

## **Pen Llyn a'r Sarnau candidate Special Area of Conservation - Case History**

### **A. General description and features of conservation importance**

The Pen Llyn a'r Sarnau candidate Special Area of Conservation (cSAC) is located in northwest Wales. It is one of the largest of the marine SACs in the UK, straddling almost 230km of coastline and covering an area of over 96,500 hectares. The site extends from Penrhyn Nefyn on the north Llyn coast to the mouth of the Afon Clarach (Clarach River) north of Abersytwyth on the West Wales coast.

The coast and land around the cSAC is already recognized for its importance to nature conservation and landscape protection with a number of existing designations including: Special Protection Areas (two existing site and 1 proposed), a National Park, National Nature Reserves (4), Biosphere Reserve, Ramsar site, Area of Outstanding Natural Beauty and other candidate Special Areas of Conservation.

Pen Llyn a'r Sarnau qualifies as a candidate Special Area of Conservation (cSAC) for the following Annex 1 habitats and Annex II species:

- ? Reefs
- ? Estuaries
- ? Subtidal sandbanks
- ? Shallow inlets and bays
- ? Coastal lagoons
- ? Intertidal mudflats and sandflats
- ? Atlantic salt meadows
- ? Sea caves
- ? Grey seal
- ? Bottlenose dolphin
- ? Otter

However, the management scheme to date has only addressed the reefs and estuaries. The remaining habitats and species were not added until early 2001, as a result of "moderation" of the UK list of candidate SACs at the request of the European Commission in 1999-2000. These features were not part of the scope of the UK marine SACs project, but clearly their incorporation into the management scheme is an urgent priority.

The reefs and estuaries support a large variety of marine wildlife communities of European importance.

The reefs of the cSAC are located predominantly around Pen Llyn and in north Cardigan Bay. They are exposed to a wide variety of environmental conditions such as wave action, tidal streams and depth variation and, as a result, support many different marine communities reflecting the local conditions prevailing at any one location. There are two distinctive elements to the reef feature of the site: (a) the reefs around Pen Llyn which are mainly of bedrock and boulders extending to depths of over 40m, and support a wide variety of floral (seaweed) and faunal communities; and (b) the Sarnau reefs which are unique shallow ridges of boulders, cobbles and pebbles that extend south-west from the coast into Cardigan Bay. The Sarnau are dominated by seaweed communities that form

extensive stands across the reefs. The Sarnau are thought to be the remains of glacial moraines formed during the last glaciation.

The three estuaries of the cSAC are located along the Meirionnydd coast in the southern half of the site. These are the best examples of small, drying, bar-built estuaries in Britain and, with their mountainous catchment areas, have some of the lowest nutrient inputs of any estuaries in Wales. The three estuaries are predominantly sandy-sandy/mud and support extensive intertidal sediment communities and saltmarsh. There is a continuous gradient between clean sands near the entrance to the sea and mud or muddy sands in the sheltered landward extremes of the estuaries with the different sediment types supporting a range of different communities of worms, crustacea and molluscs. The estuaries form important nursery areas for a number of fish species and are designated nursery areas for bass.

The area of the cSAC is also important for other wildlife not included in the reef and estuary features including cetaceans (bottlenose dolphin, harbour porpoise and Risso's dolphin), grey seals, birds (breeding seabirds, divers, waders and wildfowl) and other littoral and sublittoral marine communities.

## **B. Socio-economic characteristics**

The land area bordering the Pen Llyn a'r Sarnau cSAC is mainly rural in character with a relatively low population density and a population that is dispersed throughout the surrounding area. The population of the coastal communities is about 48,000, but the number of people living in the main catchment area of the site is likely to be larger than this as this figure does not account for the inland communities who could be considered within the catchment area of each of the estuaries, for example. A large proportion of the local population are first language Welsh speakers.

Aside from infrastructure services (e.g. local government, health, education and so on) the economy is based primarily on farming and tourism. Fishing, mainly with static gear (pots and nets) is an important element of the economy for the coastal communities, although it is carried out mostly on a part-time basis.

The coast and sea are an important asset locally attracting many visitors to the area. It is estimated that there are over 2,000,000 visitors (including day visitors) each year to Gwynedd (Gwynedd Council pers. com) and of these over 50% are likely to visit the coastal areas of Pen Llyn and Meirionnydd (Gwynedd Council Tourism survey 2000 - Gwynedd Council web site). There are a number of developments supporting the tourism industry and these are located in the areas of the main coastal settlements. Key attractions of the Pen Llyn and Meirionnydd coasts are the coastal landscape and natural beauty of the area, the amenity beaches and opportunities for watersports and recreational fishing. The main harbours are at Aberdyfi, Barmouth, and Porthmadog with a relatively large marina development at Pwllheli on the south Llyn coast. The inshore area by Abersoch, again on the south Llyn coast, is an important anchorage and a popular boating location in the summer.

## **C. The Relevant and Competent Authorities**

### Relevant authorities:

- ? Ceredigion County Council
- ? Countryside Council for Wales

- ? Dwr Cymru Welsh Water
- ? Environment Agency Wales
- ? Gwynedd Council
- ? North Western & North Wales Sea Fisheries Committee
- ? Powys County Council
- ? Severn Trent Water
- ? Snowdonia National Park Authority
- ? Trinity House Lighthouse Authority

Competent authorities and other organizations or individuals that have had a significant input to the scheme or have otherwise been substantially involved in site management:

- ? All of the above
- ? National Assembly for Wales (formerly Welsh Office)
- ? Department for Environment Food and Rural Affairs (formerly DETR)
- ? Crown Estate Commissioners
- ? Railtrack
- ? Liaison Group members (representation includes specific organizations and associations, e.g. Welsh Yachting Association, Llyn Inshore Fishermen's Association, Farmers Union of Wales, Welsh Federation of Sea Anglers, town and community councils, as well as different interest groups, e.g. outdoor activity centres, tourism and diving).

#### **D. Management Structures**

Prior to the submission of the Pen Llyn a'r Sarnau site to Europe as a candidate Special Area of Conservation and the subsequent establishment of a relevant authorities group, there were no existing marine or coastal initiatives or projects linking the relevant and competent authorities. There was, and is, an existing management group for the Dyfi estuary biosphere reserve which is one of the estuaries of the cSAC. There are also voluntary associations concerned with the protecting the environment and wildlife of Cardigan Bay (part of which lies within the SAC), and the interests of the local communities around the Bay, but there were no existing initiatives that involved all the key partners in terms of the cSAC.

The Pen Llyn a'r Sarnau site was submitted to Europe at the start of 1996, and an initial meeting of the relevant authorities was organized later that year by the Countryside Council for Wales (CCW). At this meeting it was agreed that a relevant authorities working group for the cSAC should be established to address the management of the site. The role of Pen Llyn a'r Sarnau as one of the demonstration project sites under the UK Marine SACs project was also explained at the meeting and received general support from the relevant authorities present. The relevant authorities group has met regularly since mid 1997. It consists of representatives of most of the relevant authorities who bring to the group a wide range of personal and professional perspectives and technical expertise. After an uncertain start during which chairmanship of the group alternated between relevant authority officers, the group is chaired by a senior officer of the Snowdonia National Park Authority (SNPA), and CCW acts as secretariat.

Following a series of public meetings in 1999 and 2000 a Liaison Group made up of representatives of local interest groups and interested individuals together with community council and local authority representatives was established to work with the relevant authorities to develop a management plan for the site. The Liaison Group

