

LOUTH - COUNTY GEOLOGICAL SITE REPORT

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| NAME OF SITE | King William's Glen |
| Other names used for site | |
| IGH THEME | IGH7 Quaternary, IGH8 Lower Carboniferous |
| TOWNLAND(S) | Tullyallen, Townley Hall |
| NEAREST TOWN/VILLAGE | Drogheda |
| SIX INCH MAP NUMBER | 24 |
| ITM CO-ORDINATES | 704575E 776550N (centre of channel) |
| 1:50,000 O.S. SHEET NUMBER | 43 GSI BEDROCK 1:100,000 SHEET NO. 13 |

Outline Site Description

King William's Glen comprises a deep channel oriented generally northwest-southeast, and stretches for a distance of almost 2 km. A small stream flows along the base of the channel into the River Boyne.

Geological System/Age and Primary Rock Type

The channel is formed in an area of glacial till of varying depths, with portions of bedrock outcrop or subcrop along its stretch. The till was deposited at the maximum of the last Ice Age. The channels themselves were formed during deglaciation at the end of the last Ice Age, by meltwater erosion along the northern edge of the Boyne Meltwater Complex.

The bedrock in the locality is varied, with Silurian shales underlying most of the channel stretch, and bedded, karstified limestone at the southernmost extent adjacent to the River Boyne.

Main Geological or Geomorphological Interest

The channel is up to 20m deep and has a particularly well-developed U-shaped profile, typical of meltwater channels. The channel hosts a misfit stream, which is much smaller than the channel hosting the watercourse.

Though no dating or detailed study has been completed on the feature, it is considered to have formed completely in the late-glacial period. King William's Glen may have been formed subglacially initially, before it operated as a proglacial channel, something that is suggested by its unusual depth and size.

The crags of limestone across the road to the south, and adjacent to the River Boyne, are included in the site extent, as exposure of this limestone is extremely rare in County Louth.

Site Importance – County Geological Site

This is a location with good potential as a teaching site on glacial meltwater erosion, as the feature is accessible and easily viewed from both the car park at its southern end, and the Battle of the Boyne site across the road to the south.

Management/promotion issues

The roadside location of the feature means it is easily accessible, although the majority of the land within the channel itself is presumably either privately owned or in commonage. Parking is available and a signboard in the car park outlining the formation of the channel itself, as well as the bedrock geology of the locality, may help promote the feature.



Steep 'U' shaped profile in King William's Glen, etched into bedrock along this portion.



The car park at the southern end of the Glen, on the Slane-Drogheda road.



