

# Nathusius' pipistrelle

*Pipistrellus nathusii*



## Introduction

Nathusius' pipistrelle is a rare bat in the UK, though records have increased in recent years. It is a migratory species, and most bats are encountered in autumn, although some do remain all year and breed in the UK. It is similar in appearance to, but slightly larger than the much more commonly found common and soprano pipistrelles, and the fur on its back is longer, sometimes giving a shaggy appearance.

## Vital statistics

Head & body length:	46mm - 55mm
Forearm length:	32mm - 38mm
Wingspan:	228mm - 250mm
Weight:	6g - 16g
Colour:	Fur reddish-brown, occasionally with frosted tips on the belly. The ears, membranes and face are usually very dark.

## General

Nathusius' pipistrelle was first recorded in Great Britain in the Shetland Islands in 1940. It was initially regarded as a vagrant, but its status was subsequently upgraded to winter visiting migrant as records accumulated, and since the 1990s it has been known to breed in the UK. A small number of maternity colonies are known both in England and Northern Ireland.

In continental Europe, Nathusius' pipistrelle migrates south west across Europe in late autumn and winter before returning to eastern Europe the following spring. In the UK it appears that a small summer breeding population is supplemented by migratory individuals during the winter.

## Habitats

Nathusius' pipistrelles are often recorded roosting in crevices and have been found in cracks in walls, under soffit boards, fissures in rocks and tree hollows.

In the UK only a small number of maternity colonies have been reported and these have been in the walls of traditionally-built buildings of stone and red brick, in wall cavities and under flat roofs. Maternity roosts are frequently shared with soprano pipistrelles.

The majority of roosts are located close to large freshwater lakes, and this species also forages near rivers, canals, lakes and waterlogged areas, as well as in woodland rides and edges. The flight is rapid – slightly faster than that of common and soprano pipistrelles, although it is not quite as manoeuvrable, and its insect prey are caught on the wing, by 'aerial hawking'.

No significant hibernation sites reported for this species in the UK with the majority of winter records being of grounded individuals.

## Diet

Feeds on medium-sized flying insects such as aquatic flies, midges, mosquitoes and caddis flies.

## Reproduction & life cycle

During the summer, females form large maternity colonies of up to 350 bats where each gives birth to a single young in

June or early July. For three or four weeks the young are fed solely on their mother's milk. After about four weeks the young are able to fly and at six weeks they are able to forage for themselves. Occasionally, maternity colonies may temporarily move location.

Male bats usually roost alone during the summer. During the main mating period from July to early September, males set up roosts close to the maternity roost site and spend long periods of each night singing social calls from their roosts which are thought to be used to attract females for mating.

## Echolocation

Echolocation calls of Nathusius' pipistrelle are similar to those of the other pipistrelles. The peak intensity of the call is lower than the other two species, however, at about 38kHz (between 36 and 40kHz). The social calls are between 20 to 30kHz, audible to some adults and children.



## Distribution & conservation

Nathusius' pipistrelles have been widely recorded throughout the British Isles but records are sparse. Individuals have been recorded on North Sea oil platforms, the Shetland and Orkney Islands, Jersey and Guernsey, the Isle of Wight as well as on mainland Britain and Ireland. A small number of maternity colonies have been found in both Northern Ireland and England.

The increase in records in the British Isles in recent years may reflect sampling effort, although the possibility that the species range is expanding cannot be discounted.

At present, threats to the species would appear to be reduction in insect prey due to degradation of water quality, loss of foraging habitat such as woodland, treelines and hedgerows plus loss of roosting habitat.