

CITATION

CRAWTON BAY
SITE OF SPECIAL SCIENTIFIC INTEREST
Aberdeenshire

Site code: 453

NATIONAL GRID REFERENCE: NO879796

OS 1: 50 000 SHEET NO: Landranger Series 45
1: 25 000 SHEET NO: Explorer Series 396

AREA: 8.86 hectares

NOTIFIED NATURAL FEATURES

Geology : Stratigraphy : Non-marine Devonian
 : Igneous petrology : Old Red Sandstone Igneous

DESCRIPTION

Crawton Bay is located on the east coast of Aberdeenshire about 6 km south of Stonehaven. The site is the type locality of the Crawton Volcanic Formation, the youngest formation of the Crawton Group which comprises part of the Lower Old Red Sandstone succession in this area of the Midland Valley. The formation consists of volcanic lavas (olivine-bearing basalts and basaltic andesites) and interbedded river-deposited conglomerates of late Silurian to Early Devonian age. Exposure of the lavas is unusually fine, and features such as large elongate plagioclase crystals (phenocrysts) aligned with the direction of lava flow, and superb polygonal cooling joints, are locally well displayed. The persistent nature of the formation makes it an invaluable stratigraphic marker horizon.

The Crawton Volcanic Formation is underlain by the Whitehouse Conglomerate Formation and overlain by the Catterline Conglomerate Formation. Rock clasts within the conglomerates indicate that sediment sources differ from those identified for younger sediments in the same area. This gives important information on adjacent mountain uplift and erosion patterns over time. The conglomerates in all three formations provide evidence for the large size and braided stream character of the river systems that were interrupted by the volcanic outpourings preserved in the Crawton Volcanic Formation. The site clearly shows the relationships between volcanic and sedimentary rocks, and is widely used for teaching purposes.

NOTIFICATION HISTORY

First notified under the 1981 Act: 28 March 1990.
Reviewed under the 2004 Act: 18 May 2011.

REMARKS

Measured area of site corrected (from 9.2 ha).

Crawton Bay SSSI overlaps in part with Fowlsheugh SSSI. This part of Crawton Bay is also part of Fowlsheugh Special Protection Area (SPA), which is designated for the birds listed below.

Breeding seabird assemblage

Fulmar *Fulmarus glacialis*, breeding

Kittiwake *Rissa tridactyla*, breeding

Guillemot *Uria aalge*, breeding

Razorbill *Alca torda*, breeding

Herring gull *Larus argentatus*, breeding