

OFFALY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Screggan Fan		
Other names used for site	Tullamore		
IGH THEME	IGH7 Quaternary		
TOWNLAND(S)	Screggan, Claragh, Mucklagh, Cloghanbane, Heath, Bunaterin		
NEAREST TOWN/VILLAGE	Mucklagh		
SIX INCH MAP NUMBER	16, 17		
ITM CO-ORDINATES	629170E 722250N		
1:50,000 O.S. SHEET NUMBER	48	GS1 BEDROCK 1:100,000 SHEET NO.	15

Outline Site Description

A hummocky landform covered by well-drained tillage, grazed land and gravel pits, to the southwest of Tullamore.

Geological System/Age and Primary Rock Type

The site comprises glaciofluvial fan sands and gravels that were deposited during the final deglaciation stage of the last Ice Age. Bedrock underlying the sand and gravel cover is Carboniferous-age muddy limestone.

Main Geological or Geomorphological Interest

This site is representative of extensive areas in this part of County Offaly which comprise sands and gravels (mainly derived from limestones) deposited as subaqueous fans in meltwaters that issued from the nearby melting ice sheet into a glacial lake. The fans were most likely associated with the Kilcormac Esker. The depositional environment may have evolved into a glacio-delta system when the build-up of sediment reached the water level of the ancient lake. The thickness of the deposits is evident from the depth of the local quarries and the N52 Tullamore By-pass road excavations at Screggan.

Well-sorted glacio-deltaic sediments exposed in a quarry face at Agall vary from bottom-most muddy sands (which have 'dropstones', or stones dropped into them), overlain by silt and sand beds that dip NNE at 20°-30°, and succeeded by horizontal and cross-bedded gravels. The sediments are taken to reflect the presence of a large glacial lake, with water levels of around 75mOD when the sediments were deposited.

Site Importance – County Geological Site

This is an important recommendation as a County Geological Site in terms of understanding the final, deglaciation stages of the last Ice Age. (Screggan Bog NHA 000921 is located 2km south of Mucklagh, in the townlands of Ross and Killurin and is not within this site.)

Management/promotion issues

Quarrying of sand and gravel occurs in the locality, and a disused (2016) pit at Screggan provides good exposures of cross-bedding in the quarry faces. Kilsaran Concrete Ltd. operates an active sand and gravel pit nearby, at Bunaterin. The lowland topography of the county is largely dominated by glaciofluvial landforms (of which eskers are the most well-known) and bog-land. The well-drained glaciofluvial sediments are suitable for both tillage and grazing. The site was the location for the 2016 Irish National Ploughing Championships.



The hummocky topography of the Screggan Fan.



View SW from L2011 road bridge over N52 road (Mucklagh Bypass). Road excavations into Screggan Fan visible.



Screggan: site of National Ploughing Championships 2016.



Sand and gravel quarry at Bunaterin

