Bat Species of the Year 2026-2027

LEISLER'S BAT (*Nyctalus leisleri*)

Facts compiled for BatLife Europe by Ulrich Hüttmeir

Morphology

Leisler's Bat is a medium-sized bat with rounded ears and a mushroom-shaped tragus. The body's dorsal side dark brown, the ventral side is similar, but slightly lighter on the throat. The hair is dark at the base and becomes reddish-brown towards the tips.

Fig. 1: Bat of the year 2026-2027: Leisler's Bat (*Nyctalus leisleri*). © Wolfgang Forstmeier.

Vital statistics	
Head & body length:	48-68 mm
Forearm length:	40-47 mm
Wingspan:	260-320 mm
Weight:	13–18 g
Colour:	Dark brown hair, the base is darker than the tips, ventral side is similar to the dorsal side, but slightly lighter on the throat

This species has a patchy distribution across the European continent, but it is missing in most parts of Scandinavia (except few records from southern Sweden) and in the north of This species has a patchy distribution across the European continent, but it is missing in most parts of Scandinavia (except few records from southern Sweden) and in the north of Scotland, in south-eastern Spain and in southwestern Italy (Fig. 2).

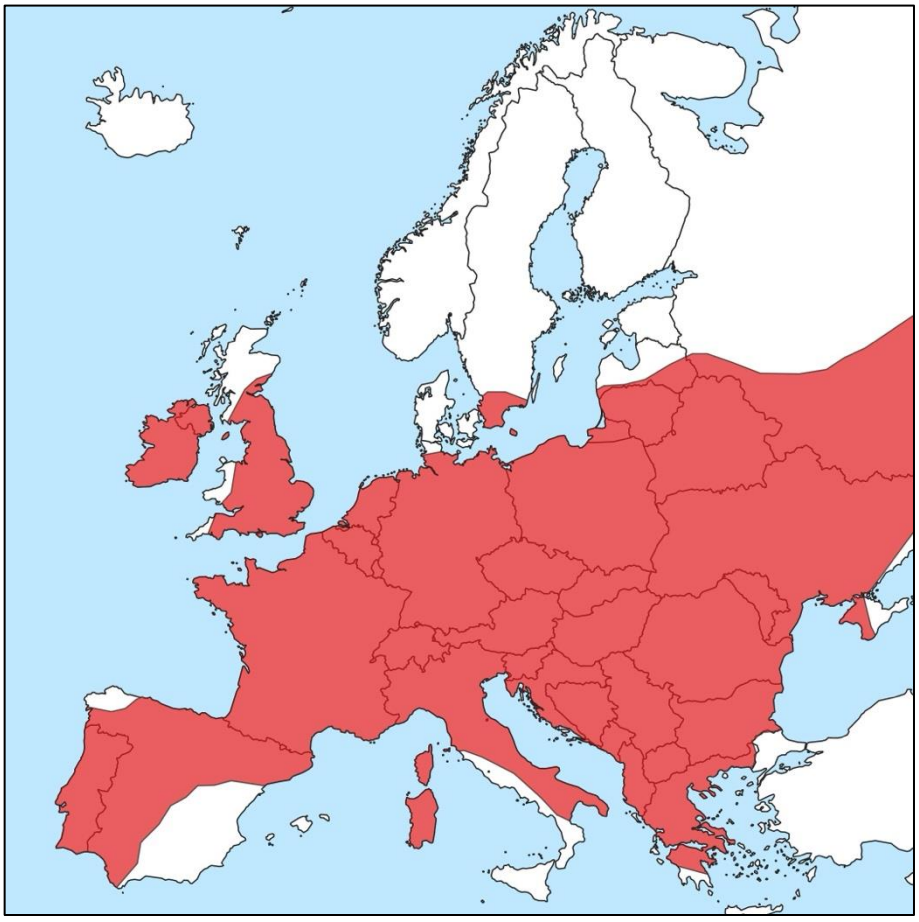

Fig. 2: Distribution of the Leisler's Bat © Batlife Europe

Roosts

The Lesser Noctule primarily uses tree cavities as its natural roosting sites. It roosts in rot holes, overgrown trunk crevices and hollow rotten areas in knotholes. Naturally formed tree hollows are preferred to woodpecker holes. Tree roosts have been obsverved mainly in oaks, ashes and beech, but also in other trees like sweet chestnust, sycamor lime or pine. In Ireland, the Canary Islands, Madeira, and occasionally in Germany, roosts are located in the attics of buildings, but also bat boxes are used by the Leisler's Bat.

Maternity roosts typically consist of 20- 50 females, but in Ireland a large colony of up to 1000 females was described. Male Leisler's Bats can also form small colonies with up to 12 individuals.

Hibernation roosts are thought to be also in hollow trees, buildings and occassionally in rock crevasses.

Foraging and foraging habitats

The lesser noctule hunts in fast, straight flight close above or below the treetops of deciduous, coniferous, and mixed forests, along forest paths, or over large bodies of water. It can also hunt around street lamps for insects attracted to the light.

With its long, narrow wings and short ears, the lesser noctule is well adapted to aerial hawking in fast flight, with commuting speeds of up to 40 to 48 km/h.

Foraging habitat is typically located within 4–6 km from the roost. The total foraging area can be up to 18 km^2.

Diet

The diet of Leisler's bats consists largely of moths but also includes dipterans and caddisflies. However, the diet varies strongly depending on local habitat, season and geographically. In the British Isles and Ireland, individuals that hunt over pastureland consume more than half of their food in the form of yellow dung flies (*Scatophaga stercoraria*) and beetles. The diet of Leisler's that hunt above and along bodies of water is dominated by chironomids, mosquitoes, and caddisflies. Overall, Leisler's bats were described as opportunistic consumers of flying insects, but they also appear to hunt selectively when profitable prey is available in large numbers.

Echolocation

Leisler's Bats typically produce loud calls, that alternate between lower (around 24 kHz) and higher (around 27 kHz) frequencies, which results in a "chip-chop" (or "plip-pop") sound in the heterodyne detector. The calls are not always easy to identify, as they can be confused with other species (*Nyctalus noctula*, *Vespertilio murinus*, *Eptesicus serotinus*) under certain circumstances. However, the best frequency for listening in the heterodyne detector is about 25 kHz.

Reproduction & life cycle

Mating takes place from late July to September in harems, where the male attracts up to ten females, mainly by singing in flight or, less commonly, from the entrance to the roost. One to two young are born between early and late June. Some of the young reach sexual maturity in their first autumn.

The average life span of the Leisler's bat not known for certain but is probably around 7 years. However, some individuals can grow much older, with ages of up to 18 years being known.

Migration

The lesser noctule bat can travel long distances of several hundred kilometers between its summer and hibernation roosts. Most of the migrations observed were in a southwest-northeast direction: the long-distance record is held by a female that was tagged in eastern Germany and found over 1,500 km away in northern Spain (and a year and a half later back again in Germany). In some regions of Europe, populations appear to be sedentary and do not migrate long distances between their summer and winter habitats.

Threats

As a typical forest bat, the lack or loss of suitable cavity trees poses a significant threat. In addition to the loss of roosting sites, the lesser noctule is often killed by wind turbines.

The fact that wind turbines are increasingly being built in forested areas combines these two threats.

Legal protection

The Leisler's Bat is listed under Annex IV of the EU Habitats Directive, which . In addition, this species is targeted by the UNEP-EUROBATS Convention, in line with the Convention on Migratory Species (CMS). All the parties of this convention (EU and non-EU Members states) are requested to have legal instruments for the protection of all bat species, including the Leisler's Bat.

Conservation

This species is classified as Least concern (LC) the IUCN Red List both globally and at European level. However, locally, the species is considered as Near Threaten (NT) up to Endangered (EN) due to persistent threats at European national scales.

References

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