

Bat Conservation Trust

Barbastelle bat



Barbastella barbastellus



Introduction

The barbastelle is a medium-sized bat, distinctive by its pug-shaped nose. The ears are broad, joined across its head by skin, and covered in gingery-brown fur on the rear surface. The tragus is triangular – broad at the base but with a nearly parallel tip which starts about halfway along its length.

Vital statistics

Head & body length:	40mm - 55 mm
Forearm length:	35mm - 45 mm
Wingspan:	260mm - 290mm
Weight:	6g – 13g
Colour:	Fur dark, lighter tips on back. Skin surfaces black or dark brown.

General

Barbastelle bats tend to forage over a wide area. They are fast, agile flyers and specialist foragers in a range of habitats, swooping to drink from ponds or lakes. In summer they often emerge early from their daytime roosts to forage in the dark zone amongst trees until open area light levels have fallen to those existing under tree canopies; then they may forage in quite open areas.

Being one of the rarest mammals, much remains to be learned about barbastelles. Their UK range is currently thought to extend mainly over southern and central England and Wales but the information contained in this leaflet may change as further roosts are discovered and research is undertaken.

Habitats

In mainland Europe nursery colonies have been found in building crevices but in England roosts have also been located in cracks in trees in areas of high humidity. Once the young can fly it seems that the colony may sometimes divide into smaller units and then reconvene at a single roost in late July – sometimes in one of the roosts used before the young were born.

The majority of UK winter records are of single bats in underground sites. Barbastelles are relatively tolerant of the cold, and are found in caves, tunnels, cellars and trees in mainland Europe. They often hibernate in relatively exposed situations. In the UK they are also known to roost in cavities behind joints of timber-framed buildings, between close fitting roof timbers and in hollow tree trunks. Occasionally they can be found behind loose bark on dead trees, and movement between winter roosts is quite frequent they have been known to fly and forage in mild spells all winter.

Diet

Mainly small moths, some flies and beetles.

Reproduction & life cycle

Little information is available on the mating of barbastelles. It seems take place in small gatherings at the end of the nursery roost period, with one sexually active male attended by up to six females some accompanied by their young. They may also mate in hibernacula. Females usually reach sexual maturity in their second year, although they have been known to mate in their

first. Nursery roosts seem to be relatively small, with only 10-20 females plus babies in mainland Europe roosts may rarely consist of up to 100 bats. Baby bats are usually born in July, sometimes even in early August; females usually produce a single baby, but occasionally twins. Juvenile bats can fly at about 3 weeks, and by 6 weeks can forage for themselves. Research indicates that juveniles follow the adults into their established foraging areas. During the nursery roosting time males tend to live a solitary existence.

Echolocation

Their echolocation can best be heard at approximately 32 kHz. Their calls sound like short, hard smacks, in fast and then slower pulses.



Distribution & conservation

The barbastelle is very rare, found in southern and central England and Wales.

Very few breeding sites are currently known in the UK and it is important that surrounding environments of these and winter hibernation sites are maintained. It is thought that they prefer pastoral landscapes with deciduous woodland, wet meadows and water bodies, such as woodland streams and rivers.

The extensive loss of deciduous woodland in the UK may be a significant factor in the rarity of this species. Use of artificial fertilisers and pesticides reduces insect diversity and may lead to indirect poisoning of bats, and pesticide run-off in water can severely disrupt aquatic insect abundance. Bats foraging over wet meadows mostly prey on micromoths, therefore measures to improve the quality of water meadows for the benefit of micromoths will provide better foraging opportunities for barbastelles.

The barbastelle is a UK Biodiversity Action Plan species, which means that it is a conservation priority on both a local and national scale. The Bat Conservation Trust is the lead partner for the barbastelle bat Biodiversity Action Plan – for more information visit www.ukbap.org.uk.