

23rd Meeting of the Standing Committee

Online meeting, 12 June 2024

Summary Report on the Outcomes of EPI projects funded in 2023



1. Monitoring of SARS-CoV-2 in European bat species, conducted by the Research Institute of Wildlife Ecology, University of Veterinary Medicine, Austria

The main goal was to retain the bat monitoring and conservation activities and to show that the SARS-CoV-2 pandemic is the best proof of the necessity for the recreation of sustainable human and ecosystem health and for enhancing the protection of wildlife in its natural and undisturbed habitat, away from close human contact.

The project aimed at sampling viruses from bats in several European countries using non-invasive sampling methods. Samples included oral and rectal swab samples, guano (fecal) samples, and organ samples from dead bats (only by authorised veterinarians).

The collected samples were analysed with validated molecular methods (real time quantitative RT-PCR) in the participating countries, or, after transport to the responsible laboratory, in Austria. Several European countries, such as Germany, the Netherlands, Switzerland, had already tested a batch of bat samples. Data from those countries had been collected. All bat researchers and virologists from European countries had been contacted to collect more data about the analyses of the bat samples.

In total, more than 2,000 bat samples were analysed, all samples revealed negative results in SARS-CoV-2 specific quantitative RT-PCR tests. No positive or suspected sample was identified. A paper will be published in a high-ranking peer-reviewed journal and the guidelines for bat handling will be updated.

2. **Towards an informed and sustainable bat conservation in Romania and Moldova**

Currently there is no functional national online bat database either in Romania, or in Moldova. Bat data is scattered among publications, projects, organisations and in personal databases, hindering the possibility of a clear overview of the bat faunas of both countries. This is also detrimental in case of development / infrastructure projects, where conservation-aimed arguments need proof in form of localised bat data. In addition, the latest (2016) Romanian bat book suffers from a series of erroneous data and incorrect citations, as does the latest (2013-2018) Romanian national report under Art. 17 of the Habitats Directive. Further, a comprehensive and, especially, a correct bat Atlas is needed for both Romania and Moldova. Lastly, both countries suffer from the small number of local bat experts, who face the multitude of bat conservation challenges.

The project will have diverse activities aimed at several target groups (e.g., bat experts, students, public), and will be tailored to give the best possible results:

M1. Creating the 10x10 km (for Romania and Moldova) and 50x50 km (for the European Atlas) species distribution maps will require the extraction of bat data from all existing literature sources, as well as unpublished reports, project summaries and other sources, inputting data into an online database and generating maps. Final version for the European Atlas dataset (50x50 km) will use the format provided by the European Mammal Foundation.

M2. Fieldwork in key seasons (summer, autumn, winter) and with proper bat research methods (direct observation, ultrasound records and/or mist-netting) will focus on areas where a lack of bat data is identified while generating distribution maps.

M3. The structure and content of the Bat Atlas of Romania, and respectively, of Moldova, will be written by the project team, and will have chapters like introduction, history of national bat research, conservation challenges and results, species accounts, etc.

M4. In the preliminary versions of the online databases already created, details will be finalised, especially about data input and generating reports (e.g., for species, for roosts, or for a certain geographic areas). Access levels will also be clarified, and public pages generated for all species.

M5. The project's results, including the efforts for the European Atlas of Mammals will be presented at bat conferences, and in the media to multiply impact and visibility.

M6. Final report will be compiled based on pre-established formats (for EUROBATS and for the European Mammal Foundation).

This project is ongoing, it ends in May 2024.

3. Identification of critical habitats for the conservation of the highly endangered Madeira pipistrelle (*Pipistrellus maderensis*)

The aim of the project is to unveil habitat selection in *P. maderensis* with special reference to the roosting and foraging site choice. The ecology of this species is completely unknown and the situation in Madeira is extremely concerning. Strong (>80%) declines in pipistrelle presence were recorded in the last 10 years in major foraging sites that were destroyed by extensive wildfires, and colonies recorded in important roosts disappeared. Meanwhile, the species has also disappeared from Porto Santo. Overall, the reduction in suitable and roosting habitats is very strong and, unless strict habitat protection is granted, the path towards extinction will be irreversible. Unfortunately, there is no data on habitats used by this species, so the aim of the project is to identify such habitats and inform concrete conservation actions through preparing a Conservation Strategy. No previous document aimed at planning the conservation of this species could consider its habitat preferences, so previous attempts have been inevitably hindered by this lack of knowledge. The scientific partner, Prof. Danilo Russo, has outstanding experience in habitat selection assessment. He will supervise the study and carry out capacity building on the island by training local researchers on such methods. He will also supervise the preparation of the species' Conservation plan.

The project was partially funded in 2023. The Secretariat procured radio-transmitters for the fieldworks which should take place in 2024.