

AGREEMENT ON THE CONSERVATION OF BATS IN EUROPE (EUROBATS).

The report on implementation of the Agreement in Georgia.

A. General Information

- *Name of Party Range State:* Georgia.
- *Date of Report:* 15 May 2002.
- *Period Covered:* March 2001 - May 2002.
- *Competent Authority:* Ministry of the Environment and Natural Resources Protection

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

1. Summary details of resident species, by territory.

All bats are under the protection of Bonn Convention (CMS), that is signed at 10 February 2000th and EUROBATS Agreement, which is adopted by Georgian Parliament in the December 2002nd. However, migration routes and shelters (roosts) of wintering species are still in need of research.

According to literary data there are 29 species of Bats (order *Chiroptera*) occurring in Georgia. The following seven species of bat are included in the "Red Data Book of Georgia" (1982). These are *Rhinolophus mehelyi*, *Myotis bechsteinii*, *M. emarginatus*, *Barbastella barbastellus*, *Nyctalus leisleri*, *N. lasiopterus* and *Miniopterus schreibersii*. The following ten species are included 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.

No change. During last decades status and trends of species distributed in Georgia were not studied. We can say that four species are common on territory of Georgia, these are: *Pippistrellus kuhlii*, *P. pippistrellus*, *Eptesicus serotinus* and *Myotis blythii*. The Daubenton's bats (*Myotis daubentonii*) were found in Georgia during the workshop "The workshop for bat conservation experts training on work with Ultra Sonic Bat Detectors" in May 2000, and not confirmed after then. The Pygmy Pipistrelle bat (*Pipistrellus pygmaeus*) was found also during the training in May 2000, and then many times recorded through the territory of Eastern Georgia.

Tab.1 Status of bat species.

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

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

*- According to literary data, these species possibly occurring in Georgia, but not yet confirmed.

3. Habitats and Roost Sites

Since 1998, we observed 22 karst caves, about 200 man-made caves and 4 old mines. Bat roosts are found in 22 caves and 3 mines. This year we found 4 new roosts.

4. Threats

Main threats are consequences of energy and economic crisis existing in Georgia in addition with low public environmental awareness. Due to these reasons over exploitation and illegal cutting of forests cause habitat destruction and those of roosts sites. Besides, increasing of tourism in historical buildings and caves can be considered as threats for bat sites. As for pesticides, due to economical crisis and its high prices it is not actively used in agricultural sector. According to the all above-mentioned pesticides cannot be considered a serious threat for bats in Georgia.

5. Data Collection

After the training "**The workshop for bat conservation experts training on work with Ultra Sonic Bat Detectors**", three Georgian experts were granted the D-200 detectors. One has D-240. They all have sound records and all necessary equipments, for the work on bats in the country.

One new for bat species for the Transcaucasus (and, in particular, for Georgia) - the Pygmy Pipistrelle bat (*Pipistrellus pygmaeus*) was found in several places in Eastern Georgia during 2001. The Daubenton's bat (*Myotis daubentonii*) was not sighted this year.

The investigation of the bat fauna of the riparian forests on the rivers Iori and Kura has been continued.

In 2001st, Mr. Bukhnikashvili and Mr. Natradze inspected monastery cave complexes in downstream of Iori River. In March 2001st they inspected karst caves in vicinity of Chiatura town. Also, we inspected all caves and ruins in the complex of David-Gareji caves monastery near city Rustavi (in Eastern Georgia). After last Meeting of Advisory Committee in the April of 2001st following data were collected:

- ÷ Roosts of the 950 - 1100 Greater Horseshoe bats were found in 4 caves of monastery "Tetri Senakebi", the part of David-Gareji complex, in the July.
- ÷ The nursery colony (around 600-700 adults and young bats) of a Mouse-eared bat (*Myotis blythii*) in the other part of David-Gareji complex.
- ÷ Males colony of a Mouse-eared bat (*Myotis blythii*) (about 50 individuals) was identified in caves of the monastery complex Sabereebi (part of the David Gareji caves-monastery complex on Iori plateau)
- ÷ 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 wintering roosts of other protected species: Greater horseshoe bat (*Rhinolophus ferrumequinum*) (in 6 caves), Mediterranean horseshoe bat (*Rhinolophus euryale*) (10 individuals in 1 cave), Lesser horseshoe bat (*Rhinolophus hipposideros*) (5 caves), in the summer also were found a few individuals of these species except of *R. euryale*.
- ÷ In May of the current year the colony (about 200 individuals) of Mediterranean horseshoe bat (*Rhinolophus euryale*) were found in Tbilisi in seismological mines.
- ÷ The nursery colony (around 130-150 adult individuals) of Pygmy pipistrelle bat (*Pipistrellus Pigmaeus*) was also found in Gardabani managed reserve.

The compilation of the list of the caves, occupied by the bats, is in progress as well as the compilation of the list of churches and the other buildings, in which occur the bats. More than 200 caves are investigated since 1998. Roosts of bats were recorded in 11 karst and 11 artificial caves.

All data existed on bats occur in Georgia are recorded as 22 scientific articles, mainly in Russia. There are 159 specimens (skulls and skins), and 15 in formaldehyde In the Mammals Collection of Institute of Zoology, also 490 bats specimens of the 20 species, in the State Museum of Georgia.

One paper that depicts all cases of catching of bats in Georgia, named "Findings of Chiroptera in Georgia for last 100 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.

One member of the group continues work on the PhD-thesis "Species composition and spatial distribution of Bats in Eastern Georgia."

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.

On 10 February 2000th, Georgian Parliament ratified the Bonn Convention (CMS).

"The Agreement on the Conservation of Bats in Europe" (EUROBATS) was ratified by the Parliament of Georgia in 2001, 22 December.

Catching for non scientific purposes or other disturbance of bats is prohibited by law. Catching of bats for scientific purposes demands a special license. The license is issued by Ministry of Environment and Natural Resources Protection through the decision of Ministry's Scientific Council. The license clearly indicates the accessories which will be used for catching and number of samples.

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

Two sites are identified as an important for bats conservation, but not yet protected. First site - the karst-massif in western Georgia between Zugdidi and Chiatura. Second site - David Garedji caves-monastery complex near Rustavi and neighbouring Iori tableland, in eastern Georgia. No sites are protected today. The preparation for creating a large protected area is begun on the Iori tableland.

8. Considerations given to habitats which are important to bats.

No considerations are given to the habitats important to bats.

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

- ÷ Private conversations and lectures for school children's and students.
- ÷ Posters "European bat Night", received from Germany, distributed among governmental Nature Protecting bodies, NGOs, in University.
- ÷ Small groups of bat experts and amateurs of wild nature participated in collective observation on bats in frame of European Bat Night in Tbilisi and Rustavi, at October of 2001.
- ÷ 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.
- ÷ The project "Conservation of arid and semiarid ecosystems in the Caucasus" (granted by UNDP-GEF, implementation agency NACRES) is going to publish popular book for wide public. This book will be addressed to species distributed in the above mentioned ecosystems. The main purpose of this book is to increase public environmental awareness. One article of this book will be dedicated to bats.
- ÷ Preparation for printing 7 leaflets (grant of governments of Belgium and Germany) is in progress.

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 appointed by Ministry of Environment and Natural Recourses Protection in the near future.

11. Additional action undertaken to safeguard populations of bats.

The "Horizonti" Foundation supported the project of NGO "Campester" - "Losses in mammals' biodiversity that arise because of the construction of the Baku-Supsa oil-pipeline. Suggestions on the restoration of damaged ecosystems". The impact of the oil-pipeline on the mammals' fauna in Georgia, and particularly on bats, was estimated in frame of this study. The paper "Impact of Baku-Supsa oil-pipeline on mammals' biodiversity in Georgia" (authors A. Bukhnikashvili, A. Kandaurov) was

presented on "The First International Conference on Ecology and Environmental Management in The Caucasus" in Tbilisi, 7-8 October 2001.

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

a) Programmes in progress:

Preparation of the catalogue of the caves in which exist the bats' colonies.

Studies on bats, occur in arid and semiarid ecosystems, have been carried out under the project "Conservation of arid and semiarid ecosystems in the Caucasus" (funded by UNDP-GEF, implementing agency NACRES).

NACRES is initiating public environmental awareness project for the countries of the South Caucasus. The public awareness activities will be based on research to be carried out within this project. Researches will be carried out by young scientists from the Caucasus countries. Also leading scientists of the Caucasus countries will be involved in the project as consultants for young scientists. Bats are considered as one of other key groups to be studied within the project. Currently there are negotiations with donors and colleagues from neighbor countries.

b) Programmes completed:

The joint Azerbaijanian-Georgian project (on study of consequences of construction of oil pipelines in these countries for a fauna of mammalian), prepared during the workshop. This project is supported by ISAR (US AID) fund.

c) Programmes begun:

The project: "Bat's colonies and stopover sites in the karst caves of Eastern Black Sea Coast (Western Transcaucasia)" is prepared as a part of the EUROBATS project proposal "Conservation strategies for underground habitats, forested and mountain areas along the flyway of bats in Eastern and South-Eastern Europe" with UNEP/GEF funding. The author of the application/organisation: Andrei Kandaurov/ the Union of the field-workers - "Campester" and Institute of Zoology, GAS.

The proposal: "Save the bat colonies in the karst caves of Western Transcaucasia" is prepared on request of WWF-Georgia office and is approved as one of priorities in the biological diversity conservation of the Caucasus. The authors' application/organisation: Andrei Kandaurov and Alexander Bukhnikashvili, the Union of the field-workers - "Campester" and Institute of Zoology, GAS.

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 are given.

D. Functioning of the Agreement.

14. Co-operation with other Range States.

In the may of 2001 the joint expedition was convened in Georgia (Gardabani managed reserve) with colleges from Azerbaijan. In June two members of our group were in Azerbaijan (by financial support of NACRES and the Horisonti Foundation). In particular, we were guests of professor, doctor of sciences, head of laboratory of vertebrates, of the Institute of Zoology, Academy of Sciences of

Azerbaijan Ms. Irina Rakhmatulina. While this visit it was possible to discuss issue dealing with enhancement cooperation in the field of bats conservation and raise our professional skills.

Also we are very grateful to our Polish colleagues Prof. Bronislaw W. Woloszyn and Wieslaw Bogdanowicz for constant providing of a new literature.

Russian colleagues provide journal "Plecotus".

After series of fieldwork it became clear that additional training with the bat detector will be very useful for us. If it could be possible, we want to take participation in the training, which will be held in Armenia.

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

Resolution 2.1 – Consistent Monitoring Methodologies.

This resolution has not been implemented yet.

Resolution 2.4 Transboundary Programme: Habitat Proposals.

See paragraph 7, 12a and 12b of this Report.

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Resolution 2.5 – Geographical Scope of the Agreement.

This resolution has not been implemented yet.

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.

Resolution 3.5 – International Year of the Bat

Institute of Zoology, Ministry of Environment and Natural Resources and NGO "Campester" has taken efforts to attract public attention on bat conservation problem.

Resolution 3.7 – Amendment of the Agreement.

See point 6 of this Report.

Andrei S. Kandaurov, Institute of Zoology, Georgian Academy of Sciences.

Ioseb Natradze, NACRES (Noah's Ark Centre for the Recovery of Endangered Species), on behalf of the Ministry of Environment and Natural Resources Protection.

Georgia. 2002-05-15