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: March 2002

Period Covered: February 2001 - March 2002

Competent Authority: Institute of Zoology Azerbaijan Academy of Sciences, NGO "Mammalogists of Azerbaijan"

B. Status of Bats within the Territory of Azerbaijan

1. *Summary Details of Resident Species*

The situation is similar to the last report (February 2001).
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. kihlii 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.ferrumequinun	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 artifical 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. We have no information on bats' situation in such big caves, as Azykh, Shusha, Kilit, in view of occupation of the Karabakh.

5. *Data Collection*

No change.

C. Measures Taken to Implement Article III of the Agreement

6. Unfortunately, there were not changes during the past year. Azerbaijan Ministry of Ecology and Natural Resources is on the stagy of reorganization. No specific state measures are aimed at bat protection due to hard economical situation in Azerbaijan. We do not know contemporary bats` situation on the territory of Republic, their condition in various landscapes, habitats, and roosts. We can not realize any field works, except short-term observations.

Research

During the last year members of the NGO "Mammalogists of Azerbaijan" have studied the bat fauna of the Kura Plain, from the Apsheron Peninsula to the western border with Georgia. Main work was done along the oil pipeline Baku-Supsa.

From 17 species of Chiroptera known for the Kura Plain since the XX Century according to literature and collection data, we have revealed 11 - Rhinolophus ferrimequinum, Myotis mystacinus, M. nattereri, Barbastella leucomelas, Nyctalus noctula, Pipistrellus pipistrellus, P.pygmaeus, P.nathusii, P.kuhlii, Eptesicus serotinus, E.bottae.

It was established that only P.kuhlii is wide-spread and numerous on all this territory. These bats live only in various man-made buildings. About 20 individuals inhabited almost each of buildings, houses of settlements. Population density of this pipistrelle consisted more than 100 specimens per one square kilometres.

Kuhli' bats and their shelters do not accessible for their enemies and because there is not necessity for their protection.

Bats of another above mention species were found in a few number. Using bat detectors we discovered in riparian (tugai) forests along the Kura Plain Pipistrellus pygmaeus the new species for Azerbaijan. This and another bat species (R. ferrumequinum, P. kuhlii, E. serotinus) were found by our Georgian colleagues in the adjacent area and in the same landscape.

Our investigations shown that tree-dwelling bats are in hard situation in connection with disappear of forests due to energy crisis in the Southern Caucasus. Rare E. bottae, populated the Gobustan region, is protected by its habitation within inaccessible rock fissures. But there is a danger for the existence of bats because intensification of oil and gas industry on this territory.

Legislation

Azerbaijan low on "Animal World" prohibits the catching and killing of all animals, including bats. 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. However, Azerbaijan chiropterologists and Ministry of Ecology and Natural Resources realize the importance of bat conservation.

International co-operation

Bat research on the adjacent territory of Georgia and Azerbaijan have been done together with chiropterologists of these countries in May 2001.

Scientific connection is regular with Georgian, Russian, and European bat researches. We are ready for co-operation with all chiropterologists.

Publication

Rakhmatulina I.K. 2001. Altitudinal distribution of bats in the Eastern Transcaucasia. Plecotus et al.: 41-50 (in Russian, English abstract).

Rakhmatulina I., Hasanov N. 2001. Our winged friends. J. "Ecologica", N 1 (in Azerbaijan).

Other articles about bats and in connection with the Bat Year were published in local newspapers.