



REPUBLIC OF MOLDOVA

**MINISTRY OF THE ECOLOGY
AND NATURAL RESOURCES**

Biodiversity Research and Conservation Group FAUNA

***NATIONAL REPORT
ON THE IMPLEMENTATION OF THE EUROBATS AGREEMENT
IN THE REPUBLIC OF MOLDOVA***

Chisinau, 2006

A. GENERAL INFORMATION:

- Name of the Party: **Republic of Moldova**
 - Date of Report: **May 2006**
 - Period Covered: **July 2004 – August 2006**
 - Competent Authority: **MINISTRY OF ECOLOGY AND NATURAL RESOURCES:
Environmental Policy and European Integration Division
Ms Diana Celac
9 Cosmonautilor str.
MD-2005 Chisinau
Republic of Moldova
Tel: +373 22 204530
Fax: +373 22 226858
e-mail: celacd@mediu.moldova.md**
- Changes regarding: Competent Authority responsible person

B. STATUS OF BATS WITHIN THE TERRITORY OF THE REPUBLIC OF MOLDOVA:

1. Summary Details of Resident Species

There are 21 species of bats recorded in Moldova. Because of the deficiency of data it is difficult to know the real state of the species. Most of them are considered rare and are protected by national legislation. Six species are included in the second edition of the Red Book of the Republic of Moldova. The most frequent occurring in underground shelters are *Myotis daubentonii*, *M.mystacinus*, *Plecotus austriacus* and *Rhinolophus hipposideros*. The biggest colonies in underground shelters usually form *M.blythii*, *M.daubentonii* and *Rh.hipposideros*. Forest bats and bats living in human localities are not yet enough studied. However it is known that the most frequent bats occurring in forests are *Nyctalus noctula*, *M.mystacinus*, *M.daubentonii*, *Pipistrellus pipistrellus*, *P.pygmaeus* and in settlements - *M.mystacinus*, *Eptesicus serotinus* and *Plecotus austriacus*.

2. Status and Trends

N	Species	Categories of rarity according to the "Law on Animal Kingdom" Annex 4	IUCN Red List Categories according to data of the Group FAUNA
1.	<i>Rhinolophus ferrumequinum</i>	III- Vulnerable	CR
2.	<i>Rhinolophus hipposideros</i>	IV- Rare	LR/nt
3.	<i>Myotis myotis</i>	IV- Rare	CR
4.	<i>Myotis blythii</i>	IV- Rare	EN
5.	<i>Myotis bechsteinii</i>	IV- Rare	CR
6.	<i>Myotis nattereri</i>	IV- Rare	CR
7.	<i>Myotis mystacinus</i>	not evaluated	VU
8.	<i>Myotis dasycneme</i>	IV- Rare	CR
9.	<i>Myotis daubentonii</i>	IV- Rare	LR/lc
10.	<i>Plecotus auritus</i>	IV- Rare	DD
11.	<i>Plecotus austriacus</i>	not listed	LR/cd
12.	<i>Barbastella barbastellus</i>	IV- Rare	CR
13.	<i>Eptesicus serotinus</i>	IV- Rare	LR/cd
14.	<i>Vespertilio murinus</i>	II- Endangered	DD
15.	<i>Pipistrellus pipistrellus</i>	not evaluated	DD
16.	<i>Pipistrellus pygmaeus</i>	not listed	DD
17.	<i>Pipistrellus kuhlii</i>	not listed	DD
18.	<i>Pipistrellus nathusii</i>	not evaluated	DD
19.	<i>Nyctalus noctula</i>	VIII- Out of danger	DD
20.	<i>Nyctalus lasiopterus</i>	II- Endangered	DD
21.	<i>Nyctalus leisleri</i>	IV- Rare	DD

3. Habitats and Roost Sites

From the beginning of the 20th century there are a large number of artificial underground shelters in the Republic of Moldova. Most of them are working or abandoned mines of limestone exploitation. The only known natural shelters are some natural limestone and sand caves. Forest bats occupy hollow trees. House dwelling bats live usually in the attics and different crevices and cavities in the walls.

Forests poorly cover Moldova and the biggest forests are concentrated in the central part of the country. There are some wetlands in the southern and south-eastern parts of Moldova.

4. Threats

Among the main threats to bat populations in Moldova we can mention the following:

- Loss of natural habitats, especially the loss of forests and wetlands
- Using of pesticides in agriculture
- Disturbance and killing by humans

The rural population knows little or nothing about the important role of bats in nature, and presently does not have any interest in conserving them. They are attributed with evil qualities because they are creatures of the night and due to this unfavourable perception, people kill bats when they are roosting or hibernating.

5. Data Collection

Data on bats are collected by the specialists from Group FAUNA since 1995 and are stored in a database.

C. MEASURES TAKEN TO IMPLEMENT ARTICLE III OF THE AGREEMENT

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

The following legislative acts currently protect bats:

18 bat species – are protected by the Law on Animal Kingdom and 6 of these species are included in the second edition of the Red Book of Moldova. The other three species are recently discovered in Moldova and are not yet considered by any legal acts. According to the Annex Nr. 4 of the Law on Animal Kingdom, there is a list of bats species included in and the penalty taxes are ranging from 10 to 50 minimal salaries for the law violation.

Law nr. 1244-XIV from 28th of September 2000 on Accession to the CMS, AEWA and EUROBATS Agreement adopted by the Parliament of the Republic of Moldova.

Moldova is also a part of the Convention on the Conservation of European Wildlife and Natural Habitats where the majority of bat species are included as well as the Convention on Biological Diversity.

Realization of Agreement's objectives (laws, strategies, action plans and programmes that have been elaborated)

a. Law nr. 244-XI from 20.10.2005 on modification of Appendix 3 (A) of the Law nr. 1538-XIII from 25.02.1998 On the Fund of Natural State Protected Areas for taking the “Pestera Surprizelor” Cave under state protection which is an important habitat for bat species suffering a decline in their population number.

b. The State Survey on the Animal Kingdom have been approved By Governmental Decision of the Republic of Moldova nr. 1005 from 13.09.2004 .

7. Sites Identified and Protected which are Important to the Conservation of Bats

Currently several sites with underground shelters are identified as of the most important conservation concern. Among them, the most important are the mines near the villages of Sakharna, Bicioc and Cricova and the natural cave Pestera Surprizelor. They are inhabited by 10, 8, 9 and 3 species of bats respectively. Two of them – the mine near the village of Cricova and the Pestera Surprizelor cave are already taken under protection.

Pestera Surprizelor, the most recent site taken under protection, is a well known among speleologists natural limestone cave that is situated near the Criuleni town, in the forest on the right bank of the Nistru River, directed on the south - north. Slits and empties network form numerous halls and tunnels that can be conventional divided in at least 3 floors. The interior temperature ranges from 12 to 14°C, and the humidity – 75-80%. The overall length of the cave is 350 m. Three species of bats inhabit this site: *Myotis daubentonii*, *Myotis nattereri* and *Rhinolophus hipposideros*. This is the third known place of recent findings of the Natterer's bat in Moldova.

8. Consideration given to Habitats which are Important to Bats

Insufficient consideration is given to habitats important to bats in Moldova. There are no special areas protected, except the Bat Reserve "Tiganca" and three national reserves, like "Plaiul Fagului", "Codrii" and "Padurea Domneasca", which are habitats important to bats and are protected by law.

There are also some initiatives to protect an important riparian habitat to bats – Talmaza flood forests (South Eastern part of Moldova). A series of projects have been carried out with the aim to create a National Park in this biodiversity rich territory.

This year environmental NGOs BIOTICA and FAUNA carried out a project to improve the biodiversity of the Talmaza forests, including identification of roosts needs for bats and installation of around one hundred bat boxes to attract and monitor forest bats.

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

One of the biggest dangers for the bats is the lack of proper knowledge about bats among the rural population. For several years the nongovernmental organisation FAUNA Group is promoting the awareness through different activities. For the period of 1995 – 1998 years FAUNA Group organized more than 50 workshops in the rural schools in the Northern and Central part of Moldova on the biodiversity importance including the role of bats in nature.

In 1998 in Moldova the Bat Night celebration was organized, which brought together a lot of people, especially young generation, to take part in different activities and ended with a big concert on the central square of Chisinau city.

In august 2001 three bat workers attended a summer school in Closani (Romania) and learned the basic approaches and methodologies in research and conservation of bats.

From 7th to 18th of July 2002 the Group FAUNA and AVI-Moldova in the framework of Milieukontakt's project on International Volunteering in Moldova organised a work camp for international volunteers to build and place bat boxes in a flood forest of Talmaza.

During last year important activities were undertaken by BIOTICA Ecological Society in collaboration with the Group FAUNA. A brochure designed for students and zoologists about Moldovan bats. In addition, such educational activities as lectures and bat walks were organized for local communities.

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

In 2002 through ministry decision No. 10 from 21 January a Working Group responsible for the implementation of CMS Convention, European Bats Agreement and of African-Eurasian Migratory Waterbird Agreement was established.

Currently in the Ministry of Ecology and Natural Resources there is functioning Working Group for the implementation of European Bats.

11. Additional action undertaken to safeguard populations of bats.

Not available.

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

Development of management plans for Talmaza Wetland and bats conservation in Lower Dniester Ramsar Site (financed by Michael Otto) included monitoring, bat protection actions and elaboration of recommendations for bat friendly forest management. This project provided a detailed description of:

- physico-geographical conditions, diversity and distribution of plant and animal communities flooding regime and zonation of the territory for its sustainable management
- evaluation of the importance of the territory for biodiversity conservation
- analysis of the threats
- main directions for biodiversity management

Within the framework of this project a comprehensive action plan for flood forest management was elaborated. The bat populations were revealed as the main biodiversity components of the area. A detailed inventory of forest species of bats, foraging habitats and roosts was undertaken and recommendations for their improvement were given. A manuscript is currently prepared for the publication.

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

Until present, no work in this field has been done in Moldova.

D. Functions of the Agreement

14. International Cooperation

Serghei Andreev – study visit to the Netherlands in partnership with Club Speo Bucovina (Romania) for the experience sharing and cooperation networking within the European Bat Night events. Financial support provided by MTS, ANSIT Ro, PHARE

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

For the realization of Resolution No.4.3, an important natural underground habitat was identified and given full legal protection, including limiting of the unauthorized physical access to “Pestera Surpriselor” Cave (see specifications under point 7).

For the realization of Resolution 4.4 – Talmaz flood forest was identified as an important habitat for bat conservation, however not being yet protected by law. Recommendations were elaborated by Ecological Society Biotica in collaboration with Group Fauna for the restoration and enhancement of the habitats. The recommendations included bat-friendly forestry practices that can serve as arguments for the elaboration of legislative acts. The project also addressed forest management practices and their adaptation for bat conservation: GIS analysis, complex analysis of the flora and fauna communities in the region, identification of important old hollow trees zones, avoidance of clearing. Specifically these recommendations referred to bat-friendly forest management practices that should exclude:

- Thinning, pruning, regeneration cuttings and removal of old dead and dying trees (snags), that reduce feeding and roosting opportunities to bats
- The use of pesticides- reduce the number of insects and have a direct impact on bats
- Economic exploitation of timber in bat conservation valuable areas

The project was implemented with the accordance of Moldsilva – responsible body for forest management in Moldova. The recommendations were presented to the Ministry of Ecology and Natural Resources, Moldsilva and the public authorities in the villages situated in the immediate neighbourhood territories of the flood forests.

For the realization of Resolution 4.6, regulations on the Issue of Permits for the Capture and Study of Captured Wild Bats were not yet elaborated.

For the realization of Resolution 4.11 –

Ministry of Ecology and Natural Resources was aware and appreciated the efforts taken by the Ecological Society Biotica in cooperation with Fauna Group for the monitoring and conservation of flooded forest of Talmaza. Support from the Ministry was also provided to NGO “Lupii” (“The Wolves”) who facilitated the process of taking under state protection the “Pestera Surprizelor” Cave.

E. Literature

Publication on bat research and conservation in Moldova:

Averin Y., Lozan M. (1965) Rukokrylye Moldavii. Voprosy ekologii i practicheskogo znachenija ptits i mlecopitaiuschih Moldavii. Vyp.2. Chisinau, “Stiintsa”, pp. 25-32. (rus)

Vasiliev A., Andreev S. (1998) Vidovoi sostav, chislennost i raspredelenije rucocrylyh (Chiroptera), obitaiuschih v podzemel’ah bliz sela Saharna (Moldova). Plecotus et al., Nr. 1., pp. 48-54. (rus)