# **Bat Conservation Trust**

# Brown long-eared



# Plecotus auritus



#### Introduction

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

### Vital statistics

Head & body length: 37mm - 52mm
Forearm length: 34mm - 42mm
Wingspan: 230mm - 285mm

Weight: 6g - 12g

Thumb: More than 6.2mm (in comparison with grey long-eared)

Tragus: Greatest width less than 5.5m (in comparison with grey long-eared)
Colour: Adults have light brown fur, pale underneath; juveniles greyish -

beware confusion with grey long-eared!

#### General

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.

These bats are 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'. 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.

#### **Habitats**

Summer roosts are usually located in older buildings, barns, churches and trees. Long-eared bats generally form small and quiet colonies of about 20 animals - often the first a householder knows about them is when a visit to the loft reveals a cluster of tiny faces peering down from a corner of the rafters!

Winter roosts tend to be found in caves, tunnels, mines, icehouses and occasionally even trees and buildings. Their foraging habitat is open deciduous and coniferous woodland, parkland and orchards

Unlike the males of other species, a significant proportion of male brown long-eared bats may be present in the maternity roosts.

Brown long-eared bats prefer to hibernate at very cold temperatures, often just above freezing point.

#### Diet

Moths, beetles, flies, earwigs and spiders.

## Reproduction & life cycle

Mating takes place in the autumn and active males will continue to seek out and mate with females throughout the winter.

Materity colonies are established in late spring, with one young born around late June to mid-July, and then weaned at 6 weeks.

Colony size is between 10 to 20 bats (up to 50), and each brown long-eared can live for up to 30 years.

## **Echolocation**

Brown long-eared bats' echolocation calls range from 25 -  $50 \mathrm{kHz}$  and peak at  $35 \mathrm{kHz}$ .

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.



#### Distribution & conservation

The Brown Long-eared bat is found throughout the UK, Ireland and the Isle of Man. It is absent from Orkney and Shetland, and other exposed islands. It is also common and widespread in the rest of Europe, except for southern Spain, southern Italy and Greece

It has declined in Britain due to changing land use, including modern

intensive agricultural practices, and the conversion of barns which have resulted in the loss of suitable feeding and roosting habitats. It is particularly susceptible to pesticides, especially their use in roofs where it often roosts on exposed timbers.