## **CAVAN - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Blackwater Valley

Other names used for site

IGH THEME IGH7 Quaternary

TOWNLAND(S) Ballaghdorragh, Ryefield, Edenburt, Lisduff,

Stramatt, Carraghkeelty More, Knocknagartan,

Corronagh

NEAREST TOWN/VILLAGE Virginia SIX INCH MAP NUMBER 43, 44

ITM CO-ORDINATES 663660E 782360N (centre of valley feature)

1:50,000 O.S. SHEET NUMBER 35 GSI BEDROCK 1:100,000 SHEET NO. 13

#### **Outline Site Description**

The Blackwater valley is the most significant river valley in the southernmost part of County Cavan. It extends southeastwards from the southern end of Lough Ramor near Lisduff. The pitted sandur that forms a striking hummocky terrain at the base of the valley is unique in the size and amplitude of its hummocks.

### Geological System/Age and Primary Rock Type

The valley is underlain by bedrock which is Silurian in age, and comprises quartz-greywackes and greywackes. The sandur sediments are Quaternary in age, having been deposited across the valley by meltwater rivers, when the ice sheets of the last Ice Age were melting.

#### Main Geological or Geomorphological Interest

This is one of the best examples of a pitted sandur in Ireland. Pitted sandur features are hummocky outwash plains, formed either because blocks of dead ice melted out from under the meltwater sediments after they were deposited, or because a large-scale, instantaneous meltwater flood occurred.

The source of the Blackwater River is at Lough Ramor and the sandur sediments flank the lake on its western and southern shores. The area between the lake and the Meath county boundary has the best expression of outwash sediments in the entire Blackwater Valley, where the hummocks are high, up to 10m in height, and interspersed with striking hollows, or kettle holes.

The theory that a large lake formed under the retreating ice sheet, where Lough Ramor now lies, and deposited the sand and gravel sediments along the Blackwater Valley when the lake burst out through the ice in a 'Jokulhlaup', cannot be discounted and is worthy of future investigation.

## Site Importance - County Geological Site

This is one of the finest examples of a pitted sandur in Ireland.

# Management/promotion issues

This is an excellent site in terms of macro-scale Quaternary geomorphology. A signboard in Lisduff village detailing the importance and formation of the features within the valley, as well as the adjacent Bruse Hill, might prove useful.



View westwards across the Blackwater Valley, from the high ridge at Edenburt.



The source of the Blackwater River, flowing through the wide floodplain at Stramatt Bridge adjacent to Lough Ramor, with the hummocky sands and gravels in the distance.

