

Wildlife and Habitats

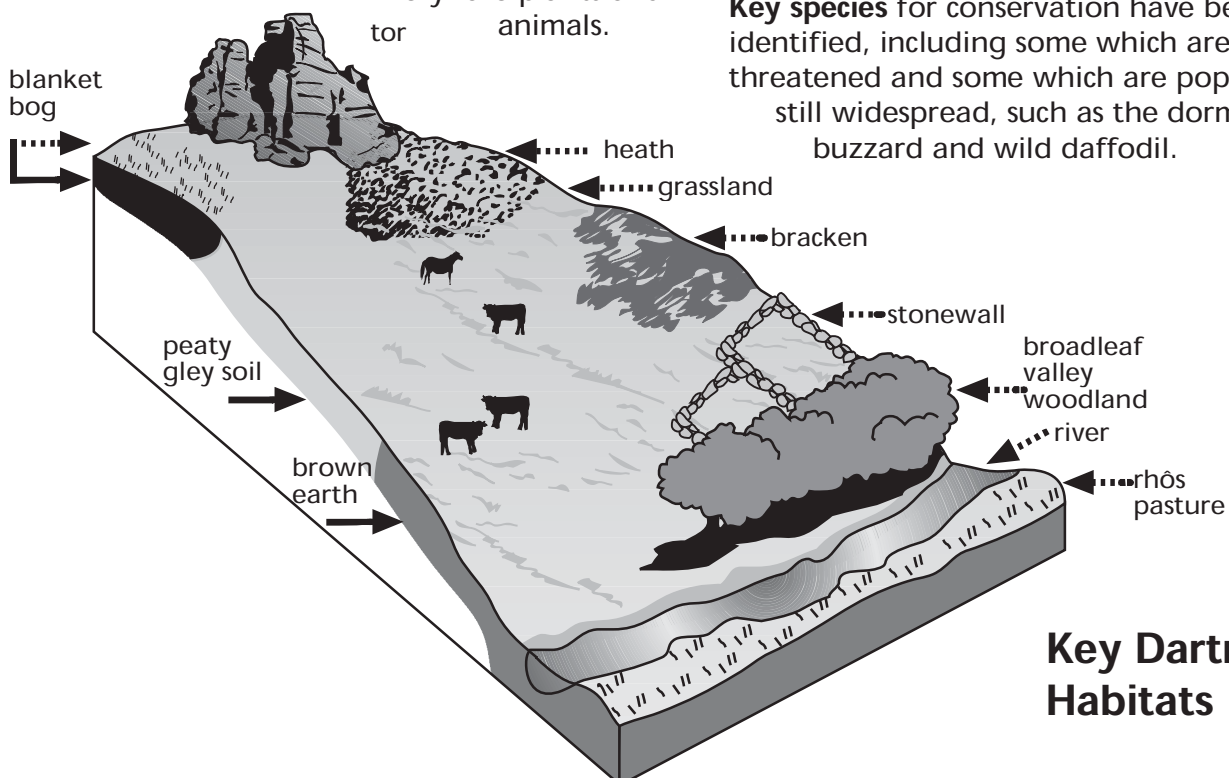


Dartmoor Factsheet

Dartmoor is the largest and highest upland in southern Britain, exposed to strong winds and high rainfall. The soils are acidic and the area has been relatively undisturbed by intensive agriculture. These factors make the National Park especially interesting and good for wildlife.

The National Park contains a considerable variety of habitats. There are principally two core areas of blanket bog on the highest parts of the moor - the larger northern plateau and the smaller and lower southern plateau. A mixture of heath and grassland surrounds them. Enclosed farmland is found around the margins of Dartmoor's granite core; broadleaf woodlands flourish in the more sheltered valleys, and the tors and rivers shelter a number of plants and animals.

The severe climate limits the variety of species, but the area is an important haven for those which can withstand these conditions including some very rare plants and animals.



Geologically, Dartmoor is the largest expanse of unglaciated upland in Great Britain, and the largest granite surface in England; it is of exceptional importance for the study of these and related earth science features.

In terms of its wildlife, Dartmoor is of **international importance** for its:

- blanket bogs
- upland heaths
- upland oakwoods
- cave systems

and of at least **national importance** for its:-

- valley mires
- Rhôs pasture and
- grass moor.

Other notable habitats within Dartmoor include species-rich hay meadows and hedgebanks, granite tors, torrent rivers and lowland heath. Numerous rarities occur, particularly lichens and butterflies. Birds of moors, heaths and farmland are also to be found.

Key species for conservation have been identified, including some which are globally threatened and some which are popular and still widespread, such as the dormouse, buzzard and wild daffodil.

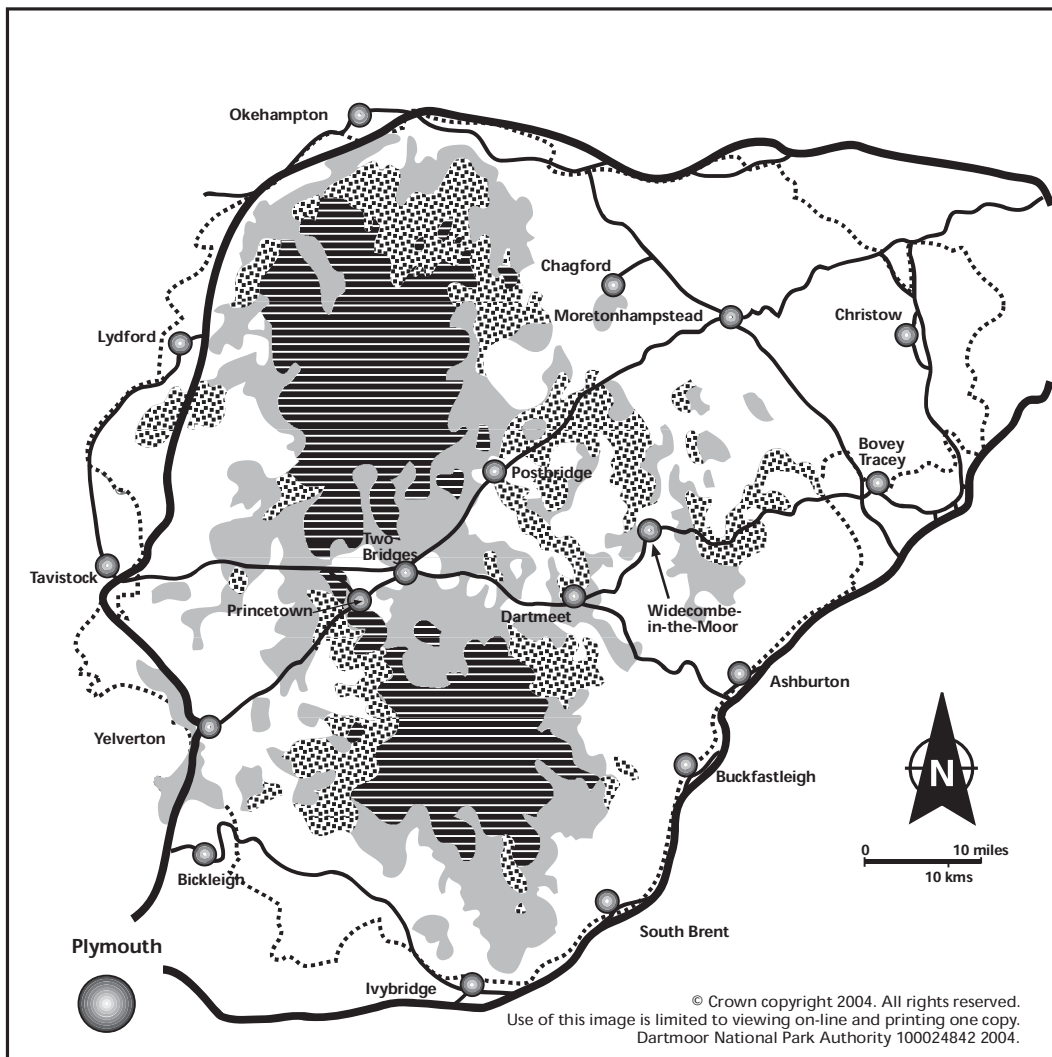
Key Dartmoor Habitats

Dartmoor Major Habitats

| Habitat | Environmental Conditions | The Plant Community | Animals |
|--------------------------|---|---|---|
| Open land | | | |
| Blanket bogs | Higher rainfall, poor drainage and accumulation of unrotted plant matter create a waterlogged and nutrient-poor bog on hill tops. | The plants which characterise Dartmoor's blanket and raised bog are deer grass, hare's-tail cotton-grass, cross-leaved heath, round-leaved sundew and bog asphodel, as well as numerous bog mosses. | Dunlin and golden plover nest on high blanket bogs. |
| Upland heathland | Steeper slopes surround the blanket bog giving rise to the better drained and drier soils supporting heather moorland. | The plants are dominated by ling, but also include bell heather, bilberry and western gorse in drier areas. Cross-leaved heath and purple moor grass grow in wetter areas. | Meadow pipits, stonechats, and skylarks as well as adders, lizards and the distinctive emperor moth caterpillar. Also supports red grouse and ring ouzel. |
| Grass moor (and bracken) | As for upland heathland, but more intensively grazed. | The main grasses include bents and fescues which often form a close cropped mat dotted with tormentil, bedstraw and milkwort flowers. These areas often contain gorse and are invaded by bracken on the drier slopes. | Cattle, sheep and ponies prefer this habitat, but it also supports voles, wheatears, whinchats and the small heath butterfly. It is within the range of predators such as foxes and buzzards. Some areas of bracken are important for high brown and pearl-bordered fritillary butterflies. |
| Valley mire | Regions of waterlogged deep peat with characteristic acid wetland plants. They follow the rivers and streams that drain the moor. | Cotton grass, crossleaved heath, bog bean, pale butterwort along with many sedges and numerous bog mosses. | Valley bogs are rich in dragonflies, and nesting birds include snipe and curlew. |

(cont.)

Moorland Habitats of Dartmoor



Key

- Boundary of Dartmoor Natural Area
- Road
- Blanket Bog
- Grass Moor
- Heathland

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Dartmoor Major Habitats (cont.)

| Habitat | Environmental Conditions | The Plant Community | Animals |
|---|--|---|---|
| Woodland | | | |
| Upland oak woodlands | Sheltered steep and stony valleys especially on the east side of the moor above 250m. | Dominated by oak with occasional birch, hazel, holly and rowan. A wide variety of flowers on richer soils. Abundant ferns, mosses and lichens grow on the rocks and tree branches. | An important area for insect eating birds such as the pied flycatcher, wood warbler and redstart. Woodland mammals include woodmice, dormice, grey squirrels and badgers. Important insects include red wood ants and blue ground beetle. |
| Plantation woodlands | Large plantations planted on former moorland areas often around reservoirs and sometimes replacing ancient woodlands. | Mainly of exotic conifer, Sitka spruce or Norway spruce and beech. The trees allow little light through the canopy for other plants. | The trees provide a habitat for specific birds not found commonly on the moor such as the crossbill and nightjar. Other birds include goldcrest, coal tit and siskin. |
| Enclosed Farmland Includes permanent pasture and examples of:- | | | |
| Rhôs pasture | Wet valley bottoms and shallow slopes with impeded drainage. | A wide variety of wetland plants such as devil's bit scabious, heath spotted orchid and ivy-leaved bellflower growing within grasslands dominated by either purple moor grass or rushes. Wet woodland and scrub is often associated with the pasture. | Important for insects such as the marsh fritillary butterfly and narrow-bordered bee hawkmoth. Characteristic birds include snipe, reed bunting and grasshopper warbler. Foxes and roe deer often use these areas as cover for lying up during the day. |
| Haymeadows and other enclosed dry species rich grasslands | Moderately well drained fields within enclosed farmland which have not been disturbed by modern agricultural practices such as reseedling and fertilising. | A rich variety of flowers including ox-eye daisy, red clover, yellow rattle and knapweed. This habitat has an abundance of rare greater butterfly orchids. | Important feeding ground for the greater horseshoe bats near Buckfastleigh as well as the large blue butterfly. |
| Improved grassland | Fields which have received regular artificial fertilisers and have usually been re-seeded with rye-grass and white clover in recent years. | Tend to be species poor with rye-grass and other grasses of cultivation dominating. | Few animals tend to be present, although individual species of insect may occasionally be abundant eg on docks and thistles. |
| Hedge banks and stone walls | These make up an essential part of the enclosed landscape. | Often very old, supporting many species of trees (hawthorn, blackthorn, hazel, oak, ash) plants and flowers (red campion, greater stitchwort, navelwort and many ferns) within a short distance. | Food and nesting places are provided for small birds e.g. song thrush, yellowhammers, whitethroats, and buzzards in the hedgerow trees. |
| Buildings, farms, barns and churches | Permanent structures whose surroundings provide plenty of food. | Lichens and mosses on stones. Cultivated plants may 'escape' into surrounding habitats. | Owls, feeding on rats and mice. Bats, house martins and swallows, feeding on insects. |
| Other Features | | | |
| Tors, rocky outcrops, clitter, slopes and quarries | Very exposed to extremes of temperature, humidity and wind and severe cold. Different conditions on warmer and colder sides of outcrop. | A typical Dartmoor tor has as many as 60 different species of lichen, some more commonly found in the Arctic. They also support a range of ferns. | Provides nesting sites for birds such as ravens and ring ouzels, peregrine falcons and wheatears. |
| Torrent rivers and streams | Turbulent and with rapid changes in volume, the water is well oxygenated, acidic, but relatively unpolluted. | Mosses, liverworts, algae and floating weeds grow on or between rocks where the current allows. The banks support ferns such as royal fern and lemon scented fern. | A variety of insect larvae form part of a food chain that includes fish (trout and salmon), dippers, herons, goosander and otter. |
| Reservoirs | Large areas of open water mostly in former moorland valleys. | Rushes, reeds and water plants on the fringes support species that can stand frequent flooding and drying. | Fish often introduced. Frogs, toads, newts and leeches breed. Cormorants and wintering wild ducks come inland to the reservoirs. |

The Selection of Key Species

The Dartmoor Natural Area contains many species that are highly valued, whether by wildlife conservation bodies or by the general public. Given the limitations on human and financial resources that exist, we are unlikely to be able to focus conservation action on them all, so we must identify those that are priorities for action. In addition we can rely on habitat conservation measures to conserve the great majority of the remaining species.

Selection criteria for key species

- Species that only occur in the UK and which have viable populations in the Dartmoor Natural Area.
- Species which are threatened on a global or European scale and which have significant populations on Dartmoor.
- Species which are rapidly declining throughout Great Britain and which have a national stronghold on Dartmoor.
- Species which are on the extreme edge of their normal range in the Dartmoor Natural Area and are threatened in Great Britain.
- Species which are highly characteristic of Dartmoor, being seldom found in such numbers elsewhere in England, and which are popular with the general public.

The following are examples of key species chosen using the selection criteria above.

Vigur's Eyebright

Euphrasia vigursii This flower species represents the first and most important category, i.e. these only occurring in the UK.

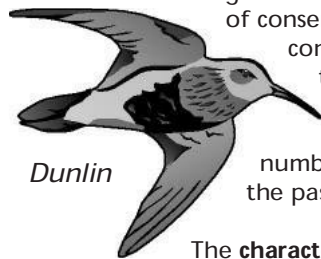


Vigur's Eyebright

In addition, it would qualify under either of the next two criteria. Recent monitoring has revealed that Dartmoor holds the majority of the world's population of this small annual plant which is found in well grazed areas of bristle bent and western gorse. Vigur's eyebright is included on the priority list of the UK Biodiversity Action Plan, where it is categorised as being of 'global conservation concern'.

Dunlin *Calidris alpina*

This small wading bird has a very northern breeding distribution, with a small population nesting on Dartmoor's blanket bogs. This represents one of the most southerly breeding stations for this species in the world. In the UK it



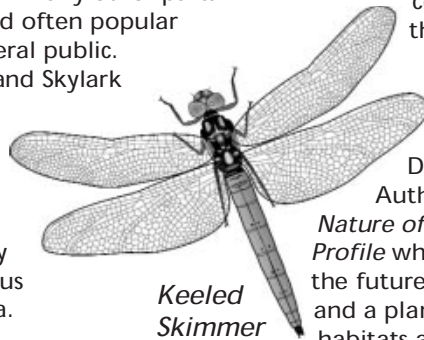
Dunlin

is regarded as being of conservation concern due to a major decline in breeding numbers over the past 25 years.

The characteristic category has been used to include buzzard, wild daffodil, heather, greater butterfly orchid, string of sausages lichen and keeled skimmer (a dragonfly). These species are noticeably more common on Dartmoor than many other parts of the UK, and often popular with the general public.

Dormouse and Skylark

could also be added to this list, but they also qualify under various other criteria.



Keel Skimmer

Habitat Management for Biodiversity

Dartmoor's current habitats are largely the product of human's effect on the natural vegetation that existed 10,000 years ago, and have evolved since then through a combination of agricultural practices, primarily burning, cutting and grazing. The vegetation would nationally be deciduous woodland and all of the current habitats (except perhaps the blanket bog) attempt to change back to woodland without management. It therefore follows that if we wish to maintain these habitats, support must be available to preserve the management techniques which are beneficial to Dartmoor's wildlife, if used appropriately.

For example, the heathland areas have been periodically burnt for thousands of years to produce better grazing for livestock. This is called 'swaling'. Current collaboration between commoners, Dartmoor National Park Authority, English Nature, the Department of Environment, the Food and Rural Affairs, Duchy of Cornwall, the Ministry of Defence and the Fire Brigade is seeking to ensure that swaling is carried out in a controlled fashion at the right time of year to maintain diverse wildlife habitats as well as producing better grazing.

Dartmoor National Park Authority has produced *The Nature of Dartmoor: A Biodiversity Profile* which sets out a vision for the future of Dartmoor's wildlife, and a plan of action, for both habitats and key species, in *Action for Wildlife: The Dartmoor Biodiversity Action Plan*.

Useful web links for further information:

- Other related factsheets:**
 - Dartmoor Commons
 - Land Use Issues
 - Farming

<http://www.dartmoor-npa.gov.uk/dnp/factfile/homepage.html>
- Other publications:**
 - *The Nature of Dartmoor: A Biodiversity Profile*
<http://www.dartmoor-npa.gov.uk/dnp/pubs/natureod.html>
 - *Action for Wildlife: The Dartmoor Biodiversity Action Plan*
<http://www.dartmoor-npa.gov.uk/dnp/pubs/bap.html>
- Other information:**
 - <http://www.actionforwildlife.org.uk>
 - <http://www.dartmoor-npa.gov.uk/dnp/biodiversity/homepage.html>
- Other publications (not available on-line):**
 - Dartmoor Pocket Guides: Natural History set available to purchase at DNPA Information Centres and through our on-line shop:
<http://www.dartmoor-npa.gov.uk/acatalog/>

For further information, and a list of other Fact Sheets available, contact the:

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