

Notification date: 31 January 1990

COUNTY: DERBYSHIRE

SITE NAME: STONEY MIDDLETON DALE

DISTRICT: DERBYSHIRE DALES

SITE REF: 15 WLX

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

Local Planning Authority: PEAK PARK JOINT PLANNING BOARD, Derbyshire Dales District Council

National Grid Reference: SK 210760

Area: 68.8 (ha.) 170.0 (ac.)

Ordnance Survey Sheet 1:50,000: 119

1:10,000: SK 17 NE, SK 27 NW

Date Notified (Under 1949 Act): 1972

Date of Last Revision: –

Date Notified (Under 1981 Act): 1990

Date of Last Revision: –

Other Information:

Site formerly notified as Shining Cliff SSSI. Site boundary alteration (extension).

Description and Reasons for Notification:

The Carboniferous Limestone massif of the Peak District is one of the most important in Britain, lying in latitude and altitude between the Mendips and the Craven area of Yorkshire. The limestone is cut by valleys, 'the dales', which contain areas of high geological interest and support a wide range of wildlife habitats, particularly woodland, scrub and grassland.

Stoney Middleton Dale lies on the north-eastern margin of the limestone outcrop, south of the village of Eyam. The northern side of this deep limestone gorge contains some of the most important caves in the Peak District, together with four associated swallets. Parts of the site are also of biological interest, particularly the areas of ancient and semi-natural woodland, cliff communities and unimproved limestone grassland.

Geological Interest

More than 3000 metres of caves are known beneath the northern side of Stoney Middleton Dale and within this area, four distinct levels of cave development have been identified. As the River Derwent cut down its bed, thereby lowering the regional water table, caves were developed at progressively lower levels. The individual cave levels in this site show a close relationship to the limestone geology, in that passages often follow folds in the rock or mineral veins and are often floored with impermeable clay horizons which limit the downward movement of water. The associated swallets now supply water to the cave system taking the surface water from the adjoining gritstone uplands eastwards through the cave system. The cave sediments here are of great importance in describing climate during the Pleistocene period and the development of local erosion processes.

These caves are the best in Derbyshire for demonstrating the relation of cave systems to major river downcutting phases and rock structures.

Biological Interest

Woodland occupies the lower valley slopes and the adjoining gorges of The Delf and Eyam Dale. Most of the woodland is classified as ancient and consists of a typical limestone dale semi-natural ash *Fraxinus excelsior*, wych elm *Ulmus glabra* community. Where elm has died, there is mainly sycamore *Acer pseudoplatanus*

and ash regeneration together with some elm recovering through suckering. In the main dale where old hazel *Corylus avellana* coppice remains, the ground flora is dominated by ivy *Hedera helix* and dog's mercury *Mercurialis perennis*. A greater range of species is found in The Delf, including bluebell *Hyacinthoides non-scripta* and early dog-violet *Viola reichenbachiana*. Additional interest here is provided by a small re-entrant stream with opposite-leaved golden-saxifrage *Chrysosplenium oppositifolium* and ramsons *Allium ursinum*. Scattered through the wood are areas of buckthorn *Rhamnus catharticus*, a species considered to be an indicator of ancient woodland.

The limestone crags are of particular interest with a number of local species such as rock whitebeam *Sorbus rupicola*, yew *Taxus baccata*, field maple *Acer campestre* and mountain currant *Ribes alpinum*.

Towards the top of the main daleside, woodland gives way to a scrub community of dogwood *Cornus sanguinea*; a species now uncommon in Derbyshire daleside woodlands. In Eyam Dale, this is replaced by hawthorn *Crataegus monogyna* and dog rose *Rosa canina* over a diverse ground flora including moschatel *Adoxa moschatellina* and wood avens *Geum urbanum*.

The limestone cliffs and older quarry faces are not subject to grazing and support species-rich grassland communities with a number of nationally or locally uncommon species such as Nottingham catchfly *Silene nutans*, spring cinquefoil *Potentilla tabernaemontani*, limestone bedstraw *Galium sternerii* and greater knapweed *Centaurea scabiosa*.

Whereas most of the plateau land has been agriculturally improved, some small areas of herb-rich pasture remain. These grasslands are of the yellow oat-grass *Trisetum flavescens*, quaking-grass *Briza media*, crested dog's-tail *Cynosurus cristatus* type and contain a wide range of limestone grassland species such as common rock-rose *Helianthemum nummularium*, cowslip *Primula veris* and mossy saxifrage *Saxifraga hypnoides*.

Within the site important communities of mosses and liverworts occur in the swallets on the north-western edge. Of particular note are three nationally rare species; the moss *Amblystegiella sprucei* and the liverworts *Cololejeunea rosettiana* and *Pedinophyllum interruptum*.