

EC Directive 92/43 on the Conservation of Natural Habitats and of Wild Fauna and Flora

Citation for Special Area of Conservation (SAC)

Name:	Dee Estuary / Aber Dyfrdwy
Unitary Authority/County:	Cheshire West and Chester, Sir Ddinbych / Denbighshire, Sir y Fflint / Flintshire, Wirral
SAC status:	Designated on 10 December 2009
Grid reference:	SJ190819
SAC EU code:	UK0030131
Area (ha):	15,805.89
Component SSSI:	Dee Estuary / Aber Afon Dyfrdwy Gronant Dunes and Talacre Warren North Wirral Foreshore

Site description:

The Dee Estuary / Aber Dyfrdwy Special Area of Conservation (SAC) includes the Dee Estuary itself and areas of intertidal flats on the north-west coast of the Wirral (North Wirral Foreshore) and on the north east Wales coast, east of Prestatyn (Gronant Dunes and Talacre Warren). Gronant Dunes and Talacre Warren also includes the largest remaining area of a once extensive dune system along this section of Welsh coast

The SAC has been designated because of its size and biological interest including its saltmarshes, intertidal mudflats and sandflats, sand dunes, drift line vegetation and sea cliffs, the presence of petalwort *Petalophyllum ralfsii*, and sea lamprey *Petromyzon marinus* and river lamprey *Lampetra fluviatilis* that migrate through the area.

Upstream of an enclosing line across the mouth of the estuary between Point of Ayr (Wales) and Hilbre Point (England), the estuary is the sixth largest in the UK.

The Dee Estuary includes about the seventh largest area of saltmarsh in the UK. Of this the most extensive habitat can be described as Atlantic salt meadows. Other habitats include *Salicornia* and other annuals colonising mud and sand, of which there are comparatively large stands reflecting that the estuary is an accreting one. Unlike most western estuaries, sizeable areas of saltmarsh remain ungrazed and therefore plant species that are susceptible to grazing are widespread such as sea purslane *Atriplex portulacoides*. The saltmarsh shows a range of stages of development, from young, recently formed communities to old, well-established communities. The elaborate creek system creates a more diverse array of habitats than are found in more continuous fringing saltmarshes, such as those of Morecambe Bay. Nationally scarce plants occur in these saltmarshes, including slender hare's-ear *Bupleurum tenuissimum*.

The extensive mudflats and sandflats not covered by seawater at low tide in the Dee Estuary form the fifth largest area within an estuary in the UK. They contain many invertebrate species, including worms, bivalves such as cockles *Cerastoderma edule* and amphipods such as *Bathyporeia pilosa* and *Corophium arenarium*. Much of the upper part of the estuary consists of muddy fine sand dominated by ragworms *Hediste diversicolor* and Baltic tellins *Macoma balthica*. The sediment flats in the outer estuary also have fine muddy sands but here they are often dominated by cockles and worms. Where water movement is greater the

sediments tend to be sandy, with worms and amphipods. The invertebrates living in these sediments provide a rich source of food for birds and fish.

The dune system at Talacre Warren and Gronant Dunes exhibit a range of features from the seaward edge where accumulations of nutrient rich debris often build up along the strandline developing annual vegetation of drift lines. This provides a habitat for invertebrates and annual plants, such as sea rocket *Cakile maritima* and sea holly *Eryngium maritimum*. The sand dunes progress from the early stages of dune formation embryonic shifting dunes, and shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes'), to the more fixed dunes with herbaceous vegetation ('grey dunes'). Within the dunes, humid dune slacks occur. The latter support a rich variety of plants, including the rare petalwort *Petalophyllum ralfsii* and several species of orchid.

The rocky sandstone cliffs of Hilbre Island, Little (Middle) Island and Little Eye are the only examples of vegetated sea cliffs of the Atlantic and Baltic coasts in along the north east Wales and Wirral coast. The cliffs support a range of plants, including common scurvy grass *Cochlearia officinalis*, sea campion *Silene uniflora* and the scarce rock sea lavender *Limonium britannicum celticum* and sea spleenwort *Asplenium marinum*.

Sea lamprey *Petromyzon marinus* and river lamprey *Lampetra fluviatilis* use the estuary as part of a migratory route to the River Dee. Sea and river lampreys spend their adult life in the sea or estuaries but spawn and spend the juvenile part of their life cycle in rivers. Lampreys are a primitive type of fish that have a distinctive suckered mouth, rather than jaws.

Qualifying habitats: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Annual vegetation of drift lines
- Atlantic salt meadows
- Embryonic shifting dunes
- Estuaries
- Fixed dunes with herbaceous vegetation ('grey dunes')*
- Humid dune slacks
- Mudflats and sandflats not covered by seawater at low tide
- *Salicornia* and other annuals colonising mud and sand
- Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes')
- Vegetated sea cliffs of the Atlantic and Baltic coasts

Qualifying species: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex II:

- Petalwort *Petalophyllum ralfsii*
- River lamprey *Lampetra fluviatilis*
- Sea lamprey *Petromyzon marinus*

Annex I priority habitats are denoted by an asterisk (*)

This citation relates to a site entered in the Register of European Sites for Great Britain.
Register reference number: UK0030131
Date of registration: 10 December 2009

S G Hopkins

Signed:

On behalf of the Secretary of State for
Environment, Food and Rural Affairs