

CITATION

**ISLE OF WHITHORN BAY
SITE OF SPECIAL SCIENTIFIC INTEREST**
Dumfries and Galloway

Site code: 821

NATIONAL GRID REFERENCE: NX476363

OS 1:50,000 SHEET NO: Landranger Series 83
1:25,000 SHEET NO: Explorer Series 311

AREA: 2.96 hectares

NOTIFIED NATURAL FEATURES

Geological: Structural and metamorphic geology: Caledonian Structures

DESCRIPTION

This site lies within the village of Isle of Whithorn, forming the northern shore of the bay. This coastal section provides excellent exposures of the 'Hawick Rocks', of probable Silurian age, consisting of alternating impure sandstones (greywackes) and mudstones. The structural features displayed here are of particular interest and demonstrate very clearly some of the characteristic effects of repeated compression during the Caledonian mountain building episode. These structures belong to the first of a series of generations that can be attributed to the Caledonian Orogeny. At this locality six major first generation folds occur; the hinges of these folds vary considerably in their orientation (plunge), through a total range of 120° about the vertical. This unusual feature is an important characteristic of the first generation folds in the 'Hawick Rocks' of this area and is best displayed at this locality.

Another feature of interest here is the existence of large-scale folds which pre-date the first generation Caledonian structures described above. These probably formed by slumping of the unconsolidated sediments on the sloping sea-bed, perhaps triggered by earthquake shocks. At the northern end of this section thick beds display unusually clear graded bedding with coarse-grained bottoms, displaying flute casts and load structures and well marked tops with cross-laminated silts and cleaved mudstones. This site provides a valuable illustration of some important aspects of the Caledonian structures of the 'Hawick Rocks'.

NOTIFICATION HISTORY

First notified under the Wildlife and Countryside Act 1981: 09 March 1990.

Notification reviewed under the Nature Conservation (Scotland) Act 2004:
28 September 2010

REMARKS

Measured area of site corrected (from 3.7 ha).