

Information Sheet 2B: Special sites - Conservation designations and important areas for wildlife around Meldon

Introduction to designations and wildlife law

Sheets 2E and 2F provide an explanation of the various nature conservation designations applied to the Meldon area and their legal background.

Dartmoor Special Area of Conservation

One of the best areas in the UK for wet and dry heath (40%), blanket bog (42%) and sessile oak woodland (1%) covering an area of 23165.77 hectares. It supports a significant presence of otter and Atlantic salmon. Includes North Dartmoor SSSI and Black-a-Tor Copse National Nature Reserve within the parish, which are outlined above.

More information:

Special Areas of Conservation: <http://www.jncc.gov.uk/page-23>

Dartmoor SAC - <http://www.jncc.gov.uk/ProtectedSites/SACselection/sac.asp?EUCODE=UK0012929>



View over North Dartmoor © DNPA

North Dartmoor Site of Special Scientific Interest

North Dartmoor SSSI, within Dartmoor National Park, covers 13561.0 hectares and contains one of the largest areas of upland semi-natural habitat in southern Britain. With large areas of wet and dry heath it is particularly important for blanket bog and valley mire communities. It also supports a diverse upland breeding bird community including the only regular breeding populations of golden plover and dunlin in southern Britain as well as breeding whinchat, wheatear and ring ouzel. Among the more unusual species recorded on site are cranberry on the open moor, fir clubmoss, lemon-scented fern, Tunbridge filmy-fern and Wilson's filmy-fern in wet shaded crevices in scree slopes and bog orchid in a few mires.

Within the SSSI lies Black Tor Copse National Nature Reserve, of national importance for lichens, and also Black Ridge Brook Geological Conservation Review (GCR) site, of national geological importance for pollen stratigraphy in peat deposits.

More information:

SSSIs - <http://www.english-nature.org.uk/special/sss/>

North Dartmoor SSSI - http://www.english-nature.org.uk/special/sss/sss_details.cfm?sssi_id=1001721

Meldon Aplite Quarry Site of Special Scientific Interest

Meldon Aplite Quarry SSSI covers an area of 20.8 hectares and is designated solely for its geological features. The SSSI consists of two quarries in the famous Meldon aplite – a fine-grained granite-like rock – and an old copper mine beside the Red-a-ven Brook, to the south. Both sites have yielded a vast range of different types of minerals, some only known in the UK from here. Not surprisingly, these exposures are very sensitive to rogue specimen collectors, so any removal of geological samples now requires permission from the government nature conservation body, English Nature (soon to become 'Natural England' – see also Information Sheet 1A). The geology of these sites is very complex but is explained in detail on Information Sheets 1C, E-G).

The quarries also include some biological features, however, which although not part of the SSSI designation, still contain interesting species. These include a pool on the edge of the quarry which has been used by Okehampton Youth Hostel to study the great diversity of land snails found there. Trees and rocks in the quarry also support a diversity of lichens as well as liverworts, present where water flows down the face of the northern quarry. Nature is gradually reclaiming these quarries, but as vegetation grows, it hides important geological features - so it is always interesting to think about contrasts between the aims of geological and biological conservation! In practice though, there are rarely conflicts, and controlling scrub and even grass can actually help maintain much rarer species such as lichens and liverworts, and even invertebrates which use the rock to shelter in or sun themselves on, to maintain their activity on cold days.



Meldon Aplite Quarry © DNPA

More information:

Meldon Aplite Quarry SSSI -

http://www.english-nature.org.uk/special/sss/sss_details.cfm?sssi_id=1001051

Meldon Quarry Site of Special Scientific Interest

Meldon Quarry covers an area of 75.7 ha and is also a geological SSSI. It is structurally very complex and provides classic exposures of folded and faulted Lower Carboniferous rocks caught up in dramatic

mountain-building processes around 300 million years ago - and then roasted by the Dartmoor granite as it was intruded as a molten magma (this complex geology is explained on Information sheets 1C and

1G). The site is a working quarry and consequently for health and safety reasons access is restricted. For a detailed illustrated review see: <http://www.devon.gov.uk/geology>.

As with the Meldon Aplite Quarries, ecological features are also present around Meldon Quarry: small copses are home to dormice and otters and lesser and greater horseshoe bats have been recorded on site, as well as nesting peregrine falcons and ravens. Areas of habitat are being restored - mainly heath and woodland - as the quarry is worked.

More information:

Meldon Quarry SSSI - http://www.english-nature.org.uk/special/sss/sss_details.cfm?sss_id=1005740

Meldon Woods Ancient Woodland

Meldon Woods is an ancient semi-natural woodland and recorded as such on the national Ancient Woodland Inventory. The area is a pedunculate oak wood with scatterings of ash and beech and hazel under storey. Dormice and pied flycatchers have been recorded here in abundance. The ground flora includes ferns such as broad buckler, male fern and scaly male fern, but it is most famous for its vast carpets of bluebells in the spring. Many other flowering plants are also present, including wood sorrel, wood anemone, wood melick, enchanter's nightshade, pignut and primroses. Some large oak maiden trees have plenty of deadwood – important for invertebrates and fungi – and mosses and potential bat roosting places. Dartmoor National Park Authority's *Action for Wildlife* project has erected 50 dormouse boxes in the wood and there is an ongoing, long-term study of pied flycatchers, which has been running for over 30 years.



Meldon Woods © DNPA

The woodland has a closed canopy and appears to link to other woodlands in the surrounding landscape but was, unfortunately, cut into two halves by the construction of the A30 dual carriageway in the 1980s, which now forms a major barrier to wildlife movement into other woodlands.

Some areas on the margins of the woodland contain different species, however. For instance, the lime-rich spoil heaps of the old limestone quarries near Meldon Pool (see information sheet 3B) support a richer, neutral to lime-loving flora, such as thyme and mouse-eared hawkweed; whilst acid-loving wet flush vegetation can be found in a wet area west of the old Aplite Quarry weighbridge and includes sphagnum mosses, rushes, sedges and sundew. The woodlands give way to moorland habitats along the slopes south-west of the railway station and western valley side leading towards the Meldon Reservoir, supporting moorland plants such as gorse, bracken, heathers and acid grassland species.

Meldon Reservoir

Meldon Reservoir was formed by the construction of a dam across the West Okement river between 1970-72. This impressive structure is 201m long and 44m high and when full covers an area of 1,660ha. The reservoir acts as a top-up supply during low river flows for the nearby Prewley Treatment Works, which supplies much of North Devon's water. Canada geese, goosanders, cormorants as well as otters have all been recorded here, although the area has no formal conservation designation.



Meldon Reservoir © DNPA

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