

TIPPERARY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ardcrony Esker
Other names used for site	Willsborough Esker, Cloughjordan Esker
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Numerous townlands
NEAREST TOWN/VILLAGE	Ardcrony
SIX INCH MAP NUMBER	10, 15
ITM CO-ORDINATES	589600E 688130N
1:50,000 O.S. SHEET NUMBER 59	GSI BEDROCK 1:100,000 SHEET NO. 15

Outline Site Description

This esker system trends west-northwest to east-southeast in north Tipperary, traversing the N52 road at Ardcroney, and extending to the Limerick-Ballybrophy railway line.

Geological System/Age and Primary Rock Type

The esker system is Quaternary in age, having been deposited at the base of an ice sheet retreating northwestwards during deglaciation at the end of the last Ice Age, approximately 14,000 years ago. Underlying bedrock comprises Lower Carboniferous limestone, Calp and Waulsortian lithologies.

Main Geological or Geomorphological Interest

The Ardcroney Esker extends as a segmented and bifurcated esker system from Claree Lough (4 km east of the Lough Derg shore) eastwards towards Ardcroney, and further southeastwards to the Limerick-Ballybrophy railway line, a total distance of approximately 12 km. The esker is a fine example of a complex, multi-crested esker ridge which is comprised of numerous segments or beads. The esker ridges are striking features, and are noticeable as elevated ridges standing proud of the otherwise flat landscape. The esker has a very complex, generally sinuous morphology, and varies from wooded and vegetated ridges, to crests along which roads meander, and broad fans quarried for sand and gravel.

The esker and surrounding fans include a large accumulation of sands and gravels deposited both under the ice sheet in subglacial tunnels and at its mouth as the ice retreated northwestward during the final phase of deglaciation at the end of the last Ice Age. The sands and gravels within the eskers, and the wide fans, are comprised chiefly of limestone clasts. The most complex and widely spread portion of the esker is around Ardcroney, where several near parallel segments are oriented in a northwest-southeast direction.

Site Importance – County Geological Site

An important County Geological Site, the Ardcroney esker system is best example of a 'long beaded' esker type feature in County Tipperary. The esker ridges and fans contribute to an understanding of the deglacial process and meltwater-deposited geomorphology and glacial history of the region.

Management/promotion issues

Many sections of the esker system, which were mapped and recorded by Geological Survey Ireland in this region of north Tipperary, no longer survive. Part of the esker is a proposed Natural Heritage Area (pNHA 000943 Willsborough Esker). Many other parts of esker system are worthy of pNHA status geologically and geomorphologically. A signboard about the esker at Ardcroney would be helpful in informing the public on the geomorphological and glacial landscape features in the area.



View of esker segments at Coolagorane Upper, northwest of Ardcroney.



View northwards along N52 road cutting through esker at Ardcroney.



View northeast from L1057 bridge over Limerick-Ballybrophy railway line cutting through esker.



Cobbles, gravels and sands in quarry face at Kyleneaheskeragh (3.5 km south of Cloughjordan).

