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

Citation for Special Area of Conservation (SAC)

Name:	Morecambe Bay
Unitary Authority/County:	Cumbria, Lancashire
SAC status:	Designated on 1 April 2005
Grid reference:	SD371697
SAC EU code:	UK0013027
Area (ha):	61506.22
Component SSSI:	Duddon Estuary SSSI, Lune Estuary SSSI, Morecambe Bay SSSI, Roudsea Wood and Mosses SSSI, South Walney and Piel Channel Flats SSSI, Wyre Estuary SSSI

Site description:

Morecambe Bay is a large, very shallow, predominantly sandy bay at the confluence of four principal estuaries, the Leven, Kent, Lune and Wyre. The Duddon Estuary is within the SAC but north of the bay itself, although directly connected to it by Walney Channel. At low tide vast areas of intertidal sandflats are exposed, with small areas of mudflat, particularly in the upper reaches of the associated estuaries. The sediments of the bay are mobile and support a range of community types, from those typical of open coasts (mobile, well-sorted fine sands), grading through sheltered sandy sediments to low-salinity sands and muds in the upper reaches. Apart from the areas of intertidal flats and subtidal sandbanks, Morecambe Bay supports exceptionally large beds of mussels *Mytilus edulis* on exposed 'scars' of boulder and cobble, and small areas of reefs with fucoid algal communities. Of particular note is the rich community of sponges and other associated fauna on tide-swept pebbles and cobbles at the southern end of Walney Channel.

Extensive saltmarshes and glasswort *Salicornia* spp. beds are present in the Lune estuary, contrasting with the fringing saltmarshes and more open intertidal flats of the Leven and Kent estuaries. Most of the saltmarshes are grazed, a characteristic feature of north-west England. In the upper levels of the saltmarshes there are still important transitions from saltmarsh to freshwater and grassland vegetation.

Walney Island is a barrier island fringed by shingle with a partial sand covering. Two areas of exposed vegetated shingle occur at the extremes of the barrier. The southern area has been highly modified by eutrophication from a large gull colony, resulting in communities that are unusually species-rich for pioneer shingle vegetation. Perennial rye-grass *Lolium perenne*, common chickweed *Stellaria media* and biting stonecrop *Sedum acre* are constant elements, with dove's-foot crane's-bill *Geranium molle* an unusual and important feature.

Shifting dune vegetation forms a major component of the active sand dune systems at the entrance to Morecambe Bay on Walney Island and the Duddon Estuary at Sandscale Haws. Sandscale supports a mosaic of shifting communities, which form a continuous block around the seaward edge of this site. There are transitions to embryonic shifting dunes. The shingle spits at either end of Walney Island support dune systems at South End and North End Haws. Species associated with these shifting dunes include sea holly *Eryngium maritimum*, sea spurge *Euphorbia paralias*, Portland spurge *Euphorbia portlandica* and sea bindweed *Calystegia soldanella*. Sandscale supports the largest area of calcareous fixed dunes in Cumbria, which contrast with the acidic dunes at the adjacent North End Haws. South End

Haws supports a smaller area of fixed dunes. The fixed dunes support a rich plant diversity including wild pansy *Viola tricolor*, lady's bedstraw *Galium verum*, common restharrow *Ononis repens* and the uncommon dune fescue *Vulpia membranacea* and dune helleborine *Epipactis dunensis*. Dune slacks are particularly well-represented at Sandscale, where they support several uncommon species including marsh helleborine *Epipactis palustris*, dune helleborine and coralroot orchid *Corallorhiza trifida* occur. Sandscale contains both permanent and ephemeral waterbodies and man-made scrapes supporting breeding colonies of great-created newts *Triturus cristatus*. The newts forage widely over the foreshore, dunes, dune-heath and scrub.

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:

- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*). (Coastal dune heathland)*
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Coastal lagoons*
- Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*). (Dunes with creeping willow)
- Embryonic shifting dunes
- Estuaries
- Fixed dunes with herbaceous vegetation ("grey dunes"). (Dune grassland)*
- Humid dune slacks
- Large shallow inlets and bays
- Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats)
- Perennial vegetation of stony banks. (Coastal shingle vegetation outside the reach of waves)
- Reefs
- *Salicornia* and other annuals colonising mud and sand. (Glasswort and other annuals colonising mud and sand)
- Sandbanks which are slightly covered by sea water all the time. (Subtidal sandbanks)
- Shifting dunes along the shoreline with *Ammophila arenaria*. ("White dunes")

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

- Great crested newt *Triturus cristatus*

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: UK0013027
Date of registration: 14 June 2005
Signed: Trevor Salmon
On behalf of the Secretary of State for Environment, Food and Rural Affairs