GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE
East Galway Moraines

Other names used for site
Ballygar-Mountbellew Moraines

IGH THEME
IGH7 Quaternary

TOWNLAND(S)
Gowla, Eskermore, Keeloges, Lattoon, Killen, Bredagh, Lughanagh, Ticooly, Ballyvoneen, Castle Ffrench, Killosolan, Eskerballycahill, Course, Greenville, Lisnagree, Crannagh, Gallagher, Rahins, Ballynasooragh, Mullaghmore South, Mullaghmore West, Mullaghmore East, Carrownabo, Patch, Annaghmore West, Annaghmore East, Gorteen, Carrownagannive, Castlegar, Ballynahowna, Longford, Ballinlass, Tirur, Islands, Tonacurra, Eskermurry, Cloonabricka

NEAREST TOWN/VILLAGE
Caltra, Castleblakeney, Mountbellew Bridge, Moylough, Ballygar

SIX INCH MAP NUMBER
32, 45, 46, 59, 60

ITM CO-ORDINATES
567500 748200N (centre of moraines extent, north of Mountbellew Bridge)

1:50,000 O.S. SHEET Nos. 46, 47

GSI BEDROCK 1:100,000 SHEET NOs. 11,12

Outline Site Description
The East Galway Moraines Complex includes a large accumulation of short, discrete, singular moraine ridges, interpreted to have been deposited at the edge of an eastward-retreating ice margin at the end of the last Ice Age.

Geological System/Age and Primary Rock Type
All the moraines have formed on bedrock of Lower Carboniferous limestones, but the ridges comprising the moraines themselves are Quaternary in age.

Main Geological or Geomorphological Interest
The moraines have only been noted in the scientific community since the early 2000s, and their origin is poorly understood.

The ridge features are each a few hundred metres long, generally no more than 100 m wide, and 2 m - 6 m high. The maximum amplitude of any of the ridges is approximately 8 m.

The features have a geometry suggesting they were deposited by an ice lobe retreating eastwards into the Irish Midlands at the end of the last ice age, as they are arcuate with horns pointing eastwards. However, this is at odds with the general consensus that the last ice retreat over the area was from east to west (as demonstrated by the Galway and Midlands eskers). More research is therefore needed to unravel their actual depositional processes and mode of formation, and its implications for the deglaciation of the last Irish ice sheet.

Site Importance – County Geological Site
The features are all good examples of ice marginal moraine ridges, formed at the retreating margin of a melting ice sheet. The system comprises a fine landform sequence and should be listed as a County Geological Site.

Management/promotion issues
The ridges are on privately-owned land and should not be examined without the permission of the respective landowners.
View of one of the ridges at Ballynahowna, just north of Mountbellew Bridge.

A ridge at Carrownagannive, near the junction of the R365 and N63 roads.

The low ridge at Lattoon, east of Caltra.