

CORK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Youghal Bay		
Other names used for site			
IGH THEME	IGH13 Coastal Geomorphology		
TOWNLAND(S)	Claycastle, Summerfield, Ballyvergan East, Kennel, Colerenagh, Monearmore, Redbarn, Clonard West, Clonard East, Pillmore, Clonpriest West, Clonpriest East, Aghavine, Gortavadda, Ballykinealy, Ring		
NEAREST TOWN/VILLAGE	Youghal, Ballymacoda		
SIX INCH MAP NUMBER	67, 78		
ITM CO-ORDINATES	610770E 567450N (NE), 603710E, 571540N (SW)		
1:50,000 O.S. SHEET NUMBER	81	GSi BEDROCK 1:100,000 SHEET NO.	25
GIS CODE	CK088		

Outline Site Description

A large bay extending southwest from Youghal town for approximately 6 km, to the Womanagh River estuary. The latter has a wide intertidal zone with sandflats and mudflats. A sandspit extends northeast toward Youghal and passes into low cliffs backed by glacial till and a freshwater marsh.

Geological System/Age and Primary Rock Type

The estuary, spit and marsh were formed in the Holocene Period, following the last glaciation. The glacial till in the centre of the site is Irish Sea Till, deposited from the Irish Sea glacier during the last Ice Age, around 20,000 years ago.

Main Geological or Geomorphological Interest

Youghal Bay is a large site with several well-defined components. The Womanagh River estuary includes intertidal mudflats and sandflats, with the inner part dominated by finer sediment and the outer part comprising fine rippled sand. The river channel is bounded by saltmarsh, with Atlantic and Mediterranean salt meadows, including some rare species of vegetation. The sandspit that extends northwards from the estuary is backed by low dunes that pass into low cliffs of till. This till is Irish Sea till with dominant Devonian Old Red Sandstone clasts. As the till passes northwards into the freshwater Ballyvergan Marsh, the narrow belt of low dunes is re-established and extends almost to the northern end of the site. Ballyvergan Marsh is the largest freshwater marsh in County Cork, albeit one that has undergone some seawater infiltration in its eastern part.

Site Importance – County Geological Site

Youghal Bay is an impressive geomorphological feature with well-defined components that are good representatives of coastal features and processes in Ireland, specifically estuarine sedimentation, sandspit and dune development, and both freshwater and saltwater coastal marsh development. Access is possible to most parts of the site via the road network or the boardwalk that links Redbarn and Youghal town.

Management/promotion issues

The site includes Ballymacoda SAC, which is designated for its tidal flats and salt meadows, and part of Ballymacoda Bay SPA, one of the most important bird sites in the country. The construction of the boardwalk indicates active management of this part of the coast and presents an opportunity for promotion of the geomorphological aspects of the bay through signage.



View northwards across Youghal Bay from the Ring peninsula. Youghal town visible on right at north end of bay, Womagh River estuary to left.



View westwards along contact between Ballyvergin Marsh (right) and deposit of Irish Sea Till with clasts dominated by Devonian sandstone (grassed area on left).



View westwards over Womagh River tidal marsh at Pillmore.



View southwest at Pillmore Strand, at southern end of Youghal Bay, along sandspit and low dunes towards the mouth of the Womagh River.

