Inf.EUROBATS.MoP3.15

IMPLEMENTATION OF THE AGREEMENT ON CONSERVATION OF BATS IN EUROPE

NATIONAL REPORT OF HUNGARY

2000

A. General Information

Name of Party: HUNGARY

Date of Report: March 2000

Period covered by the Report: March 1998 – February 2000

Competent Authority: Ministry for Environment

This report has been compiled in accordance with the Resolution No. 7, on the Format of National Reports, of the Second Session of the Meeting of Parties to the Agreement on the Conservation of Bats in Europe.

B. Status of Bats Within the Territory of the Party

1. Summary Details of Resident Species

Species	Population estimate	Protection status	Summer Roost	Winter Roost	Trend	Habit at	Threats
R F	12.000	P	90% A	100%	decline	M F S	AC, RB
R H	10.000	P	60% A	100%	stable	M F	AC, RB
R E	1.000	S, R	100% C	100%	stable	M F	AC
M E	12.000	S, R	100% A	? C	stable	O S	AC, RB
M BEC	15.000	S, R	100% H	? CH	decline?	M F	AC, LT
M N	15.000	P	100% H	? HC	?	M F	AC, LT
M DAS	2.500	S	60% A	? HC	decline	O S	AC, RB,
M DAU	100.000	P	90% H	? HC	?	O W	AC, RB,
M MYS	30.000	P	100% H	? HC	?	M F	LT, AC, LH
M BR	10.000	P	100% H	? HC	?	M F	LT, AC, LH
M M	50.000	P	80% A	100%	increase	O S	RB, AC
M BL	20.000	P	90% A	100%	stable	O S	RB, AC
N N	400.000	P	60% B	? HB	increase	O S F	LT, IK
N LAS	200	P	100% H	100% H	stable	M F	LT
N LEIS	30.000	P, R	100% H	100% H	?	M F	LT
E S	200.000	P	80% A	? C B	stable	O S	RB, AC
E N	1–50	P	?	C	?	M F	AC
V M	500	P	?	?	?	O S	RB
P P	300.000	P	80% H	90% H	?	O F S	LT
P N	10.000	P	100% H	100% H	?	O W	LT
P K	300	P	?	?	increase	O S F	?
P S	0–50	P	?	?	?	M F	?
P AUS	80.000	P	80% A	90% CM	decline	O S	RB, AC

P AUR	20.000	P	100% H	90% H	?	M F	LT, AC
B B	8.000	S, R	80% H	? CH	decline	M F	LT, AC
M S	3.500	S	100% CM	100%	increase	M F	AC

Abbreviations and acronyms:

SPECIES

R F	Rhinolophus ferrumequinum
R H	R. hipposideros
R E	R. euryale
M E	Myotis emarginatus
M BEC	M. bechsteini
M N	M. nattereri
M DAS	M. dasycneme
M DAU	M. daubentoni
M MYS	M. mystacinus
M BR	M. brandti
M M	M. myotis
M BL	M. blythi oxignathus
N N	Nyctalus noctula
N LAS	N. lasiopterus
N LEIS	N. leisleri
E S	Eptesicus serotinus
E N	E. nilssoni
V M	Vespertilio murinus
P P	Pipistrellus pipistrellus
P N	P. nathusii
P K	P. kuhli
P S	P. savii
P AUS	Plecotus austriacus
P AUR	P. auritus
B B	Barbastella barbastellus
M S	Miniopterus schreibersi

PROTECTION

P	Protected
S	Strictly protected
R	National Red List

ROOST

A	Attic
B	Block of house
C	Cave
H	Hollow
M	Mine

HABITAT

F	Forest
M	Mountain region
O	All over in Hungary
S	Settlement
W	Wetland

THREAT

AC	Activities in caves
IK	Intentional killing in housing estates
LH	Loss of habitats
LT	Loss of old trees
RB	Reroofing / renovation of building

2. Status and Trends

Nowadays 26 species of bats are known to have occured in Hungary. All of them have been protected by national legislation. Six species (Rhinolophus euryale, Myotis emarginatus, myotis bechsteini, myotis dasycneme, Barbastella barbastellus, Miniopterus schreibersi) are under strict legal protection because of their extreme threats have been experienced for last years or decades.
According to the recent data, size of population of four species (Myotis myotis, Nyctalus noctula, Pipistrellus kuhli, Miniopterus schreibersi) is considered to have been increased.
On the contrary, a certain extent of decline is pointed out at five species (Rhinolophus ferrumequinum, Myotis bechsteini, Myotis dasycneme, Plecotus austriacus, Barbastella barbastellus).
The size of population of six species (Rhinolophus hipposideros, Rhinolophus euryale, Myotis emarginatus, Myotis blythi, Nyctalus lasiopterus, Eptesicus serotinus) is known to be stable and the trend of the rests is unknown due to lack of reliable information.

3. Habitats and Roost Sites

Caves
All known 3500 caves in Hungary are protected and 124 of them are strictly protected.
Some completely closed cave doors were replaced to a bat-friendly door.
Several information boards have been placed at the most important caves close to the entrance.

Mines
There are nine endangered mines to be considered important underground habitats for bats. Strengthening the entrances of these would be an important task.
These sites being hardly known have not been disturbed by tourism so far.

Woodlands
18% of the whole area of Hungary are covered by forest. Unfortunately nearly half of them is plantation (Robinia pseudoacacia, Populus ssp., Pinis ssp., Quercus rubra, etc.) in which there are not any tree-holes. In the last years the new law on forestry was accepted. As a consequence, it is prohibited to cut down more than 2ha contiguous forest at the same time. On the other hand, it is compulsory to plant only native tree species. We hope that these provisions will help to preserve the populations of forest-dwelling bats.

Buildings
The members of Hungarian Bat Research Society have just finished a house-dwelling bat project. In the framework of this there have been 2185 buildings (without the panel buildings), including 1618 churches and 62 castles, surveyed between 1991 and 1997. Bats were found in 869 buildings of which 378 sites were occupied by 20 or more individuals. In Hungary colonies with more than 20 individuals are 'significant' and strictly protected.

Panel buildings
In Hungary the Noctula bat is the most urbanizated bat species. Its second main roost type occurs in blocks of houses in panel gaps. In the last decade they changed their habitat and nowadays this is the most common species in panel buildings in towns. Those colonies living on housing estates use these artificial roosts throughout whole year as both summer and winter roosts. Nowadays it is common that thousands of bats live on single housing estates. From 1997 September until 1999 July we studied a housing estates in the town called Debrecen. 142 roosts were explored on this 103 ha large housing estate. Bats prefer roosts at the height of 6-8 metres (64 % of the roosts) without any seasonal differences. Results show that there are no bat roosts below the height of 3 metres. The width of used entrance is minimum 19 mm. The density is 24 individuals/ha, which is higher than in a natural forest due to the possibility of dense roosts. In other Hungarian towns the situation is similar to this, therefore, it is a very important task to save these colonies.

Migration route
We recaptured a Rhinolophus ferrumequinum in Transylvania, which was banded in Hungary. The distance is 320 km!

4. Threats

- The intensive cave tourism still means a serious problem.
- Several mine openings are threatened by falling in. It occurs to be a very serious problem. We have not enough money at present to reconstruct these openings.

The most significant underground habitat (mine) is in high danger. 13 species of bats have been detected so far. An English-Hungarian mining company has performed a gold-investigation project for three years. They have sunk several holes into the rocks. These works did not mean a real danger for bats, however, if the company finds a significant amount of gold, the present mine will be demolished.

- Building work in dwelling houses, including insulating walls, may be excluding and killing a number of individuals of some species.
- Reroofing and renovating churches and old buildings is considered as serious problem.

5. Data collection, analysis, interpretation and dissemination

House-dwelling bat database (Hungarian Bat Research Society)
Fauna database (Hungarian Bat Protection Foundation)
Register of specimens of museums (Hungarian Natural Science Museum)

C. Measures taken to implement article III of the Agreement

6. Legal measures taken to protect bats, including enforcement action

At present the Law Decree No.4 of 1982 on Nature Conservation, the Order No. 8 of 1982. (III.15.) MT on the implementation of the Nature Conservation Law Decree of 1982 and the

modifications of the same: Order No.12 of 1993. (III.31.) KTM, and Order No. 15 of 1996. (VII.26.) KTM are in force. A new Act (No. 53 of 1996 on the Conservation of Nature) entered into force on 1 January 1997.

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

There are 3500 caves known in Hungary. All of them are protected ex lege. A number of caves are considered as important habitat to bats.
According to the EC Habitats directive, sites may be eligible to be designated special areas of conservation (SACs). The designation process is under preparation presently in Hungary.

8. Consideration given to habitats which are important to bats

- A number of grilles have been fixed to the entrances of caves to safeguard the populations.
- The flooding of entrances, where it is possible, is thought to be successful means to prevent accesses to certain caves.
- There are some proposals and plans to close mines by grilles as well as to reconstruct accesses of mines but they have been carried out nowhere due to lack of money.
- Lots of effective measures have been done for the sake of house-dwelling bats. The timing of the renovation, reroofing churches properly is considered to be one of the most important.
- At the roost sites of bigger colonies the stairs and attics have been cleaned up from droppings regularly (generally once a year) in order that caretakers of churches should be free from any inconveniences caused by bats.
- Transformation of attics unoccupied by bats can be needed as well as useful measure at certain sites. Conditions for bats may be improved and disturbances (e.g. by pigeons) may be reduced by this activity.
- There have been already some initiatives concerning forest-dwelling bats. Thanks to successful agreements between the nature conservation side and the forestry, old trees with holes for bats have been marked and remained at some places.
- Artificial bat-boxes have been set out at different parts of the country (e.g. close to food foraging sites without proper roosts). As far as the result is considered there have been encouraging signs.

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

Publications produced in the last year:
- Proceedings of the I. Conference on the Bat Conservation in Hungary pp.69.
- Bell towers, owls, bats (colour leaflet, pp.12.)
- Bakos Beáta - Molnar Viktor (1998): Bat protection activities for children. Budapest 23 pp.

To encourage bat protection activity we publish and distribute information booklets, and attempt to convince people of the usefulness of bats and the importance of its protection through TV and radio programmes and newspaper articles. We organise lectures to educate

pupils in primary and secondary schools and universities. Camps organised for bat ringing also give a great opportunity to teach the young participants and learn all the species.

We organized the Bat-night in 9 towns with about 1600 participants.

II. Conference on the Bat Conservation in Hungary was organized in December 1999.

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

Although bodies have been not yet nominated for these tasks by legislation, there are two organizations, in addition to the 9 National Park Directorates as local nature conservation authorities, playing active roles in the provision of advice:
-Hungarian Bat Research Society
-Hungarian Bat Protection Foundation

11. Additional action undertaken to safeguard populations of bats

12. Recent and ongoing programmes (including research and policy initiatives) relating to the conservation and management of bats. In the case of research, summaries of completed projects should be provided, giving references where possible and acknowledging the sources of funding.

-Bat boxes (Csaba Fehér, Péter Paulovics, Mihály Endes)
-Monitoring of caves (Miklós Szatyor, Zoltán Molnár, Peter Gombkötő)
-Forest-dwelling bat research (Péter Estók, Csaba Fehér, Miklós Szatyor)
-Ecological conditions of the hibernacula of Rhinolophus ferumequinum (Miklós Szatyor)
-Monitoring of house-dwelling bats (Zoltán Bihari, Csaba Fehér, Zoltán Molnár, Péter Paulovics, Péter Gombkötő)
-Population-ecology of Ectoparasites (Péter Paulovics)
-Hibernating activity of bats (Péter Paulovics)
-Taxonomy, systematics and zoogeography of Old World bats (Gábor Csorba)
-Bats of wetlands (Imre Dombi, Noémi Papp)
-Ecological roles of bats in forest ecosystems (Károly Papp)
-Movements of Myotis emarginatus (Károly Papp)
-Rehabilitation and reproduction of injured and captured bats (Zoltán Molnár)
-Study of species diveresity and sex ratio at mating sites (caves) in autumn (Zoltán Molnár)
-Ecology of Myotis nathusii (Csaba Fehér)
-Pathoanatomy and pathophysiology of bats (Viktor Molnár)
-Veterinary treatment of sick and injured bats (Viktor Molnár)
-Problems and factors by keeping bats in captivity (Viktor Molnár)
-Endoparasitological (coprological) and ectoparasitological studies of bats (Viktor Molnár)
-Roost selection of Nyctalus noctula (Judit Bakos, Zoltán Bihari)
-Migration of Myotis Daubentoni end M. dasycneme (Imre Dombi)
-Population ecology of bats (Zoltán Bihari)
-Roost selection of Rhinoilophus ferrumequinum and Myotis myotis (Zoltán Bihari)
-Urbanization of bats (Zoltán Bihari)

-Ecology and monitoring of Miniopterus schreibersi

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

Remedial timber treatment has been used in some cases only due to drier climate. Therefore the use of these chemicals does not cause considerable harm to bats in Hungary.
The killing of mosquitoes by pesticides dispersed from plane, in holiday resorts have been likely to have more effect. Although this effect has not yet proved, decline of bat population of smaller size had been observed in some cases. The reason was likely to be the decrease of food supply.

D. Functioning of the Agreement

14. Cooperation with other Range States

There has been an ongoing contact with Slovakian bat researches in relation to the migratory routes of bats, in particular the Greater Horseshoe bat for years. This co-operation is important because a significant proportion of the population of this species lives in Hungary in summer, then they migrate to Slovakian caves and mines in winter.

There is a close co-operation with Romanian colleagues in order to survey the caves and the bat colonies in Romania.

Hungary has initiated a regional single-species conservation programme, involving several countries from Europe, for the conservation of Miniopterus schreibersi endangered throughout the continent. The first meeting was held in Budapest in September 1997. The participants have prepared information sheets for the survey of particular caves and mines. This year an Action Plan, based on the outcomes from this survey, should be prepared. The programme has been supported by the financial assistance of the Government of Germany and the Secretariat of the European Bats Agreement.