

## WICKLOW – COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Toor Channel</b>
Other names used for site	Parts of the feature are called 'Toor Glen' and 'Toor Brook'
<b>IGH THEME</b>	<b>IGH7 Quaternary</b>
<b>TOWNLAND(S)</b>	<b>Scalp, Toor, Drumreagh, Dunboyke</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Hollywood</b>
<b>SIX INCH MAP NUMBER</b>	<b>33</b>
<b>ITM CO-ORDINATES</b>	<b>694340E 703585N (centre of channel)</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>56 GSI BEDROCK 1:100,000 SHEET NO. 16</b>

### Outline Site Description

The Toor Channel comprises a deep channel that was formed by meltwater erosion on the northwestern flank of the Wicklow Mountains. The channel is oriented generally north–south, before turning east-west, and extends for a distance of just over 1 kilometre.

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

The feature is formed in an area of bedrock outcrop and subcrop and bedrock crops out along the majority of the channel sides, giving the feature its 'scalped' appearance. The feature was etched out by meltwater during deglaciation at the end of the last Ice Age, about 12,000 years ago.

The bedrock in the locality is dominated by schists and quartzites of Ordovician age, with granite also outcropping at the head of the channel.

### Main Geological or Geomorphological Interest

The Toor Channel is up to 40m deep and has a U-shaped profile, typical of meltwater channels. The base of the north-south portion of the channel is dry, but the Toor Brook flows westward along the east-west stretch south of this.

The Toor Channel is considered to have formed completely in the late-glacial Period. Initially the glen was a subglacial channel, formed under the ice, but later carried surface glacial outwash from Glacial Lake Enniskerry south and westwards. As well as this, the channel carried huge amounts of subglacial meltwater draining the ice sheet which also covered the Irish Midlands. This very high energy meltwater flow resulted in the Toor Channel's unusual depth and size.

The intake point for the Toor Channel, which acted as the outlet to Glacial Lake Blessington, lies at approximately 270m above sea level, which means the channel acted as a lake outlet at the time of the formation of the Blessington Delta. The channel is very narrow and has an irregular long profile, which means that meltwater was under huge pressure from ice above, thus proving that the channel was initially subglacial in origin.

### Site Importance – County Geological Site; may be recommended for Geological NHA

This is a site with good teaching potential on glacial meltwater erosion, as the feature is accessible, quite spectacular, and easily viewed from roads.

### Management/promotion issues

The location of the channel with a road passing alongside it means it is easily accessible, although the flanks are located presumably in private ownership or in commonage. However, there is no parking and it is difficult to stop safely on the road. The channel can be viewed from the road that leaves the N81 about 2 kilometres south of Blessington, and skirts the southeast flank of Slievecorragh.



The north-south portion of the Toor Channel, looking south.



Left: The portion of the channel where flow orientation changes, with bedrock outcrop at either side.



Right: Steep, cliff sides in the channel mid-portion.





