Swiss Coordination Center for Bat Conservation

Species fact sheet

Barbastella barbastellus

Western barbastelle
Barbastelle
Mopsfledermaus
Barbastello
Barbastel ureglia lada

Characteristics

Wingspan:	24-28 cm
Weight:	8-11 g
Max. age:	22 years
Offspring/year:	1-2

Status

Protection:	protected by NCHA
Red List:	EN (Endangered)
National Priority	3 (media)
Other:	Forest target species, Target species sparse forest

Synergies: Greater mouse-eared bat, Brandt's bat, Alcathoe whiskered bat, Bechstein's bat, Natterer's/cryptic bat

Roost tree: standing dead wood

Habitat use

Roosts

Roost specialist: Usually hides behind the bark of dead trees during the day in summer, and, is therefore dependent on large amounts of standing dead wood. However, roosts are also occasionally found in bat boxes, behind window shutters or wooden wall cladding. Nursery roosts usually contain 10-50 females. Size of roosting habitat (forest areas with tree cavities): 10-100 ha. Winter roosts in underground caves and rock crevices

Foraging grounds

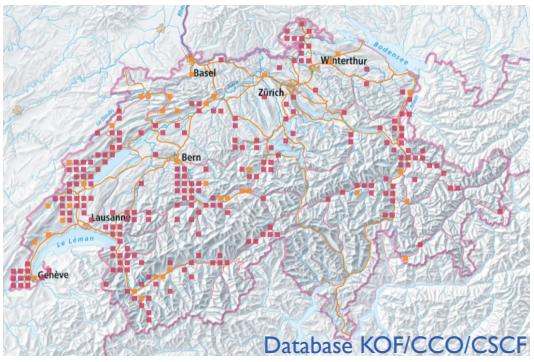
Butterfly specialist: Forages almost exclusively in and near woodland. Foraging habitats include forests that are not too dense, well-structured forest edges, orchards and, at least seasonally, extensive meadows and pastures. Foraging grounds up to 20 km away from the roost, but usually less than 4.5 km. Size of foraging grounds: 1-10 ha.

Flight corridors

Strongly structure-bound species that rarely strays far from the forest. For transit flights between different forests, as well as between building roosts and foraging grounds, continuous hedges, copses or alleys are therefore advantageous.

Distribution

Widespread, but uncommon. Throughout Switzerland (no records from TI yet) up to the tree line, assuming sufficiently extensive, old stands of trees. Highest evidence at more than 2000 m.a.s.l. As a typical forest species, the distribution tends to be underestimated in inventories, as there are hardly any random finds.



Threats

- Loss of habitat due to the felling of old, dying, and dead trees (beetle wood) and a general lack of standing dead wood in the forest.
- 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
- Energy loss due to disturbance caused by cave tourism during hibernation
- Habitat loss/fragmentation due to light pollution and construction of infrastructure (roads, railroad lines) in the forest

Mitigation measures

Conservation and promotion measures necessary. Conservation dependent (conditionally). Elaboration of cantonal action plans and closing of local knowledge gaps. Involvement of the Regional Coordination Center for Bat Conservation mandatory for all measures on roots in buildings.

Roosts

Tree roosts: Adaptation of forest management to foster more roost trees - i.e., standing dead wood with peeling bark. At least 5-10 roost trees per hectare of forest.
Roosts in buildings: Inclusion of roost surroundings in conservation concepts, particularly with regard to reduction/avoidance of light pollution. Protection of known winter roosts in caves by restriction of access during the winter months.

Foraging grounds

Conservation and promotion of sparse forests. Avoidance of light pollution, especially in the form of linear lighting in forests. Regular crossing aids on busy, wider roads in the forest. Avoidance of pesticide use of in forestry.

Flight corridors

Protection and inclusion of flight corridors between roost buildings and forest in regional planning acts.
Synergies with other target species to establish an ecological infrastructure through settlement areas (especially dark corridors). Ensuring of the connectivity of sufficiently large, deadwood-rich forest areas.

Roost behind a window shutter

Foraging habitat: sparse forest

Literature

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Krättli et al. (2012). Konzept Artenförderung Fledermäuse 2013-2020. Schweizerische Koordinationsstelle für Fledermausschutz.

Lugon et al. (2017). Fledermausschutz bei der Planung, Gestaltung und Sanierung von Verkehrsinfrastrukturen-Arbeitsgrundlage.

Links

fledermausschutz.ch

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

pipistrelliticino.ch

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