

CITATION

BLOOD MOSS AND SLOT BURN SITE OF SPECIAL SCIENTIFIC INTEREST East Ayrshire & South Lanarkshire

Site code: 233

NATIONAL GRID REFERENCE: NS 679318

OS 1:50,000 SHEET NO: Landranger Series 71
1:25,000 SHEET NO: Explorer Series 334

AREA: 162.35 ha.

NOTIFIED NATURAL FEATURES

Geological: Palaeontology: Silurian-Devonian chordata
Geological: Palaeontology: Arthropoda (excluding insects and trilobites)
Biological: Bogs: Blanket bog

DESCRIPTION

Blood Moss and Slot Burn SSSI, lying less than 5km north-west of Muirkirk, is an area of upland moorland dissected by the Slot Burn and several tributaries. The protected natural features include fossil-bearing rocks (yielding fossil fish and water scorpions) alongside the Slot Burn, and blanket bog.

The site is of national and international importance for its two 'fish beds', rock outcrops on the Slot Burn which both yield the same fossil fauna. The rocks are the Slot Burn Formation of the Waterhead Group, probably of Wenlock age (approximately 430 million years ago). The agnathan assemblage is the usual one for the upper fish beds from the Midland Valley Silurian inliers. However, this site is historically important because it supplied most of the early described material. Slot Burn is the type locality for *Ateleaspis tessellata* Traquair 1899, which is the oldest known cephalaspid. It also yields the anaspids *Birkenia* and *Lasanius*, and the thelodonts *Logania* and *Lanarkia*. These primitive jawless vertebrates are all rare, and important because of the information they can supply about the early origins of vertebrates, the first developments of bony exoskeletons and the life-styles of the first primitive fish. This assemblage is comparable to that recorded from Rudstangen, Ringerike (S. Norway).

The same rock outcrops have also proved of national and international importance for their fossil eurypterids (water scorpions), with nearly complete remains of several species found here, including *Lanarkopterus dolichoschelus* and *Brachyopteroidea ritchiei*. The genus *Lanarkopterus*, known only from the Slot Burn Formation, is the only member of the superfamily *Mixopteroidea* present in Britain. It has been suggested that jumbled fish debris within the fossil-bearing rock may be coprolites or regurgitates from eurypterids (probably *Lanarkopterus*).

Blood Moss, lying in the extreme north-eastern section of the site, is an excellent example of blanket bog vegetation and one of the best of its type in south-west Scotland. The bog surface is gently undulating and has numerous pools and runnels providing a variety of different hydrological conditions which is reflected in the vegetation. A number of species rare or uncommon in southern Scotland occur, including tall bog-sedge *Carex magellanica*, few-flowered sedge *Carex pauciflora* and two species of bog moss, *Sphagnum imbricatum* and *Sphagnum fuscum*.

Besides the notified natural features, the site also supports a varied upland breeding bird community, notably including hen harrier, short-eared owl, peregrine, merlin and golden plover.

NOTIFICATION HISTORY

Notified under the 1949 Act: 1971, 1980.

Re-notified under the 1981 Act: 28 November 1986 with a 6ha increase in area.

Notification reviewed under the 2004 Act: 2 August 2007

REMARKS

Measured area of site corrected (from 161.4 ha).

Blood Moss and Slot Burn SSSI is designated as part of Muirkirk & North Lowther Uplands Special Protection Area for the birds listed below.

Birds: Hen harrier *Circus cyaneus* (breeding)
 Hen harrier *Circus cyaneus* (non-breeding)
 Short-eared owl *Asio flammeus*
 Peregrine *Falco peregrinus*
 Merlin *Falco columbarius*
 Golden plover *Pluvialis apricaria*