# National Report on the Implementation on the 'European Bat Agreement' HUNGARY

**General informations**
Party: Hungary
Date of Report: February 2001
Period Covered by Report: January 2000 – February 2001
Competent Authority: The Ministry of Environment Policy

**Status of bats within the territory of the Party**

1. Summary details of resident species. Their status and trends in the last year

In Hungary all bat species gained protection by law in 1901. It was prohibited to capture, killing, keeping and disturbance of bats in any way. In 1974 the theoretical value of the animals were also determined as a fine for killing, capturing or illegal trade of them. Now 26 species living in Hungary are all either protected or strictly protected. From the summer of 2001 two species will get srtictly protected status: Rhinolophus ferrumequinum and Nyctalus lasiopterus. (1.Table)

In the last year we proved the presence of Pipistrellus pygmaeus in several part of Hungary.

2. Habitats and roosts

Caves
-Some completely closed cave doors were replaced to a bat-friendly door.
-Several information boards were placed before the most important caves.
-The intensive cave tourism still means a serious problem.

Mines

It occurs to be a very serious problem that several mine openings are threatened by falling in. In the last year we fixed the most dangerous entrances.

The Nature Conservation Bureau prepared a new low for the protection of mines. A project started in January to make a list about the most important bat-mines. Probably thirty mines will be protected from 2002.

Buildings

The members of Hungarian Bat Research Society continously check the most imprortant roosts in churches and castles. In Hungary colonies with more than 20 individuals are 'significant' and strictly protected.

Panel buildings

In Hungary the noctule 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 Hungary. These colonies are very threatened and the local people usually expel them, because they affraid of them and the bats make noise. Therefore, it is a very important task to save these colonies.

Migration route

We have summarized some of the bat migration data. (Fig. 1, 2, 3, 4)

3. Data collection

House-dwelling bat database (Hungarian Bat Research Society)

Fauna database (Hungarian Bat Protection Foundation)
Register of specimens of museums (Hungarian Natural Science Museum)

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

Publications produced in the last year:
Miklós Szatyor 2000. Európa denevérei (Bats of Europe). 142pp. (book)

To encourage bat protection 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. They can get to know all the species. These young children can give the society the future bat-workers.

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

-Bat boxes (Csaba Fehér, Péter Paulovics, Mihály Endes)
-Monitoring of caves (Miklós Szatyor, Zoltán Molnár, Peter Gombkötő)
-Monitoring of mines (Zoltán Bihari, Péter Gombkötő, Zoltán Molnár, István Géczi, Sándor Boldogh)
-Forrest-dwelling bat research (Péter Estók)
-Ecological conditions of the hibernacula of Rhinolophus ferumequinum (Miklós Szatyor, Zoltán Bihari)
-Monitoring of hous-dwelling bats (Zoltán Bihari, Csaba Fehér, Dénes Dobrosi, Isván Géczi, Zoltán Molnár, Péter Paulovics, Péter Gombkötő)
-Activity of hibernating bats (Péter Paulovics)
-Taxonomy, systematics and zoogeography of Old World bats (Gábor Csorba)
-Bats of wetlands (Imre Dombi, Noémi Papp, Dénes Dobrosi)
-Rehabilitation and reproduction of injured and captured bats (Zoltán Molnár, Viktor 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 Daubentonii end M. dasycneme (Imre Dombi)
-Population ecology of bats (Zoltán Bihari)
-Roost selection of Rhinolophus ferrumequinum and Myotis myotis (Zoltán Bihari)
-Urbanization of bats (Zoltán Bihari)
-Ecology and monitoring of Miniopterus schreibersii (Péter Gombkötő)

6. Cooperation with other States

There has been a continous contact for years with Slovakian bat researches in relation to the migratory routes of bats, in particular the Greater Horseshoe bat. The reason for this co–operation is that a significant proportion of the population of this species lives in Hungary, then they migrate to winter to Slovakian caves and mines.

A close co–operation with Romanian colleagues is emerging 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.

1.Table Bat species and their status in Hungary

| Species | Population estimate | Protection status | Summer Roost | Winter Roost | Trend | Habitat | Threats |
|---|---|---|---|---|---|---|---|
| R F | 10.000 | P | 95% A | 100% CM | decline | M F S | AC, RB |
| R H | 11.000 | P | 60% A | 100% CME | stable | M F | AC, RB |
| R E | 1.050 | S, R | 100% C | 100% CM | stable | M F W | AC |
| M E | 12.000 | S, R | 100% A | ? C | stable | O S | AC, RB |
| M BEC | 14.000 | S, R | 100% H | ? CH | decline? | M F | AC, LT |
| M N | 14.000 | P | 100% H | ? HC | ? | M F W | AC, LT |
| M DAS | 2.500 | S | 60% A | ? HC | decline | O S W | AC, RB, LH |
| M DAU | 100.000 | P | 90% H | ? HC | ? | O W F | AC, RB, LH |
| M MYS | 25.000 | P | 100% H | ? HC | ? | M F W | LT, AC, LH |
| M BR | 10.000 | P | 100% H | ? HC | ? | M F | LT, AC, LH |
| M M | 50.000 | P | 80% A | 100% CM | increase | O S | RB, AC |
| M BL | 20.000 | P | 90% A | 100% CM | 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 | 0–20 | P | ? | C | ? | M F | AC |
| V M | 500 | P | ? | ? | ? | O S | RB |
| P P | 300.000 | P | 80% H | 90% H | decline | 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 | 0–20 | P | ? | ? | ? | M F | ? |
| P AUS | 70.000 | 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% CM | 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 |
| E | Cellar |
| 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 |

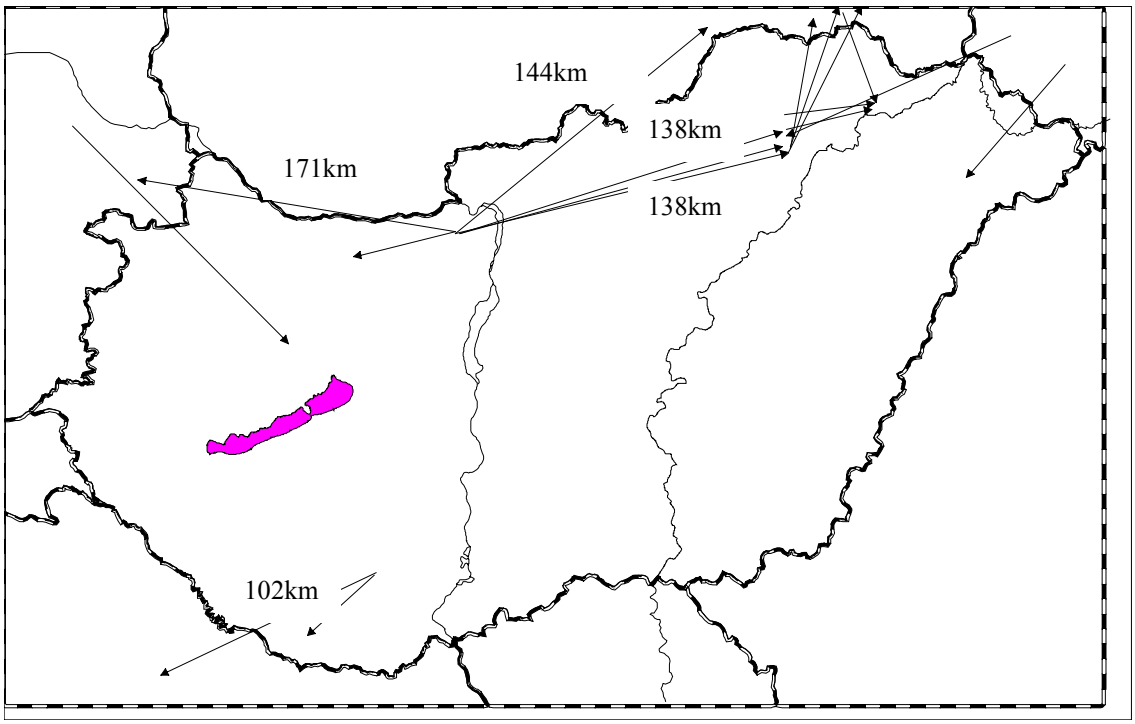


Figure 1. Migration route of Miniopterus schreibersii

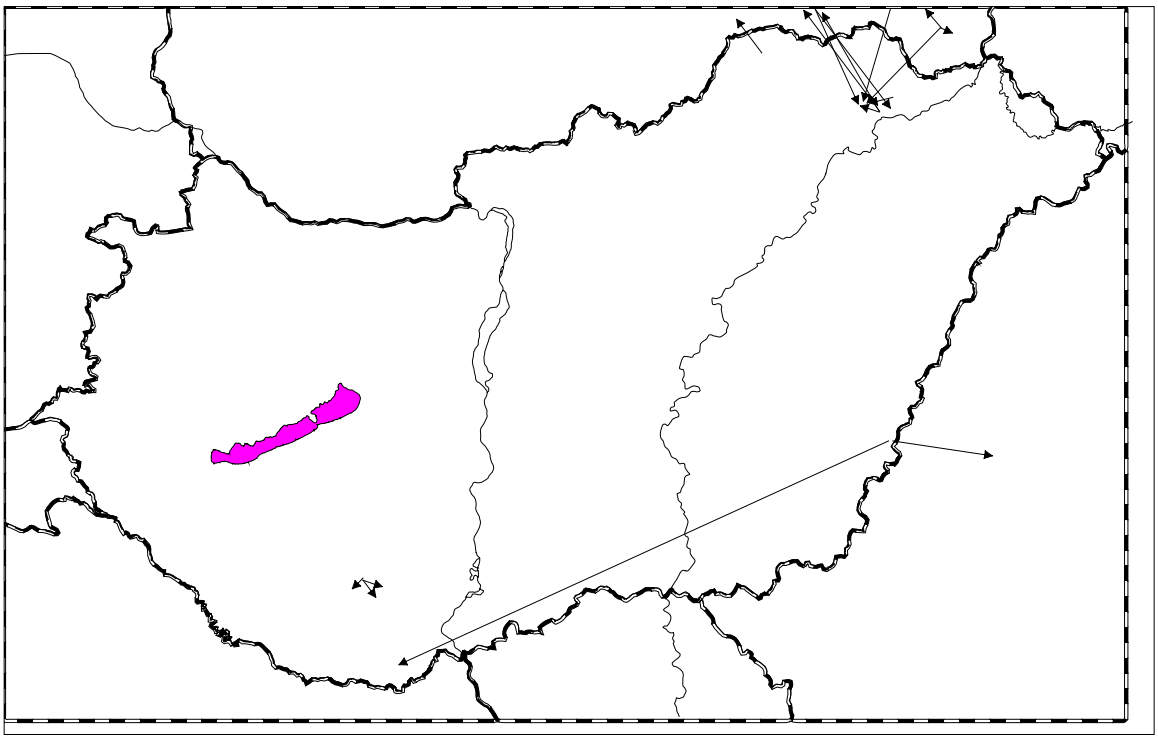

Figure 2. Migration route of Rhinolophus ferrumequinum

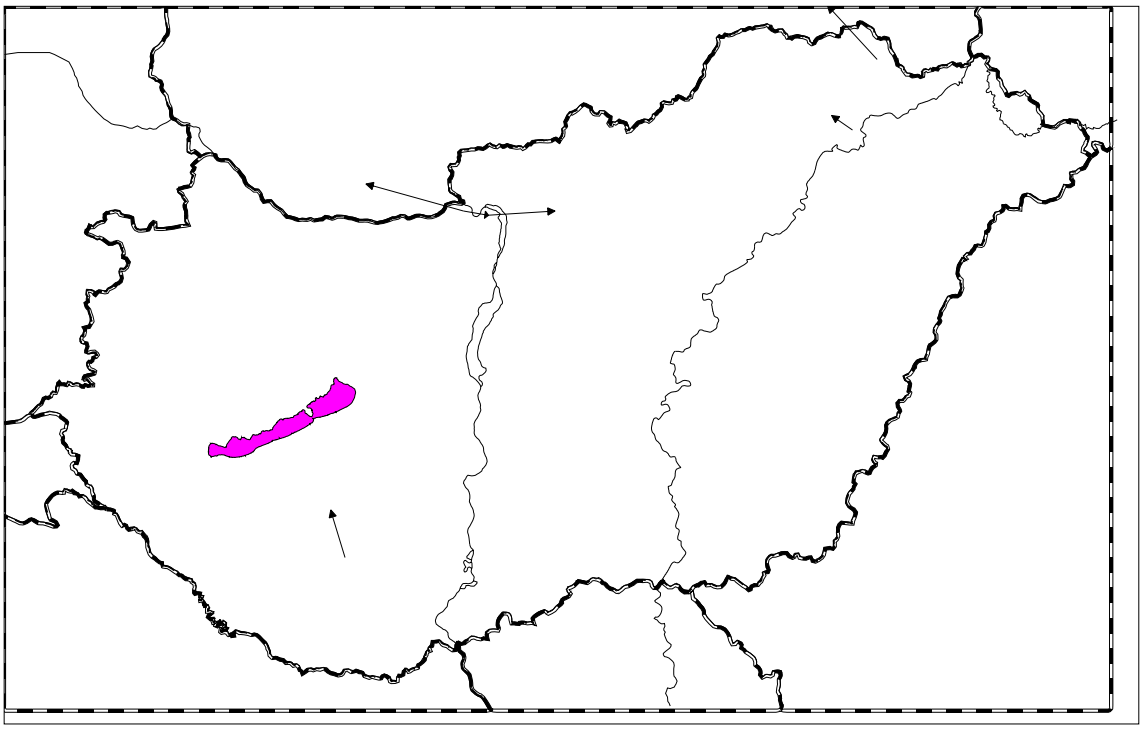

Figure 3. Migration route of Myotis myotis

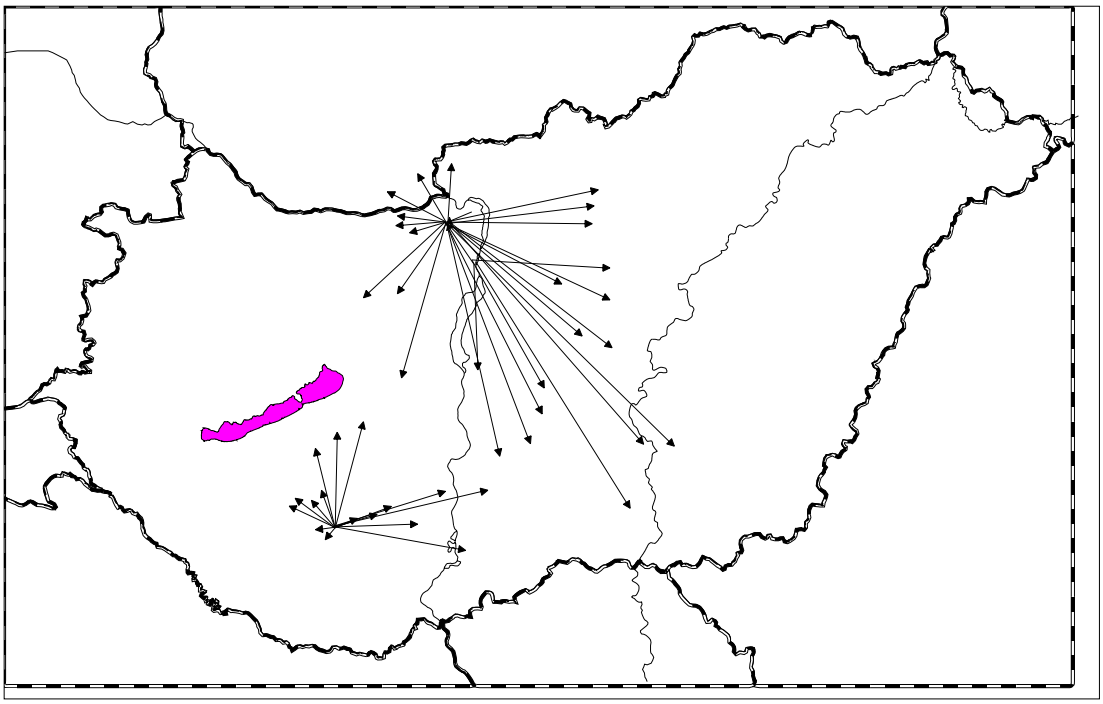

Figure 4. Migration route of Myotis blythii