

THE AGREEMENT ON THE CONSERVATION OF POPULATIONS OF  
EUROPEAN BATS (EUROBATS)

**Report on the Implementation of the Agreement in Romania  
- 2008 -**

**A. General Information**

<b>Name of Party</b>	<i>Romania</i>
<b>Date of Report</b>	<i>November 10, 2008</i>
<b>Period covered</b>	<i>March 2007 – November 2008</i>
<b>Competent authority</b>	<i>Romanian Ministry of the Environment and Sustainable Development – Directorate of Nature Conservation, Biodiversity, Biosafety</i>  <i>12 Libertății str. 040129, district 5 Bucharest, Romania</i>  <i>Focal point: Antoaneta OPRIȘAN</i>  <i>Director Silviu MEGAN</i>  <i>Head of Unit Mihaela ANTOFIE</i>
<b>Organization providing support and expertise</b>	<i>„Grigore Antipa” National Museum of Natural History (MNINGA) – Bucharest</i>
<b>Appointed member of the Advisory Committee</b>	<i>Dr. Dumitru Murariu</i>

**B. Status of Bats within the territory of the party**

*1. Summary details of the resident species:*

In the recent Romanian chiropterological literature 31 bat species are reported as follows: 4 of *Rhinolophidae* and 27 of *Vespertilionidae*. Three of the vespertilionids (*Myotis alcaethoe*, *Pipistrellus pygmaeus* and *P. kuhlii*) were reported before this time report, based only on Bat Detector identification. First bat species was captured, measured and released during a mistnetting in the Varghis Gorge, at Orban Balasz Cave and published by Jere Csaba and col. in 2007. In November 2006, two Romanian authors (Irina Ifrim and Nicolai Valenciuc) published the article „*Pipistrellus kuhlii* Kuhl, 1819, a new reported species for the chiropteran fauna of Moldavia (Romania)” in the scientific journal “*Travaux du Muséum*

*National d’Histoire Naturelle „Grigore Antipa”*, vol. 49, pages 359 – 363. The published results were also based on measures using an ultrasound detector, but getting a specimen from the city Iassy – Moldova. In 2007 other specimens of *Pipistrellus kuhlii* from Constanta (Romanian Dobroudja) and in August 2008 – from Calarasi, Ialomita Co (in verbis Gabriel Chisamera) were investigated.

Some other recent reported bat species (*Pipistrellus savii*, *P. pygmaeus*) were confirmed by contributions of specialists from Romanian academic institutions (Universities, Institutes of Biological Research, Museums of Natural Sciences), NGO-s spread all over the country (more active in Transylvania) and volunteers.

Excepting the very new reported species (*Myotis alcathoe*), all bat species from the Romanian fauna are included in the ”*Red Book of Vertebrates from Romania*” published in 2005.

## 2. Status and trends:

Based on scientific results (observation, collecting with mist-nets and releasing as well as identifying with bat detectors) obtained in the field trips between 2007-2008, the above mentioned 31 bat species, for Romanian bat fauna, have the status and estimated trends of populations as listed in the Table 1.

**Table 1: Status and trends of bat populations in Romania**

Species	Status	Estimated Trend	Observations
<i>Rhinolophus ferrumequinum</i>	EN*.	Declining	Few in East RO
<i>R. hipposideros</i>	VU.	Declining	Widespread
<i>R. euryale</i>	EN.	Declining	Isolated in karsts
<i>R. blasii</i>	CR.	Declining	Isolated in karsts
<i>R. mehelyi</i>	VU.	Declining	Only South RO
<i>Myotis alcathoe**</i>	NE	Unknown	Only one specimen in Eastern Carpathians
<i>Myotis myotis</i>	NT.	Declining	Widespread
<i>M. brandtii</i>	DD.	Unknown	Only West Carpathians
<i>M. blythii</i>	VU.	Declining	Widespread
<i>M. dasycneme</i>	DD.	Unknown	Only in S-W of RO
<i>M. daubentonii</i>	LC.	Stable	Widespread
<i>M. emarginatus</i>	VU.	Declining	Small and isolated populations
<i>M. mystacinus</i>	VU.	Declining	Widespread, small populations

<i>M. nattereri</i>	EN.	Declining	Absent in S of RO
<i>M. bechsteini</i>	EN.	Declining	In all Carpathians
<i>M. capaccinii</i>	CR.	Declining	Only W. of RO
<i>Plecotus auritus</i>	VU.	Declining	Few in Carpathians
<i>P. austriacus</i>	VU.	Declining	Only in S. of Carpathians
<i>Vespertilio murinus</i>	NT.	Possib. declining	Widespread
<i>Eptesicus serotinus</i>	VU.	Declining	Widespread, small population
<i>E. nilssonii</i>	EN.	Declining	Only in W. of RO
<i>Nyctalus noctula</i>	LC.	Stable	Widespread
<i>N. lasiopterus</i>	VU.	Declining	Only South RO
<i>N. leisleri</i>	VU.	Declining	Widespread, small population
<i>Pipistrellus pipistrellus</i>	LC.	Stable	Widespread
<i>P. pygmaeus</i>	NE.	Unknown	Recent reported
<i>P. nathusii</i>	LC.	Unknown	At low altitude
<i>P. kuhlii</i>	NE.	Unknown	Recent reported
<i>Hypsugo savii</i>	NE.	Unknown	Recent reported
<i>Barbastella barbastellus</i>	VU.	Declining	Restricted distribution
<i>Miniopterus schreibersii</i>	VU.	Serious declining	In limited no. of sites

\* According to new IUCN categories: EX = Extinct; EW = Extinct in the Wild; CR = Critically Endangered; EN = Endangered; VU = Vulnerable; NT = Near Threatened; LC = Least Concern; DD = Data Deficient; NE = Not Evaluated.

\*\* Species reported in 2007.

Being a synthesis from the Romanian chiropterological literature and including the results from the field trips, the above table indicates that two bat species are estimated with populations **critically endangered**. Other five bat species have the status of **endangered**. A number of 11 species are **vulnerable**. In the category **near threatened** there are two species. Four species are with status **least concern**. **Not evaluated** are four species. Finally, in the category **data deficient** there are two bat species.

As it was reported before, the trends of bat populations is **declining** or **serious declining** for 21 species, **stable** for 4 species and **unknown** for 6 species.

### 3. Habitats and Roost Sites

A number of 20 caves from Dobroudja, Banat and Transylvania were included in a monitoring programme for hibernating and nursery bat colonies. In the cave „Cioclovina uscata” the bat species increased their populations after restoration of the microclimate, and

other bat species came into: *M. bechsteinii*, *Myotis daubentonii*, *M. capaccinii* and *M. nattereri*.

A project to restore former bat colonies (about 12,000 specimens) in Women Cave (Southern Carpathians) is under construction to attract *Rhinolophus ferrumequinum*, *R. hipposideros*, *Myotis myotis*, *Barbastella barbastellus* and *Miniopterus schreibersii*. The Women Cave is included in tourists' circuits and the new project suggests combining the local community's interest with bat protection according to the Romanian Law 90/2000.

The other caves are now better managed and protected against the uncontrolled access inside and destruction of karstic formations as well as against the disturbances of bat colonies.

Other important roosts are tree hollows and therefore there is necessary to improve the management of forests, to maintain old trees. In addition, the forests are important foraging habitats for bats and the use of pesticides should be prohibited.

#### *4. Threats*

One of the main causes is the unsustainable deforestation and due to this main cause the lack of old trees with tree hollows for long distances. Also we mention here the unfriendly attitude of the people on bats garrets, and attics also threat bat populations.

A second main cause is due to the use of harmful chemicals (general pesticides) which pollute the foraging habitats and reduce insect fauna – the main food supply for bats.

A third main threat to the bats species from the Romanian fauna is coming from roosts disturbing. Very often the caves are visited by local people and amateur speleologists who make fire in the front or inside of the cave, make noise and catch bats, some of them destroying hibernating specimens.

#### *5. Data Collection, analysis, interpretation and dissemination.*

Out of academic institutions, today more and more NGOs and volunteers are implied in monitoring the underground roosts for bats, in identification of the species and conservation measures. Natura 2000 programmes – the ecological network of protected areas give an additional chance to bat populations. In a previous report it was mentioned and continued along the last year to be printed and spread leaflets and booklets regarding the biology and behaviour of bats, insisting on the benefit and need to their protection. Also, booklets, posters and books for optional disciplines in instruction and education institutions continued to be published in 2007 - 2008 and were distributed, mainly in schools and museums of natural sciences from all over the country.

## C. Measures taken to implement 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.*

Low No. 167/8 May 2000 which ratifies the agreement. Ongoing educational programmes and activities must be continued with all social categories at different levels of age and education. The Emergency Government Ordinance 57/2007 regarding the regime of natural protected area, the conservation of natural habitats, wild flora and fauna, through the annex no. 3 is protecting bat species which are also protected through the annexes of EC Regulation no. 338/97/EC on the protection of species of wild fauna and flora by regulating trade therein. General protection measures are also mentioned into the environment main frame Emergency Government Ordinance 195/2005 proved with modifications and completions by the Law 265/2006.

The enforcement of the legal framework is accomplished by the National Environment Guard which is subordinated to the Ministry of Environment and Sustainable Development.

### 7. *Sites identified and protected which are important to bat conservation*

In the period 2007 – 2008 new natural sites were identified as important shelters for bat colonies. The above mentioned Women Cave – located at 2 km North from Baia de Fier village, Gorj County is also a place of touristic importance and it can host large colonies of the following bat species: *Rhinolophus ferrumequinum*, *R. hipposideros*, *Barbastella barbastellus*, *Myotis emarginatus* – with hibernating colonies; *M. myotis*, *M. blythii* – with nursery and hibernating colonies; *M. mystacinus*, *Nyctalus noctula*, *Plecotus austriacus/auritus* - with hibernating colonies; *Miniopterus schreibersii* - with nursery and hibernating colonies. The first and the last species (*R. f.* and *M. s.*) are newly reported for this place in 2007 and the others are dominant species at hibernation.

Continuing monitoring programme started in 2002, we mention that Caves Șura Mare and Huda lui Păpară are on the first place as important sites with impressive bat colonies of some bat species (e.g. 35,000 individuals of *Pipistrellus pipistrellus* in first cave).

### 8. *Consideration given to habitats which are important to bats*

Similar to the last report, in the period 2007 – 2008 extended all over the country the net of protected areas in the frame of NATURA 2000, many of such areas being closed by or include bat's roosts and offer optimum conditions for hosting and foraging.

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

Summer schools with lectures about the biology of bats were organized in each year at Closani Information Chiropterological Center. Field trips over the night, using bat detectors familiarized the attendants to identify bats according to their fly, silhouette, opened or covered habitats, frequencies of ultrasounds. The result was the ordering of many bat detectors especially by rangers and biologists from different national and natural parks of the country: Măcin (in Dobroudja), Piatra Craiului (in Southern Carpathians), Poziții de Fier (in South-Western part of the country). On the same occasions, booklets and posters with images and short texts about the biology and important morphological features of bats were printed and distributed to scholars and interested people.

In Bucharest and in other large cities all over the country (Cluj, Iași, Satu Mare, Ploiești, Constanța) several hundreds of posters received from the EUROBAT Secretariat, for European Bat Night were distributed.

Temporary exhibition in Tulcea, Galați and Târgu Mureș Counties Museum of Natural Sciences, presented adaptations of bats, their food, behaviour, physiology and distribution on the Earth, in temperate zone and in Romania. In the National Museum of Natural History – Bucharest, on the occasion of European Bat Night, special visits to the Division of Bats in basic exhibition, were organized, two lectures on the place and role of bats in forests were held and as well as an applied trip in the museum's park to identify bat species in the night. A special presentation on the importance of bat conservation was in the National Museum of Hunting – Posada, Prahova Co.

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

Situation similar to the last report:

*a. Governmental bodies:*

- Romanian Ministry of the Environment and Sustainable Development;
- National Agency for Nature Protection and county level agencies;
- National Environment Guard and county commissariats;
- Municipal and Counties Agencies of the Environment;
- Ministry of Agriculture the Department for Forestry.

*b. Institutions:*

- National Museum of Natural History „Grigore Antipa”;
- Institute of Speleology „Emil Racovitza” (in Bucharest and Cluj);

- Institute of Biology of the Romanian Academy;
- Faculties of Biology (Universities of Bucharest, Cluj, Constanta, Iassy, Satu Mare)

*c. NGOs:*

- Romanian Federation of Chiropterology;
- Romanian Bat Protection Association;
- Transylvanian Museum Association;
- Group of Underground and Underwater Explorations;
- Speo Club „Bucovina” etc.

#### *11. Additional action undertaken to safeguard populations of bats.*

The Romanian Ministry of the Environment and Sustainable Development through the Nature Protection, Biodiversity and Biosafety Directorate improved communication scheme and maintain close working relations and encouraged academic institutions, NGOs and volunteers to report illegal cases of deforestation, foraging habitat destructions or individual activities against bat species conservation (e.g. fire in front of caves, crossing with noisy and inappropriate lights under bat colonies, taking in hands bats from the cave walls etc.). These authorities discourage any attitude/intention to collect or kill bats without permit.

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

Like in previous years, a monitoring programme to estimate size of populations and to identify bat species as well as management of the underground roosts continued in 2007 - 2008. More and more administrations of the different protected areas organized *Centers of Information* for visitors to indicate general rules inside the area and most important roosts for bats, with prohibited access in hibernating and parturition time.

#### *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.*

Unfortunately every spring forests are aspersed (using utilitarian planes) with insecticides against the invasion of the butterfly *Limantria dispar* with a dramatic effects on the bat residential populations. The timber used for roof of new buildings is also treated with chemicals very toxic for bats. Due to this issues new bat conservation measures should be developed for the future.

## **D. Functioning of the Agreement**

### *14. Co-operation with other Range States*

A new official project of bilateral co-operation between Shumen University – Bulgaria and the National Museum of Natural History „Grigore Antipa” – Romania included bats in the survey of Vertebrates from Romanian and Bulgarian Dobroudja. Other projects are ongoing with NGOs and academic institutions from Romania with similar organisms from Hungary and Poland.