

Final Evaluation Report

Your Details	
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Project Title	Bats of natural protected territories of Northern and Central Ukraine
Application ID	19573-1
Grant Amount	£5,000
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Date of this Report	15 January 2019

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<p>The new array of data on bat species occurrence, their relative abundance, sex ratio, reproductive status, and roosts in Northern and Central Ukraine will be obtained. The data are important both at national and all-European levels.</p>				<p>More territories than planned were covered. The achievements on this objective are one of the three main outcomes of the project.</p>
<p>The received data will be disseminated and will serve as the base for further monitoring of bat populations. Reports with results of the field work will be compiled and given to administration of the protected territories for including them in nature history books. As well, results will be compiled and published in peer-reviewed journals.</p>				<p>One of the three main outcomes.</p>
<p>Based on results of the work we'll start the development of criteria for distinguishing key forest and forest-park localities, important for bat conservation and monitoring. The initial list of such localities will be compiled and sent to the Ministry of ecology and natural resources of Ukraine.</p>				<p>The list had been compiled. The final submission to the ministry is in the process.</p>
<p>Based on the national legislation and best tree management practice in other European countries we will compile the list of recommendations on tree management at protected territories, necessary to be taken into account in view of tasks of bat conservation. The recommendations will be passed to the Ministry of ecology and natural resources of Ukraine and</p>				<p>We started from the representing all-European principles of bat friendly management of "tree territories" (sections 3.2, 3.3). The recommendations relevant for the local conditions and sites are in progress.</p>

sent to managers of corresponding parks.			
A booklet about tree-dwelling bats and their forest and forest-park habitats will be prepared and published. The printed booklets will be distributed through managers of target territories, forestry's, and broad public.			One of the three main outcomes. We prepared two leaflets and stickers with bat images and distributed them. Leaflets are also available on-line.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

In general, there were no unexpected difficulties.

3. Briefly describe the three most important outcomes of your project.

3.1. A big array of factual data

In total, the team covered even more territories than it was planned initially. We did the work in seven administrative provinces of Ukraine in over 17 protected areas of different level: three nature reserves, four national parks, one landscape nature parks, over 10 landscape park monuments and territories of other categories. Between other, we also made a short survey of the territories determined as perspective for giving them a protection status.

New data on 19 bat species (all predicted but *N. lasiopterus*), about their roosts, abundance, breeding status were obtained. The data make a good contribution to the knowledge about distribution of species, their status in Ukraine and, yet, in Europe. The presence of all 19 species were confirmed by contact records.

All recorded species have a legal protection status in Ukraine and in Europe generally.

3.2. Involvement of the data in decision-making and science processes

The received data were used for creation a scientific background (together with researchers from other institutions) for giving two objects a protection status: one national park, one landscape park monument (in Poltava oblast).

The reports on the survey carried out in borders of protected territories of the "high level" (reserves, national parks, landscape nature park) were given to administration of these territories for including them in books of nature records (or nature history books). The results of the work were used for preparation of diploma and PhD projects.

The received factual data were involved into general bat database and were already presented during six scientific meetings (five in Ukraine and one international (European Bat Research Symposium - 2017)).

Two papers reflecting the received data were already published in peer-reviewed journals (Godlevska, Rebrov, 2018 in: Theriologia Ukrainica; reporting about the work in the eastern part of the study area; Godlevska et al., 2016 in: Nature conservation, results of the work in 2016 in the Rivnenskyi nature reserve and the national park "Dermansko-Ostrozkyi"). Other data are under preparation for publishing them in scientific papers as well. The data will be used as well in the next edition of the Red Data Book of Ukraine (planned for 2019), in the prepared Atlas of European mammals. The received data will be enabled for the monitoring of bats in Ukraine.

We also prepared, published and distributed the translation of the guide on the bat friendly forestry (see 3.3), which is actual for all managed forest territories.

3.3. Education and popularisation work

We prepared printed production: two leaflets and stickers with bat images.

A leaflet translation into Ukrainian of: "Mitchell-Jones A. Bats and the forestry", prepared and issued by UNEP / EUROBATS, highlighting the main principles of bat-friendly forestry in Europe. There is still no such guide, adopted to the local situation in Ukraine. Thus, it was decided that a guide with principles, general for all Europe, printed and available in Ukrainian, will be a good step forward. The leaflet was distributed among target institutions and groups (in protected areas, the Ministry of ecology and natural resources of Ukraine, foresters, interested public, etc.) and still available in paper and online.

<http://www.eurobats.org/sites/default/files/documents/publications/leaflet/bat-buklet-592x210-005.pdf> and <http://kazhan.org.ua/eng/library/bat-forestry-ua.htm>.

A leaflet "Bats are night guards of forests" aimed to explain in details what benefits are provided by bats for forestry and trees.
<http://kazhan.org.ua/ukr/library/bngf.htm>

We gave few public lectures (in the national park "Pyryatynsky"; one, in borders of the Fascination of Plants Day-2017, Kyiv).

Popular information on bats and their studying was prepared for the website of the Polis'kyi nature reserve: <http://polesye-reserve.org.ua/head/animals/animals-kazhani.html>, <http://polesye-reserve.org.ua/sciencework/kazhani.html>.

The results of the work in Unava reserve area (Kyiv oblast) were highlighted at the informational board on bats of the reserve (prepared together with NGO "Environment, people, law).

4. Briefly describe the involvement of local communities and how they have benefited from the project.

If to take Ukraine as a local community, in a whole, then the benefits are strictly associated with the main outcomes of the work: new factual data, their insertion into current processes: decision-making, science, nature conservation, monitoring of fauna. Students from a local university (Kyiv national University) were involved into the work (a possibility to learn and meet closely with the work in nature).

5. Are there any plans to continue this work?

The rest obtained factual data are to be published.

The list of determined important sites (territories), especially of park type, which are significant for monitoring and conservation of bats, should be approved at the national level.

As the used field methodology was really effective (allowed to collect a big array of data), the same work is worth to be done in other regions of Ukraine (e. g. central-southern).

6. How do you plan to share the results of your work with others?

The results of the work were already partly shared in reports for nature history books of the protected areas of the high level, in scientific papers, conference talks, via webpages. See also section 3.2 of the report.

7. Timescale: Over what period was the grant used? How does this compare to the anticipated or actual length of the project?

The project period covered 2016-2017. The biggest part of the work was done as planned. Most of the field work was carried out in summer 2016 and 2017. We also did few short field excursions in autumns 2016 and 2017 to survey swarming bats at their underground shelters and in winter 2016/2017 for making a census of hibernating bats. Generally, the main work, as planned, was done during 18 months.

8. Budget: Provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Day expenses for the field work (6 GBP/day/person; summer field work = ca. 180 man-days; winter field work = 24 man-days)	1101	1416	-315	The team did more field-work; thus the number of man-days was more.
Lodging in hotels	165	66	99	—
Transport (renting, wear and tear costs)	1100	1020	80	—
Fuel	900	800	100	—
Endoscope	300	130	170	A cheaper model was bought.

Camping stove	60	15	45	A cheaper model was bought.
Balances	94	170	-76	Spring balances were bought as planned and, additionally, an electronic balance was bought.
Head-lamps	50	132	-82	Few our lamps were out, so the team had to renew the "lamp-park" more than it was planned.
Light ladder	100	70	30	A cheaper model was bought.
Consumables (for the field work and administration of the project: batteries, gas cartridges, mist-nets, rope, car charger, paper, phone costs, etc.)	330	260	70	Less was spent.
Booklet: preparing, printing and distribution	500	621	-121	We prepared two leaflets and, additionally, stickers with bat images.
Administration costs (coordination, reporting, etc.)	250	250		—
Bank and transfer fees	50	50		—
Total	5000	5000		

9. Looking ahead, what do you feel are the important next steps?

We will finalise the recommendations on tree management at protected territories, necessary to be taken into account in view of tasks of bat conservation. The recommendations will be passed to the Ministry of Ecology and Natural Resources of Ukraine and sent to managers of corresponding parks.

Not published factual data will be published. In total, few more scientific papers which will include received data are under preparation.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

Yes. The logo was placed in the leaflets (both at the printed and web versions). The logo was used at the conference poster (EBRS-2017).

The foundation was and will be further mentioned in acknowledgement section of scientific publications and in conference presentations reflecting the data obtained during the project. The support of the foundation was separately marked in reports of executors about their work to corresponding research institutions-employers (in particular Institute of Zoology, NAS of Ukraine).

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

The main team-group executors are:

Name	Role
Lena Goldevska	– PhD, a senior researcher in Schmalhausen Institute of Zoology, NAS of Ukraine, Kyiv. Organisation of the work, logistics, field work, data processing and compilation, preparation of the booklet and leaflet, presentation and dissemination of results, public education, reporting.
Sergiy Rebrov	– PhD student in Schmalhausen Institute of Zoology, NAS of Ukraine, Kyiv. Field work, logistics, data processing and compilation, presentation and dissemination of results, public education.
Volodymyr Tyshchenko	– PhD, associate professor, the National University of Bioresources and Nature Management of Ukraine, Kyiv. Preparation of the booklet and leaflet (texts).
Maria Savchenko	– a student in Taras Shevchenko Kyiv National University, biological faculty. Field work, data processing and compilation, dissemination of results.
Pavel Panchenko	– an experienced bird and bat-worker, Azov-Black Sea Ornithological Group. Participated in few expeditions.

Few more people took part in the work.

Mikhailo Franchuk	– a researcher in Rivne Natural Reserve. Helped with the logistics and field work.
Anna Bednarchuk	– a volunteer, helped with the field-work.
Aleksandra Larchenko	– a student in Byelarusian State University, Minsk, biological faculty, helped with the field-work.
Kateryna Zabava	– a student in Taras Shevchenko Kyiv National University, biological faculty. Helped with the field-work.
Roman Potapenko	– a student in Taras Shevchenko Kyiv National University, biological faculty. Helped with the field-work.
Alona Mischenko	– a student in Taras Shevchenko Kyiv National University, biological faculty. Helped with the field-work.
Margarita Gudzyak	– a student in Taras Shevchenko Kyiv National University, biological faculty. Helped with the field-work.
Mykhailo Drebet	– a researcher in the national park "Podilski Tovtry". Provided photos for the leaflets.
Oleksandra Shevchenko	– a researcher in Schmalhausen Institute of Zoology, NAS of Ukraine, Kyiv. Helped with the field-work.

12. Any other comments?

On behalf of the team, I thank the Rufford Foundation for supporting the project and making it real.

I thank all who made the work on the project possible, all team-members and volunteers. I thank A. Podobailo and Ju. Protsenko (National park "Pyratynskyi"), A. Sagaidak (regional landscape park "Mizhrichynskyi"), N. Nazarov and L. Podolyako (National park "Mezynskyi"), O. Holovko, V. Romanenko, G. Kalchuk (National park "Dermansko-Ostrozky"), M. Franchuk and R. Zhuravchak (Rivnenskyi Nature Reserve), S. Zhyla and L. Kobzar (Polis'kyi Nature Reserve) for the logistic and advisory help.



Rivnensky Natural Reserve, May 2016

On the road to place of night field work.

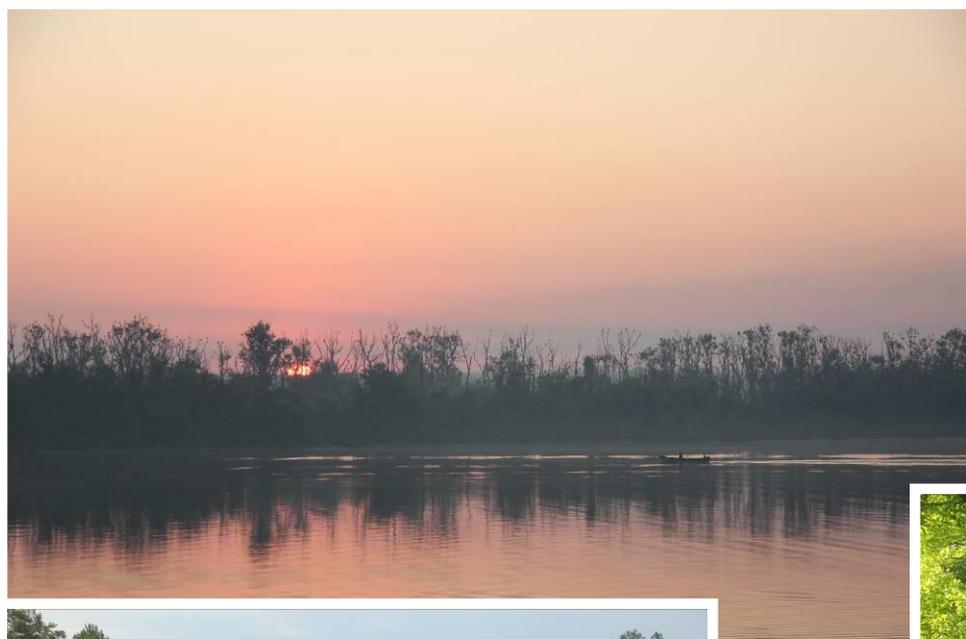


Bats of natural protected territories of Northern and Central Ukraine: a photo report

*Photos by L. Godlevska,
and S. Rebrov, A. Larchenko (when marked)*

Study territories:

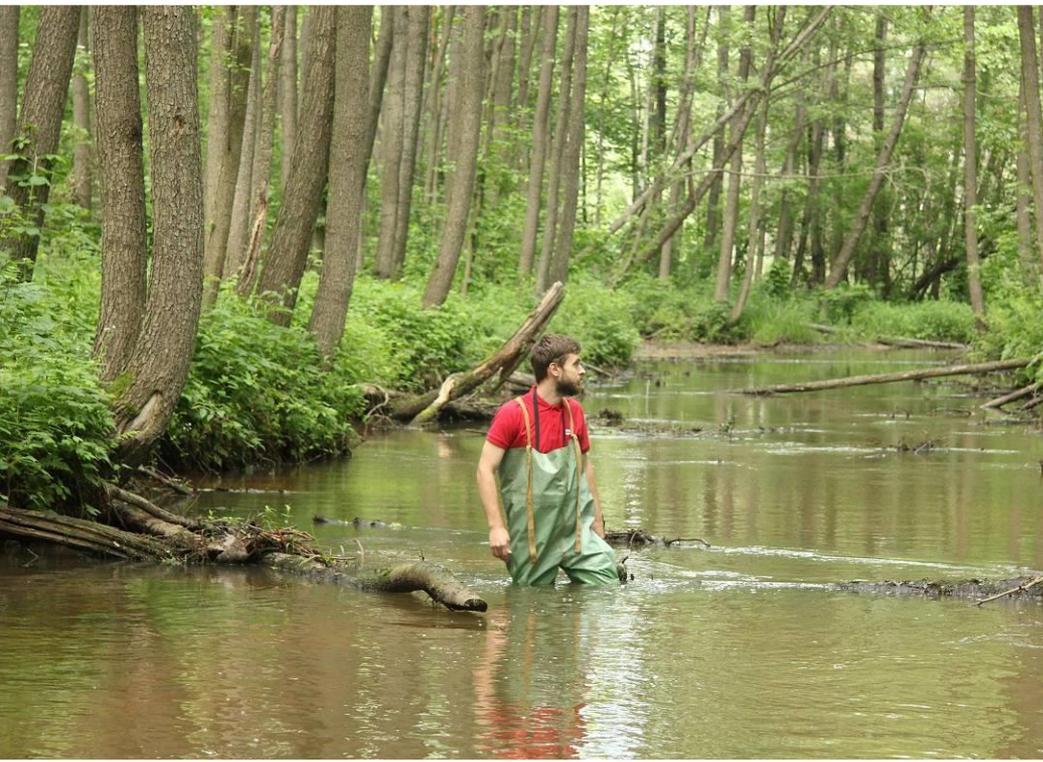
3 nature reserves, 4 national parks, 1 landscape nature parks, over 10 landscape park monuments and territories of other categories.





The standard set of methods was used: bat roosts' search and their inspection, with count of dwellers where possible, capturing (with mist-nets), bat detector survey, checking bat swarming sites.





*A potential netting place?
Checking during daytime.*

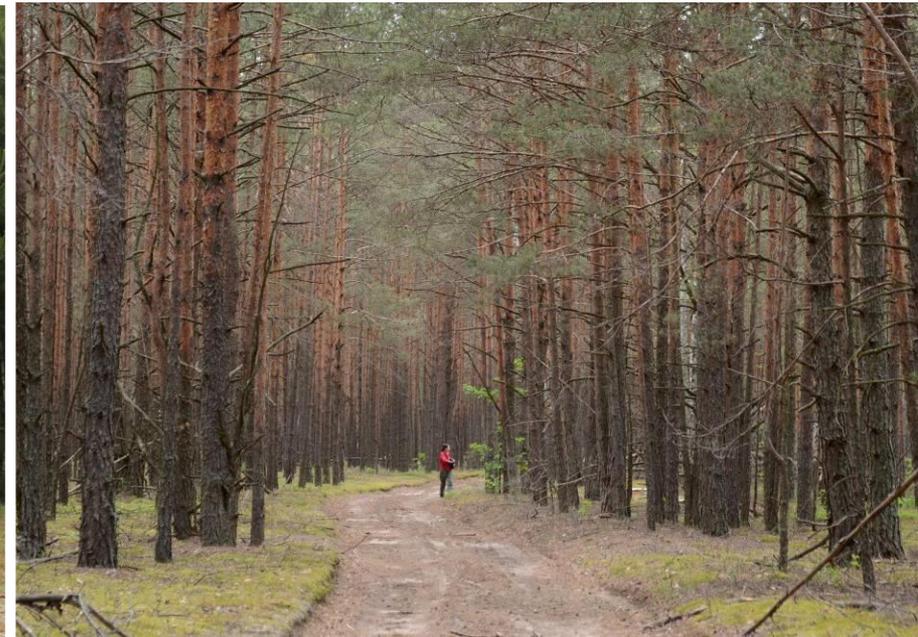




photo by A. Larchenko

Putting nets and counting





Night case shots

After a short examination bats were released in a place of catching.





Plecotus auritus

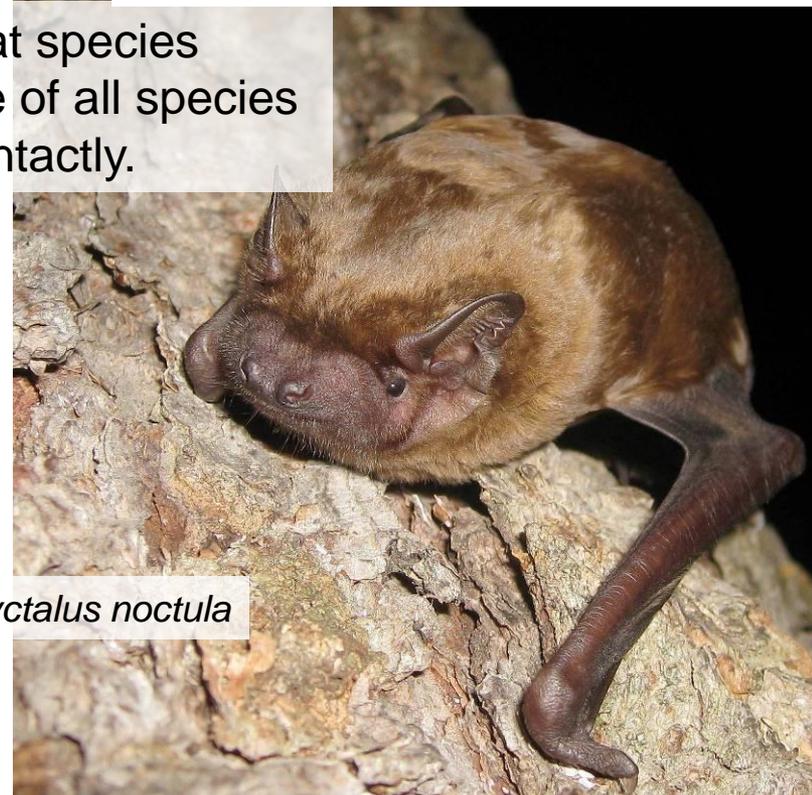


Barbastella barbastellus

New data about 19 bat species were collected. Occurrence of all species was confirmed contactly.



Myotis bechsteinii



Nyctalus noctula

Over 100 shelters of all 19 species were revealed and / or examined.

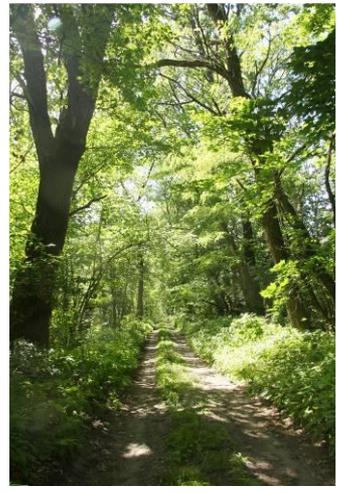




photo by S. Rebrov



Bat lectures and talks
in Pyryatin National Park in 2016.





Leaflets and bat stickers were prepared and distributed in printed and web-versions.



photo by A. Larchenko

