

CITATION**DRUMADOON - TORMORE
SITE OF SPECIAL SCIENTIFIC INTEREST
North Ayrshire**

Site code: 537

NATIONAL GRID REFERENCE: NR 886300

OS 1:50,000 SHEET NO: Landranger Series 69
1:25,000 SHEET NO: Explorer Series 361

AREA: 73.99 hectares

NOTIFIED NATURAL FEATURES**Geological: Stratigraphy: Permian Triassic (red beds)****Geological: Igneous Petrology: Tertiary Igneous****DESCRIPTION**

The coast and adjoining raised beach cliffs from Drumadoon to Tormore, less than 1km north west of Blackwaterfoot on the west coast of Arran, provide an unrivalled opportunity to study an exceptionally varied range of the minor intrusions characteristic of the Palaeogene Volcanic Province, which formed around 60 million years ago. The site includes the celebrated dykes and sheets of volcanic glass ("Judd's Dykes") south of Tormore, associated composite dykes whose members are basaltic and granitic in composition, intrusions of flow banded, devitrified volcanic glass at Cleiteadh nan Sgarbh and the thick composite sill forming Drumadoon, which shows contamination and mixing of granitic and basaltic magmas.

In addition the Auchenhew Mudstone Formation of Anisian-Ladinian age (Triassic) is well represented by the coastal exposures between King's Cave and Drumadoon. The sequence contains water-lain red mudstones, siltstones and thin sandstones with sedimentary structures such as symmetrical and asymmetrical ripples, wavy, lenticular and flaser bedding, and also halite pseudomorphs. These rocks usually show rock units which coarsen upwards, and frequently evidence of bimodal (two-directional) palaeocurrents. These features, and the occurrence of trace fossils (*Siphonites* and *Cylindricum*) indicate a marine inter-tidal environment and make this an important site in the elucidation of environments and palaeogeography in Triassic times, which occurred around 240 million years ago.

NOTIFICATION HISTORY

First notified under the 1981 Act: 28 February 1990

Notification reviewed under the 2004 Act: 12 August 2008

REMARKS

Measured area of site corrected from 77.5 hectares.