

# Citation

**County:** SOMERSET/DEVON

**Site name:** NORTH EXMOOR

**District:** WEST SOMERSET, NORTH DEVON

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

**Local Planning Authority:** Exmoor National Park, Somerset Country Council, Devon County Council

**National grid reference:** SS 800430  
SS 770360

**Area:** 12005.3 (ha) 29665.0 (ac)

**Ordnance Survey sheet:** 1:50,000: 180.181

1:10,000: SS 63 NE, SS 64 SE, SS 73 NE, SS 73 NW,  
SS 73 SE, SS 74 NE, SS 74 NW, SS 74 SE,  
SS 74 NW, SS 84 NE, SS 84 NW, SS 84 SE,  
SS 84 SW, SS 83 NE, SS 94 NW, SS 94 SW

**Date notified (Under 1949 Act):** 1954

**Date of last revision:** 1971

**Date notified (under 1981 Act):** 1992

**Date of last revision:**

## Other information

Within Exmoor National Park. The name has been changed from Dunkery, Holnicote and Porlock and the boundary amended by extensions and deletions. The site includes the Dunkery Beacon and the Holnicote and Horner Water Nature Conservation Review sites, and the Chains Geological Conservation Review site.

## Description and reasons for notification

North Exmoor is a southern outpost of typically northern and upland elements of Britain's flora and fauna. The site is nationally important for its south-western lowland heath communities and for transitions from ancient semi-natural woodland through upland heath to blanket mire. The site is also of importance for its breeding bird communities, its large population of the nationally rare Heath Fritillary butterfly *Mellicta athalia*, an exceptional woodland lichen flora and its palynological interest of deep peat on the Chains. The site is in two main blocks: the major one to the North and a smaller one by Simonsbath to the South. The highest point, Dunkery Beacon, is 519 metres above sea level, the lowest heathland is at about 250 metres and the site extends down to 80 metres in woodland. The underlying rocks are Devonian and most of the site is underlain by hard sandstones, while at the west end and to the South there are younger and less base-poor slates siltstones and sandstones.

The high plateaux in the West has blanket bog of the Deergass - Hare's-tail Cottongrass *Trichophorum cespitosum* - *Eriophorum vaginatum* type. Bog mosses *Sphagnum* spp are abundant, together with Purple Moor-grass *Molinia caerulea*, Deergass, Hare's-tail Cottongrass and Common Cottongrass *Eriophorum angustifolium*. Typical herbs are Bog Asphodel *Narthecium ossifragum* and Round-leaved Sundew *Drosera rotundifolia*. Wet heath occurs around the blanket bog and on other poorly drained ground. The main type is the Deergass - Cross-leaved Heath *Erica tetralix* community, which is dominated by mixtures of Heather *Calluna vulgaris*, Purple Moor-grass, Cross-leaved Heath and Deergass. Impoverished stands of the more lowland Cross-leaved Heath - bog moss *Sphagnum compactum* community are also present, but scarce. Plant species found in these communities which are typical of upland habitats but which are very uncommon in southern Britain include Cranberry *Vaccinium oxycoccus*. Crowberry *Empetrum nigrum*, Lesser Twayblade *Listera cordata*, Stag's-horn Clubmoss *Lycopodium clavatum* and Fir Clubmoss *Huperzia selago*.

In the wettest areas of the higher moorland, usually in depressions, Bog Asphodel - bog moss *Sphagnum papillosum* valley mires occur. The Marsh St John's-wort - Bog Pondweed *Hypericum elodes* - *Potamogeton polygonifolius* and the Blinks - Round-leaved Crowfoot *Montia fontana* - *Ranunculus omiophyilus* communities are to be found in similar situations where the lateral movement of water is greater. Within these areas, herbs such as Ivy-leaved Bellflower *Wahlenbergia hederacae*, Pale Butterwort *Pinguicula lusitanica* and the nationally scarce Cornish Moneywort *Sibthorpia europaea* can be found, these plants being confined almost entirely to the extreme West of Britain.

The Heather - Bilberry *Vaccinium myrtillus* community, in which Heather dominates, forms the main dry heath of higher ground and north-facing slopes. Bilberry, wavy Hair-grass *Deschampsia flexuosa* and mosses, especially *Plaurozium schreberi* and *Dicranum scoparium* are generally abundant, but are less frequent on south-facing slopes. Where Bell Heather *Erica cinerea*, Common Bent *Agrostis capillaries* and Sheep's Fescue *Festuca ovina* are frequent.

The lowland heath types include those which are restricted to Wales and South West England. The Western Gorse - Bristle Bent *Ulex gallii* - *Agrostis curtisii* heath consists of a mixture of Western Gorse. Bell Heather, Heather and Bristle Bent on drier ground and on damper sites Purple Moor-grass and Cross-leaved Heath become more abundant. Heather - Western Gorse dry heath also occurs, commonly as a mosaic with grassy turf of Common Bent and Sheep's Fescue. Gorse *Ulex europaeus*, which forms large stands on the moorland fringes, often occurs in this heathland type.

Within the area which was once the Royal Forest of Exmoor grassy mires dominated by Purple Moor-grass and associated species including Torementil *Potentilla erecta* are now widespread. Variations of this community range from acid and heathy, to more neutral at lower altitudes. Grassland, dominated by Mat Grass *Nardus stricta*, is also common in this area and, on drier slopes merges with grassland of the Sheep's Fescue - Common Bent - Heath Bedstraw *Galium saxatile* type. Of particular interest are moorland stands of Great Wood-rush *Luzula sylvatica*, which is normally only a woodland plant in the South West. The Star Sedge - bog moss *Carex echinata* - *Sphagnum recurvum* mire is frequent and mainly dominated by Soft Rush *Juncus effusus* and the moss *Polytrichum commune*. In the broad combe bottoms the Marsh Bedstraw - rush pasture *Galium palustre* - *Juncus effusus/acutiflorus* community is common.

Bracken *Pteridium aquilinum* is common and mainly restricted to free-draining combe sides and hill slopes and often has an understory of Bilberry.

The ancient woodland is mostly to be found around Horner and Hawkcombe near Porlock where it is open to the moorland and is grazed by domestic stock and Red Deer *Cervus elaphus* of which there is a large population. The steep combe sides are dominated by Sessile Oak *Quercus petraea* with some Silver Birch *Betula pendula* and Rowan *Sorbus aucuparia*. The understory is mainly Bilberry. Bracken, mosses and Wavy Hair-grass, Pedunculate Oak *Quercus robur* dominates the combe bottoms, with Ash *Fraxinus excelsior*, Alder *Alnus glutinosa* and sallows *Salix species*. Oak on the slopes has been previously coppiced, but large old trees and pollards are common, especially in the combe bottoms.

These woods are nationally important for their lichen flora. The two major lichen associations which are well represented here are the Lobarion and Lecanactidetum premnae. These are communities of ancient woodland and many species which are particularly indicative of a long continuity of woodland cover are present for example; *Nephroma laevigatum*, *Peltigera coillina*, *P. horizontalis*, *Sticta limbata*, *S. sylvatica*, *Thelotrema lepadinum*, *Lecanactis premnae*, *Biatorina atropurpurea* and all four species of *Lobaria* which are to be found in Britain. The Lobarion association is best represented here on larger trees in the combe bottom and on old pollards where conditions are moist and not too shaded. The Lecanactidetum premnae is to be found on drier well-lit parts of trees often on the higher parts of the slopes. Many of the species recorded in these moods are nationally rare or scarce and these include: *Graphina ruiziana*, *Pannaria mediterranea*, *Parmelia guercina*, *Usnea articulata*, *Thelopsis rubella*, *Schismatomma niveum*, *Strangospora ochrophora* and *Wadeana dendrographa*. Other species worthy of note include *Leptogium cyanescens*, *L. teretiusculum*, *Parmelia taylorensis*, *Porina leptalea*, *Pertusaria pupillaris* and *Megalospora tuberculosa*. The bryophyte communities include the liverworts, *Lepidozia pinnata*, *Plagiochila spinulosa* and *Bazzania trilobata*. Hay-scented Buckler-fern *Dryopteris aemula* and Tunbridge Filmy-fern *Hymenophyllum tunbrigense*, also occur in these woods.

Freshwater bodies on this site are generally oligotrophic. In standing water emergent species such as Bogbean *Menyanthes trifoliata* and Bottle Sedge *Carex rostrata* occur with submerged and floating species such as Bog Pondweed *Potamogeton polygonifolius* and the floating form of Bulbous Rush *Juncus bulbosus*. In streams and rivers Alternate Water-milfoil *Myriophyllum alterniflorum* is abundant.

The breeding bird community includes species at or close to the southern limits of their breeding range in Britain: notably Merlin *Falco columbaris*, Ring Ouzel *Turdus torquatus* and Red Grouse *Lagopus lagopus scoticus*. The moorland also has strong populations of Whinchat *Saxicola rubetra*, Stonechat *Saxicola torquata* and Wheatear *Oenanthe oenanthe*. Mires provide nesting sites for Curlew *Numenius arquata* and Snipe *Gallinago gallinago*. Buzzards *Buteo buteo* and Ravens *Corvus corax* nest in large trees high on the moor. Regular winter visitors include Hen Harriers *Circus cyineus* and Golden Plover *Pluvialis apricaria*. The woodland bird community is diverse and typical of western oak woodlands. Strong populations include those of Pied Flycatcher *Ficedula hypoleuca*, Wood Warbler *Phylloscopus sibilatrix* and Redstart *Phoenicurus phoenicurus*. Nightjar *Caprimulgus europaeus* and Redpoll *Acanthis flammea* breed on the woodland edges. The streams and rivers have many pairs of Dipper *Cinclus cinclus* and Grey Wagtail *Notacilla cinerea*.

This site is by far the largest stronghold in Britain for the Heath Fritillary butterfly. Twenty colonies of this nationally rare species have so far been discovered here, some of which are very large. Another nationally rare butterfly species, the High Brown Fritillary *Argynnis adippe* also occurs on this site.

The Chains provides palynological record of a mid to late Flandrian vegetation history on Exmoor. The pollen sequence in the peat is calibrated by radiocarbon dating. It permits comparisons with other upland sites in South West England and demonstrates the impact of man on the landscape from Neolithic times onwards.