EUROBATS National Implementation Report

In the Resolution 7.4, the 7th Meeting of Parties to EUROBATS decided to adopt a new format for the National Implementation Reports and instructed the Secretariat to make this new format available for online completion in time for MoP8.

Present format of national reports was carefully revised by the relevant Intersessional Working Group during the 20th Meeting of the Advisory Committee (2015) in order to include the Resolutions of MoP7 and is now available on the CMS Family Online Reporting System (ORS).

Please visit the Support Centre page in case of any questions regarding the Online Reporting System. The link is available in the bottom left corner.

A. General Information

Name of your country
› Czech Repulic

Period covered by this report
› 2014-2018

Is your country a party to EUROBATS Agreement?
☑ Yes

Competent authority

Title, address, phone, fax, e-mail and other contact details
› Ministry of the Environment
Vršovická 65
10010 Prague 10, Czech Republic
libuse.vlasakova@mzp.cz

Personal details of administrative focal point (s)
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Please give details of designated scientifical focal points
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Compilers and contributors to this report
› Helena Jahelková, Libuše Vlasáková
Czech Bat Conservation Society

B. Status of bat species within the territory

Please assess a national status ONLY for those bat species from the Annex 1 to EUROBATS Agreement that were recorded in your country

Rhinolophus ferrumequinum (Schreber, 1774)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› Occasionally in winter and summer, irregular migrant

Status in the National Red List (when it exists)
☑ CR, Critically Endangered

Year of assessment
› 2017

Year of report
› 2013

Rhinolophus hipposideros (Bechstein, 1800)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ VU, Vulnerable

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Barbastella barbastellus (Schreber, 1774)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.
NO = doesn't occur in the region

	FV	U1	U2	XX	NO
Alpine	☐	☐	☐	☐	☐
Atlantic	☐	☐	☐	☐	☐
Boreal	☐	☐	☐	☐	☐
Continental	☐	☐	☐	☐	☐
Macaronesian	☐	☐	☐	☐	☐
Mediterranean	☐	☐	☐	☐	☐
Arctic	☐	☐	☐	☐	☐
Black Sea	☐	☐	☐	☐	☐
Pannonian	☐	☐	☐	☐	☐
Steppic	☐	☐	☐	☐	☐
Anatolian	☐	☐	☐	☐	☐

Eptesicus nilssonii (Keyserling & Blasius, 1839)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Eptesicus serotinus (Schreber, 1774)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Hypsugo savii (Bonaparte, 1837)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis alcathoe von Helversen & Heller, 2001

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, maternity colonies, winter

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis bechsteinii (Kuhl, 1817)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Stable

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis blythii (Tomes, 1857)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› irregular occurence, mostly in winter

Overall national trend
☑ Negative

Status in the National Red List (when it exists)
☑ CR, Critically Endangered

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?

☑ Yes

Year of report
› 2013

Myotis brandtii (Eversmann, 1845)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis dasycneme (Boie, 1825)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› winter, summer, reproduction confirmed

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ CR, Critically Endangered

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis daubentonii (Kuhl, 1817)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› winter, summer, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis emarginatus (Geoffroy, 1806)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ NT, Near Threatened

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis myotis (Borkhausen, 1797)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ NT, Near Threatened

Year of assessment

› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis mystacinus (Kuhl, 1817)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Myotis nattereri (Kuhl, 1817)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Nyctalus lasiopterus (Schreber, 1780)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› mostly during migration

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Nyctalus leisleri (Kuhl, 1817)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, maternity colonies, occasionally winter

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Nyctalus noctula (Schreber, 1774)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Pipistrellus kuhlii (Kuhl, 1817)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› occasionally summer and winter

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Pipistrellus nathusii (Keyserling & Blasius, 1839)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, maternity colonies, winter

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report

› 2013

Pipistrellus pipistrellus (Schreber, 1774)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, maternity colonies, winter

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Pipistrellus pygmaeus (Leach, 1825)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, maternity colonies, winter

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Plecotus auritus (Linnaeus, 1758)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required

› summer, winter, maternity colonies

Overall national trend
☑ Positive

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Plecotus austriacus (Fischer, 1829)

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Negative

Status in the National Red List (when it exists)
☑ VU, Vulnerable

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Vespertilio murinus Linnaeus, 1758

Status of the species occurrence
☑ Resident

General comments

Comments

Add specific comments, if required
› summer, winter, maternity colonies

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ LC, Least Concern

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

Miniopterus schreibersii (Kuhl, 1817)

Status of the species occurrence
☑ Occasional

General comments

Comments

Add specific comments, if required
› recorded once in winter

Overall national trend
☑ Not studied

Status in the National Red List (when it exists)
☑ DD, Data Deficient

Year of assessment
› 2017

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?
☑ Yes

Year of report
› 2013

C. Measures taken to implement Article III of the Agreement

Does the national legislation protect all bat species?
☑ Yes

Please, give details of the legislation which is protecting bats
› The legislative protection of all bat species of bats in the Czech Republic is ensured by up-dating of the Act No. 114/1992 on nature conservation and landscape protection from 2004. All species are protected and are included in critically endangered or endangered by novel regulation 175/2006 of regulation 395/1992.

Which species are not protected and why?
› Not relevant

1. Guidelines for the issue of permits for the capture and study of captured wild bats

Does the system of permits or licenses for the capture of bats exist in your country?
☑ Yes

Comments (optional)
› All species are protected and are included in critically endangered or endangered by novel regulation 175/2006 of regulation 395/1992. Act No 246/1992 on protection of animals against maltreatment (novelized by 77/2006 and 312/2008) referes to individual bat protection. Keeping of handicapped bats and their participation on public education programs are treated by regulation 316/2009 and 5/2009.
Exceptions (permits) to the Act are granted by competent authorities (Ministry of Environment, Ministry of Agriculture, and regional authorities). Offence against the law is penalized by the Czech Environmental Inspection.

System of permits or licences to keep bats for educational or animal welfare purposes
☑ In place

System of permits or licences for sampling, ringing, killing of bats for scientific studies
☑ Exists

2.Identified and protected sites which are important to the conservation of bats

Click "expand" to see the questions!

Resolution 5.7. Guidelines for the protection of overground roosts, with particular reference to roosts in buildings of cultural heritage importance

2.4. List of national important overground roosts (including legal/physical protection status)
☑ Exists

Please, give details or links
› ČESON (Czech Bat Conservation Trust), www.ceson.org, netopyr@ceson.org

Comments
› The important overground roosts are yearly monitored by volunteers of Czech Bat Conservation Trust

2.5. National guidelines for custodians of historical buildings on the protection of bat roosts have been developed
☑ No

Comments
› When bat colony on a historical building is present, it is listed in CBCT database. The reconstruction is planned according to legislation in cooperation with custodes of historical building.

2.6. Summary report on interactions between the relevant cultural and natural heritage agencies (attach a file or provide a description)
› Custodes or owners of historical buildings are contacted and concrete situation is solved directly with them (damage of timber by bat urine, renovation of historical building with bat roost, holding bat events)
http://www.ceson.org/ukryty.php?f=5
http://www.ceson.org/ukryty.php?f=26
http://ceson.org/nnoc.php

Comments
› None.

Other activities carried out under this resolution (optional)
› In castles, chateaux and churches across the country there are annualy hold on International Bat nights. The plaquettes "Bat is our neighbour" are placed at bat-friedly buildings with bat roosts. Close the roost entrances were installed small informational boards. 2017 was on CBCT websites made an interactive online map of historical building with bat roosts visited by turists.

Resolution 7.6. Guidelines for the protection and management of important underground habitats for bats

Updated counts of bats at each listed site are submitted to the Secretariat
☑ Yes

2.1. List of important underground sites

2.1. List of important underground sites for bats and measures of their protection (including Natura 2000, Emerald or other status) was submitted to EUROBATS
☑ Yes

When the latest update was submitted?
› 2018

Comments
› None.

2.2. Management of important underground sites for bats is in accordance with EUROBATS Publication n°2
☑ Yes

Comments
› None.

2.3. Other relevant activities for the protection of underground habitats

› In any case, where the mine or other underground site important for bats should be closed, CBCT enters the administrative procedure.

3.Consideration given to habitats which are important to bats

Click "expand" to see the questions!

Resolution 7.7. Bat conservation and sustainable forest management

National guidance has been developed based on the principles in the EUROBATS Bats and Forestry leaflet
☑ No

Examples of best practice for forest management are submitted to the Secretariat
☑ No

If no, provide explanations or give links to available examples
› There is a brochure published by CBCT which summarizes forest management
http://www.ceson.org/document/brozura_netopyri_v_lesich.pdf
and also web pages dealing with bats in trees
http://vestrome.sousednetopyr.cz/

Research in forest management that is sustainable for bats (attach file or provide links)
› No.

Other activities carried out under this resolution (optional)
› Since 2013, there is available brochure „Bats in forests - Guidelines for foresters“ published by CBCT. In 2016 new websites focusing on Bats in trees were developed including also information about bats and forest management. Also, before felling trees in old lines and parks, bat conservationists are asked to provide a research.
Monitoring of bats in forests:
http://webserv.krnap.cz/data/netopyri_krkonos.pdf
Bats in wetlands andwetland forests
file:///C:/Users/zoologie/Downloads/cz_2_vyhodnoceni-druhove-diverzity-a-habitatove-preference-netopyru.pdf
2015 Research of activity of bats in Czech primeval forests

Resolution 7.8. Conservation and management of critical feeding areas, core areas around colonies and commuting routes

Awareness of the importance of critical feeding areas, core areas around known colonies and commuting routes for bats exists
☑ Yes

Give details of activities devoted to raising awareness
› Awareness is raised every year during travelling exhibitions and also during International bat nights as a part of necessary conservation aspect.

Measures to take bats into account in land use and planning decisions
☑ Yes

Measures, if yes

Describe these measures, please
› Before building-up works, wind farms or road construction and maintenance are bat workers contacted to make a survey of bat roosts and bat activity at influenced areas.

Research and monitoring to improve understanding of the use of landscape by bats are ongoing
☑ Yes

research, if yes

Please, specify or give referencies to studies
› 2015 - habitat preferencies and species diversity in wetlands (Czech Bat Conservation Trust, CBCT, "ČESON")
2014-2018 projects of CBCT focused on protection of roosts in towns (buildings, trees)
2017-2018 Bat detectoring survey in Prague parks as important foraging sites with consideration to potentional and inhabited tree roosts (NGO Nyctalus)
inventory surveys in PLA (Nature Conservation Agency, NCA, "AOPK")

National guidelines, drawing on the general guidance published in EUROBATS Publication have been developed
☑ No

Other activities carried out under this resolution (optional)
› None.

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

Click "expand" to see the questions!

4.1. International Bat Night. Give details for each year: number of events and number of people participated

› 2014 - 50 events, 4450 participants
2015 - 47 events, 7940 participants
2016 - 59 events, 5380 participants
2017 - 54 events, 4410 participants
2018 (not finished yet)
IBN are coordinated by CBCT (Czech Bat Conservation Society "ČESON")

4.2. Details of other important activities which are worth to mention (educational centres, etc.)

› Programs for schools and kindergartens, excursions for public, art and literary competions, travelling exhibitions, geocaching game

4.3. Information on training and awareness raising for forest managers and workers, farmers, road workers, stakeholders involved in insulation of buildings, etc.

› 2014 - 8 seminars, 293 participants (CBCS) ; 2/71 (Nyctalus)
2015 - 3 seminars, 60 participants
2016 - 3 seminars, 107 participants
2017 - 5 seminars, 170 participants

Resolution 4.11. Recognising the important role of NGOs in bat conservation

4.4. Details of NGOs participating in /contributing to bat protection and most valuable activities that have the potential to substantially improve transboundary cooperation and mutual assistance

› The most important is Czech Bat Conservation Trust "ČESON", www.ceson.org ; this organization takes part in many projects - monitoring of underground and overground roosts, holding on plenty of public events and programs for raising awareness, participating in bat concervation and scientific projects, participating in administrative procedures concerning bats. There are also local NGOs which protect bats on regional level (e.g. Nyctalus - bat rehabilitation and public events; several speleologic organizations). Volunteers or empoyees are also scientists with language knowledge.

5. Additional actions undertaken to safeguard populations of bats

Click "expand" to see the questions!

Resolution 2.2. Consistent monitoring methodologies

5.1. Implementation of EUROBATS guidelines published in EUROBATS Publication n°5 to ensure consistency and information exchange between Parties and Range States
☑ Yes

Please give details
› Important underground and overground sites are conrolled each year and data are collected and stored by memebers of CBCT and National database.
Counts on maternity roosts every year, data are stored by CBCT and National database.
Local (PLA) bat detector studies every year, data are inserted in National database.
Netting (PLA) during swarming or as a part of inventory bat research projects every year, data are inserted in National database.

Resolution 5.4. Monitoring bats across Europe

5.11. Involvement in a long-term pan-European surveillance to provide trend data
☑ Yes

Involvement details

Please, give details of involvement
› In 2018 were evaluated trends of bat abundance in the Czech Republic (1970-2016) by using statistics Birdstats and Trim.

Awareness-raising of the importance of underground sites
☑ Yes

Collaboration and information exchange with other Parties and range states on surveillance and monitoring activities
☑ Yes

Please provide details
› monitoring of WNS (details see resolution 6.6., point 5.17)
bats in Krkonoše mountains
BARTONIČKA, Tomáš, Zdeněk ŘEHÁK, Jiří FLOUSEK a Joanna FURMANKIEWICZ. Netopýři českých a polských Krkonoš. Vrchlabí: Správa Krkonošského národního parku, 2015. 183 s. Fauna Krkonoš, svazek 3. ISBN 978-80-87706-90-9.
bats in Mediterranean and Africa
Petr Benda, Mounir Abi-Sais, Jaoude I Bou, Rena Karanouh, Radek K Lučan, Riyad Sadek, Martin Ševčík, Marcel Uhrin, Ivan Horáček Bats (Mammalia: Chiroptera) of the Eastern Mediterranean and Middle East. Part 13. (2016) Review of distribution and ectoparasites of bats in Lebanon. Acta Societatis Zoologicae Bohemicae 80, 2016.
Radek K Lučan, Tomáš Bartonička, Petr Jedlička, Šimon Řeřucha, Martin Šálek, Martin Čížek, Haris Nicolaou, Ivan Horáček (2016). Spatial activity and feeding ecology of the endangered northern population of the Egyptian fruit bat (Rousettus aegyptiacus) Journal of Mammalogy 97, 2016.
Benda, Petr & Lučan, Radek & M. Shohdi, Wael & Porteš, Michal & Horacek, Ivan. (2015). Microbats of the Western Oases of Egypt, Libyan Desert. Vespertilio. 17. 45–58.

5.14. Monitoring bats in accordance with EUROBATS Publication n°5
☑ Yes

5.15. Capacity building of bat workers and surveyors to support the undertaking of bat surveillance projects
☑ Exists

Other activities under Resolution 5.4.
› No.

Resolution 6.6. Guidelines for the prevention, detection and control of lethal fungal infections in bats

5.17. Surveillance for the presence of fungal infections

☑ Yes

Please provide details
› During monitoring of underground hibernacula are noted bats, which are suspected to have Pdes. Monitoring and survey of geomycosis in bats caused by Pseudogymnoascus destructans. The results were published in 16 international journals amounting to total IF of 49 and 3 papers in nationally recognized reviewed journals. 8 manuscripts are in final stages of preparation. Multiple articles include international cooperation between European or trans-Atlantic research institutions. During the course of the project, we developed a non-destructive method for quantification of WNS lesions on bat wings in cooperation with colleagues from US Universities, Pennsylvania Game Commission and US Geological Survey, a method for detection of horizontally transferred genetic information in eukaryotes and a method to grade disease severity from non-lethal biopsy punches.
2018
Kováčová V., Zukal J., Banďouchová H., Botvinkin A. D., Harazim M., Martínková N., Orlov O. L., Piaček V., Shumkina A. P., Tiunov M. P., Pikula J.: White-nose syndrome detected in bats over an extensive area of Russia, BMC Veterinary Research 14 (2018) .
Zahradníková Jr. A., Kováčová V., Martínková N., Orlova M. V., Orlov O. L., Piaček V., Zukal J., Pikula J.: Historic and geographic surveillance of Pseudogymnoascus destructans possible from collections of bat parasites, Transboundary and Emerging Diseases 65 (2018) 303-308.
2017
Pikula J., Amelon S. K., Banďouchová H., Bartonička T., Berková H., Brichta J., Hooper S., Kokurewicz T., Kolařík M., Köllner B., Kováčová V., Linhart P., Piaček V., Turner G. G., Zukal J., Martínková N.: White-nose syndrome pathology grading in Nearctic and Palearctic bats, PLoS ONE 12 (2017) .
2016
Lučan R. K., Banďouchová H., Bartonička T., Pikula J., Zahradníková Jr. A., Zukal J., Martínková N.: Ectoparasites may serve as vectors for the white-nose syndrome fungus, Parasites & Vectors 9 (2016) .
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Resolution 6.13. Bats as indicators for biodiversity

5.19. Does your country support a development of national, regional and pan-European biodiversity indicators for appropriate target audiences, using bat data
☑ Yes

Please provide details
› Within the frame of Convention on Biological Diversity and National Strategy of Biological Diversity Conservation 2016-2025

5.20. Bat data is incorporated within high profile national multi-taxa indicators
☑ Yes

Body in charge for gathering the data for these indicators
› "AOPK" (Nature Conservation Agency, NCA), www.ochranaprirody.cz

5.22. Cooperation platforms that facilitate the required data exchange
☑ Don't exist

Other activities carried out under this resolution (optional)
› No.

Comments (optional)
› No.

Resolution 7.5. Wind turbines and bat populations

5.2. Raising awareness on the impact of turbines on bats and the existence of some unsuitable habitats or sites for construction
☑ Yes

If yes, how?
› during public events; wind turbines construction so far do not represent very serious problem in country

5.3. Pre-construction impact assessments, if possible, undertaken by suitably experienced bat experts
☑ Yes

Please, give details
› There is a methodological brochure of wind turbines survey validated by the Ministry of Environment. It has strict condictions for construction of wind turbines.

5.4. National guidelines were developed following Eurobats Pub. No. 6
☑ Yes

Please, attach a file or or provide a link
› http://www.ceson.org/document/VtE_metodpokyn_fin.pdf

National guidelines are implemented
☑ Yes

Please, provide implementation details
› Guidelines are implemented in environment impact assessment process

5.5. Investigations and research for mitigating bat mortality have been undertaken
☑ No

5.6. Additional information on research on the impact of wind turbines on bat populations

List new references, attach reports or articles
› no.

5.7. Post-construction monitoring, if possible, is undertaken by suitably experienced bat experts

If yes, give details
☑ No

5.8. Raw data from environmental impact assessment and post-construction monitoring is available for independent scientific analysis
☑ Yes

Please, list references, attach reports and articles
› Data of bat activity and species can be provided on request. The company must always document the report of impact of wind turbines on bats.

5.9. Blade feathering, higher cut-in wind speeds and shutting down turbines are used to reduce or avoid bat mortality
☑ No

Other activities carried out under Resolution 7.5 (optional)
› none

Comments (optional)
› no

Resolution 7.9. Impact of roads and other traffic infrastructures on bats

5.23. Bats are taken into account during the planning, construction and operation of roads and other infrastructure projects
☑ Yes

Please give details or attach a file with description
› The company must always document the report of impact of road construction on bats (roosts, bat activity).

5.24 Pre-construction strategic and environmental impacts assessment procedures are mandatory
☑ Are mandatory

5.25. Post-construction monitoring
☑ Isn't required

5.26. Raw data from environmental impact assessment and post-construction monitoring is available for independent scientific analysis
☑ Yes

Please list references and attach reports and articles
› Data of bat activity and species can be provided on request. The company must always document the report of impact of road construction on bats

5.27. Research into the impact of new and, where appropriate, existing roads and other infrastructure on bats and into the effectiveness of mitigation measures
☑ No

5.28. National guidelines are developed
☑ No

Other activities carried out under Resolution 7.9 (optional)
› No.

Comments (optional)
› No.

Resolution 7.10. Bat Rescue and Rehabilitation

5.29. Animal rescue and rehabilitation systems are effective in the country
☑ Yes

5.30. Collaboration between bat rehabilitators and scientists
☑ Exists

Provide examples of collaboration
› species identification
providing dead bats for research
databases of findings for future research

5.31. Bat rehabilitators contribute their data to a national database
☑ Yes

Please provide information about this database
› ČSOP (Czech Union of Conservationists) - rescue centres covered by this organization have to send data every year; www.zvirevnouzi.cz
AOPK (Agency for Lands - national database of any record of bats (detectoring, monitoring, capture, finding); www.ochranaprirody.cz
Nevertheless, some organization are not covered by CUNC and data escape.

Other activities carried out under Resolution 7.10 (optional)
› Disabled, but contact bats (Nyctalus noctula mostly) are used for educational programs for schools, IBNs, public and in workshops (e.g. bats and insulation, bats in captivity)

Comments (optional)
› No.

Resolution 7.11. Bats and building insulation

5.32. Are there conflicts between insulation regulations and bat conservation?
☑ Yes

Please provide details

› Insulation of buildings must have good thermal efficiency. If it is possible to save a roost, solution are proposed by bat experts with cooperation of designers and technicians, which do not influence thermal profile. If it is not possible, conservationists follow recommendations in the CBCT brochure "Bats and buildings" from 2015 (e.g. interruption of insulation during time of maternity colonies or hibernation; installation of on-way enclosure in spring and autumn migrations).

5.33. Which actions including mitigation and compensation measures were undertaken to address these conflicts?
› It was stated by Ministry of Environment, that every company which plan to insulate buildings and asks for government financial support, must include in request the results from bat basic pre-insulation survey, and all official buildings which should be insulated, must document bat expert opinion.
There is always effort to keep the bat roost undamaged; if it is not possible, wooden-concrete bat boxes or home-made bat boxes fitting for particular cases are installed.

5.34. Impacts on bats are included in the environmental assessment of insulation programs

☑ Yes

Other activities carried out under Resolution 7.11 (optional)
› 2015 - The second updated publication from CBCT: Schnitzerová, P., Cepáková E., Viktora L. 2015. Bats in building. Reconstruction and solving problems. 88 pages
http://www.ceson.org/document/brozura_Netopyri_2015_final.pdf
2014-2017 - 12 workshops for stakeholders by CBCT, focusing on Bats and Insulation
database of bats in panel buildings on CBCT web pages available for officials
http://www.ceson.org/sidliste_databaze.php
2017 - SCHNITZEROVÁ, Petra, Tomáš BARTONIČKA, Hana BERKOVÁ, Iveta BRZOBOHATÁ, Eva CEPÁKOVÁ, Tereza ČAMLÍKOVÁ, Gašpar ČAMLÍK, Borek FRANĚK, E JINDROVÁ, Jana KŘEMENOVÁ, Jana NECKÁŘOVÁ, Václav ŘÍŠ, Josef WAGNER a Dita WEINFURTOVÁ. Úspěšnost instalace náhradních úkrytů pro netopýry při zateplování budov. In Zoologické dny 9.-10.2.2017 Brno. 2017. (success rate of colonization of substitutional bat roost after insulation)

Comments (optional)
› No.

Resolution 7.12. Priority species for autecological studies

Rhinolophus blasii Peters, 1866

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Eptesicus isabellinus (Temminck, 1840)

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Myotis escalerai Cabrera, 1904

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Nyctalus azoreum (Thomas, 1901)

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Nyctalus lasiopterus (Schreber, 1780)

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Pipistrellus hanaki Hulva & Benda, 2004

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Pipistrellus maderensis (Dobson, 1878)

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Plecotus kolombatovici Dulic, 1980

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Plecotus sardus Mucedda, Kiefer, Pidinchedda & Veith, 2002

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Plecotus teneriffae Barrett-Hamilton, 1907

Some studies have been conducted (are ongoing) for this species in the country
☑ No

Other activities carried out under Resolution 7.12 (optional)
› No.

Comments (optional)

› except very occasional occurence of Nyctalus lasiopterus in the Czech Republic, listed species do not occur here.

6. Recent and ongoing programmes (including research and policy initiatives) relating to conservation and management of bats

Click "expand" to see the questions!

Resolution 2.3. Transboundary programme: species proposals

6.1. Inclusion of Myotis dasycneme and Pipistrellus nathusii in transboundary cooperation

☑ No

Comments (optional)
› Presently, we have no special project focusing of these species, nevetheless, their occurence is recorded (especially in Myotis daysneme, which occur occasionally) and inserted in National database

Resolution 2.4. Transboundary programme: habitat proposals

6.2. National research on underground sites has been undertaken since the last reporting
☑ Yes

Please list references
› Every year took part the monitoring of cca 600 underground hibernacula by volunteers from CBCT and data are stored.

6.3. National research on bats in forests
☑ No

Comments (optional)
› There is no special project on national research, but bat surveys of bats in forests are part of other projects:
2015 - habitat preferencies and species diversity in wetlands (Czech Bat Conservation Trust, CBCT, "ČESON") including wetlands forests
2015 Bats in Krkonoše mountains, http://webserv.krnap.cz/data/netopyri_krkonos.pdf
inventory surveys in PLA (Nature Conservation Agency, NCA, "AOPK") , data are insered in National database

Resolution 5.2. Bat rabies in Europe

6.5. National bat rabies surveillance network
☑ No

6.6. Vaccination against rabies is compulsory
☑ No

6.7. Details of the institution(s) in charge of recording of all test results and their submission to the World Health Organisation
› Státní veterinární ústav (SVÚ Praha, State veterinary institute, www.svupraha.cz) makes tests of all animals suspected of any infection disease, including rabies. It was established by Ministry of Agriculture.

6.8. Other activities carried out under this resolution (optional)
› None.

Comments (optional)
› No.

Resolution 6.5. Guidelines on ethics for research and field work practices

6.9. National Code of Practice that addresses the context and legitimacy of acquisition, due diligence, long-term care, documentation, relevance and institutional aims
☑ Doesn't exist

6.10. Other activities carried out under this resolution (optional)
› None.

Comments (optional)
› No.

Resolution 6.8. Monitoring of daily and seasonal movements of bats

Please select a species for which a research in daily/seasonal movements has been conducted from the list

6.12. Other activities carried out under this resolution (optional)

› There is a current project of migration corridors and survey of activity of flying animals (butterflies, birds, bats).

Bartonička, T., Voříšek P., Klvaňová A., Andreas M., Lučan R., Romportl D. 2017. Hrubá mapa významných migračních koridorů ptáků a létajících savců na úrovni ČR. (Map of important migration corridors for bats and birds)

Bartonička, T., Voříšek P., Klvaňová A., Andreas M., Lučan R., Romportl D. 2017. Metodika monitoringu a sběru dat k určení významných migračních koridorů ptáků a létajících savců na úrovni ČR. (Guidelines for monitoring and data collection for determination of migration corridors for bats and birds)

Lučan R., Koukolíková A, Bartonička, T., Vavřík M, Zicha P. 2017. Sledování podzimní migrace ptáků, netopýrů a tažných motýlů přes Červenohorské sedlo. In Zoologické dny 9.-10.2.2017 Brno. 2017.(observation of autumn migration of birds, bats and migratory butterflies over Červenohorské sedlo).

7. Consideration being given to the potential effects of pesticides on bats, and their food sources and efforts to replace timber treatment chemicals which are highly toxic to bats

Click "expand" to see the questions!

Resolution 4.5. Guidelines for the use of remedial timber treatment

7.1. Small projects to provide basic data to allow an assessment of the potential impact of industry on bat populations
☑ No

7.2. Raising awareness of product users is taking place
☑ Yes

Please provide details
› Occasionaly during International Bat Nights and during solving concrete cases of bats in buildings.

7.3. Legislation on products which have any adverse effects on bats
☑ Doesn't exist

Comments (optional)
› Legislation takes into account impact on mammals in general.

Resolution 6.15. Impact on bat populations of the use of antiparasitic drugs for livestock

7.4. Efficient non-chemical methods to control livestock parasites and use of products of least toxicity to non-target species implemented
☑ Yes

Please give details
› Legislation takes into account impact on mammals. In livestock, farmacological drugs are classified and divided according maximal limit of residuums in food products (avermectine, cypermethrine, amitraz, cyfluthrine, cyromazine, deltamethrine, derquantel, diazinon, dicyklanil ,doramectine, etc.) , actualized 2018. Use of alternative antiparasitic drugs in private livestock used for grazing or sport (horses, goats, sheeps) is dependant on owner decision.
Also it was suggested to use "wild" animals (e.g. deer) for grazing instead of sheeps and goats, due to their lower susceptibility to parasites.

7.5. Research on the use of antiparasitic drugs
☑ No

7.6. Recommendations in Annex I to the Resolution 6.15 are adopted
☑ No

7.7. Other activities carried out under this resolution
› The National Strategy on Prevention the Risk of Poisoning and Illegal Killing of Wild Animals in the Czech Republic is under preparation. The Ministry of the Environment is a leader and coordinator of intersessional WG that is preparing the Strategy. The Strategy includes also chapter on pesticides, their influence to bats is mentioned also.

Comments (optional)
› No.

8. Further important activities to share with other Parties and Range States

Give details or provide links
› No.

Confirmation

Confirmation of information verification and approval for submission

Please confirm:

In addition a scanned copy of an official letter from the relevant state institution, approving the report for submission, can be attached.

☑ I declare that the information provided in the Report on the implementation of EUROBATS has been verified and the report has been approved for submission by the appropriate state institution in the country.

Date of submission

Fill as follows: dd.mm.yyyy
› 18.09.2018