

Species fact sheet



Rhinolophus hipposideros

Lesser horseshoe bat **Characteristics Status** Kleine Hufeisennase Wingspan: 19-24 cm Protection: protected by NCHA Weight: 5-9 g Red List: EN (Endangered) Petit rhinolophe I (very high) Rinolofo minore Max. age: 21 years **National Priority** Rinolof pitschen Offspring/year: 0-1

Other: Forest target species,
Target species sparse forest

Synergies: Greater mouse-eared bat, Brown long-eared bat, Grey long-eared bat, Alpine long-eared bat, Greater horseshoe bat, Whiskered bat



Habitat use

Roosts

Uses attics and other parts of buildings during the day in summer, where the females raise their young in colonies of a few to over 100 individuals. Males can stay in the same roosts. Non-reproductive animals can also be found all year round in underground roosts such as rock caves. Hibernates mainly in caves and tunnels.

Foraging grounds

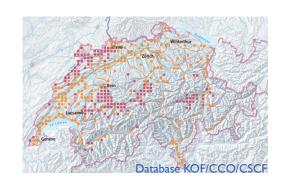
Foraging mainly in the forest, whereby the forest structure appears to be of secondary importance. Size of foraging grounds: 10-50 ha. Prey includes moths, two-winged and net-winged insects. Foraging grounds are usually less than 2.5 km from the roost.

Flight corridors

Strongly structure-bound species, especially in areas with light pollution. Transit flights mostly along forest edges, hedges, bodies of water or structured dark corridors in settlement areas. Distances between summer and winter roosts can be over 20 km but are usually much shorter.

Distribution

Suffered massive population collapses in the middle of the 20th century. Currently only around 80 nursery colonies left, concentrated in the cantons of Grisons, Obwalden and Bern (Lake Thun and Lake Brienz region). Scattered nurseries in Solothurn, Jura, Neuchâtel and St. Gallen. Total population in the nurseries around 5.300 adults.



Threats

- Loss of roosts due to unaccompanied building works: Renovations, energetic optimization of the building envelope, closure of access points, conversions, use of toxic wood preservatives
- Intrusion of birds of prey/owls into roosts
- Loss of energy due to disturbance caused by cave tourism during hibernation
- Habitat loss/fragmentation due to light pollution (roosts, flight corridors) in urban areas, landscape clearance, noise pollution and infrastructure construction in foraging grounds

Mitigation measures

Conservation and propagation measures necessary. Highly conservation dependent. Continuation and expansion of the National Conservation and Monitoring Program for the Lesser Horseshoe Bat. Elaboration of cantonal action plans and closing of local knowledge gaps, particularly with regard to flight corridors. Involvement of the Regional Coordination Center for Bat Conservation is mandatory for all measures.

Roosts

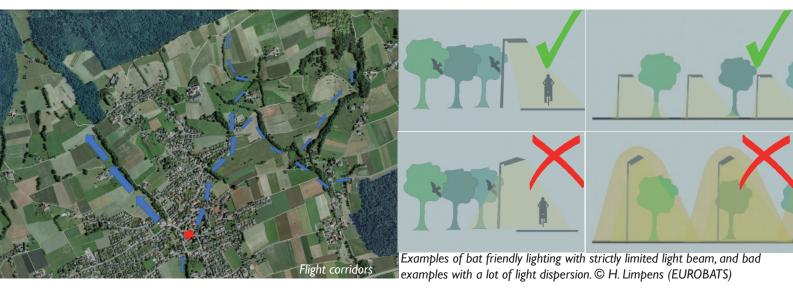
Strengthening of the protection of existing nursery roosts (inclusion in regional planning acts). Continuation of roost supervision by volunteers. Inclusion of the wider roost surroundings and the connection to the forest in protection concepts, especially with regard to light pollution. Avoidance of façade lighting on roost buildings in the summer months. Protection of known winter roosts in caves by restriction of access. Provision of suitable roosts in buildings in the peripheral areas of the current distribution.

Foraging grounds

Avoidance of pesticide use in forestry, avoidance of light pollution in the forest (especially lighting of forest paths and roads)

Flight corridors

Recording, inclusion in regional planning and consistent protection of nocturnal flight corridors between roosts and foraging sites. Revision and, where necessary, optimization of the lighting regime and connectivity near roosts. Synergies with other target species to establish an ecological infrastructure through the settlement area (especially dark corridors).



Literature

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Mitchell-Jones et al. (2017). Protecting and managing underground sites for bats, 5th edition. UNEP/EUROBATS, Bonn.

Voigt et al. (2019). Guidelines for consideration of bats in lighting projects. UNEP/EUROBATS, Bonn.

Links

fledermausschutz.ch institutions.ville-geneve.ch/fr/cco/ pipistrelliticino.ch