



## Dartmoor Habitat Action Plan for Moorland

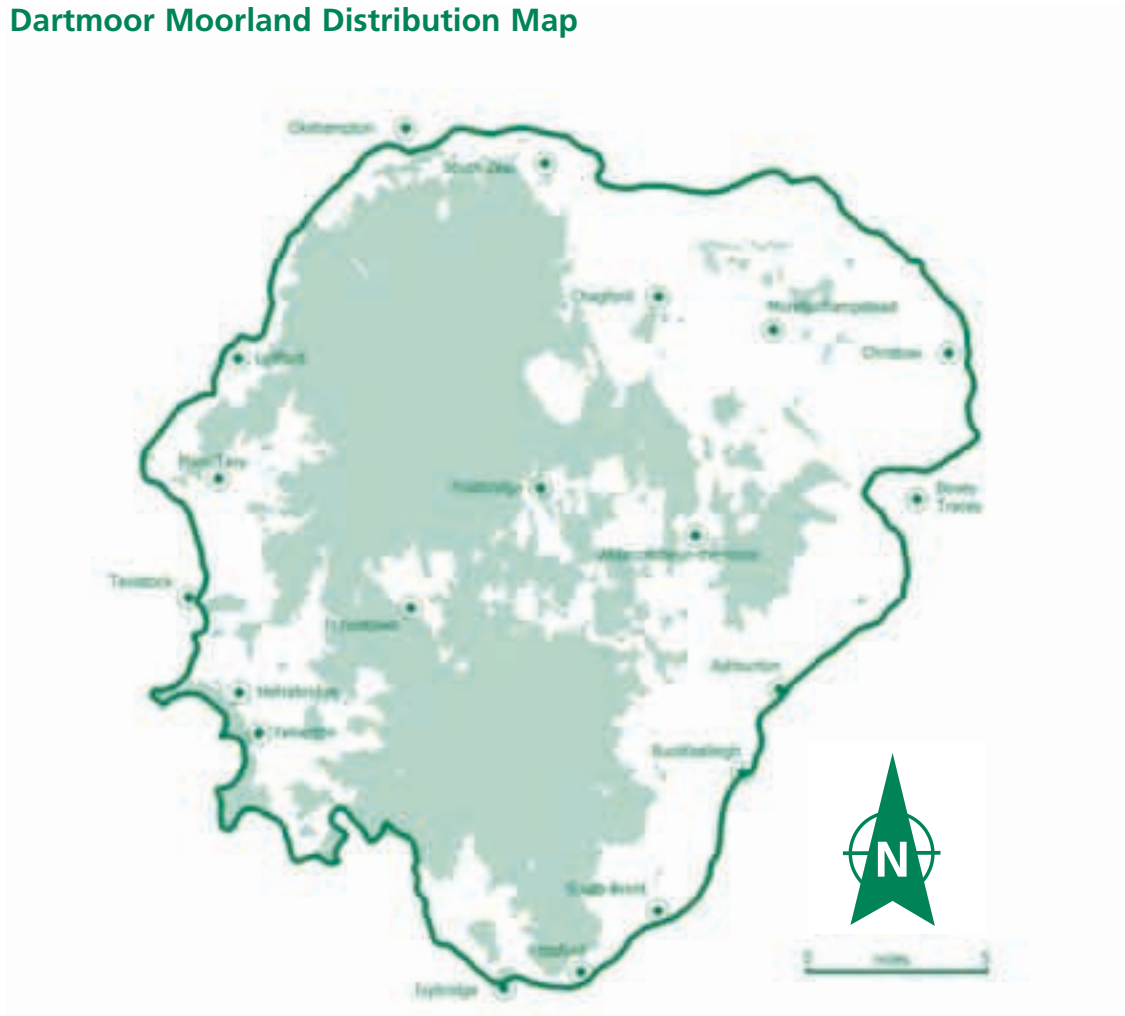
Dartmoor's moorland forms the heart of the National Park, covering almost 50 % of the total area. It is a unique and valuable wildlife resource of international ecological significance, recognised by the designation of much of the moorland as a candidate Special Area of Conservation (SAC) under the European Habitats Directive. It is also important agriculturally for extensive grazing of sheep, cattle and ponies, and much loved for its sense of wild, open landscape and varied recreational opportunities. Archaeologically it provides one of the best pre-historic landscapes in Europe with many Scheduled Monuments. It also possesses a remarkable legacy of former industrial activity (particularly relating to tin workings, peat cutting and granite extraction) and past farming activity particularly post-prehistoric cultivation and abandonment. Areas with outstanding and extensive archaeological interest have recently been mapped as Premier Archaeological Landscapes (PALs). Recent studies have shown the importance of peatlands as carbon stores and potentially carbon sinks. It is essential to integrate management for biodiversity with all these other interests.

A fuller description of status, characteristic wildlife, special species, site protection and current factors affecting the moorland habitats on Dartmoor can be found in *The Nature of Dartmoor: A Biodiversity Profile (2001)*.

This Moorland Action Plan covers all those moorland habitats found within both open and enclosed moorland on Dartmoor, namely blanket bog and raised bog, upland heathland, lowland heathland, grass moor and bracken, and valley mire. These habitats have been amalgamated into one Action Plan for Moorland because the major issues affecting them are shared, boundaries between them are not always clear-cut and a joint working document will prove much more practical to use. Key objectives for moorland habitats have been defined in *The Nature of Dartmoor*. There are two general objectives for moorland habitats - Objectives 1 and 2 in this Action Plan. The remaining objectives included here relate to specific moorland habitats and are arranged under those headings - blanket bog and raised bog, upland heathland, lowland heathland, grass moor and bracken, and valley mires.

Key Dartmoor species present in moorland habitats are **red grouse, skylark, curlew, bog orchid, Irish lady's tresses and heather** which are included within this Plan; **golden plover, dunlin, ring ouzel, buzzard, high brown fritillary, pearl-bordered fritillary, bog hoverfly and Vigur's eyebright**, all of which have their own separate Action Plans; and **keeled skimmer and southern damselfly**, which are both included in the Scarce Dragonflies Action Plan. Other species of conservation importance include Dartford warbler, wheatear, whinchat, stonechat, lapwing, snipe, small red and scarce blue-tailed

## Dartmoor Moorland Distribution Map



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damselflies (also included in the Scarce Dragonflies Species Action Plan), the ground beetle *Pterostichus kugelanni* (a Red Data Book species), hornet robber fly, greater sundew, cranberry, crowberry, stag's-horn clubmoss, fir clubmoss, chamomile, pale dog violet and the bog moss *Sphagnum imbricatum*.

For further management advice and information contact the DNPA or NE.



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*Bell heather*

## Moorland Key Conservation Objectives and Targets

### General Moorland Objectives

#### Objective 1

*Retain or restore, as appropriate, the full diversity and extent of moorland habitats, particularly blanket bog, upland and lowland heathland, tors and valley mires, and the transitions between them, through the introduction of ecologically sustainable management.*

##### Dartmoor targets

- A** Retain the current 46,000 ha of semi-natural habitats (within the 'moor and heath' area on DNPA Section 3 Conservation Map which includes enclosed moorland).
- B** Support research to identify ecologically sustainable management of natural resources which will lead to the restoration of degraded moorland habitats and retention of carbon stored in peatlands by 2011.
- C** Recreate 50 ha of moorland by 2005, on former sites which have been improved for agriculture or afforested.\*
- D** Recreate a further 50 ha of moorland by 2011, on former sites which have been afforested.

#### Objective 2

*Encourage public understanding and appreciation of the wildlife resource, where this does not conflict with its conservation.*

##### Dartmoor targets

- A** Provide interpretative material on moorland wildlife, natural resource protection and climate change and regularly update the public, land users and landowners on the progress of the Action Plan.
- B** Provide access and interpretation facilities or opportunities, where appropriate.

### Blanket Bog and Raised Bog Objectives

#### Objective 3

*Reverse the degradation of the blanket bog as far as climatic changes allow, through provision of favourable, stable conditions for its re-development.*

##### Dartmoor targets

- A** A minimum of 7,650 ha of blanket bog (90% of the total) to be in favourable management by 2005.\*
- B** A minimum of 8,075 ha of blanket bog (95% of the total) to be in favourable or unfavourable recovering condition by 2011.

#### Objective 4

*Ensure that the raised bog at Tor Royal remains hydrologically and ecologically intact.*

##### Dartmoor target

- A** Maintain and enhance the hydrological and ecological integrity of Tor Royal raised bog through favourable management of the bog and the surrounding catchment.

#### Objective 5

*Maintain and enhance populations of breeding golden plover and dunlin.*

**Dartmoor targets - see Action Plan for Golden Plover and Dunlin**

\* Target from original (2001) version of the BAP that has already been achieved and therefore not taken forward in the revised Action Plan.

**Objective 6**

*Prevent loss of upland heathland to grass moor.*

**Dartmoor targets**

- A** Maintain a minimum of 7,300 ha of moorland (1993 FRCA figures) containing >25% dwarf shrub\*\* cover.
  - B** Achieve favourable or unfavourable recovering condition for 95% of upland heathland within Dartmoor SSSIs by 2011.
- \*\*'Dwarf shrub' includes heather, bilberry and western gorse heathland.

**Objective 7**

*Restore substantial areas of grass moor, where the heather persists in a very suppressed state, to heathland.*

**Dartmoor targets**

- A** Identify restorable areas of fragmented dwarf shrub (10-25% cover) by 2001.\*
- B** Restore 50% (c. 6,750 ha) of these identified areas to dwarf shrub (>25% cover) by 2016.
- C** Manage bracken in grass moorland where this will provide genuine biodiversity improvement

\* Target from original (2001) version of the BAP that has already been achieved and therefore not taken forward in the revised Action Plan.

**Objective 8**

*Ensure that heather stands are structurally diverse, with a good balance between tall, dense patches and shorter ones.*

**Dartmoor targets**

- A** Ensure that burning on heathland complies with the Heather and Grass Burning Code and ESA Conservation Plans, with 31 March as the last date for burning.
- B** Within stands of actual or potential heathland, establish all growth phases of heather and at least 10% by area in the late mature growth phase by 2011.

**Objective 9**

*Maintain the current populations of red grouse and skylark.*

**Dartmoor targets**

- A** Maintain a population of at least 50 pairs of red grouse.
- B** Maintain skylarks as a common and widespread breeding bird on Dartmoor (i.e. present in at least 90% of moorland 1km squares).

**Objective 10**

*Encourage appropriate habitat conditions for re-colonisation by merlins.*

**Dartmoor target**

- A** Encourage moorland management to benefit merlin through agri-environment schemes by 2011.

## Lowland Heathland Objectives

### Objective 11

*Maintain and improve where possible, the condition of all areas of lowland heathland.*

#### Dartmoor targets

Lowland heathland is included in the general heathland targets set under Objectives 1, 7 and 8. In addition:

- A** Maintain at least the 2006 population of Dartford warblers (48 territories).

## Grass Moorland & Bracken Objectives

### Objective 12

*Ensure that viable and healthy populations of the high brown fritillary are retained.*

**Dartmoor targets - see Action Plan for High Brown and Pearl-bordered Fritillary.**

### Objective 13

*Ensure that populations of other rare species are sustained in grass moorland and bracken.*

#### Dartmoor targets

See Action Plans for Mosses, Lichens, Ferns and Fungi, High Brown and Pearl-bordered Fritillaries, and Vigur's Eyebright.

### Objective 14

*Manage the remaining areas of grass moor, i.e. those not targeted for restoration to heathland or supporting rare species, for the benefit of characteristic wildlife such as wheatears.*

#### Dartmoor targets

- A** Maintain a population of at least 1,000 pairs of wheatears on Dartmoor.
- B** Maintain a population of at least 55 pairs of whinchats on the north moor.

\* Target from original (2001) version of the BAP that has already been achieved and therefore not taken forward in the revised Action Plan.

## Valley Mire Objectives

### Objective 15

*Maintain all valley mires in good condition, in terms of their hydrology, water quality and species composition.*

#### Dartmoor targets

- A** Establish the location of the most ecologically rich valley mire communities by 2001.\*
- B** Ensure these valley mires remain hydrologically intact and seek opportunities to improve water retention.
- C** Achieve favourable condition within valley mires (identified in the *Moorland Vision* map) by 2011.

### Objective 16

*Ensure that the bog orchid and Irish lady's tresses survive on Dartmoor, and that the keeled skimmer remains a common species.*

#### Dartmoor targets

- See Action Plan for Scarce Dragonflies.
- A** Monitor distribution of bog orchid and Irish lady's tresses, and seek beneficial management for these species if they are relocated.

### Objective 17

*Attempt to reverse the decline in breeding wader populations, through favourable land management practices.*

#### Dartmoor targets

- A** Establish the status of curlew, lapwing and snipe by 2001.\*
- B** Achieve management appropriate to the specific requirements of curlew, lapwing and snipe so that breeding populations of the first two species increase by 30% and snipe numbers are maintained by 2011.

\* Target from original (2001) version of the BAP that has already been achieved and therefore not taken forward in the revised Action Plan.

## Actions for Moorland on Dartmoor

Monitoring responsibility: Natural England / Dartmoor National Park Authority

Action	Meets Objective/ Target	Deliverer		Complete by					Date achieved
		Lead	Partners	2007	2008	2011	2016	On-going	
<b>Policy and Legislation</b>									
Seek to ensure that prescriptions and financial incentives continue to encourage entry into agri-environment schemes and support the best management regimes for wildlife	1, 3, 6, 7, 8, 9, 10, 11, 14, 15, 17B	NE	DNPA/ RSPB, DaCC					●	
Seek to ensure that environmental cross compliance conditions are met	1, 6, 7, 11	NE	DaCC/ NFU/ CLA					●	
Include protection policies for moorland in all statutory plans and LEAPs when reviewed	1, 3, 4, 11, 15	DNPA	EA					●	
<b>Site Safeguard</b>									
Safeguard moorland against direct threats through planning controls and other consultation procedures	1, 3, 4, 11, 15	DNPA, EA, FC	DaCC					●	

(cont.)

Actions for Moorland on Dartmoor (cont.)

Action	Meets Objective/ Target	Deliverer		Complete by					Date achieved
		Lead	Partners	2007	2008	2011	2016	On-going	
<b>Habitat Management</b>									
Identify suitable sites for further moorland re-creation and initiate work	1	NE, FC	DNPA			●			
Re-create moorland on 50 ha of former sites which have been improved for agriculture or afforested	1D	NE, FC	DNPA			●			
Establish pilot projects to explore the potential for rewetting of degraded blanket bog areas and expand to a larger scale if appropriate	3B	DNPA, NE, DoC, EA	MoD, RSPB, DaCC		●				
Explore the potential for rewetting at Tor Royal mire	4A	NE			●				
Restore c. 6,750 ha of fragmented dwarf shrub to >25% dwarf shrub cover by 2016 using agri-environment schemes, other management agreements and cross-compliance	7B	NE	DNPA				●		
Manage bracken in grass moorland where this will provide genuine biodiversity improvement	7C	NE	DNPA					●	
Map areas of dense dwarf shrub cover to remain unburnt (c.650 ha, widely distributed) and incorporate in fire management plans and ESA management plans	8B	NE	DNPA		●				
Seek opportunities to improve water retention in valley mires	15B	DNPA, NE, DoC, EA	DaCC					●	
Continue to implement moorland management plans for all moorland entered into the Dartmoor agri-environment schemes	1, 3, 6, 7, 8, 11, 15	NE Agreement holders	CAs, DNPA					●	
Maintain existing DNPA management agreements on enclosed moorland where appropriate	1, 4, 8, 13, 14, 15, 17B	DNPA	Owners					●	

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## Actions for Moorland on Dartmoor (cont.)

Action	Meets Objective/ Target	Deliverer		Complete by					Date achieved
		Lead	Partners	2007	2008	2011	2016	On-going	
<b>Habitat Management</b>									
Maintain fire management plans for all Quarters of the Dartmoor commons and update annually	1, 3, 6, 7, 8, 11, 15, 17B	DaCC	CAs, DCOA, DNPA, NE, MoD, DSFRS						●
Provide practical support to commoners for swaling where resources allow	1, 6, 8, 17B	DNPA, Fire Services	DBP						●
Compare military use of MoDs licensed training areas with Dartmoor BAP objectives and take action to address any anomalies	1, 3, 6, 7, 8, 9, 14, 15, 17	MoD		●					
<b>Key Species Management and Protection</b>									
<b>(For golden plover &amp; dunlin, ring ouzel, high brown and pearl-bordered fritillaries, keeled skimmer, southern damselfly and bog hoverfly, see separate Species Action Plans)</b>									
Continue the work of the Operation Wader Project to achieve 30% increase in curlew and lapwing populations	17B	RSPB, DNPA, MoD, NE, DoC				●			
Collate records of merlin sightings annually (including possible breeding records)	10A	RSPB	DNPA, DBWPS						●
<b>Advisory</b>									
Revise Dartmoor Commoners' Council regulations to bring them in line with Heather and Grass Burning Code and agri-environment schemes	8A	DaCC				●			

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Actions for Moorland on Dartmoor (cont.)

Action	Meets Objective/Target	Deliverer		Complete by					Date achieved
		Lead	Partners	2007	2008	2011	2016	On-going	
<b>Research &amp; Monitoring</b>									
Support research into carbon management of Dartmoor peatlands	1B	DoC, DNPA, NE, EA	SWW, DaCC						●
Continue to encourage research into the effects of grazing by Dartmoor ponies	1	DNPA, NE	NT, DaCC						●
Plot burns annually using GIS	1	NE, DNPA							●
Collate data from existing gauging stations and seek to establish new ones in order to monitor long term water table variability	1B	EA	SWW		●				
Monitor the extent and condition of blanket bog areas at five-year intervals	3	NE				●	●		
Assess favourable condition status of valley mires identified in the <i>Moorland Vision</i> map	15C	NE				●			
Re-survey sample dwarf-shrub communities	1,6,7,8,11	NE				●			
Survey all moorland for birds at ten-year intervals	5,9,10,14,17	RSPB, DNPA, MoD	NE, DBWPS			●			
Monitor whinchat, red grouse, skylark and wheatear numbers on the north moor at five year intervals	9A, 9B, 14A, 14B	RSPB, MoD	DNPA, DBWPS			●	●		
Monitor former sites for the presence of bog orchid and Irish lady's tresses, at five-year intervals	16A	DNPA, NE	BSBI			●	●		
Survey for curlew, snipe and lapwing	17A	RSPB, DNPA, DoC	NE, DBWPS			●			
Monitor all suitable areas for Dartford warblers during national surveys	11	RSPB/BTO	DNPA, DBWPS						●

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## Actions for Moorland on Dartmoor (cont.)

Action	Meets Objective/ Target	Deliverer		Complete by					Date achieved
		Lead	Partners	2007	2008	2011	2016	On-going	
<b>Communication and Publicity</b>									
Maintain Moorland Fire Liaison Group	1	DNPA, DaCC, NE	All						●
Maintain the Moorland Management Forum to share best management practice	1	DNPA, DaCC, NE	All						●
Continue to produce a <i>Dartmoor Biodiversity Newsletter</i> , aimed at sharing information with farmers, landowners and commoners, including articles on moorland management, progress on targets, etc.	2A	DNPA	NE						●
Seek to disseminate information on climate change and reduced grazing levels and their effect on vegetation cover and access issues	2A	DNPA	NE,NT						●
Provide guided walks for the public to illustrate moorland management and wildlife	2B	DNPA	NE,NT						●
Encourage feedback from farmers about ecological and resource protection information they require through the Moorland Vision / Moorland Management Forum	2B	DNPA, NE, DaCC							●

**Abbreviations used in this table:**

ANPA - Association of National Park Authorities, BDS - British Dragonfly Society, BSBI - Botanical Society of the British Isles, CAs - local Commoners' Associations, CLA - Country Landowners' Association, DBWPS - Devon Birdwatching and Preservation Society, DaCC - Dartmoor Commoners' Council, DCOA - Dartmoor Common Owners' Association, DoC - Duchy of Cornwall, DETR - Department of the Environment, Transport and the Regions, DNPA - Dartmoor National Park Authority, DSFRS – Devon and Somerset Fire and Rescue Service, EA - Environment Agency, NE – Natural England, FA - Forest Authority, MoD - Ministry of Defence, NFU - National Farmers' Union, NPMP – National Park Management Plan, RSPB - Royal Society for the Protection of Birds.