

KERRY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Barrow
Other names used for site	Barrow Harbour - Fenit, Fenit Towerkarst, and including Cloughnacrousta
IGH THEME	IGH1 Karst, IGH12 Mesozoic and Cenozoic, IGH8 Lower Carboniferous
TOWNLAND(S)	Barrow
NEAREST TOWN/VILLAGE	Fenit
SIX INCH MAP NUMBER	28
ITM CO-ORDINATES	474575E 619400N (Cloughnacrousta)
1:50,000 O.S. SHEET NUMBER	71
GSi BEDROCK 1:100,000 SHEET NO.	20
GIS CODE	KY017

Outline Site Description

This site includes an area of limestone knolls, inland from the coast at Carrahane Strand.

Geological System/Age and Primary Rock Type

The rocks exposed in this area are fossil-rich Waulsortian limestones from the Lower Carboniferous (Mississippian, 359-323 million years old). The primary interest in the site is the karstic features that have a proven or indicative late Pliocene Epoch age (c. 5.3 to 2.6 million years old).

Main Geological or Geomorphological Interest

The Waulsortian limestone mudmounds exposed along the southern end of Carrahane Strand display a number of juxtaposed mound cores. These mounds contain typical Waulsortian faunal elements, including crinoids and foraminifera. Conodonts present in exposures just north of the site indicate a specific late Courcayan – Chadian age within the Lower Carboniferous (354 to 343 million years old).

Around this locality are a number of isolated, steep-sided ‘towers’ of limestone bedrock, that are interpreted as relict, glacially-modified tower karst. They are considered to be potentially the best example of a group of such hills in Ireland, with better exposure and less blanketing by glacial sediments than in other comparable sites. Prior to glacial modification, the features may have been similar to the classic tower karst of the Guilin area in China.

It is apparent from natural exposures that the hills at Barrow are composed of typical massive Waulsortian carbonate mudbanks. The massive nature of these carbonate mudbanks tends to make them more resistant to erosion, and consequently they have formed a series of isolated hills or towers in this area.

Site Importance – County Geological Site; recommended for Geological NHA

As they are considered to be potentially the best example of a group of such relict tower karst hills in Ireland, they are of national importance and have been previously proposed to the National Parks and Wildlife Service (NPWS) for designation as a Geological NHA. In the absence of progress with Geological NHA designation, the inclusion of the Barrow site as a County Geological Site is important.

Management/promotion issues

The site is on private farmland and is not accessible without landowner permission. Given the dramatic nature of the cliffs and towers, they are best viewed from nearby roads, or from Carrahane Strand. Some of the site is within the Tralee Bay Complex SPA (site code 004188) and Akeragh, Banna and Barrow Harbour SAC / pNHA (site code 000332). Tower karst features such as these are rare in Ireland, so the site merits promotion, preferably as part of a north Kerry coastal geological heritage trail.



View of 'Cloghnacrousta' towerkarst from Carrahane Strand.



Twin karst towers in Barrow Townland.



Cloghnacrousta, viewed from the south. Person at right for scale.



Panorama of the towerkarst at Barrow Harbour – Fenit.

