



**REPUBLIC OF MACEDONIA
MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING**

AGREEMENT ON THE CONSERVATION OF POPULATIONS OF EUROPEAN BATS

**7th Session of the Meeting of Parties to EUROBATS
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**MACEDONIAN NATIONAL REPORT
OF THE IMPLEMENTATION OF THE AGREEMENT ON BATS**

Skopje: June, 2014

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MACEDONIAN NATIONAL REPORT

- UPDATE TO THE YEAR 2014-

For remind, actions of the Ministry of Environment and Physical Planning and Macedonian Committee of the conservation of migratory species (MBC) for the activities of the bats conservation is described in the our National Reports (see: <http://www.eurobats.org/Party Reports/ Macedonia.htm>).

Macedonian Committee of the CMS (MBC) has considered following directions:

- Protect the nature ecosystems and habitats,
- Protection of the buildings in urban and rural complexes,
- Promoting important ruts of the bats population on biodiversity conservation,
- Organizing tre European Bats Night (last weekend of August 2012, 2013 and 2014) in Skopje (Arheologic lokality Kale, Old buildings of the Key of river Vardar and smal canals and lakes of the City Park- Skopje), kej of River Luda Mara and lokaliti Brioni of the City Park of Kavadarci, lakes Tikvesh, Mladost, Matka, Treska, Kozjak, Ohrid Lake, Prespa Lake and Dojran Lake, and in many different places in Macedonia,
- Created Work Program of activities for organizing European Bats Night in nex trienium (last weekend of August 2015-2017) in Macedonia.

A. General information

- Party: **Republic of Macedonia**
- Date of report: **June 2014**
- Period covered by Report: **May 2010- June 2014**
- Competent Authority: **Ministry of Environment and Physical Planning**

B. Status of Bats within the Territory of the Party

1. Summary Details of the Species

24 species of bats were known for Macedonia so far. Two new species are added to the list of Macedonia (*Plecotus auritus* and *P. pygmaeus*), by the BSGM, so the current number of bat species for Macedonia is 26.

2. Status and Trends

Status and trends of species conservation are the same like in previous years. Detailed inventory and evaluations have not been done due to financial reasons.

3. Habitats and Roost Sites

The majority of data has been collected from the traditionally examined areas, which are also considered as the key sites of bat diversity. Currently bats are known for 72 localities in the Republic of Macedonia. The territory of Macedonia has been unequally studied. Most important habitat sites include forests and mountain protected areas, parks with old trees, locality of recreation, old buildings, rivers and ponds, surroundings of natural lakes and dams. Important wintering sites are artificial mining sites and caves. Most of the data originate from Vardar River valley, (Lepenec, Treska, Pcinja, Babuna, Topolka, Bregalnica, Crna Reka, Luda Mara, Boshava, Dochnica, Anska Reka) and Canjon Matka George, Badar-Taor, Demir Kapija George, NP Mavrovo, NP Galitcica, Golem Grad, NP Pelister, Central Macedonia (valley of Bregalnica), Northern side of Prespa Lake area were also studied by Bat Study Group Macedonia. Collectors also sampled mainly at lower altitudes, while the mountains were neglected. For the majority of them, nursery or pregnant females and juvenile specimens were found in caves or other underground spaces.

4. Threats

Human activities in Macedonia have been apparently large in the lowland areas, as constant draining of wetlands, steady reduction of forests, urbanization of large areas, uniformity in the arrangement and landscaping of farmland, continuing and increasing use of chemicals to eliminate unwanted insects. The higher altitude habitats are less exposed to human activities.

5. Data Collection

The source of data is Dpt for animal taxonomy and ecology, Institute of Biology-Faculty of Natural Science, P.Box 162, 1000-Skopje and

Macedonian Museum of Natural History, Boulevard Ilinden 86 Skopje

Bat Study Group Macedonia, Blvd. Februarski Pohod 24/47,, Skopje

Information with data collection is done by BSPSM, MES, PEONI, ORLE (NGO-s).

But official system for data collection, analysis and yearly reporting, or voluntary network is not yet established.

6. Legal measures taken to protect bats, including enforcement actions

Traditionally bats never have been a subject of capture, keeping or killing.

Legal measures has been taken in protected areas over in country (132 localities with total surface of 260.855 ha), especially rivers, dams, gorges, lakes, forests and caves.

In our Triennial Program (2012-2014) is include preparation of sub-legislation of Law of Nature Protection, Law of Fishing and Aquaculture , Law of Forestry and Law of Hunting. Situation of the other legislative is similar to the last update report. In next Triennium (2015-2017) sub-legislation will be adopted and harmonized with CMS,

EUROBATS and the EU Directives and Regulatives.

7. Sites identified and protected which are important for the conservation of bats

The Macedonian Committee of the Bonn Convention (MBC) was promoted actions to make the Macedonian list of SCI (important to the conservation of bats). This action is coordinated and instructed of experts from sciences institutions of nature conservation: Dpt. for animal taxonomy and ecology, Institute of Biology, Faculty of Natural Sciences Skopje, BSPSM, Bat Study Group Macedonia, Macedonian Museum of Natural History Skopje, Speleological Society "Peoni", Skopje, and Department of Biological Diversity and Nature on the Ministry of Environment and Physical Planning.

8. Consideration given to habitats which are important for bats

Project for research and conservation natural habitats (caves) important for bats protection has been carried out. This action coordinate experts from Dpt. for animal taxonomy and ecology, Faculty of Natural Sciences, Bat Study Group Macedonia (BSGM), Macedonian Museum of Natural History, DBD, Skopje, Speleological Society "Peoni" Skopje, and Department of BDN on the Ministry of Environment.

9. Activities to promote the awareness of the importance of the conservation of bats

In reporting period by the Macedonian Environmental Info-Center and Department of Public Communication on the Ministry of Environment and Physical Planning has been promoted this awareness of the importance of conservation of bats population and their habitats. Many of data, information and pictures are include on our web-site and on printing material (prospects, brochures, posters, catalogs, calendars etc.).

Department of Biological Diversity and Nature, with co-operation and assistance of the MBC, BSPSM and Bat Study Group Macedonia has been realized process of implementation measures and actions for protection bat population and their habitats in forests and caves.

The Campaign of Bat Conservation every year traditionally has been started on 22 March (World Water Day) and continy in April to November. Special part has been organized on 22 April (International Day of our Planet), 22 May (International Day of Biological Diversity) and 5 June (World Day of Environment). In the feamework of European Bat Night, on last weekend of August every year has been organizing many manifestations with education of the childrans, local peoples, farmers, ecological sections and NGO-s. Also, Macedonian Committee of CMS and Macedonian Committee of CBD have organized several debates to protect bat populations and their habitats.

In this treenium many of activities from our Work Program where implemented in co-operation with our partners in Macedonia, Contracting Parties in Balkan Peninsula, CEE, EU, other European countries and international organizations and supported by UNEP/ EUROBATS Secretariat.

**10. Responsible bodies nominate for the provision of advice
of bat conservation and management**

Dpt for animal taxonomy and Ecology, Institute of Biology, Faculty of Natural Science-
Skopje, Gazi Baba bb, P.Box.162, 1000- Skopje Macedonia

Bat Study Group Macedonia, BSGM, Blvd. Februarski Pohod 24/47, Skopje 1000,
Macedonia

Macedonian Museum of Natural History
Boulevard "Ilinden" 86, 1000 Skopje Macedonia

11. Additional action undertaken to safeguard populations of bats

- Created concept of priority for next triennium (monitoring),
- Preparing application of important projects for biodiversity conservation.

**12. Recent ongoing programs (including research) relating to the conservation
and management of bats**

Project for evaluation of biodiversity components and natural heritage in Gorge Canjon Matka and river Treska has include several important areas for protection of bat population in Macedonia (ASCI). Experts have evaluated natural habitats and species. On the List of fauna species has been include bats species from Rhinolophidae: *Rhinolophus blasii*, *Rhinolophus euryale*, *Rhinolophus ferrumequinum*, *Rhinolophus hipposideros*, *Rhinolophus mehelyi*, and Vespertilionidae: *Myotis blythi*, *Barbastella barbastellus*, *Miniopterus schreibersi*, *Myotis capaccinii*, *Myotis emarginatus* and *Myotis myotis*.

Tree studies are taken for EIA on potential areas of vine turbine parks.

In 2013 thanks to DEFRA (UK) and Eurobat secretariat a project for Capacity-Building for Bat Species identification and future Monitoring was realised by Bat Study Group Macedonia at Prespa Region (SW Macedonia).

**13. Considerations being given to the potential effects of pesticides on bats, and
efforts to replace timber treatment chemicals which are highly toxic to bats**

Department of Biological Diversity and Nature and Department of Environment Impact Assessment in the Administration of Environment, in co-operation whit State Inspectorate of Environment and State Inspectorate of Agriculture has organize actions for elimination potential effects of pesticides on population of birds and bats.

Also, Department of Nature in Administration of Environment, in co-operation with the Department of Forest and Hunting by the Ministry of Agriculture, Forestry and Water-management (MAFWE), has analyzed the efforts to replace timber treatment chemicals which are highly toxic to flora and fauna, including bats and collect review.

14. Co-operating with other Range States

Active cooperation Macedonian Committee for CMS held between the National Committees and Institutions from UK, the Netherlands, Germany, Norway, France, Belgium, Albania, Greece, Bulgaria, Slovenia, Croatia, BIH and Serbia.

15. Measures taken to implement Resolutions adopted by MOP.

Resolution 2.2 Database of Monitoring Results

Creation National framework of the official database system for bats based on monitoring data.

Resolution 4.6 Guidelines for the Issue of Permits for the capture and Study of Captured bats

Administration of Environment, Department of Biodiversity and Nature is hereby responsible for the licenses for bat ringing activities keeping in mind the resolution.

Annex I

Status of Bats within the territory of the Republic of Macedonia

1. Summary details of the Species

Twenty-six species of bats are currently known to occur within the territory of Macedonia. On the basis of the available data from the adjacent regions (Bulgaria, Greece, Serbia and Albania) and habitat diversity in Macedonia, the presence of a few additional species are expected. The majority of specimens and information are from spring; summer and early autumn, while winter visits to caves were exceptional. Consequently, only five species (*Rhinolophus ferrumequinum*, *Rhinolophus hipposideros*, *Myotis myotis*, *Nyctalus noctula* and *Miniopterus schreibersi*) were found in hibernation. For nine species we have evidence of their reproduction in the region: *Rhinolophus hipposideros*, *Rhinolophus ferrumequinum*, *Rhinolophus euryale*, *Myotis myotis*, *Myotis blythi*, *Myotis emarginatus*, *Myotis capaccinii*, *Eptesicus serotinus*, *Pipistrellus pipistrellus* and *Miniopterus schreibersii*.

2. List of threatened bat species in Macedonia

<i>Rhinolophus blasii</i>	<i>Rhinolophus euryale</i>	<i>Rhinolophus mehelyi</i>
<i>Rhinolophus hipposideros</i>	<i>Rhinolophus ferrumequinum</i>	<i>Barbastrella barbastrelus</i>
<i>Miniopterus schreibersii</i>	<i>Myotis capaccinii</i>	<i>Myotis emarginatus</i> .

Table 1. Threatened status of Bat species (Mammalia: Microchiroptera) in Macedonia

	NATIONAL AND SCIENTIFIC NAME OF SPECIES	TREAT STATUS (CATEGORY) (2010)	TREAT STATUS (CATEGORY) (2014)
1	2	3	4
Rhinolophidae			
1	<i>Rhinolophus blasii</i>	VU	VU
2	<i>Rhinolophus euryale</i>	VU A2c	VU
3	<i>Rhinoloph. ferrumequinum</i>	LR:nt	VU
4	<i>Rhinolophus hipposideros</i>	VU A2c	VU
5	<i>Rhinolophus mehelyi</i>	VU A2c	VU
6	<i>Barbastella barbastellus</i>	VU A2c	VU
7	<i>Minioterus schreibersii</i>	LR:nt	VU
8	<i>Myotis cappacinii</i>	VU A2c	VU
9	<i>Myotis emarginatus</i>	VU A2c	VU

Source: IUCN/SSC CSG (2001), Hudson. M.A. et al./ Global Status and Conservation Action Plan MOEPP (2010), Analyze and Evaluation of Biological Diversity in Macedonia, UNDP, UNEP, MEPP, IUCN World Status: VU- vulnerabl; LR:nt- Lower Risk:near threatened

Annex II

Table 2. The distributional and estimated found status of the bat species known in Macedonia

	SPECIES	DISTRIBUTION STATUS	ESTIMATED FAUNAL STATUS	HIBERNATION SITES	SUMMER ROOST
1.	<i>Rhinolophus hipposideros</i>	widespread	common	mines	buildings, caves
2.	<i>Rhinolophus ferrumequinum</i>	widespread	common	mines	caves
3.	<i>Rhinolophus euryale</i>	widespread	common		caves
4.	<i>Rhinolophus blasii</i>	restricted	rare		
5.	<i>Rhinolophus mehelyi</i>	restricted	rare		caves, mines
6.	<i>Myotis mystacinus</i>	widespread	rare		
7.	<i>Myotis myotis</i>	widespread	numerous	caves	caves
8.	<i>Myotis daubentonii</i>	restricted	rare		
9.	<i>Myotis blythi</i>	widespread	common		caves, mines
10.	<i>Myotis emarginatus</i>	restricted	common		caves
11.	<i>Myotis capaccinii</i>	widespread	common		caves, mines

12.	Myotis nattereri	restricted	rare		
13.	Nyctalus noctula	widespread	rare		hollow trees
14.	Nyctalus leisleri	restricted	rare		
15.	Eptesicus serotinus	restricted	rare		caves
16.	Vespertilio murinus	restricted	rare		
17.	Pipistrellus pipistrellus	widespread	common		buildings, caves
18.	Pipistrellus nathusii	restricted	rare		
19.	Pipistrellus kuhlii	restricted	rare		
20.	Hypsugo savii	restricted	rare		
21.	Plecotus austriacus	restricted	rare		
22.	Barbastella barbastellus	restricted	rare		
23.	Miniopterus schreibersi	widespread	common	caves	caves
24.	Tadarida teniotis	restricted	rare		
25.	Plecotus auritus	restricted	rare		
26.	Pipistrellus pygmaeus	widespread	common		

Address:

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