

LIMERICK - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Carrigkerry Esker
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Knockaunnagun, Glensharrold, Glenastar
NEAREST TOWN/VILLAGE	Carrigkerry
SIX INCH MAP NUMBER	27, 28
ITM CO-ORDINATES	525066E 639487N (centre of easternmost esker segment)
1:50,000 O.S. SHEET NUMBER 64	GIS BEDROCK 1:100,000 SHEET NO. 17
GIS CODE LK006	

Outline Site Description

The Carrigkerry Esker and surrounding sands and gravels includes a small accumulation of sorted, waterlain sediments deposited both under the ice sheet and at its margin as the ice melted and withdrew eastwards across County Limerick 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 Carboniferous (Namurian) shale and sandstone, on the high ground of the Abbeyfeale Plateau. The esker itself is Quaternary in age, having been deposited either under or at the edge of the eastward-retreating ice sheet, approximately 14,000 years ago.

Main Geological or Geomorphological Interest

The esker ridge comprises three separate segments, which together form a 'chain' of esker beads. These are striking features, standing proud of the gently undulating landscape of till upon which they were deposited. In the central portion of the feature the esker has been surrounded by post-glacial peat deposits that formed in the Holocene. This is especially impressive along the central portion of the esker, in Glensharrold and Glenastar townlands. At the westernmost extent of the site, in Knockaunnagun, the esker grades from a singular ridge of coarse gravels to a more haphazard, hummocky topography.

The esker is important in that it records faithfully the ice movement across this area of Limerick during the final phase of deglaciation. As well as this, the esker is highly unusual in that, though deposited on shale and sandstone bedrock, the sands and gravels that forms the esker are dominated completely by limestone. This shows that the meltwater depositing the feature was flowing from east to west and suggests that the ice sheet that deposited it had its origin on the mid-Limerick lowlands, to the east of the upland plateau.

Site Importance – County Geological Site

The feature is a haphazardly-arranged, high, striking example of a dry sand and gravel ridge, and stands proud of the surrounding landscape. This system comprises a well-defined landform sequence and should be listed as a County Geological Site. The combination of an esker, mainly comprised of limestone clasts, sitting on shale / sandstone bedrock, is unique in southern Ireland.

Management/promotion issues

Much of the feature is on private land, but as some of the roads in the locality are built on top of the esker itself, it can be seen from these roads. Most of the area of the feature lies within the Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (sitecode 004161). Much of the easternmost 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 part of Ireland.



The easternmost segment of the Carrigkerry Esker in Glenastar Townland.



Exposed sands and gravels in a disused pit at Glenastar; note the limestone-dominated gravels.



A high section of the esker, at Glenastar.



The road at Glensharrold built on top of the esker

