

Present status of Barbastelle (*Barbastella barbastellus*) in the Ukraine in historical aspect

Aktuelle Bestandssituation der Mopsfledermaus
(*Barbastella barbastellus*) in der Ukraine mit geschichtlichem Aspekt

Statut actuel de la Barbastelle (*Barbastella barbastellus*) en Ukraine
dans un contexte historique

By IRINA M. KOVALYOVA and LEONID A. TARABORKIN, Kyiv

Abstract

In this paper the available literature and original data on the distribution of Barbastelle in the Ukraine are presented. The last published systematic investigation on mapping bats of the Ukraine was in 1956. Our observations are confirmed on the data on animals from the Red Data Book of Ukraine Animal Kingdom (1994) that *Barbastella barbastellus* is considered as very rare and vulnerable under the new IUCN criteria. During numerous field excursions in the last 20 years in the territory of the Ukraine, the authors and their collaborators have investigated the bat faunas of several areas of the Ukraine, such as Crimea, Carpathians, Kiev region and others. Our maps showing the distribution of the Barbastelle bat in the Ukraine based on our own findings, literature data and museum specimens, are presented. Its distribution is confined to the peninsula of Crimea, Ukrainian Carpathians, and in the forest area of the right bank of the Dnjepr.

Zusammenfassung

Diese Schrift präsentiert die erhältlichen Literaturangaben sowie Daten zur Verbreitung der Mopsfledermaus in der Ukraine. 1956 wurden hier letztmalig Forschungsergebnisse der kartographischen Fledermauserfassung veröffentlicht. Die Roten Listen der ukrainischen Tierwelt (1994) stufen *Barbastella barbastellus* unter den neuen IUCN-Kriterien als sehr selten und verletzlich ein, was unsere Beobachtungen bestätigt. Während zahlreicher Fachexkursionen im ukrainischen Raum in den vergangenen 20 Jahren erforschten die Autoren und ihre Mitarbeiter die Fledermausfauna einiger ukrainischer Gebiete wie die der Krim, der Karpaten, des Raumes um Kiev und anderer. Unsere Karten zeigen die Verbreitung der Mopsfledermaus in der Ukraine, basierend auf unseren eigenen Ergebnissen, Literaturangaben und Museumsexemplaren. Ihr Verbreitungsgebiet beschränkt sich auf die Halbinsel Krim, die ukrainischen Karpaten und die am rechten Ufer des Dnjepr gelegenen Waldgebiete.

Résumé

Cet exposé présente les données de la littérature et les observations originales sur la distribution de la Barbastelle en Ukraine. Les dernières investigations systématiques sur la cartographie des chauves-souris remontent à 1956. Nos observations confirment les données de la liste rouge des espèces animales menacées en Ukraine datant de 1994; la Barbastelle est considérée comme très rare et vulnérable d'après les nouveaux critères de l'UICN. Lors de nombreuses excursions sur le terrain pendant les 20 dernières années, les auteurs et leurs collaborateurs ont investigué la faune chiroptérologique de plusieurs régions d'Ukraine, telle la Crimée, les Carpathes et la zone de Kiev. Nos cartes montrant la répartition de la Barbastelle en Ukraine sont basées sur nos propres découvertes, sur les données de la littérature et les spécimens de musée. La Barbastelle est confinée à la péninsule de la Crimée, aux Carpathes ukrainiennes et aux forêts de la rive droite du Dnjepr.

Key words: bats, Barbastelle, status, map, Ukraine.

Consideration of the status of the European Barbastelle in the Ukraine in its history development is presented as actual and interesting for at least two reasons: firstly, this species is entered in the Red Book of the Ukraine and, secondly, exactly this species of *Chiroptera* is described among others in pioneer studies on the fauna of Crimea carried out by the professor of the Odessa university, A. NORDMAN (1840). In his monograph report on results of many years fauna studies of this part of modern Ukraine Professor NORDMAN notes that the European Barbastelle is a highly common species all over the south coast of Crimea (cit. from NIKOLSKIY 1891). In NIKOLSKIY's monograph on mammals of Crimea (1891) published half a century after

NORDMAN's monograph, it is established the keeping of the indicated status of the Barbastelle with a specification that apparently this bat is met within the whole of the mountain part of Crimea. This monograph contains new facts on findings of the Barbastelle in different regions of Crimea.

30 years later M. SHARLEMAN (1920) in his reference book on vertebrates of the Ukraine (it will be recalled that the West Ukraine and the Bessarabia at that time were not included in the Ukraine) notes that amongst 20 species of *Chiroptera*, dwelling in the examined territory, Barbastelle stands out for being found in Crimea only. This observation is partly confirmed in the monograph written by V. KHRANEVICH (1925), which, describing the fauna of Podolye, identifies 7 species of bats; however, the European Barbastelle is not numbered among them. The first known to us published information on the finding of European Barbastelle in the territory of the Ukraine proper is referred to 1927 and belongs to the posterior director of the Institute of Zoology of the Academy of Sciences of Ukraine i. G. PIDOPLICHKO. The question is about the finding of the Barbastelle in the village of Mliev of the Gorodishchenskaya district in the Cherkassy region in 1926 made by E. V. ZVEROZOMB-ZUBOVSKIY. 10 years later (in 1937) I. G. PIDOPLICHKO reports on his finding of the Barbastelle staying for the winter at the village of Glezno of the Lubarsky district in the Vinnitza region.

Findings of the Barbastelle in the territory of Kiev region are confined in the narrow about half a century term: the first finding is dated by 1938, and the last one – in 1986. Isolated findings were realized in the fifties and the sixties.

Available to the authors data on bats of the West areas of the Ukraine belong to the period after the World War II, end.

In his monograph (1956) K. A. TATARINOV for the first time among Ukrainian scientists gives results of morphometric analysis of Barbastelle he found in the territory of the West Ukraine. In his conclusions K. A. TATARINOV practically refutes the thesis of preceding researchers about the small number of the European Barbastelle in conditions of the West Ukraine areas. On the

contrary, according to his data it is one of numerous species of *Chiroptera* in the studied region. It is proved to be true also by the formation of groups of this animal. Numbers of 30-40 individuals are noted in the monograph.

In a series of papers by the authors ABELENTSEV V. I., KOLUSHEV I. I., KROCHKO Y. & TATARINOV K. A. (1956, 1969) there are presented totals of ringing bats in the Ukrainian SSR from 1939 to 1967 and the presence of the European Barbastelle is noted in Crimea, on the right bank of the Ukraine as well as in the western areas of the Ukraine. At the same time, some findings have to be considered as episodic or even casual. So, in the Volynskaya region only one finding of the Barbastelle has been announced (TATARINOV 1956) in the village of Shatsk, and to date there is no data on the presence of this animal in this area (TKACH, LYCHOTOP & SOLOGOR 1995).

During the seventies and eighties the number of the species in the Ukraine steadily declined. For instance, if in the fifties in the Stradchanskaya cave in vicinities of the city of Lvov on the average nearly 40 individuals of the Barbastelle dwelled (TATARINOV 1956), in the period of 1981 - 1984 only one specimen of the European Barbastelle (POLUSHYNA & BOROVEZ 1988) was found in this cave.

As a whole, in the territory of the Ukrainian Carpathians the numbers of the species also declined from year to year. Significant crowds (100 - 300 individuals), noted in the fifties, ceased to exist. Here presently the European Barbastelle is a rare species, living solo or in small groups of 3 - 5 individuals (KROCHKO 1981).

Thus, according to competent evidences of researchers (KROCHKO 1981, 1995; ZAGORODNUK & TKACH 1996 and others), the present status of the European Barbastelle in the Ukraine should be characterized as small in numbers, subjected to a process of declining and standing in need of protection. Practically this status is fixed in the Red Book of the Ukraine, where the European Barbastelle was put down in 1994.

The last published systematic investigation on mapping bats of the Ukraine was in 1956. During numerous field excursions in the last 20 years in the territory of Ukraine, the authors and their collaborators have investigated the bat faunas of several areas of the Ukraine, such as

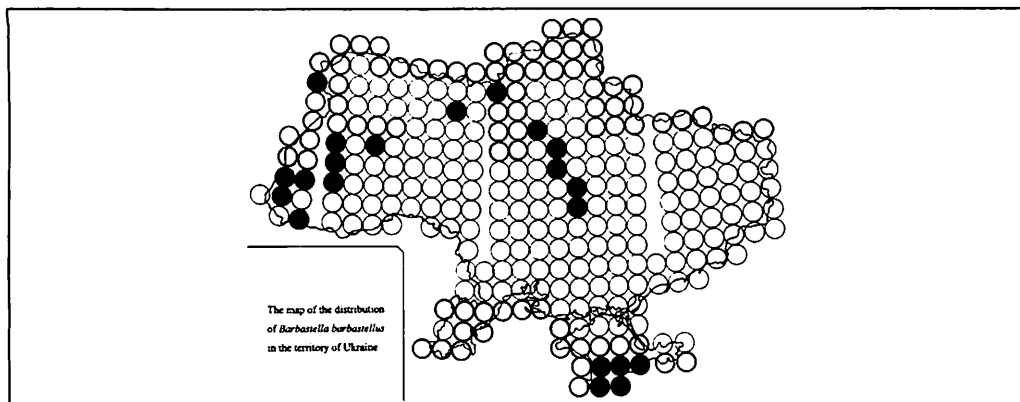


Fig. 1. Map of dissemination of *Barbastella barbastellus* in the Ukraine

Abb. 1. Karte zur Verbreitung von *Barbastella barbastellus* in der Ukraine

Graph. 1. Carte de distribution de *Barbastella barbastellus* en Ukraine

Crimea, Carpathians, Kiev region and others. Our maps showing the distribution of the *Barbastelle* bat in the Ukraine based on our own findings, literature data and museum specimens, are presented.

Literature

- ABELENTSEV, V. I., PIDOPLICHKO I. G. & B. M. POPOV (1956): *Insectivora and Chiroptera*. Fauna of Ukraine. V. 1. Mammals. - Acad. Of. Sci. Ukr. RSR, Kyiv., 445 p (in Ukrainian).
- ABELENTSEV, V. I., KOLUSHEV, I. I., KROCHKO YU. I. & K. A. TATARINOV (1969): The sum of bat ringing in Ukrainian SSR in the years from 1939 to 1967. - *Vestn. Zool.*, N 2: 20-24. (in Russian).
- KROCHKO, Yu. I. (1981): Some *Chiroptera* species and their conservation in the soviet Carpathians. - *Biological aspects of conservation of rare animals*. - Moscow. - P. 23- 28. (in Russian).
- KROCHKO Yu. I. (1995): The Bats of Ukraine and some aspects of their conservation. - *Sci. Nauk. Vestn. Uzhgor. unta. Ser. B*, N 2: 96-98. (in Ukrainian).
- KHRANEVYCH, V. (1925): *Essay on the Podylla fauna*. - I. Mammals and Aves. - Vinnitza. - 125 p. (in Ukrainian).
- NORDMAN, A. (1840): *Observation sur la faune Pontique*.
- NYKOLSKY, D. (1891): *The animals of Crimea*. (in Russian).
- POLUSHYNA, N. A. & E. Y. BOROVEZ (1988): About bat winter roosts in Stradchanskaya cave. - *Study of Ukrainian teryofauna, its rational using and conservation*. By ed. TOPACHEVSKY V. A., etc. - Kyiv, Nauk. Dumka. - 49-51 p. (in Russian).
- PIDOPLITSHKO, I. G. (1927): The new bat species of Ukraine - *Barbastella barbastellus* Schreb. - *Mat. of Zoomuseum of AS USSR*. - N 3. - P. 61-64. (in Russian).
- PIDOPLITSHKO, I. G. (1937): Sum of investigations in the years from 1924 to 1935. *Mat. of Zoomuseum of AS USSR*. - N 9. - P. 101-171. (in Russian).
- Red Data Book of Ukraine. Animal Kingdom. (1994): Ed. ZHERBAK N. N., etc. - Kyiv, Ukr. encyclopaedia. - 464 p. (in Ukrainian).
- SHARLEMAN, M. (1920): *Animals of Ukraine*. - Kyiv. - P. 51-83. (in Ukrainian).
- TATARINOV, K. A. (1956): *The animals of West region of Ukraine*. - *Mt. Tostudy of Ukraine fauna*. - Kyiv, Publ. house AS USSR. - 188 p. (in Ukrainian).
- TKACH, V. V.; LYCHOTOP, R. YO. & E. A. SOLOGOR (1995): The present state of study of the Ukrainian Volynskaya region fauna. - *Vestn. Zool.* - N 2-3: 44-49. (in Russian).
- ZAGORODNUK, I. & V. V. (1996): The present state of fauna and historical change of bats number (*Chiroptera*) in the Unkrainian territory. - *Dop. NAS Ukraine*. - N 5: 136-142. (in Ukrainian).

Authors' addresses:

IRINA M. KOVALYOVA
I. I. Schmalhausen Institute of Zoology
Ukrainian National Academy of Sciences
Kyiv
UKRAINE

LEONID A. TARABORKIN
E. O. Paton Welding Institute
Ukrainian National Academy of Sciences
Kyiv
UKRAINE

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Nyctalus – Internationale Fledermaus-Fachzeitschrift](#)

Jahr/Year: 2002

Band/Volume: [NF_8](#)

Autor(en)/Author(s): Kovalyova Irina M., Taraborkin Leonid A.

Artikel/Article: [Present status of *Barbastella \(Barbastella barbastellus\)* in the Ukraine in historical aspect 596-598](#)