

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Monaraha Esker
Other names used for site	Caher Esker, Knockmorris Esker
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Monaraha, Knockmorris, Loughlohery
NEAREST TOWN/VILLAGE	Caher
SIX INCH MAP NUMBER	76, 82
ITM CO-ORDINATES	607740E 624800N (central portion of esker)
1:50,000 O.S. SHEET NUMBER 74	GSI BEDROCK 1:100,000 SHEET NO. 22

Outline Site Description

The Monaraha Esker includes a small, linear accumulation of sorted sand and gravel sediments deposited both under the ice sheet and at its margin as the ice withdrew northeastwards across south County Tipperary at the end of the last Ice Age.

Geological System/Age and Primary Rock Type

The esker and surrounding sands and gravels are formed entirely on Lower Carboniferous limestone rocks, across the lowlands southeast of the Galtee Mountains. The esker itself is Quaternary in age, having been deposited either under or at the edge of the northeastward-retreating ice sheet in deglaciation, approximately 14,000 years ago.

Main Geological or Geomorphological Interest

The esker ridge is a striking feature, standing proud of the flat landscape of till (boulder clay) upon which it was deposited. Throughout its extent, the esker forms a singular ridge of coarse gravels, with no flanking, hummocky sands or gravels; this is unusual as the majority of eskers in Ireland occur with associated sands and gravels.

The esker feature is important in that it records faithfully the ice movement across this area of Tipperary during the final phase of deglaciation. As well as this, the esker is also unusual in that it is surrounded by glacial till deposits which are dominated by erratic Namurian (Carboniferous) shales and sandstones, yet the ridge itself is comprised of clasts of limestone.

Site Importance – County Geological Site

The feature is a high, striking example of a dry sand and gravel ridge, and stands proud of the surrounding landscape.

Management/promotion issues

Much of the feature is on private land, but as some of the minor roads in the locality are built on top of the esker itself, it can be well seen from these roads. It is best viewed from the top of Knockmorris Hill, at the northeast. Much of the central portion of the feature has been quarried out, and any further quarrying should be managed carefully to try to preserve what is a relatively rare feature in the southern portion of Ireland.



An excavated portion of the Monaraha Esker; see the gorse-covered ridge feature extending off in the distance.



An excavated cross-section through the steep-sided esker ridge.



Bedded sands in the esker at Loughloher.



The tree-covered, northern portion of the liner ridge.

