# Agreement on the conservation of bats in Europe Update to the National Implementation Report of Ukraine

#### A. General Information

Name of Party: Ukraine

Date of Report: April 2005

Period covered: May 2004 – April 2005

Competent Authority: Ministry of Environmental Protection of Ukraine:

Wildlife Protection Department

Address: 35 Urytskogo Str. 03035 Kyiv, Ukraine

Tel/Fax: (+38) (044) 206 31 26

E-mail: domashlinets@menr.gov.ua

### B. Status of bats within the territory of party

### 1. Summary details of Resident Species

Totally, 26 species have been registered (and confirmed) for bat fauna of Ukraine. Mentions on the records of *Rhinolophus euryale*, *Rhinolophus mehelyi* are considered as erroneous. Presence of 24 species has been confirmed with new records. Two species (*Miniopterus schreibersii*, *Eptesicus nilssonii*) have not been registered for last years at all.

#### 2. Status and Trends

New data have been received on a number of species in different regions of the country. This enables to precise the details on distribution and abundance of bats' species in Ukraine (Table 1).

A new edition of the Red Data Book of Ukraine is being prepared, and list of protected species (according to RDBU) is expected to increase essentially (see Point 6).

### 3. Habitats and Roost Sites

In general, situation is similar to the last report.

#### 4. Threats

Situation similar to the last report.

### 5. Data Collection, analysis, interpretation and dissemination

Each annual meeting of the Ukrainian Theriological Society — Theriological School — includes a special session titled "European Bat Night" for presentation of the results of investigations in the field of bat biology, morphology, ecology and conservation in Ukraine. The last session on bats was convened in the framework of the XI Theriological School (Regional Landscape Park "Granytno-Stepove Pobuzhzhya") in October 11–16, 2004.

The results of bat investigations carried out by Ukrainian scientists are reflected at publications covering the following topics: general and regional reviews of bat fauna, distribution of bats in Ukraine, biology and ecology of bats, bat conservation. List of papers published for the period covered with the report as well not included into previous reports is presented in the Annex 1.

Table 1. Distribution and abundance of bats' species in Ukraine\*

N	Species	Distribution	Status	Estimated trend	RDBU (1994)	RDBU, new ed.
1	Rhinolophus ferrumequinum	restricted	frequent	0	yes	yes
2	Rhinolophus hipposideros	restricted	frequent	0	yes	yes
3	Miniopterus schreibersii	restricted	extinct	_	yes	yes
4	Myotis blythii	restricted	frequent	-/o	no	yes
5	Myotis myotis	restricted	frequent	0	no	yes
6	Myotis bechsteinii	restricted	rare	0	yes	yes
7	Myotis nattereri	widespread	rare	0	yes	yes
8	Myotis emarginatus	restricted	very rare	0	yes	yes
9	Myotis dasycneme	widespread	rare	0	yes	yes
10	Myotis daubentonii	widespread	common	0	no	no
11	Myotis brandtii	restricted	rare	0	no	yes
12	Myotis mystacinus	widespread	frequent	0	no	yes
13	Plecotus auritus	widespread	frequent	0	no	yes
14	Plecotus austriacus	restricted	frequent	0	no	yes
15	Barbastella barbastellus	restricted	rare	0	yes	yes
16	Nyctalus leisleri	widespread	rare	0	yes	yes
17	Nyctalus noctula	widespread	common	0	no	no
18	Nyctalus lasiopterus	restricted	very rare	_	yes	yes
19	Pipistrellus kuhlii	widespread	common	+	yes	no
20	Pipistrellus nathusii	widespread	frequent	0	no	no
21	Pipistrellus pipistrellus	widespread	common	0	no	no
22	Pipistrellus pygmaeus	widespread	frequent	?	no	no
23	Hypsugo savii	restricted	very rare	0	yes	yes
24	Eptesicus nilssonii	restricted	very rare	_	no	yes
25	Eptesicus serotinus	widespread	common	0	no	no
26	Vespertilio murinus	widespread	common	0	no	yes

<sup>\*</sup> Notes and abbreviations in Table 1:

Distribution: "widespread" — records of a species cover all the territory of Ukraine or its biggest part; "restricted" — a species was registered at the less part of Ukraine or in few localities.

Estimated trends during last 50 years: "o" stable/unknown, "-" decreasing, "+" increasing.

Special protected status: RDBU (1994) – species included to the Red Data Book of Ukraine (1994); RDBU, new ed. – species expected to be included into new edition of the Red Data Book of Ukraine.

### C. Measures taken to implement Article III of the Agreement

### 6. Legal measures taken to protect bats, including enforcement action

Preliminary list of bat species expected to be included into the new edition of the Red Data Book of Ukraine contains 19 species. Last edition of the Book (1994) includes 12 bat species (table 1). Thus, according to the Laws of Ukraine "On the Red Data Book of Ukraine" and "On the Animal World" these species belong to natural resources of state significance and have to be protected at all the territory of Ukraine.

### 7. Sites identified which are important to the conservation of bats

In general situation similar to the last report.

Additionally, three main hibernation sites among natural caves of Central Podillya karst region (S.-E. part of Ternopilska and S.-W. part of Khmelnytska provinces of Ukraine) were determined at the base of results of a cycle of bats' monitoring (coordinator: Dr. I. Zagorodniuk). Though these sites are presented by the biggest known winter aggregations in the region, in all of them an average number of hibernating bats doesn't exceed 200 individuals (table 2).

Table 2. The biggest winter bats' aggregations in natural caves of Central Podillya

Cave	Years of ob- servations	Species and average and maximum number of individuals (in gaps)
Lysyachiy Khid Cave (of Kryshtaleva system)	1999-2003	R. hipposideros (95, max=162), M. myotis (2, max=5), P. auritus (1, max=2), P. austriacus (1, max=2), B. barbastellus (1, max=1), E. serotinus (1, max=1)
Vitrova Cave (of Optymistychna system)	2000-2002	R. hipposideros (182, max=204), M. myotis (1, max=3), P. auritus (1, max=1), M. mystacinus s. l. (1, max=1)
Verteba Cave	2000-2003	R. hipposideros (35, max=52), M. myotis (95, max=127), M. daubentonii (1, max=2), P. auritus (1, max=2)

Additionally a row of new key sites presented by underground cavities of Crimean peninsula (South Ukraine) was preliminary determined according to the results recently obtained (point 12-3). Here big maternity colonies of *Myotis blythii* and *Rhinolophus ferrumequinum* up to 3000 and 4000, correspondingly, were found. Few rather big winter aggregations for these species were revealed here as well. Some other new bat important sites in the different regions of the country have been identified as well. The measures for their protection are being elaborated.

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

Situation similar to the last report.

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

Public awareness activities towards the necessity and importance of bat conservation were as follows: development of the web-site, preparing and distribution of printed information, public lectures, and public education actions.

In the framework of the project on bats of Crimea supported by the BP Conservation Programme (point 12-3) a complex of activities was realized. They include:

 Working out a new conception and a new structure for web-site of Ukrainian Centre for Bat protection (<a href="http://www.kazhan.org.ua">http://www.kazhan.org.ua</a>). The main accent is transferred from UCEBA activities to bats. An URL of the site is pointed at all printed production. Line for questions about bats and fast connection was opened.

- Preparing, publishing and distribution of printed information (a booklet "Cave inhabitants of Crimea need protection", a pocket calendar "Bats of Crimea need protection", an article for magazine of Ukrainian Speleological Association "Svet" (2005, № 1) "Upside-down, or caves for bats".
- a lecture-presentation "Cave dwelling bats of Crimea: a current status" in theframework of 13<sup>th</sup> Conference of Ukrainian Speleological Association (Ukraine, Poltava, 10–13 March).

In the framework of the KNIP funded project "Conservation of dendrophile species of mammals" (point 12-6) at the base of the "Desnyanski Zori" children ecocamp (16-19 August of 2004) an action on making and hanging out about 100 bat-boxes was carried out.

In Lugansk, Uzhgorod, Kiev and Lviv, actions were organized in autumn of 2004 for students-biologists and children that included excursions with bat-detectors and discussions about bat distribution, activity, census and conservation.

A public action "Home for Bats" was prepared by Ukrainian Centre for Bat Protection together with Kyiv Ecoethic Centre in the framework of "Day of the Earth' which was carried in the Kiev Zoo (May, 2004). The action included few concourses for children (for the best bat-box made by children, for best answers on bats' biology, for the best story about bats), distribution of booklets "Be friendly to bats" among visitors of Zoo, etc.

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

Wildlife Protection Department Ministry of Environmental Protection of Ukraine 35 Urytskogo Str., 03035 Kyiv, Ukraine

Tel/fax: (+038) (044) 206 31 26 E-mail: <u>domashlinets@menr.gov.ua</u>

#### Contact persons:

Dr. Volodymyr Domashlinets
Deputy Head of
Wildlife Protection Department
Ministry of Environmental Protection
Tel/fax: (+38) (044) 206 31 26
E-mail: domashlinets@menr.gov.ua

Ms. Lena Godlevska Schmalhausen Institute of Zoology of NAS of Ukraine 15 Khmelnitsky Str., MSP, 01601 Kyiv-30, Ukraine. E-mail: dc@isppe.freenet.kiev.ua Dr. Igor Zagorodniuk Head of UCEBA, expert of the Ministry of Environmental Protection

Uzhgorod National University Tel/fax: (+38) (050) 69 00 257 E-mail: zoozag@ukr.net

Dr. Andriy-Taras Bashta
Institute of Ecology of the Carpathians
of NAS of Ukraine

4 Koselnytska Str., 79026 Lviv, Ukraine.

Tel/fax: (+38) (0322) 70 74 30 E-mail: atbashta@polynet.lviv.ua

### 11. Addition action undertaken to safeguard population of bats

Situation similar to the last report.

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

#### Finished:

1. Working out a new edition of Red Data Book of Ukraine. A collective of Ukrainian bat-workers (V. Tyshchenko, L. Godlevska, Dr. I. Zagorodniuk, Dr. A. Dulitsky) took part in the preparing of a new draft list of bat species to be included into a new edition of the Red Data Book of Ukraine.

### Ongoing:

- 2. Centre of Bat Rehabilitation of UCEBA at the Kyiv Zoo. The Centre had been worked at the Kyiv Zoo since 1999. Coordinator: V. Tyshchenko. One of the tasks of the Centre is to take care of the bats which occasionally abandoned their roosts in the city in winter with following release of the animals in spring. Another activity is to elaborate the methods of keeping bats in captivity and returning them into the wild.
- 3. "Bat census in Crimean caves" project. One-year project was supported by the BP Conservation Programme (started in May 2004; project's leader: L. Godlevska; executive team: Ukrainian-Polish-Romanian). The project aims determine a current status of cave dwelling bats in Crimean region (South Ukraine) and to rise attention of local public to the necessity of bats' and bat roosts' protection.
- <u>4. "ABC Atlas of bats of the Carpathians project".</u> International project which is coordinated by the Chiropterological Information Center, Krakow, Poland. Chiropterologists from the Czech Republic, Hungary, Romania, Slovakia, Poland and Ukraine participate in it.
- 5. "Transcarpathian Riverine Forests, Ukraine". Project started in 2002. Integral part of it is the investigation of bat fauna in the valley of Borzhava river (Transcarpathian region).
- <u>6. "Conservation of dendrophile species of mammals" project.</u> The project was supported by KNIP fund (the Royal Netherlands Embassy in Ukraine). Project's head: Dr. I. Merzlikin.
- 7. Scientific Advisory Council on Bats at the Ministry of Environmental Protection of Ukraine comprising of 5 experts consults the Ministry in bat related issues, involves in coordination of bat protection activities, and preparation of the National Implementation Report for EUROBATS (chaired by Dr. I. Zagorodniuk).

# 13. Consideration being given to the potential effect of pesticides on bats, and efforts to replace timber treatment chemicals, which are highly toxic to bats

Situation similar to the last report.

### D. Functioning of the Agreement

### 14. Co-operation with other Range States

Ukrainian bat workers have co-operations with specialists from the UK, Germany, Hungary, Moldova, The Netherlands, Poland, Romania, the Russian Federation, Czech and Slovak Republics.

The BP Conservation Programme's project "Bat census in Crimean caves" is implemented by an international Ukrainian-Polish-Romanian team. Also, the volunteers from Poland, Romania, Russia and Ukraine took part in the project's fieldwork investigations (point 12-3).

Preparation of the Atlas of Bats of the Carpathians ("ABC – project", point 12-4) is realized under a cooperation between Carpathians states (Czech Republic, Slovak Republic, Poland, Ukraine, Hungary and Romania).

A continual experience exchange on investigations of bat fauna composition, long-term fauna dynamics, study of bat swarming takes place between C.I.C. (Institute of Animal Systematics and Evolution, PAS, Krakow) and UCEBA members.

## 15. Measures taken to implement Resolutions adopted by the Meeting of the Parties

Situation similar to the last report.

### Annex 1. Printed papers for period covered

Note. The list contains also references not included into previous reports.

- Bashta A.-T. Bat fauna in the Western Polissya // Shatsky National Park (Scientific investigations in 1994–2004). Svityaz, 2004. P. 110–114. (In Ukrainian).
- Bashta A.-T. Species composition of bats (Chiroptera) in the riverine forests of the Borzhava river (Transcarpathians) // Uchenye zapiski Tavricheskogo Natsionalnogo Universiteta. Series «Biology, chemistry». 2003. V. 17 (56), № 2. P. 154–159. (In Ukrainian with English summary).
- Bashta A.-T. Bat fauna of the plain and foothill parts of the Latorytsia river basin (western Ukraine), with special focus on alluvial forests // Vespertilio. 2004. № 8. P. 3-11.
- Bobkova O. A. Distribution of mites and ticks as bats' ectoparasites in caves of Ukraine // Uchenye zapiski Tavricheskogo Natsionalnogo Universiteta. Series «Biology, chemistry». 2003. V. 17 (56), № 2. P. 206–211. (In Russian with English summary).
- Denisova E. V. Additional data on distribution and biology of Barbastelle bat (*Barbastella barbastellus* Schreber, 1774) in the Crimea // Modern problems of zoological science. Kyiv: VPC "Kyiv University, 2004. P. 40–43. (In Ukrainian).
- Denisova E. V. Vertebrates as natural enemies of bats // Uchenyje zapiski Tavricheskogo Natsionalnogo Universiteta. Series «Biology, chemistry». 2003. V. 17 (56), № 2. P. 212–215. (In Russian with English summary).
- Godlevskaya E. V., Beskaravainyi M. M. Mammals // Natural History Book of Karadagsky Natural Reserve. 2001. Vol. XVIII. P. 109–111. (In Russian).
- Godlevska L. Long-term observations on bats in Ukraine's caves: main results // Bat Monitoring Workshop (Rimetea, Romania 26-30 June, 2003). 2003. P. 8–9.
- Godlevska O. V., Petrushenko Ya. V., Tyschenko V. M., Zagorodniuk I. V. Winter aggregations of bats (Chiroptera) in caves of Central Podillya (Ukraine) // Vestnik zoologii. 2005. V. 39, № 2. P. 43-52. (In Ukrainian with English summary).
- Kivganov D. A., Omelchuk I. Yu., Oleynik Yu. N. About a find of *Pipistrellus kuhlii* on Zmijiny island // Vestnik zoologii. 2004. V. 38, № 4. P. 94. (In Russian).
- Merzlikin I. R. On some causes of bat mortality in Sumy region (northeastern Ukraine) // Plecotus et al. 2002. Pars specialis. P. 113–115. (In Russian).
- Merzlikin I. R. Enemies of bats in Sumy region // Plecotus et al. 2002. Pars specialis. P. 115–117. (In Russian).
- Merzlikin I. R. Notes on bats of some artificial caves of Sumy region // Natural sciences. Sumy, 2004. P. 9–12. (In Ukrainian).
- Srebrodolska Ye. B., Dyky I. V., Mysiuk V. O. Mammal fauna of Shatsk National Park // Uchenye zapiski Tavricheskogo Natsionalnogo Universiteta. Series «Biology, chemistry». 2003. V. 17 (56), № 2. P. 134–143. (In Ukrainian with English summary).
- Tyshchenko V. M. Swarming of bats at undergrounds sites of Podillya (West Ukraine) in late summer // Uchenye zapiski Tavricheskogo Natsionalnogo Universiteta. Series «Biology, chemistry». 2003. V. 17 (56), № 2. P. 98–104. (In Ukrainian with English summary).
- Tyshchenko V. M. 2004. Bat fauna (Chiroptera) in the West-Podollian forest-steppe area: current state // Current problems of the zoological science. Kyiv University, Kyiv, 174–176. (In Ukrainian).
- Zagorodniuk I. V. Mountain regions as a zone of the highest species riches of terrestrial vertebrates in Ukraine // Uchenyje Zapiski Tavricheskogo Nacionalnogo Universiteta. Seria «Biologia, Chimia». 2004. Vol. 17 (56), № 2. P. 33–38. (In Ukrainian with English summary).
- Zagorodniuk I. Levels of morphological differentiation in closed species of mammals and the concept of hiatus // Visnyk of Lviv University: Biology Series. 2004. Is. 38. P. 21–42. (In Ukrainian with English summary).
- Zagorodniuk I. Terrestrial vertebrates of Ukraine and their protection categories (reference book). Uzhgorod: Lira, 2004. 48 p. (In Ukrainian with English summary).
- Zagorodnyuk I. V., Poluda A. M., Yemelyanov I. G. Fauna of Ukraine as object of protection: state and threats for conservation // Shelyag-Sosonko Yu. R. (ed.). System of protection of biological diversity in Ukraine: state and prospects. Kyiv, Chimjest Press, 2003. P. 38–72. (In Ukrainian with English summary).
- Zizda Yu. E., Zagorodniuk I. V. Rarity species as sign of exceptionality of the region (on example of the mammal fauna of Carpathians) // Modern problems of ecology. Zaporizhzhia, 2004. P. 159–163. (In Ukrainian with English summary).