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: June 2003
Period Covered: March 2002 – June 2003
Competent Authority: Institute of Zoology Azerbaijan National 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 (March 2003).

28 bat species occur on the territory of Azerbaijan. Among them Myotis bechsteinii, M. brandti, Nyctalus leisleri, Plecotus austriacus, Eptesicus nilssonii have been recorded only once.

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

9 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. The status of Pipistrellus pygmaeus is defined. This pipistrelle has been found in west and south-eastern parts of the country. 17 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 6 species (R.hipposideros, R.ferrumequinum, M.blythii, Miniopterus schreibersii, H. savii, E.serotinus). 2 species (P.pipistrellus and P.kuhlii) increase their number and both of them are very abundant in the anthropogenic 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,

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	Decline
M.bechsteinii	Rare	Vulnerable	?
M.nattereri	Rare	Lower Risk	Decline
M.emarginatus	Rare	Vulnerable	Decline
M.mystacinus	Common	Lower Risk	Decline
M.brandti	Rare	Lower Risk	?
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	?
N.leisleri	Rare	Lower Risk	?
Pipistrellus pipistrellus	Numerous	Lower Risk	Increase
P.nathusii	Rare	Lower Risk	Decline
P.kuhlii	Numerous	Lower Risk	Increase
P.pygmaeus	?	Lower Risk	?
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	Arid and forests	Underground spaces	Underground spaces
R.blasii	Mountain steppes & forests	Underground spaces	Underground spaces
R.euryale	Arid & mountain landscapes	Underground spaces	Underground spaces
M.blythii	Various	Underground spaces, buildings, rock fissures	Underground spaces
M.bechsteinii	Lowland forest	Church	
M.nattereri	Mountain steppes and forests	Buildings, rock fissures	
M.emarginatus	Various	Caves, attics, churches	
M.mystacinus	Various	Rock fissures, buildings, attics	
Min.schreibersii	Mountain steppes and forests	Caves	Caves
P.auritus	Various	Buildings, underground spaces	Caves
P.austriacus	Mountain steppes and forests	Crypt	
B.barbastellus	Forests and mountain steppes	Buildings, rock fissures	Buildings, crypt
B.leucomelas	Semi-desert, mountain steppes	Caves	Caves
N.noctula	Forests	Attics, tree hollows	
N.leisleri	Mountain forests	Tree hollow	
P.pipistrellus	Various	Buildings, tree hollows	Rock fissures, buildings
P.nathusii	Semi-desert, forests	Buildings, tree cavities	Buildings
P.kuhlii	Various	Buildings	Buildings
H.savii	Various	Buildings, rock fissures	Rock fissures
V.murinus	Arid & forest ecosystems	Buildings	
E.nilssonii	Lowland forest		
E.serotinus	Various	Buildings, attics, tree cavities	
E.bottae	Semi-desert	Caves, rock fissures	
T.teniotis	Mountain forests	Rock fissures	

E.serotinus. Mainly mountain steppes and forests are inhabited by R.blasii, R.euryale, R.mehelyi, 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*

The 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. Till now we have no information about bats of such big caves, as Azykh, Shusha, Kilit due to occupation of their territory.

5. *Data Collection*

During the last 2 years Azerbaijan mammalogists have studied the bat fauna of the Absheron Peninsula and Lencoran region.

From 6 species known for the Absheron Peninsula according to literature data, only P.kuhlii and P.nathusii were found. The first of them is numerous (2,7-13,2 individuals per 1 hectare). The single specimens of P.nathusii were revealed in Baku from August till April.

During the short-term summer expedition in Lenkoran region in June 2002 11 bat species were discovered in forests and man-settlements (R.hipposideros, M.mystacinus, M.nattereri, B.barbastellus, P.pipistrellus, P.pygmaeus, P.nathusii, P.kuhlii, N.noctula, V.murinus, E.serotinus). Of them only P.kuhlii was wide-distributed and common in the lowland and foothill landscapes. P.pipistrellus and P.pygmaeus were common in the middle-mountain forests and urbanized territories.

Habitations and feeding places of bats connect with anthropogenic biotopes in both studied regions.

The study of the bat fauna of these territories is continued.

Two articles by Rakhmatulina I.K. & Hassanov N.A. were published in the Journal “Plecotus et al.” (Pars specialis - 2002).

Mammalogists of Azerbaijan prepared the internet-site “Biodiversity of Azerbaijan mammals and their role in the ecosystems”, where is information about bats composition, significance, and protection.

The booklet about red-book and rare mammals, including bats, is prepared for the publication.

C. Measures Taken to Implement Article III of the Agreement

6. Unfortunately, there were not changes during the past year. The Bonn Convention is in Azerbaijan Parliament. We have been informed, that only after its ratification the Bat Agreement will be examined.

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 our country, their condition in various landscapes, habitats, and roosts. We cannot realize any field works, except short-term observations.

Legislation

Azerbaijan low on "Animal World" prohibits the catching and killing all animals, including bats. Only three species are in the Red Book of the Republic. No specific state measures are aimed at the bat protection. Azerbaijan chiropterologists and Ministry of Ecology and Natural Resources realize the importance of bat conservation and do all for this.

Majority bats of Azerbaijan are synantrope and do not need in special measures of protection.

13. Considerations begin given to the potential effects of oesticides on bats, and efforts to replace timber treatment chemical, which are highly toxic to bats.

No considerations are given.

It is necessary to note that after the land privatization pesticides and other chemicals do not use widely in Azerbaijan and their influence on bats is weak.

International cooperation

Scientific connections are regular with Georgian, Ukraine, Russian, and European bat researchers. We are ready for cooperation with all chiropterologists.

Publications

Rakhmatulina I.K. Biodiversity of the Caspian coastal territory under threat // Contemporary Ekological Problems. Baku, 2002: 113-115.

Musaev M.A., I.K.Rakhmatulina. About study and protection of Azerbaijan animals // Materials of the Conference devoted to Acad. H.Aliev. Baku, 2002: 307-309 (in Azeri).

Rakhmatulina I.K. & Hassanov N.A. Chiropterofauna of Absheron-Gobustan. Plecotus et al. (Pars specialis), Moskow, 2002: 92-98 (in Russian with English summary).

Rakhmatulina I.K. & Hassanov N.A. Pipistrellus pygmaeus (Leach, 1825) in Azerbaijan. Plecotus et al. (Pars specialis), Moskow, 2002: 98-99 (in Russian with English summary).

Musayev M.A., I.K.Rakhmatulina. Fauna of Azerbaijan is the inalienable part of the natural resources and problems of its conservation. Confer. On the Natural resources. Baki, 2003:272-275.