# WESTMEATH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Finnea-Murrens Esker
Other names used for site	Murrens Esker, Tonashammer Esker
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Finnea, Williamstown, Castletown Lower,
	Castletown Upper, Ardnagross, Tonyowen Lower,
	Tonyowen Upper, Sheskernagh, Tonashammer,
	Hammondstown and Tonaghmore
NEAREST TOWN/VILLAGE	Finnea
SIX INCH MAP NUMBER	1
ITM CO-ORDINATES	644850E 779000N (centre of feature)
1:50,000 O.S. SHEET NUMBER	34, 41 GSI BEDROCK 1:100,000 SHEET NO. 12

## **Outline Site Description**

The Finnea-Murrens Esker comprises a long, linear series of esker sand and gravel segments deposited under the ice sheet as the ice withdrew northwestwards across northwest Meath and north Westmeath at the end of the last Ice Age.

## Geological System/Age and Primary Rock Type

The Finnea-Murrens Esker is formed within an area dominated by bedrock of Lower Carboniferous limestone, with some chert-dominated bedrock beneath the southeastern end of the feature. The esker itself is Quaternary in age, having been deposited under the northwestward-retreating ice sheet during 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. Intact portions crossing the main R394 road southeast of Finnea, and within Tonashammer Townland, are especially impressive. In both localities the esker is comprised of a raised, elevated ridge of sands and gravels.

The sands and gravels within the esker feature are comprised chiefly of limestone clasts.

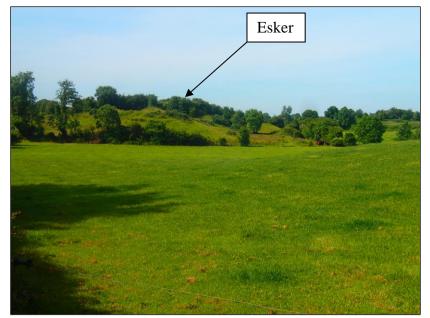
The esker feature is important in that it records faithfully the ice movement across this area of north Westmeath which was along its orientation, *i.e.* northwest to southeast. Associated sands and gravels around Finnea Village, in Castletown Lower and Upper Townlands, and adjacent to the Meath county boundary in Tonashammer Townland, flanking the esker, are probably part of associated ice marginal fans.

#### Site Importance – County Geological Site

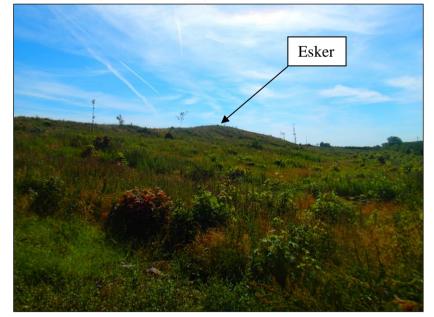
The feature is a high, striking example of a dry sand and gravel ridge, and stands proud of the surrounding landscape. This esker and the associated sands and gravels in the locality seem to be a good example of a deglacial, meltwater-deposited complex, with portions deposited under the ice (esker), and portions at the ice margin (fans). The southeasternmost extremity of the esker, in Tonashammer Townland, has been designated part of an NHA (Lough Naneagh NHA 001814), and noted for its calcareous grassland.

### Management/promotion issues

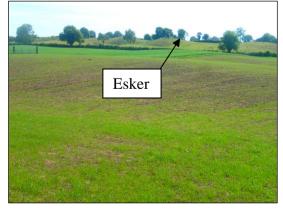
This system comprises a well-defined landform sequence and should be listed as a County Geological Site. A signboard along the R394 road, where the feature can be well seen, might help promote the feature.



The Finnea-Murrens Esker, looking south. See the high, elevated nature of the ridge.



Looking southeastwards in Sheskenagh Townland along the esker ridge.



A particularly hummocky portion of the esker in Tonasmhammer Townland.



Cross section through the esker along the roadside near the Meath county boundary.

