MAYO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Blacksod Bay

Other names used for site Cuan an Fhoid Dubh

IGH THEME IGH13 Coastal Geomorphology

TOWNLAND(S) (Numerous townlands bordering bay)

NEAREST TOWN/VILLAGE Belmullet SIX INCH MAP NUMBER 33, 34, 42, 43

ITM CO-ORDINATES 468000E 815010N (centre of features) 1:50,000 O.S. SHEET NO. 22 GSI BEDROCK 1:100,000 SHEET NO. 6

GIS Code MO012

Outline Site Description

A large bay extending from Belmullet and the Mullet peninsula (north) to Achill Island (south), and bordered by a coastline of cliffs, promontories, inlets, shallow sandy bays and estuaries, beaches, sand dunes, and low-lying bogland and rocky shoreline.

Geological System/Age and Primary Rock Type

Bedrock exposed along the coastline of Blacksod Bay ranges from Palaeoproterozoic, Mesoproterozoic and Neoproterozoic (Dalradian) age metamorphic rock and Caledonian age igneous rock. The bay itself, as it is appears today, has largely formed in the 12,000 years since the last glaciation (Holocene Period, post Ice Age). The bay hosts sand and silt sediment, and soft mud, which has washed into and around it during that time. The main structure of the bay probably dates back through the Quaternary. Erosion of the coast and deposition of sediments contributes to the continued development of the site's geomorphology.

Main Geological or Geomorphological Interest

The bay is over 20km long, from north to south. The mouth of the bay is c. 10km wide between Saddle Head (Achill Island) and the southern tip of the Mullet peninsula. The bay also drains southwards through Achill Sound. The bay is bordered by sea cliffs along the north coast of Achill Island. Numerous beaches occur along the northern edges of the bay, particularly in Trawmore Bay, Elly Bay (near Belmullet) and at Doolough. The southeast part of the bay is shallow, with wide expanses of sand and mud sediments (such as in Tullaghan Bay, and at the mouth of the Owenmore River). The coast is also bounded by low peatbogs, such as at Gubnastacky.

Site Importance – County Geological Site; recommended for Geological NHA

The northern part of Blacksod Bay is located within the Mullet/Blacksod Bay Complex SAC (0000470). Cumulatively, the site has a wide range of features of interest, such that it has national importance for the proximal Palaeoproterozoic, Mesoproterozoic and Neoproterozoic geology (see Doogort and Doolough (Gneiss) site reports) and will be considered for geological NHA status. Coastal geomorphology features are also of significant interest around the bay.

Management/promotion issues

This extensive site is easily observable from many locations around the bay, and coastal sections (e.g. beaches, piers and headlands) are publicly accessible. Aside from normal warnings about safety near coastal cliff sections and caution with tides along foreshore settings, this site is one which could be promoted in publications, websites, and other ways. An information board at the parking facility/trailhead at Doogort (Achill Island), Doolough, or at Belmullet would prove valuable in communicating aspects of the site's geodiversity and associated biodiversity.



Nephin Beg range from Ridge Point on Achill Island.



Mayo flag over Blacksod Bay.



Pollawaddy beach and Slievemore (672m), Achill Island, at south coast of Blacksod Bay.



Barnynagappul Strand at the SE part of Blacksod Bay, looking north.



 $Low\ rocky\ shoreline\ at\ Doolough\ Point,\ looking\ west\ across\ the\ north\ part\ of\ Blacksod\ Bay\ to\ the\ Mullet.$



