

Country Report: Slovenia

The presence of twenty-seven bat species has been recorded from the territory of Slovenia until the present time (i.e. all European species except *Rhinolophus mehelyi*, *Eptesicus bottae*, *Myotis dasycneme*, and *Tadarida teniotis*). Considering that the entirety of Europe west of Russia (area c. 4.77 million km²) is populated by 32 species, 27 bats is a large number, particularly for a country with an area of only 20,251 km². Slovenia, particularly its western part, is actually biodiversity one of the major species "hotspots" of Europe. The high number of bat species reflects, at least in part, a high diversity of habitats and large number of caverns in the limestone bedrock (over 7,000 have been recorded so far).

The only records for the Blasius's horseshoe bat are from the 19th century and the species presumably vanished from its entire former range around the northern Adriatic. The greater noctule is seemingly exceptional vagrant, being recorded only once at the beginning of the 20th century. State of knowledge differs strongly among the remaining species, and the presence of several bats in Slovenia was confirmed only in the last decade; Brandt's bat and Northern bat were the last two species discovered in the country. Distributional ranges are far from being complete. Very is limited knowledge on the status of individual species (vagrants v. stationary; reproducing v. visitors), their population densities and temporal trends. More intensive research in 1990s indicated that some bats, which were previously supposed to be endangered or very rare, are actually more common (e.g. Mediterranean horseshoe bat, Schreiber's bat). On the other hand, a preliminary census of the Greater horseshoe bat suggests that this widespread bat is actually rare.

All bat species and their roosting places are protected by law. In the last years, Slovenia accelerated the process of adopting of the European legal standards in nature conservation. This is evident from the ratification, among others, of the Convention on Biological Diversity (1991), Bonn Convention (1998), and Bern Convention (1999). It is also expected that this year Slovenia will accede to the Agreement on the Conservation of Bats in Europe (EuroBats Agreement). Some of important bat areas (shelters, feeding grounds) are already included into reserves and more are planned to benefit from some degree of protection. It is planned that over 20% of the national territory will be under some level of protection.

Governmental institutions (Slovenian Museum of Natural History, Department of Nature Conservation) as well as one Non-governmental organisation (Biology students' Society, Section for Bat Research and Conservation) are engaged in monitoring of bat populations and their conservation. Major activities concern monitoring of hibernaculas, research projects on individual species' biology (Mediterranean horseshoe bat, Schreiber's bat), education (bat identification, field techniques) and popularisation. Thus, the European Bat Night was conducted for the first time in 1999 by the NGO. Slovenia also participates in the Central European *Miniopterus* protection programme.

Bats seem to be generally safe and there is no direct threat to their survival. It is thus difficult to expect that bat conservation will achieve top priority in conservation efforts. Other cases require urgent solutions in order to prevent the erosion of national biodiversity. Sustainable management with large carnivores and establishment of extensive reserves in the south of the country are the most urgent tasks of nature conservation in Slovenia. However, many species (including bats) and ecosystems will benefit when these goals will be achieved.