

SITE

Name: Wembury Point

Parish: Wembury

Local Authority: South Hams

National Grid Ref: SX 504 485

OS Sheets: 1:50k 202 1:10k SX54NW, GS Sheet 1:50k 349

Locality Description: Coast from Wembury Beach to Wembury Point.

Nature and Status of Site: Coastline, cliffs and foreshore. The shore is part of the Wembury Marine Conservation Area and care should be taken not to disturb marine life. A County Geological Site (www.devonrigs.org.uk) and part of a biological [Site of Special Scientific Interest](#) (SSSI).

Summary of Geological / Geomorphological Interest: The site exhibits many features. It shows the sedimentology of the Wembury Siltstones, their intrusion by basic (lacking quartz) igneous rocks and deformation by Variscan (Permo-Triassic age) folding. The Pleistocene raised beach platform with beach deposits is backed by a fossil cliff line. The overlying head deposits form a prominent coastal platform and make up the current cliff line; these deposits are cryoturbated at the top. The raised beach platform and head are being cut back by wave action. The Wembury Siltstones are purple red and grey slates with scattered sandstone beds. Tight folds can be seen in places. Various basalt dykes can be seen intruding the country rock.

Safety Considerations: Generally safe but care needed on rocks. Examination of the foreshore should be made on a falling tide.

Educational Age Groups: Secondary, College/6th Form, University.

Parking and Access: Access on foot is possible via the [South West Coast Path](#). There is a regular bus service between Plymouth and Wembury which stops at Church Road, which is within walking distance of Wembury Beach. For timetable details, visit www.traveline.org.uk. The area is easily accessible by bicycle and has close links with the National Cycle Network. The National Trust hold guided talks for educational groups in the area; however this must be pre-arranged prior to the visit.

Site Owner: The National Trust, Telephone 01548 810197 visit [The National Trust](#) online.

References:

DINELEY, D. L. (1966). The Dartmouth Beds of Bigbury Bay, South Devon, Quat. Jour. Geol. Soc., 122, 187-217

HENDRIKS, E.M.L. 1951. Geological succession and structure in western south Devonshire. Trans. Roy. Geol. Soc. Cornwall, 18, 255-308.

HOBSON, D. M. (1976). The Structure of the Dartmouth Antiform. *Proc. Ussher Soc.*, 3, 320-32.

LEVERIDGE, B.E., HOLDER, M.T., GOODE, A.J.J., SCRIVENER, R.C., JONES, N.S. and MERRIMAN, R.J. 2002. Geology of the Plymouth and south-east Cornwall Area. *Memoir of the British Geological Survey*, Sheet 348 (England and Wales), 143pp

ORME, A.R. 1960. The raised beaches and strandlines of South Devon. *Field Studies* 1: 109-130.

SEAGO, R.D. and CHAPMAN, T.J. 1988. The confrontation of structural styles and the evolution of a foreland basin in central south-west England. *Jl. Geol. Soc. Lond.* 145, 789-900.

SMITH, S.A. and HUMPHRIES, B. 1989. Lakes and alluvial sandflat-playas in the Dartmouth Group, south-west England. *Proceedings of the Ussher Society*. Vol.7 (2), pp.112-117.

USSHER, W.A.E. 1912. The geology of the country around Ivybridge and Modbury. *Memoirs of the Geological Survey, England and Wales*. London, HMSO.

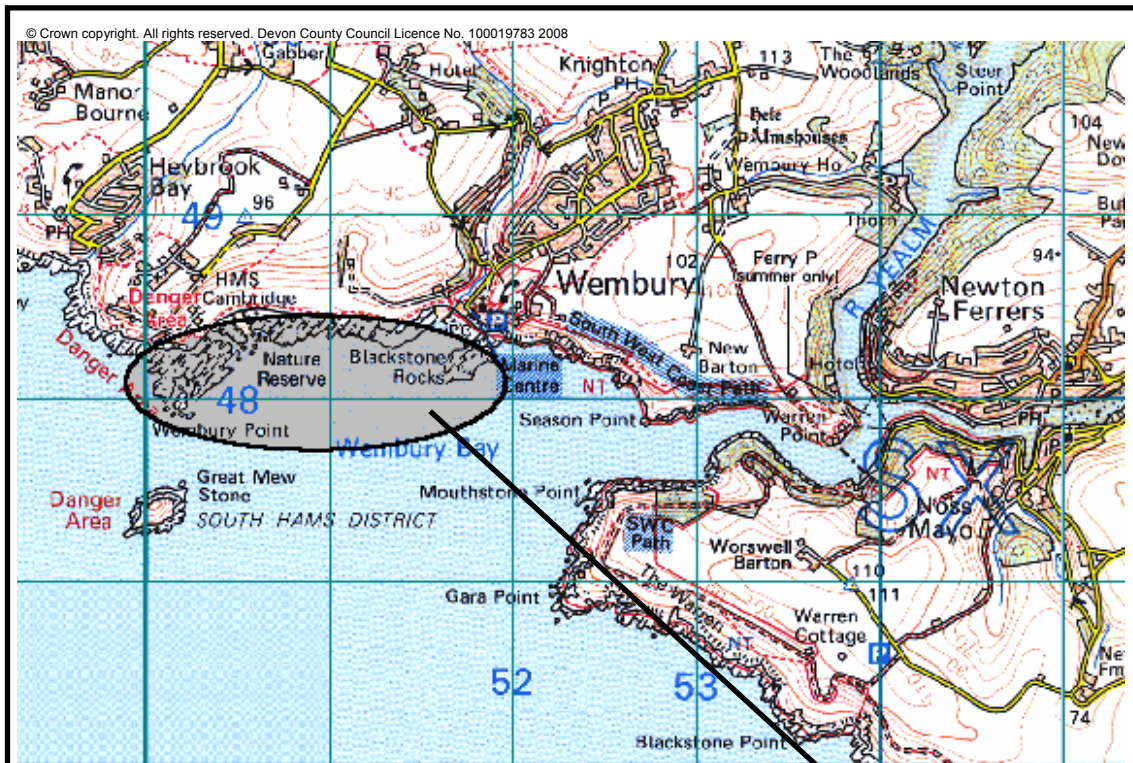
Detailed Geology: Lower Devonian Wembury Siltstones (Dartmouth Group). Purple, red and grey silty slate with scattered groups of sandstone beds, some showing small scale ripple cross-bedding. Some sandstone is medium- to coarse-grained. At several places on the foreshore sandstone beds pick out the hinges of northerly overturned, westerly plunging, tight to isoclinal folds with a southerly dipping axial planar cleavage. Near Wembury Point a porphyritic basic dyke cuts the Wembury Siltstones but has the same cleavage as the slates and siltstones. Some narrower non-porphyritic dykes occur to the east of the larger intrusion.

At the back of the modern beach a raised beach platform is being cut back by present wave action. The raised beach platform has maximum width of about 150m and is backed by a fossil cliff line. Its height varies, being lower where it is further from the old cliff line. The platform is overlain by head, consisting of yellowish buff silt and rock fragments, but at its highest level, near Wembury Point, remnants of raised beach cobbles and pebbles rest on the rock platform or have been disturbed during the formation of the head. The upper one to two metres of the head are cryoturbated in places at the western end indicating that it was deeply frozen during the later part of the Pleistocene.

LOCATION PLAN

WEMBURY POINT WEMBURY, SOUTH HAMS

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Scale 1: 40,000



Site Locality

Coast from Wembury
Beach to Wembury Point

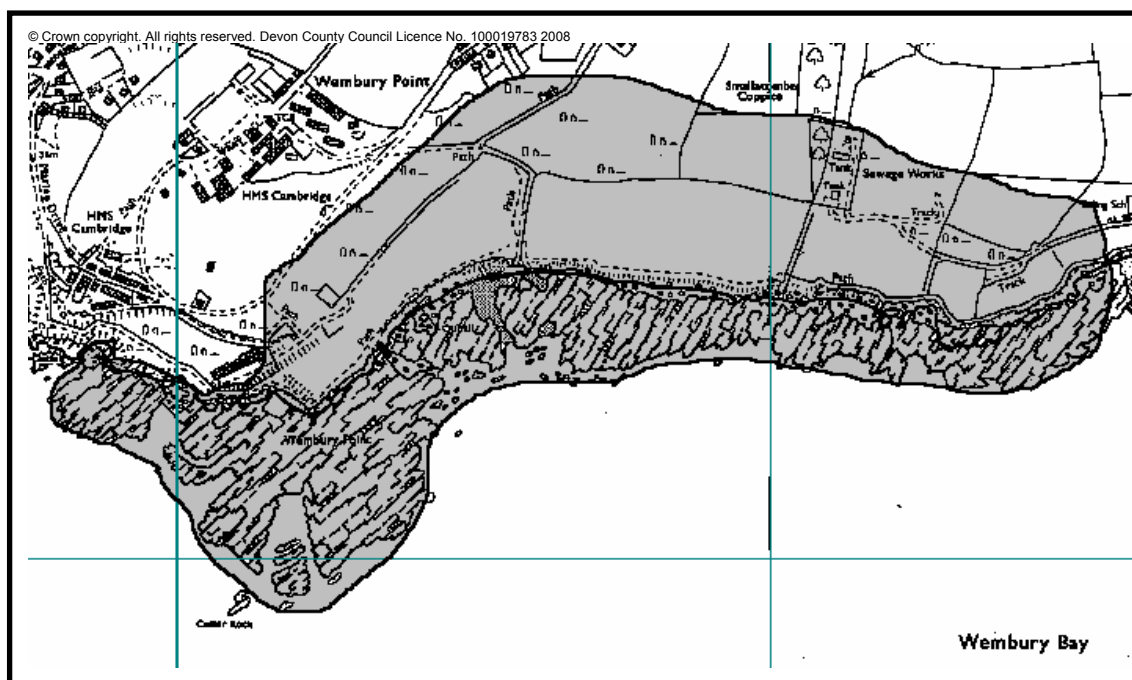
Parking and Access

- Public access to the site via the South West Coast Path
- Regular bus services to Wembury from Plymouth.
- Guided walks held by the National Trust, however must be pre-arranged prior to visit.

SITE PLAN

WEMBURY POINT WEMBURY, SOUTH HAMS

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Approx. Extent of Site

Scale 1: 10,000

Main Points of Interest:

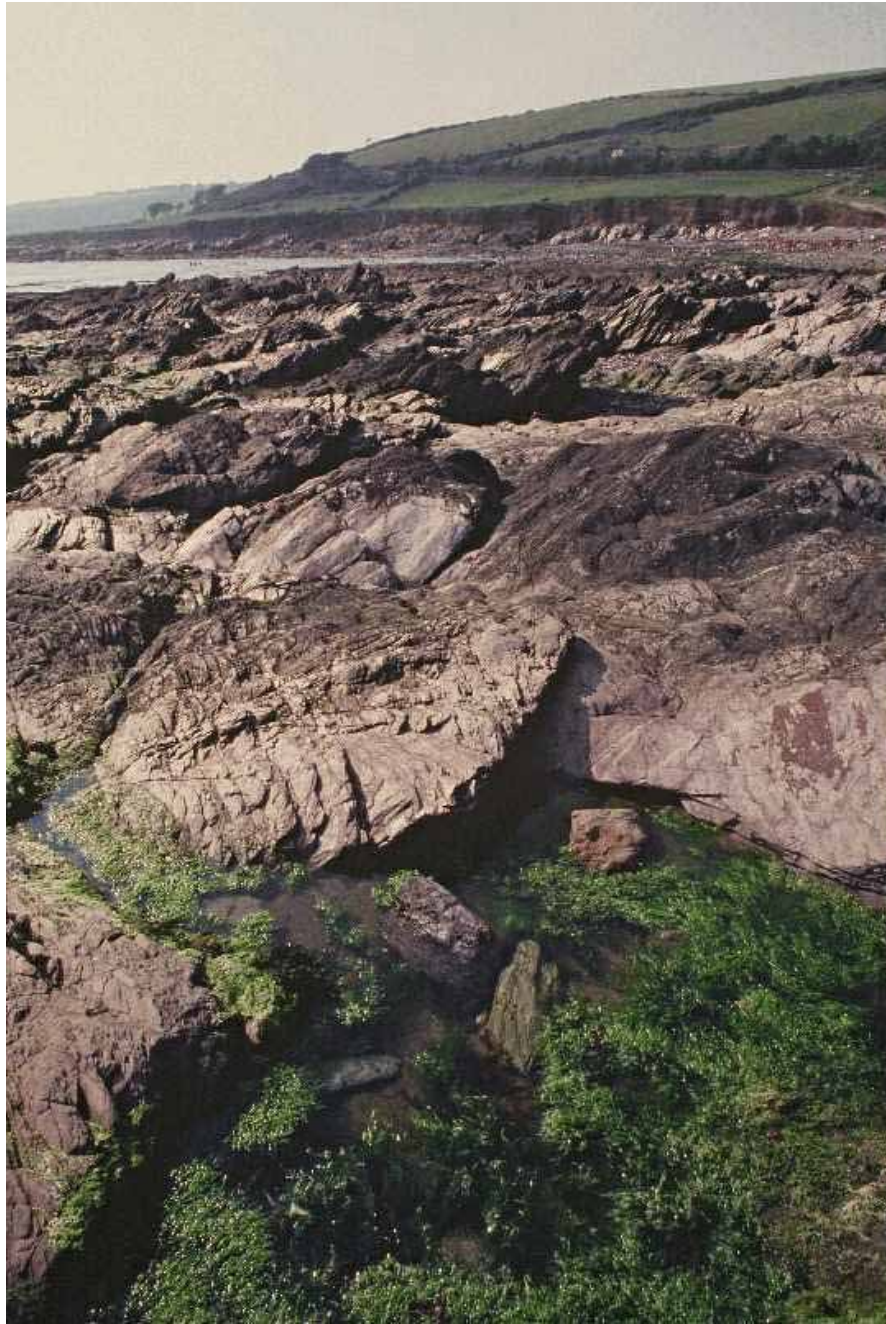
- The Lower Devonian Wembury siltstones (purple red and grey slates with scattered sandstone beds).
- The intrusion of the siltstones by basic dykes and deformation by folding.
- Excellent example of a raised beach platform backed by a fossil cliff line.
- Overlying Periglacial Head deposits forming a prominent coastal platform and current cliff line.

WEMBURY POINT



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View (1) of the shore platform (Lower Devonian, Dartmouth Group) at Wembury.
Note low cliff in Pleistocene, periglacial head at back of beach



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View (2) of the shore platform (Lower Devonian, Dartmouth Group) at Wembury.
Note low cliff in Pleistocene, periglacial head at back of beach