# CYNGOR CEFN GWLAD CYMRU COUNTRYSIDE COUNCIL FOR WALES

### SITE OF SPECIAL SCIENTIFIC INTEREST CITATION

PEMBROKESHIRE ARFORDIR SAUNDERSFOOT – TELPYN/

SAUNDERSFOOT TO TELPYN COAST

**<u>Date of Notification:</u>** 1967, 1985, 2002

**National Grid Reference:** SN 140046 – SN 183072

**O.S. Maps:** 1: 50 000 Sheet Number: 158

1: 25 000 Sheet Number: SN 10 SW

SN 10 NE SN 10 SW

Site Area: 151 ha

## **Description:**

The site is of special interest for its intertidal communities and geological exposures. It is located at the far south-eastern end of Pembrokeshire, stretching along the coast from the town of Saundersfoot in the west, through the village of Amroth to the border with Carmarthenshire.

### **GEOLOGY**

Westphalian: This site includes the most complete section of middle Westphalian A to middle Westphalian B (Carboniferous) strata in the western part of the South Wales Coalfield. It includes thirteen horizons yielding non-marine bivalves and four with plants, which allow the section to be correlated in detail with other sequences of this age. There is also a fine exposure of the Amman Marine Band, the internationally recognised boundary between the Westphalian A and Westphalian B stages. The sequence shows clearly that at this time the area was dominated by large river channels and deltas, with periodic marine incursions. There are several prominent coal seams in this part of the section (the Rock, Garland, Fiddler's and Lower Level) as well as the most important plant beds. The section can be compared with that documented from mining activity in the Gwendraeth Valley and surrounding areas, where surface exposures are limited, and certainly none show a continuous sequence as along the Wiseman's Bridge coast. Farther east the strata thin out rapidly and do not yield the fossils which occur at Saundersfoot. This section is thus one of the most important of this age in the South Wales Coalfield, allowing detailed correlations to be made with other areas as well as helping with the interpretation of the structure of the basin of deposition.

#### **BIOLOGY**

The site is comprised mainly of sandy beaches interspersed with bedrock platforms, backed by soft cliffs, shingle and cobbles or artificial structures including sea walls and groynes. The lower to mid shore sand is colonised by burrowing amphipods such as *Bathyporeia* spp., *Urothoe* spp. and *Haustorius arenarius*, and the isopod *Eurydice pulchra*. In places, polychaete worms such

as Scololepsis squamata, Owenia fusiformis and cat worm Nephtys spp. occur, together with bivalve molluscs including the thin tellin Angulus tenuis and the banded wedge shell Donax vittattus which occur at decreasing frequency towards the western end of the site. Areas of barren shingle occur intermittently along the site, and in particular between the groynes, which are colonised by barnacles Semibalanus balanoides and limpets Patella spp. together with occcasional spiral wrack Fucus spiralis, and mussels Mytilus edulis at the seaward end. Cobbles and small boulders are colonised by patches of spiral wrack and bladder wrack Fucus vesiculosus, with barnacles and mussels. Lower shore cobbles are colonised by patches of barnacles and molluscs such as the edible periwinkle Littorina littorea, while gutweed Enteromorpha spp.occurs with laver bread Porphyra spp on more scoured areas.

Rockpools can be found on the bedrock platforms. The rockpools are of two types, either coralline pools characterised by coral weed Corallina officinalis, caragheen moss Chondrus crispus, with beadlet anemone Actinia equina and the hermit crab Pagurus bernhardus, or sediment floored pools with carragheen moss, mussles, beadlet anemone and edible periwinkle. The bedrock is colonised by mussels and barnacles S. balanoides on the lower shore, above which a wide zone of barnacles S.balanoides and limpets occurs. A further band of barnacles such as Chthamalus spp with limpets occurs above this, with black tar lichen Verrucaria maura and yellow and grey lichens on the uppermost parts of the shore. Caves also occur in a bedrock headland at the eastern end of the site, which support the velvety red alga *Audouinella purpurea*. Pepper dulse Osmundea pinnatifida can be found on the leeward sides of some of these rock platforms, together with the shade tolerant red alga Catanella caespitosa towards the upper end of the shore. Sea walls at the back of the shore support sparse bands of yellow and grey lichens, below which a band of black tar lichen exists. Gutweed grows where freshwater seeps through the cliffs onto the foreshore. The nationally scarce Portland spurge Euphorbia portlandica occurs on the cliffs near Amroth. Allis shad Alosa alosa and twaite shad A. fallax have been observed in the intertidal waters of this shore.

#### **Remarks:**

The SSSI lies within Pembrokeshire Coast National Park. Part of the site is owned by the National Trust.

The site lies within the Carmarthen Bay and Estuaries/Bae Caerfyrddin ac Aberoedd Special Area of Conservation for its 'mudflats and sand flats not covered by seawater at low tide', and as part of a 'large shallow inlets and bays' feature.

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