

Notification date: 23 March 1987

COUNTY: PEAK DISTRICT, DERBYSHIRE

SITE NAME: ABNEY &  
BRETTON CLOUGHS

DISTRICT: DERBYSHIRE DALES

SITE REF: 15 WJR

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 210790

Area: 147.7 (ha.) 364.9 (ac.)

Ordnance Survey Sheet 1:50,000: 119

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

Date Notified (Under 1949 Act): 1972

Date of Last Revision: 1972

Date Notified (Under 1981 Act): 1987

Date of Last Revision: –

Other Information:

Site boundary alteration (extension & reduction). Site formerly two separate sites 'Abney Clough' and 'Bretton Clough'.

Description and Reasons for Notification:

Abney and Bretton Cloughs lie on Millstone Grit (Carboniferous) between Eyam and Abney Moors to the south-west of Hathersage. They have been cut through mudstones, shales, sandstones and grits which have given rise to soils that are principally coarse loams with peaty gleys (waterlogged soils) near springs on the sandstone/shale junctions. Deep basin peats occur in localised pockets behind the spectacular landslip features of Bretton Clough. The two valleys show an almost complete range of gritstone/shale plant communities consisting of ancient semi-natural broadleaved woodland, unimproved acidic grasslands and dwarf shrub heaths, wet flushes and chalybeate (containing iron) springs, bracken covered slopes and scrub.

The ancient and semi-natural woodland is composed of a number of different types. The principal species on these acid soils is sessile oak *Quercus petraea* with some pedunculate oak *Q. robur*. Downy birch *Betula pubescens* is present throughout, often with rowan *Sorbus aucuparia*. Locally, rowan forms some intermediate stands with birch alone. In some areas hazel *Corylus avellana* is associated with oak over a diverse field layer, with lady fern *Athyrium filix-femina*, creeping soft-grass *Holcus mollis* and the local oak fern *Gymnocarpium dryopteris* and beech fern *Phegopteris connectilis*. Two variants of the basic woodland structure occur, both containing ash *Fraxinus excelsior*. On damper soils the ash is associated with aspen *Populus tremula* with water mint *Mentha aquatica* and meadowsweet *Filipendula ulmaria* growing below. On drier soils, where there is some base enrichment from the shales and a correspondingly richer ground flora dominated by dog's mercury *Mercurialis perennis*, the ash is associated with small-leaved lime *Tilia cordata*.

Bretton Clough is noted for its flush and river mire communities. The more species-rich flushes are dominated by sharp-flowered rush *Juncus acutiflorus* with meadowsweet, marsh-marigold *Caltha palustris* and common spotted-orchid *Dactylorhiza fuchsii* but where conditions are more acidic, soft rush *Juncus effusus* predominates.

A wide range of grasslands occur ranging from neutral swards in Abney Clough, to the acidic valley slopes and landslips of Bretton Clough. The latter are dominated by wavy hair-grass *Deschampsia flexuosa*, common bent *Agrostis capillaris*, mat-grass *Nardus*

*stricta* and tormentil *Potentilla erecta*. Bracken *Pteridium aquilinum* is dominant over considerable areas and is associated in places with dense hawthorn *Crataegus monogyna* scrub. Some of the grasslands are particularly species-rich with purple moor-grass *Molinia caerulea*, common bent, lousewort *Pedicularis sylvatica* and greater butterfly-orchid *Platanthera chlorantha*. Heather *Calluna vulgaris* is present in this community but is more typically found on the higher ground at the east end of the valley with bilberry *Vaccinium myrtillus* and western gorse *Ulex gallii*.

The lichen flora is of exceptional interest, with a number of species which are present in only a few sites in the Peak District. These include corticolous (bark loving) species such as *Arthonia punctiformis*, *Arthopyrenia fallax* and *Lecanora chlorana* which colonise the smooth bark of rowan. The 'old oak forest' indicator *Lecidea cinnabarina* is found here in its only location in the National Park. Saxicolous (stone loving) species of local distribution include *Lecidea soretizodes* and *Stereocaulon vesuvianum*.

The structural diversity provided by the mosaic of woodlands, bracken, flushes and scrub in these sheltered valleys provides important breeding, feeding and roosting areas for birds, with some 60 species recorded. Breeding species include kingfisher *Alcedo atthis* and snipe *Gallinago gallinago*.

The invertebrate fauna has been little studied but several species of fly (Diptera) of restricted national distribution have been recorded.