

# WICKLOW - COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	<b>Aughrim Quarry</b>
Other names used for site	
<b>IGH THEME</b>	<b>IGH11 Igneous Intrusions</b>
<b>TOWNLAND(S)</b>	<b>Tinnakilly</b>
<b>NEAREST TOWN/VILLAGE</b>	<b>Aughrim</b>
<b>SIX INCH MAP NUMBER</b>	<b>34</b>
<b>NATIONAL GRID REFERENCE</b>	<b>713998E 680662N</b>
<b>1:50,000 O.S. SHEET NUMBER</b>	<b>62</b>
	<b>GSI 1:100,000 Bedrock Sheet No.</b>
	<b>19</b>

## Outline Site Description

The site consists of two abandoned quarries cut into the western side of a hill - a large upper quarry with an extensive quarry face and a smaller, lower quarry that is partly flooded and extensively vegetated.

## Geological System/Age and Primary Rock Type

The rock is a fine-grained granodiorite of the Aughrim Granite, a 400 Ma-old intrusion that is part of the late Caledonian suite of minor granitoid intrusions emplaced along the margin of the Leinster Granite in southeast Ireland.

## Main Geological or Geomorphological Interest

The Aughrim Granite is a sheet-like intrusion, up to 400 m wide and almost 3 km long, striking northeast-southwest just east of the town of Aughrim between the townlands of Killacoran and Tinnakilly Upper. It was emplaced under static conditions after the main phase of late-Caledonian deformation, unlike the slightly older Leinster Granite batholith which was emplaced at least partly during deformation. The granite is one of a number of granodiorite intrusions of similar composition between Aughrim and Ballinaclesh and is considered to be part of a more extensive suite of contemporaneous minor intrusions in the region.

The quarries ceased operating in 1952. The granodiorite's fine grain (typically 1 mm), lack of textural variation, lack of deformation and limited alteration give it a very even, massive quality with a low porosity that make it very suitable as a building stone. The quarries supplied stone for, among other projects, the construction of the Ardnacrusha hydroelectric scheme.

## Site Importance – County Geological Site

The quarries at Tinnakilly are among the best exposures of this suite of minor granitoids. The extensive faces of the upper quarry, in particular, provide ample opportunity to examine the composition and texture of the granodiorite.

## Management/promotion issues

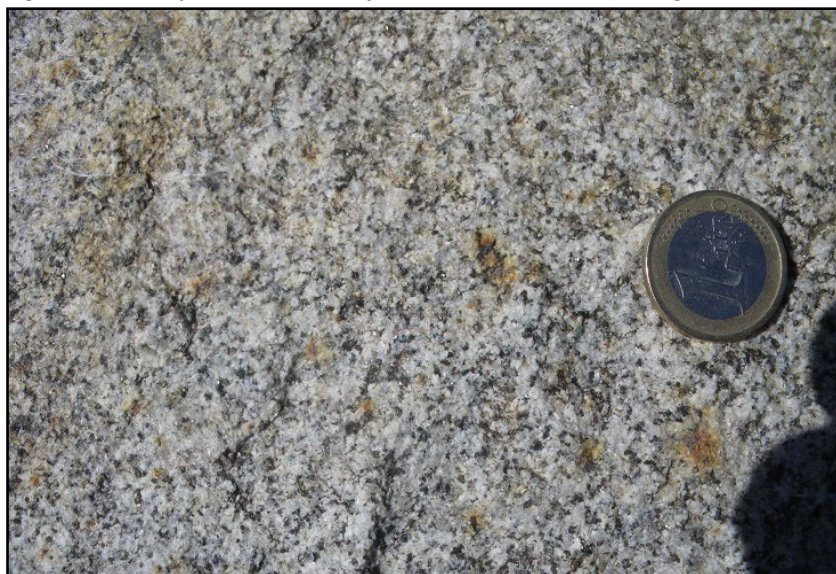
The site is on private land and appears to be used for grazing horses, although none were observed during this audit. Padlocked gates at the roadside mark the entrance to the site. The quarries have been abandoned for over 60 years, yet appear to be largely intact. The site does not appear to be under any threat. The site is likely to be of interest mainly to professional geologists and researchers. In any case, the presence of high, unfenced quarry faces and partly flooded floor mean that it is not suitable for promotion to the general public.



Aughrim Quarry: Lower quarry, view from west.



Aughrim Quarry: Upper quarry, view northwards along eastern face.



Aughrim Quarry: Fine-grained Type 1 granodiorite.



