

all about

© compiled from Scottish Natural Heritage and Forestry Commission sources.

BATS

Pipistrellas pipistrellus

Bats are the only mammals that can truly fly. Like most other mammals they have a body covered in fur and give birth to live young which feed on their mother's milk. Their wings are formed by webs of skin which stretch between long bones which are similar to those in your hand. The bat's thumb has a hooked end which helps it to hang when it is not flying. Their feet have tiny claws and are used for climbing, holding on and grooming.

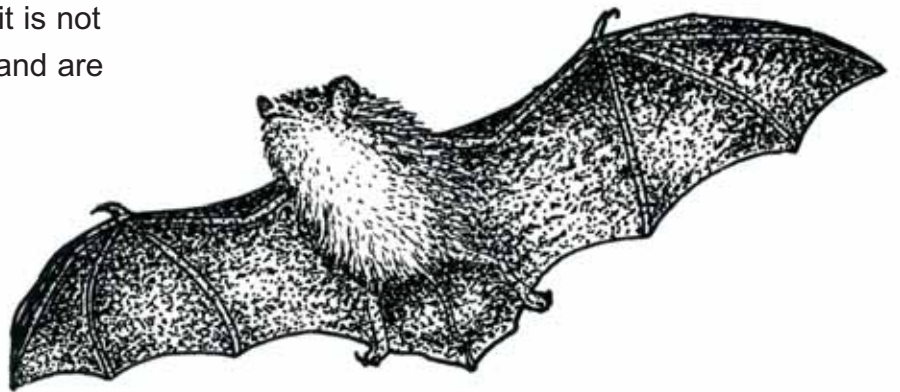
Bats are nocturnal animals. They roost all day, huddled together, often upside down, in dark sheltered places. At dusk or later they leave their roost and start to hunt for insects.

Bats in Scotland

Eight or nine different kinds of bat are found in Scotland. They all have tiny bodies, no bigger than a mouse.

The kind of bat that you are most likely to see is the Pipistrelle. There are now thought to be two different widespread

kinds of pipistrelle bat living in Scotland but they are difficult to tell apart. A pipistrelle is so small that it could fit in a matchbox. It weighs between 4 and 7g, which is less than a 2p coin. Their wing span is around 20cm. Pipistrelles fly fast, twisting and diving, with sudden changes in direction.



The other common bat in Scotland is the brown long eared bat. Brown long eared bats have ears which are as long as their bodies. They feed late in the evening, flying quite slowly. By hovering among the branches of trees they are able to snatch insects from their leaves. Less common kinds of bat include the Daubenton's bat and the Natterer's bat.

Daubenton's bats hunt by skimming low over water, catching insects close to the water surface.

Rare bats in Scotland include Noctule, Whiskered, Leisler's and possibly also Brandt's bat. A third much rarer species of pipistrelle (Nathusius's pipistrelle) may occur in Scotland, but we do not know if it breeds in Scotland or is just a visitor.

What do they eat?

Bats eat insects. Some eat large insects like beetles and moths. Others eat large numbers of tiny insects like midges. A pipistrelle can catch over 3000 midges in one night!

Bats are not blind but they use their ears to help them find their prey in the dark. They send out pulses of high pitched sound which bounce off objects like an echo, letting the bat know the size, shape and position of the object. This method of finding prey is called echolocation. Most of the sounds that a bat makes are too high for us to hear but they can be heard using a special piece of equipment called a bat detector.

Bats have few predators but they are sometimes caught by cats, owls and other birds of prey.

Life cycle

In summer female bats gather together in a warm place. This is called a maternity roost because it is here that they give birth to a single young. The baby bat clings to its mother's fur with its claws and feeds on her milk for four to five weeks. The mothers stay with their young until they are able to fly and hunt

for themselves.

Bats hibernate in winter. They hibernate in cool places like caves, hollow trees or disused tunnels. Their bodies get cooler and their heartbeat slows down to save energy. They may wake on warmer winter evenings when some insects can be found.

Where do they live?

Bats do not make nests but gather together in roosts. Different kinds of bat prefer different types of roost. The same site is often occupied by the same bats at the same time each year. Pipistrelle maternity roosts usually contain between 50 and 200 bats, although a roost was found with about 2000. Brown long eared bat roosts usually have less than 50 bats (typically around 20 or so).

Hollow trees and cracks in trees are used by some bats throughout the year. In summer many bats roost in buildings. Pipistrelles are often found in parts of the roof structure of modern houses but they are usually hidden from view. They can crawl through gaps as small as 1cm wide. Brown long eared bats prefer older buildings with large roof spaces. In winter bats hibernate in cool places, including caves, cellars and disused tunnels.

Humans and bats

Bats are much less common than they used to be. Bats suffered in the past because people did not understand enough about them. They are completely harmless and will not attack people or get tangled in their hair.

Bats need suitable places to live and plenty of insects to eat. Many of the places where bats could roost and find food have been destroyed or damaged. Old and dead trees have been cut down and whole woodlands have disappeared. Many new forests of conifers have been planted but these do not have as many nesting holes as old deciduous woods. Caves and tunnels have been blocked up or disturbed by people. Buildings are now really important roost sites for bats. Bats can be harmed or lose their home if a building is altered. Lofts are sometimes sprayed with chemicals which control fungi and wood boring beetles but also poison bats. However newer improved chemicals are now available which are much less dangerous to bats.

There are fewer insects now for bats to feed on because the insects' habitats have been destroyed and people have used insecticides to kill them.

All British bats and their roosts are protected by law. Builders and timber treatment companies now have to be much more careful about bats. It is an offence to injure or disturb a bat. It is also against the law to damage or stop bats getting into any places that they use for shelter or protection, including houses. In Scotland if people want to carry out work that may harm bats or damage their roosts they must contact Scottish Natural Heritage for advice.

[Finding out more](#)

The Bat Conservation Trust is an excellent source of information about

British bats. They produce a series of fact sheets on British bats and other useful leaflets. Contact them at: 15 Cloisters House, 8 Battersea Park Road, London SW8 4B

Other sources of information include: Bats in Scotland, Investigations for 5–14 Shirley Thompson (The Bat Conservation Trust)

Bat Conservation Project Book

Shirley Thompson and Phil Richardson (Young Headway)

Bats

Phil Richardson (Whittet Books)

Scotland's Wildlife – Bats and People

(Scottish Natural Heritage)

[How you can help](#)

Improve your garden for wildlife and you may help bats. By growing plants that attract insects you can provide more food for bats living in your area. A useful leaflet 'Garden for Bats' is available from the Bat Conservation Trust.

Help to change people's attitudes to bats. Tell people the facts about bats and persuade them that they are not scary or horrible.

Make some bat boxes and put them up. Usually bats get in and out of these through a narrow slit underneath. A useful leaflet is available from the Bat Conservation Trust.

Join your local bat group. They will be interested in any information that you can give them about where you have seen bats. Some organise special bat events, walks and other activities.

Contact the Bat Conservation Trust to find out the address of your nearest group. The Young Batworkers Club is their junior wing (for under 16s). They also produce a bat newsletter 'Young Batworker' especially for Junior/Young members.

Roost

A place where a bat or bird settles to rest.

Glossary

Deciduous wood

Wood of trees that lose their leaves in winter.

Echolocation

A system of locating objects using sound.

Habitat

The place in which an animal or plant lives.

Hibernation

A sleep-like state which allows an animal to survive the winter.

Insecticide

A chemical that is used to kill insects.

Nocturnal

Active at night.

Predator

An animal that kills and eats other animals.

