

Notification date: 21 March 1996

COUNTY: DERBYSHIRE

SITE NAME: BALLIDON DALE

DISTRICT: DERBYSHIRE DALES

SITE REF:

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 205555

Area: 51.15 (ha.)

Ordnance Survey Sheet 1:50,000: 119

1:10,000: SK 15 NE, SK 25 NW

Date Notified (Under 1981 Act): 1996

Date of Last Revision: –

Other Information:

New site.

Site Description and Reasons for Notification:

Located mid-way between the lower hills of the Somerset Mendips and the higher Craven region of Yorkshire, the White Peak of Derbyshire and Staffordshire is one of the most important areas of carboniferous limestone in Britain, with daleside grasslands which show similarities to those found in both parts of the country. The White Peak is cut by valleys or 'dales'. These expose areas of high geological interest and support a range of important semi-natural woodland, scrub, grassland and, stream habitats.

The dales vary in their orientation and this, together with differences in slope, affects the development of soil types and plant communities. South facing slopes are warm and dry in contrast to north facing slopes which are cool and moist; east facing slopes are shallow, nutrient-poor, well-drained rendzinas high in calcium carbonate. Towards the plateau, where downwash of loessic material combined with surface-leaching has reduced calcium carbonate, acidity is higher and soils grade into deeper brown earths. Richer, moister soils cover the more variable deposits on the floor of the dales and these areas tend to support neutral, rather than calcareous plant communities.

Ballidon Dale is 10 km south west of Matlock on the south eastern edge of the Peak National Park. It is a broad, deep valley which curves from north to south with a large side-dale entering from the west and smaller side dale from the east. The south western section of the main dale and the southern part of the western side-dale have been substantially altered by quarrying and some parts of the original dale land form have been completely removed.

Extensive tracts of species-rich limestone grasslands cover the unaffected dalesides. The differing slopes and aspects increase interest by giving rise to a variety of grassland communities, including those typical of limestone grassland in the Peak District and others more characteristic of northern limestones and southern chalks.

On the shallow lime-rich soils of the dalesides, the grassland is typified by a rich and attractive mixture of grasses, sedges and herbs, dominated by meadow oat grass *Avenula pratense*, quaking grass *Briza media*, sheep's fescue *Festuca ovina*, with glaucous sedge *Carex flacca* and spring sedge *C. caryophyllea*. Herbs are abundant and typically include salad burnet *Sanguisorba minor*, bird's-foot trefoil

*Lotus corniculatus* and mouse ear hawkweed *Hieracium pilosella*. Although present throughout the site, small scabious *Scabiosa columbaria*, fairy flax *Linum catharticum*, thyme *Thymus praecox* and lady's bedstraw *Galium verum* occur at a higher frequency in the side dale. Early purple orchid *Orchis mascula* is found in the main dale. On the deeper soils of the north facing slopes of the main side dales, the grassland is similar to more northern limestone grasslands and can be distinguished by an abundance of sedges including carnation sedge *Carex panicea* in addition to spring sedge and glaucous sedge. Grass of Parnassus *Parnassia palustris*, a species at the southern edge of its distribution in Britain, also occurs in this community.

An uncommon grassland type in the Peak District is found on west facing slopes of the main dale. It is characterised by a herb-rich sward high in lime-loving species, with stemless thistle *Cirsium acaule* (a plant at the northern edge of its British distribution in the Peak District) found throughout. This community contains herbs such as the locally uncommon kidney vetch *Anthyllis vulneraria*, carline thistle *Carlina vulgaris* and autumn gentian *Gentianella amarella*.

The tops of the dalesides have grassland characterised by a lack of meadow oat and abundance of common bent *Agrostis capillaris* and sheep's fescue, with species more indicative of acidic conditions such as tormentil *Potentilla erecta*, sweet vernal grass *Anthoxanthum odoratum* and around rocky outcrops, the sward becomes more species-rich with glaucous sedge, mouse ear hawkweed, common cats-ear *Hypochaeris radicata*, field wood rush *Luzula campestris*, common dog violet *Viola riviniana* and thyme. Mountain pansy, *Viola lutea*, at the southern edge of its distribution in England, is also found on these leached soils.

Neutral grassland communities have developed on areas of deeper brown earths scattered throughout the main dale. These support species such as adders tongue *Ophioglossum vulgatum* and pignut *Conopodium majus* although a calcareous influence is still apparent with species such as salad burnet and lady's bedstraw.

Small areas of dense and scattered hawthorn *Crataegus monogyna* scrub occur on the slopes where the side dales join the main dale.