

LOWLAND HEATHLAND AND LOWLAND DRY ACID GRASSLAND IN OXFORDSHIRE

UK Biodiversity Group - Priority

Species associated with heathland

Nightjar

Linnet

Dingy mocha moth

Grey scalloped bar moth,

Other Associated Species

Tree pipit

Stonechat

Emperor moth

White-line snout moth

Small red damselfly

Adder

Blue fescue

Heath cudweed

Heather

Bell heather

Sphagnum mosses

Associated Habitats

Woodlands

Wetlands

Grasslands

1. INTRODUCTION

Lowland heathland is characterised by the presence of species such as heather, bell heather, and gorse, and it is associated with acidic, nutrient-poor soils. Acid grassland also occurs on nutrient-poor soils and is characterised by species such as common bent, sheep's sorrel, heath bedstraw and tormentil. Parched acid grassland, which becomes excessively dry in summer, may support a number of uncommon, ephemeral species, such as small cudweed.

Heathland and acid grassland are formed when forests on nutrient poor soils are cleared for agriculture. It requires management to check scrub invasion and the subsequent development of woodland, and to keep the nutrient content of the soil low. In the past this management took the form of grazing, burning and gathering of heather and gorse, for such uses as fuel and thatch. Heathland is not only an important habitat for wildlife but also forms a valuable part of the cultural heritage of the U.K.

In Oxfordshire, heathland and acid grassland were never very common and are now very rare habitats largely restricted to the sandy soils on the Corallian sandstone (where it forms a grassy 'Breckland' type heath) and the clay-with-flints and pebbly soils of the Chilterns plateau (where heather forms a mosaic with acid grassland).

2. CURRENT STATUS

2.1 Europe

The total heathland resource in Europe is around 290,000ha. Approximately 20% of this is found within the U.K.

2.2 The United Kingdom

The U.K. has around 58,000ha of lowland heath remaining, with counties such as Hampshire, Surrey, and Dorset being particularly important. Over 80% of the lowland heath in England has been lost since 1800. Lowland dry acid grassland is unlikely to exceed 30,000 ha and is becoming increasingly rare in Britain.



Heathers – typical heathland vegetation

2.3 Oxfordshire

Oxfordshire's contribution to the UK's heathland and acid grassland resource is comparatively small. It is estimated that there is currently about 46ha of acid grassland and heath left within the county. However, ericaceous species, such as heather, are now extremely scarce and much of the resource is now dominated by grass heath or acid grassland. This type of habitat, particularly around Frilford, can be quite species-rich and similar to the Brecklands of Norfolk and Suffolk.

The most important heathland and acid grassland sites in Oxfordshire are listed in Appendix 1.

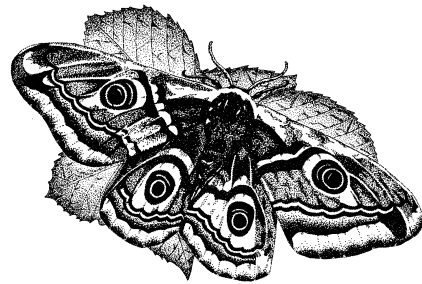
2.4 Species

Within the UK Biodiversity Action Plan there are a number of priority species that are relevant to Oxfordshire's heathlands:

Birds	Nightjar
	Linnet
Insects	Dingy mocha moth
	Grey scalloped bar moth

Breeding **Nightjars** have not been recorded in Oxfordshire since the 1980s. However nightjars are still breeding in Berkshire, and there is a chance they might return to Oxfordshire with appropriate heathland management.

The **Linnet** is widespread in Oxfordshire, but rapidly declining. Its typical habitat includes heathland, open country gardens and parks, but heathland sites in Oxfordshire do not at present support linnets.



Emperor moth *Pavonia pavnia*

The **Dingy mocha moth** prefers damp heathland and is now extinct in Oxfordshire.

The **Grey scalloped bar moth** is also feared extinct, but more survey data are required.

2.4.2 Other Associated Species

The following are some of the species that would also benefit from action to safeguard and improve the heathland and acid grassland resource in Oxfordshire:

Birds:	Tree pipit
	Stonechat
Insects:	Emperor moth
	White-line snout moth
	Small red damselfly
Reptiles:	Adder
Plants:	Blue fescue
	Heath cudweed
	Heather
	Bell heather
	Cross-leaved heath
	Sphagnum

The **Tree pipit** is nearly extinct in Oxfordshire. It likes open scrubby countryside, and reconstructed heathland is one of the habitats that may favour its return.

Stonechats are found both in open heaths and grassland, and although rare, are increasing as wintering birds in the county.

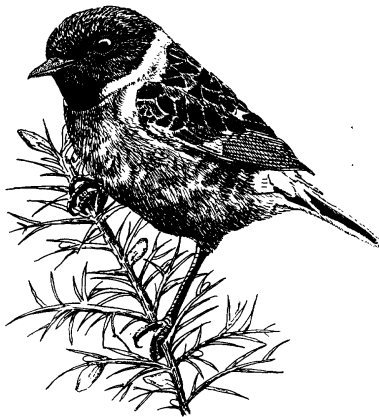
Adders are common in the Chiltern Heaths and Commons, but are declining.

The **Emperor moth** is scarce in Oxfordshire (recorded in Bernwood and Otmoor, rather than the heathland sites listed), but may breed in good quality heathland, if available.

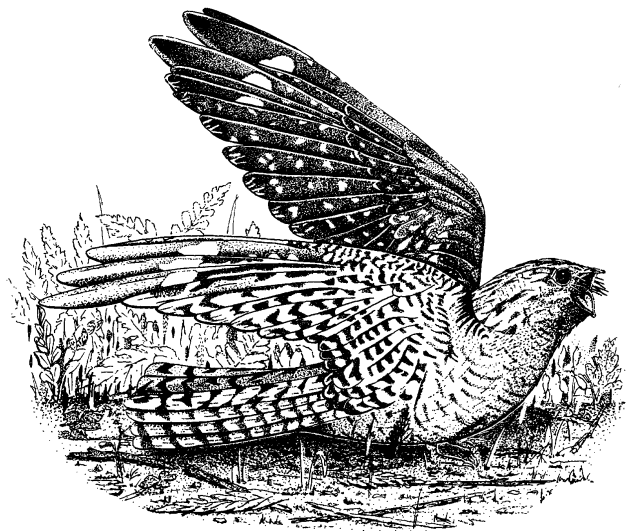
The **White-line snout moth** was formerly localised but widespread particularly in the SE of the county, but post-1980 records show a decline. In Oxfordshire its habitat includes both heathland and woodland.

The **Small red damselfly** is found in only one site in Oxfordshire – Cothill Fen.

Other characteristic species of heathland and acid grassland include plants such as heath bedstraw, sheep`s-fescue, common bent, common storks-bill, dodder and numerous bryophytes and lichens. Birds such as woodlark, lapwing and Dartford warbler might eventually return with sympathetic management. Dry open heath and acid grassland also provide valuable areas of bare ground that, on sandy soils in particular, can support a number of ground dwelling and burrowing invertebrates including insects, solitary bees and wasps.



Stonechat *Saxicola torquata*



Nightjar *Caprimulgus europaeus*

9. Appendix 1: Heathland sites in Oxfordshire

Site name	Grid Ref	Alert Map Code	Total Area (Ha)	Area Acid Grassland/ Heath (Ha)	Primary Land Use	Status	Natural Area	Comments
CHERWELL								
Wardington D.R.	SP 51340	54CO1	5.4	5.0/0.1	Disused railway	CWS	Cotswolds	Some heather on embankments
Tadmarton G.C.	SP 395355	-	60.0	5.0/0.1	Golf Course	-	Cotswolds	Acid grassland/ patches of heather
Cherwell Totals				10.0/0.2				
SOUTH OXFORDSHIRE								
Sidlings Copse	SP 555095	50PO1	22	3.0/0.0	Nature Reserve	SSSI	Midvale Ridge	Bracken dominated
Shirburn Hil	SU 715955	79CO1	65	3.0/0.3	Grazing land	SSSI	Chilterns	Good stands of heather
Pyrton Hill	SU 712942	79BO1	111	1.0/0.0	Grazing land	SSSI	Chilterns	Acid grassland/ no heather
Shotover Hill	SP 563061	SP563061	40	5.0/1.5	Country Park	EIL/ SSSI	Midvale Ridge	Good stands of heather
Peppard Common	SU 706817	78AO1	21	0.5/0.5	Common	CWS	Chilterns	Good stands of heather
Kingwood Common	SU 696825	68LO1	60	2.8/0.1	Common	CWS	Chilterns	Heathland restoration being tackled
Nettlebed Common	SU 702875	78CO2/1-4 78DO3/1/2	53	3.4/1.1	Common	CWS	Chilterns	Mostly woodland/ patches of heath
	SU							

Nuffield Common	675875	68TO5	2	0.1/0.0	Golf Course	CWS	Chilterns	Patches of heather
Russell's Water	SU 675875	-	6	0.5/0.1	Common	-	Chilterns	Patches of heather
Burnt Platt	SU 692833	-	11	0.0/1.0	Plantation	-	Chilterns	Heather significant/ good potential
Nipper's Grove/ Shaw Parklane	SU 673809	-	-	0.0/0.1	Woodland	-	Chilterns	Calluna on boundary bank
South Oxfordshire Totals				19.3/4.7				

WEST OXFORDSHIRE								
Foxholes	SP 256208	21UO1	64	0.1/0.0	Woodland	SSSI	Cotswolds	Small fragment of acid grassland
Tackley Heath	SP 469211	42Q01	2.4	0.1/0.0	Common	CWS	Cotswolds	Dominated by birch and bracken
North Leigh Common	SP 403138	41BO5	8.0	0.1/0.0	Wood/ scrub	CWS	Cotswolds	Birch, bracken, and acid grassland
Ramsden Heath	SP 343158	31MO5	7.7	0.1/0.0	Grazing	CWS	Cotswolds	Acid grassland
West Oxfordshire Totals				0.4/0.0				
VALE OF WHITE HORSE								
Frilford Heath	SU 442985	49PO3	110	10/1.0	Golf Course	SSSI	Midvale Ridge	One of best remaining areas
Hurst Hill	SP 477043	40SO1	20.6	0.4/0.0	Wood/ scrub	SSSI	Midvale Ridge	Small fragments of lichen heath
Vale Total				10.4/1.0				
GRAND TOTAL				40.1/5.9				