

SPECIES ACTION PLAN FOR BATS

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Current Status

Nine of the bat species found in the UK have been recorded in Nottinghamshire. All are insectivorous, requiring insect-rich habitats such as wetlands, deciduous woodland and unimproved pasture in which to feed. They need warm breeding sites in buildings and trees in summer, and cold, secure hibernation sites in winter. Linear landscape features (hedgerows, tree lines, water courses, etc.) are thought to be particularly important to a number of species for travel between roosts and feeding areas.

Little is known about the current status of most of our bat species, although the available evidence suggests an overall decline in population levels. The pipistrelle, although the most abundant and widespread bat in the UK, is thought to have undergone a significant decline in numbers this century. Pipistrelle populations have been monitored since 1978 through the National Bat Colony Survey (NBCS). Estimates from this survey indicate a population decline of approximately 70% between 1978 and 1993. The problems of estimating population trends have been compounded by the recent discovery that there may be two distinct species of pipistrelle in the UK.

Population levels of bats in Nottinghamshire are inadequately known, and as yet there is little information on trends, although anecdotal evidence suggests a general decline. Both Nottinghamshire Bat Groups are actively monitoring populations as part of national schemes and it is hoped that a clearer picture will emerge as a result of this and other ongoing survey work in the County. The provisional status of each species in Nottinghamshire is summarised below:

Daubenton's Bat, *Myotis daubentoni*

A scattered distribution throughout the County, but not common. Closely associated with both standing and running water. Has been observed feeding over most of the larger water bodies in the County, although only three nursery roosts are known. Four or five are found grounded each year, on average. Two hibernation sites are known.

Brandt's Bat, *Myotis brandti*

Only one grounded individual found, although this species is probably under-recorded due to confusion with the whiskered bat.

Whiskered Bat, *Myotis mystacinus*

Widespread, although not common. About a dozen roosts known, most of which are thought to be nursery colonies. A few solitary individuals have also been found roosting in buildings and bat boxes. Seven or eight grounded individuals turn up in the County each year on average. One hibernation site known, in a cave.

Natterer's Bat, *Myotis nattereri*

Widely scattered, but scarce. Only six confirmed roosts currently known, most of which are thought to be nursery colonies. Two of these are in churches. Only one or two grounded individuals are found each year. One hibernation site known, in a cave.

Pipistrelle, *Pipistrellus pipistrellus*

Widespread and common. Most nursery colonies are found behind the barge boarding of modern houses, although two of our largest colonies are found in older properties. Pipistrelles are also found in bat boxes (particularly in the autumn) and in trees.

Noctule bat *Nyctalus noctula*

A scattered distribution, not common. Closely associated with large areas of deciduous woodland where they roost in trees. Fourteen trees in six sites have been found to contain noctules, although at least four of these trees have been lost, either through natural processes, or in two cases through being felled as unsafe (the bats were only discovered after the trees had been felled.) Several noctules are regularly found in bat boxes at one site.

Leisler's bat *Nyctalus leisleri*

Rare. There are confirmed records from just four sites - a tree in which the bats were discovered only after it had been felled, a bat box, and two attics. Only one confirmed nursery colony - in one of the attics.

Brown long-eared bat *Plecotus auritus*

Widespread and moderately common, mainly in the roof spaces of older properties, including barns and churches. One tree roost known, and one hibernation site in a cave.

Serotine *Eptesicus serotinus*

One grounded individual only, in 1986. Probably a vagrant.

Threats

The main factors currently affecting bats in Nottinghamshire are:

- Loss and fragmentation of suitable insect-rich feeding habitats such as wetlands and deciduous woodland.
- Loss of linear features such as tree-lines and hedgerows, depriving bats of commuting routes between roosts and feeding areas.

- Loss of and damage to roosting sites, including buildings, hollow trees, and underground structures (mines, tunnels, ice-houses, cellars, etc).
- Ignorance or deliberate avoidance of consultation procedures legally required to protect bats, resulting in the loss of many roosts through demolition, inappropriate building practices, use of toxic timber treatment chemicals, intolerance by roost owners, and tree-felling.
- Reduction in the abundance and diversity of insect prey due to intensive agriculture, particularly over-grazing and the use of pesticides.

Current Initiatives - Examples

- A UK Species Action Plan for pipistrelle has been prepared, and plans for other species are likely to follow.
- Bats and their roosts are protected under a range of legislation, including the Wildlife and Countryside Act 1981, the Bern Convention, the EC Habitats Directive, and the Bonn Convention, which includes an Agreement on the Conservation Of Bats in Europe. Anyone intending to carry out an operation which may effect bats or their roosts (outside the living area of a dwelling) is required by law to consult English Nature.
- A range of organisations provide expert advice on bats, including English Nature and both Notts Bat Groups.
- Many private landowners manage areas of actual or potential value for bats. They have a vital part to play in the implementation of this plan.
- The National Bat Monitoring Programme (NBMP) was launched in 1996 by the Bat Conservation Trust, with DoE funding. This should provide valuable information on the UK status and population trends of seven species - greater horseshoe, lesser horseshoe, Daubenton's bat, Natterer's bat, serotine, noctule and pipistrelle.
- Data on bat distribution in the County is collected by both bat groups and by Nottingham Natural History Museum staff, and held at the Notts Biological and Geological Records Centre (NBGRC) at Wollaton Hall.

Both the North and South Notts Bat Groups are also involved in the following activities:

- Construction of a purpose-built hibernaculum, and enhancement of other underground sites to increase their suitability for hibernating bats. Enhancement of habitat by the addition of bat boxes to trees and buildings where appropriate.
- Running a programme of activities to raise the profile of bats - including talks, guided walks, and events at local shows.
- Rescue and rehabilitation of sick, grounded or orphaned bats.

Targets

To contribute to UK bat species action plans by:

- *Establishing a base-line monitoring scheme for all bat species in Nottinghamshire by the year 2000, so that realistic targets can be set for increasing bat population levels, and the effectiveness of efforts to do this can be properly evaluated.*
- *Enhancing, where necessary, roosting sites (including hibernation sites) and important feeding habitats (particularly around maternity roosts) - with the aim of increasing bat population levels within the County.*
- *Maintaining known populations of all bat species in the County.*

Proposed Action

Policy and Legislation

1) Promote awareness of the legal protection afforded to bats.

Action: English Nature (EN), Notts Bat Groups (NBGs), Nottinghamshire Wildlife Trust (NWT), Local Authorities (LAs).

2) Monitor the degree to which statutory advice given by EN is implemented by those who receive it.

Action: EN, LAs, NBGs.

3) Ensure that bats and their habitats are protected and promoted through appropriate regional and local planning policy instruments.

Action: LAs, Government Office East Midlands, Environment Agency (EA).

4) Ensure that the ecological requirements of bats are considered in local and national incentive schemes.

Action: EN, LAs, Forestry Authority (FA), Farming and Wildlife Advisory Group (FWAG), Ministry of Agriculture Fisheries and Food (MAFF), Farming and Rural Conservation Agency (FRCA), Sherwood Forest Trust (SFT).

5) Ensure that the needs of bats are taken into account in Local Environment Agency Plans (LEAPS).

Action: EA.

6) Bats must be considered at an early stage in the planning of any work which could affect them. Local Authorities should adopt policies and procedures to ensure that the presence of bats is a material consideration in all planning applications.

Action: EN, LAs, NBGs.

Site Safeguard and Management

7) Encourage the use of timber treatment chemicals which are non-toxic to bats - both in the building trade and for DIY use.

Action: EN, NBGs, NWT.

8) Encourage the use of bat-friendly design features both in new buildings and in the renovation of existing structures.

Action: EN, EA, LAs, NBGs, Bat Conservation Trust (BCT),.

9) Raise awareness of the needs of bats among those managing trees and woodlands, and encourage appropriate management. Develop a code of good practice in relation to the conservation and management of trees which are of value to bats.

Action: BCT, EN, EA, FA, Forest Enterprise (FE), FWAG, LAs, NBGs, NWT, British Trust for Conservation Volunteers (BTCV), SFT.

10) Encourage the favourable management of land adjacent to roosts, and promote the restoration or re-creation of insect rich habitats and linear features.

Action: EA, LAs, FWAG, NBGs, BTCV, SFT, FRCA.

11) Continue to enhance habitat, where appropriate, by the addition of bat boxes to trees and buildings. Bat boxes should never be used as a substitute for the retention of natural tree roosts.

Action: FA, EA, LAs, NBGs, BTCV, NWT.

12) Continue to enhance existing underground sites to make them more suitable for hibernating bats. Promote the construction of purpose-built hibernacula where appropriate.

Action: BCT, EN, LAs, NBGs.

Species Management and Protection

13) Maintain and improve current training and licensing procedures for bat workers and others whose occupation may bring them into contact with bats. Support and develop the voluntary bat warden system.

Action: BCT, EN, NBGs.

Advisory

14) Provide advice to land owners and managers on sympathetic land management for bats.

Action: EN, FWAG, LAs, NBGs, SFT.

Future Research and Monitoring

15) Continue to participate in national monitoring schemes, extending the work to include Natterer's and noctule as well as pipistrelle and Daubenton's. Carry out additional monitoring as necessary to establish a baseline scheme for the County by 2000. In particular, increase survey effort for summer roosts, and survey and monitor known and potential underground sites.

Action: NBGs.

16) Review and improve current methods of storage and handling of data on distribution of bats and their roosts.

Action: NBGs, NBGRC, EN.

17) Conduct research into the habitat requirements and ecology of bats in Nottinghamshire to help develop appropriate management advice.

Action: NBGs, NWT, BCT.

Communications and Publicity

18) Promote the legal status and conservation importance of bats to roost owners, the building trade, arboricultural staff, planners, owners of ancient buildings, and others whose actions may affect bats.

Action: BCT, EN, LAs, NBGs, NBGRC.

19) Continue to operate a programme of educational activities and events to raise the profile of bats amongst the wider public.

Action: LAs, NBGs, NBGRC.

What You Can Do

- Make your house 'bat friendly' by providing loft access or a purpose built bat box. Your local bat group or English Nature can provide advice.
- Consult English Nature before you do anything that might affect bats or their roosts outside the living area of a dwelling, for example building work, removing hollow trees or remedial timber treatment. Remember that bats and their roosts are legally protected.