

CAVAN - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Mid-Cavan Drumlinised Ribbed Moraines
Other names used for site	
IGH THEME	IGH7 Quaternary
TOWNLAND(S)	Too many to list ... this portion of the field covers over one hundred individual townlands, across an area of 180 km²
NEAREST TOWN/VILLAGE	Cavan, Cootehill, Stradone
SIX INCH MAP NUMBER	15, 16, 20, 21
ITM CO-ORDINATES	654000E 811000N (centre of features)
1:50,000 O.S. SHEET NUMBER	27a, 28a GSI BEDROCK 1:100,000 SHEET NO. 8/9

Outline Site Description

This field of ribbed moraines forms part of the largest field of ribbed moraines found anywhere in the world. The entire field includes over 3,000 individual features, but this subset covers an area of 15 by 12 kilometres and contains approximately 170 individual features.

Geological System/Age and Primary Rock Type

The ribbed moraines were formed on bedrock of either Silurian or Ordovician metasediments and volcanic rocks. The moraines themselves are Quaternary in age, having been deposited at the base of the ice sheet moving in a southeasterly direction during the maximum period of the last Ice Age.

Main Geological or Geomorphological Interest

These ribbed moraines each contain many superimposed drumlins on their crests, and the area has traditionally been known as the middle portion of the 'Drumlin Belt'. Owing to their size, the true scale and size of the ribbed moraines can only be seen using digital elevation modelling (DEM) and satellite imagery.

This ribbed moraine field is not only unusual in its size and for the size of individual features, but also for being interspersed with thick peat which allows the features to stand out in a quite striking fashion. They form the perfect 'ribbed' topography.

The moraines in this portion of the field are generally 1km to 2km long and 500m or so wide, with individual superimposed drumlins being c. 500m long and 100m to 200m wide. They are typically 20m high but can attain a maximum height of about 35m. The largest individual feature in this portion of the field is 4 km long, 650m wide and up to 35m high.

Site Importance – County Geological Site

This area forms part of the largest field of discrete ribbed moraines in the world, and is therefore a prime example of the kind of features found within the most important such field in Ireland.

Management/promotion issues

This is an excellent site in terms of macro-scale Quaternary subglacial geomorphology. The features are too large to undertake any conservation efforts on their part, but the landscape itself is noteworthy and should be promoted as unique amongst landscape elements within the Cavan County Development Plan, and in Landscape Characterisation. The features are especially well viewed from the high ridge at Artonagh-Edrans, on the Stradone to Cootehill road.



A view across the mid-Cavan Drumlinised Ribbed Moraines, White Lough, west of Cootehill.



Individual ribbed moraine ridge at Rakane, near Cootehill, looking north.



