#### NATIONAL REPORT OF THE RUSSIAN FEDERATION

on the implementation of the Agreement on the Conservation of Populations of European Bats (EUROBATS)

#### A. General Information

Non-Party Range State: Russian Federation

Date of Report: May 2006

Period Covered: May 2003 — April 2006

Competent Authorities: Institute of Ecology of Mountain Territories, Kabardino-Balkarian Scientific Centre of Russian Academy of Sciences; Severtsov Institute of Ecology and Evolution,

Russian Academy of Sciences

#### B. Status of bats within the territory of Russia (European part and the Caucasus)

### 1. Summary details of resident species

30 bat species have been recorded in European part of Russia and the Russian Caucasus (Table 1). All Russian records of Grey Long-eared Bat had been referred to *Plecotus macrobullaris*, when the presence of *P. austriacus* was not confirmed (Spitzenberger et al., 2003). *M. aurascens* still demand assessment of its distribution and conservation status. Current presence of *Barbastella leucomelas* in the Russian bat fauna also requires confirmation. New special surveys in the previously known and potential roosts of *R. euryale* indicated that this species, most probably, vanished in Russia.

Recent taxonomic study of daubentonii – group species revealed that the modern range of Daubenton's bat reaches the Omsk Region in Western Siberia, when a distinct species *M. petax* occurs further to the east (Matveev et al., 2005). These results considerably reduce the range of *M. daubentonii* s.str. in Russia and the Palearctic region.

#### 2. Status and trends

As fur as 14 bat species have restricted area, the most of them were found in Russia in the Caucasus only. Besides above mentioned possible extinction of *R. euryale*, following species had significant changes in status and trends:

*Rhinolophus mehelyi* must be considered as extremely endangered in Russia, because the only known winter and summer roost in Daghestan is now abandoned (Gazaryan, Dzhamirzoev, 2005).

*Pipistrellus pygmaeus* was recorded for the first time in Russia by in Briansk region in summer 2003 (Glushkova et al. 2004). Up to now it has been found in many new localities and seems to be numerous and widespread in the European part of Russia.

*Myotis dasycneme* was found for the first time in the Caucasus (Gazaryan, 2004). This finding significantly enlarges its known range in Russia. The number of bats in known winter roosts also still increasing.

Myotis nattereri could be more numerous and widespread species in Russia than it was considered earlier, after new records in the Ural (Snitko, 2003) and the Caucasus (Gazaryan, Dzhamirzoev, 2005).

*M. daubentonii* got new status in the Caucasian part of its range. As was revealed in recent years, this species is one of the most common there (Gazaryan, 2003).

*Tadarida teniotis* has been recorded in summer 2005 for the first time since the last finding in 1960 (Gazaryan, Tembotova, submitted). New observations revealed stable population of this species in the mountains of Kabardino-Balkaria (North Caucasus).

Barbastella barbastellus. Several new hibernacula were found in winter 2005-2006 in the caves of Western Caucasus, one of them contains more than 2000 specimens. During this winter the number of barbastelles in Canyon cave exceeded 7 000 that could be related with severe external conditions. New findings in several localities in Central Caucasus confirm its wide distribution in the North Caucasus. Nevertheless, species is threatened by rapid loss of suitable roosts and habitats.

*Nyctalus noctula.* Very high mortality level was recorded in the Caucasus after a period of extremely low temperatures in December, 2005 and January, 2006. Almost all of noctules were destroyed by frost in known tree hibernacula.

**Table 1.** Current status and trends of bat populations in European Russia and Russian Caucasus: - — decrease of population; + — increase of population; 0 — population is stable, R - the species is protected in some regions, F - the species is protected in federal level

Species	Distribution	Population trend*	Legal protection*
Rhinolophus euryale	The Caucasus	Extinct	R
Rh. mehelyi	The Caucasus	-	F, R
Rh. hipposideros	The Caucasus	0	F, R
Rh. ferrumequinum	The Caucasus	-	F, R
Myotis blythii	The Caucasus	0/+	F, R
M. bechsteinii	The Caucasus	-	R
M. dasycneme	Widespread	0/+	R
M. daubentonii	Widespread	0/+	R
M. nattereri	Widespread	0/+	R
M. emarginatus	The Caucasus	-	F, R
M. brandtii	Widespread	0/-	R
M. mystacinus	Widespread	0	R
M. aurascens	Widespread	?	No
Eptesicus serotinus	Widespread	0/+	No
E. nilssonii	Widespread	0/+	No
Hypsugo savii	The Caucasus	0	R
Pipistrellus pipistrellus	Widespread	0	No
P. pygmaeus	Widespread	?	No
P. nathusii	Widespread	0	R
P. kuhlii	Widespread	+	R

Nyctalus leisleri	Widespread	-	R
N. noctula	Widespread	-	No
N. lasiopterus	Widespread	?	F, R
Vespertilio murinus	Widespread	0	No
Barbastella barbastellus	The Caucasus,	0/-	R
	Kaliningrad region		
B. leucomelas	The Caucasus	?	No
Plecotus auritus	Widespread	0	R
P. macrobullaris	The Caucasus	?	No
Miniopterus schreibersii	The Caucasus	-	F, R
Tadarida teniotis	The Caucasus	0	R

#### 3. Habitats and roost sites

Mountain and pre-mountain landscapes of different types are the most significant bat habitats in Russia. Undergrounds, overground man constructions and tree hollows are the main roosts for bats in Russia. Roosts of the last type are poorly studied although they have great importance for many threatened species. Bat boxes are being applied in small number in several localities.

#### 4. Threats

Main threats come from loss of habitats and disturbance in underground roosts. Two main reasons of habitat lost are logging and infrastructure development. An impact of these factors increases due to the growth of Russian economics. One of the critical examples is the construction of huge winter resort in the virgin forests of Sochi National Park, with goal to hold there the Winter Olympic Games 2014. This project, destructive for wild nature, contradicts with Russian environmental legislation but has strong support from many governmental structures and Administration of the President. Significant increase of cave tourism in recent years is dangerous for colonial species like *M. schreibersii*, *R. ferrumequinum* or *M. emarginatus*.

#### 5. Data collection

Data collection is ongoing in several institutes of the Russian Academy of Science, educational State Universities and Institutes, and also in science departments of State Reserves and National Parks. But the number of qualified bat specialists is low, they absent in most regions of European Russia and Russian Caucasus.

## C. Measures Taken to Implement Article III of the Agreement

## 6. Legal measures taken to protect bats

The situation with the Agreement ratification is without changes. The text of the Agreement has been translated and submitted to the Ministry of Natural Resources in 2002. Situation is the same with other Agreements of CMS family and with the Convention itself.

All animals are protected in Russia under the Law on Animal World (1995). It foresees a direct protection of animals, which are included in the Red Data Book of Russian Federation or regional Red Data Books. There are only 7 bat species in the latest issue of the Red Data Book of Russian Federation, but many other bat species are protected by regional Red Data Books (Table 1). Thus, the first edition of the Red Data Book of Rostov-on-Don Region was issued in 2004. It

includes 4 bat species – N. lasiopterus, N. leisleri, M. dasycneme and P. auritus. Three latter species have not been entered in the Red Data Book of Russian Federation (2000).

New edition of Red Data Book of the Krasnodar Territory will include 16 bat species. This region covers key habitats and major roosts of several bat species with restricted range (for example, B. barbastellus, M. schreibersii and M. bechsteinii).

## 7. Sites identified and protected

No new sites had been officially identified and protected.

## 8. Consideration given to habitats, which are important to bats

No considerations are given.

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

The project "Status and conservation of *B. barbastellus* and *M. bechsteinii* in Russian Federation" (led by S. Gazaryan) was carried out in 2003-2004 with support of DEFRA/FFI Flagship Species Fund. This project included educational activities, survey of key habitats and development of recommendations for their protection.

Two conservational projects are ongoing. The project "Return of a pond bat" lead by J. Glushkova and supported by the Bat Conservation International is focused on restoration of artificial underground galleries as hibernacula for the pond bats. Speleologists, scientific research institution and nature conservation organization will unite the efforts for competent usage of abandoned constructions for recreational, conservational and scientific purposes.

The project "Conservation action plan for threatened bat species of the UNESCO World Heritage "Western Caucasus" (lead by S. Gazaryan) was supported by the Rufford Small Grants. As a result, all official persons and governmental organizations involved in conservation planning, tourist management or environmental control will know which bat species is threatened in the Western Caucasus and what they must to do for its protection. Second, but essential, aim of this project is to increase the public awareness, focused on groups and communities that have major impact on bats – the personal of protected areas, tourists, cavers and scientists. As the first result, extended list of threatened bats was adopted for the second issue of the Red Data Book of the Krasnodar Territory (see Chapter 6).

# 10. Responsible bodies nominated for the provision of advice on bat conservation and management

The Russian Nature Control Agency of the Ministry of Nature Resources and their regional departments are bodies responsible for the provision of advice on the bat conservation and management. They also have a police service.

#### 11. Additional action undertaken to safeguard populations of bats

No additional actions have been undertaken.

#### 12. Recent and ongoing programmes relating to conservation and management of bats

Besides projects mentioned in Chapter 9, several scientific researches dealing with the conservation of bats are taking place in Russia. The most of them are related with the monitoring of underground roosts and habitats in protected areas, and one – with radio telemetry and DNA-analysis of *M. bechsteinii* (see Chapter 14).

## 13. Considerations being given to the potential effects of pesticides on bats

No considerations were given.

## **D.** Functioning of the Agreement

### 14. Cooperation with other Range States

Russian bat workers unofficially cooperate with their colleagues from many party and non-party states. Since 2006 Russian bat workers together with those from Switzerland, Bulgaria, Georgia and Serbia participate in international project "Ecology, behaviour and population genetics of the forest living Bechstein's bat (*Myotis bechsteinii*) in two glacial refuges: South-Eastern Europe and the Caucasus", supported by Swiss National Science Foundation.