

OFFALY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Little Brosna-Shannon Confluence		
Other names used for site			
IGH THEME	IGH14 Fluvial and Lacustrine Geomorphology		
TOWNLAND(S)	Cloonahenoge, Incherky, Lavagh, Gortachallow, Ballymacoolaghan		
NEAREST TOWN/VILLAGE	Banagher		
SIX INCH MAP NUMBER	29		
ITM CO-ORDINATES	594750E 713000N (Little Brosna-Shannon confluence)		
1:50,000 O.S. SHEET NUMBER	53	GSi BEDROCK 1:100,000 SHEET NO.	15

Outline Site Description

A low-lying, callow grassland and bog landscape amid the floodplains where the Little Brosna River flows into the multi-branched River Shannon.

Geological System/Age and Primary Rock Type

The underlying bedrock is Carboniferous age limestone (Lucan Formation; Waulsortian). Subsoils along the Little Brosna comprise alluvium along the river course, bounded by either peat or marl sediments, of post-glacial Holocene age. Limestone tills originating during the Ice Age occur to a lesser extent near the site. The main river course is Holocene in age, having adopted its present course in the last 10,000 years.

Main Geological or Geomorphological Interest

The course of the Little Brosna River demarcates the Offaly-Tipperary county boundary. A tributary of the Shannon, the Little Brosna empties into the Shannon near Victoria Canal Lock (Shannon Navigation). This stretch of the Shannon to the west of Banagher is a good example of an *anastomosing* channel – a category of river that comprises multiple, interconnected, stable channels. The channels branch and flow around large and small islands, including Incherky, Inishee, Esker Island, Friar Island and Big Island.

The Little Brosna empties into the Shannon around 100m east of Victoria Lock, although the mouth of the river is not easily visible from the lock grounds. On its course from Birr, the Little Brosna cuts a sinuous channel across lowland for around 12km to the river mouth at the River Shannon. Along this course, the Little Brosna is confined by raised bogs with callows along its final 8km. The callows on the floodplains are subject to prolonged flooding, particularly in winter and early spring.

Site Importance – County Geological Site, recommended for Geological NHA

This important County Geological Site is recognised as an area of international significance for its waterfowl importance, and is already designated an SPA (River Little Brosna Callows 004086) and NHA (River Little Brosna Callows 000564). At 328km, the River Shannon is the longest river system in Britain and Ireland, with a catchment area greater than 16,000km².

Management/promotion issues

The interconnected channels that make this site so interesting in terms of river morphology could be highlighted in literature pertaining to the area, particularly that which is aimed at river navigators. As a natural floodplain on the largest river in Ireland, the land in the vicinity is liable to flooding in the winter creating a habitat of international importance.



View looking east to mouth of Little Brosna River from Victoria Lock.



Looking south from lock grounds to confluence of natural course of Shannon (far right), the canal, and 'New Cut' (left). Little Brosna flows into Shannon at the south end of 'New Cut'.



View south from Victoria Lock. Natural course of Shannon on right.

