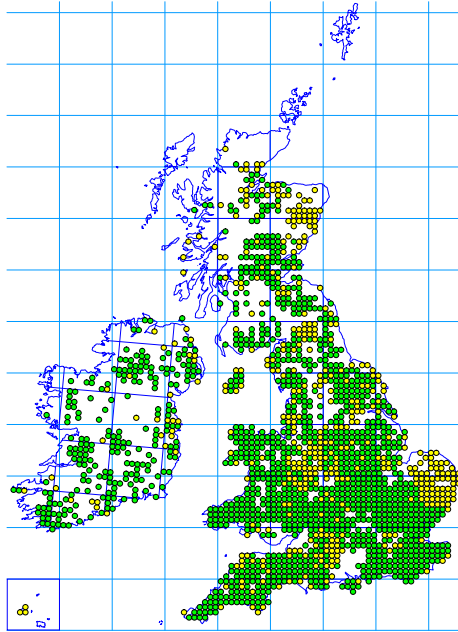


Status and distribution

The brown long-eared bat is one of the commonest species in Britain and is found throughout the UK, Ireland and the Isle of Man. It is absent from Orkney and Shetland and other exposed islands. Grey long-eared bats are very rare in the UK, confined to the south of England.



Map includes records of brown long-eared bat roosts

Conservation

Long-eared bats have declined in Britain owing to changing land use, especially removal of trees and woodland, which has resulted in the loss of suitable feeding habitats and hollow trees for roosting. They are particularly susceptible to pesticides, including in roofs where they often roost on exposed timbers.

Bats and the law

Bats and their roosts are protected under the Wildlife and Countryside Act 1981, the Conservation (Natural Habitats, etc.) Regulations 1994, the Countryside and Rights of Way Act 2000 and the Nature Conservation (Scotland) Act 2004.

Should any work be planned that could result in the disturbance of bats or their roosts, the relevant Statutory Nature Conservation Organisation – English Nature, Countryside Council for Wales, Scottish Natural Heritage or the Environment and Heritage Service (Northern Ireland) – must be consulted.

Local bat groups will also be happy to give help and advice.

Further information

The Bat Conservation Trust
15 Cloisters House
8 Battersea Park Road
London SW8 4BG
Bat Helpline 0845 1300 228
www.bats.org.uk

English Nature
Telephone 01733 455000
www.english-nature.org.uk

Countryside Council for Wales
Telephone 01248 385500
www.ccw.gov.uk

Scottish Natural Heritage
Telephone 0131 447 4784
www.snh.gov.uk

Environment and Heritage Service
(Northern Ireland)
Telephone 02890 546558
www.ehsni.gov.uk

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The Bat Conservation Trust is grateful to the organisations listed above for their support of our work. Map from Distribution atlas of bats in Britain and Ireland, compiled by Phil Richardson for the Bat Conservation Trust in 2000.
Illustrations by Joan Childs and Tom McOwat.

Bat Conservation Trust

Long-eared bats



Species information leaflet



Brown long-eared
Plecotus auritus



Grey long-eared
Plecotus austriacus

There are two species of long eared bat in the UK, brown long-eared and grey long-eared. Brown long-eareds are much more common; the range of the grey long-eared is confined to southern England.

Long-eared bats are medium-sized. The ears are nearly as long as the body but are not always obvious: when at rest long-eared bats curl their ears back like rams' horns, or tuck them away completely under their wings leaving only the pointed inner lobe of the ear (tragus) visible.

Bat facts

Description	Head and body length	Brown: 37mm–52mm, grey: 40mm–55mm
	Forearm length	Brown: 34–42mm, grey: 36mm–44mm
	Wingspan	230mm–285mm
	Weight	Brown: 6g–12g, grey: 7g–14g
	Colour	Brown: adults light brown, pale underneath; juveniles greyish (beware confusion with grey long-eared) Grey: adults grey with whitish cream underneath, face dark with especially blackish mask
	Thumb	Brown: more than 6.2mm Grey: less than 6.2mm
	Tragus	Brown: greatest width less than 5.5mm Grey: greatest width more than 5.5mm
Life cycle	Mating period	Brown: October to April, grey: September to November
	Maternity colonies	Established late spring. One young born late June to mid-July, weaned at six weeks
	Average colony size	10 to 20 (occasionally more than 50)
	Longevity	Up to 30 years
Habitat/food	Summer roosts	Brown: older buildings, barns, churches and trees Grey: few colonies of grey known, probably similar to brown
	Winter roosts	Caves and tunnels; brown also probably uses trees and buildings
	Feeding habitat	Brown: open woodland, parkland, orchards Grey: open meadows and pasture as well as woodland
	Food	Brown: moths, beetles, flies, earwigs and spiders Grey: mainly moths, also eats beetles and flies

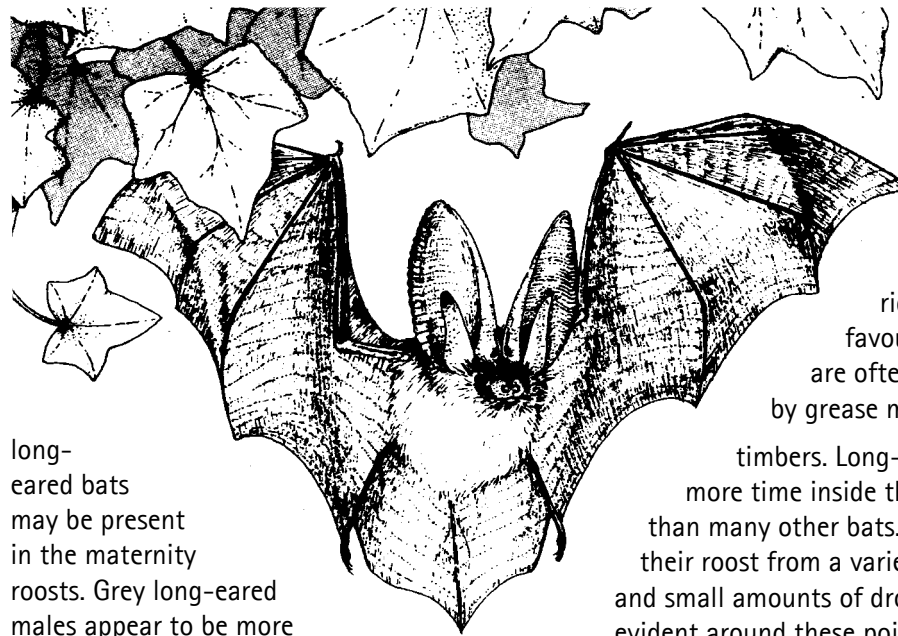
As well as catching insects in free flight, brown long-eared bats are gleaners, often flying slowly amongst foliage, picking insects off leaves and bark. Their broad wings and tail allow slow, highly manoeuvrable, hovering flight. Sometimes they land on the ground to catch insects or to shift them into a controllable position in the mouth and they are even able to take insects from lighted windows. Their flight often includes steep dives and short glides. Grey long-eared bats catch most of their prey in free flight although they too are able to glean.

These bats are also known as 'whispering bats' because their echolocation sounds are very quiet. They have particularly sensitive low frequency hearing and often locate prey from the sounds made by the insect's own movements. They may sometimes use vision. Small prey is eaten in flight, but larger insects are taken to a 'perch' by bats of both species. Regularly used perches, which are frequently inside porches or barns, can be recognised by the accumulations of discarded insect remains, particularly wings of moths such as yellow underwings.

Their habit of flying close to the ground, or even landing to tackle prey, makes long-eared bats vulnerable to attack by predators and many fall victim to domestic cats.

Breeding

Maternity roosts may be occupied from early April through to October or later, and are occasionally used for the entire year. Unlike the males of other species, a significant proportion of male brown



long-eared bats may be present in the maternity roosts. Grey long-eared males appear to be more territorial.

The female usually gives birth to a single young in late June to mid-July. For three weeks the juvenile is fed solely on its mother's milk and is left in a crèche inside the roost when the mother goes out to feed. Within three weeks the young make their first flights inside the roost and by six weeks they are fully weaned and able to forage for themselves. The numbers seen in maternity roosts are usually small, although often only part of the colony is visible.

Most females breed in their second year but do not necessarily breed every year. Males are sexually mature at about 15 months old.

Summer roosts

Many roosts have been found in buildings, particularly older ones with large open roof spaces. Bats roost singly or in small groups among the roof timbers

of the apex, especially around ridge ends and chimneys and in crevices in ridge tiles. The favourite roost sites are often indicated by grease marks on the

timbers. Long-eared bats spend more time inside the roof space than many other bats. They may leave their roost from a variety of places and small amounts of droppings may be evident around these points. Within the roost there are small accumulations of droppings beneath favoured roost sites, and a sparse scattering of droppings generally over the floor of the roof space, particularly below the ridge. They will also roost in tree-holes and bat boxes - 65 were once found in one box! Grey long-eareds seem to roost only in buildings in Europe. Long-eared bats are generally very quiet inside their roost. They do not normally leave it until after dark, although they are active - stretching, grooming and flying inside the roost - for up to an hour before emergence.

When they have young to feed, females return to the roost after one to two hours to suckle them, but at other times they may remain away from the roost until dawn. Long-eared bats have a small feeding range.

Winter roosts

Hibernation begins in November and a variety of sites are used. Only a tiny proportion of long-eared bats seen in summer are found in winter, probably because most spend the winter in trees, or tucked away in buildings, for example in hollow walls, where their presence is not obvious.

Small numbers are found in caves, tunnels, mines and ice-houses, particularly early in the winter and after prolonged cold spells. In these sites they sometimes hang in the open, on the walls or from the ceiling, although they also roost in crevices. Brown long-eared bats prefer to hibernate at very cold temperatures, often just above freezing point. Grey long-eareds select slightly warmer sites.

Echolocation

Brown long-eared bats' echolocation calls range from 25 to 50kHz and peak at 35 to 40kHz. On a bat detector the calls are very quiet and are heard as a series of clicks rather like those produced by a geiger counter.

