

# Species fact sheet



# Vespertilio murinus

Parti-colored bat
Zweifarbfledermaus
Sérotine bicolore
Serotino bicolore
Serotin d'argient

Characteristics
Wingspan: 27-31 cm
Weight: 8-18 g
Max. age: 12 years
Offspring/year: 1-3, mostly 2

Status
Protection:
Red List:
National Priority
Other:

protected by NCHA
VU (Vulnerable)
I (very high)
Forest target species,
Target species sparse forest

Synergies: Noctule, Leisler's bat, Nathusius's pipistrelle, Serotine bat





# Habitat use

#### **Roosts**

Summer roosts in roof interspaces, façade crevices, chimneys, flat bat boxes or behind wall cladding. Rarely also in tree hollows. Roosts usually high above the ground and with an unobstructed approach. In contrast to most other species, males also form colonies. Nursery roosts as well as male colonies can comprise several 100 animals. Little is known about winter roosts, but these are likely to be found mainly on buildings (see summer roosts) and in rock crevices.

#### Foraging grounds

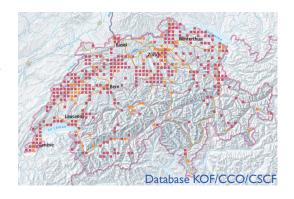
Foraging activity impacted by the presence of swarming prey insects such as mosquitoes, caddisflies and mayflies. Foraging grounds often over near-natural, productive water bodies. Forages mainly in the open sky at heights of up to 40 m. Size of foraging areas: 1000-10,000 ha. Foraging grounds can be more than 15 km away from the roost.

#### Flight corridors

Due to its fast flight speed in open space, it is hardly dependent on flight corridors in the narrower sense. However, because the species is a migrant, national and international migration corridors are of great importance. Depending on the population, distances between summer and winter roosts can be over 800 km.

# **Distribution**

Patchy distribution throughout Switzerland, rare south of the Alps. The few nursery roosts mainly at larger lakes at low altitudes, male colonies up to over 1000 m above sea level.



# **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
- Decrease in food supply due to extensive mosquito control measures in lakes and marshes (e.g. Bti-toxin)
- Collisions with wind turbines
- Significantly increased mortality due to domestic cats

# Mitigation measures

Conservation and propagation measures indicated. Restrictedly conservation dependent. Monitoring of known nursery roosts, development of cantonal action plans and closing of knowledge gaps, particularly with regard to spatial behavior. Involvement of the Regional Coordination Center for Bat Conservation in all measures.

#### **Roosts**

Strengthening of the protection of existing nursery and male roosts on buildings (inclusion in regional planning acts). Protection of roosts and their (aerial) access routes against domestic cats.

# Foraging grounds

Reduction of pesticide use in aquatic habitats (e.g. Bti toxin), in private households and in agriculture. Restoration of the riparian zones of larger standing and slow-flowing water bodies. Consideration of the species in the planning and implementation of wind energy projects.

# Flight corridors

Protection of migration corridors at inter-regional (international) level. Consideration of these corridors in wind energy projects.



#### Literature

Bohnenstengel et al. (2014). Rote Liste Fledermäuse, Stand 2011. Umwelt-Vollzug 1412.

Dietz et al. (2018). Bats of Britain and Europe. Bloomsbury Academic, London.

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

Rodrigues et al. (2014). Guidelines for consideration of bats in wind farm projects. UNEP/ EUROBATS, Bonn.

#### Links

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