

COUNTY: PEAK DISTRICT, DERBYSHIRE

SITE NAME: TOPLEY PIKE &
DEEP DALE

DISTRICT: HIGH PEAK

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

Local Planning Authority: PEAK PARK JOINT PLANNING BOARD, High Peak Borough Council

National Grid Reference: SO 099717 Area: 50.59 (ha.) 125 (ac.)

Ordnance Survey Sheet 1:50,000: 119 1:10,000: SK 07 SE, SK 17 SW

Date Notified (Under 1949 Act): 1965 Date of Last Revision: 1972

Date Notified (Under 1981 Act): 1984 Date of Last Revision: –

Other Information:

Description and Reasons for Notification:

The White Peak of Derbyshire and Staffordshire is one of the most important masses of carboniferous limestone in Britain. It lies both in latitude and altitude between the other notable areas of carboniferous limestone, the Mendips and the Craven area of north Yorkshire. The limestone is cut by valleys, the 'dales', which expose areas of high geological interest and contain a range of woodlands, scrub, grassland and streams.

The dales vary in their orientation. Those that run east-west show a strong contrast between the south facing slopes which are warm and dry and the north facing slopes which are cool and moist. Dales running north-south have only slightly cooler east facing than west facing slopes. Soils vary considerably; large areas are covered by a shallow black soil that is frequently leached and sometimes strongly acid. Richer moister soils occur in the floor of the dales where material has washed from the slopes and where there may also be variable deposits laid down in recent geological time.

The woodlands of the dales are dominated by ash *Fraxinus excelsior*. In those areas that are regarded as being the oldest this is associated with wych elm *Ulmus glabra*. Small-leaved lime *Tilia cordata* is present in variable quantities but oak *Quercus robur* is absent except in the western dales. The understorey is mostly hazel *Corylus avellana* coppice with rowan *Sorbus aucuparia* and field maple *Acer campestre*. On rock outcrops yew *Taxus baccata* and rock whitebeam *Sorbus rupicola* are present. Woodland shrubs include bird cherry *Prunus padus*, dogwood *Cornus sanguinea* and guelder rose *Viburnum opulus*. The ground flora is dominated by dog's mercury *Mercurialis perennis* or tufted hair-grass *Deschampsia cespitosa* with a very wide range of other woodland plants. In moist areas ferns and bryophytes form an important component.

Scrub in the dales is varied; much is derived from hawthorn *Crataegus monogyna* encroachment onto the grassland, some of it being 80–100 years old. This scrub is enriched with blackthorn *Prunus spinosa*, buckthorn *Rhamnus catharticus* and rose *Rosa* spp. In several dales there is a distinctive type of scrub known as 'retrogressive scrub', typically developed on poor soils and over limestone screes. Here hazel forms a fairly open habitat with the ground between colonised by a rich plant community often dominated by bloody cranesbill *Geranium sanguineum* with Nottingham catchfly *Silene nutans* and stone bramble *Rubus saxatilis*.

Grasslands in the dales are very rich in species. Meadow oat *Avenula pratense* and glaucous sedge *Carex flacca* are abundant. The richness and type of grassland varies according to aspect, grazing and soil conditions. On more acid areas mat-grass *Nardus stricta* and wavy hair-grass *Deschampsia flexuosa* are locally dominant occasionally with bilberry *Vaccinium myrtillus* and more rarely heather *Calluna vulgaris*. Tall, dry, herb-rich grasslands contain marjoram *Origanum vulgare* and field scabious *Knautia arvensis*, damper tall grasslands have abundant meadow sweet *Filipendula ulmaria* with water avens *Geum rivale* and hogweed *Heracleum sphondylium*.

Other habitats in the dales include rock outcrops and scree. In the White Peak, dog's mercury colonises scree along with oat-grass *Arrhenatherum elatius* and mouse-eared hawkweed *Hieracium pilosella*. Rock outcrops are typically colonised by early flowering species such as rue-leaved saxifrage *Saxifraga tridactylites* and shining cranesbill *Geranium lucidum*.

Many dales are dry but some have streams in winter only and some, permanent or semi-permanent rivers. These streams are fringed by reed-grass *Phalaris arundinacea* and in the water courses fool's watercress *Apium nodiflorum* and the bryophytes *Cinclidotus fontinaloides* and *Fontinalis antipyretica* are abundant.

The dales woodlands attract a range of typical woodland birds but are particularly noted for the high density of nesting pairs compared with the surrounding areas. Those include hole-nesting species such as redstart *Phoenicurus phoenicurus*. In the open grasslands of the upper valley slopes and near walls wheatears *Oenanthe oenanthe* are common. The cliffs attract kestrels *Falco tinnunculus* and jackdaws *Corvus monedula*. Associated with the streams are a variety of birds notably dipper *Cinclus cinclus* and grey wagtail *Motacilla cinerea*.

This dale runs north-south and contains good examples of limestone cliffs and screes. There is a small stream which runs only in the winter and spring.

The grasslands of the dale are characterised by species such as meadow oat and carnation sedge. These are well represented in other dales but are notable here for their being ungrazed and for not having been invaded by rank species.

Considerable areas of the dale sides are dominated by bloody cranesbill or kidney vetch *Anthyllis vulneraria* and Nottingham catchfly is exceptionally abundant. Communities dominated by tufted hair-grass containing globe flower *Trollius europaeus* and melancholy thistle *Cirsium helenioides* also occur.

The cliffs and screes have a rich flora including whitebeam and yew. The screes are colonised by limestone polypody *Gymnocarpium robertianum* and rock hutchinsia *Hornungia petraea*. On some screes a 'retrogressive' hazel scrub occurs with abundant rock rose *Helianthemum nummularium*, bloody cranesbill, stone bramble, lily of the valley *Convallaria majalis* and broad-leaved helleborine *Epipactis helleborine*.

A number of mosses and lichens of interest are known to occur but these along with the invertebrates require more study.

On Topley Pike a considerable amount of limestone dust has been deposited from the adjacent quarry. Although this has destroyed the typical zonation found on limestone dale sides calcicolous lime-loving plant appear to thrive. Deep Dale is free of limestone dust and the typical leached limestone grasslands along the upper edge of the dale occur with bilberry and common bent *Agrostis capillaris*. Cowberry *Vaccinium vitis-idaea*, very unusual in limestone areas also occurs on these edges.

There are some areas of broad leaved woodland dominated by ash but containing a moderate amount of sycamore *Acer pseudoplatanus*.

Many dales are dry but some have streams in winter only and some, permanent or semi-permanent rivers. These streams are fringed by reed-grass *Phalaris arundinacea* and in the water courses fool's watercress *Apium nodiflorum* and the bryophytes *Cinclidotus fontinaloides* and *Fontinalis antipyretica* are abundant.

The dales woodlands attract a range of typical woodland birds but are particularly noted for the high density of nesting pairs compared with the surrounding areas. Those include hole-nesting species such as redstart *Phoenicurus phoenicurus*. In the open grasslands of the upper valley slopes and near walls wheatears *Oenanthe oenanthe* are common. The cliffs attract kestrels *Falco tinnunculus* and jackdaws *Corvus monedula*. Associated with the streams are a variety of birds notably dipper *Cinclus cinclus* and grey wagtail *Motacilla cinerea*.

This dale runs north-south and contains good examples of limestone cliffs and screes. There is a small stream which runs only in the winter and spring.

The grasslands of the dale are characterised by species such as meadow oat and carnation sedge. These are well represented in other dales but are notable here for their being ungrazed and for not having been invaded by rank species.

Considerable areas of the dale sides are dominated by bloody cranesbill or kidney vetch *Anthyllis vulneraria* and Nottingham catchfly is exceptionally abundant. Communities dominated by tufted hair-grass containing globe flower *Trollius europaeus* and melancholy thistle *Cirsium helenioides* also occur.

The cliffs and screes have a rich flora including whitebeam and yew. The screes are colonised by limestone polypody *Gymnocarpium robertianum* and rock hutchinsia *Hornungia petraea*. On some screes a 'retrogressive' hazel scrub occurs with abundant rock rose *Helianthemum nummularium*, bloody cranesbill, stone bramble, lily of the valley *Convallaria majalis* and broad-leaved helleborine *Epipactis helleborine*.

A number of mosses and lichens of interest are known to occur but these along with the invertebrates require more study.

On Topley Pike a considerable amount of limestone dust has been deposited from the adjacent quarry. Although this has destroyed the typical zonation found on limestone dale sides calcicolous lime-loving plant appear to thrive. Deep Dale is free of limestone dust and the typical leached limestone grasslands along the upper edge of the dale occur with bilberry and common bent *Agrostis capillaris*. Cowberry *Vaccinium vitis-idaea*, very unusual in limestone areas also occurs on these edges.

There are some areas of broad leaved woodland dominated by ash but containing a moderate amount of sycamore *Acer pseudoplatanus*.