

# DUN LAOGHAIRE - RATHDOWN – COUNTY GEOLOGICAL SITE REPORT

<b>NAME OF SITE</b>	White Rock, Killiney
Other names used for site	
<b>IGH THEME</b>	IGH 11 Igneous intrusions, IGH 6 Mineralogy
<b>TOWNLAND(S)</b>	Scalpswilliam or Mount Mapas
<b>NEAREST TOWN/VILLAGE</b>	Killiney
<b>SIX INCH MAP NUMBER</b>	23
<b>ITM CO-ORDINATES</b>	726444E 725770N (centre of outcrop)
<b>1:50,000 O.S. SHEET NUMBER</b>	50
<b>GSI BEDROCK 1:100,000 SHEET NO:</b>	16

## Outline Site Description

A coastal section of cliffs, at the northern end of the Killiney beach, including a small mine adit.

## Geological System/Age and Primary Rock Type

The granite intrusion into Ordovician slates is of Devonian age, and was intruded approximately 405 million years ago. The country rock or host rock that the granite intruded is the Maulin Formation, part of the Ribband Group of early Ordovician age.

## Main Geological or Geomorphological Interest

White Rock is so called because sailors noted a strong colour difference between the dark rocks on the southern side of the site, and the white or cream coloured granite exposures here. The site shows the margin of an intruded granite body into the older, dark coloured mud rocks, which have locally been metamorphosed to schists. The granite – schist junction is complex with intermixing, and veins of aplite (very fine grained granite) and pegmatite (very coarse grained granite) injected in both rock types form the late stages of cooling of the granite. The metamorphism of the mudrocks to produce schist has also resulted in the growth of some new minerals, including large needle like crystals of andalusite up to 20 mm long and 5 mm wide.

The interaction of seawater with minerals in the adit is reported to have formed deposits of the mineral phosgenite. This would be a rare occurrence.

## Site Importance - County Geological Site

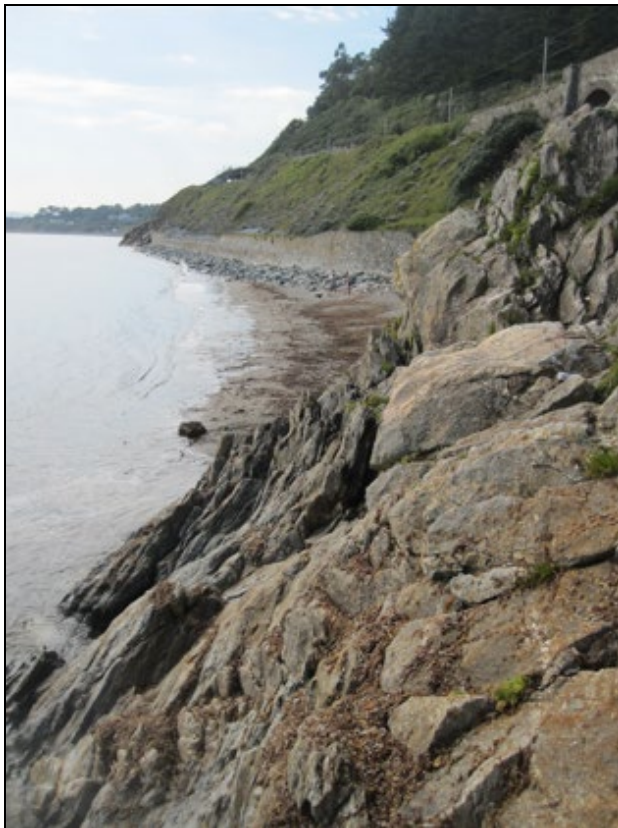
This is a good educational site, widely used by third level student groups and is publicly accessible.

## Management/promotion issues

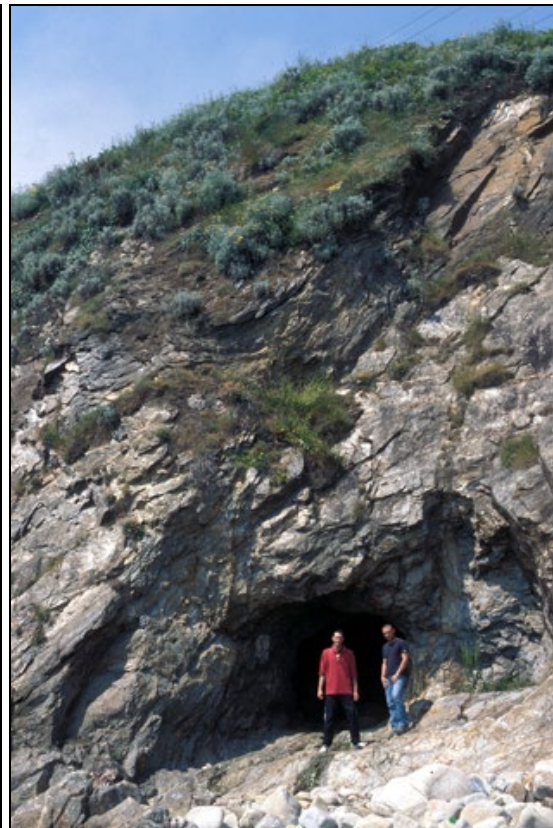
There is good roadside parking on the Vico Road, above the site, with tarmac paths and a railway footbridge to allow access to the beach via steps. Care must be taken with tides by visitors but there is something to see even at high tides. The mine adit has a gate installed by the Exploration and Mining Division of the Department of Communications, Energy and Natural Resources. The concrete shelter building constructed for swimmers at the foot of the steps to access the beach could be used to mount an interpretation panel explaining the name of the place and the geological significance.



Overview of site from the northern end of the section.



Schist and granite interfingering.



The mine adit is gated but is almost filled with mud and rock inside the entrance.



