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

The National Report on the Implementation of the Agreement in Georgia

A. General Information

- Name of Party Range State: Georgia
- Date of Report: 5 September, 2003
- Period Covered: August, 2000 September, 2003
- Competent Authority: The Ministry of Environment and Natural Resources Protection of Georgia

B. Status of Bats within the Territory of the Party.

1. Summary details of resident species, by territory

All bat species occur in Georgia are protected under the framework of Convention on the Conservation of Migratory Species of Wild Animals (CMS) and Agreement on the Conservation of Populations of European Bats (EUROBATS). Since August, 2002 Georgia is a Contracting Party of EUROBATS. However, migration routes and shelters (roosts) of wintering species are still in need of investigation.

According to literary data there are 29 species of Bats (order *Chiroptera*) occurring in Georgia. The following seven bat species are included in the "Red Data Book of Georgia" (1982): *Rhinolophus mehelyi, Myotis bechsteinii, M. emarginatus, Barbastella barbastellus, Nyctalus leisleri, N. lasiopterus* and *Miniopterus schreibersii*. The following ten species are listed in IUCN Red Data List of Threatened Species: *Rhinolophus hipposideros, Rhinolophus euryale, Rhinolophus mehelyi, Barbastella barbastellus, Myotis bechsteinii, Myotis emarginatus* (species with category *VU*), *Miniopterus schreibersii, Nyctalus lasiopterus, Nyctalus leisleri, Rhinolophus ferrumequinum* (species with category *LR/nt*).

2. Status and Trends

During last decades status and trends of bat species distributed in Georgia were not studied. Based on our research it was revealed that the following bat species are common in Georgia: Pippistrellus pippistrellus, Eptesicus serotinus, Myotis blythii, Rhinolophus ferrumequinum, Rhinolophus hipposideros. Myotis blythii mainly are distributed in Eastern Georgia, while in Western Georgia there are isolated facts of findings. Species - Pipistrellus kuhlii occur with great number in the extreme Eastern part of Georgia. Also Pipistrellus pygmaeus were often found in the Eastern Georgia during our research.

Tab.1 Status of bat species.

Scientific Name	Abundance	Georgian Red Data Book	IUCN Red List of Threatened Species
Rhinolophus euryale	rare		VU
Rhinolophus ferrumequinum	common		LR/nt
Rhinolophus hipposideros	common		VU
Rhinolophus mehelyi	very rare	rare species	VU
Barbastella barbastellus	very rare	rare species	VU
Barbastella leucomelas*	????		
Eptesicus bottae*	????		
Eptesicus nilssoni*	????		
Eptesicus serotinus	common		

Miniopterus schreibersii	rare	rare species	LR/nt
Myotis bechsteinii	very rare	rare species	VU
Myotis blythii	abundant		
Myotis emarginatus	rare	rare species	VU
Myotis brandtii	rare		
Myotis mystacinus	common		
Myotis nattereri	rare		
Myotis doubentonii	new (found 2000)		
Nyctalus lasiopterus	very rare	rare species	LR/nt
Nyctalus leisleri	rare	rare species	LR/nt
Nyctalus noctula	common		
Pipistrellus kuhlii	common		
Pipistrellus nathusii	common		
Pipistrellus pipistrellus	common		
Pipistrellus pygmaeus	new (found 2000) abundant		
Hypsugo savii	rare		
Plecotus auritus	rare		
Plecotus austriacus	rare		
Vespertilio murinus	rare		
Tadarida teniotis *	????		

^{*-} According to literary data, these species possibly occur in Georgia, but not yet confirmed by up-to-date scientific research.

It should be emphasized that bats maternity and wintering roosts demands more deep research.

3. Habitats and Roost Sites

Since 1998, we observed 22 karsts caves, about 240 artificial caves and 4 mines.

4. Threats

Main threats for bats (especially, increased anthropogenic pressure on biodiversity) are consequences of energy and economic crisis existing in Georgia in addition with low public environmental awareness. Due to these reasons there are facts of over exploitation and illegal cutting of forests causing crucial changes and destruction of habitats and roosts sites. Also, restoration of historical buildings and caves can be considered as threats for bat sites. As for pesticides, due to economical crisis and its high prices pesticides are not actively used in agricultural sector and consequently, pesticides cannot be considered as a serious threat for bats in Georgia.

5. Data Collection

At present, we continue observation of old bats roosts and finding of new ones. Since the last Meeting of the Parties the following facts should be emphasized from our research:

Bats maternity colony was found in 2000 and it is verified each year in Monastery ``Tetri Senakebi`` (the part of David-Gareji monastery complex). It was revealed that this colony consists of three species: *Rhinolophus ferrumequinum* (about 700 ind.), *Myotis emarginatus* (about 400 ind.) and *Myotis blythii* (10 Ind.).

Based on verification conducted in the Monastery Natlismcemely (the part of David-Gareji monastery complex), it was revealed that the maternity colony of Myotis *blythii* is still exists and quantity approximately amounts to 700 individuals.

Based on verification conducted in the administration building of Gardabani managed reserve, it was confirmed that maternity colonies of *Pipistrellus pygmaeus* (about 150 individuals) and *Eptesicus serotinus* (50 individuals) still exist in the garret of this building (found in 2002). These colonies are in the garret separately from each other.

During the year of 2001 winter roosts of species - *Rhinolophus euryale, Miniopterus schreibersi, Rhinolophus ferrumequinum* and *Rh. hipposideros* were found and these roosts are checked each year.

In the Summer 2001, in the cave at Chiatura district only 2 individuals of Red Data Book Schreiber's bat (*Miniopterus schreibersii*) were found, while the same place was recorded to be a shelter for hibernacula of 25 individuals (in 1 cave) of this species last year.

In 2002, males colony of *Myotis blythii* (about 50 individuals) was identified in caves of the monastery complex Sabereebi (part of the David Garedji caves-monastery complex on Iori plateau).

In May of 2002 the colony (about 200 individuals) of *Rhinolophus euryale* was found in Tbilisi in seismological mines.

A new maternity colony was identified in 2002 in the David-Gareji monastery complex. This colony consists of two species: *Rhinolophus ferrumequinum* and *Myotis emarginatus*. Its quantity approximately amounts to 250 individuals. We should mention a fact that in 1999-2000 this colony did not exist which is confirmed by our research conducted in those years. Based on information of persons from the monastery, this colony originated in 2001. It should be mentioned that in 2003 quantity of the colony of *Rhinolophus ferrumequinum* and *Myotis emarginatus* was decreased and amounts to about 100 individuals.

In June, 2003 close to the seismological mines where species - *Rhinolophus euryale* are occur (found in 2002), a maternity colony of *Myotis nattereri* (about 35-40 ind) was found in a subway with rolling river. This maternity colony was found together with colleague from Russian Federation – Dr. Suren Gazarian.

In June, 2003 during visiting of the Zoology Division of the State Museum of Georgia, one sample of *Myotis nattereri* (obtaining of these species was dated with January, 1951) was reidentified as *Myotis doubentonii* by Dr. Suren Gazarian.

Preparation process of list containing caves, monasteries and churches which represents roosts for bats is currently underway.

We continue preparation of catalogue containing all karsts caves with relevant conditions for bats.

Paper that depicts all cases of catching of bats in Georgia, named "Findings of Chiroptera in Georgia for last 140 years" is prepared for the "Plecotus et al." That is a magazine of Russian Commission on Bats of the Theriological Society at Russian Academy of Sciences.

The article - ``New Findings in Bats Distributions in Georgia`` was published in the digest issued under the framework of the Project - ``Conservation of the Arid and Semiarid Ecosystems in the Caucasus``.

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

Catching of bats in Georgia is regulated by `Law on the Animal World` and consequently subjected to license system. According to requirements of this law, based on recommendations and decisions of a special Inter-institutional Scientific Council, license for catching is issued by the Ministry of Environment and Natural Resources Protection. The issued license clearly indicates number of samples and tools to be used for catching.

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

Two sites are identified as an important for bats conservation. First site - the karsts-massif in Western Georgia (between cities Zugdidi and Chiatura). Second site - David Garedji Caves-Monastery complex in Eastern Georgia. These sites are not protected.

8. Considerations given to habitats which are important to bats

No considerations are given to habitats important to bats.

- 9. Activities carried out to promote the awareness of the importance of the conservation of bats
- Seminars for school children;
- Posters "European bat Night" were distributed;
- The book "Vertebrate Animals of Borjom-Kharagauli National Park (*A Field-guide*)" describes 13 species' of bats. This book is printed in Tbilisi by WWF-Georgia Office with support of German Government in December, 2001. Editor-in-chief A.Kandaurov, author of the chapter A. Bukhnikashvili. That is a first popular publication in Georgian, in which are described bat species, their life mode and range.
- Collective observations of bats are conducted in the frame of European Bat Night;
- In 2003, a popular book with the title ``Hyena, Levantine viper and al.`` was published in the frame of the project "Conservation of Arid and Semiarid Ecosystems in the Caucasus" (granted by UNDP-GEF, implementation agency NACRES) for wide public. This book is addressed to species distributed in the above mentioned ecosystems and main purpose of it is to increase public environmental awareness. One article of the book is dedicated to bats.
- In 2003 Public Awareness leaflet dedicated to bat species was produced in Georgia. The production of this leaflet was generously financed by the Ministry of the Flemish Community, Administration for Environment, Nature, Land and Water Management (AMINAL) of Belgium. The leaflet text was kindly provided by the German Federal Agency for Nature Conservation"

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

Responsible bodies will be designated by the Ministry of Environment and Natural Recourses Protection.

11. Additional action undertaken to safeguard populations of bats

In order to eradicate anthropogenic pressure on the colony of *Rhinolophus euryale* (about 200 individuals) found in seismological mines of Tbilisi, a special cage has been done for this mines.

A Management Plan has been elaborated under the project - "Conservation of Arid and Semiarid Ecosystems in the Caucasus" (granted by UNDP-GEF, implementation agency NACRES). Trough this Management Plan key species, specified for these ecosystems, were identified and among them are bats.

The National Biodiversity Strategy and Action Plan contains strategic action for conservation of bat species.

- 12. Recent ongoing programms (including research) relating to the conservation and management of bats
- Preparation process of list containing caves, monasteries and churches which represents roosts for bats is currently underway.
- Mr. A. Bukhnikashvili (Scientific worker in the Institute of Zoology of Academy of Science, President of the Field Researchers` Union ``Campester``) has an individual project `` Preservation of Small Mammals as a Key Species for Sustainability of biodiversity``. Study of bats is envisaged by this project as well.
 - 13. Considerations begin given to the potential effects of pesticides on bats, and efforts to replace timber treatment chemicals, which are highly toxic to bats

No considerations in this regard.

D. Functioning of the Agreement

14. Co-operation with other Range States

There are consultations, exchange of relevant information and materials with Parties to the Agreement.

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

Resolution 2.4 Transboundary Programm: Habitat Proposals.

See paragraph 7, 12a

Resolution 2.7 and 3.3 –Format of National Reports.

The report has been prepared accordingly to the format.

Resolution 2.8 and 3.8 – On the implementation of the conservation and management plan

See point 6 and others of this report.

- Mr. Ioseb Natradze Campester (Field Researchers' Union);
- Mr. A. Bukhnikashvili (Scientific worker in the Institute of Zoology of Academy of Science of Georgia, President of the Field Researchers` Union - ``Campester``);
- Mr. Andrei S. Kandaurov, Institute of Zoology of Academy of Science of Georgia;
- Mrs. Maka Bitsadze The Ministry of Environment and Natural Resources Protection of Georgia.