

COUNTY: DURHAM

SITE NAME: SLEIGHTHOLME BECK
GORGE 'THE TROUGHS'

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981, as amended.

Local Planning Authority: TEESDALE DISTRICT COUNCIL

National Grid Reference: NY 966119

Ordnance Survey Sheets 1:50,000: 92 1:10,000: NY 91 SE

Area: 7.5 (ha.) 18.5 (ac.)

First Notified: 1976*

Date of Revision: 1986

Description:

Sleightholme Beck Gorge is of national geological importance for its exposure of sedimentary rocks, and contains interesting rock crevice, grassland, flush, boulder scree and woodland habitats, which support a varied flora.

Geologically the site provides an excellent section through the Namurian Great Limestone cyclothem. Of importance are the sandstones lying in the middle of the cyclothem, which contain a number of sedimentary structures characteristic of a shoreline, with deltaic and barrier bar features. The sediments consist of alternating types, representing storm deposits and intervening quiescent periods, when the sediment was biologically reworked. The section provides an excellent example of a 'laminated and bioturbated' shoreline facies and is a key sedimentological locality.

Some of the most interesting vegetation is developed on shallow soils of limestone crevices and ledges and amidst boulder scree. Ferns form a prominent component and include maidenhair spleenwort *Asplenium trichomanes*, green spleenwort *A. viride* and brittle bladder fern *Cystopteris fragilis*. In shaded crevices woodland plants such as wood sorrel *Oxalis acetosella*, wood millet *Milium effusum*, dog's mercury *Mercurialis perennis* and wood melick *Melica uniflora* occur, whilst in the most exposed situations annual species, including rue leaved saxifrage *Saxifraga tridactylites*, shining cranesbill *Geranium lucidum* and common whitlow grass *Erophila verna* are found.

Calcareous grassland on deeper soils consists of sheep's fescue *Festuca ovina*, common bent *Agrostis capillaris*, thyme *Thymus praecox* and rock rose *Helianthemum nummularium*.

There are numerous flushes with carpets of mosses and liverworts, and wetland plants such as mossy saxifrage *Saxifraga hypnoides*, marsh hawk's beard *Crepis paludosa*, marsh valerian *Valeriana dioica* and opposite-leaved golden saxifrage *Chrysosplenium oppositifolium* together with the more local alternate-leaved golden saxifrage *C. alternifolium*.

In woodland of the lower valley-slopes ash *Fraxinus excelsior* and wych elm *Ulmus glabra* are the main canopy species, with an understorey of hazel *Corylus avellana* and bird cherry *Prunus padus*. The ground flora features ramsons *Allium ursinum*, woodruff *Galium odoratum* and giant bellflower *Campanula latifolia*. On the most inaccessible rock faces there are stands of open woodland in which yew *Taxus baccata* is abundant, although on the valley floor some limited planting of alien species has occurred.

Dipper and common sandpiper have been recorded and probably breed at this site.

Other Information

1. The site has been identified as of national importance in the Geological Conservation Review for its Namurian features.
2. The site boundary has been amended by both addition and deletion during the 1986 revision.

*Under Section 23 of the National Parks and Access to the Countryside Act, 1949.