

LOUTH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Dundalk Bay
Other names used for site	
IGH THEME	IGH13 Coastal geomorphology
TOWNLAND(S)	Loughanmore, Rampark, Annaloughan, Rockmarshall, Bellurgan, Aghaboys, Marsh North, Point, Townparks, Marsh South, Haggardstown, Mooretown, Dromiskin, Castlebellingham, Linns, Dillonstown
NEAREST TOWN/VILLAGE	Dundalk
SIX INCH MAP NUMBER	7, 8, 12, 15
ITM CO-ORDINATES	710300E 806500N (centre of Bay)
1:50,000 O.S. SHEET NUMBER	36
GSI BEDROCK 1:100,000 SHEET NO.	8/9, 13

Outline Site Description

Dundalk Bay is a wide coastal embayment, flanked on either side by bedrock headlands and incorporating wide expanses of coastal flats.

Geological System/Age and Primary Rock Type

The feature has been forming in the Holocene Period following the last glaciation, and the bay itself hosts soft mud, silt and sand sediment washed into it during that time.

It is likely that the macro-structure of the Bay dates back beyond the Quaternary (Ice Age) to the Palaeogene Period.

Main Geological or Geomorphological Interest

The bay is almost perfectly symmetrical and is bordered on the northeast by the Castletown River Estuary and to the south by the Glyde Estuary at Annagassan. Freshwater feeds into the bay *via* the Glyde, Fane and Castletown Rivers, which flow through Annagassan, Blackrock and Dundalk respectively. The central portion of the bay comprises mud, silt and sand flats, which dry out at low tide. Extensive salt marshes and intertidal sand/mudflats also occur in pockets around the edge of the bay and there is a narrow sand or gravel beach in places also.

Shingle beaches are particularly well represented in Dundalk Bay, occurring more or less continuously from Salterstown to Lurgan White House in the south, and from Jenkinstown to east of Giles Quay in the north. The shingle is mostly stable, occurring on post-glacial raised beaches. The shingle often occurs in association with intertidal shingle, salt marsh and or shingle-based grassland.

Site Importance - County Geological Site

The extensive flats and the associated beach, dune and slack features, as well as the surrounding beaches, salt marshes and headlands, make Dundalk Bay a textbook locality for the recognition of coastal erosion and deposition features. The Harbour is already a proposed NHA (pNHA 00455, Dundalk Bay), SPA and SAC for biodiversity reasons and the geodiversity of an active sedimentation system should be highlighted in any promotion of this.

Management/promotion issues

The location of the features of interest makes them easily accessible, and Dundalk Bay is a popular recreational area given the number of fine beaches around its perimeter. Information boards at Port and Blackrock are worthy additions to the site, and explain the features associated habitats, flora and fauna. The geological formation of the feature could be highlighted in future on literature produced on the bay.



A panorama view of Dundalk Bay, across the mud, silt and sand flats, near Castlebellingham.



Shingle beach at the edge of Dundalk Bay, near Castlebellingham.



