

Agreement on the conservation of bats in Europe

Update to the national implementation report of Finland, 2003

A. General Information

Party: Finland

Date of Report: May 2003

Period covered by report: 2001-2003 (but also includes summaries for the last few years)

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B. Status of Bats Within the Territory of the Party

1. Summary Details of Resident Species

11 species of bats have been observed in Finland. 5 of them are widespread (Southern and Central Finland) and occur with regularly reproducing populations (table 1). One further reproducing species, Natterer's bat, is considered as endangered (Rassi 2001).

Apparently also *Pipistrellus nathusii* reproduces in Finland. In recent years it has been regularly observed in potential breeding habitats in the southernmost parts of Finland.

Two of the eleven species have recently been recorded for the first time in Finland. *Pipistrellus pipistrellus* was observed in Hanko, in southernmost Finland in 2001 (Halkka 2001, Salovaara 2001). A hibernating *Myotis dasycneme* was found in 2002 in eastern Finland, near the Russian border (Siivonen & Wermundsen 2003a, 2003b). A new observation of Natterer's bat was made in Turku in winter 2003 (Vihervaara et al. 2003). There are only few previous records of this species in Finland (Stjernberg 1996, 1998).

2. Status and Trends

Table 1 shows the distribution and status of bat species recorded in Finland. No estimates of population size are still available.

Table 1. Status and distribution of the bat species recorded in Finland. Status categories: CR (critically endangered), E (endangered), V (vulnerable). No species was classified as NT (near threatened). Rassi et al. 2001.

Species	Distribution/status
<i>Nyctalus noctula</i>	restricted, S Finland, vagrant
<i>Eptesicus nilssonii</i>	widespread, to S Lapland
<i>Vespertilio murinus</i>	restricted, S Finland, vagrant
<i>Plecotus auritus</i>	widespread, S & Central Finland, to 63° N
<i>Pipistrellus nathusii</i>	restricted, S Finland, vagrant

<i>Pipistrellus pipistrellus</i>	restricted, S Finland (first record 2001)
<i>Myotis nattereri</i>	rare, S Finland/ Endangered
<i>Myotis brandtii</i>	widespread, S & Central Finland, to 64-65° N
<i>Myotis mystacinus</i>	widespread, S & Central Finland, to 64-65° N
<i>Myotis daubentonii</i>	widespread, S & Central Finland, to 63-64° N
<i>Myotis dasycneme</i>	restricted, E Finland (1 hibernating specimen 2002)

3. Habitats and Roost Sites

Bat habitats and roost sites in Finland have not yet been systematically investigated at any depth. Table 2 comprises some data on these topics.

Table 2. Habitat of the species known in Finland. B (buildings), S (woodland), Sb (gallery forests, glades), V (ponds or lakes), Vv (streams), P (parks), R (roads), U (urban).

Species	Habitat	Hibernating sites	Summer roost sites
<i>Nyctalus noctula</i>		Only migrating?	None known
<i>Eptesicus nilssonii</i>	S, U, R, P, V, Vv	Cellars, mines, Caves, buildings	Buildings, hollow trees
<i>Vespertilio murinus</i>		Only migrating?	None known
<i>Plecotus auritus</i>	P, S, B	Cellars, caves, mines	Churches, buildings, bat & bird boxes, hollow trees
<i>Pipistrellus nathusii</i>	P, S	Only migrating?	(brick pile, bat box)
<i>P. pipistrellus</i>			None known (only one record at coast)
<i>Myotis nattereri</i>	S, Sb	Cave (one record)	Building
<i>Myotis brandtii</i>	S, R, P	Caves, cellars, crevices?	Buildings, hollow trees
<i>M. mystacinus</i>	S, R, P	Caves, cellars, crevices?	Buildings, hollow trees
<i>Myotis daubentonii</i>	V, Vv, S, Sb	Cellars, caves, mines	Hollow trees, buildings, old bridges, bat & bird boxes
<i>M. dasycneme</i>		Cellar (one record)	

Data on hibernating sites of bats has recently been collected by the Finnish Museum of Natural History (cf. Resolution No. 4). This information consists of published (scanty) and unpublished records, both old and recent data. Up till now there are about 240 records. However, from some of the sites there are several records.

According to this data set caves and bunkers, buildings and cellars seem to be most important types of hibernating sites in Finland. There are also some observations of bats hibernating in hollow trees or piles of wood. There are two records of a hibernating bat within the ground.

In the great majority of the sites there were only 1 to 10 individuals. Only two sites with more than one hundred hibernating bats and three sites with 30 to 50 animals have been recorded.

About half of the records comprise unidentified bats. Of the identified individuals about 60 percent are Northern bats, about 10 percent Longeared bats and the rest are *Myotis* species. The majority of the recorded *Myotis* individuals have been *Myotis daubentonii*, followed by *Myotis mystacinus/brandtii*. One individual of *Myotis dasycneme* (March 2002) and one *Myotis nattereri* (February-March 2003) were observed (Vihervaara 2003).

It is still unclear how representative this sample is on hibernating sites in Finland.

4. Threats

Situation similar to the previous report.

5. Data Collection

The source of data is the Zoological Museum, Finnish Museum of Natural History, P. O. Box 17, FIN-00014 University of Helsinki.

Basic information on hibernation, faunal composition and distribution in this report has been received from bat researchers and amateurs in Finland, as well as from published reports.

A preliminary bibliography of articles and books with data on the bat fauna and bats in Finland is included as an Appendix to this report.

C. Measures Taken to Implement Article III of the Agreement

6. Legal measures taken to prevent the deliberate capture, keeping or killing bats, including details of enforcement actions used to support such measures

All bats in Finland have been protected by law since 1923 (Nature Conservation Act 71/1923). All bats, both regularly occurring and vagrant species (bats), are now protected according to the new Nature Conservation Act (1096/1996). According to its § 39, (which) concerning individuals of a protected species, following is forbidden: deliberate killing and capture, deliberate harming, deliberate disturbance particularly during the breeding or on any other sites of significance to their life cycles.

The Natterer's bat is considered as a species under strict protection (Nature Conservation Decree (160/1997, § 22, Appendix 4), hence a special action plan for its protection can be made. The deterioration and destruction of a habitat important for the survival of the Natterer's bat is prohibited after that the regional environment centre has made an official decision of the site's borderline.

All bat species in Finland belong to those species mentioned in the EC Council directive 92/43/EEC, Annex IV (a). Hence, according to § 49 (Nature Conservation Act 1096/1996) following is forbidden:

- the destruction and deterioration of clearly identifiable breeding sites and resting places
- to keep bats
- to transport bats
- to sell or exchange bats or to offer them for selling or exchange

It is possible derogate from these provisions only for reasons mentioned in the habitats directive Article 16 (1). The permission can be given by the regional environment centre or the Finnish Environment Institute.

Finland is also a member of the Bern convention (since 21.3.1986), the Bonn convention (since 1.1.1989) and is, since October 20 1999, also a member of EUROBATS.

The Åland Islands have a legislation of their own on nature conservation. According to the Nature Conservation Act of the Åland Islands (82/1998), § 14, all mammals except game species, are permanently protected.

7. Sites identified and protected which are important to the conservation of bats

Situation similar to the previous report.

8. Consideration given to habitats which are important to bats

Bat habitats have not, generally, affected the choice of sites to the Natura 2000 programme in Finland, but in a few areas in SW Finland bats were mentioned as a strengthening protectional value. However, in summer 2003 systematic bat surveys in Natura 2000 sites in SW Finland will be conducted.

9. Activities carried out to promote the awareness of the importance of the conservation of bats

In March 2001 a bat symposium was arranged in Helsinki by the Finnish Museum of Natural History and the Ministry of the Environment. Basic information on bats, bat ecology and research methods was given by two invited lecturers from Sweden, Professor Ingemar Ahlén and Dr. Johnny de Jong. The EUROBATS agreement as well as legislation on bat protection in Finland and in EU were elucidated by Matti Osara. Information on bat rabies was given by Professor Erkki Neuvonen and Dr. Torsten Stjernberg gave an overview of bat research in Finland. About 60 persons attended the symposium.

Information about bats has been disseminated via e-mail posting lists as well as through articles in magazines, newspapers, radio and television programmes as well as during excursions. This kind of work has been conducted by the staff of the Zoological museums in Helsinki, in Oulu, Kuopio and Turku, as well as by amateurs engaged in bats in Finland. Also administrators at the regional environment centers, administrators in different municipalities, especially in Turku, researchers at the Universities of Helsinki, Jyväskylä, Oulu and Turku have been active informers as well as persons engaged in NGOs.

During the summer 2000 a leaflet on bats was issued by the Ministry of the Environment. This leaflet has been sent to people asking for information on bats as well as to people participating in field trips. Information on bat boxes has been distributed during many years.

Several field trips have been organized in order to introduce bats to public. These trips have been very popular.

The Bat CD "We are your friends", provided by EUROBATS, was sent by the EUROBATS Secretary to the Finnish Broadcasting Company.

In 2001 Bat Group Finland was founded.

In March 2002 the Chiropterological Society of Finland was founded. The home page of the society (www.lepakko.org) also comprises information on bats and their imperatives.

10. Responsible bodies, in accordance with Article III.5 of the Agreement, nominated for the provision of advice on bat conservation and management

(a) Zoological Museum, Finnish Museum of Natural History, P.O. Box 17, FIN-00014 University of Helsinki.

(b) The Finnish Environment Institute, P. O. Box 140, FIN-00251 Helsinki.

11. Additional action undertaken to safeguard populations of bats

Situation similar to the previous report.

12. Recent ongoing programmes (including research) relating to the conservation and management of bats

Data on hibernating sites of bats – location, type, bat species and numbers – has been collected from different sources, i.a. with the aid of bat researchers and amateurs as well as the public, cf. paragraph 3. This work has been conducted by Eeva-Maria Kyheröinen, Finnish Museum of Natural History.

Diversity and abundance of the bat fauna in different parts of the Archipelago Sea in South-Western Finland has recently been studied by Petteri Vihervaara, University of Turku.

Together with colleagues, i.a. Markku Lappalainen, Ari Karhilahti and Harri Vehviläinen, Vihervaara has also started studies on hibernating bats and nursery colonies on the mainland and in the archipelago of South-Western Finland. This project is coordinated by the University of Turku and the city of Turku is involved. Several hibernating sites have been found in the Turku area, i.a. an important site with more than forty animals. In this site also one hibernating Natterer's bat has been recorded (Vihervaara et al. 2003).

The same working group has also in 2003 started a project on migrating bats by putting up "bat migration boxes" in the outermost parts of the Archipelago Sea.

Several surveys have been made by Yrjö Siivonen, Bat Group Finland during 2001-2003. He has surveyed the bat fauna i.a. in the cities of Vantaa, Espoo, Järvenpää and Tampere (Siivonen 2001, Siivonen 2002a, 2002b, 2002 c). See also Inf.EUROBATS. AC7.33.

In 2003 a bat mapping project will be conducted in the city of Lahti by Mikko Erkinaro, University of Jyväskylä.

A study of habitat selection and feeding activity of bats in the Lammi region in Southern Finland is conducted by Eeva-Maria Kyheröinen, University of Helsinki.

Studies on survey methods have been conducted by Kari Salovaara and Olli Haukkovaara in South Finland. Together with colleagues they are also surveying bats in the same region.

Torsten Stjernberg, together with Juhani Lokki and Olli Haukkovaara, has continued to register the occurrence and distribution of bat species in Finland. The project started in the early 1980's. The registration has been carried out with bat detectors in a 10 x 10 km grid system (Grid 27°E). Combined with data on specimens in museum collections provisional Atlas maps for the different species have been worked out. Together with new data collected by researchers and amateurs, in cooperation with the newly founded Chiropterological Society of Finland will be published as a Finnish bat atlas.

13. Consideration being given to the potential effects of pesticides on bats, and efforts to replace timber treatment chemicals which are highly toxic to bats

Report to EUROBATS provided by Matti Osara 2001.

D. Functioning of the Agreement

14. Co-operation with other Range States

The University of Turku together with the Finnish Museum of Natural History, Chiropterological Society of Finland and the Environmental Office of Turku is preparing an interbaltic co-operation project. The aim is to establish an effective network between bat researchers from the Northern Baltic, and to promote bat studies and bat conservation research. The project also aims to promote public awareness of bats.

15. Measures taken to implement Resolutions adopted by Meeting of Parties

Resolution No. 2. Consistent Monitoring Methodologies.

Similar to the previous report.

Resolution No. 3. Transboundary Programme: Species Proposals

Similar to the previous report.

Resolution No. 4. Transboundary Programme: Habitat Proposals

Since the knowledge of hibernating bats in Finland still is rather scarce, and wintering strategies here presumably differs, at least in details, from those in more southern regions, basic inventories of potential sites will be continued. A report of what is known is under preparation, see paragraphs 3 & 12.

APPENDIX 1

FINNISH BAT LITERATURE. A BIBLIOGRAPHY

This bibliography consists of articles and books concerning bats – their distribution, ecology and conservation in Finland.

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Addenda: More recent references, also including articles promoting the awareness of bats

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