

Agreement on the Conservation of Populations of European Bats

National Implementation Report of Ukraine

2014 / MoP 7

A. General Information

Name of Party:	Ukraine
Date of Report:	June 2014
Period covered:	June 2010 – June 2014
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B. Status of bats within the territory of party

1. Summary details of Resident Species

Totally, 28 species have been registered and confirmed for bat fauna of Ukraine (Table 1).

Additionally to known previously species, *Myotis alcaethoe* in Ukraine was confirmed. By all signs, *Myotis alcaethoe* was revealed in 1940-s in the Ukrainian Carpathians (Abelenstev, Popov, 1956) and described under “*ikonnikov*” name. Later this description was brought to “*mystacinus*”. However, a revision of the whiskered bats’ records in Ukraine allowed affirming a presence of *M. alcaethoe* among Ukrainian bat fauna at least based on morphological signs (Zagorodniuk, Dykyy, 2009). Later the occurrence of the species was confirmed by sequencing of DNA-samples (Bashta et al., 2011). One species — *Myotis aurascens* — was included into the list of fauna after revision of P. Benda and K. Tsytsulina (2000). In cases of both *M. alcaethoe* and *M. aurascens* more research is needed to determine borders of their ranges and status.

Miniopterus schreibersii is still in the list of extinct species of Ukraine. No evidence of the species occurrence on the territory of the country has been found since 1993 except for registration of a single individual of the species in one of underground shelters in the Transcarpathians (Vargovich, 2000)).

2. Status and Trends

Updated information about distribution, status and trends of bat species of Ukrainian fauna is presented in Table 1. All recognized bat species occurring in Ukraine were included into the new edition of the Red Data Book of Ukraine (RDBU). The exception are *Myotis alcathoe* and *M. aurascens*, occurrence of which in Ukraine were recognized after publishing the book in 2009.

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

	Species	Distribution	Status	Estimated trend	RDBU (2009)
1.	<i>Rhinolophus ferrumequinum</i>	restricted	frequent	o	+
2.	<i>Rhinolophus hipposideros</i>	restricted	frequent	?/o	+
3.	<i>Miniopterus schreibersii</i>	restricted	extinct	ext.	+
4.	<i>Myotis blythii</i>	restricted	frequent	o	+
5.	<i>Myotis myotis</i>	restricted	frequent	o	+
6.	<i>Myotis bechsteinii</i>	restricted	rare	?/o	+
7.	<i>Myotis nattereri</i>	widespread	rare	?/o	+
8.	<i>Myotis emarginatus</i>	restricted	very rare	?/o	+
9.	<i>Myotis dasycneme</i>	widespread	rare	?/o	+
10.	<i>Myotis daubentonii</i>	widespread	common	o	+
11.	<i>Myotis brandtii</i>	restricted	Rare	o	+
12.	<i>Myotis mystacinus</i>	widespread	frequent	o	+
13.	<i>Myotis alcathoe</i>	restricted?	?	?	—
14.	<i>Myotis aurascens</i>	restricted?	frequent?	?/o	—
15.	<i>Plecotus auritus</i>	widespread	frequent	o	+
16.	<i>Plecotus austriacus</i>	restricted	frequent	o	+
17.	<i>Barbastella barbastellus</i>	restricted	rare	o	+
18.	<i>Nyctalus leisleri</i>	widespread	rare	o	+
19.	<i>Nyctalus noctula</i>	widespread	common	o	+
20.	<i>Nyctalus lasiopterus</i>	restricted	very rare	?/–	+
21.	<i>Pipistrellus kuhlii</i>	widespread	common	+	+
22.	<i>Pipistrellus nathusii</i>	widespread	frequent	o	+
23.	<i>Pipistrellus pipistrellus</i>	restricted	frequent	o	+
24.	<i>Pipistrellus pygmaeus</i>	widespread	frequent	?/o	+
25.	<i>Hypsugo savii</i>	restricted	very rare	o	+
26.	<i>Eptesicus nilssonii</i>	restricted	very rare	?/–	+
27.	<i>Eptesicus serotinus</i>	widespread	common	o	+
28.	<i>Vespertilio murinus</i>	widespread	frequent	o	+

* 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 10 years: "?" – unknown, "o" – stable, "–" decreasing, "+" increasing.

3. Habitats and Roost Sites

Table 2 summarizes all updated data on bats' roosts in Ukraine by three main types.

Table 2. Use of different roost types by bats in Ukraine

	Species	Underground type*	Building (over) type	Tree type
1.	<i>R. ferrumequinum</i>	W, S, M**	M	—
2.	<i>R. hipposideros</i>	W, S, M	S, M	—
3.	<i>M. schreibersii</i>	W, S, M	M	—
4.	<i>M. blythii</i>	W, S, M	S, M	—
5.	<i>M. myotis</i>	W, S, M	S, M	—
6.	<i>M. bechsteinii</i>	W, S	—	M
7.	<i>M. nattereri</i>	W, S, M	—	S, M
8.	<i>M. emarginatus</i>	W, S, M	M	—
9.	<i>M. dasycneme</i>	W, S	M	M
10.	<i>M. daubentonii</i>	W, S	S, M	S, M
11.	<i>M. brandtii</i>	W, S	—	S
12.	<i>M. mystacinus</i>	W, S, M	S	—
13.	<i>M. alcaethoe</i>	W	?	?
14.	<i>M. aurascens</i>	W, S	?	?
15.	<i>P. auritus</i>	W, S, M	W, S	S, M
16.	<i>P. austriacus</i>	W, S	W, S, M	—
17.	<i>B. barbastellus</i>	W, S, M	W, S	W, S
18.	<i>N. leisleri</i>	—	S, M	S
19.	<i>N. noctula</i>	W	W, S, M	W, S, M
20.	<i>N. lasiopterus</i>	—	S	S, M
21.	<i>P. kuhlii</i>	—	W, S, M	—
22.	<i>P. nathusii</i>	—	S, M	S, M
23.	<i>P. pipistrellus</i>	W, S	W, S, M	S, M
24.	<i>P. pygmaeus</i>	?	M	M
25.	<i>H. savii</i>	S, M	—	—
26.	<i>E. nilssonii</i>	W	S	S
27.	<i>E. serotinus</i>	W, S	W, S, M	M
28.	<i>V. murinus</i>	—	W, S, M	S, M

* Underground type — natural caves, cellars, mines, quarries, wells, grottos, etc.; building (over) type — attics, bell towers, hollow walls, ventilation communications, bridges, etc.; tree type — hollow trees, cavities under bark, bird and bat boxes;

** W — winter records, S — summer records, M — maternity colonies or single breeding females.

4. Threats

The following main threats for bats were identified: disturbance in roosts (up to full removing and killing by humans); exclusion from roosts (for overground shelters); loss of roosts (including recreational mastering of underground cavities, full blocking of entrances to underground shelters; so-called sanitation felling and cleaning cutting in forestry); changing of appropriate microclimate conditions for bats inside the underground shelters as a result of partial blocking of entrances; downfall during migration (including downfall in different anthropogenic traps). Also, a negative human attitude to bats is still common. An impact of chemical pollution of the environment (including pesticides) on bats in Ukraine is unclear.

5. Data Collection, analysis, interpretation and dissemination

A geography of bat investigations continues to broaden. New data collected allow clarifying new details concerning status and distribution of bat species in Ukraine. Together with standard methods of data collection, Ukrainian bat-workers widely apply the new approach – gathering faunistic data following calls from public to bat contact-lines (see also Section 11). Due to calls from public about bats in buildings or animals found on the ground a number of regionally new findings were recorded.

Results of bat investigations carried out by Ukrainian zoologists are reflected in publications covering the following topics: general and regional reviews of bat fauna, description of rare species' records, distribution of bats in Ukraine, biology and ecology of bats, bat conservation, functional morphology. Geography of field faunistic data collection during the period covers, to a greater or lesser extent, almost all administrative provinces of Ukraine.

The results are regularly presented at Ukrainian and international scientific meetings.

C. Measures taken to implement Article III of the Agreement

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

All bat species (except for *M. alcahoe* and *M. aurascens*) are Red Data Book species (Red Data Book of Ukraine, 2009). In 2012, the Cabinet of Ministers of Ukraine has substantially increased penalties for illegal taking from the wild or damage caused to the species listed in the Red Data Book of Ukraine.

Requirements for keeping and breeding of wild animals that are in captivity or in semi-captive conditions had been adopted by the Order No. 429 of 30.09.2010 of the Ministry of Ecology and Natural Resources of Ukraine and registered by the Ministry of Justice of Ukraine on 29.12.2010 by No. 1384/18679 which covers bats as well.

Ukraine is a Party to the Convention on Protection of European Wildlife and Natural Habitats and the Convention on the Conservation of Migratory Species of Wild Animals since 1999. Thus, all bat species are protected by these international treaties as well.

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

Although an initial list of underground key sites had already been compiled, a work on search and determining of new important underground bat roosts is going on (e. g. look Section 12).

For now, the list includes a number of sites in different regions of Ukraine — in the Crimea (Crimean Autonomous Republic), in Podolia and the Dniester River Region (namely, Ternopil, Khmelitsky, Chernivtsi, Vinnytsya and Odesa Oblasts), in Transcarpathian region (Zakarpatska Oblast), in the Central and Eastern Ukraine (Kiev and Kharkov Oblasts), at continental south of Ukraine (Odesa, Mykolayiv and Kherson Oblasts). During the reporting period the list was expanded by inclusion of new underground sites from Vinnytsya, Zhytomyr and Rivne Oblasts.

8. Consideration given to habitats which are important to bats

Initial measures (already proved to be effective) on the conservation of newly identified key bat sites mostly includes official notifying the responsible authorities about their new status and inadmissibility of activities which may lead to worsening of conditions vital for bats. One site was protected by giving it and the surrounding territory the status of protected area (of zakaznik-level).

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

"Year of the Bat - 2011-2012". In Ukraine, a set of methods for promoting bats is being used with information on the "Year of the Bat". Campaign stickers were developed, printed and distributed around the country. The World Wide Web is the main tool for the dissemination of information and it has been observed that bat related articles have been reposted and reprinted. The campaign has so far been very well received.

For the first time five cities (Kyiv, Kamyianets-Podilsky, Lviv, Luhansk and Kharkov) hosted bat events during 2012 and reports can be found here: http://kazhan.org.ua/eng/projects/pr_ibn_2012.htm.

In December 2012, the National Bank of Ukraine put into circulation the 5 hryvnia commemorative coin dedicated to the 'Year of the Bat'. The coin, inscribed with 'International Year of the Bat' was made of German silver, mintage – 20,000 pieces. For more information visit:

http://www.bank.gov.ua/control/en/publish/article?art_id=127769

In 2012, the post envelope with the logo of "Year of the Bat" and inscription (in Ukrainian) was issued by Ukrainian State Enterprise of Posts "Ukrposhta".

In 2011, the second Ukrainian bat website was launched: <http://www.bat-kharkov.in.ua>. The web-site was created by Kharkov Bat Group and is devoted to bats of Kharkov City and Kharkov Region. The site includes a variety of information on bats themselves, their protection status, answers to frequently asked questions, announcements and reports about bat events, etc.

Although Ukrainian bat-workers keep two communities in social networks:

FaceBook — <https://www.facebook.com/bat.community> (launched on the threshold of the Year of the Bat; opened for all internet-users); VKontakte — http://vk.com/bat_kharkov.

During the reporting period, tens of interviews to mass-media (TV, news-papers, radio) about bats and necessity of their conservation were given by Ukrainian bat workers and bat conservationalists.

For raising public awareness of local people and speleologists for the necessity of bat conservation, few posters, booklets and leaflets and pocket calendars calling people to be friendly to bats were issued and distributed (mostly by Kharkov Bat Group).

Other activities include special lectures for different groups of people and popular bat excursions, separate or in borders of other events (e. g. Science Picnics, Days of Science etc.).

In March 2012, Kharkov Bat Group carried out the Children Conference of Bat Conservation. In 2014, in Kharkov the first Bat Photo Exhibition was organised.

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

Scientific Advisory Council on the Conservation of Bats at the Ministry of Ecology and Natural Resources of Ukraine. Contact persons: Dr. Lena Godlevska (head of the Council), Dr. Volodymyr Domashlinets, Dr. Igor Zagorodniuk.

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11. Addition action undertaken to safeguard population of bats

In 2005, Ukrainian bat-workers established a contact line. Presently, they receive hundreds of calls annually, mostly from Ukraine but from other countries as well. A separate activity concerns bat rescue and rehabilitation. The more people knew about bats the more calls we received. During last winter (2013/2014) Ukrainian bat-workers had got about 1300 bat individuals for rehabilitation. About 900 of them were released back to the nature. This work is voluntary mostly. However, during last year bat rescue and rehabilitation work in Ukraine was supported a little by private contributions, by Feldman Ecopark (Kharkov) and by the EPI project. In Kharkov, in spring 2014, the releasing of bats, being rescued during the last winter in Kharkov City, was organised as the public education event. It was visited by more than 300 people. The short review of this event is already placed on the EUROBATS web-site under news: http://www.eurobats.org/bat_news/hundreds_bats_returned_wild_ukraine.

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

Currently, there is no state funding on concerning conservation and management of bats. All projects or programmes are originated from enthusiasm of individual bat-workers or their groups. The list below includes both small-budget projects and initiatives which have no any financial support. In absence of stable financial support each initiative becomes a certain outbreak in some direction.

Finished:

“Bats and Fungi in the Eastern Europe: the first step for WNS signs search in the territory” (2010-2012). Supported by The Youth Activity Fund of the Explorers Club (USA) (project leader: Kseniia Kravchenko).

The project is concerned with the problem of bat mass mortality associated with the White-Nose Syndrome that had happened in the North-eastern USA. It first appeared in North America in 2006, where over a million bats died since then. The main agent of this disease is considered to be the cold loving fungus *Geomyces destructans*. During last years a similar fungus was found in some parts of Western Europe. In Europe, *G. destructans* was first identified in France in 2009. Its distribution, infection dynamics, and effects on hibernating bats in Europe are largely unknown. It is still unknown if there are any signs of this pathogen fungus in Eastern Europe. Therefore this project devotes to the development of universal policy of identification potential pathogens (keratinophilic fungi) in undergrounds and analyses of contamination bats by them in Ukraine and Russia.

“Bat census in underground cavities of Western part of Ukraine”. Supported by Stichting Zoogdierenwerkgroep Zuid-Holland and Bat Support Fund for Eastern Europe (2010–2011; project leader L. Godlevska). The project aimed at inventory of underground cavities in the region for determining of important bat sites for their further protection and monitoring and carrying out the entire winter bat census in already identified key bat sites of Western part of Ukraine.

In previous years Ukrainian bat-workers had started with the systematical search and examination of underground sites, which are shelters for bats. Some previous results may be looked through at the pages of the UCEBA web-site <http://kazhan.org.ua/eng/projects.htm> or in the corresponding publications.

In 2010 and 2011 the work had been continued.

The work had covered 7 administrative provinces of Ukraine (Zhytomyr, Rivne, Ternopil, Khmelnytsky, Vinnytsya, Chernivtsi and Mykolaiv Oblasts). During the expeditions, over 80 underground units were revealed and / or examined. More than a half of them were examined for bats for the first time. The work enabled to receive additional data on the status and distribution of a number of bat species in Ukraine. Five new key underground sites, important for bat conservation and monitoring, were determined: 2 – in Vinnytsya Oblast, 1 – in Zhytomyr Oblast, 1 – in Rivne Oblast, 1 – in Chernivtsi Oblast. The short report is presented on the link: http://kazhan.org.ua/eng/projects/pr_wukr.htm

“Conservation of important underground bat sites in the Eastern Crimea (Southern Ukraine)”. Supported by Stichting Zoogdierenwerkgroep Zuid-Holland and Bat Support Fund for Eastern Europe (2010–2011; the project leader: L. Godlevska). In 2004–2005, new bat underground habitats were revealed in the Eastern Crimea. These habitats, which are abandoned limestone mines mostly, provide a shelter for aggregations in thousands of bats. Winter census in these underground objects was not full (the winter census was carried only once and only few parts of mines were examined). So, the full winter census was needed. Besides, the uniqueness of these shelters requires implementation of measures for their preservation. Only one of the sites had a protection status, other ones were not defended at all. In view of all pointed the executors aimed: 1) to make a full winter bat census in the mines; to receive more exact figures on summer bat population of the sites; 2) to protect these unique bat sites.

In February 2010, the fullest census of bat aggregations was done in cavities recognized to be possible places of hibernation (i.e. rather isolated from the outer environment). During the census mine systems and their complexes with a length from 3 to 50 km each in 9 localities were examined. In sum, more than 100 km of galleries were examined. In total, more than 21,700 bat individuals were accounted, represented, mainly by two species, *M. blythii* and *R. ferrumequinum*, were accounted. Besides the two species, forming large aggregations, three more ones are regularly found: *Myotis mystacinus*, *Plecotus austriacus*, *Eptesicus serotinus*. In summer 2010, additional counts of summer bat aggregations were done; objects, their borders etc. were described (that is necessary for giving them protection status); objects in context of general conservation needs of unique nature territories of the Eastern Crimea were estimated. The summer work allowed to reveal new colonies and make additional census in previously known summer aggregations. By our estimation, in summer, sites are used by more than 40,000 bat individuals, represented mostly by maternity and bachelor colonies of *M. blythii* and *R. ferrumequinum*.

A work on legal protection of these sites started with official letters informing local authorities and land-owners about importance of the sites and inadmissibility of actions which may lead to worsening of roost conditions or decreasing of bat colonies' number. Later, 9 scientific rationales for giving a status of *zakaznik* to the sites were prepared (by the procedure determined by the national legislation). All rationales were certified in Schmalhausen Institute of Zoology of NAS of Ukraine. Rationales together with petitions were submitted to the Crimean republic committee for the environment protection. Additionally, these materials were submitted to the Council of

Ministers of the Crimean AR. All sites were included into the planned Econet of the Eastern Crimea.

“Fauna of bats as an indicator of the most valuable natural complexes in Chernobyl Exclusion Zone worthy of legislative protection (Ukraine)”. Supported by the Rufford small grants Foundation (2010–2011; the project leader: S. Gaschak). Chernobyl Exclusion Zone (of Ukraine) is a huge (2600 km²) natural and semi-natural complexes almost completely abandoned during last 25 years. Due to absence of people it became very attractive for many animals, including endangered species. Population and diversity of wildlife certainly increased there, and this region became to play an important role in nature conservation respect. Nevertheless there are no governmental programs and plans to really protect the area in nature value concern. Moreover, ideas about recovery of some kinds of industrial activities in the zone are considered, including use of forest resources. It is a direct threat for wildlife and all achievements which natural complexes got over last 25 years. Additional weigh downing circumstance is lack of wildlife researchers and corresponding truthful scientific information about the region. The aim of the project is to provide such information in order to justify proposals about conservation and protection of the most valuable habitats of the Chernobyl Exclusion Zone. Bats were chosen as a key wildlife object. The project included regular contacts with scientists, conservationists, media, officials, public etc. by presentations, articles, interviews, the website. The conservation proposals were elaborated by the project end.

The detailed report is available at the web-site of the Rufford Foundation: http://www.rufford.org/rsg/projects/sergey_gashchak (in English); or at the web-site of Ukrainian Centre for Bat Protection: http://kazhan.org.ua/library/reports/Gaschak_2011.pdf (in Russian).

“Development of new system of summer bat population monitoring on the territory of nature reserves of Ukraine” (2010-2013). Supported by Bat Conservation International, Inc. (BCI), Student Scholarship Program (project leader: Alona Prylutska (Gukasova). An aim is approbation and application of a new multifactor system of summer bat population monitoring on the territory of Especially Protected Natural Areas of the Eastern Europe.

Ongoing:

“Kharkov Bat Education Programme II” (2013-2014). New step of the project was supported by EUROBATs project initiative. (team leader: Alona Prylutska (Gukasova).

The first Kharkov Bat Education Program (supported by Bat Conservation International) was realized in the city in 2007-2008 years. On the base of the Program we got significant progress in bat conservation in Kharkov city. On the one hand, we have stopped mass killing of bats, but on the other hand we have got more information about bat records and total number of finding bats get over thousand per year. a) The aims of the second step of the project are to achieve the full dominance of bat-friendly information in media-space of Kharkov region, to start up regular bat rehabilitation work by volunteers and to teach young generation about bats. The project represents the first, large, systematic bat-education programme in Eastern Ukraine. In the framework of the project several colorful posters, a lot of the leaflets and many pocket calendars had been produced and distributed. Lectures in schools were given.

“Estimation of Impact of Wind Energy Turbines on Migration Bats in the South of Ukraine, the Pilot Project” (2011), Supported by Global Grassroots Bat Conservation Fund of Bat Conservation International (USA) (project leader: Anton Vlaschenko); —**“Bat Migration and Development of Wind Energy in Ukraine” (2012)**, Supported by The Youth Activity Fund of the Explorers Club & Bat Conservation International, Inc. (BCI), Student Scholarship Program (USA) (project leader: Kseniia Kravchenko); —**“Trans-border collaboration in bat migration research**

in Eastern Europe and the Black Sea region. The pilot project. Ukraine, Russia, Georgia, Turkey” supported by EUROBATS project initiative (EU) (project leader: Kseniia Kravchenko).

The main aim of the project is to investigate the connectivity between breeding, migration and hibernation zones in Eastern European bat populations of long-distance migrant species.

The joint effort of the collaborative research aims at investigating bat populations in Eastern Europe, especially around the Black Sea region, using stable isotope analyses. Eastern Europe is terra incognita for bat migration, because we know virtually nothing about seasonal long-distance bat movements. At present times, banding efforts aimed at elucidating bat migration has come to a complete stop in Eastern Europe, making it impossible to use a conventional approach in the study of bat migration behavior. Currently, we lack data about the ecological requirements of species, information that is particularly relevant during the current biodiversity crisis, especially for such bats with their low reproductive rate. The seaside territories of the Black Sea have significant potential for wind farm developments; an industrial branch that currently attracts foreign investors from all around the world. Yet the sustainable use of wind power is feasible only if based on risk assessment studies and basic research.

“Greater Noctule (*Nyctalus lasiopterus*) in the Eastern Europe” (2010-2011, 2013-2014).

Inventory of current status, proposals to revise the species status in IUCN Red List and conservation. Supported by Rufford Small Grants for Nature Conservation (UK) & EUROBATS project initiative (EU) (project leader: Anton Vlaschenko), and supported by The Youth Activity Fund of the Explorers Club (USA) (project leader: Alexander Klochko).

The main idea (aim) of the project is to achieve the change the Greater Noctule (GN) (*Nyctalus lasiopterus*) IUCN status to highlight the problem of conservation of forest-dwelling-bats and old forests. Now two European bat species (*Rhinolophus mehelyi* and *Myotis capaccinii*) are evaluated as Vulnerable. These species are cave-dwelling-bats, and it is easier to estimate the status of such bats in comparison of forest-dwelling-bats. On this reason GN is estimated unequal we think. One of our working hypothesis is the “Extinction debt” – oak forests were converted by human activity irretrievable (for GN) in the beginning of the XX century yet, and records of GN in 1930-50 were the remainder of breeding populations. Also, we don't know what the other forest-dwelling bat species are in the queue of extinction debt. It could mean that we need in harder rule of forest cutting-management (especially in Ukraine and Russia) for stopped the forest habitat degradation.

”Center of bat rehabilitation of Feldman Ecopark”. Supported by Olexandr Feldman Foundation (OFF), Kharkov, Ukraine (<http://www.feldmanfund.org>). University and Kharkov Zoo (leaders of the initiative Dr. A. Vlaschenko and Alona Prylutska (Gukasova)). A phenomenon of bat migration in Kharkov city is being recorded by local zoologists from year to year, that includes mass invasions of bats into inner chambers of few buildings in the city. Bat experts knocked at doors of different scientific and zoological organizations but were refused everywhere. And only in 2013 on the initiative of “Oleksandr Feldman Foundation” it was decided to create the first in Ukraine Center of bat rehabilitation in Feldman Ecopark.

During 2013-2014 winter the specialists of the Center of bat rehabilitation of Feldman Ecopark saved more than 600 specimen of 5 bat species. Kharkov citizens not indifferent to the fate of animals reported on the bat findings in accommodations and on the city streets. Bats were passed to the center of rehabilitation from other cities also: Poltava, Kupyansk, Zmiiv, Komsomolsky. Each specimen was examined carefully, watered, given vitamins, weighed and ringed. The animals with sufficient weight were placed on the hibernation to the special refrigerator with optimal for bats regime of humidity and temperature. Bats with insufficient weight, with injuries or just weakened were treated and fed by beetle larvae. The duration of feeding of each specimen was from 3 days to 1 month. During winter 13 kg of insects was eaten by bats.

<http://www.bat-kharkov.in.ua/en/rehabilitation-centre.html>

“Bat census in underground cavities of Western Podillya” (2008 – going on). Main executor: M. Drebet. Works on search of new underground habitats in the region and bat census in them are carried out. A number of unknown earlier sites with large winter bat aggregations have been already found.

"Encyclopedia of Migratory Species in Ukraine" (2013–2014). The Ministry of Ecology and Natural Resources of Ukraine has started a project on preparation and publishing of Encyclopedia of Migratory Species in Ukraine. The first phase of the project was completed in 2013 in cooperation with the Institute of Zoology of Ukraine. This publication is intended to present not only the latest information on migratory species occurring in Ukraine but to elucidate what factors affect this group of animals and what actions have been undertaken on both national and international levels to address those factors in the framework of CMS and associated agreements or MoUs as well as other international treaties.

"Inventory of bat underground sites in “not-cave regions” of Ukraine" (2014–2015; the team-leader: L. Godlevska). Supported by Bat Support Fund for Eastern Europe. During last years hundreds of underground bat roosts were found and/or examined in Ukraine. Most of them were examined for bats for the first time, many of them were firstly revealed as speleological objects. First of all, the attention was given to the regions which are rich for natural caves or mines. The work was carried out in Crimean Peninsula, Podolian Upland, the continental Black Sea Region of Ukraine, Donets River Basin. Brief reports on the work are available at <http://kazhan.org.ua/eng/projects.htm>.

The considerable part of Ukraine is “not-cave”. Underground cavities in this part are represented almost or exclusively with anthropogenic structures (cellars, fortifications, bomb shelters, etc.). Many such regions are characterised by poor bat fauna data or their full absence. So, the project deals with the further search, examination and inventory of potential underground bats sites – in “not-cave” regions of Ukraine. The final purpose of the work is identification of underground sites important for monitoring and conservation of bats.

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

No consideration has been given.

D. Functioning of the Agreement

14. Co-operation with other Range States

Ukrainian bat-workers collaborate constantly with colleagues from many EUROBATS Range States in the field of information exchange, research and bat conservation (the Netherlands, Poland, Germany, Turkey and others).

Since 2011 Ukrainian Centre for Bat Protection (UCEBA) is a member of the BatLife Europe — an international NGO built from a partnership of national bat conservation organisations that are committed to promoting the conservation of all bat species and their habitats throughout Europe.

15. Measures taken to implement Resolution adopted by Meeting of Parties

Resolution 2.4 “Transboundary Programme: Habitat proposals” and Resolution 4.3 “Guidelines for the Protection and Management of Important Underground Habitats for Bats”. The work on systematic survey of potential underground bat sites for the determination of key ones for further protection and monitoring is going on.

Translation of the guidelines “Protecting and managing underground sites for bats” into Russian was done (by S. Gazaryan, L. Godlevska) and published on-line (<http://kazhan.org.ua/eng/library/eps4.htm> and http://www.eurobats.org/sites/default/files/documents/publications/publication_series/pubseries_no2_russian_2011.pdf).

Resolutions 2.7 and 3.3 “Format of National Report”. The reports are prepared according to adopted scheme.

Resolution 5.2 “Bats and Rabies in Europe”. In 2013 an initiative group started the work on surveillance of EBLV in bats on the territory of Ukraine (together with the Central Veterinary Institute in Lelystad, the Netherlands).

Resolution 5.7 “Guidelines for the Protection of Overground Roosts, with Particular Reference to Roosts in Buildings of Cultural Heritage Importance”. Translation of the guidelines “Protection of overground roosts for bats” into Russian was done (by L. Godlevska, S. Gazaryan) and was published on-line in 2011

(http://www.eurobats.org/sites/default/files/documents/publications/publication_series/pubseries_no4_russian.pdf and <http://kazhan.org.ua/eng/library/eps4.htm>).

Resolution 6.10 “Year of the Bat”. The campaign was supported by both NGOs and government authorities. In Ukraine, 2011 and 2012 were declared as years of bats.

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