

Notification date: 28 July 1993

COUNTY: DERBYSHIRE

SITE NAME: BONSALL LEYS

DISTRICT: DERBYSHIRE DALES

SITE REF: 15 W9Q

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 265575

Area: 15.01 (ha.) 37.03 (ac.)

Ordnance Survey Sheet 1:50,000: 119

1,10,000: SK 25 NE

Date Notified (Under 1949 Act): –

Date of Last Revision: –

Date Notified (Under 1981 Act): 1993

Date of Last Revision: –

Other Information:

New site.

Site Description and Reasons for Notification:

Bonsall Moor is an extensive tract of low intensity grazing land on the limestone plateau in the south east corner of the Peak National Park. Situated above the Via Gellia, some 3 km west of Cromford, Bonsall Leys lies at an altitude of 350 m and is subject to a relatively harsh climate in the face of the prevailing south westerly wind. Much of the site has been intensively mined for lead from mediaeval to recent times, leaving the remains of some 200 mine shafts and associated spoil heaps, together with areas of open vein workings; some of which are of particular archaeological interest. Soils are therefore disturbed over the greater part of the area, with heavy-metal rich, mine-spoil heaps scattered throughout. Elsewhere, deep loess deposits occur over Carboniferous limestone which is exposed at the surface in places or present as limestone spoil giving rise to highly calcareous soils.

The principal interest of the site lies in its range of grassland communities. Much of the site comprises neutral grassland types of varying plant composition which merge imperceptibly into more species-rich calcicolous closed turf over lead mine spoil. There are other areas of more open, heavy-metal toxic, mine spoils supporting a characteristic 'metallophyte' vegetation. The site is also exceptionally species-rich and contains a number of plants uncommon in the Peak District.

The calcicolous grassland contains all of the species characteristic of Derbyshire dales limestone grassland such as sheep's fescue *Festuca ovina*, frequent meadow-oat grass *Avenula pratense*, rough hawkbit *Leontodon hispidus* and small scabious *Scabiosa columbaria*. The most interesting sub-communities are unusually species-rich with frequent grass of parnassus *Parnassia palustris* together with frog orchid *Coeloglossum viride* and the metallophyte species spring sandwort or 'leadwort' *Minuartia verna* which it is exceptional to find in a closed turf.

These communities grade into more open vegetation growing on mine spoil heaps, where only characteristic metallophytes such as alpine pennycress *Thlaspi alpestre* and spring sandwort occur together with populations of species locally adapted to heavy-metals such as moonwort *Botrychium lunaria* and mountain pansy *Viola lutea*.

More extensive areas of a range of neutral grasslands, more typical of old meadows, are spread throughout the site. These are characterised by common knapweed *Centaurea nigra* and crested dog's-tail *Cynosurus cristatus*. More calcareous sub-communities are found on brown calcareous earth soils with quaking grass *Briza media*, fairy flax *Linum catharticum* and a range of sedges.

Within this range of exceptionally varied communities, several locally uncommon plants are found. No other site of comparable size in the Peak District is known to support eight orchid species including the locally scarce pyramidal orchid *Anacamptis pyramidalis*, bee orchid *Ophrys apifera*, and occasional fly orchid *O. insectifera* on spoil heaps.