

# NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

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| <b>NAME OF SITE</b>                 | <b>Stua Mór Phollaide</b>                |
| Other names used for site           | Pollet Great Arch, Great Pollet Sea Arch |
| <b>IGH THEME</b>                    | <b>IGH13 Coastal Geomorphology</b>       |
| <b>TOWNLAND(S)</b>                  | <b>Pollet, Doagh Beg</b>                 |
| <b>NEAREST TOWN/VILLAGE</b>         | <b>Portsalon</b>                         |
| <b>SIX INCH MAP NUMBER</b>          | <b>9</b>                                 |
| <b>ITM CO-ORDINATES</b>             | <b>624168E 945690N (centre of arch)</b>  |
| <b>1:50,000 O.S. SHEET NUMBER 2</b> | <b>GSI BEDROCK 1:100,000 SHEET NO. 1</b> |
| <b>GIS Code ND024</b>               |  |

## **Outline Site Description**

This site includes a high coastal cliff section that extends for several hundred metres, and includes a huge sea arch, as well as some other coastal erosion features.

## **Geological System/Age and Primary Rock Type**

The rock comprising the coastline at Pollet and Doagh Beg is quartzite of Precambrian age (2,500-541 Ma). The form of the cliffs was shaped within the Quaternary (Ice Age) Period, with much of the coastal erosion and *in situ* weathering of the bedrock having occurred since then, during post-glacial or Holocene times.

## **Main Geological or Geomorphological Interest**

The Pollet Great Arch site is only a few hundred metres long, and a walk along the cliffs here can allow an appreciation of a wide diversity of coastal erosion features situated within one small, and accessible area.

The coastline here comprises bedrock cliffs, some of which are overhanging. Headlands and small bays have been etched into the cliffs, and sea caves and blowholes are seen. A very large and impressive sea arch is the site's major feature. The arch itself is almost 20m high, and is a perfect arch form, having been cut through an isolated stack standing free in the ocean. Other smaller sea arches, sea stacks and spurs of rock jutting out into the ocean also occur adjacent to Pollet Great Arch. An impressive pebble and cobble gravel beach is also seen, having formed in a cove in between the rocky sections.

## **Site Importance – County Geological Site**

The Pollet Great Arch site is important owing to the variety of coastal erosional features which lie side by side in such a small area. The Great Arch is a textbook feature and one of the best examples of a sea arch in the country.

## **Management/promotion issues**

The site is accessible *via* the beach and is therefore easily visited. An entrance gateway and long entrance avenue have been provided down to the beach, although much of this passes over private farmland.

The cliffs north of the beach are high and are not fenced off, and care must be taken if atop the section and close to the faces. The importance of the arch and the origins of how it formed could be highlighted in a signboard at the site. The site is already an SAC and proposed NHA (001975, Ballyhoorisky Point to Fanad Head) for biodiversity reasons and the geodiversity of the locality should be highlighted in any promotion of this.



View north along the coastline from Pollet Great Arch.



Pollet Great Arch.



Stacks and incised bedrock slab beside beach.



View from inside a sea cave at Pollet Great Arch.

