# **Carmarthenshire Nature Recovery Plan**

Marine habitats here include intertidal boulder communities, intertidal mudflats, seagrass beds, peat and clay exposures, subtidal sand and gravels and blue mussel beds.

Our entire coastline is of significant importance for its wildlife. The Carmarthen Bay and Estuaries European Marine Site (EMS) extends from Tenby in the west almost to Oxwich Point in the east and includes the Burry Inlet/Loughor Estuary and the Taf–Tywi–Gwendraeth (Three Rivers) estuaries.

The marine area of Carmarthenshire's coast encompasses three European designated sites, which include the priority habitats listed above.

**Carmarthen Bay Special Area of Conservation** (SAC) was designated in 2004 as part of a network of sites for having excellent examples of six habitats and five species listed as important and threatened on a European scale.

### Habitats

- Estuaries
- Large shallow inlets and bays
- Atlantic salt meadows (saltmarsh)
- Salicornia and other annuals colonising mud and sand
- Mudflats and sandflats not covered by seawater at low tide (mudflats)
- Sandbanks which are slightly covered by sea water all the time

### Species

- Allis shad Alosa alosa
- Twaite shad Alosa fallax
- River Lamprey Lampetra
- Sea Lamprey Petromyzon marinus
- Otter Lutra lutra

**Carmarthen Bay Special Protection Area** (SPA) – was the first SPA designated in the UK (in 2003) designated under the EU Birds Directive for the common scoter sea duck, *Melanitta nigra*.

In Europe, the common scoter migrate from summer breeding sites in Iceland, Scandinavia and arctic Russia as far south as the Iberian peninsula, where they overwinter in flocks. Carmarthen Bay is mainly used by the birds as a refuelling and rest stop in these migrations, but some birds may over-winter here.

More than 50% of the non-breeding population is found at fewer than ten sites and Carmarthen Bay is considered

### Marine Habitats and Species

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## Natural benefits of 'marine' habitats

As well as the inherent value of these habitats and for the species they support they provide us with a number of natural benefits:

- Food via fishing and aquaculture
- Tourism and recreation
- Nutrient recycling and waste breakdown
- Carbon storage
- Weather creation and regulation
- Cultural heritage
- Coastal defences mudflats

### Pressures and threats to Carmarthenshire marine habitats?

- Habitat loss.
- Habitat degradation.
- Overexploitation
- Pollution and nutrient enrichment.
- Climate change.
- Over grazing.
- Invasive species.
- Military activity.

the most important, consistently recording peak numbers of 17,000–22,000 birds.

Scoter feed by diving for shellfish and other invertebrate prey in sandy sediments and mostly in waters shallower than 10- m deep. High densities of easily accessible prey at shallow depth makes Carmarthen Bay so important as a migratory and over-wintering site for scoter. The most consistent feeding areas are offshore from Amroth and Pembrey Sands and, occasionally, Rhossili Bay.

**Burry Inlet SPA and Ramsar site** – The large estuary of the Burry Inlet was designated in 1992 and includes extensive areas of intertidal sand and mudflats and the largest continuous area of saltmarsh in Wales (22 km<sup>2</sup>). The Burry Inlet regularly supports internationally important numbers of overwintering wildfowl (e.g. pintail, wigeon, shelduck and shoveler) and waders (e.g. knot, oystercatcher and redshank) that feed in the saltmarshes and on the intertidal areas.

Sandbanks within Carmarthen Bay support a range of species (including bivalves, amphipods and worms), many of which spend most of their time wholly or partly buried in the sediment.

The large area, made up by the estuaries of the Rivers Loughor, Tâf, Tywi and the Gwendraeth support a range of subtidal and intertidal sediments that range from sand at the mouth to mudflats in the upper estuary. Extensive areas of intertidal mudflats and sandflats are dominated by bivalves, including cocklebeds. There are also beds of the nationally scarce dwarf eelgrass *Zostera noltei*.

The whole of the inter-tidal shoreline and inshore waters from Loughor Bridge in the east, to the county boundary west of Pendine, sustains an economically locally important fishing industry and provides employment for a few local people.

Fin fish landings each year are relatively small, but there are two substantial shellfish fisheries in the Burry Inlet and at the Three Rivers estuary. Some of the shellfish is processed locally at Burry Port or at Penclawdd (Gower) but the vast majority of the cockles collected from Carmarthenshire beaches are exported to European fish markets and processing plants.

Cockles have been gathered in the Burry Inlet estuary since Roman times – and methods have changed little since then. Around 50 licensed gatherers rake the cockles from the mud at low tide. They then sieve them through meshes – those small enough to pass through the mesh are left in place to rebury.

Surveys are carried out twice a year, in May and November, to determine harvest levels. These ensure

## Associated priority species (NB this may not an exhaustive list!):

**Birds** Arctic skua Common scoter

### Mammals Harbour porpoise Bottlenosed dolphin Risso`s dolphin

Common dolphin Reptiles

Loggerhead turtle Leatherback turtle

### Fish

Basking shark Herring Cod Tope shark Lesser sandeel Porbeagle shark Monkfish Whiting Ling Plaice Blue shark Undulate ray Thornback ray Blond ray Mackerel Sole Spiny dogfish Angel shark/monkfish Horse mackerel

### Molluscs

Fan mussel (historical record) Ocean quahog/icelandic cyprine

### **Coastal mudflats**



enough cockles are left to breed and as food for birds such as oystercatchers. Issues with cockle mortality have meant that some of the cockle beds along the coast have been temporarily closed in recent years. A multi-country project is underway to assess the health of the cockle population across a number of countries and to look at new techniques for cockle management and provide guidance on best practice to encourage a sustainable industry.

The Carmarthenshire marine and coast is one of the defining landscapes of the county, contributing significantly to its overall character and if of importance for our local economy drawing visitors and inward investment.



#### Vision statement and objectives

The overall vision is to maintain and enhance these habitats in our coastal environment and the priority species associated with them, especially within the context of our marine environment being an internationally recognised ecosystem. Raising awareness about the importance of our coastal habitats is integral to the vision for this plan through provision of information for the public and education opportunities. Any action should seek to meet one or more of the following objectives:

- ► Activities are being managed such that there is no loss in extent and quality of priority or range of marine habitats and so that increases in habitat extent and quality are possible.
- ► Activities are being managed such that they do not result in further population decline, or hindrance of population recovery of Section7 priority marine species
- ▶ To identify and record priority areas of marine and coastal habitats and associated species.
- ► To raise awareness of marine/coastal species, the key pressures and threats affecting them and the benefits they bring us

Useful links https://www.biodiversitywales.org.uk/Marine www.wildlifetrusts.org/wildlife/habitats/marine www.cbeems.org.uk https://naturalresources.wales/guidance-and-advice/business-sectors/fisheries/burry-inlet-cocklefishery/?lang=en