DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Fairies Bridge
Other names used for site The Fairy Bridges

IGH THEME IGH13 Coastal Geomorphology

TOWNLAND(S) Finner
NEAREST TOWN/VILLAGE Bundoran
SIX INCH MAP NUMBER 106

ITM CO-ORDINATES 582555E, 860257N

1:50,000 O.S. SHEET NUMBER: 16 GSI BEDROCK 1:100,000 SHEET NOs. 3, 4

GIS Code DL015

Outline Site Description

This site comprises two striking sea arches, below a cliff section.

Geological System/Age and Primary Rock Type

The arches have been formed in the last 10,000 years (Holocene) since the end of the last Ice Age. They are formed within limestone of the Lower Carboniferous Ballyshannon Limestone Formation.

Main Geological or Geomorphological Interest

Undermining of the cliff-face by coastal erosion has led to the formation of two sea arches at the top of the cliff. Such natural arches are common features in coastal settings and arise where underlying strata in a cliff undergo more rapid erosion than overlying strata. This may occur simply because of more exposure to sea erosion, but the process may be accelerated by a difference in hardness between interbedded rocks.

Marine erosion of this kind initially creates sea caves in cliff faces, but where a ridge has formed with cliff faces on either side, then erosion of the underlying strata eventually creates a hole through the base of the ridge and the arch is formed.

Apart from the two arches at Bundoran, there is a large blowhole in the cliff-top where further undermining has occurred.

Site Importance - County Geological Site

This site has two spectacular examples of sea arches, located close to a popular footpath in Bundoran.

Management/promotion issues

The Fairies Bridge has long been recognized as a local tourist feature. There is a signpost ("Fairy Bridges") immediately adjacent to the site and the site is also signposted from Bundoran town. The cliff-top around the sea arches is very exposed, and there is no fencing. The surface of the site around the arches is grassed and potentially slippery in wet weather.

Apart from ongoing natural erosion, there are no apparent threats to the site. The location of the sea arches within a tourist town means they are particularly suitable for promotion as geological heritage features. However, apart from the directional signposting, no information is available to the viewer regarding the nature of the sea arches. An information panel would enhance the attraction of these important geomorphological features.



View across The Fairies Bridge, towards the southwest.



View through the main sea arch, looking west.





Blowhole in cliff-top (left) and sign-post on walking path (right).

McClure et al. 2019. Geological Survey Ireland.





