

MEATH - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Blackwater Valley
Other names used for site	Blackwater Valley Sandur
IGH THEME:	IGH 7 (Quaternary)
TOWNLAND(S)	Numerous
NEAREST TOWN	Virginia, Carnaross
SIX INCH MAP NUMBER	10
NATIONAL GRID REFERENCE	267500 278700 = N 67 87 (near Carnaross)
1:50,000 O.S. SHEET NUMBER	35, 42 1/2 inch Sheet No. 13

Outline Site Description

Valley and outwash plain with Lough Ramor to the north.

Geological System/Age and Primary Rock Type

Quaternary deposits in the form of a pitted sandur (a glacial outwash plain).

Main Geological or Geomorphological Interest

The Blackwater Valley stretches from Castlekeeran in Meath to just north of Virginia in Cavan. This represents a large glacially derived valley, which is flooded to the north to form Lough Ramor. To the south of the lake is a glacial outwash feature known as a pitted sandur or pitted outwash plain. The valley catchment covers over 1,000 square kilometres, but the pitted sandur that forms a striking hummocky terrain at the base of the valley is only *c.* 20 square kilometres in area. A sandur forms when glacial meltwater flowing from a melting ice sheet deposits its load (silt, sand, gravel and boulders), creating a bumpy landscape. The term 'pitted' refers to the small to large depressions within the glacial sediment, created by solitary blocks of melting ice. These features are generally at such a large scale that they are difficult to recognise on the ground and may only be seen from satellite imagery or high resolution aerial photography. Unusually, in the Blackwater Valley, the hollows are visible on the ground. The full extent of the feature includes areas within County Cavan.

Site Importance

Most of this site lies within the River Boyne and River Blackwater SAC (Sitecode 02299). The Blackwater Valley sandur records the deglacial retreat of the ice sheet through north Meath and into Cavan at the end of the last glaciation. It is an excellent example of a series of proglacial outwash pitted sandurs, but is only recommended as a County Geological Site due to the size of the landforms.

Management/promotion issues

Blackwater Valley is so large, that few threats would alter the overall geometry of the feature. However, individual gravel hummocks and ridges should be protected as best as possible, especially with regard to planning applications likely to alter their geomorphology. Some protection does exist for the SAC, but excavations and developments on the alluvial flat area or within the sands and gravels should be strictly monitored. This site is best observed from the roadside, as most of the land is privately owned agricultural land, and therefore not suitable for general promotion.



Above: A glacier carved out the broad and steep sided Blackwater Valley in which Lough Ramor lies today. All the deposits along the banks of this lake and along the Blackwater River to the south are glacially derived.



Above: Hummocky terrain of the pitted sandur at Pottlereagh, Carnaross.

Blackwater Valley



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