

# Bats



**National lead organisation(s):**  
Bat Conservation Trust

**County lead organisation(s):**  
Bedfordshire Bat Group

Bats are the only true flying mammals, highly specialised with complex ecological requirements. In many parts of the world including Great Britain, bat populations have declined and many species are not as common as they were.

There are 16 species of bat found in the UK, half of which are rare, two are endangered and one species is extinct. The lack of information about the ecology of some species means it is difficult to determine their distribution, status and population size. It is clear that populations have suffered declines, the causes are poorly understood but thought to include changes in

agriculture, the use of insecticides, habitat loss and change, disturbance and loss of breeding and resting places.

All bats in the UK eat insects, occupy a variety of habitat types and in general require warm summer breeding roosts and cool secure hibernation sites. Hunting between dusk and dawn bats use echolocation, high pitched squeaks emitted by the bat which bounce back to produce a sound picture of surroundings and location of its prey. The noises bats make are usually too high pitched for the human ear, however some people particularly younger people can hear some social calls of bats and the echolocation calls of certain species that call at lower frequencies. By using an electronic bat detector the sounds can be made audible and species identification can often be made depending on the frequency.

Many of the bat requirements and the threats they face are similar therefore this is a generic action plan that covers all the species found in Bedfordshire and Luton. Specific issues or actions applicable to single species are included and noted as such.

## Current status

Species	National distribution	Local distribution	National status	Local status
<b>Barbastelle</b> <i>Barbastella barbastellus</i>	Very rare and erratic but apparently widespread in England and Wales. Only one maternity roost is known in the UK at present.	One or two per winter found in hibernation along the Greensand Ridge, tunnels and ice-houses. Thought to summer in woodland close to water.	Very rare	Very rare
<b>Brown long-eared bat</b> <i>Plecotus auritus</i>	Throughout Britain. Absent in the Orkneys, Shetlands, Outer Hebrides and other exposed islands.	Third commonest species. Found throughout Bedfordshire, particularly along the Greens and Ridge in deciduous and woodland and parkland.  During the summer can be found in older buildings, barns, churches, trees and bat boxes. In winter in mines, tunnels and ice houses.	Vulnerable	Stable
<b>Daubenton's bat</b> <i>Myotis daubentonii</i>	Throughout Britain, common in UK up to north Scotland, in Ireland and Isle of Man.	Feeds throughout Bedfordshire in woodlands and parkland, along rivers, canals and over standing water. Few roost sites are known and they are limited to Kempston, Old Warden/Southill, Sandy, and Heath and Reach areas.  In summer found in trees and occasional bat boxes. In winter in mines and ice houses.	Thought to be in decline	Thought to be Stable
<b>Natterer's bat</b> <i>Myotis nattereri</i>	Found throughout Britain but rare in Scottish highlands	Found rarely but throughout Bedfordshire, particularly along the Greensand Ridge. Most commonly found during the winter in underground sites. In the summer almost exclusively in old undisturbed churches.	Vulnerable	Uncommon and vulnerable
<b>Noctule</b> <i>Nyctalus noctula</i>	Uncommon in England, Wales and parts of southern Scotland. Absent in Ireland.	Found rarely but throughout Bedfordshire particularly along river corridors, flood meadows and over open water where deciduous woodland, parkland and pasture are found.  Roosts in trees and sometimes bat boxes during the summer. No Noctules have been found in winter.	Vulnerable and in decline	Vulnerable Uncommon and declining

<p><b>Common and soprano pipistrelles</b> <i>Pipistrellus pipistrellus</i> and <i>P. pygmaeus</i></p>	<p>Most common species found virtually everywhere. They are the smallest and most common of British bats especially in urban areas. However pipistrelles have declined by approx. 70% between 1978 and 1993 (National Bat Colony Survey)</p> <p>The pipistrelle has recently been split into two species but work on their individual requirements is still in its infancy</p>	<p>Widespread in Bedfordshire in woodland, riverine and urban areas.</p> <p>Roosts in churches, modern and older houses, other buildings and bat boxes. Rarely found in hibernation — usually squeezed behind structures on buildings.</p> <p>Uses a wide variety of habitats feeding on insects over water, grassland, open woodland, farmland, hedgerows, suburban gardens and in urban areas.</p>	<p>Vulnerable a steady decline reported</p>	<p>Common but declining</p>
<p><b>Whiskered/ Brandt's bat</b> <i>Myotis mystacinus</i> <i>Myotis brandtii</i></p>	<p>Main populations exist in Wales, the south-west and north to Yorkshire. Rare in the north, south-east and midlands going eastward.</p>	<p>Rare. No active roosts known in the summer or winter, but one summer roost has been recorded, and individuals occasionally found. House roosting species in summer and tunnels in winter.</p>	<p>Vulnerable</p>	<p>Rare</p> <p>Vulnerable and declining</p>

Ten species of bat have been recorded in Bedfordshire, six have been found hibernating. Leisler's bat and Nathusius Pipistrelle have been recorded as single specimens in the County in recent years but it is not known whether they are resident.

## Current factors affecting bats

- c Loss and disturbance of roosts, particularly maternity roosts, through the remedial treatment of roof timbers using toxic chemicals, insulation of cavity walls, building renovation and obstruction of roosts;
- c Lack of consultation prior to work commencing that affects bats leading to the loss or damage of many roosts;
- c Vandalism, disturbance and loss of hibernation sites which may include buildings, trees and underground sites;
- c Changes in agricultural practice — intensification of agriculture and use of pesticides in particular insecticides, has caused habitat loss, reducing habitat diversity and the availability of insect prey;
- c Inappropriate management of riparian habitats and the removal of dead and diseased trees in deciduous woodland has reduced the number of roost sites and insect prey;
- c Loss of linear landscape elements used as flight lines, for example tree lines and hedgerows;
- c Climate, prolonged winters affect bat survival rates and insect availability in early spring;
- c Lack of knowledge about some bat species;
- c Loss of roosts or damage to bats from public's lack of understanding of bats.

## Current action

All bats are given full protection under the Wildlife and Countryside Act 1981. English Nature must be consulted before any work takes place that affects bats or their roosts. It is illegal to intentionally, kill, injure, catch or keep bats, damage, destroy or obstruct bat roosts, disturb bats by entering known roosts or hibernation sites and sell, barter or exchange bats dead or alive.

Bats are also protected under the following

- Bern Convention 1979
- Bonn Convention 1980
- EC Habitats and Species Directive 1992
- Conservation (Natural Habitats etc) Regulations 1994

Locally, impact on bats can be limited by activities in accordance with Planning Policy Guidance Nature Conservation (PPG9, 1994) and through Local Agenda 21/the Biodiversity Action Planning process.

Barbastelle bat is subject to English Nature's Species Recovery Programme that helps to conserve the species. A National Bat Monitoring Programme is in existence aimed at establishing baseline data and long term monitoring of barbastelle and other species.

A local bat group operates in the County as part of Bedfordshire Natural History Society. They are particularly active and undertake a programme of survey and monitoring of various sites, contributing to the National Bat Monitoring programme. A study is currently underway to determine distribution in the county of Whiskered/Brandt's Bat more accurately, however so far it has failed to turn up any bats.

The Group will provide advice on bats and visit to provide assistance. Bat workers licensed by English Nature make roost visits throughout the year to check on bats and will answer calls to rescue injured animals. Information on bats is also provided to consultancies concerning bat records for specific sites in the County.

The Bat Group carries out much educational work in a variety of forms including talks, displays, bat and moth evenings. They also produce literature and leaflets about bats.

## Action plan objectives and targets

- A. Maintain or enhance the known range and populations of bats in Bedfordshire;
- B. Monitor species of bats to determine their status and distribution in Bedfordshire and Luton;
- C. Seek out opportunities to enhance habitat diversity and management, particularly feeding habitat and flight lines;
- D. Protect known bat roosts and hibernation sites, and where possible increase roosting site opportunities;
- E. Raise awareness of the importance of bats and the threats they face.

# Proposed Action

## Abbreviations

BBG	Bedfordshire Bat Group
BNHS	Bedfordshire Natural History Society
IVCP	Ivel Valley Countryside Project
NCT	North Chilterns Trust

## Policy and legislation

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|---|-----------|
| a). Ensure Local Authorities implement PPG9 in respect of bats and their habitats by effective monitoring of planning applications and organisation of surveys followed by appropriate action where roosts or important foraging habitat may be threatened                          |           |
| b). Ensure the presence of bats is considered at an early stage when any work is planned which could affect them e.g. roads, bridges, tree work, tunnels, watercourses and all types of buildings. Create where appropriate or enhance bat feeding, roosting and hibernation areas. | NCT, IVCP |
| c). Ensure the needs of bats are highlighted in local development plans, LEAP s of the County and those of other statutory bodies   |           |
| d). Lobby to include bats in Woodland Grant, Countryside Stewardship and other agri-environment and incentive schemes.  |           |
| e). Prothods for timber treatment including the use of least toxic chemicals through COSHH regulations  |           |

## Site safeguard and management

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|---|----------------|
| a). Work with landowners, developers, local authorities and others to protect known roosts and hibernation sites.   | NCT, IVCP, BBG |
| b). Encourage acceptance and understanding of existing roosts by their owners and site managers   | NCT, IVCP, BBG |
| c). Protect and seek appropriate management of foraging habitat adjacent to known roost sites   | NCT, IVCP      |
| d). Identify, protect and encourage favourable management of important roosts   | IVCP, BBG      |
| e). Consult with individuals, local authorities and developers during upgrading and repair work of bridges, ice houses and other structures to prevent unnecessary disturbance and maximise benefit to bats | BBG            |
| f). Ensure all tree and woodland management takes into account the possible presence of bats  | NCT, IVCP      |
| g). Retain where possible hollow, veteran, dying and dead trees in woods and hedges   | NCT, IVCP      |

## Species management and protection

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|--|-----|
| a). Promote sensitive building and timber treatment work in consultation with English Nature | BBG |
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Action	Implemented by
b). Maintain current licensing procedures and training schemes for bat worker volunteers and others whose work could affect bats	BBG
c). Identify and survey potential underground hibernacula and roost sites and protect important sites	BBG, BNHS
d). Increase the number of bat box schemes	NCT, IVCP, BBG
<b>Advisory</b>	
a). Ensure landowners/managers are aware of the presence and legal status of bats and provide advice on appropriate methods of management for the conservation of roosts and foraging habitats	NCT, IVCP, BBG
b). Initiate or maintain contact with owners of roosts and offer advice on their favourable management	IVCP, BBG
c). Develop good practice in consultation with the building industry, tree surgeons, tree wardens, foresters, highway department etc.	BBG
<b>Future research and monitoring</b>	
a). Maintain a programme of supervised roost checking and monitoring	BBG, BNHS
b). Increase survey and monitoring efforts of the local bat population to establish distribution and population data of bats in the County	NCT, IVCP, BBG, BNHS
c). Continue to forward local information on bats to JNCC national database and encourage submission of data to the Biodiversity, Recording and Monitoring Centre.	BBG
d). Identify key areas for future research, for example identify habitat requirements for rare species around their centres of population	BBG
<b>Communication and publicity</b>	
a). Raise awareness of the legal status and conservation needs of bats to, building industry, local planning authorities, arboriculturalists, pest controllers, and others whose actions may affect bats	IVCP
b). Run a programme of publicity and educational activities aimed at Local Authorities, buildings trade, conservation volunteers, children, arboriculturalists and the wider public	
c). Increase awareness and understanding of the threats facing bats and the conservation measures available to benefit them	IVCP
d). Appeal to the public for identification of roosts	

## Complementary plans

Barbastelle and Pipistrelle bats have UK National Species Action Plans written for them.

This species action plan for Bedfordshire and Luton should be read alongside habitat action plans available for Farmland, Woodland, Urban Habitats and Waterways and wetlands.

### Acknowledgements

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### References

Corbet, G. B., & Harris, S., Eds (1991) **The Handbook of British Mammals** The Mammal Society/Blackwell Scientific Publications, Oxford

English Nature (1992) **Focus on Bats** English Nature

Stebbings, R.E., (1993) **Which Bat Is It? A guide to bat identification in Great Britain and Ireland** The Mammal Society