CITATION

ARTHUR'S SEAT VOLCANO
SITE OF SPECIAL SCIENTIFIC INTEREST
City of Edinburgh

Site code: 91

NATIONAL GRID REFERENCE:	NT 275733, NT 263742, NT 252736
OS 1:50,000 SHEET NO:	Landranger Series 66
1:25,000 SHEET NO:	Explorer Series 350
AREA:	227.84 hectares

NOTIFIED NATURAL FEATURES

Geological:	**Igneous Petrology:**	**Carboniferous-Permian Igneous**
Biological:	**Lowland grassland:**	**Lowland calcareous grassland**
	Lowland grassland:	**Lowland acid grassland**
	Vascular plants:	**Vascular plant assemblage**

DESCRIPTION

Arthur's Seat Volcano Site of Special Scientific Interest (SSSI) is a composite site located within the City of Edinburgh, comprising Arthur's Seat Volcano in Holyrood Park, Calton Hill and Castle Rock.

The small composite volcano of Arthur's Seat, of Lower Carboniferous age, is one of the most studied ancient volcanoes in the world. All the component parts of a typical strato-volcano are well displayed and the sequence of the eruptions can be traced with a continuity unique in Britain.

Holyrood Park is unique in Edinburgh as an example of lowland, unimproved grass-land, and is the largest and most diverse area of such unimproved lowland grassland in the Lothian area. The Park is also of exceptional interest due to the diversity of plant species present, and the particularly large number of rare species that occur.

Research into Arthur's Seat Volcano began some 2 centuries ago and the area played a significant role in the early establishment of geological science, in particular for the evidence it supplied vital to deciding the controversy between the Vulcanists and Neptunists in the former's favour. Features of special note include five vents showing a wide variety of fillings including a lava lake; crater lavas and associated lacustrine sediments; intrusive plugs and spectacular agglomerates; over 20 lava flows separated by tuffs and tuffaceous sediments, often water-laid; and a range of intrusions including the Salisbury Crags Sill, one of the earliest, if not the earliest sills to be recognised. The sequence of rocks, and especially of the sediments, in places fossiliferous, intercalated in the lava pile enable the palaeo-environments which existed during the vulcanicity to be determined in unusual detail. In view of the excellence of the exposure and the wide range of features of interest, the Arthur's Seat Volcano is one of the most heavily used educational areas in Britain.

The complex geology of this area is reflected in the richness of the plant communities that are present. Much of Holyrood Park is covered in unimproved grassland and, depending on the underlying rock type, acid and calcareous grassland have developed on the site. The complexities of habitat present lead to an exceptional diversity of plant species, with over 350 species of higher plant being recorded from within Holyrood Park. Over 60 species of plants that are rare in Scotland or the Lothian area have been recorded, including the nationally rare sticky catchfly *Lychnis viscaria*.

Other habitats present contribute to the habitat and plant diversity of the site, including sedge-rich marsh, gorse scrub and open water with associated aquatic plants. In addition to vascular plants, a number of rare bryophyte and lichen species have also been found. Several uncommon plants are also found on the cliffs of Castle Rock and Calton Hill has disturbed woodland, scrub and species poor acid grassland of local interest within Edinburgh.

NOTIFICATION HISTORY

First notified under the 1949 Act: as Holyrood Park 1953, 1972; St Leonards and St Johns Hill 1958, 1972; Calton Hill 1958, 1972; Castle Rock 1958, 1972.
Re-notified under the 1981 Act: 24 April 1986 with a 10.3 ha increase in area.
Notification reviewed under the 2004 Act: 21 January 2011

REMARKS

Measured area of site corrected (from 229 ha).