

DUN LAOGHAIRE - RATHDOWN – COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Blackrock Breccia		
Other names used for site			
IGH THEME	IGH 11 Igneous intrusions		
TOWNLAND(S)	Intake		
NEAREST TOWN/VILLAGE	Blackrock		
SIX INCH MAP NUMBER	23		
ITM CO-ORDINATES	721339E 729661N		
1:50,000 O.S. SHEET NUMBER	50	GSi BEDROCK 1:100,000 SHEET NO:	16

Outline Site Description

A small area of rocks exposed in the intertidal zone beside the coastal path, adjacent to Blackrock DART Station.

Geological System/Age and Primary Rock Type

The granite breccia is related to the intrusion of the Leinster Granite plutons in the Wicklow Mountains and the southern part of the Dublin area. It is probably of the same age of around 405 million years ago.

Main Geological or Geomorphological Interest

The small area (approximately 30m by 13m) of rock exposed in the intertidal zone is composed of a breccia – mostly angular fragments of granite set in a matrix of finely broken granite. No junction or boundary with another rock type is seen although exposures of granite are mapped to the south of the swimming baths beside the DART Station, and Carboniferous Limestone outcrops occur in the area. The rock is interpreted to be an explosion breccia – broken up by the upsurge of an explosive gas phase in the later stages of the intrusion of the granite.

Site Importance - County Geological Site; may be recommended for Geological NHA

As an unusual and relatively rare rock type, in Ireland at least, it merits CGS status, but may be considered for NHA designation when all sites in the Igneous intrusions theme are assessed together.

Management/promotion issues

The biggest risk to the site is the sea which is constantly attacking it. Eventual attrition will reduce the upstanding parts to a plane at low tide, but it may take some time. The benefit of the sea erosion is that it keeps surfaces polished and free of seaweed and barnacles so that the breccia is clearly visible.



The Blackrock Breccia at low tide, with swimming baths in the background (2004).



The breccia close-up.



The Blackrock Breccia at high tide.



