://www.bto.org/survey/webs/	<i>Upper limit:</i> Not required <i>Lower limit:</i> 209 geese (current 1% UK population level)
A2. Winter survival /mortality rate	High over-winter survival rates indicate that shooting has not directly affected the population in recent years and that suitable wintering habitat has been adequately available. Indirectly, disturbance may be critical in affecting condition, survival and reproductive capability (see F1 below).	<i>Upper limit:</i> Not required <i>Lower limit:</i> 98% winter survival rate
A3. Proportion of juvenile geese to adults	This indicates the level of population recruitment, which is important in maintaining the long-term viability of the goose population.	<i>Upper limit:</i> Not required <i>Lower limit:</i> flock contains 5% juvenile/sub-adult birds. NB. Whilst management at the wintering site cannot directly influence this attribute, it is considered to be a valuable indicator of the population health.
Performance indicators for factors affecting the feature		
Factor	Factor rationale and other comments	Operational Limits
F1. Disturbance of goose feeding and roosting habitat	The geese are easily disturbed by human activity, even from a considerable distance away. Currently, geese can suffer disturbance from two main sources: i) from land management activities eg farming and utility management; ii) from shooting on land in close proximity to goose feeding/roosting areas. Statutory protection and/or additional management agreements are required. In addition, no disturbance buffer zones should be considered around key feeding/roosting areas.	
F2. Sward height	The geese graze on both saltmarsh and improved grasslands where the turf is kept relatively short by livestock grazing over the summer. Key grazing areas utilised consistently in recent years are at Hen Hafod (unit 5.2) and Penmaen Isaf (units 8.1 & 8.2)	All saltmarsh and grassland swards in the SPA: <i>Lower limit:</i> Annual summer livestock grazing at moderate intensity. Units 5.2, 8.1 and 8.2: <i>Lower limit:</i> Mean sward height of < 15cm in early October.

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: Greenland white-fronted goose *Anser albifrons flavirostris*

Conservation Status of Feature 1

The current condition of the feature (February 2008) is **declining** and the conservation status is **unfavourable**.

The basis for these judgements is as follows:

A general decline in Greenland white-front populations has taken place in the last decade. Worldwide, numbers have declined from a high of 35,600 in 1999/2000 to an estimated 24,895 in 2006.

This decline is reflected in the Dyfi wintering flock, in which wintering numbers have declined steadily from 167 in 1998/99 to less than 103 in the last three winters (2005-6 to 2007-8). The decline is also mirrored at other sites such as in SW Scotland and at Wexford.

There is evidence (Fox A.D. pers.comm.) that delayed age of first breeding is leading to a reduction in population recruitment, but the reasons for this are unclear.

The table below shows the maximum number of wintering Greenland white-fronted geese at Dyfi SPA since 1990 (counts provided by RSPB).

Year	1990/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
	152	179	134	160	155	142	125	106	167	112
Year	2000/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08		
	134	97	126	116	92	102	90	76		

Management Requirements of Feature 1

Information on past changes to the range and distribution of wintering populations indicates that the Dyfi Greenland white-front population is highly vulnerable to further decline and subsequent loss.

Data analysis (Fox *et al.* 1998) indicates that size, number and quality of feeding areas, levels of disturbance, flock size and site latitude are all factors that influence flock status.

The Dyfi flock is the only one surviving in mainland UK south of the Scottish border, and is both small, isolated and at the southern edge of its range.

Management requirements at Dyfi need to concentrate on:

- maintaining the extent and quality of grazing;
- ensuring minimum disturbance of feeding and roosting areas.
-

At present there is insufficient control over either of these requirements, even though a greater extent of SPA land is under conservation management than in previous decades.

Wildfowling activities whilst having minimal direct impact on the geese, are reported to cause disturbance to the birds from adjacent parts of the wildfowling zone (RSPB pers. comm.).

The geese also remain vulnerable to shooting and disturbance on private farmland and statutory protection for the species is highly desirable.

- Information is required on the frequency of disturbance at Dyfi feeding/ roosting sites, and on distances from sources of disturbance.
- Further information on grazing behaviour within the site in relation to sward nutrition value and possible competition from greater Canada goose is recommended.
- In addition further research is required on the breeding grounds in Greenland to determine more clearly the factors which appear to be delaying breeding activity amongst younger adult birds and depressing population recruitment.

6. ACTION PLAN: SUMMARY

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

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
1	002414	Dyfi SSSI-main channel and intertidal flats	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowling.</p> <p>Wildfowling takes place along part of the southern edge of this unit, giving potential for disturbance of geese here and on adjacent units.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	Yes

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
2	002416	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowling.</p> <p>Wildfowling takes place along in this unit, giving potential for disturbance of geese here and on adjacent units.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No
3.1	002418	Dyfi SSSI-railway	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowling.</p> <p>Potential for disturbance of geese on adjacent units by railway property maintenance.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
3.2	002420	Dyfi SSSI-railway	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>Potential for disturbance of geese on adjacent units by railway property maintenance.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No
4.1	002421	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
6	002423	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No
5.1	002425	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>Unit part of wildfowling zone. Shooting has potential to impact adjacent units.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	Yes

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
4.4	002426	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>Unit mostly no shooting zone and used by geese. Proximity to wildfowling zone may be influential. For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No
7	002429	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
8.1	002431	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlingers.</p> <p>For the marine SAC features in this unit, any issues and remedies to be identified 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.</p>	Yes
4.2	002440	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlingers.</p> <p>Unit not generally used by geese. Proximity to wildfowling zone may be influential.</p>	No
4.3	002441	Dyfi SSSI	<p>The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlingers.</p> <p>Unit not generally used by geese. Proximity to wildfowling zone may be influential.</p>	No

Unit Number	CCW Database Number	Unit Name	Summary of Conservation Management Issues	Action needed?
4.5	002442	Dyfi SSSI	The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.	No
5.2	002443	Dyfi SSSI	The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers. Unit well used by geese, but no agreement in place to prevent disturbance.	Yes
8.2	002444	Dyfi SSSI	The principal issue relating to the status of the wintering Greenland white-fronted geese at Dyfi involves lack of population recruitment. The only way this can be influenced by site management at Dyfi is: enabling maximum winter survival and best condition of geese returning to Greenland to breed. Shooting and avoidable disturbance must be prevented, requiring continued and where possible enhanced co-operation of landowners and wildfowlers.	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.

Action	A recognisable and individually described act, undertaking or project of any kind, specified in section 6 of a Core Management Plan or Management Plan , as being required for the conservation management of a site.
Attribute	A quantifiable and monitorable characteristic of a feature that, in combination with other such attributes, describes its condition .
Common Standards Monitoring	A set of principles developed jointly by the UK conservation agencies to help ensure a consistent approach to monitoring and reporting on the features of sites designated for nature conservation, supported by guidance on identification of attributes and monitoring methodologies.
Condition	A description of the state of a feature in terms of qualities or attributes that are relevant in a nature conservation context. For example the condition of a habitat usually includes its extent and species composition and might also include aspects of its ecological functioning, spatial distribution and so on. The condition of a species population usually includes its total size and might also include its age structure, productivity, relationship to other populations and spatial distribution. Aspects of the habitat(s) on which a species population depends may also be considered as attributes of its condition.
Condition assessment	The process of characterising the condition of a feature with particular reference to whether the aspirations for its condition, as expressed in its conservation objective , are being met.
Condition categories	The condition of feature can be categorised, following condition assessment as one of the following ² : Favourable: maintained; Favourable: recovered; Favourable: un-classified Unfavourable: recovering; Unfavourable: no change; Unfavourable: declining; Unfavourable: un-classified Partially destroyed; Destroyed.
Conservation management	Acts or undertaking of all kinds, including but not necessarily limited to actions , taken with the aim of achieving the conservation objectives of a site. Conservation management includes the taking of statutory and non-statutory measures, it can include the acts of any

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

party and it may take place outside site boundaries as well as within sites. Conservation management may also be embedded within other frameworks for land/sea management carried out for purposes other than achieving the conservation objectives.

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

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

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

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

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

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

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

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

Integrity See **site integrity**

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

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

Management Plan	The full expression of a designated site's legal status, vision, features, conservation objectives, performance indicators and management requirements. A complete management plan may not reside in a single document, but may be contained in a number of documents (including in particular the Core Management Plan) and sets of electronically stored information.
Management Unit	An area within a site, defined according to one or more of a range of criteria, such as topography, location of features , tenure, patterns of land/sea use. The key characteristic of management units is to reflect the spatial scale at which conservation management and monitoring can be most effectively organised. They are used as the primary basis for differentiating priorities for conservation management and monitoring in different parts of a site, and for facilitating communication with those responsible for management of different parts of a site.
Monitoring	An intermittent (regular or irregular) series of observations in time, carried out to show the extent of compliance with a formulated standard or degree of deviation from an expected norm. In Common Standards Monitoring , the formulated standard is the quantified expression of favourable condition based on attributes .
Operational limits	The levels or values within which a factor is considered to be acceptable in terms of its influence on a feature . A factor may have both upper and lower operational limits, or only an upper limit or lower limit. For some factors an upper limit may be zero.
Performance indicators	The attributes and their associated specified limits , together with factors and their associated operational limits , which provide the standard against which information from monitoring and other sources is used to determine the degree to which the conservation objectives for a feature are being met. Performance indicators are part of, not the same as, conservation objectives. See also vision for the feature .
Plan or project	Project: Any form of construction work, installation, development or other intervention in the environment, the carrying out or continuance of which is subject to a decision by any public body or statutory undertaker. Plan: a document prepared or adopted by a public body or statutory undertaker, intended to influence decisions on the carrying out of projects . Decisions on plans and projects which affect Natura 2000 and Ramsar sites are subject to specific legal and policy procedures.
Site integrity	The coherence of a site's ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it is designated.
Site Management Statement (SMS)	The document containing CCW's views about the management of a site issued as part of the legal notification of an SSSI under section 28(4) of the Wildlife and Countryside Act 1981, as substituted.
Special Feature	See feature .

Specified limit	The levels or values for an attribute which define the degree to which the attribute can fluctuate without creating cause for concern about the condition of the feature . The range within the limits corresponds to favourable, the range outside the limits corresponds to unfavourable. Attributes may have lower specified limits, upper specified limits, or both.
Unit	See management unit .
Vision for the feature	The expression, within a conservation objective , of the aspirations for the feature concerned. See also performance indicators .
Vision Statement	The statement conveying an impression of the whole site in the state that is intended to be the product of its conservation management . A ‘pen portrait’ outlining the conditions that should prevail when all the conservation objectives are met. A description of the site as it would be when all the features are in favourable condition .

8. REFERENCES

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