

## **Species Action Plan: Bats**

### **Exmoor Biodiversity Action Plan**

#### **1. Introduction**

Bats are good indicators of the general health of the countryside given that they utilise a wide range of habitats. Many species have declined in abundance and suffered a contraction in their range throughout Europe over the past century due to fragmentation and loss of habitat, and loss of roosts.

Exmoor still supports a good deal of suitable habitat and hence it is likely that it has good bat populations. 15 of the 16 UK species have been recorded in the National Park. However, current knowledge of the status across Exmoor is limited and one of the aims of this action plan is to remedy the situation. This action plan has been drawn up for all bat species within the National Park, as many of the issues which affect them and the necessary actions to protect and enhance their populations are common to all.

The barbastelle bat is a rare species in Britain with currently only a few known maternity roosts. In 1999/2000 a major maternity roost was discovered in Homer Wood with an estimated population of 50 - 150. The barbastelle is characterised by blackish fur on the back with pale tips giving a frosted appearance and grey-brown underfur. The ears are black, short and broad and joined across the forehead with a very distinctive 'pug-like' appearance. Barbastelles have a preference for foraging in scrub and along wooded river valleys.

The Bechstein's bat is another very rare woodland breeding species in the UK having been recorded in only a few locations. Bechstein's bats were also recorded in 1999/2000 in Homer Wood. Bechstein's bats have light brown fur on the back and greyish-buff fur underneath. The face is bare and pink, similar in appearance to that of the Natterer's bat but the ears are much longer.

There are good numbers of lesser horseshoe colonies on Exmoor given the suitability of habitat – lesser horseshoes prefer open deciduous woodland, scrub, hedgerows, parkland, wetland and permanent pasture – and availability of roost which are usually in large rural houses and stable blocks. During the winter, lesser horseshoes will use caves, mines, tunnels and cellars as hibernation sites, but winter hibernation sites on Exmoor are currently largely unknown.

There is currently one known greater horseshoe roost just outside the National Park in the Brendon Hills and the bats utilise feeding areas within the National Park given that they are known to travel up to 20km in one night. Over the last century this bat has undergone a significant decline with the national population currently estimated to be between 4,000 and 6,000 individuals. In the South-West, greater horseshoes tend to breed in disused farm buildings and caves and overwinter underground, mostly in caves, mines or cellars, but increasingly in buildings. The feeding requirements of the greater horseshoe are permanent pasture (unimproved and semi-improved, preferably grazed by cattle), tall hedgerows with mature trees and mixed deciduous woodland, wetland and scrub.

Serotines are probably relatively frequent on Exmoor and are certainly known to occur in the Heddon Valley, Porlock Vale and Dunster area. Their preferred feeding habitat is pasture, parkland, open woodland edge and tall hedgerows. They roost in summer in buildings with high gables and cavity walls, and in winter probably also in buildings.

Although the pipistrelle bats (*P. pipistrellus* and *P. pygmaeus*) remain the most abundant and widespread bat species in the UK, jointly they are thought to have declined by 70% between 1978 and 1993. The current status of both species on Exmoor is unknown.

Figure 1 shows the current status and distribution of bats on Exmoor.

**Figure 1: Summary of the habitat requirements and known population status of bats within Exmoor National Park**

<b>Species of bat</b>	<b>Habitat requirements</b>	<b>Status in England</b>	<b>Status on Exmoor</b>
<b>Greater horseshoe</b>	Old buildings with permanent pasture, hedges and woodland	Declining	Scarce with one large colony just outside National Park, but possibly feeding within. Hibernating in tunnels.
<b>Lesser horseshoe</b>	Buildings or mines/caves near sheltered valleys with deciduous woods	Stable to increasing	Fairly scarce. Some roosts in large country houses and farm buildings.
<b>Whiskered</b>	Trees or buildings in wooded or open country, often near open water	Declining?	Rare?
<b>Brandt's</b>	Woodland, hedges, often near water	Declining?	Recorded in Horner Woods; otherwise status unknown
<b>Natterer's</b>	Mainly deciduous, open woodland and parkland, well developed hedgerows and well vegetated watersides	Stable	Scarce; recorded in Horner Woods
<b>Bechstein's</b>	Mixed and old deciduous woodland, as well as parkland	Stable?	Recorded in Horner Woods
<b>Daubenton's</b>	Open smooth water with some overhanging trees	Stable?	Scarce? Recorded in Horner Woods
<b>Serotine</b>	Woodland edge, tall hedgerows, parkland, pasture	Stable to declining	Scarce. Recorded in Heddon Valley.
<b>Noctule</b>	Woodland and pasture	Declining	Fairly common. Large roost in Homer Wood
<b>Leisler's</b>	Woodland and pasture, feeds around street lamps	Stable	Unknown
<b>Common Pipistrelle</b>	Wide range of habitats	Declining?	Widely distributed, common
<b>Soprano Pipistrelle</b>		Declining?	Unknown
<b>Nathusius' Pipistrelle</b>	Woodland rides and paths, parkland, large waterbodies	?	Recorded in Horner, otherwise unknown

<b>Barbastelle</b>	Dense woodland with lots of dead standing wood	Stable	Key UK population in Horner Wood
<b>Brown long-eared</b>	Woodland, parkland and gardens	Declining	Common
<b>Grey long-eared</b>	Little known but maybe similar to brown long-eared	Stable?	Unknown

### *Links to other BAPs*

Upland oakwood  
Neutral grassland  
Parklands, wood pasture and veteran trees  
Bracken and scrub  
Farmland  
Rivers, streams and associated habitats

## **2. Current status**

All bat species are listed on Appendix II of the Bonn Convention and on Appendix II of the Bern Convention (except for the pipistrelle which is listed on Appendix III). All bat species in Britain are given strict protection under Annex IVa of the European Habitats Directive.

In addition, lesser and greater horseshoe bats, Bechstein's bat and the Barbastelle are listed on Annex II of the same Directive. Special Areas of Conservation (SAC) for these species have been proposed to the European Commission including the Exmoor and Quantock Oakwoods cSAC proposed partly due to the presence of Barbastelle and Bechstein's bats. Other SSSIs contain winter/summer roosts used by lesser horseshoes and other bats.

At a national level, all bats and their roosts are protected under Schedule 2 of the Conservation (Natural Habitats, etc) Regulations 2000 (amended) and Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) both of which prohibit killing, taking and disturbance of bats or their roost.

### *Map showing distribution*

Use Somerset and Devon RC data, bat group  
Info from Nigel Hester, Steve Mulberry  
Other info? - dave appleton records  
Old info from files

UK Biodiversity Action Plans have been prepared for Barbastelle, Bechsteins, lesser and greater horseshoe and the 2 pipistrelles and all, except for the pipistrelles, are the subject of an EN Species Recovery Programme. The *Devon Biodiversity Action Plan* includes an action plan for the greater horseshoe bat and *Action for Biodiversity in the South-West* includes one for the pipistrelle bat. This action plan for Exmoor incorporates relevant actions from these plans and sets local objectives, targets and actions.

### *Key sites*

Horner Wood

Heddon Valley  
Barle Valley Woodlands  
Watersmeet  
Dunster Park

### **3. Current factors affecting bats on Exmoor**

- 3.1 Lack of generic surveys and thus robust data affects conservation of most bat species on Exmoor.
- 3.2 Disturbance and loss of roosts in buildings, trees, mines and cave sites caused by human activities, including the re-development of buildings, use of toxic chemicals for timber treatment, blocking and infilling of cave/mine entrances and unsympathetic tree management.
- 3.3 Loss and unsympathetic management of important, well-developed hedgerows and riparian trees that act as corridors for the bats to travel from roost sites to favoured feeding habitats.
- 3.4 Reduction in insect prey abundance through intensification of agricultural systems, loss of wetlands and further loss, damage and fragmentation of ancient deciduous woodland, old hedgerows and tree lines, loss of low intensity permanent pasture in favour of rotational leys and arable production.
- 3.5 Use of avermectin-based chemicals which can have a detrimental effect on the development of specific dung fauna, which forms a food source for some species of bat.

### **4. Current Action**

- 4.1 The National Trust carried out surveys of the Holnicote Estate, which was followed by detailed research in Horner Wood, part funded by English Nature. This work recorded 14 of the 16 UK bat species including a nationally important maternity roost of Barbastelles, Bechsteins and a large noctule tree roost. The survey also looked specifically at the foraging behaviour and roost preferences of the barbastelle.
- 4.2 The Exmoor ESA Scheme and the ENPA Farm Conservation Scheme, although not designed specifically to take account of the requirements of a single species, can have significant benefits for bats by encouraging the appropriate management of pasture, woodland and hedgerows, thereby increasing feeding opportunities for bats.
- 4.3 Members of the Devon and Somerset Bat Groups assist with data collection and the welfare of injured or grounded bats on Exmoor, although currently there are not many active members within the National Park. They also provide practical advice when needed, and are active in the promotion of bats through various media outlets. EN Voluntary Bat Wardens assist roost owners with all bat related issues pertaining to UK and European legislation and EN employs a Species Officer to advise on bat cases.
- 4.4 The National Trust is preparing whole farm plans for their tenants which incorporate positive management measures for bats and are assisting with the provision of alternatives of avermectins.
- 4.5 The National Trust is carrying out a major survey of all its properties as part of its thatching project which will include surveys for bats.

- 4.6 The National Trust and ENPA carries out a number of bat walks and talks aimed at raising understanding and awareness of bats to the general public.
- 4.7 The ENPA works closely with EN to ensure that proposed development does not adversely affect bats and their roosts and the new local plan contains planning policies aimed at their protection.
- 4.8 The Devon and Somerset Hedge Groups promote the sympathetic management of hedgerows and verges.

## **5. Action Plan Objectives and Targets**

- 5.1 **To increase our knowledge of the distribution and status of bats on Exmoor. TARGET: by 2010**
- 5.2 **To maintain, and enhance where appropriate, current populations of bats on Exmoor. TARGET: ongoing**
- 5.3 **To improve management of foraging areas and commuting routes of barbastelle, bechsteins, greater and lesser horseshoe bats. TARGET: by 2010**  
**INCLUDE: positive management for 50ha of foraging area**  
**20km of hedgerows**
- 5.4 **To increase public awareness of Exmoor National Park as a stronghold for bat species. TARGET: ongoing**

## **6. BAT ACTION PLAN**

### **Policy and legislation**

- 6.1 Include protection policies for bats in all statutory plans and LEAPs when they are reviewed (ongoing). Partners: ENPA, EA.
- 6.2 Ensure that ENPA implements the Planning Policy Guidance in PPG9 in respect to all bats, their roosts and any linear features used for commuting or feeding (ongoing). Partners: ENPA.
- 6.3 Ensure that all planning applications likely to affect bat (primarily re-roofing, loft and barn conversions) have an appropriate bat survey carried out prior to the granting of planning permission (ongoing). Partners: EN, ENPA, DBG, SBG.
- 6.4 Seek to ensure that the ESA contains appropriate management prescriptions to enhance suitable bat habitats, e.g. unimproved/semi-improved grassland, hedges and woodland (by 2002) Partners: DEFRA, EN, ENPA.

### **Site safeguard and management**

- 6.5 Promote and carry out, where appropriate, site safeguard works and improvements to roosts, including those that once held large populations (ongoing). Partners: EN, ENPA, NT, DBG, SBG.
- 6.6 Ensure that all known roosts are identified within GIS database used within ENPA (by 2002). Partners: ENPA, EN, NT, DBG, SBG, DBRC, SERC.

- 6.7 Ensure that all breeding or hibernation roosts outside of current SSSIs are designated as County Wildlife Sites (by 2002). Partners: ENPA, DBRC, SERC.
- 6.8 Develop appropriate grant funding for habitat enhancement close to major roosts e.g. hedge planting or scrub clearance, as appropriate, and for work on roosts, e.g. grids and work on roost trees creating/improving access to potential roost sites. (ongoing) Partners: ENPA, EN, DEFRA, DBG, SBG.
- 6.9 Promote the maintenance of continuous tall wide hedges containing some overhanging trees and a network of riparian trees, especially those close to major roosts which act as corridors for bats commuting between feeding sites (ongoing). Partners: DHG, SHG, ENPA, DEFRA, EA.
- 6.10 Promote the appropriate management of woodlands, particularly mixed deciduous woodland within close proximity of major breeding roosts and encourage the provision of a Woodland Improvement Grant for bats (WIG) (ongoing). Partners: FA, FE, EN, ENPA, NT.
- 6.11 Ensure that wetland and riparian habitats are maintained and, where appropriate, improved and re-created, particularly within close proximity of major roosts, especially in terms of maintaining water tables, reducing livestock pollution and retaining riparian trees and ensuring presence and management of grassland (ongoing). Partners: EA, DEFRA, SWLT, Site owners, SWT, DWT, FWAG, NT, WCRT.

### **Advisory**

- 6.12 Offer advisory services to land managers/owners on the maintenance and sympathetic management of sites used by bats (ongoing). Partners: EN, SBG, DBG, ENPA, FWAG, SWT, DWT, Site owners.
- 6.13 Offer advisory services to land managers on agricultural practices that are beneficial for bats including advice on alternatives to the use of avermectins and promote available grant schemes (ongoing). Partners: DEFRA, ENPA, EN, FWAG, SWT, DWT, Site owners.
- 6.14 Promote ideal hedge management practices to provide feeding areas and commuting routes (ongoing). Partners: DHG, SHG, DEFRA, ENPA, FWAG, SWT, DWT.
- 6.15 Promote advisory services to land managers/owners which promote practices of woodland management that are helpful or harmless to bats (ongoing). Partners: FA, FE, FWAG, DWT, SWT, Silvanus, TGA, SWA.
- 6.16 Raise the profile of the importance of hedgerow and veteran trees for bats (ongoing). Partners: EN, ENPA, DHG, SHG, FWAG, DWT, SWT.
- 6.17 Promote advisory services to land managers/owners of parkland estates which promote positive management for bats re roosts and feeding areas and promote sites as examples of good practice (by 2005). Partners: ENPA, landowners, CLA, NFU, EN.
- 6.18 Organise a training day aimed at ENPA staff especially within planning section (by 2002). Partners: ENPA, EN.
- 6.19 Organise a bat training day for DEFRA staff covering Exmoor ESA and Countryside Stewardship Scheme (by 2003). Partners: DEFRA, EN, ENPA.

## **Further research and survey**

- 6.20 Collate existing records for all bat species in the National Park, identify gaps in knowledge and develop a general survey strategy for bats (by 2002). Partners: ENPA, EN, DBG, SBG, DBRC, SERC, ENHS.
- 6.21 Exchange information on the distribution of bat species on Exmoor (ongoing). Partners: ENPA, EN, DBG, SBG, DBRC, SERC, ENHS.
- 6.22 Implement the survey strategy including surveys of potential hibernaculum, e.g. quarries, iron workings, ice houses, etc. (by 2010). Partners: EN, ENPA, DBG, SBG.
- 6.23 Carry out further detailed research on Barbastelle, concentrating on diet, wintering requirements and detailed habitat preferences and use results to aid management recommendations for woodland and foraging areas (by 2003). Partners: EN, NT, ENPA, DEFRA, FC.
- 6.24 Carry out research into greater horseshoe foraging behaviour on areas within the National Park and use results to influence prescriptions of agri-environment schemes (by 2003). Partners: EN, ENPA, DEFRA.
- 6.25 Carry out bat surveys in ENPA-owned woodland (by 2005). Partners: ENPA, EN.
- 6.26 Monitor known roosts and ensure that the information is passed to EN and ENPA and any national database (ongoing). Partners: DBG, SBG, DBRC, SERC, ENPA, EN, BCT.

## **Communications and Publicity**

- 6.27 Raise awareness and understanding of bat conservation amongst the general public by producing articles in newsletters and journals (ongoing). Partners: ENPA, EN, DBG, SBG, DWT, SWT, BCT.
- 6.28 Produce a leaflet on conservation of wildlife in buildings, including bats (by 2002). Partners: ENPA, EN, DBG, SBG.
- 6.29 Promote the existing BCT leaflet on 'Bats and Trees' to woodland owners, foresters, contractors (by 2002). Partners: ENPA, BCT, DBG, SBG, FA, FE, TGA, SWA.
- 6.30 Promote bat friendly building and woodland management techniques to landowners, architects, planners, householders, builders, thatchers, timber treatment companies and foresters through personal contact and publicity (ongoing). Partners: EN, ENPA, NT, DBG, SBG, BCT.

## **Key to abbreviations**

BCT	Bat Conservation Trust
CLA	Country Landowners Association
DBG	Devon Bat Group
DBRC	Devon Biodiversity Records Centre
DEFRA	Department of the Environment, Food and Rural Affairs
DHG	Devon Hedge Group
DWT	Devon Wildlife Trust
EA	Environment Agency
EN	English Nature

ENHS	Exmoor Natural History Society
ENPA	Exmoor National Park Authority
FA	Forestry Authority
FE	Forestry Enterprise
FWAG	Farming and Wildlife Advisory Group
NFU	National Farmers Union
NT	National Trust
SBG	Somerset Bat Group
SERC	Somerset Environmental Records Centre
SHG	Somerset Hedge Group
SWA	Small Woods Association
SWLT	South West Lakes Trust
SWT	Somerset Wildlife Trust
TGA	Timber Growers Association
WCRT	West Country Rivers Trust