

NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Inishtrahull |
| Other names used for site | <i>Inis Trá Tholl</i> , Tor Rocks |
| IGH THEME | IGH5 Precambrian |
| TOWNLAND(S) | Inishtrahull |
| NEAREST TOWN/VILLAGE | Carndonagh |
| SIX INCH MAP NUMBER | (None) |
| ITM CO-ORDINATES | 648860E 965330N (Lighthouse) |
| 1:50,000 O.S. SHEET NUMBER 3 | GS1 BEDROCK 1:100,000 SHEET NOS. 1, 2 |
| GIS Code ND027 | |

Outline Site Description

Situated about 10km north of the Inishowen peninsula, Inishtrahull and the Tor Rocks are Ireland's most northerly islands.

Geological System/Age and Primary Rock Type

The island is composed of Palaeoproterozoic gneisses that have been dated to c. 1,779 million years old. The rocks are part of the Rhinns Complex, a suite of Palaeoproterozoic basement rocks.

Main Geological or Geomorphological Interest

The coarsely crystalline banded metamorphic rocks of Inishtrahull are the oldest rocks in north Donegal and in Ireland. Using the uranium-lead (U-Pb) zircon age dating method, researchers have proven that the syenitic gneiss of Inishtrahull is 1,779 million years old. They are now recognised as part of the Rhinns Complex.

Isotopic data indicates that the Rhinns Complex represents the addition of igneous material to the crust at c. 1,800 Ma, during Proterozoic events associated with an extensive 1,900–1,700 Ma mobile belt around the southern margin of Laurentia-Baltica. The Rhinns Complex rocks of north Donegal are similar to rocks in Colonsay and Islay in Scotland and are really a part of Greenland, forming a link between the Ketilidian province of the Svecofennian Orogeny of Scandinavia.

Site Importance – County Geological Site; recommended for Geological NHA

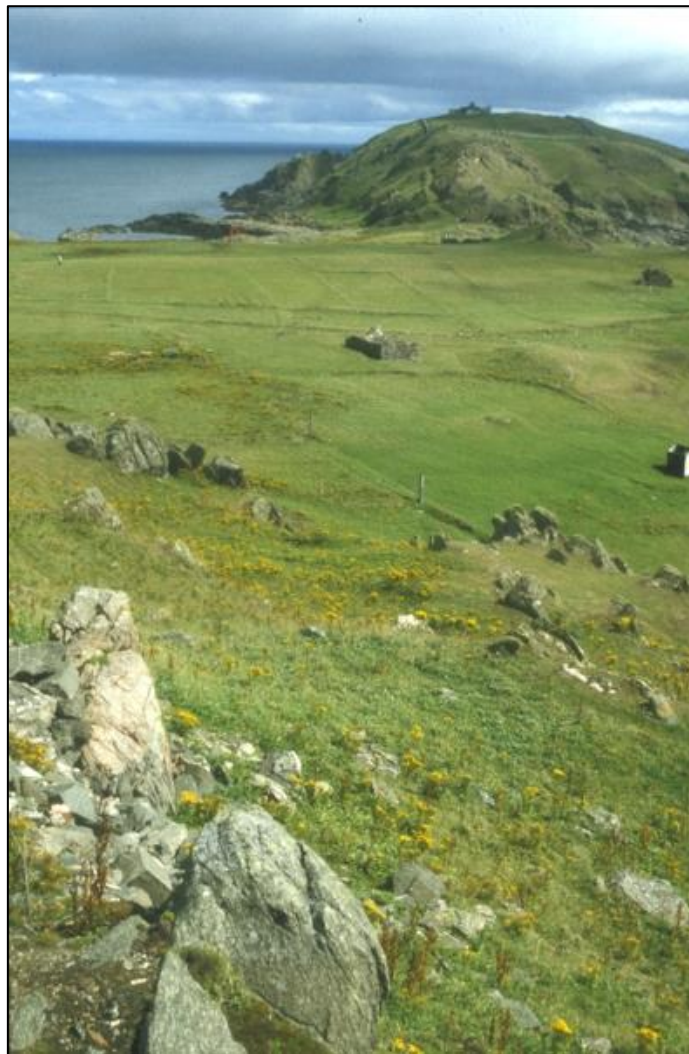
The site is of national importance for its exposure of the oldest rocks in Ireland, and is recommended for designation as a Geological NHA.

Management/promotion issues

The island is uninhabited, and is protected as SAC (000154), SPA (004100) and also as a proposed NHA for the wildlife.



The west side of Inishtrahull (photograph copyright Michael J Simms).



The east side of Inishtrahull (photograph copyright Michael J Simms).

