

WATERFORD - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Raheen Shore |
| Other names used for site | Newtown Head |
| IGH THEME | IGH 2 Precambrian to Devonian Palaeontology, IGH 4 Cambrian to Silurian |
| TOWNLAND(S) | Raheen |
| NEAREST TOWN | Passage East |
| SIX INCH MAP NUMBER | Waterford 18 |
| NATIONAL GRID REFERENCE | 269995, 107310 |
| 1:50,000 O.S. SHEET NUMBER | 76 1/2 inch Sheet No. 23 |

Outline Site Description

Coastal rock exposures, mainly on the foreshore.

Geological System/Age and Primary Rock Type

The site has Upper Ordovician (Caradoc) volcanic rocks about 460 million years old. There are fossils within the sedimentary rocks, with lots of volcanic ash.

Main Geological or Geomorphological Interest

The volcanic ashes include a diverse range of small fossil brachiopod shells, typically centimeter or less, and trilobite fossils and some other species. This characteristic small shell size and the assemblage of fossils indicate they lived in fairly deep water, around the flanks of a volcano. The site is the place that several trilobite species were originally first described from – it is the type locality for those species and also for a cystoid – a type of echinoderm. Despite the fossil collections from here, the precise age of the rocks at Raheen compared with those further west, at Tramore and beyond, is the subject of debate amongst geologists and so the site has much research potential.

Site Importance

The site has already been proposed to National Parks and Wildlife Service for designation as a geological Natural Heritage Area, although it is included within the existing proposed NHA 787. It is also a part of the River Barrow and River Nore SAC 002161. County Geological Site status will help protect it until it is formally put forward for designation as a geological NHA.

Management/promotion issues

The site is accessible through public beach access, but the fossiliferous rocks are largely in the intertidal zone, and covered with barnacles and seaweed or by shifting sands. With the very small size of fossils, collecting fossils is not an easy task and so the site is not particularly suitable for public promotion of the geological interest. The access to the main volcanic rocks of Newtown Head is possible from the beach at the southern end or a path at the northern end, but is controlled by the tides in the River Suir. The site is continuous with the Newtown site, but is reported on separately.



A type fossil trilobite from Raheen Shore



Raheen Shore access path.



A view of site from Newtown cliffs to the north.



The fossiliferous rocks are in the foreshore zone over a lateral distance of several hundred metres.



