

# ARMENIA NATIONAL REPORT ON THE IMPLEMENTATION OF THE AGREEMENT ON THE CONSERVATION OF BATS IN EUROPE

2001 - 2003

Armenia, Yerevan, 2003

### Agreement on the conservation of bats in Europe

# Report on implementation of the agreement in Republic of Armenia

### A. General information

Non-Party Range: Republic of Armenia

Date of Report: 11 March 2003 Period Covered: 2001-2003

### Competent Authorities:

Yerevan State University, Faculty of Biology, Armenian Nature Protection Union, Armenian National Academy of Sciences, Institute of Zoology, Ministry of Nature Protection

### Address:

- 8 Charents str., Yerevan, 375022, Armenia, Tel.: (+3741) 556778

- 35 Moskovian str., Yerevan, 375002, Armenia, Tel.: (+3741) 531841,

Fax: 007441, E-mail: anpuorg@freenet.am, va.arthur@rambler.ru

Prepared by: Doctor of Biological Science, Professor Eduard G. Yavrouyan.

# B. The information on the done work on research and protection of Chiroptera in territories of RA and Mountain Karabakh Republic (2001-2003).

1. Caves formation of Southern Caucasus, occured basically in topplocen - pleystocen time for a background of differential movements, deep erosion of the rivers, a changeable mode vertical circulation of underground waters and is caused by numerous changes of a climate.

Morphogenetic type of caves on Transcaucasus (Southern Caucasus), despite of complexity of their formation, distinction on genesis, etc. can be.

- the caves produced in effusion breeds and
- the karstic caves advanced mainly in limy-dolomitic breeds of mountains of Small Caucasus, Armenian and Internal Tavrov.

Karstic caves of Armenia are widely advanced in thicknesses of limestones and dolomite of Mesozoic and Paleozoic age and stretched on slopes of mountains of Small Caucasus, pools of the rivers Agstev, Akhum, Tavush, Arpa, Khndzorut, etc.

From 820 worthy, suitable bats for dwelling, caves of Armenia-6 (Magely, Bears, Mozrov, Sand-glass, Katarian Labyrinth and Key) are the most valuable the biodiversity.

In territory of Mountain Karabakh Republic to number of similar caves concern:

Azokh cave, 6 caves in Shushi, 3-Gandzasar and Lyulasazskaya cave.

In the listed caves during different seasons of year many thousands colonies Rhinolophus ferrumequinum, R. euryale, R. meheli, Myotis blythii and Miniopterus schreibersi accumulate, T. bxogob this caves frequently can be met Plecotus austriacus (1-7 units and Barbastella Leucomelas (1-5)).

To protect these unique caves and their inhabitants from constantly growing interest of adventurouses, tourists and climbers, by forces of ours NGO (ANPU) and employees, students of faculty of zoology of YSU has been solved to close some from them by special gates.

Many organizations have responded to help, both on our Republic, and from abroad, for example: «Bat Conservation International» Austin, Texas (U.S.A.). However "support" was in words, and our financial opportunities appeared insufficient. Works are suspended also we hope to the aid the countries of participants of EUROBATS.

In Azokh cave, in a spring - autumn season thousands colonies (sometimes more than 200.000 units) R. ferrumequinum, R. meheli, Miniopterus schreiberri and Myotis blythii accumulate. From this number wintering here the mixed colony in 60-80000 units every year.

- 2. Numerous lectures on the International Day of Bats are read at universities, institutes and schools of different regions of Armenia and Mountain Karabakh. Posters are distributed. By forces of our NGO clear vicinities of 76 caves, 3 gorges (Noravank, Herher, Dilijan) and northern coast of lake Sevan, where most of all caves.
  - Two short-footage films about caves and their inhabitants, which are shown on the central TV of Armenia.
  - Printed 11 scientific articles.
  - Two post-graduate students have produced master's theses about bats.
- 3. Cooperation in various areas chiropterologiic is started:
  - Institute of Systematics and Evolution of Animals The Polish Academy of Sciences (Krakow, Poland).

- Laboratory of Neurobiology of Development and Evolution, Nencki Institute of Experimental Biology (Warsaw, Poland).
- Cher Biology, Artsagh State Universiti and Ministry of Agriculture of Mountain Karabakh Republic

### **List of References**

- 1. Yavrouyan E., Safarian L. Find of broad-yeared wrinklelips (Tadarida teniotis Rafinesque) in Armenia/ Biol. journal AS RA, V. XXVII, N7, 1975: 90-93 (in Russian).
- 2. Yavrouyan E., Konstantinov A. Finds of unique colonies in some areas of Armenia (Collection of proceedings «Biological aspects of protection of rare animals» Leningrad), 1981: 119 (in Russian).
- 3. Yavrouyan E. To the Ecology of Plecotus geof. of the Transcaucasus/ Biol. journal AS RA, V. XLII, N5, 1989: 488-492 (in Russian).
- 4. Yavrouyan E. Findings of Pipistrellus (Vespertilio) savii Bonaparte, 1837./Biol.jurnal AS RA, V. XLII, N4, 1989: 427-430. (in Russian).
- 5. Yavrouyan E. Ecology Pipistrellus pipistrellus and Pipistrellus kuhli in Armenia and Nachitschevan/ Collection «Questions of Biology», V.5, 1989: 88-99 (in Russian).
- 6. Yavrouyan E., Sogomonian L., Yavrouyan D. Wintering of Miniopterus schreibersi in territory of Armenia/ Biol. journal AS RA, V. XLIII, N1, 1990: 79-82 (in Russian).
- 7. Yavrouyan E. Chiropteras Armenia and Mediterrania / Doctors degree (V. I and II), 1991: 1-392 and 1-49
- 8. Yavrouyan E., Bedavi B.E.S (Egypt), Sogomonian L. Tendency to sedentary at some migratory chiropteras/ Collection of proceedings, Chudjan, 1993: 106-108 (in Russian).
- 9. Yavrouyan E. et all Biodiversity of Armenia/ First National Report, RA Ministry of Nature Protection, 1993: 3-144 (in Armenian, also in Russian and English).
- 10. Yavrouyan E., Papov G., Gzrarian N., Airapetian V. Three new species of Chiroptera in mammalian fauna of Armenia/ Scientist's notes of ESU, N1, 2002: 137-139
- 11. Yavrouyan E. Landscape –faunistic characteristic of Armenia (V.I. Chiroptera) / Ecological journal of Armenia, N1, 2002: 13-17

## **Country: ARMENIA**

N	Species	Migratory Behaviour	dm (km)*	References
1	Rhinolophus hipposideros	Sedentary speices. Seasonal change of roosts (5-17 km)	31	Yavrouyan, Konstantinov, 1981
2	R. ferrumequinum	Makes seasonal and fodder movements (5-40 km). Sometimes winters in summer roosts	116	Yavrouyan, 1991
3	R. euryale	Some movements detected. Sometimes winters in Armenia	27	Yavrouyan, 1991
4	R. blasi	Some movements detected	7 -	
5	R. mehelyi	Seasonal change of roosts (10-35 km)		
6	Myotis daubentonii	In Armenia isn't detected		
7	M. capaccinii	Too little studied	5-12?	
8	M. dasycneme	In Armenia isn't detected		
9	M. brandtii	In Armenia isn't detected		
10	M. mystacinus	Some movements detected.	22 -	
11	M. emarginatus	Too little studied		
12	M. nattereri	Some movements detected.	27	Yavrouyan, Papov, Ayrapetian, Gzrarian 2002.
13	M. bechsteinii	In Armenia isn't detected		
14	M. myotis	In Armenia isn't detected		
15	M. blythii	Sedentary: regular movements between summer and winter roost within 15-40 km	298	Yavrouyan, 1991
16	Nyctalus noctula	Several movement detected 8-42 km		Only very local movements observed
17	N. leisleri	Very seldom winters in northern wood areas of Armenia	116	Yavrouyan, Bedavi, Sagatelyan, 1993
18	N. lasiopterus	In Armenia isn't detected		
19	Eptesicus serotinus	Too little studied		
20	E. nilssonii	In Armenia isn't detected		
21	Vespertilio murinus	Some movements detected.	17	Yavrouyan, 1991, 1999
22	Pipistrellus pipistrellus	Sedentary: movements between summer and winter roosts usually less than 3 km, rarely more than 5 km.	10	Yavrouyan, 1989
23	P. pygmaeus	Too little studied		Yavrouyan, Papov, Ayrapetian, Gzrarian 2002.
24	P. nathusii	Sedentary: seasonal change of roosts	22	Yavrouyan, 1989, 2002
25	P. kuhli	Sedentary: seasonal change of roosts (1-3 km)	5	Yavrouyan, 1989, 2002
26	E. bottae	Too little studied	9	Yavrouyan, 1989
27	Hypsugo savii	Too little studied		
28	Plecotus auritus	Sedentary: seasonal change of roosts	22	Yavrouyan, 1989
29	P. austriacus	Sedentary: seasonal change of roosts	79	Yavrouyan, 1989
30	Barbastella barbastella	Too little studied		
31	B. leucomelas	Sedentary: seasonal change of roosts	17	Yavrouyan, Bedavi, Sogomonian, 1991, 1993
32	Miniopterus schreibersi	Movements between the summer and winter roosts, usually within a distance of 25-40 km	119	Yavrouyan E., Sogomonian L, Yavrouyan D., 1990
33	Tadarida teniotis	Too little studied	36 ?	Yavrouyan, Safarian, 1975

<sup>\*</sup> dm (km) = distance of migrations in kilometers