

WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	St. Helen's Glaciomarine Mud		
Other names used for site			
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	St. Helens Burrow, Bing		
NEAREST TOWN/VILLAGE	Rosslare		
SIX INCH MAP NUMBER	48		
ITM CO-ORDINATES	705522E 606228N (centre of feature)		
1:50,000 O.S. SHEET NUMBER	77	GSi BEDROCK 1:100,000 SHEET NO.	23

Outline Site Description

A coastal section, comprising low cliffs backing a long gently-curved sandy beach between Greenore Point and St.Helen's.

Geological System/Age and Primary Rock Type

Quaternary (Late Devensian) age glaciomarine muds with shelly material of Arctic marine fauna. The sediments are underlain by Neoproterozoic amphibolite, grey-coloured gneiss (Greenore Point Group) and dark-coloured diorite.

Main Geological or Geomorphological Interest

The coastal section consists of sloping vegetated muddy cliffs (bluffs) made up of massive to laminated muds, with some silty horizons, and an overall absence of coarse-grained material in the cliffs. The layers (diamicts) contain well-preserved shelly cold-water microfauna (*E. clavatum*; *C. lobatalus*). These shell-fish microfauna are commonly found in marine waters in Arctic regions, indicating that Arctic conditions prevailed in south Wexford during the last Ice Age. This all indicates that the muds were deposited by glaciers in a marine environment (i.e. glaciomarine).

Site Importance – County Geological Site

This is an important County Geological Site with mud and silt layers in cliff sections that provide evidence for glaciomarine conditions during the decay cycle of the Irish Sea glacier towards the end of the last Ice Age. The site includes St. Helen's Burrow pNHA (000782) and is situated along the boundary of Carnsore Point SAC (002269).

Management/promotion issues

The site was designated a Coastal Policy Area under the County Development Plan (2007-2013) for its intrinsic natural and special amenity value and limited capacity to absorb development. Coastal erosion is a continual factor affecting this coastline. This site is not deemed of particular public interest, as it resembles much of the Wexford coastline north and south of Rosslare, where muddy cliffs and bluffs are being eroded by the sea.



View of muddy cliffs along beach looking southwest to St. Helen's Golf Club.



Vegetated cliff collapses along the beach between St. Helen's and Greenore Point.



Muddy cliffs below St. Helen's Golf Club.



Mud exposed at foot of cliff overlying amphibolite near Greenore Point.



Marine bivalve shells in cliff muds at Greenore Point.

