# **MONAGHAN - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Rockcorry-Cootehill Ribbed Moraines

Other names used for site

IGH THEME IGH7 Quaternary

TOWNLAND(S) Too many to list ... this portion of the field covers

over two hundred individual townlands, across an

area of 180 km<sup>2</sup>

NEAREST TOWN/VILLAGE Rockcorry, Cootehill (just inside Cavan)

SIX INCH MAP NUMBER Monaghan 17, 18, 22, 23

ITM CO-ORDINATES 666000E 891000N (centre of features)

1:50,000 O.S. SHEET NUMBER 28a GSI BEDROCK 1:100,000 SHEET NO. 8/9

### **Outline Site Description**

These moraines form part of the largest field of ribbed moraines found anywhere in the world (which also includes the Scotshouse-Redhills cross cutting ribbed moraines). The entire field includes over 3,000 features and this subset, covering an area of 18 by 10 kilometres, contains approximately 160 individual features. It includes the largest individual ribbed moraines found anywhere in the world.

## Geological System/Age and Primary Rock Type

The ribbed moraines were formed on bedrock of Silurian and Ordovician metasediments and volcanic rocks. The features themselves are Quaternary in age, having been deposited at the base of the ice sheet as it moved 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 ribbed moraines can only be seen using digital elevation modelling (DEM) and satellite imagery.

This ribbed moraine field is not only unusual in its huge size and the size of individual features around Rockcorry and Cootehill, but because they are interspersed with thick peat deposits the features are quite striking. They form the perfect 'ribbed' topography.

The features are generally 5km–8km long and 800m or so wide, with individual superimposed drumlins being c. 600m long and 100m–200m wide. They attain a maximum height of about 50m but are typically 30m or so high. The largest individual feature is 10 km long, 1 km wide and up to 45m high, and contains approximately 400 million tonnes of sediment.

#### Site Importance - County Geological Site; recommended for Geological NHA

These are the largest individual ribbed moraine features anywhere in the world and therefore one of the most important geological terrains 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 both the Monaghan County Development Plan, and in Landscape Characterisation.



A view across some of the Rockcorry-Cootehill ribbed moraines at Cargaghbane, east of Cootehill.



Ribbed moraines near Latton, County Monaghan, looking south.

