

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Cloonlooan
Other names used for site	
IGH THEME	IGH5 Precambrian
TOWNLAND(S)	Cloonlooan
NEAREST TOWN/VILLAGE	Tully Cross
SIX INCH MAP NUMBER	9
ITM CO-ORDINATES	467100E 762250N
1:50,000 O.S. SHEET No. 37	GSI BEDROCK 1:100,000 SHEET NO. 10

Outline Site Description

Series of large outcrops on moorland hillside, overlooking minor road.

Geological System/Age and Primary Rock Type

Schists of the Dalradian Argyll Group Streamstown Schist Formation, separated by the Renvyle-Bofin Slide from schists and quartzites of the Ben Levy Grit Formation.

Main Geological or Geomorphological Interest

The Renvyle-Bofin Slide is a ductile fault that can be traced from Inishbofin eastwards at least as far as Cornamona. It separates the Dalradian Connemara inlier (Bennabeola Succession) to the south from the Ben Levy Grit Formation. The latter is of uncertain age, with most workers ascribing it to the Upper Dalradian, and thus broadly in sequence with the underlying Dalradian succession, implying a relatively modest displacement across the slide. Conversely, GSI's bedrock geology report on the area suggests the slide is a much more significant feature, potentially involving significant displacement, and that the Ben Levy Grit Formation is thus not necessarily Dalradian but could be Cambrian or Ordovician. Tellus aeromagnetic maps appear to support the suggestion that the slide is a significant structural phenomenon. The Ben Levy Grit Formation is generally mylonitic, reflecting intense deformation accompanying movement along the slide, and some distinctive textures have been recorded. It is intruded by several mafic bodies, part of the Ordovician Connemara Metagabbro and Gneiss Complex, which provides a minimum age for the formation.

The timing of movement on the slide, relative to the regional deformation history, is uncertain, with various researchers ascribing it to D2, D3 or even D4 phases of deformation. In the area of Cloonlooan, the slide overlies the Streamstown Schist Formation but it ramps up and down through the Dalradian sequence.

Site Importance – County Geological Site

Cloonlooan affords an excellent opportunity to examine rocks and their structural features on either side of the Renvyle-Bofin Slide, an extensive ductile fault zone that can be traced from Inish Bofin to Cornamona in eastern Connemara.

Management/promotion issues

The site is not within any designated heritage or conservation area – it lies just north of Tully Mountain pNHA. The part of the site around the old Eagle's Nest school, now a private dwelling, is private land but most of the site is commonage and access is readily available from the road that forms the southern boundary of the site. Promotion is not required as the site is likely to be of interest mainly to geologists.



View northwestwards from southeastern end of site.



Ben Levy Grit Formation, north of Renvyle-Bofin Slide: intensely deformed schists and thin quartzites.



Ben Levy Grit Formation, north of Renvyle-Bofin Slide: intensely deformed schists and thin quartzites.



Ben Levy Grit Formation, north of Renvyle-Bofin Slide:
intensely deformed schists and thin quartzites.

