

WICKLOW - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE	Glendalough Valley
Other names used for site	<i>Gleann Dá Loch</i> (glen of the two lakes), Van Diemen's Land (mining locality at head of valley)
IGH THEME	IGH7 Quaternary, IGH 14 Fluvial and Lacustrine Geomorphology, IGH15 Economic Geology
TOWNLAND(S)	Sevenchurches, Lugduff, Derrybawn, Brockagh
NEAREST TOWN/VILLAGE	Laragh
SIX INCH MAP NUMBER	23
NATIONAL GRID REFERENCE	709154E 696318N (centre of valley)
1:50,000 O.S. SHEET NUMBER	56 GSI Bedrock 1:100,000 Sheet No. 16

Outline Site Description

The Glendalough Valley is a deep glacial valley in the central Wicklow Mountains. The mine site within it sits at the head of the Upper Lake, where siltation has led to development of a wetland. 'Van Diemen's' Land is an isolated mine site further up the valley, on high ground.

Geological System/Age and Primary Rock Type

The bedrock is Lugnaquilla Granodiorite, part of the Lugnaquilla Pluton which is one of the five plutons that comprise the late-Caledonian (405 Ma) Leinster Granite batholith. The granite is cut by slightly younger quartz veins containing lead and zinc mineralization. The contact between the granite and schists of the Lower Palaeozoic Maulin Formation runs through the site immediately east of the mine area. The valley itself and the glacial features within it date from the last Ice Age.

Main Geological or Geomorphological Interest

Glendalough is a marvellous example of a glaciated U-shaped valley, with oversteepened cliff sides and a flat floor. At the mouth of the glen where it meets Glendasan is a delta, which formed at the end of the last Ice Age in a lake that reached a higher level than either of the present lakes. Above the delta, to the north, is a fine medial moraine deposited between the ice of the Glendalough and Glendasan glaciers as they decayed during deglaciation. The two lakes at Glendalough are separated by a broad, low alluvial fan deposited by water from the high level valley to the south of Glendalough. At the upper end of the Upper Lake, at the so-called "Miners Village", is a modern delta building out into the lake, which is in turn gradually shrinking in size.

The "Miners Village" was in fact a processing area for ore mined from the Luganure lode that runs northwards through Camaderry mountain to Luganure in Glendasan. Adits were driven northwards along the lode in the 1850s to connect with those driven earlier southwards from Luganure. A crusher plant was built and ore produced in Luganure was then brought to the Glendalough site for processing. Between 1913 and 1925 a small operation was run to recover Pb (lead) from the waste rock in the valley. Mine features include several adits, the ruins of the Roll Mill house, forge and offices as well as a stone hopper (ore bin/chute) and cobbled dressing floor. A small 20th-century roll crusher presumably dates from the period between 1913 and 1925 when waste was reworked to extract Pb. The Van Diemen's site, which was linked to Glendalough by a tramway, contains numerous small waste heaps, the remains of a crusher house and office, several flooded shafts and a collapsed adit. The rare mineral Pyromorphite has been found in the dumps here. The contact between the granite and its wallrocks is well exposed at the eastern end of the site.

Site Importance – County Geological Site; recommended for Geological NHA

The Glendalough site is a superb example of a glacial valley. Its abundant, accessible mine features add considerable interest to the site. It merits consideration as a Geological NHA.

Management/promotion issues

The site is within the Wicklow Mountains SAC, SPA and proposed NHA, as well as the National Park. Some signboards have been erected but further information could be provided. The crusher house may require conservation.



The Glendalough Valley, including the Upper Lake.



Spoil heaps below adits above the "Miners Village".



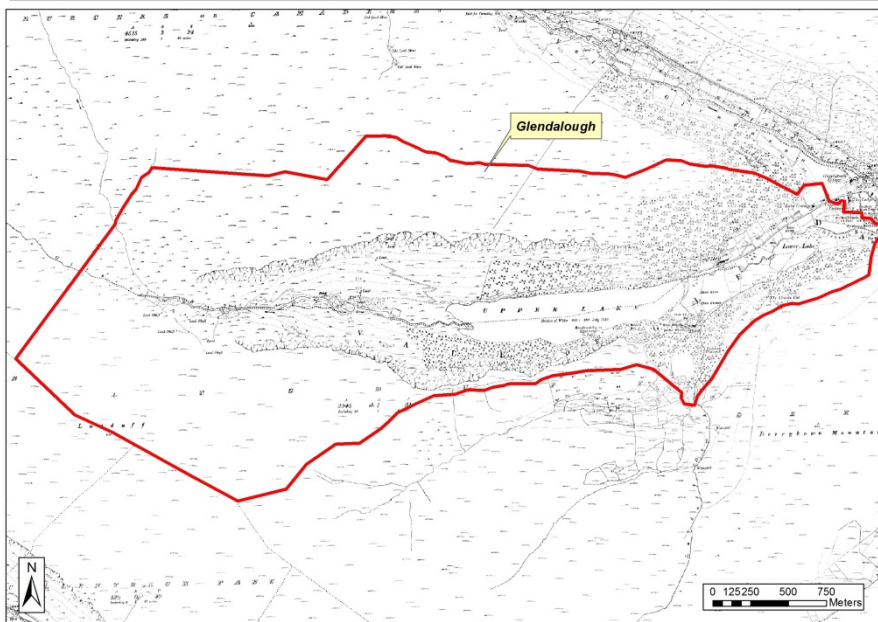
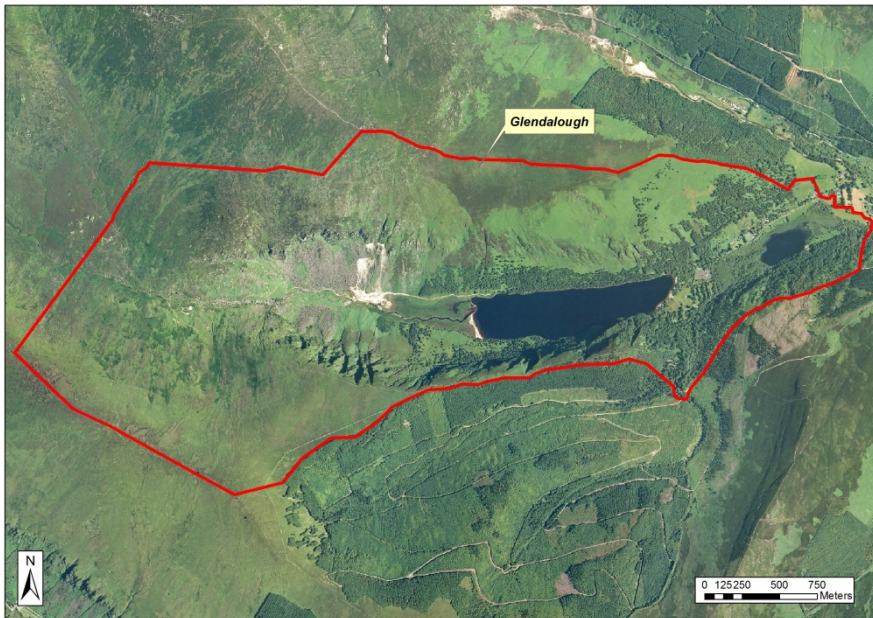
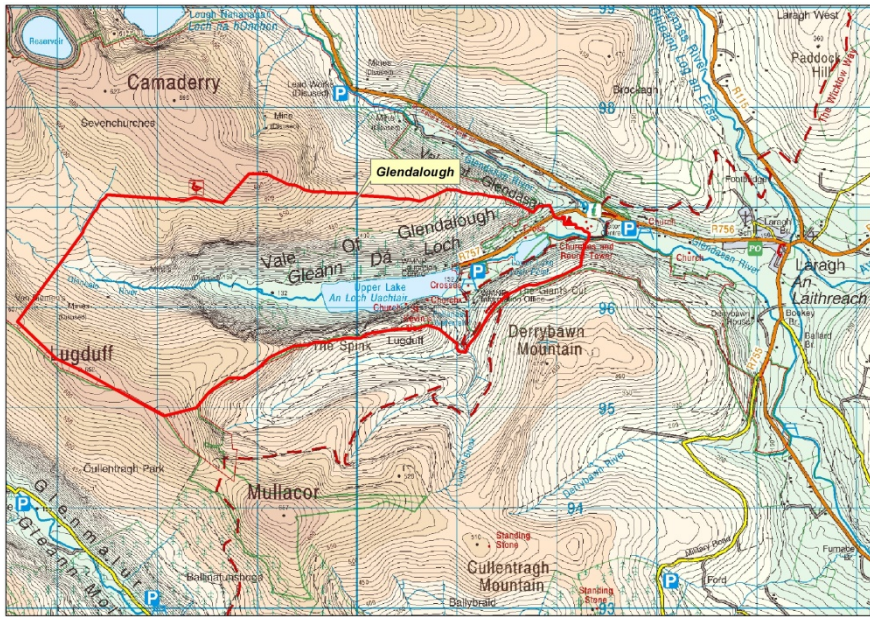
Boulder scree along the northern flank of the valley.

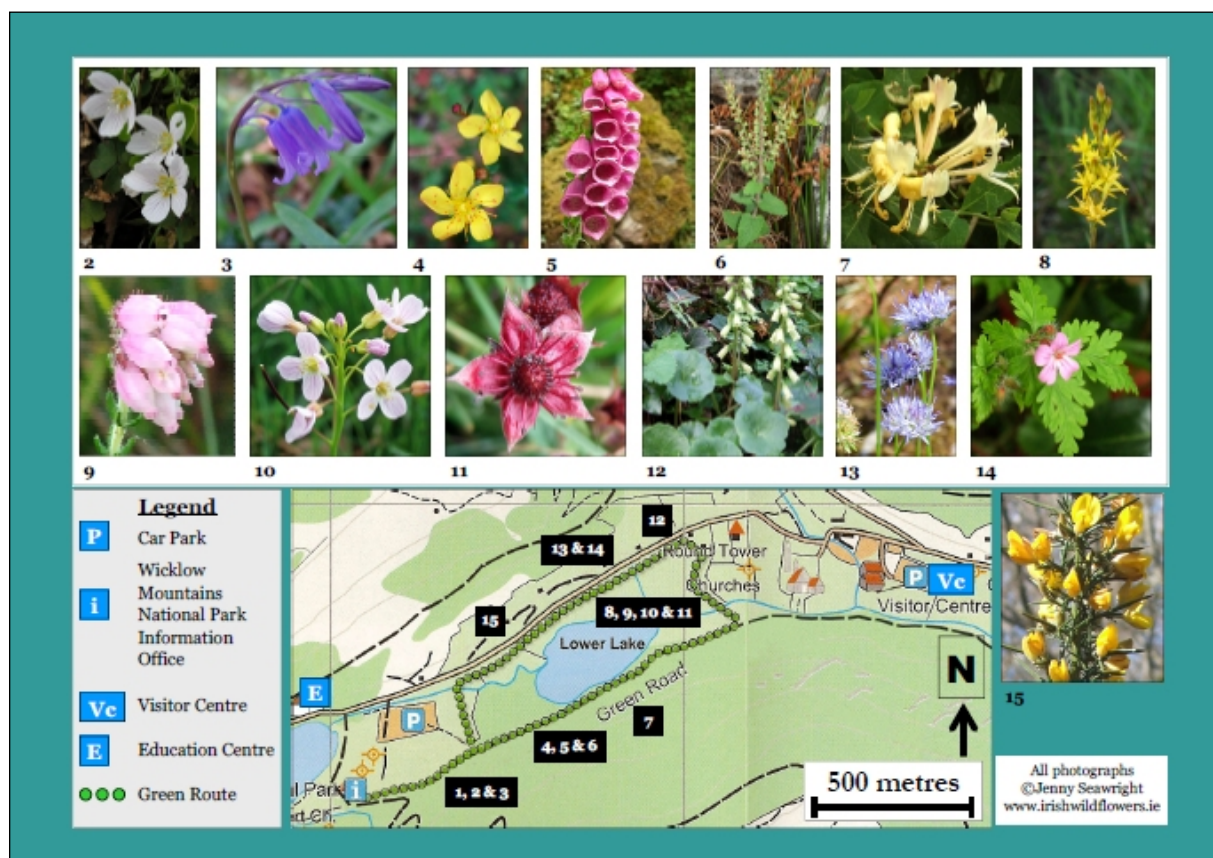


Spoil heaps at van Diemens Land.



Panorama of Glendalough, from the west.





Walking tour of the Glendalough Valley, following flowers. Several themes have been produced (birds, trees, bugs). Such or similar material could potentially include a geological element.



George Victor du Noyer's painting of Glendalough from the nineteenth century, viewed from the north slope of Derrybawn Mountain and looking west.