

Date Notified: 24 November 1989

File ref: SD 49/2

County: Cumbria **Site Name:** Scout and Cunswick Scars

District: South Lakeland

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

Local Planning Authority: Lake District Special Planning Board, South Lakeland District Council

National Grid Reference: SD 488909
SD 492937

Area: 370.5 (ha) 915.5 (ac)

Ordnance Survey Sheet 1:50,000: 97 **1:10,000:** SD 48 NE, SD 49 SE

Date Notified (Under 1949 Act): 1954 **Date of Last Revision:** 1975

Date Notified (Under 1981 Act): 1982 **Date of Last Revision:** 1989

Other Information:

1. The boundary of the site has been modified by extension at this revision.
2. The site is listed in 'A Nature Conservation Review', edited by D. A. Ratcliffe 1977, Cambridge University Press.
3. The site lies parts within the Lake District National Park.

Description and Reasons for Notification:

Scout and Cunswick Scars, located 2 km west of Kendal form a Carboniferous Limestone ridge which runs almost 5 km in a north-south direction. The ridge has a steep, west facing scarp slope which reaches 229 m at its highest point, while the gentler dip slope extends eastwards towards Kendal.

The Scars are made up of a complex of limestone habitats which support a very rich fauna and flora including a number of rare and local species. The main habitats present are unimproved calcareous grassland and areas of dry dwarf shrub heath with scattered trees and shrubs, woodland, open water and fen. The assemblage of habitats can be regarded as unique in Cumbria, only one other site, Whitbarrow Scar SSSI, having a similar range of habitats of equivalent quality. However Scout and Cunswick Scars differ from Whitbarrow in being particularly noted for their open water and fen habitats and the well developed grass/heath habitat mosaic.

The limestone grasslands of Scout and Cunswick Scars form an important part of the hill pasture of surrounding farms, and the continuation of the traditional farming pattern is essential to the integrity of the site. The vegetation community, known as the blue moor-grass – limestone bedstraw *Sesleria albicans*–*Galium sternerii* type is almost wholly confined to the North of England on the shallow, free-draining soils derived from the Carboniferous Limestone. The open grassland areas on Cunswick Fell, Bradleyfield and Helsington Barrows are dominated by blue moor-grass within which occurs many characteristic calcareous grassland species such as carline thistle *Carlina vulgaris*, hairy violet *Viola hirta*, dropwort *Filipendula*

vulgaris, common rock-rose *Helianthemum nummularium*, salad burnet *Sanguisorba minor*, horseshoe vetch *Hippocrepis comosa*, wild thyme *Thymus praecox*, squinancy wort *Asperula cynanchica*, fairy flax *Linum catharticum*, mouse-ear hawkweed *Hieracium pilosella* and the local lesser meadow rue *Thalictrum minus*. In addition to limestone bedstraw a number of other montane or northern species occur throughout the site: vernal sandwort *Minuartia verna* and mountain everlasting *Antennaria dioica*.

Orchid species are well represented, including frog orchid *Coeloglossum viride* on Bradleyfield, the local dark-red helleborine *Epipactis atrorubens*, early purple orchid *Orchis mascula*, lesser butterfly-orchid *Platanthera bifolia*, fly orchid *Ophrys insectifera* and fragrant orchid *Gymnadenia conopsea*. The latter three species are particularly well represented within the grass/heath mosaic on the dip slope of Helsington Barrows. The prominent vegetation within this mosaic is heather which occurs on the deeper soils between outcropping limestone strata. Away from the dwarf shrub heath areas the hollows between limestone strata have a more acidic, grass-dominated flora with fescues *Festuca rubra*, *F. ovina*, wavy hair-grass *Deschampsia flexuosa*, common bent *Agrostis capillaris*, sweet vernal grass *Anthoxanthum odoratum* with mat-grass *Nardus stricta* in the more acidic soils. Although some of these areas have tended to be agriculturally improved in the past they are typically very much less herb-rich than the surrounding calcareous grasslands.

Many areas of limestone scree and clitter are found within the grassland and heath communities and support a distinctive flora, particularly of fern species. These include the local limestone polypody *Gymnocarpium robertianum*, green spleenwort *Asplenium viride* and the rare rigid buckler-fern *Dryopteris villarii*. Another widespread but local fern is the moonwort *Botrychium lunaria* which occurs in good numbers throughout the site. Adjacent to some of these scree areas and also on the scarp slope the rare bird's-foot sedge *Carex ornithopoda* can be found. The very local fingered sedge *C. digitata* has also been recorded from the site in addition to the more common species such as pill, common, spring and glaucous sedge, the latter sometimes becoming co-dominant with the blue moor-grass.

An important sub-community of the typical *Sesleria* grassland described above occurs along the west-facing scarp slope of Scout Scar. Here the growth of grasses and scrub is inhibited by the very dry calcareous conditions and two national rarities occur: rare spring sedge *Carex ericetorum* found here at one of only two localities in Cumbria and hoary rock-rose *Helianthemum canum* at one of only a few sites in Cumbria between Kendal and Humphrey Head.

The woodland below Cunswick Scar shows a gradation from abundant yew *Taxus baccata* and whitebeam *Sorbus* species on the steep scree slopes to ash-oak-hazel woodland and then to wet alder-willow woodland beside Cunswick Tarn. The drier woodland, similar to that below Scout Scar, contains a characteristic woodland flora including species such as wood anemone *Anemone nemorosa*, sanicle *Sanicula europaea*, dog's mercury *Mercurialis perennis* and herb-Paris *Paris quadrifolia*. The wet woodland has a varied shrub and ground flora including alder buckthorn *Frangula alnus*, purging buckthorn *Rhamnus catharticus*, bay willow *Salix pentandra*, hemp-agrimony *Eupatorium cannabinum*, common valerian *Valeriana officinalis* and meadowsweet *Filipendula ulmaria*. Most of the woodlands within this site are thought to be of ancient origin and thus of high nature conservation and historical value.

Cunswick Tarn is one of the few eutrophic or nutrient-rich water bodies in North West England. It is surrounded by fen with some willow scrub as well as the wet woodland described above. The fen areas are typically sedge-rich with species typical of base-rich mires such as tufted sedge *Carex elata*, greater tussock-sedge *C. paniculata*, common yellow-sedge *C.*

demissa and long-stalked yellow-sedge *C. lepidocarpa*. Grass-of-Parnassus *Parnassia palustris* also occurs here, in addition to marsh arrowgrass *Triglochin palustris*, marsh valerian *Valeriana dioica* and bird's-eye primrose *Primula farinosa*, the latter being geographically confined to the damp base-rich soils of Northern England and Southern Scotland. Emergent plants around the shore include abundant common reed *Phragmites australis* and club rush *Schoenoplectus lacustris* as well as great fen-sedge *Cladium mariscus* which is known from only two other localities in Cumbria.

The complex range of habitat types contributes to the site's regional importance for invertebrate conservation which includes several scarce species. There are strong populations of the vulnerable High Brown Fritillary butterfly *Argynnis adippe* and the nationally rare Least Minor moth *Photedes captiuncula*. Other nationally scarce species of Lepidoptera include the Northern Brown Argus butterfly *Aricia artaxerxes*, the Pearl Bordered Fritillary butterfly *Boloria euphrosyne*, the Barred Tooth-striped moth *Trichopteryx polycommata*, the Thyme Pug moth *Eupithecia distinctaria*, the Argent and Sable moth *Rheumaptera hastata*, and the chestnut-coloured carpet *Thera cognata*.

Other nationally scarce invertebrates include the dead wood feeding hoverflies *Criorhina asilica* and *Criorhina ranunculi*, the hoverfly *Microdon mutabilis* which lives in ant's nests, and the pill woodlouse *Armadillidium pulchellum* which lives in scree on Carboniferous Limestone. The leafhopper *Chlorita dumosa*, which feeds on wild thyme, and is new to Britain, was described from this site in 1988 and has subsequently been recorded only from a single other site, in Scotland.