

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	River Dargle Valley
Other names used for site	Dargle Gorge, Lover's Leap
IGH THEME	IGH7 Quaternary, IGH14 Fluvial/Lacustrine
	Geomorphology
TOWNLAND(S)	Tinnehinch, Cookstown, Kilcrone, Newtown
NEAREST TOWN/VILLAGE	Enniskerry
SIX INCH MAP NUMBER	7
ITM CO-ORDINATES	723380E 716400N (centre of feature)
1:50,000 O.S. SHEET NUMBER	56 GSI BEDROCK 1:100,000 SHEET NO. 16

Outline Site Description

A stretch of the River Dargle meandering from a wide and flat valley into cascades in a deep, steep-sided rocky gorge.

Geological System/Age and Primary Rock Type

The River Dargle gorge is a Quaternary feature, formed during deglaciation towards the end of the last glaciation (after 22,000 years ago). The river course flows over glaciofluvial drift, underlain by Ordovician slates (from Tinnehinch Bridge to gorge) into a rocky gorge cut into Cambrian quartzite and greywacke bedrock (from the gorge to Dargle Bridge near the N11).

Main Geological or Geomorphological Interest

The River Dargle gorge is one of several spectacular subglacial meltwater channels cut into solid bedrock in north Wicklow (see also Glen of the Downs, the Scalp, Glencullen River). This deeply incised landscape feature was formed when high pressure waters, flowing at the base of the overlying ice sheet, cut into and eroded solid bedrock. The gorge is up to 60m deep below Lovers Leap.

The Dargle River rises in granite uplands between War Hill (686m) and Tonduff North (642m) and flows 3km eastwards to Powerscourt Waterfall (120m high), where it descends to the floor of a wide and flat valley (between Maulin and Great Sugar Loaf). The river course meanders northeastwards, meeting the waters of the Glencree River at Onagh Bridge.

Much of the Dargle valley, like that of the Cookstown River to the north, is drift-filled. After it passes 1km east of Tinnehinch Bridge, the river cuts into a ridge of quartzite and becomes constricted into a wooded rocky gorge. At the floor of the gorge, the riverbed steepens, cascading over greywacke and quartzite bedrock, and continues on to Dargle Bridge where it is joined by the waters of the Cookstown (Glencullen) River, and henceforth to the sea at Bray.

Site Importance - County Geological Site

This is an important County Geological site partly because of its dramatic gorge landform, and also because it is one of several meltwater channels in Wicklow that are essential to understanding deglaciation processes, and the recent formation of the Wicklow landscape.

Management/promotion issues

The River Dargle gorge is less widely known or seen than the meltwater channels of the Scalp and the Glen of the Downs on the N11. The northern ridge overlooking the gorge (e.g. at Lover's Leap) is accessed via a wooded path. It is a steep scramble to the riverbank, and obvious caution should be exercised. Public signboards are not recommended in this relatively unspoilt and secluded site, however its value in terms of geological education and as a local natural amenity is ideally suitable for promotion in any relevant literature.



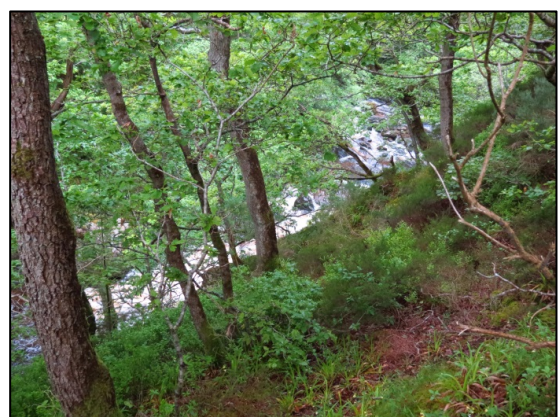
Cascades over Cambrian greywackes below The View\Lover's Leap looking upstream (west).



View downstream from north bank below The Lodge (ruin) towards The View\Lover's Leap.



Wasting on south bank viewed from north bank below Lover's Leap.



Cascades on gorge floor viewed from The View and Lover's Leap looking upstream.

