

WEXFORD - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Sandeel Bay		
Other names used for site			
IGH THEME	IGH2 Precambrian to Devonian Palaeontology, IGH10 Devonian		
TOWNLAND(S)	Houseland		
NEAREST TOWN/VILLAGE	Fethard		
SIX INCH MAP NUMBER	49, 50		
ITM CO-ORDINATES	676460E 601590N		
1:50,000 O.S. SHEET NUMBER	76	GSI Bedrock 1:100,000 Sheet No.	23

Outline Site Description

The site is a coastal cliff.

Geological System/Age and Primary Rock Type

The rocks are Devonian in age, and belong to the Harrylock Formation, part of the 'Old Red Sandstone' – sedimentary rocks formed by rivers on an arid continent.

Main Geological or Geomorphological Interest

This coastal cliff site displays interesting sedimentological features from river deposits on a land surface, from the Devonian Period. Unusual and important plant fossils have been found within the sequence. The site exposes a cliff section in the Harrylock Formation with a continental fluvial sequence of fining upward cycles. In this particular section, a superb cycle boundary is exposed. The prominent thick sandstone conglomerate has a pronounced erosive base which downcuts into the underlying fine grained sediments of the underlying (older) cycle. It is in these dark grey siltstones that plant fossils have been found. The plants are preserved as fragmentary permineralised material, and stems of arborescent lycopods and gymnosperms have been described. The site is the type locality for a lycopod described as *Wexfordia hookense*. Siltstones at this horizon have also yielded a diverse miospore assemblage that indicates a late Devonian age.

Immediately adjacent to the end of the track down to the beach on its northern side is a dish shaped excavation with the characteristic scars of millstone excavation.

Site Importance – County Geological Site; recommended for Geological NHA

This site contains one of the best examples of a continental fining upward sequence in Ireland and therefore is of considerable sedimentological interest. In addition, this site is the type locality for the arborescent lycopod *Wexfordia hookense* Matten, 1989.

Management/promotion issues

Public access here is by a track and slipway to the beach and foreshore. The long term issue here is site erosion by the sea, as the cliffs get undercut and collapse in rockfalls where they are competent, or form slides or slumps in the weaker zones. However, such dynamism is a natural part of any coastal site, and erosion may reveal new sections of fossiliferous interest. Care must be taken by any visitor to the beach as access to the beach is partly tidally controlled, and rocky cliffs may be dangerous.

The site is entirely within the Hook Head SAC/NHA 764, a marine SAC. Any attempted collection of fossils or rocks, other than as loose material, should be strongly discouraged and reported to NPWS and/or GSI.



The site viewed from the end of the track to the slipway.



The main erosive sandstone conglomerate unit, downcutting steeply towards the left of the cliff. The beds of grey shales with fossil plant fragments lie at the lower right hand side.



Left: The beds of grey shales with fossil plant fragments lie at the lower right hand side.



Right: The excavation dish of a millstone beside the track and slipway.

