

National Report on the implementation of the Agreement on the Conservation of Bats in Europe in the Russian Federation

GENERAL INFORMATION

Non-Party Range State:	Russian Federation
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STATUS OF BATS WITHIN THE TERRITORY OF THE NON-PARTY RANGE STATE

The situation is generally similar to the last report.

Of 30 European bat species, 27 are known to be resident in Russia, and one additional Asian species, *Barbastella leucomelas*, is recorded in European part of the country (NE Caucasus, Daghestan). Another Asian species, *Eptesicus bottae*, may also be present in Daghestan, but has not been found.

Several species are represented in the European part of Russia by distinct geographical forms. *Eptesicus serotinus* has two subspecies (*E. s. serotinus* and *E. s. turcomanus*) which seem to hybridize to the west of the Volga River (Strelkov, Ilyin 1990). Another species, *Myotis mystacinus* is represented by at least three subspecies (*M. m. mystacinus*(?), *M. m. popovi*, and *M. m. aurascens*); their geographical and genetic relationships are unclear (E. A. Tsytulina, in press). All of these forms are fairly common in Russia.

13 species have restricted distribution (Table 1), and 12 of them do not occur within Russia beyond the North Caucasus. Only *Barbastella barbastellus* lives also in the north-eastern Russia, in Kaliningrad Region.

Table 1. Current status and trends of bat populations in Russia

Species/subspecies	Distributional status	Estimated faunal status	Red Data Book status*	IUCN status	Trend
<i>Rhinolophus euryale</i>	restricted	rare		R	?
<i>R. mehelyi</i>	restricted	rare?	V	V	?
<i>R. hipposideros</i>	restricted	common	V	V	o/+
<i>R. ferrumequinum</i>	restricted	common	V	V	o
<i>Myotis blythi</i>	restricted	common	V	V	o
<i>M. bechsteini</i>	restricted	rare		R	o
<i>M. dasycneme</i>	widespread	common		NT	o/+
<i>M. daubentoni</i>	widespread	numerous		NT	o/+
<i>M. nattereri</i>	widespread	rare?		NT?	o
<i>M. emarginatus</i>	restricted	common?	V	V	?
<i>M. brandti</i>	widespread	numerous		NT	o/+
<i>M. mystacinus mystacinus</i>	widespread	common		NT	o
<i>M. mystacinus popovi</i>	restricted	common		N/A	?
<i>M. mystacinus aurascens</i>	restricted	common?		N/A	?
<i>Eptesicus serotinus serotinus</i>	widespread	common		NT	+
<i>Eptesicus serotinus turcomanus</i>	restricted	common		N/A	+
<i>E. nilssoni</i>	widespread	common		NT	o
<i>Hypsugo savii</i>	restricted	rare		R	?
<i>Pipistrellus pipistrellus</i>	widespread	numerous		NT	o/+
<i>P. nathusii</i>	widespread	numerous		NT	+

<i>P. kuhli</i>	widespread	numerous		NT	+
<i>Nyctalus leisleri</i>	widespread	common		NT	?
<i>N. noctula</i>	widespread	common		NT	-
<i>N. lasiopterus</i>	widespread	rare	R	R	o
<i>Vespertilio murinus</i>	widespread	common		NT	o
<i>Barbastella barbastellus</i>	restricted	common		V	o/+
<i>B. leucomelas</i>	restricted	rare		R	?
<i>Plecotus auritus</i>	widespread	numerous		NT	o/+
<i>P. austriacus</i>	restricted	common		NT	?
<i>Miniopterus schreibersi</i>	restricted	common	V	V	o
<i>Tadarida teniotis</i>	restricted	rare	R	R	?

* Red Data Book of Russian Federation 1985. M., Rosselkhozizdat, 456 pp. [in Russian]. Status abbreviations: V – vulnerable; R – rare.

HABITATS AND ROOST SITES

The situation is generally similar to the last report.

DATA COLLECTION

Data accumulation is undertaken by several institutions independently. These are the Zoological Institute, Russian Academy of Sciences (St. Petersburg: P. P. Strelkov and E. A. Tsytsulina), The Ecological Centre “Dront” (Nizhny Novgorod: A. I. Bakka), Udmurt State University and Institute of Applied Ecology (Izhevsk: V. I. Kapitonov, A. K. Grigoryev, A. V. Vassilyev), Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences (Moscow: P. N. Morozov, E. I. Kozhurina, S. V. Gazaryan), Zoological Museum of Moscow State University (Moscow: A. V. Borissenko, S. V. Kruskop), Zvenigorod Biological Station of Moscow State University (Moscow Region: K. K. Panyutin, A. V. Borissenko), Biological Research Institute, St. Petersburg State University (St. Petersburg: D. V. Chistyakov), Department of Zoology, Penza State Pedagogical University (Penza: V. Yu. Ilyin, D. G. Smirnov and others), and some reserves. Students of the Biological Faculty of Moscow Lomonosov State University are also being involved in summer ecological research, and of them are doing their BSc and MSc thesis on bats. The primary task remains in the accumulation of distribution records and definition of key sites for chiropteran biodiversity in the European part of Russia.

RESEARCH

Many of the research activities carried out during the previous year continue, and several new research projects have been launched.

The survey of bats of Nizhny Novgorod Region (conducted in 1985-88 and 1992-99) is proceeding under the guidance of A. A. Bakka and S. V. Bakka. Also proceeding are the field works carried out by V. I. Kapitonov and A. K. Grigoryev in the Udmurt Republic (launched in 1991).

The researchers from Penza State Pedagogical University (V. Yu. Ilyin, S. G. Smirnov and others) have started faunistic studies of bats in the western and south-western slopes of the Ural Mountains (the border of the Agreement area). Also, together with V. P. Vekhnik, they continue to monitor bat populations in the mines of Samarskaya Luka (Middle Volga, about 52°30'N, 49°30'E). The bat numbers during hibernation continue to rise, as compared with the previous years. Further studies were made of the largest known aggregations of hibernating *Myotis dasycneme* and *Eptesicus nilsoni*, whose numbers also continue to grow. New improved methods of winter counts of hibernating bats were introduced, and over 17000 bat individuals were counted. Among the current priorities is the establishment of summer localities, from which the bats come to hibernate in the mines of Samarskaya Luka.

D. V. Chistyakov (St. Petersburg) has launched a study of the northern distribution limits of migratory and resident species of Russian bats; new ecological and faunistic data are already obtained.

The study of Caucasian bats is also in progress. Cave-dwelling bats of Western Caucasus are being surveyed by S. V. Gazaryan (since 1994), both in summer and in winter. E. I. Kozhurina and V. G. Varsareva have begun to assess the status of local populations of migrating bat species (particularly, *Nyctalus noctula*) in the vicinity of Maikop (NW Caucasus). A short-term survey was conducted in Caucasian Reserve by S. V. Kruskop and E. A. Tsytsulina.

A small survey of bats of the Middle Don area was conducted by A. V. Borissenko and others. Particularly, observations were conducted of the largest and southernmost known nursing colony of *Myotis dasycneme* in Russia (ca. 500 individuals) in Nizhny Chir (Volgograd Region, ca. 48°20'N, 43°10'E). The colony is known since the 1970-s, and has hitherto been occupying the attic of the local school. Fortunately, the school personnel understands the importance of preserving this unique colony, and does not cause harm to the bats.

Bat monitoring in the eastern part of Moscow Region is carried out by P. N. Morozov and E. I. Kozhurina at the Biological Station in Chernogolovka (Noginsk Distr.) The studies to the West of Moscow are being carried out in the vicinity of the Zvenigorod Biological Station (Odintsovo Distr.) by A. V. Borissenko and K. K. Panyutin. The work includes studies of summer ecology and local distribution patterns of bats, particularly *Myotis dasycneme* and *Pipistrellus nathusii* and surveys of local hibernation sites. A large nursing colony of *M. dasycneme* (ca. 300 individuals) was recorded last summer in the vicinity of the Zvenigorod Biological Station, and some patterns of dispersal and foraging of bats from this colony were studied.

A noteworthy event is the introduction of a new bat box originally designed by K. K. Panyutin. Last summer one of the boxes mounted at the Zvenigorod Biological Station consecutively housed three nursing colonies of *Nyctalus noctula*.

LEGISLATION

Unfortunately, there were no significant changes during the past year. All bat species are legally protected in Russia, especially those included in the Red Data Book (Table 1). However, no specific state measures are aimed at bat protection.

Efforts have been put by V. Yu. Ilyin and D. G. Smirnov to give special conservation status to Virginskaya mine (Volga basin) serving as a hibernation shelter to thousands of bats.

S. V. Gazaryan struggled with the local authorities to give the Kanyon cave (NW Caucasus, Krasnodar Territory) status of the Nature Monument. His efforts were not vain: Session of Apsheronsk district Soviet of Deputies took a decision No 160 of 25 February 2000 about creation of Nature Monuments on the territory of the district. Four caves (all inhabited by bats) have been included in the list of protected objects, the Kanyon cave is among of them.

CHANGES TO THE STATUS OF BAT SPECIES IN RUSSIA

No change.

RATIFICATION

The Agreement has not been ratified yet. Due to the difficult economic situation in Russia, joining to the Agreement is impossible for the nearest years. However, bat specialists and the State Committee of the Russian Federation on Environmental Protection realise the importance of bat conservation.

INTERNATIONAL CO-OPERATION

“Genetic diversity and population structure of European bats” (Germany, Austria, Russia; 1994-present).

NEW ITEMS OF PUBLICITY ISSUED

The second issue of the Russian bat journal “Plecotus et al.” was published in 1999, and the third one is under preparation and will be published in 2000.

The Russian Bat Research Group website has been prepared, containing information on Russian bats, bat specialists, research, events, activities and publications of the Russian Bat Research Group. The version of this website in Russian language and part of the proposed English version is online and available at <http://zvert.ss.msu.ru/~rgr>.