# **TIPPERARY - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE	Devilsbit	
Other names used for site		
IGH THEME	IGH10 Devonian, IGH12 Mesozoic and Cenoz	zoic
TOWNLAND(S)	Barnane	
NEAREST TOWN/VILLAGE	Templemore	
SIX INCH MAP NUMBER	28	
ITM CO-ORDINATES	605750E 674200N	
1:50,000 O.S. SHEET NUMBER 5	59 GSI BEDROCK 1:100,000 SHEET NO. 18	

### **Outline Site Description**

Mountain-top plateau with near-vertical cliffs

### Geological System/Age and Primary Rock Type

Devonian Old Red Sandstone alluvial fan conglomerates and sandstones, with a possible palaeodrainage system, estimated to date from the Palaeogene.

### Main Geological or Geomorphological Interest

Devilsbit mountain comprises a thick, near flat-lying alluvial fan sequence that unconformably overlies steep-dipping Silurian metasedimentary rocks. These are the oldest ORS rocks in the region, believed to have been preserved by faulting. Elsewhere in the south midlands, ORS rocks represent a more distal sedimentary facies that was deposited in the early Carboniferous.

The cliff sections comprise thickly bedded conglomerates with well-bedded sandstones reaching thicknesses of one metre or more in places. The cliff sections are readily accessible albeit the area around the base is overgrown. The best exposures of the unconformable contact between the ORS conglomerates and the underlying Silurian sediments can be found at the southwestern end of the cliffs, to the east of the "bit".

The conglomerates contain a wide variety of clasts, including sandstone, quartz, quartzite and mafic igneous rock, with larger clasts often well-rounded.

## Site Importance – County Geological Site

This is an excellent exposure alluvial fan conglomerates and associated sandstones of the early Devonian. The contact with the underlying steeply dipping sediments strikingly demonstrates the unconformable nature of the relationship between the Devonian and Silurian rocks.

#### Management/promotion issues

Most of the site lies within the Kilduff-Devilsbit Mountain SAC. The site is traversed by a popular loop walk which could present the opportunity to install a signboard on the geology of Devilsbit.



View of Devilsbit, from the south



Unconformable contact between steeply dipping Silurian metasediments (below, bedding parallel to handle of hammer) and overlying shallowdipping ORS conglomerate. Southwestern end of Devilsbit mountain.



ORS conglomerate – large rounded cobbles of various lithologies, some aligned parallel to bedding. Thin sandstone bed (at base of hammer) shows orientation of bedding.



View eastwards from Marian Year cross towards southwestern end of Devilsbit mountain where unconformity is exposed



Gallagher et al. 2019. Geological Survey Ireland.