

File ref:

County: Devon **Site Name:** East Dartmoor

District: Teignbridge, West Devon

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

Local Planning Authority: Devon County Council, Dartmoor National Park, Teignbridge District Council, West Devon Borough Council

National Grid Reference: SX 695815 **Area:** 2,088.1 (ha) 5,159.7 (ac)

Ordnance Survey Sheet 1:50,000: 191 **1:10,000:** SX 67 NE, SX 68 SE, SW, SX 77 NW, SX 78 SW

Date Notified (Under 1949 Act): 1976 **Date of Last Revision:** 1976

Date Notified (Under 1981 Act): 1987 **Date of Last Revision:** –

Other Information:

The site boundary has been amended by extension and deletion. The site is within Dartmoor National Park and the Devon County Structure Plan Dartmoor Conservation Zone.

Description and Reasons for Notification:

This site contains the largest area of heather moorland remaining on Dartmoor. The submontane acidic dwarf shrub heath concerned is associated with acidic grassland and valley mires. Birch Tor, within the site, is of national geological importance.

East Dartmoor SSSI is located towards the easternmost extent of the Dartmoor granite outcrop at an altitude of 350 to 530 metres. The soils are mainly podzolic, with peaty upper horizons causing restricted drainage. The site is largely unenclosed, treeless and grazed by cattle, sheep and ponies.

Extensive areas are dominated by dwarf shrubs, mainly heather *Calluna vulgaris*, bell heather *Erica cinerea*, cross-leaved heath *E. tetralix*, bilberry *Vaccinium myrtillus* and western gorse *Ulex gallii*. This vegetation also forms a mosaic with a grassy sward, the main components of which are purple moor-grass *Molinia caerulea*, mat-grass *Nardus stricta*, sheep's fescue *Festuca ovina*, common bent *Agrostis capillaris* and bristle bent *A. curtisii*, the last being restricted in Britain to the south-west.

In the valley bottoms various mire communities occur. Where the water flow is restricted the vegetation is characterised by abundant bog-mosses, notably *Sphagnum papillosum*, *S. auriculatum* and *S. capillifolium* and by common cottongrass *Eriophorum angustifolium*. Where water movement is greater, the characteristic mosses are *S. recurvum*, *S. palustre*, *S. squarrosum* and *Polytrichum commune*, occurring with soft rush *Juncus effusus* and sharp-flowered rush *J. acutiflorus*. Within these mires are bog pools containing species such as *Sphagnum cuspidatum*, bottle sedge *Carex rostrata*, star sedge *C. echinata*, bogbean *Menyanthes trifoliata*, marsh lousewort *Pedicularis palustris* and bog asphodel *Narthecium ossifragum*. Uncommon plants found on the site include stag's-horn clubmoss *Lycopodium clavatum* and black bog-rush *Schoenus nigricans*.

Moorland birds such as red grouse *Lagopus lagopus*, snipe *Gallinago gallinago*, curlew *Numenius arquata*, wheatear *Oenanthe oenanthe* and whinchat *Saxicola rubetra* breed within the site, as does the ring ouzel *Turdus torquatus*. The emperor moth *Saturnia pavonia* is among the many invertebrates that occur.

The coarse magacrystic biotite granite at Birch Tor, part of the Dartmoor mass (of Permo-Carboniferous age), is remarkable for the wide variety of xenoliths of varied size, shape and composition contained within it. In addition to metasedimentary fragment some are igneous and the possibility exists that both pre-granite and cognate (i.e. fragments of igneous precursors to the granite) varieties are present. The biotite is now considered to be restitic (i.e. material inherited from the source rock without melting) in origin. A critical site for research into the early-stage derivation of the Cornubian granite magmas, as well as their subsequent modification by incorporation of extraneous material.