

# LONGFORD - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Cloghchurnel Esker and Fan</b>
Other names used for site	Ballywillin Esker
<b>IGH THEME</b>	<b>IGH7 Quaternary</b>
<b>TOWNLAND(S)</b>	<b>Cloonbeen, Cloghchurnel, Ballywillin</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Granard</b>
<b>SIX INCH MAP NUMBER</b>	<b>7, 11</b>
<b>NATIONAL GRID REFERENCE</b>	<b>634640E 784280N (centre of feature)</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>34</b>
<b>GSi BEDROCK 1:100,000 SHEET NO.</b>	<b>12</b>

## **Outline Site Description**

The Cloghchurnel Esker and fan includes a large accumulation of sands and gravels deposited both under the ice sheet and at its margin as the ice withdrew northwestwards across north Longford at the end of the last Ice Age.

## **Geological System/Age and Primary Rock Type**

The Cloghchurnel Esker and Fan are formed within an area dominated by bedrock of Silurian Metasediments and Volcanics, with some Lower Carboniferous limestone bedrock at the southeastern end of the feature. The esker itself is Quaternary in age, having been deposited either under or at the edge of the northwestward-retreating ice sheet during deglaciation, approximately 14,000 years ago.

## **Main Geological or Geomorphological Interest**

Where present, the esker ridge is a striking feature, standing proud of the flat landscape of till (boulder clay) upon which it was deposited. Intact portions along the main R194 road northeast of Granard, and within Cloghchurnel Townland, are especially impressive. In both localities the esker is comprised of a raised, elevated ridge of sands and gravels.

The esker feature is important in that it records faithfully the ice movement across this area of northeast Longford which is along its orientation, *i.e.* northwest to southeast. Associated sands and gravels in Cloghchurnel and Ballywillin Townlands, flanking the esker, are probably part of an associated ice marginal fan. The sands and gravels within the feature are comprised chiefly of shale and sandstone clasts.

## **Site Importance – County Geological Site**

What remains of the feature is still a high, striking example of a dry sand and gravel ridge, which stands proud of the surrounding landscape. This esker and the associated sands and gravels in the locality are a good example of a deglacial, meltwater-deposited complex, with portions deposited under the ice, and portions at the ice margin.

## **Management/promotion issues**

This system comprises a well-defined landform sequence and should be listed as a County Geological Site. A signboard along the R194 road, where the feature can be well seen, might help promote the feature.



The Cloghchurnel Esker, looking southeast. See the high, elevated nature of the ridge.



Looking northwestwards from Cloghchurnel Townland along the esker ridge.



Some of the hummocky terrain where the esker and fan meet.



A portion of the (well drained) fan sands and gravels 'rising out' of flat, poorly drained alluvium.



