NORTH DONEGAL - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Glinsk

Other names used for site Glinsk, NW Fanad IGH THEME IGH5 Precambrian

TOWNLAND(S) Glinsk
NEAREST TOWN/VILLAGE Carrickart

SIX INCH MAP NUMBER 16

ITM CO-ORDINATES 613079E 940753N

1:50,000 O.S. SHEET NUMBER 2 GSI BEDROCK 1:100,000 SHEET NO. 1

GIS Code ND039

Outline Site Description

Coastal exposures with some inland exposures over more than 2km of section. It extends from Donaghmore Strand in the north to the edge of Drumnacraig Bay in the south.

Geological System/Age and Primary Rock Type

Dalradian pelites of the Sessiagh - Clonmass Formation are metamorphosed by the Fanad Granite Pluton.

Main Geological or Geomorphological Interest

This site has a section of the pelitic rocks of the Sessiagh – Clonmass Formation which are roughly at right angles to the contact with the Fanad Granite Pluton. Although there is some evidence of a mild degree of deformation associated with the intrusion of the granite, the principal geological interest here is a section that displays the effects of contact metamorphism. The effects of heat from a large granite intrusion create a thermal metamorphism, which falls off in a gradient, going away from the intrusion. It is rare to find an example where the effects of heat alone are demonstrated, as opposed to a combination of heat with deformations caused by pressure or stress associated with the intrusion.

The thermal metamorphic effect or metamorphic (or contact) aureole, is traced over about 2km of section along the shore, with different new minerals appearing at different distances with textures, size of crystals and shapes all being affected.

Site Importance – County Geological Site; may be recommended for Geological NHA

The site is of national importance in demonstrating the static thermal metamorphism caused by a large granite body, within one homogeneous formation.

Management/promotion issues

Access to the site is not easy, and aside from one boreen near the southern end, from Glinsk village itself, it appears that crossing private farmland is required. Low tide is best for this traverse along the coast, but caution is required at all times.



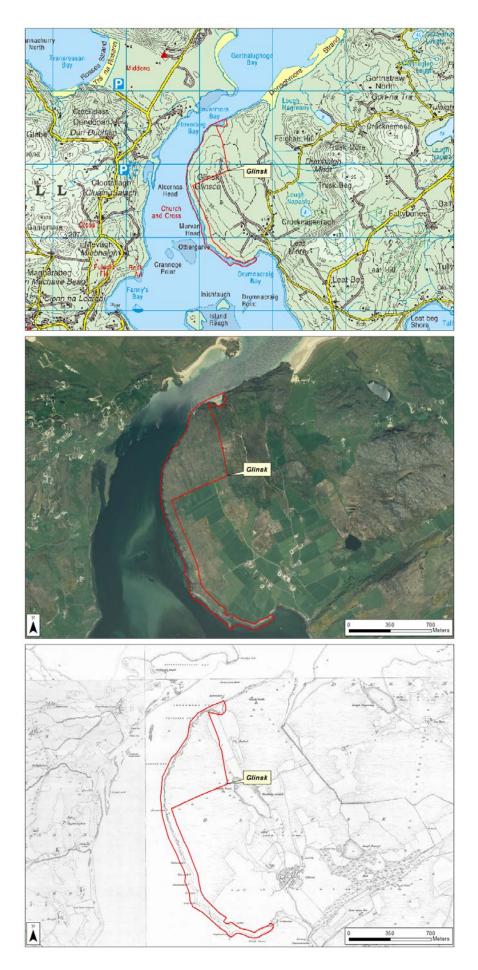
An overview of the site from higher ground, looking around at the arc of the coast.



A mineral assemblage typical of one of the zones of the static metamorphic aureole.



Views of typical parts of the long coastal section.



Hennessy et al. 2019. Geological Survey Ireland.