



8. Bat Species Action Plan

VISION

Swindon to become a stronghold for bats, providing homes for greater numbers and a wider range of species, and for local residents and developers to be aware of the importance of bats resulting in the protection of existing roosts and the creation of bat friendly structures within new developments.

KEY FACTS

What bats do we have?

Seven bat species are recorded as present within the Swindon area. However, there is a general lack of detailed information regarding bats in the vicinity, so more species than this may be present in the Swindon area.

Brown Long-Eared bats, the second most common species in Britain, are widely distributed in the Borough. Broadleaved woodlands are their preferred foraging grounds, but linear features such as hedgerows are important in linking roost sites to these foraging areas. Buildings are important, especially as summer roosts, though they are also used in the winter – along with hollow trees and caves. These bats have been affected by changes in land use throughout Britain. In particular, the loss of suitable foraging habitats and hollow trees for roosting, has led to their decline. They are also especially susceptible to pesticides, including those applied to roof timbers where the bats roost on the exposed wood. Loft conversions have also led to a reduction in potential roost sites.

Areas of water are of particular importance to **Daubenton's** bats, which feed mainly on insects with aquatic larval stages (such as non-biting midges). Their ideal habitat is sheltered water with vegetation on both banks, though other areas of freshwater are also important. The

Daubenton's bat appears to be increasing in parts of its range, possibly because of the increase in the number of artificial water bodies such as for example reservoirs and flooded quarries. However, to maintain larger populations, attempts must be made to keep pollution levels low and waterside vegetation should not be destroyed.

Lesser Horseshoes were formerly present over a much wider area of the country. They appear to be declining particularly in the north of their range. Those individuals found in Swindon are likely to be at the eastern edge of their range. Current UK population estimates suggest there are around 14,000 individuals (UK Biodiversity Group; 1998/9). Lesser horseshoes tend to feed within ancient woodland, parkland, scrub and pasture. Many lesser horseshoe roosts are used by only a few bats; however, buildings with suitable roost spaces, large access holes and set in appropriate feeding habitat are favoured as breeding sites.

The population trends of **Natterer's** bats are poorly known, but it is likely that their population sizes have been affected by pesticide use. The conversion of barns into dwelling houses, without proper provision for bats, in Swindon's more rural parts, may be leading to a loss of suitable roost sites for bats such as **Natterer's**. Little is known about the ecology of this species. They roost in old buildings and trees in the summer, but use caves and mines in winter. Open woodland, parkland, hedgerows and waterside vegetation are important for foraging. Most records are from underground hibernation sites where this species is easier to trace and identify.

Intensive farming practices have resulted in the loss of much suitable habitat for **Noctule** bats. The heavy management and subsequent loss of trees may also have contributed to their decline

by limiting the number of suitable roost sites. Noctules are known to forage over open areas such as wetlands, often at a considerable distance from their roost. They also feed by white street lamps, in villages and on the outskirts of towns.

The **Pipistrelle** has suffered a significant decline in the last century despite being the most widespread species in the UK. Estimates from the National Bat Colony Survey suggest a decline of approximately 70% between 1978 and 1993 (UK Biodiversity Group, 1998/9). The pipistrelle is Britain's most common species and is found throughout the UK. Pre-breeding population estimates for pipistrelles are approximately 2 million (UK Biodiversity Group, 1998/9). However, the problems with estimating trends have been compounded by the recent discovery that there are, in fact, two separate species. Echo-locating at 45 kHz and 55 kHz, they are sometimes referred to as common pipistrelle and soprano pipistrelle respectively. Research is underway on their distribution. Pipistrelles are nomadic and require a large number of suitable roosts to maintain each colony. They will roost in a variety of places, mainly in buildings, but will also use trees. They require a mosaic of habitats, often foraging in suburban gardens but also associated with hedgerows, scrub, trees and woodland. Wetlands appear to be particularly important.

Serotine bats are thought to be declining in number as a general rule, but they are also thought to be extending their range northwards – encompassing a greater proportion of the British Isles. The serotine bat is one of Britain's largest bat species. They roost mainly in buildings, both in the summer and in the winter. Grasslands, both improved and in particular unimproved, are principal feeding grounds for this species. Suburban areas are therefore important in providing potential habitats for this bat, as they may contain suitable roost sites as well as nearby feeding grounds in the form of gardens or, on the fringes of rural habitats, farmland.

Why are bats important?

Swindon is a large conurbation and has the potential to support a large number of roosts for pipistrelles as well as, to a lesser extent, brown long-eared bats. Serotine bats are also likely to be more prevalent in these areas than other species.

- Pipistrelle and Brown Long-Eared bats are the most widespread species found across Swindon.
- Lesser Horseshoe bats and Natterer's have been recorded at Lydiard Park.
- Stanton Park (Stanton Fitzwarren) is known to support at least three species of bat: serotine, Daubenton's and pipistrelle.
- Pipistrelle and Daubenton's bats are known to be present at Coate Water.
- The Southern Development Area of Swindon has had field surveys carried out. The two major species of bats found in foraging areas and roosts were Pipistrelles and Brown Long-Eared bats.
- The River Ray and the Wiltshire & Berkshire Canal, within the Southern Development Area of Swindon, were surveyed and found each to support 3-4 foraging Daubenton's.
- A lone Noctule bat was also recorded over the Canal in a field survey in the Southern Development Area.
- The Southern Development Area surveys highlighted the following areas as of "high local value" for bats:
 - i) Old Railway County Wildlife Site;
 - ii) River Ray and its major tributary to the West of Bushey Copse;
 - iii) Northern section of Elcombe Brook;
 - iv) Scrub alongside the active railway; and
 - v) The disused canal.

The information in this Plan has been obtained from many sources, including surveys carried out as part of planning applications and on a larger scale, field surveys carried out for the Swindon Southern Development Area plans. Limited data has also been obtained from the Wiltshire and Swindon Biological Records Centre, but the shortage of voluntary bat wardens in the Swindon area means that general research and monitoring of local bat populations is restricted. It is therefore important to increase the number of bat wardens, so that more studies can be undertaken into both roosting and foraging behaviour and requirements, as well as the location of roosts. Findings from research such as this can then be incorporated into future plans for development in Swindon.

Management for bats depends largely on appropriate management of foraging habitat and roosting sites. This is complicated by the fact that many species require a mosaic of habitats. Within the Swindon area there are a limited number of known sites frequented by bats. Further research into the ranges of different species within Swindon must be carried out in order that suitable management of the roosts and feeding grounds may be established. A programme of education is important for both landowners and owners and occupiers of buildings with existing roosts and/or the potential for them. In addition, the availability of grants can assist in the management of bat-friendly landscapes. Bats can also be encouraged into new areas, or populations increased in existing areas, by the provision of features such as bat boxes and the installation of new access points in buildings.

It is also important that developers are aware of the possibility of bats being present on a site, to avoid potential impacts to bat roosts and take advantage of opportunities for establishing additional bat roosts. Where a bat roost is present on a proposed development site, a detailed bat survey together with mitigation proposals should be submitted to the Local Planning Authority with the planning application. If this involves the loss of a roost, a suitable alternative roost should be provided before the loss of an existing roost.

For any proposals involving the disturbance of bats a licence from the Department of Environment, Food and Rural Affairs (DEFRA) may be required.

How are bats protected?

All species of bat are protected by national and international legislation. In England, Scotland and Wales all species are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats &c.) Regulations 1994. This legislation make it illegal to:

- Intentionally or deliberately kill, injure, or capture bats;
- Deliberately disturb bats;
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat, or any part of a bat, unless legally acquired;
- Sell, barter, or exchange bats, or any part of a bat. (Mitchell-Jones & McLeish, 1999)

There are no Sites of Special Scientific Interest (SSSIs) that are notified for their bat interest in the Swindon area. However, there are populations of bats in several areas, most notably: Coate Water, Lydiard Park and House (where bat survey work is currently being commissioned), and Stanton Park, Stanton Fitzwarren. There are also sites that are thought to be of potential importance (for example Burderop Wood and surrounding woodlands), but where insufficient data is available to quantify their significance. Some of these sites, especially the woodland areas, have the potential to support rarer bats such as *Barbastelles* and *Bechstein's*.

OPPORTUNITIES AND THREATS

Opportunities

Creation of new habitats, for example by planting trees, within or on the edge of urban areas (as carried out by Great Western Community Forest, Forest Enterprise and the Woodland Trust), has the potential to improve feeding habitats for bats as well as increasing the number of roost sites available.

Bat walks in Swindon Borough have attracted up to 100 people, demonstrating how much bats appeal to people. They have been largely overlooked in past surveys, and individuals studying this somewhat esoteric group of creatures quickly become very learned in the subject and help to make new discoveries.

Threats

- Loss of summer roosts through development of land and renovation and conversion of old buildings, timber treatment and disturbance.
- Lack of access to modern and commercial buildings.
- Possible loss of winter roosts through blocking of bridges, cellars and other underground sites.
- Decline in the number of old, decaying, standing trees, which could be used as roosts and hibernation sites, due to these being perceived as dangerous in built-up areas.
- Decline in insect prey through changes in land use and the increased use of pesticides and ivermectin for treatment of cattle.
- Simplification of habitat through fertiliser use, intensive grazing and high intensity farming decreases availability of prey.
- Loss and fragmentation of habitat, particularly old pasture, ancient woodland, hedgerows, wetlands and mosaics of different habitat types.
- Construction of housing and other buildings add potential roost sites, but have a negative effect on feeding areas due to fragmentation and loss of mature trees.

PRIORITIES FOR ACTION

What needs to be done?

It is a key priority to understand more about bats in Swindon Borough and in doing so promote and educate local people, developers and planners regarding the needs and wants of bats.

Actions will focus on:

- Continued survey work to determine bat numbers.
- Involving local people.
- Working with developers, planners and others to ensure roosts are protected and enhancements sought.
- Improve foraging habitat for bats through landscape scale projects and new agri-environment schemes.

WHERE CAN I SEE THESE ANIMALS?

- A number of bat walks are organised during the summer months contact (01793) 526228 for details.

CONTACTS

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