

NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Na Rosa
Other names used for site	The Rosses
IGH THEME	IGH7 Quaternary, IGH14 Fluvial and Lacustrine Geomorphology
TOWNLAND(S)	Meenmore, Keadew, Lefinn, Cruickaghmore, Belcruit, Meenbannad, Sheskinarone, Crohyboyle, Annagary, Drumnacart Mountain Pasture, Mullaghderg Mountain Pasture, Meenderryowen, Meencorwick
NEAREST TOWN/VILLAGE	Ailt an Chorráin, Anagaire, Cionn Caslach
SIX INCH MAP NUMBER	40, 41, 48, 49
ITM CO-ORDINATES	576000E 916000N (centre of area)
1:50,000 O.S. SHEET NUMBER 1	GSI Bedrock 1:100,000 Sheet No. 1
GIS Code ND025	

Outline Site Description

The Rosses is a geographical region in the west of County Donegal, separated from the rest of Donegal by a number of rivers.

Geological System/Age and Primary Rock Type

The Rosses covers a large area underlain by the late-Silurian/early-Devonian (420-390 Ma) Donegal Granite bedrock. The granite is part of the Donegal Batholith, one of a number of plutons that comprise the various granite varieties occurring in northwest Ireland. The landscape in its present form and the glacial features within it date from the last Ice Age.

Main Geological or Geomorphological Interest

The Rosses is a spectacular example of an areally-scoured landscape. The bedrock of the area has been moulded and sculpted by ice, meaning that all of the (frequent) outcrops have a smooth appearance, reflecting the polishing effect of the ice moving across them.

There are a number of excellent components within the area which are discrete examples of glacial erosion, including large scale features such as linear valleys, rock basins, crag and tails and roches moutonnées, as well as many small scale features such as localised roches moutonnées, whalebacks and chattermarks.

Very little till (boulder clay) has been deposited across The Rosses landscape. Where bedrock does not crop out, peat, which is usually relatively shallow, occurs.

Such an eroded landscape is known as 'knock and lochan' topography. This comprises a glacially-scoured lowland area which displays alternating roches moutonnées (cnoc: a small rock hill in Scots and Irish Gaelic) and eroded hollows often containing small lakes (lochans).

The entirety of the area of the Rosses is strewn with huge granite erratics, some of which are of Barnesmore Granite, proving that ice flow during glacial maximum over County Donegal was generally from south to north.

Site Importance – County Geological Site

The Rosses is a spectacular example of scoured lowland glaciated terrain, containing fine examples of glacial erosional features throughout.

Management/promotion issues

The Rosses is a popular tourist destination with many of the roads within popular walking routes. Few signboards have been erected and more information could be provided to describe the host rock geology and to illustrate the glacial processes that led to formation of the landscape.



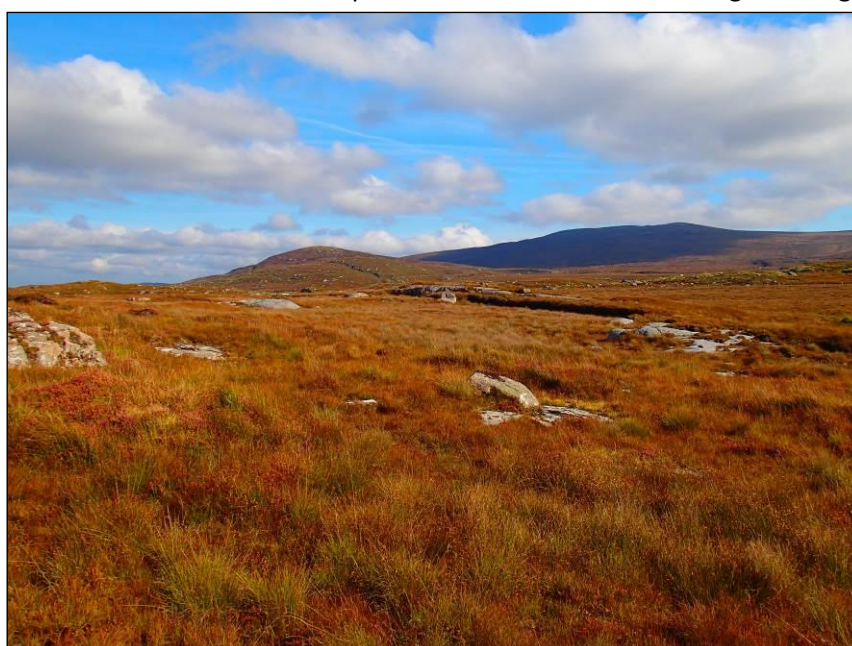
Polished bedrock outcrops (roches moutonnées) and interspersed lake at Bunawack.



Erratics strewn across The Rosses landscape.



The southern edge of Lough Anure.



Peat blanketing polished rock forms at Meencorwick.

