

AGREEMENT ON THE CONSERVATION OF BATS IN EUROPE

Report on the implementation of the Agreement in Azerbaijan Republic

A. General Information

Non-Party Range: Azerbaijan Republic

Date of Report: 10 February 2001

Period Covered: April 2000 - January 2001

Competent Authority: Institute of Zoology Azerbaijan Academy of Sciences

B. Status of Bats within the Territory of Azerbaijan

1. Summary Details of Resident Species

The situation is similar to the last report (April 2000).

Twenty-six bat species occur on the territory of Azerbaijan. Among them *Myotis bechsteinii*, *Nyctalus leisleri*, *Plecotus austriacus*, *Eptesicus nilssonii* have been recorded only once.

14 species are considered as regularly breeding bats. There are both migrant populations of *Nyctalus noctula* (in the eastern part of the region) and sedentary ones (other territory) in Azerbaijan. *Pipistrellus nathusii* according to some signs is migrating species.

Nine bat species were revealed on the all territory. Of them *Pipistrellus pipistrellus* and *P. kuhlii* are numerous, *Rhinolophus hipposideros*, *R. ferrumequinum*, *Myotis blythii*, *M. mystacinus*, *Eptesicus serotinus* are common, *Plecotus auritus* and *Hypsugo savii* are rare. Seventeen species have restricted areas.

2. Status and Trends

Situation is similar to the last report.

According to the International Union for Conservation of Nature and Natural Resources (IUCN) Category of Threat there are 20 species with Lower Risk and 6 Vulnerable ones in Azerbaijan (Table 1). The trends are stable for six species (*R. hipposideros*, *R. ferrumequinum*, *M. blythii*, *Miniopterus schreibersii*, *H. savii*, *E. serotinus*). Two species (*Pipistrellus pipistrellus* and *P. kuhlii*) increase their number and both of them are very abundant in the anthropogen landscapes. The former is numerous in mountain regions and the latter - in arid areas.

3. Habitats and Roost Sites

Various types of bat habitats are characteristic for such widespread species as *R. hipposideros*, *R. ferrumequinum*, *M. blythii*, *M. emarginatus*, *M. mystacinus*, *P. auritus*, *P. pipistrellus*, *P. kuhlii*, *H. savii*, *E. serotinus*. Mainly mountain steppes and forests are inhabited by *R. blasii*, *R. euryale*, *R. mehelyi*,

Table 1. Status and trends of bat species in Azerbaijan

Species	Faunal status	IUCN status	Trends
Rhinolophus hipposideros	Common	Vulnerable	Stable
R.ferrumequinum	Common	Lower Risk	Stable
R.blasii	Rare	Lower Risk	Decline
R.euryale	Rare	Vulnerable	Decline
R.mehelyi	Rare	Vulnerable	Decline
Myotis blythii	Common	Lower Risk	Stable
M.bechsteinii	Rare	Vulnerable	?
M.nattereri	Rare	Lower Risk	Decline
M.emarginatus	Rare	Vulnerable	Decline
M.mystacinus	Common	Lower Risk	Decline
Miniopterus schreibersii	Common	Lower Risk	Stable
Plecotus auritus	Rare	Lower Risk	?
P.austriacus	Rare	Lower Risk	?
Barbastella barbastellus	Rare	Vulnerable	?
B.leucomelas	Rare	Lower Risk	?
Nyctalus noctula	Rare	Lower Risk	Decline
N.leisleri	Rare	Lower Risk	?
Pipistrellus pipistrellus	Numerous	Lower Risk	Increase
P.nathusii	Rare	Lower Risk	Decline
P.kuhlii	Numerous	Lower Risk	Increase
Hypsugo savii	Rare	Lower Risk	Stable
Vespertilio murinus	Rare	Lower Risk	?
Eptesicus nilssonii	Rare	Lower Risk	?
E.serotinus	Common	Lower Risk	Stable
E.bottae	Rare	Lower Risk	?
Tadarida teniotis	Rare	Lower Risk	?

Table 2. Habitats, summer and winter roosts of bats in Azerbaijan

Species	Habitats	Summer roosts	Winter roosts
R.hipposideros	Various	Attics, undergrounds, buildings	Underground spaces
R.ferrumequinum	Various	Caves, attics, churches	Underground spaces
R.mehelyi	Semi-desert, mountain steppes & forests	Underground spaces	Underground spaces
R.blasii	Mountain steppes & forests	Underground spaces	Underground spaces
R.euryale	Semi-desert, mountain steppes & forests	Underground spaces	Underground spaces
M.blythii	Various	Underground spaces, buildings rock fissures	Underground spaces
M.bechsteinii	Lowland forest	Church	
M.nattereri	Mountain steppes & forests	Buildings, rock fissures	
M.emarginatus	Various	Caves, attics, churches	
M.mystacinus	Various	Rock fissures, buildings, attics	
M.schreibersii	Mountain steppes & forests	Caves	Caves
P.auritus	Various	Buildings, underground spaces	Caves
P.austriacus	Mountain forests & steppes	Crypt	
B.barbastellus	Mountain steppes & forests, lowland forests	Buildings, rock fissures	Buildings, crypt
B.leucomelas	Semi-desert, mountain steppes	Caves	Caves
N.noctula	Mountain & lowland forests	Attics, tree hollows	
N.leisleri	Mountain forests	Tree hollow	
P.pipistrellus	Various	Buildings, tree hollows	Rock fissures, buildings
P.nathusii	Semi-desert, lowland & mountain forests	Buildings, tree hollows	Buildings
P.kuhlii	Various	Buildings	Buildings
H.savii	Various	Buildings, rock fissures	Rock fissures
V.murinus	Semi-desert, mountain steppes and forests	Buildings	
E.nilssonii	Lowland forest		
E.serotinus	Various	Buildings, attics	
E.bottae	Semi-desert	Caves, rock fissures	
T.teniotis	Mountain forests	Rock fissures	

M.nattereri, M.schreibersii, P.auritus. N.noctula and majority B.barbastellus were revealed in lowland and mountain forests and in human settlements attached to these landscapes. B.leucomelas and E.bottae are met in arid habitats (semi-desert, foothill and mountain steppes or mountain xerophytes).

As it is shown in the Table 2, summer roosts are most various (different natural and artificial underground spaces, man-made buildings) in R.hipposideros, R.ferrumequinum, M.blythii, M.emarginatus. Shelters of M.nattereri, M.mystacinus, B.barbastellus, H.savii are mainly connected with rock and house fissures. N.noctula, P.pipistrellus, P.nathusii were found both within buildings and tree cavities. R.blasii, R.euryale, R.mehelyi, M.schreibersii, B.leucomelas are cave-dwelling bats.

4. Threats

Situation is similar to the last report.

Tree-dwelling bats are in the hard conditions because their roosts disappear together with woods, chopping by people for firewood due to energy crisis.

5. Data Collection

The source of data is collections of the Institute of Zoology of Azerbaijan Academy Sciences, State Museum of Georgia (Tbilisi), Zoological Institute of Russian Academy of Sciences (St. Petersburg), Zoological Museum of Moscow State University, literature information, results of our own investigation since 1966.

C. Measures Taken to Implement Article III of the Agreement

6. Unfortunately, there were not changes during the past year. No specific state measures are aimed at bat protection due to hard economical situation in Azerbaijan. We do not know contemporary bats' state on the territory of Republic, their condition in various landscapes, habitats, and roosts. We can not possibilities for field observation.

Research

During last two years we could make only a few expeditions near Baku (the Absheron peninsula and Gobustan), where we studied some rock-dwelling bats and especially - Eptesicus bottae. This rare species is protected by its habitat peculiarity within rock fissures and does not need in special protection. Similar situation is with such numerous synantrope bats of Azerbaijan as P.pipistrellus and P.kuhlii.

The book "Animal World of Azerbaijan - Vertebrates"(editors D.Hadjiev & I.Rakhmatulina) was published in 2000. There are a chapter about 26 bat species of the Republic too (PP.469-504).

We prepared also the Project "Conservation strategies for underground habitats, forested and mountain areas along the Flyway of bats in Azerbaijan" for the EUROBATS Secretariat.

We took part in the Bat-detector workshop in Tbilisi in May 2000. Two detectors were presented to us by P.Boye and H.Limpens. Now we use them for revealing of species composition and density of their population in various habitats of the Absheron peninsula and Gobustan.

Legislation

Azerbaijan law on “Animal World” prohibits the catching and killing of all animals, including bats. 10 caves populated by big bat colonies were declared as the Nature Memorials. Most of them are on the territory, occupied by Armenia and we have no information about their present situation.

Only three species were included in the Red Data Book of Azerbaijan. No specific state measures are aimed at the bat protection. According to the Convention of Biological Diversity Azerbaijan Government have prepared National Action Plan for Biodiversity Conservation, which will emphasis on actions identifying and decreasing threats in different ecosystems.

Unfortunately, the Agreement has not been ratified yet and impossible for the nearest years due to economical crisis. However, Azerbaijan chiropterologists and State Committee on Ecology and Environmental Protection realize the importance of bat conservation.

International co-operation

- 11-14 May 2000 - Bat detector workshop in Georgia.

Scientific connection is regular with Georgian, Russian, Ukrain, and European bat researches.

Publication

Animal World of Azerbaijan - Vertebrates (Ed. D.Hadjiev and I.Rakhmatulina). 2000. Baki, Elm: 654 pp. (in Russian).

Rakhmatulina I. Sex ratios in bat population of the Eastern Transcaucasia. 2000. Plecotus et al. N3 (in Russian with English summary).