

## GALWAY - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Peterswell Turlough</b>
Other names used for site	Blackrock Turlough
<b>IGH THEME</b>	<b>IGH1 Karst</b>
<b>TOWNLAND(S)</b>	<b>Turlough-Nacloghdoo Commons, Limepark North, Blackrock, Loughaunawadda</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Gort</b>
<b>SIX INCH MAP NUMBER</b>	<b>114</b>
<b>ITM CO-ORDINATES</b>	<b>549865E 708208N (centre of feature)</b>
<b>1:50,000 O.S. SHEET No. 52</b>	<b>GSI BEDROCK 1: 100,000 SHEET NO. 14</b>

### **Outline Site Description**

A large turlough.

### **Geological System/Age and Primary Rock Type**

The local rocks are Carboniferous Limestone but the hydrogeological system is post-glacial (Holocene) and probably from the glacial and interglacial period (Quaternary).

### **Main Geological or Geomorphological Interest**

The turlough is one part of the extensive karstic drainage system taking water in rivers from the uplands of Slieve Aughty through a complex surface and underground network of conduits, to eventually emerge at Kinvara Springs. This turlough is a major sink for the Owenshree River, which becomes operative once the upstream sinks are operating at full capacity. The turlough is a large basin in glacial deposits.

A series of sinks exist at various levels. However, following heavy rainfall the water level can rise more than 9 m in 24 hours and then the highest sinks come into operation.

### **Site Importance – County Geological Site; recommended for Geological NHA**

The turlough is an important component of a series of turloughs and connected underground drainage. This is one of numerous sites within the Gort-Kinvara lowlands which make up a complex of international importance. The site is recommended to NPWS for designation as a geological NHA, comprising one of 16 critical sites within the Gort-Kinvara lowland karst, which is one of the best studied lowland karst areas of the World.

### **Management/promotion issues**

The site is already designated as an SAC (00318) for the turlough habitat, of which Ireland has the largest component of Europe's Natura 2000 network of designated sites. The SAC designation overlooks the geological heritage underpinning the biodiversity interests, and much more promotion of the karstic and hydrogeological interest would be desirable.



Panoramic view of Peterswell Turlough from southern side.



Panoramic view of Peterswell Turlough from southern side, with spring in foreground.



Panoramic view of Peterswell Turlough from northwestern side, with some swallow holes in the middle distance.



