

SLIGO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE**Knocknarea**

Other names used for site

TOWNLAND(S)Culleenamore, Culleen Duff, Grange West, Grange North,
Rathcarrick
Strandhill**NEAREST TOWN****SIX INCH MAP NUMBER**

14

NATIONAL GRID REFERENCE

162500 334500 = G 62 34

1:50,000 O.S. SHEET NUMBER

25

1/2 inch Sheet No.

7

Outline Site Description

Isolated karstic hill.

Geological System/Age and Primary Rock Type

Carboniferous Limestone.

Main Geological or Geomorphological Interest

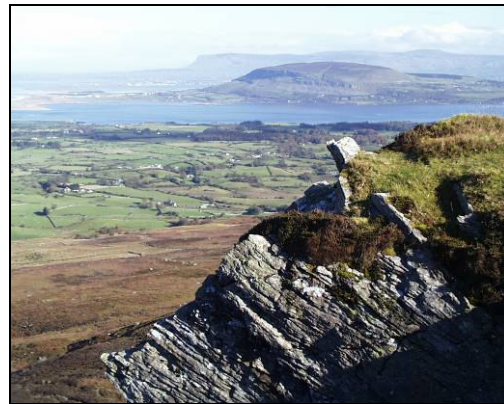
Blue/grey limestone of the Dartry Limestone formation defines the Hill of Knocknarea. The limestone here is rich in fossils and also contains blue/grey nodules of chert. These chert nodules formed during compaction and [lithification](#) early in the rocks history. Fossils include bush-like colonial corals, brachiopods (shells) and crinoids (sea-lillies). Where quartz has replaced the original composition, fossils appear to sit above the beds that contain them. This is because quartz is more resistant to weathering than limestone. Weathering along planes of weaknesses such as [bedding planes](#) and [fractures](#) has resulted in the formation of a natural limestone stairway along the path to the summit of Knocknarea Hill. Flooding of the lower end of this path occurs during the winter when a [turlough](#) on the shoulder of the hill fills up as a result of increased groundwater levels. Knocknarea is also an isolated hill, indicating part of the regional history of extensive glacial and karstic erosion. It also has tundra frost polygons, blockfields, protalus ramparts and other features of periglacial weathering.

Site Importance

The site is proposed as a County Geological Site under the IGH12 Mesozoic and Cenozoic theme and the IGH7 Quaternary theme of the GSI's IGH Programme.

Management/promotion issues

No known problems at time of writing.



Photos looking northeast at Knocknarea

Knocknarea

