THE START OF THE BAT MONITORING SCHEME IN SLOVENIA

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The Bonn Convention and the EU Habitats Directive require that each member state undertake surveys of the conservation status of natural habitats and species. To address this issue the Ministry of the Environment and Spatial Planning of the Republic of Slovenia ordered a study with the aim of establishing a monitoring scheme for all bats species in Slovenia. Between 2006 and 2007 comprehensive fieldwork was carried out to assess in the field the best methods for monitoring specific bat species. The results were complemented with the results of the project Conservation of Amphibians and Bats in the Alps-Adriatic Region INTERREG IIIA Slovenia–Austria 2000-2006. Over 70 people surveyed 1150 potential roosts. In 220 hibernacula 12, and in 930 summer roosts 13, bat species were recorded. Approximately 50 mistnettings (21 bat species recorded) and 54 transect counts (15 bat species recorded) were carried out. Altogether, 27 out of the 28 bat species currently recorded for Slovenia were found.

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Based on field data we have proposed the following bat monitoring scheme for Slovenia:

A – method for estimation absolute numbers of animals, B – method for estimation relative numbers, C – method which might occasionally detect species.

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**ROOST SURVEY**

- **Maternity Roost Counts:** 12 target species
- **Hibernacula Counts:** 7 (8) target species

**ULTRASOUND TRANSECT COUNTS**

- One count per year on 189 sites, one count per three years on 182 sites
- One count per year on 38 sites, one count per two years on 29 sites

**MISTNETTING**

- One count per year on 9 sites, one count per two years on 11 sites

**COMPLEMENTARY RESEARCH**

- One transect count per year on 24 sites
- One count per year on 11 sites
- One count per two years on 11 sites

In total, 467 detailed monitoring protocols also dealing with an estimation of the quality of bat habitat were made.

**PROPOSED SLOVENIAN BAT MONITORING SCHEME WAS ACCEPTED AND MINISTRY OF THE ENVIRONMENT AND SPATIAL PLANNING OF THE REPUBLIC OF SLOVENIA ORDERED CONTINUATION OF BAT MONITORING ACTIVITIES FOR YEARS 2008 AND 2009.**

**PROBLEMS:** A lack of suitable data prevented an estimation of population size at the start of the monitoring for the majority of proposed sites and consequently for the whole scheme for particular species. An additional problem is that some areas of Slovenia lack the data needed to propose an adequate grid of monitoring sites covering particular species distribution. Therefore, intensive continuous monitoring of proposed sites and additional bat surveys are necessary.

Many dedicated persons from hole specter of organisations have been involved in project: Association For Križna jama, Biologija students' society, Center za iskustve v slaliških dejavnosti, Societé for cave exploration, Ljubljana, Spelunker Kranj, Slovenian Association for Bat Research and Conservation, Velenje National Park, Tourist office in Spominsko v Savinjski dolini, Tourist and environmental association Gospačka and Institute of the Republic of Slovenia for Nature Conservation. Thank you: Milan Biček, Ivan & Geiger Celšič, Branka Čadež, Matej Dular, Fajdiga Bojana, Sara Femec, Matej Jakopin, Marina Jurkovič, Andrej Kapla, Meta Kogoj, Irena Kodele Krašna, Irena Kranjec, Nina Kravanja, Jure Košutnik, Janez Krnič, Speleo club Novo mesto, Goričko regional park, Park Škocjanske jame, Slovenian Association for Bat Research and Conservation.

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