MEATH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE

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

Galtrim Moraine

Summerhill, Ben Head-Galtrim, Trim esker moraine IGH 7 (Quaternary) Basketstown, Ballynamona, Monenstown, Galtrim, Summerhill (village), Trim (town) 42 286370 251850 = N 863 518 49 **1/2 inch Sheet No.** 13

Outline Site Description

Partially wooded, much quarried moraine ridge.

Geological System/Age and Primary Rock Type

Quaternary deposits predominantly of clay, sand and gravel.

Main Geological or Geomorphological Interest

The Galtrim Moraine represents a large glacial depositional feature known as a recessional moraine which formed along the ice front of a melting glacier as it retreated across the north central Midlands at the end of the last glaciation. The morainic ridge is discontinuous but is at its most striking at Basketstown-Ballynamona-Galtrim-Martinstown, where it is up to 20m high and forms a NW-SW trending arcuate ridge 3 kilometres long. The ridges around Galtrim represent fan-like accumulations at the margins of the glacial lake at Summerhill. The northwest to southeast trending eskers (see Trim Esker) which join the northern ice contact face of the moraine represent the main subglacial feeder channels at the time of deglaciation around 17,000 BP.

Site Importance

Prior to its extensive quarrying in the 1960's, the Galtrim locality was the only place worldwide where an esker was seen to cross a moraine. Synge (1950) gave a detailed morpho-sedimentological description of the associated eskers around Trim that are contemporaneous with the Galtrim Moraine. His highly robust model has stood the test of time and this remains one of the most important areas in the historical evolution of the study of the Quaternary History of Ireland.

A small portion of the moraine in Formal Townland forms part of the Rathmoylan (sic.) esker NHA.

Management/promotion issues

Quarrying is a major threat to the moraine and has already destroyed much of its integrity. Future extraction should not be permitted without consultation with the GSI. This is not recommended as an NHA owing to the size of the landforms, but the national importance of the features should be highlighted.

Left: A portion of the Galtrim moraine feature at Martinstown (R.Meehan 2007).





Galtrim moraine feature on DEM of area with the general ice limit marked in red (R.Meehan 2007).



Location of the ice contact faces along the Galtrim moraine feature as displayed on a DEM of the area, from Clonycurry in the southwest to Dunsany in the northeast. The interpreted general ice limit is marked in red (R.Meehan 2007).

Galtrim Moraine





