

GALWAY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Ross Demesne – Ower Esker
Other names used for site	Oughterard Esker, Killanin Esker
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Ross Demesne, Pribbaun, Garrynagry, Boleyvaunaun, Killannin, Pollagh, Ower, Tulllokyne
NEAREST TOWN/VILLAGE	Oughterard
SIX INCH MAP NUMBER	68
ITM CO-ORDINATES	519686E 737850N (centre of esker at Killannin)
1:50,000 O.S. SHEET No. 45	GS1 BEDROCK 1:100,000 SHEET NO. 14

Outline Site Description

The Ross Demesne – Ower Esker and surrounding sands and gravels includes a small accumulation of sands and gravels deposited both under the ice sheet and at its margin as the ice withdrew westwards across County Galway 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 between Lough Corrib and the Connemara Escarpment. The esker itself is Quaternary in age, having been deposited either under or at the edge of the westward-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. In the central portion of the feature the esker has been surrounded by post-glacial peat deposits in the Holocene, since the Ice Age. This is especially impressive along the central portion of the esker, in Killannin townland. At the westernmost extent of the feature, in Ross Demesne, the esker grades from a singular ridge of coarse gravels to a more haphazard, hummocky topography.

The esker feature is important in that it records faithfully the ice movement across this area of Galway during the final phase of deglaciation. As well as this, the esker is highly unusual in that, though deposited on limestone bedrock, the materials that form the feature itself are dominated completely by granite. This shows that the meltwater depositing the feature was flowing from west to east, and suggests that the ice sheet that deposited it had its origin offshore, to the west of County Galway.

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. The nature of the deposits within the feature, as dominated by granite rocks on limestone bedrock, is unique in Ireland

Management/promotion issues

Much of the feature is on private land, but as many of the roads in the locality are built on top of the esker itself, it can be well seen from these roads. This system comprises a well-defined landform sequence and should be listed as a County Geological Site. A small portion of the Ross Lake and Woods SAC/pNHA straddles the western extreme of the esker (sitecode 001312).



A winding segment of the Ross Demesne – Ower Esker near 'Parkacapple' in Killannin Townland.



The steep-sided esker ridge, approaching Pollagh.



A high, beaded portion of the esker, at Pribbaun.



A small gravel pit into the esker complex at Ower.

