

CITATION

DOLLAR GLEN
SITE OF SPECIAL SCIENTIFIC INTEREST
Clackmannanshire

Site code: 522

NATIONAL GRID REFERENCE: NS 950998, NS 961995, NS 963990

OS 1:50,000 SHEET NO: Landranger Series 58
1:25,000 SHEET NO: Explorer Series 366

AREA: 182.28 ha

NOTIFIED NATURAL FEATURES

Biological: Woodlands: Upland mixed ash woodland
Upland habitats: Subalpine flushes
Upland habitats: Subalpine calcareous grassland
Invertebrates: A beetle *Stenus glacialis*
Geological: Igneous petrology: Carboniferous - Permian Igneous

DESCRIPTION

Dollar Glen SSSI is situated immediately to the north of the town of Dollar. The site includes Dollar Glen itself and part of the area around the Burn of Sorrow. The site is important for its upland mixed ash woodland, subalpine flushes (including alkaline fens, acid flushes and springheads and rills), subalpine calcareous grassland, a beetle *Stenus glacialis* and its geological interest around Gloom Hill where there are exposures of rock of Carboniferous to Permian age.

Dollar Glen is the largest, least disturbed example in Clackmannanshire of a deep, narrow, steep-sided gorge, supporting long-established woodland. Lower slopes, enriched with nutrients from groundwater flushing, support mixed valley woodland of ancient origin which is dominated by ash and wych elm. The woodland is well structured with an understorey of hazel, bird cherry and saplings and a rich ground flora with many calcicolous plants, including wood cranesbill *Geranium sylvaticum* which is a locally rare species. The upper acid slopes of semi-natural deciduous woodland are dominated by oak with an understorey of birch and rowan and a characteristic ground flora. The yellow star of Bethlehem *Gagea lutea* and toothwort *Lathraea squamaria* are only recorded in Clackmannanshire from this site. Sheer, base rich rock faces support several local species of ferns and grasses, while abundant bryophyte growth includes the western species such as prickly featherwort *Plagiochila spinulosa*.

In upper Dollar Glen the subalpine flushes and calcareous grasslands are the best examples in Clackmannanshire. The subalpine flushes consist of short-sedge acidic fen, alkaline fen, and springheads and rills. The alkaline fens (base-rich flushes) are in an intimate mosaic with the subalpine calcareous grassland communities. They support characteristic grassland communities with the local species grass of Parnassus *Parnassia palustris*, quaking grass *Briza media* and meadow oat-grass

Helictotrichon pratense. Other flushes also lie in a matrix of habitats dominated by acid grassland with a characteristic flora. Small, sheltered gullies are nutrient enriched and have the locally rare Wilson's filmy fern *Hymenophyllum wilsonii* and several locally uncommon montane species. Higher up the slopes of King's Seat are many springs. Old spoil from a copper mine supports the only known colony of field gentian *Gentianella campestris* in the district.

The fauna includes *Stenus glacialis*, a beetle of mountains and high altitude. It is a species of restricted occurrence and is only known from two localities in Scotland.

During the Carboniferous and Permian periods of geological time, from 360 to 260 million years ago, central Scotland was not only the scene of widespread volcanic activity but also was the site where a rift valley was developing through an elongated block of the Earth's crust subsiding along sub-parallel cracks or faults. Time relationships between the two processes can be established at Gloom Hill where the plane of the Ochil Fault, one of the principal dislocations associated with the rift valley, has been intruded by igneous rock similar in composition to the great sill which underlies much of the Central Midland Valley. The fault is thus demonstrably older than the intrusions and as it is thought these are likely channels up which the sill magma rose, is very likely also older than the sill itself. Gloom Hill thus provides critical evidence for the time relationships of two of the processes largely responsible for determining the geology of central Scotland.

NOTIFICATION HISTORY

First notified under the Wildlife and Countryside Act 1981: 30 November 1989

Notification reviewed under the Nature Conservation (Scotland) Act 2004:
26 January 2011

REMARKS

Measured area of site corrected (from 187.4 ha).