SLIGO - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Other names used for site TOWNLAND(S) NEAREST TOWN SIX INCH MAP NUMBER NATIONAL GRID REFERENCE 1:50,000 O.S. SHEET NUMBER

Benbulben

many Grange 5 169000 346000 = G 69 46 16 **1/2 inch Sheet No.** 7

Outline Site Description

The Benbulben Plateau

Geological System/Age and Primary Rock Type

Lower Carboniferous limestones and shales.

Main Geological or Geomorphological Interest

The Benbulben Shale Formation (which overlies the Mullaghmore Sandstone Formation) is well exposed on the lower slopes of Benbulben and in some stream sections. Limestones defining the base of this formation are succeeded by a 90m package of thinly bedded black shales with occasional impure limestone bands. The shales are rich in fossils including brachiopods, corals, bryozoa, and caniniids. The top of the formation is characterized by the reappearance of limestone beds. A transitional phase from predominantly deltaic sedimentation to predominantly carbonate sedimentation is reflected in the overlying limestone and shale of the Glencar Limestone Formation. The gradual upward transition from the Benbulben Shale Formation to the Glencar Limestone Formation is well exposed in a stream section at Tievebaun (GR 17730 35080). Individual Glencar limestone beds average 10cm-20cm in thickness. Some beds are bioturbated (reflecting the burrowing activity of the organisms that lived in the sediment) and fossils are locally abundant. Overlying the Glencar Formation are the blue/grey limestones of the Dartry Limestone Formation. The limestone here is rich in fossils and also contains blue/grey nodules of chert, which formed during compaction and lithification early in the rocks history. A mud-bank limestone mound caps the Benbulben range. This upstanding structure could have formed in an environment analogous to modern day coral reefs.

As well as excellent exposures of Carboniferous rocks Benbulben displays important quaternary structures including Nunatak landscapes (where an isolated rock peak projects through an ice-sheet) and scree slopes.

Site Importance

This site is expected to be part of a large multi-interest geological NHA comprising Benbulben and the Truskmore Plateau (including parts in Leitrim) once IGH programme work is completed and final recommendations are made.

Management/promotion issues

Ben Bulben is an icon for Sligo that may be under no threat of damage, but needs to be protected as a landscape feature from inappropriate development such as houses at its base or other visually intrusive changes. As a representative geological section, the whole plateau is important, and individual parts such as Ben Whiskin are as significant as Ben Bulben itself.



Ben Bulben from the south. Photo: Matthew Parkes.

Benbulben

