

LOUTH - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | Castlebellingham Morainic Complex |
| Other names used for site | |
| IGH THEME | IGH7 Quaternary |
| TOWNLAND(S) | Kilsaran, Milestown, Greenmount, Williamstown, Bolies |
| NEAREST TOWN/VILLAGE | Castlebellingham |
| SIX INCH MAP NUMBER | 15 |
| ITM CO-ORDINATE | 705300E 793300N (centre of feature) |
| 1:50,000 O.S. SHEET NUMBER | 36 GSI BEDROCK 1:100,000 SHEET NO. 13 |

Outline Site Description

The Castlebellingham Morainic Complex includes a large accumulation of sands and gravels deposited at the edge of the northward-retreating ice margin at the end of the last Ice Age.

Geological System/Age and Primary Rock Type

The morainic complex formed on bedrock of Silurian metasediments and volcanic rocks, but the features comprising the complex itself are Quaternary in age.

Main Geological or Geomorphological Interest

The morainic complex includes a distinctive hummocky topography just south of Castlebellingham where the land surface is formed of many small hummocks and marked hollows.

The feature is poorly exposed today but in the early 1970s Marshall McCabe logged many gravel pits from the area in detail. The topography reflects a wide range of depositional settings that resulted in ice-pushed ridges, hummocks and diamict ridges. McCabe has suggested that the morainic complex is part of the well-documented Killard Point Readvance System from north central Ireland, which can be correlated with the Heinrich 1 Event in the North Atlantic. During such events, armadas of icebergs broke off from glaciers and traversed the North Atlantic. The melting of the icebergs caused prodigious amounts of fresh water to be added to the North Atlantic Ocean.

The morainic complex is consequently important in unravelling the sequence of terrestrial to marine deposition in the northern Irish Sea Basin during deglaciation. The sands and gravels within the feature are comprised chiefly of sandstones and shales of Silurian-age.

Site Importance – County Geological Site

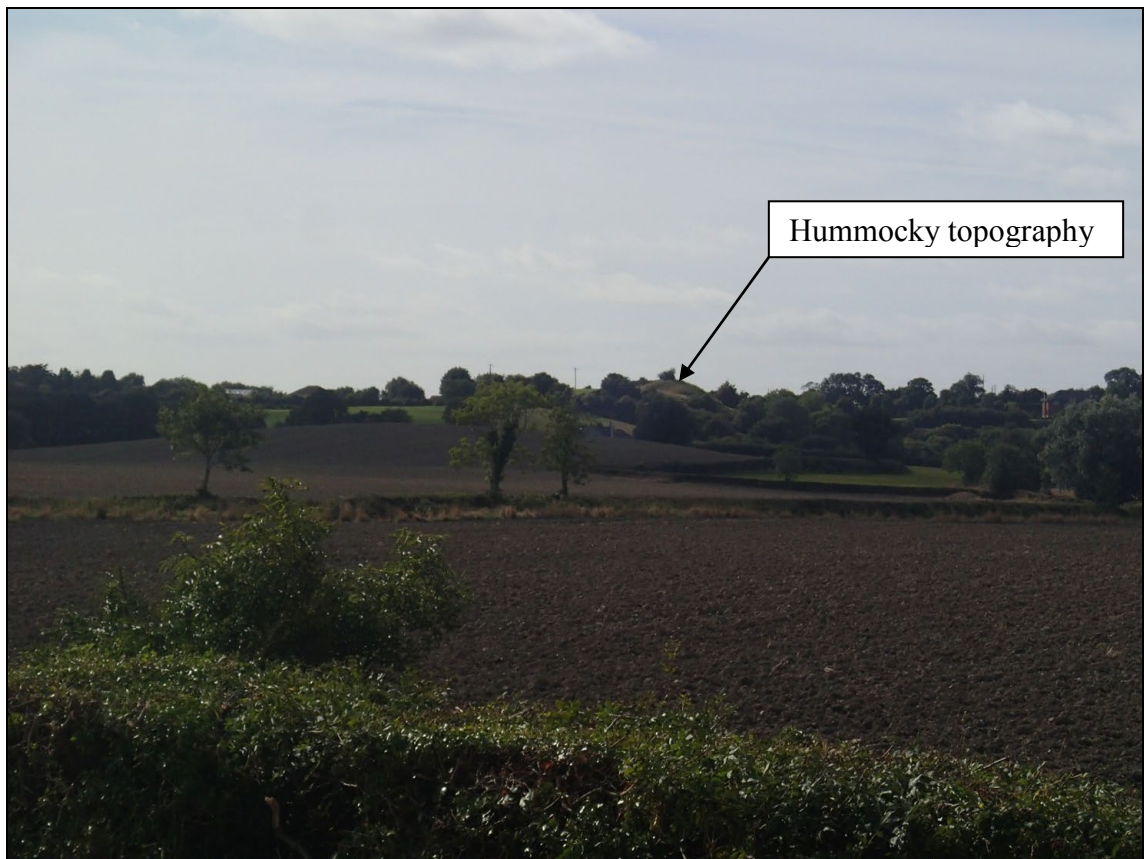
The feature is a good example of the haphazard, hummocky topography which forms at the retreating margin of a melting ice sheet.

Management/promotion issues

This system comprises a fine landform sequence and should be listed as a County Geological Site. The hummocks are readily visible from the R132 between Mullincross and Greenmount.



Well drained sand and gravel hummocks forming part of the morainic complex, at Milestown.



View of the edge of the hummocky morainic complex, at Greenmount, viewed from the northeast.

