

ROSCOMMON - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Brierfield Turlough
Other names used for site	
IGH THEME	IGH1 Karst, IGH7 Quaternary, IGH16 Hydrogeology
TOWNLAND(S)	Slevin, Lismurtagh, Ballaghabawbeg, Ballaghabawmore, Tonbaun, Brierfield, Carrowbaun
NEAREST TOWN	Tulsk
SIX INCH MAP NUMBER	28
NATIONAL GRID REFERENCE	181105 277550 (centre of turlough)
1:50,000 O.S. SHEET NUMBER	40 1/2 inch Sheet No. 12

Outline Site Description

Brierfield Turlough is located southeast of the R367 road, about halfway between Castleplunkett and Tulsk. It is in a noticeable basin, bordered by a rock outcrop to the northeast and southwest, and sloping fields underlain by till around the rest of the feature.

Geological System/Age and Primary Rock Type

The turlough has been formed by solution of the karstified Lower Carboniferous limestone which probably occurred in Tertiary times, while its current form is a result of the glaciers of the last Ice Age, which acted during the late Quaternary Period.

Main Geological or Geomorphological Interest

The turlough basin has a 'V' shape extending southwest and northeast. The southwestern arm is peaty and appears flat or slightly domed. The rest of the turlough floor is uneven, the valley in the northwest opening out into a hummocky zone around the swallow holes with shallow channels. A semi-permanent stream enters from the northwest, and water enters from a spring at the southwest. There is additional seepage into the turlough from the peaty areas at the eastern edge.

Site Importance – County Geological Site; may be recommended as Geological NHA

Brierfield Turlough was one of twenty-two turlough sites included in a project, funded by the National Parks and Wildlife Service and the Environmental Protection Agency, entitled Assessing the Conservation Status of turloughs. Twelve vegetation communities were mapped in Brierfield Turlough.

Management/promotion issues

The site is already a pNHA (site number 000594), but is an excellent site in terms of karst geomorphology as a well developed swallow hole occurs at the centre of the feature and unusual aspects such as algae paper occur at the base of the feature when freshly drained. The site should be promoted as potentially the best example of a karst turlough in County Roscommon.



The sinkholes of Brierfield Turlough exposed when the turlough was dry in September 2012.



Brierfield Turlough, dry in September 2012.

