GALWAY CITY - COUNTY GEOLOGICAL SITE REPORT

NAME OF SITE Shantalla Sliding Rock

Other names used for site Emancipation Rock, Shantallow IGH THEME IGH11 Igneous Intrusions

TOWNLAND(S) Shantalla
NEAREST TOWN/VILLAGE Galway
SIX INCH MAP NUMBER 94

ITM CO-ORDINATES 528830E 725355N

1:50,000 O.S. SHEET NUMBER 45 GSI BEDROCK 1:100,000 SHEET NO. 14

GISCODE GC009

Outline Site Description

Prominent landmark with historical significance set in a 1940s suburban housing estate amenity park.

Geological System/Age and Primary Rock Type

The bedrock comprises Murvey Granite, and metagabbro, a metamorphosed igneous rock. The Murvey Granite was emplaced around 410 million years ago, during Devonian times. The metagabbro, part of the Ordovician MetaGabbro and Orthogneiss Suite of rocks of Connemara, predates the granite with an age of around 470 million years. The stone cross and plinth is made from Carboniferous Limestone.

Main Geological or Geomorphological Interest

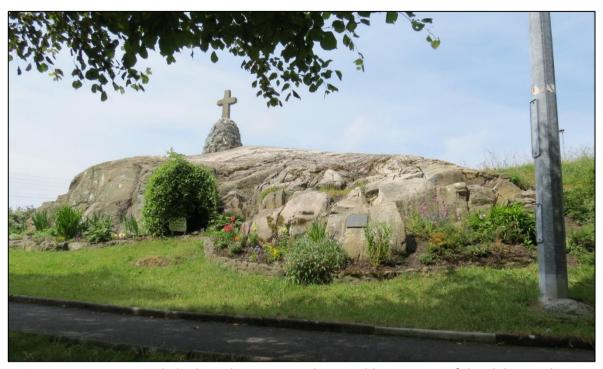
The prominent topography of the natural, polished rock outcrop has provided a focus of play and recreation for children since the 1940s, such that the rock has acquired the 'Sliding Rock' moniker. Oriented NNE-SSW, the rock is aligned is the general direction of ice sheet movement during the last Ice Age. The smooth, polished surface owes its origin to the ice movement. This site hosts easily accessible, weathered exposures of Murvey Granite and metagabbro bedrock, the contact of which is clearly observable on the summit of the Sliding Rock. Fresh exposures of granite are visible alongside the boundary wall on O'Conaire Road. Large (<2cm) K-feldspar crystals are visible in the fresh exposures. Murvey Granite is a light-coloured (leucogranite), aphyric granite, exhibiting K-feldspars in a pink crystalline groundmass. The granite is one of the dozen or so granite types that constitute the late-Caledonian Galway Batholith. The granite-metagabbro contact is readily apparent on the southwest side of the Sliding Rock, with the gabbro to the west of the contact. The main body of MetaGabbro and Orthogneiss Suite rock in Galway City occurs as a triangular wedge fanning outwards from Dangan southwards to Grattan Beach and Renmore Barracks. The Geological Survey Ireland 1st Edition field sheet (Sheet 94a1) notes "hornblendic gneiss lying up against FP" for this location, FP denoting the pink granite.

Site Importance – County Geological Site

This County Geological Site is important because of the accessible and visible contact boundary between the granite bedrock and metamorphic bedrock. Historically important, the landmark served as the site from which Daniel O'Connell (1775-1847) addressed a large crowd as part of the campaign to repeal the Act of Union on 25th June 1843. The site is also referred to as 'Emancipation Rock', a reference to O'Connell 'The Emancipator' more than to the event itself. Catholic Emancipation had been granted 14 years earlier in 1829.

Management/promotion issues

Built in the 1940s, the park is a recreational green space set within the Shantalla housing estate. The site's geological and historical significance and the ease of access make this is an ideal location for schoolchildren and students to see two of the main rock types (igneous and metamorphic) that underlie west Galway City.



Limestone cross and plinth on the granite and metagabbro outcrop of the Sliding Rock.



Murvey Granite exposed on O'Conaire Road.



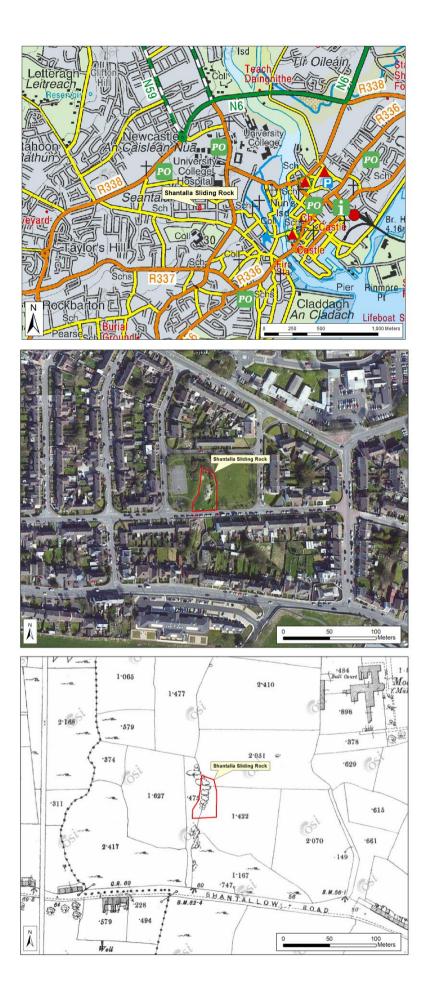
Metagabbro (right) – Murvey Granite (left) contact on the Sliding Rock.



View from the Sliding Rock of outcrop on south side of O'Conaire Road. Direction of ice sheet movement in last Ice Age.



K-feldspar crystals visible in fresh face of Murvey Granite on O'Conaire Road.



Hennessy et al., 2020. Geological Survey Ireland.