

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

> Romania

Period covered by this report

> 2011-2018

Is your country a party to EUROBATS Agreement?

Yes

Competent authority

Title, address, phone, fax, e-mail and other contact details

> Ministry of Environment

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Email: cabinet.ministru@mmediu.ro

Phone/Fax: +4 021 408 95 46/+4 021 316 02 87

Web: <http://www.mmediu.ro>

Personal details of administrative focal point (s)

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Ministry of Environment

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Please give details of designated scientific focal points

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- Levente Barti, Myotis Group for Bat Conservation
- Oana Mirela Chachula, Romanian Caving Federation, Club of Mountain Sports Hunedoara
- Ovidiu Roşu, Visul Luanei Foundation / Wild Animal Rehabilitation Centre
- Roxana Ionescu, Ministry of Environment
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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 blasii Peters, 1866

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> - Bücs Sz., Jakab E., Jére Cs., Csósz I., Jakab R. I., Barti L., Szodoray-Parádi F., Popescu O. (2014): The status of Blasius's horseshoe bat (*Rhinolophus blasii*) in the Pădurea Craiului Mountains, Romania: answers from molecular markers. XIIIth European Bat Research Symposium, Sibenik, Croatia

- Jére Cs., Bücs Sz., Csósz I., Barti L., Szodoray-Parádi F. (2013): Isolated populations or hidden connections: the presence of Blasius's Horseshoe Bat (*Rhinolophus blasii*) in the Pădurea Craiului Mountains. XIVth Cluj Biology Days, Cluj-Napoca, Romania

- Jére Cs., Bücs Sz., Csósz I., Szodoray-Parádi F., Barti L. (2017): The northernmost *Rhinolophus blasii* colony in Europe: permanent presence in the Pădurea Craiului Mountains, Romania. North-Western Journal of Zoology 13(1): 163-168, Art. no. e162801.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 20017-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U 1	U 2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rhinolophus euryale Blasius, 1853

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Uhrin M., Boldogh S.A., Bücs Sz., Paunovič M., Miková E., Juhász M., Csósz I., Estók P., Fulín M., Gombkötő P., Jére Cs., Barti L., Karapandža B., Matis Š., Nagy Z.L., Szodoray-Parádi F., Benda P. (2012): Revision of the occurrence of *Rhinolophus euryale* in the Carpathian region, Central Europe. *Vespertilio* 16: 289-328.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***Rhinolophus ferrumequinum* (Schreber, 1774)**

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

Year of assessment

> -

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rhinolophus hipposideros (Bechstein, 1800)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rhinolophus mehelyi Matschie, 1901

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Csósz I., Jére Cs., Bücs Sz., Bartha Cs., Barti L., Szodoray-Parádi F. (2015): The presence of Mehely's horseshoe bat *Rhinolophus mehelyi* in South-Western Romania. North-western Journal of Zoology 11(2): 351-356.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Barbastella barbastellus (Schreber, 1774)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Eptesicus nilssonii (Keyserling & Blasius, 1839)

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Jére Cs., Simon L., Bücs Sz., Csósz I., Barti L., Szodoray-Parádi F., Dóczy A. (2018): The distribution of the Northern Bat *Eptesicus nilssonii* (Keyserling & Blasius, 1839) in Romania. North-Western Journal of Zoology 14(1): 130-134, article nr. e174701.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Eptesicus serotinus (Schreber, 1774)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hypsugo savii (Bonaparte, 1837)

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Uhrin M., Hüttmeir U., Kipson M., Estók P., Sachanowicz K., Bücs Sz., Karapandža B., Paunović M., Presetnik P., Bashta A.T., Maxinová E., Lehotská B., Lehotský R., Barti L., Csösz I., Szodoray-Parádi F., Dombi I., Görföl T., Boldogh S.A., Jére Cs., Pocora I., Benda P. (2016): Status of Savi's pipistrelle *Hypsugo savii* (Chiroptera) and range expansion in Central and south-eastern Europe: a review. *Mammal Review* 46(1): 1-16.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis alcaethoe von Helversen & Heller, 2001

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required
> Barti et al. (in preparation)

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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

No

Myotis aurascens Kuzyakin, 1935

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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

No

Myotis bechsteinii (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis blythii (Tomes, 1857)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis capaccinii (Bonaparte, 1837)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis dasycneme (Boie, 1825)

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Görföl T., Dombi I., Barti L., Bücs Sz., Jére Cs., Pocora V., Pocora I. Szodoray-Parádi F., Paunovic M., Karapandza B., Csósz I. (2018): A review of the occurrence data of the pond bat (*Myotis dasycneme*) in its southern distribution range. North-Western Journal of Zoology 14(1): 135-141, article nr. e174702.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis daubentonii (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis emarginatus (Geoffroy, 1806)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis myotis (Borkhausen, 1797)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Myotis mystacinus (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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

No

Myotis nattereri (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Nyctalus lasiopterus (Schreber, 1780)

Status of the species occurrence

Resident

General comments

Comments

Add specific comments, if required

> Estók P., Görfői T., Szóke K., Barti L. (2017): Records of Greater Noctule Bat (*Nyctalus lasiopterus*) from Romania – with new additions. North-western Journal of Zoology 13(2): 375-376.

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Nyctalus leisleri (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Nyctalus noctula (Schreber, 1774)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pipistrellus kuhlii (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pipistrellus nathusii (Keyserling & Blasius, 1839)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pipistrellus pipistrellus (Schreber, 1774)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Pipistrellus pygmaeus (Leach, 1825)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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

No

Plecotus auritus (Linnaeus, 1758)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plecotus austriacus (Fischer, 1829)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

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

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vespertilio murinus Linnaeus, 1758

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Miniopterus schreibersii (Kuhl, 1817)

Status of the species occurrence

Resident

Overall national trend

Not studied

Status in the National Red List (when it exists)

NE, not evaluated

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 (for 2007-2012)

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	X X	N O
Alpine	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Atlantic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boreal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Continental	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Macaronesian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mediterranean	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Arctic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Black Sea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pannonian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steppic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anatolian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

- > - Law nr. 13/1993, ratifying the Bern Convention on the Conservation of European Wildlife and Natural Habitats in Europe.
- Law nr. 13/1998, ratifying the Bonn Convention on the Conservation of Migratory Species of Wild Animals.
- Law nr. 90/2000, ratifying the Convention on the Conservation of Bats in Europe, the EUROBATS Agreement.
- Governmental Emergency Ordinance no. 57/2007 on the regime of natural protected areas, conservation of natural habitats, wild flora and fauna, approved with further amendments and additions by Law no. 49/2011, as amended and supplemented (to apply European Council Directives nr. 92/43/EEC and nr. 79/409/EEC, the Habitats Directive).
- Law nr. 205/2004, on the protection of animals, republished, with further amendments and additions.
- Ministerial Ordinance nr. 656/2014 (the BatLife Ordinance), to approve the regional action plan for the management of *R. ferrumequinum*, *R. hipposideros*, *M. myotis*, *M. oxygnathus* (*blythii*), *M. bechsteinii*, *B. barbastellus* and *M. schreibersii*.

Comments

> Due to the sustained, multi-year efforts of several Romanian bat NGOs', there has been a significant positive evolution with regard to the public attitude and awareness towards bats. However, there is a great need to apply the existing legislation in a focused manner (ex. in specific cases of high importance roost, caves, historic buildings and habitats). In addition, apparent legislative paradoxes need to be resolved. For example, Ministerial Ordinance no. 656/2014 (the BatLife ordinance) states that some caves in North-Western Romania are subject to seasonal restrictions for tourism, thereby protecting resident colonies in critical periods. However, tens of other similarly (or more important) caves and colonies exist in other parts of the country (ex. the Banat region, Dobrogea, Moldova), that are not subject to seasonal restrictions, even if colonies are threatened by the same human activities. A serious problem is also the renovation of historic buildings, especially churches, where usually resident nursery colonies are rarely taken into account. Religious tourism also threatens some key colonies, ex. in the Dobrogea region. Another important issue is that of wind energy in a bat migratory corridor in eastern Romania, in the Dobrogea region. So far, some studies have been performed and limited curtailment measures have been implemented, but it is far from a national practice. Romania has a specific particularity in law enforcement, as more than one institution has law enforcement power, with different (usually geographic) levels of intervention, which overlap in most cases (eg. local Environmental Protection Agencies, local Agencies for Natural Protected Areas, Danube Delta Biosphere Reserve Management Authority, local and regional Forestry Services, local and regional Forestry and Salmoniculture Authorities, local and county Councils, local and regional Infrastructure Management and etc.). Due to their own management and institutional regulations sometimes could appear conflicting situations in law enforcement, but these challenges and legislative voids will be solved in the upcoming years, in order to reflect the continental importance, size and diversity of local bat populations, as well as the threats faced by them.

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?

No

Comments (optional)

> The only standing legal and administrative framework for permitting the study of bats using capture is the regulation for derogations according to the Art. 16 of the Habitats Directive. However, even this process is faulty, as either applicants receive no answer from the official bodies responsible for this permit, or they receive it with serious delays. Also, there is a working permit system for accessing caves for various activities (including scientific research, capturing bats at caves, sampling bats, etc.), managed by the Speleological Heritage Commission, working under the Ministry of Environment. This permit system is based on simple applications, and until 2016 bat experts were part of this commission, expressing their opinion when important underground roosts were the subject of inquiries.

In frame of the "Uniting the efforts of Romanian bat conservation", implemented by Szilárd-Lehel Bücs, during the 2015-2017 Klaus Toepfer Fellowship Programme, the development of an ethical guideline was initiated jointly by Romanian bat research community (<https://lilieci.ro/en/bat-research/ethical-bat-research/>), that contains also aspects about capture and ringing of bats. This guideline is in the process of updating, but also needs to be officialized, in order to make it viable and useful.

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

Doesn't exist

Comments

> There are provisions inside several laws, for preventing the keeping of wild animals (Law no. 49/2011, Law no. 205/2014), or which inhibit keepers to maintain bats in small enclosures (Law of Zoos no. 191/2002), but this later law does not take account artificial hibernation, which should be done in small spaces. Also, veterinarians may keep (while under treatment) animals for a short period of time (however this is not regulated by any law is tacitly accepted). With the development of a new rehabilitation centre in Bucharest designed for bats (by the Luana Wild Animal Rehabilitation Centre), new legislative proposals should be developed to treat this aspect.

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

Doesn't exist

Comments (optional)

> As above, a faulty system of permits exists to capture, sample and ring bats, but only for Annex II species. However, there are no official standards for ringing, efforts suffering from lack of (1) coordination, (2) specific training and (3) a centralized database. Work is being done on establishing a national ringing centre, similar to the birds centre which is connected to the European organisation.

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)

Doesn't exist

Comments

> In the present moment we know of approx. 45-50 historic buildings that offer roost to large colonies of *R. ferrumequinum*, *R. hipposideros*, *R. euryale*, *M. myotis*, *M. blythii*, *M. emarginatus* and others. However, the true number of historic buildings and other overground roosts with potentially large colonies probably exceeds 100. In some cases, bat researchers are reluctant to give away information about the exact location of such colonies (in order to protect them from the public), and try to deal with threat situations as they arise. Most known colonies in historic buildings are described from North-Western, South-Western and Central Romania. Six of these sites have received targeted conservation measures, in form of guano cleaning and some form of building protection (ex. protective layers under the colony), in frame of a Norwegian grant project implemented by the Romanian Bat Protection Association in the period of 2014-2016. Currently there is no specific legislation to protect building-dwelling colonies, and in many cases, colonies are threatened in frame of historic building renovation. Usually interventions and renovations take place without accounting for the presence of nursery colonies. A national and official approach is needed in order to better protect the colonies roosting in historic buildings.

There is no legal ground for statutory protection for these roosts, the only way to maintain them is the close cooperation with owners and managers, an activity which usually is beyond the capacity of the Romanian bat protection societies, limiting thus their efforts to a few and individual cases.

2.5. National guidelines for custodians of historical buildings on the protection of bat roosts have been developed

No

Comments

> Only an unofficial guideline was developed by the Romanian Bat Protection Association, in frame of a Norwegian Grant in the period of 2014-2016, and distributed across Romania, including at a specific, building renovation conference:

- Jéré Cs., Bücs Sz. (2016): Conservation of bat species in anthropic roosts. Methodological guideline.

[Conservarea speciilor de lilieci în adăposturi antropice. Ghid metodologic]. In frame of project "Long term conservation of bat colonies from anthropic roosts with the involvement of local communities". Ed. Profundis. pp. 48. ISBN 978-973-1979-45-8.

https://lilieci.ro/wp-content/uploads/2016/11/ghid_APLR_adaposturi_antropice.pdf

Another best practice guideline has focused on general practices or relocation measures for bats in buildings:

- Wilderness Research and Conservation Association, Măntoiu D.Ș. et al. (2018), funded by the IKEA Urban Fund - <http://www.wildernessrc.ro/resurse/ghid2018/>

The creation of the official list of colonies from historic buildings and other important overground roosts is highly needed to work towards their effective conservation. The development of an official and national guideline and a legislative update would also improve the situation.

2.6. Summary report on interactions between the relevant cultural and natural heritage agencies (attach a file or provide a description)

> In most cases, historic buildings are in the custody or ownership of the different clerical institutions of different religions (while the main religion of Romania is the orthodoxy (ca. 80% of all confessors, there are in addition 18 accepted confessions with an estimated 3500 old churches in the country), and their restoration is managed usually by the individual church's local architect and local companies. In numerous cases these buildings require immediate renovation (ex. due to risk of collapse etc.), and these activities are rarely synchronized in any way with the conservation of resident bat colonies. Renovation depends on the arrival of funds, which usually must be spent according to a pre-agreed timetable, a timetable which usually does not take into account the presence of nursery (or other) colonies. Protection of colonies relies on the accidental discovery of such renovation initiatives, and the quick communication with local decision makers, architects, engineers etc. Natural heritage agencies (ex. Environmental Protection Agencies, Environmental Guard) are involved in this process only in case of larger public funded projects (eg. EU funding inside areas of Natura 2000 sites).

Other activities carried out under this resolution (optional)

> Locally, there is good communication between NGOs and decision makers of cultural heritage buildings (ex.

priests) in order to maintain a close look upon the status of known colonies. However, there are always surprises, and accidental discoveries of important buildings already in renovation. Currently several NGOs and independent experts oversee the renovation of some historic sites in Romania, including also activities like informing decision makers through interpersonal contact, regular cleaning of accumulated guano, and education for local communities.

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

No

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?

> The latest update was submitted at the AC in Heraklion, in 2014, bringing the total number of Romanian important underground sites to 57.

Comments

> Since the submission of the updated list at the AC in Heraklion in 2014, several new discoveries were made, some of which of continental importance. Currently we list a total of 70 important underground sites, out of which 13 are not in Eurobats' database. An update is very necessary. Also, the true potential regarding underground sites with large colonies (hundreds / thousands of bats of several species etc.) in Romania probably exceeds 100-150 locations.

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

Yes

Comments

> Management of important underground sites for bats in accordance with EUROBATS Publication n°2 is done only partially and regionally. In frame of the LIFE+ project in North-Western Romania project partners (the EPA of Bihor Country, the Romanian Bat Protection Association and the Emil Racoviță Speleological Institute) closed in a bat friendly way a total of 15 caves in several Natura 2000 sites. Other sites were cleaned, tourism routes and artificial lighting conditions modified, with several sites receiving information boards detailing adequate behaviour for visitors in caves and in the presence of bats. At the end of the project the Ministry of Environment issued Ministerial Ordinance 656/2014 (the BatLife ordinance), to approve the regional action plan for the management of *R. ferrumequinum*, *R. hipposideros*, *M. myotis*, *M. oxygnathus* (*blythii*), *M. bechsteinii*, *B. barbastellus* and *M. schreibersii*. In consequence, bat colonies in several caves of North-Western Romanian enjoy fair levels of conservation, including the seasonal restriction of tourism. However, mass tourism and especially, specialized cave tourism is expanding in these areas and across all Romania, so sites must be regularly monitored in order to check the status of colonies. In addition, an apparent legislative paradox needs to be resolved. Even if the BatLife ordinance confers statutory protection for selected cave-dwelling colonies in NW Romania, there are tens of other similarly (or more important) caves and colonies in other parts of the country (ex. the Banat region, Dobrogea, Moldova), which, despite their importance, are not subject to any conservation measure. Local initiatives (ex. by Club Speo Bucovina at the Rarău cave, try to conserve these sites, by concrete conservation activities and by education).

In frame of the BatLife project in NW Romania, project partners organized several workshops in the 2010-2013 period, aimed at staff of local protected areas, with the objective to train them in species identification, bat conservation and management. A printed guideline was also elaborated during the BatLife project, regarding the management of underground sites (Jére Cs, Bücs Sz. (2013): *Liliecii și managementul adăposturilor subterane - ghid metodologic*. Elaborat în cadrul proiectului "Conservarea speciilor de lilieci în Munții Pădurea Craiului, Bihor și Trascău" LIFE08/NAT/RO/000504. pp. 40.)

Currently, the Centre for Bat Research and Conservation runs a project in SW Romania, financed by the Columbus Zoo and Aquarium, with the aim to actively involve cavers and caver clubs in bat monitoring and conservation. The project will also involve the creation of a durable, pocket-sized identification guide about cave-dwelling species and bat conservation aspects. This will be distributed to cavers across Romania. Other relevant projects on the matter were done by the "Emil Racoviță" Institute of Speleology (Cave monitor - Romanian - Norwegian Grants), in which data regarding multiple caves from the southern and central Carpathians was collected. The information is being processed and measures are being proposed to diminish the tourism impact on large cave dwelling colonies.

According to expert opinion (Bücs et al. 2016, oral presentation at the 14th EBRS in the Basque Country) over 60 % of underground sites important for bats are threatened by general tourism in critical seasons (35% of

sites) and by speleotourism (25% of sites). Over 50% of underground sites (36 out of 70 caves) have no active protection (eg. either bat-friendly closing, restriction of visitors in key seasons, or natural protection, like hard-to-access).

2.3. Other relevant activities for the protection of underground habitats

> In 2013, in frame of the project “Monitoring the conservation status of species and habitats in Romania under Article 17 of the Habitats Directive SMIS-NSRF 17655”, financed through the European Regional Development Fund and Sectoral Operational Programme “Environment”, the implementing partners (Emil Racoviță Speleological Institute and the Romanian Bat Protection Association) published a guideline about the monitoring of caves and cave-dwelling bats (authors: Vlaicu M., Jére Cs., Dragu A., Borda D., Goran C., Szodoray-Parádi F., Năstase-Bucur R., Nițu E., Murariu D.).

In 2016, at the request of the Ministry of Environment, a detailed document was prepared in order to try and extend protection to those sites which are not covered by MO no. 656/2014. In parallel, the Romanian bat research community is trying to get official acceptance for the list of important underground roosts, and to bring them under the permitting system of the Speleological Heritage Commission. Meanwhile, regional and national bat NGOs continue to monitor key underground sites, in order to closely observe the changes in the status of colonies and potential threats.

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

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

No

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

No

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

> Some local research:

- Bostan A.D., Chachula O.M., Dragoş Ş.M. (2015): The behavior of bats in urban areas of Bucharest, Romania.

Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 18-21.11.2015

- Bücs Sz.L., Stan O.M. (2018): Preliminary data on the bat fauna of the Eastern Park, Cluj-Napoca. The 3rd Romanian Bat Research Conference, volume of abstracts.

- Măntoiu D.Ş., Mirea I.C., Miu I.C., Chelu A., Roşu O., Vasiliu O., Şandric I.C. (2018): Urban bats: ecological corridors in the city of Bucharest. The 3rd Romanian Bat Research Conference, volume of abstracts.

- Mărginean G. (2018): Study of the bat communities of Făgăraş and Piatra Craiului Mountains. The 3rd Romanian Bat Research Conference, volume of abstracts.

- Pocora I., Pocora V. (2018): Barbastella barbastellus in different types of woodlands: habitat use and activity patterns. The 3rd Romanian Bat Research Conference, volume of abstracts.

Also, research is being conducted on how bats use the areas in the vicinity of wind turbines in the eastern part of Romania (Dobrogea - DAKIA Association POIM project - ROSCI0201 Podişul Nord Dobrogean Natura 2000 site), but also in urban areas of Bucharest Romania. The research is currently conducted by Măntoiu D.Ş., after 6 years of carcass monitoring studies in the Dobrogea region and 5 years of reducing human-bat conflicts with relocation and rehabilitation studies in Bucharest.

National guidelines, drawing on the general guidance published in EUROBATS Publication have been developed

No

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

> (year, locality, organizer, number of visitors)

- 2011, Sf. Gheorghe, Székely National Museum, ≈ 100
- 2011, Câmpulung Moldovenesc, Fundația Speologică Club Speo Bucovina, ≈ 250
- 2013, Rarău, Fundația Speologică Club Speo Bucovina, ≈ 100
- 2016, Fănețele Seculare Ponoare, Fundația Speologică Club Speo Bucovina, ≈ 80
- 2017, Cluj-Napoca, Centre for Bat Research and Conservation (CBRC), ≈ 800
- 2017, Bucharest, Wilderness Research and Conservation (WRC), ≈ 200
- 2018, Cluj-Napoca, Centre for Bat Research and Conservation, ≈ 800
- 2018, Bucharest, Wilderness Research and Conservation, ≈ 130
- 2018, Petrița, Matei and Friends Association with CBRC and WRC, ≈ 50
- 2018, Lisa, Centre for Bat Research and Conservation, ≈ 100

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

> Initiated in 2016, the Romanian Bat Portal at www.lilieci.ro is the most complex and diverse resource about Romanian bats offered to the public. Published in three languages (Romanian, Hungarian and English), the portal is currently maintained by the Centre for Bat Research and Conservation, with the corresponding social media channels on Facebook and Instagram. All members of the Romanian bat research community are invited to publish articles about current issues of research or conservation, but the public also has the option to contribute.

Starting from 2017, the Centre for Bat Research and Conservation, together with the Romanian bat research community, initiated the public designation of "Bat of the year" in Romania, with the aim to raise awareness among the public about those bat species, which the community considers most important. The Bat of the year for Romania in 2017 was *Plecotus auritus*, and in 2018 *Rhinolophus mehelyi*, selected based on the vote of hundreds of people. Information about these species reached a wide audience using various online channels, media, interviews, and printed materials distributed during several events, conferences, etc.

The CBRC also participated in 2018 in the Protected Area Week, an awareness raising event coordinated by ProPark, with the aim to better inform the public about protected areas and natural treasures. The CBRC organized an event for the visually impaired children of Cluj-Napoca in October 2018, involving discussions about bats and listening to ultrasounds, combined with Braille script.

Within the Bats of the Urban Environment Project (Wilderness Research and Conservation, Visul Luanei Foundation, IKEA Urban Fund), multiple events regarding bat education have been organised since 2014 including bat feedings during artificial hibernation, biology classes in schools about the importance of bats, training high school pupils to research bat activity in the urban environment (European Researchers Night), bat walks in the Văcărești Natural Park, a diorama at the "Grigore Antipa" National Museum of Natural History depicting bats in urban shelters and many other activities, which sum up over 6000 participants.

Over the period of 2011-2018, tens of educative presentations were held across Romania by various bat NGOs for the public, in order to inform all generations in Romania about bats and bat conservation. These presentations were held in frame of distinct project (ex. the BatLife project in NW Romania, or the Conservation Leadership Programme project in SW Romania), or were done based on invitations from schools or other entities. In case of some presentations, these were followed by site visits to observe bat emergence (ex. in the Rarău Mountains, by the NGO Club Speo Bucovina).

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

> In the period of 2011-2018, there were no specific trainings targeting forest managers or road workers, and information about conservation issues for forests and roads reach these professional categories mainly by interpersonal contacts. Regarding stakeholders involved in insulation (and generally, restoration) of buildings, the Romanian Bat Protection Association created a guideline by in frame of a Norwegian grant, and has also participated in 2015 with a presentation about building-dwelling colonies at the National Restoration and Conservation Conference (Papp R., Bücs Sz., Jére Cs., Csósz I., Szodoray-Parádi F.: Bats and building of cultural importance: solutions to protect both sides). Currently the NGOs and experts offers consultations to some restoration teams working on historic buildings that are also nationally important bat roosts. In additional, this topic was subject to several conference presentations and articles, for ex.:

- Chachula O.M., Coroiu I., Mărginean G. (2013): Between the conservation of cultural heritage and conservation of biodiversity – case study: bat colony (Chiroptera), from Humor Monastery, abstract in Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", București 20-23.11.2013
- Chachula O.M., Coroiu I., Mărginean G., Klüppel R. (2017): Romania - a moment of grace in the restoration of historic monuments that host bat colonies". Book of Abstracts of 14th European Bat Research Symposium - EBRS Donostia the Basque Country, 1-5 august 2017, p. 70.

The NGO Wilderness Research and Conservation does consultations on building insulation in Bucharest. A best practice guideline (Măntoiu D.Ş. Et al, 2018, Liliicii din Mediul Urban, Romanian - <http://www.wildernessrc.ro/resurse/ghid2018/> - IKEA Urban Fund) was published by WRC and a conference was organised with stakeholders which have control over these matters in Bucharest, setting up the grounds for a better communication between city planners and bat specialists.

However, most of the information about bat conservation issues generally reaches architects and engineers rather through interpersonal contact, and in unorganized manner, an approach that should be changed and improved.

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 Romanian Bat Protection Association implemented in the 2016-2017 period a EUROBATS EPI project (The „Carol” line: assessing the importance of 150+ deserted bunkers for the conservation of the Romanian-Hungarian cross-border bat fauna), involving bat researchers from Hungary and enhancing information.

Ringling of *Nyctalus* sp. and *Pipistrellus* sp. in Bucharest and Southern Dobrogea by Wilderness Research and Conservation NGO and the “Emil Racoviță” Institute of Speleology, is being done in order to establish migratory routes in relation to the urban rehabilitation process and wind farm impact on bats. The project is of interest for the Bulgarian, Ukrainian and Russian bat research community.

The Centre for Bat Research and Conservation regularly supplies information to Serbian and Hungarian bat researcher colleagues, about ringed bats observed in colonies from NW and SW Romania. Also, starting from 2016, bat researchers from the UK are taking part in some monitoring activities undertaken by the CBRC, thus establishing possible collaborations and joint projects.

In frame of INTERREG RO-HU 2014-2020, a project is currently being implemented that also includes aspects of bat research and conservation. The Romanian partner is the custodian of the Natura 2000 site ROSCI0241 Tur River. Bat researchers on both sides of the border will be part of this project.

In addition, in the 2011-2018 period, the Romanian bat research community has participated in several peer-reviewed international publications for several bat species, collaborating with partners from neighboring countries:

- Barti, L., Á. Péter, I. Csósz, A.D. Sándor (accepted): Snake predation on bats in Europe: new cases and a regional assessment. *Mammalia*
- Barti, L., Sándor, A.D. (submitted): First record of Mediterranean horseshoe bat (*Rhinolophus euryale* Blasius, 1853) from Romanian Dobrudja.
- Corduneanu A., Hrazdilova K., Sándor A.D., Matei I.A., Ionică A.M., Barti L., Ciocănu M.A., Măntoiu D.Ş. Coroiu I., Hornok S., Fuehrer H.P., Leitner N., Bagó Z., Steffe K., Modrý D., Mihalca A.D. (2017): *Babesia vesperuginis*, a neglected piroplasmid: new host and geographical records, and phylogenetic relations. *Parasites & Vectors*, 10: 598. Published online 2017 Dec 6. doi: 10.1186/s13071-017-2536-3
- Corduneanu, A., AD. Sándor, AM Ionică, S. Hornok, N. Leitner, Z. Bagó, K. Steffe, HP Fuehrer, AD Mihalca (2018) *Bartonella* DNA in tissues of bats in Central and Eastern Europe and a phylogenetic review of bat-associated bartonellae. *Parasites & Vectors* 11: 489. 10.1186/s13071-018-3070-7
- Corduneanu, A., A.D. Mihalca, AD. Sándor, S. Hornok, M. Malmberg, NP. Viso, E. Bongcam-Rudloff (submitted): The bacteriome of insectivorous bats from Central and SE Europe
- Estók P., Görföl T., Szőke K., Barti L. (2017): Records of Greater Noctule Bat (*Nyctalus lasiopterus*) from Romania - with new additions. *North-western Journal of Zoology* 13(2): 375-376.
- Görföl T., Dombi I., Barti L., Bücs Sz., Jére Cs., Pocora V., Pocora I. Szodoray-Parádi F., Paunovic M., Karapandza B., Csósz I. (2018): A review of the occurrence data of the pond bat (*Myotis dasycneme*) in its southern distribution range. *North-Western Journal of Zoology* 14(1): 135-141, article nr. e174702.
- Haelewaters, D., W.P. Pfliegler, T. Szentiványi, M. Földvári, A.D. Sándor, L. Barti, J.J. Camacho, G. Gort, P. Estók, T. Hiller, C.W. Dick, D.H. Pfister (2017) Parasites of parasites of bats: Laboulbeniales (Fungi: Ascomycota) on bat flies (Diptera: Nycteribiidae) in central Europe. *Parasites & Vectors* 10: 96. DOI: 10.1186/s13071-017-2022-y
- Hornok S., K. Szőke, S.A. Boldogh, A.D. Sándor, J. Kontschán, V.T. Tu, A. Halajian, N. Takács, T. Görföl, P. Estók (2017) Phylogenetic analyses of bat-associated bugs (Hemiptera: Cimicidae: Cimicinae and Cacoecinae) indicate two new species close to *Cimex lectularius*. *Parasites & Vectors* 10: 439. DOI: 10.1186/s13071-017-2376-1
- Hornok S., Szőke K., Kováts D., Estók P., Görföl T., Boldogh S.A., Takács N., Kontschán J., Földvári G., Barti L., Corduneanu A., Sándor D.A. (2016): DNA of Piroplasms of Ruminants and Dogs in Ixodid Bat Ticks. *PLoS ONE* 11(12): e0167735. doi:10.1371/journal.pone.0167735
- Hornok, S., Corduneanu, A., Kontschán, J., Bekő, K., Szőke, K., Görföl, T., Gyuranecz M., Sándor, A.D. (2018) Analyses of separate and concatenated *cox1* and 18s rRNA gene sequences indicate that the bat piroplasm *Babesia vesperuginis* (Apicomplexa: Piroplasmida) is phylogenetically close to *Cytauxzoon felis* and the ‘prototheilerid’ *Babesia conradae*. *Acta Veterinaria Hungarica* 66: 107-115. DOI: 10.1556/004.2018.010
- Hornok, S., K. Szőke, M.L. Meli, A.D. Sándor, T. Görföl, P. Estók, Y. Wang, V. Tan Tu, D. Kováts, S.A. Boldogh, A. Corduneanu, K.M. Sulyok, M. Gyuranecz, J. Kontschán, N. Takács, A. Halajian, S. Epis, R. Hofmann-Lehmann (submitted) Vector-borne bacteria newly detected in bat ticks (Acari: Ixodidae, Argasidae) from eight countries

of the Old and New Worlds.

- Hornok, S., K. Szőke, V.T. Tu, J. Kontschán, N. Takács, A.D. Sándor, A. Halajian, G. Földvári, P. Estók, O. Plantard, S. Epis, T. Görföl (2017) Mitochondrial gene heterogeneity of the bat soft tick *Argas vespertilionis* (Ixodida: Argasidae) in the Palaearctic. *Parasites & Vectors* 10: 109. DOI: 10.1186/s13071-017-2037-4
- Hornok, S., Szőke, K., Kováts, D., Estók, P., Görföl, T., Boldogh, S., Takács, N., Kontschán, J., Földvári, G., Barti, L., Corduneanu, A., Sándor, A.D. (2016) DNA of piroplasms of ruminants and dogs in ixodid bat ticks. *PLoS ONE* 11(12): e0167735. DOI: 10.1371/journal.pone.0167735
- Hornok, S., Szőke, K., T. Görföl, G. Földvári, V.T. Tu, N. Takács, J. Kontschán, A.D. Sándor, P. Estók, S. Epis, S. Boldogh, D. Kováts, Y. Wang (2017) Molecular investigations of *Argas vespertilionis* (Ixodida: Argasidae) reflect "bat connection" between Central Europe and Central Asia. *Experimental and Applied Acarology* 72: 69-77. DOI: 10.1007/s10493-017-0140-z
- Kemesesi G., Kurucz K., Zana B., Földes F., Urbán P., Vlaschenko A., Kravchenko K., Budinski I., Szodoray-Parádi F., Bücs Sz., Jére Cs., Csósz I., Szodoray-Parádi A., Estók P., Görföl T., Boldogh S., Jakab F. (2018): Diverse replication-associated protein encoding circular DNA viruses in guano samples of Central-Eastern European bats. *Archives of Virology* 163(3):671-678.
- McKee, CD., Al. Krawczyk, AD. Sándor, G. Földvári, D. Dekeukeleire, AJ. Haarsma, MY. Kosoy, CT. Webb, H. Sprong (submitted) Host phylogeny, geographic overlap, and roost sharing shape parasite communities in European bats.
- Péter, Á., L. Barti, I. Csósz, A. Corduneanu, M. Földvári, G. Földvári, S. Hornok, A.D. Mihalca, A.D. Sándor (submitted) Host-parasite relationships between bats and bat flies of South-Eastern Europe: the importance of season and multi-species bat roosts
- Pocora I., Sevcik M., Uhrin M., Bashta A.T., Pocora V. (2013): Morphometric notes and nymphal stages description of mite species from the *Spinturnix myoti* group (Mesostigmata: Spinturnicidae) from Romania and Ukraine, *International Journal of Acarology*, DOI: 10.1080/01647954.2012.757251. p. 1-7.
- Sándor, A.D., M. Földvári, A.I. Krawczyk, H. Sprong, A. Corduneanu, L. Barti, T. Görföl, P. Estók, D. Kováts, S. Szekeres, Z. László, S. Hornok, G. Földvári (2018) Eco-epidemiology of novel *Bartonella* genotypes from parasitic flies of insectivorous bats. *Microbial Ecology* 76: 1076-1088. 10.1007/s00248-018-1195-z
- Szőke, K., A.D. Sándor, S.A. Boldogh, T. Görföl, J. Votýpka, N. Takács, P. Estók, D. Kováts, A. Corduneanu, V. Molnár, J. Kontschán, S. Hornok (2017) DNA of free-living bodonids (Euglenozoa: Kinetoplastea) in bat ectoparasites: potential relevance to the evolution of parasitic trypanosomatids. *Acta Veterinaria Hungarica* 65: 531-540. DOI: 10.1556/004.2017.051
- Uhrin M., Boldogh S.A., Bücs Sz., Paunovič M., Miková E., Juhász M., Csósz I., Estók P., Fulín M., Gombkötő P., Jére Cs., Barti L., Karapandža B., Matis Š., Nagy Z.L., Szodoray-Parádi F., Benda P. (2012): Revision of the occurrence of *Rhinolophus euryale* in the Carpathian region, Central Europe. *Vespertilio* 16: 289-328.
- Uhrin M., Hüttmeir U., Kipson M., Estók P., Sachanowicz K., Bücs Sz., Karapandža B., Paunovič M., Presetnik P., Bashta A.T., Maxinová E., Lehotská B., Lehotský R., Barti L., Csósz I., Szodoray-Parádi F., Dombi I., Görföl T., Boldogh S.A., Jére Cs., Pocora I., Benda P. (2016): Status of Savi's pipistrelle *Hypsugo savii* (Chiroptera) and range expansion in Central and south-eastern Europe: a review. *Mammal Review* 46(1): 1-16.

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

> Monitoring of Romanian bats mostly follows EUROBATS guidelines, and is undertaken in key seasons: summer (nurseries), autumn (swarming) and winter (hibernation). We apply several standard methods, including colony counts at hibernation and nursery sites, emergence counts, surveys and monitoring at swarming sites (mist-netting and harp-trapping), bat detector surveys, as well as automated recordings in some cases.

Resolution 5.4. Monitoring bats across Europe

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

No

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

> The Centre for Bat Research and Conservation regularly supplies information to Serbian and Hungarian bat researcher colleagues, about ringed bats observed in colonies from NW and SW Romania during monitoring activities.

Wilderness Research and Conservation and the "Emil Racoviță" Institute of Speleology have been performing ringing of *Nyctalus* and *Pipistrellus* species, but have also collected and analysed hair samples (stable isotopes - IZW Berlin Germany, together with the Bat Rehabilitation Centre Fedman Ecopark - Ukraine), in order to establish migratory patterns in the eastern part of Europe.

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

Doesn't exist

Other activities under Resolution 5.4.

> All activities (conferences, events, presentations, online activity) undertaken by bat themed NGOs and institutions from Romania include details about the importance of Romanian underground roosts, as well as methods of protecting resident colonies. The official recognition for the list of continentally and nationally important underground roosts for bats would greatly improve both their conservation and the awareness surrounding them.

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

> Currently the Centre for Bat Research and Conservation collaborates with several research institutions in Europe and North-America in studying WNS bats. After finalizing the research, results will be published in peer-reviewed journals.

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

No

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

No

5.22. Cooperation platforms that facilitate the required data exchange

Don't exist

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?

> Work is undertaken with EPA authorities (Environment Protection Agencies) and national legislation, which impose public information on turbines impact on bats (i.e. mortalities declared), scientific articles. Bat talks in Bucharest including schools biology hours, conferences, presentations and other events (Wilderness Research and Conservation NGO).

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

Yes

Please, give details

> Usually 1-2 years in advance, with ultrasound transects and searching for nearby roosts. Usually processed by environmental assessment firm and local EPAs (Environment Protection Agencies). Some surveys undertaken by biologists with expertise in bat studies, but often just biologists with equipment and no proper experience in bat studies.

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

Yes

Please, attach a file or or provide a link

> Yes, but only in Romanian (soon to be translated), and it is not an official national guideline:
http://milvus.ro/wp-content/uploads/2017/07/Ghid_de_bune_practici_Energie_eoliana.pdf

National guidelines are implemented

Partially

Please, provide implementation details

> It depends on local politics, personnel involved in surveying, and park managers. It depends if wind park managers are willing to apply post construction and mitigation measures. EPAs do not push them very hard.

5.5. Investigations and research for mitigating bat mortality have been undertaken

Yes

Please, list references, attach reports and articles

> Partially and locally. A submitted manuscript is still in the review process for the Babadag wind park (Dobrogea, Romania). Also, a presentation:
- Măntoiu D.Ş., Kravchenko K., Lehnert L.S., Kramer-Schadt S., Vlashchenko A., Mirea I.C., Stanciu C.R., Mirceni R.P., Zaharia R., Chişamera G.B., Chachula O.M., Nistorescu M.C., Moldovan O.T., Voigt C.C. (2016): Bat migration in the western Black Sea area: stable isotopes analysis ($\delta^2\text{Hf}$), ultrasound monitoring and wind turbine mortality events. Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 16-19.11.2016, p. 74.

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

List new references, attach reports or articles

> A new study is being undertaken in the Babadag area (Dobrogea, Natura 2000 Site ROSCI0201 Podişul Nord Dobrogean) in relation to bat territories and wind farm impact (radiotracking). Also, an article:
- Carmen G., Chachula O.M. (2013): Fauna monitoring studies and the development of windfarms in Romania" at Muzeul Olteniei Craiova. Oltenia. Studii şi comunicări. Ştiinţele Naturii, VOL XXIX. Nr. 2/2013, pp 197-203;

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

If yes, give details

Yes

> Partially and locally. Post-construction monitoring is undertaken by suitably experienced bat experts, but they are limited by the study design. Most of the time the wind park managers which subcontract the bat specialists impose a certain time frame which is not optimal, but saves money. Only a few cases were performed using best practices in the field. Post-construction monitoring depends on the environmental assessment firm and their contract with the park management. Usually 2-3 years after construction, sometimes 5 years or even more. Some parks just 6-12 months after construction, after which they impose studies on other, more “visible” categories such as plants and birds.

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

No

5.9. Blade feathering, higher cut-in wind speeds and shutting down turbines are used to reduce or avoid bat mortality

Yes

Please, provide details

> Partially and locally. Blade feathering or complete shutdown at low wind speeds is currently being implemented only for one wind park (Babadag 1 and 2 - EPC Consultanță de Mediu SRL, Martifer), that is composed of 20 turbines. The process is ongoing (4th year), with extensive trials for optimizing climatic thresholds within the SCADA system. One year included monitoring of the nacelles using an ultrasound detector, but it was not linked to the SCADA (details will be published soon). Mitigation measures have been applied for 4 to 6 turbines, reducing the cut in speed during spring and autumn periods, with considerable positive effects (less than 70% mortality compared to previous years vs. less than 1% energy loss per year). More work is needed in order to understand this issue, but it is only up to the wind park managers. If they do not agree on the method proposed by consultants, then EPAs have no initiative. NGOs (ex. Wilderness Research and Conservation) are pressing this issue to decision makers, but with no results yet. A new study regarding the management plan of a Natura 2000 site near the Babadag wind park will shed light on the home ranges of bats in the area, using radiotracking equipment. A manuscript mentioned at point 5.5. has already shown that 90% of the *N. noctula* populations are migratory.

Comments (optional)

> In addition to question 5.8 on Raw data:

Officially yes, but the data is not usable, at least not yet. Each time a carcass is found, the wind park managers must inform the local EPA, which should send a team in the field to investigate. This is not the case, and most carcasses are not reported, therefore the official national database of accidental kills in regards to wind energy is far from complete. The data which was collected and sent in the Report of the IWG on Wind Turbines and Bat Populations (14th Meeting of the Standing Committee, 23rd Meeting of the Advisory Committee, Tallinn, Estonia, 14-17 May 2018), was put together by bat specialists who have collaborated off topic in order to comprehend the severity of the current situation. Although bat mortalities are reported to EPAs, the data is made public only very late or never. Also, environmental assessment teams only show conclusion of their studies in order to keep the contract with the park and never show raw data in fear of being “stolen from them”. A few best practice examples of such projects include collecting the carcasses and storing them at the “Grigore Antipa” National Museum of Natural History, after necropsies have been done by veterinary specialists (Babadag Wind Park Project - EPC Consultanță de Mediu, Marfier).

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

> According to EIA legislation in Romania, biodiversity conservation (including bats and all other species and habitats) should be taken into account during the planning, construction of roads and other infrastructure projects. However, this is a general requirement, which is usually treated with the sentence ‘No important protected area or species lays in the geographical area covered the respective plan/project’ in the permitting request (and issued permit). In case the plan or project overlaps with or is in the close neighborhood of a protected area (eg. meaning usually a Natura2000 site, as most other protected areas are either very small - max a few ha, or are high mountain national parks unsuitable for such projects), the SEA process starts with a screening phase for appropriate assessment. Bats are taken into account only if any bat species is listed in the standard data form of the respective N2000 site or the protected area includes a known and important cave roost.

In case of certain actual projects (ex. highway developments), bats were used in recent years as scape-goats

for blocking some initiatives for a certain amount of time, however, in reality this was mainly because the unpreparedness and unwillingness of implementing authorities. New environmental impact studies related to the A1 Highway which is being constructed or planned, have included mitigation measures for bats such as: hop over crossings, dunking under crossings, phonic insulation panels to limit access near known historical roosts (either anthropic or natural), but the process of building these measures will take years, and allot can change until the final form.

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

Required occasionally

5.25. Post-construction monitoring

Required occasionally

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

No

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)

> A general, unofficial guideline for impact assessment involving bats was developed the Romanian Bat Protection Association in 2008, before the current reporting period (in Romanian): https://lilieci.ro/wp-content/uploads/2017/05/ghid_APLR_impact.pdf

Comments (optional)

> Regarding national guidelines, there are mentions in the following guideline, but it is not a national accepted source. Soon to be translated in English: <https://goo.gl/GmcbVY>

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

> All involved NGOs and other structures have open communication channels towards the public. In case a local NGO is contacted about a bat-related issue from some other region in Romania, the call and the problem is forwarded to the nearest bat expert, which might be from another NGO. Also, bat experts in NGOs collaborate with several veterinary experts from various NGOs or universities in case of injured bats. A new platform called Wild Alert (Android Application) is in the beta phase for testing. It will allow people who come across injured wild animals to get in touch fast with the closest registered specialist (developed by Wilderness Research and Conservation together with the Visul Luanei Foundation – Luana Wild Animal Rehabilitation Centre, Bucharest).

5.31. Bat rehabilitators contribute their data to a national database

No

Other activities carried out under Resolution 7.10 (optional)

> (1) Public events (ex. feeding sessions) for training members of the public how to handle bats, organized by the Wilderness Research and Conservation

(2) Various informative materials for the public and decision makers:

- Best practice guidelines for the general public, authorities, veterinarians, bat specialists (in Romanian), created by the Wilderness Research and Conservation (<http://www.wildernessrc.ro/resurse/ghid2018/>)

- Section about "Contact with bats" on the Romanian bat portal (in three languages, RO, HU and EN), managed by the Centre for Bat Research and Conservation: <https://lilieci.ro/en/bat-protection/around-bats/>

- Information about contact with bats on the secondary webpage of the Romanian Bat Protection Association (in Romanian): <http://lilieci.info.ro/>

- A video which sums up the rehabilitation process in Bucharest (with English subtitles): <https://www.youtube.com/watch?v=IhvvbVEOU4M>

Also, current data was submitted at the AC in Tallinn to the IWG on this topic, about aprox. 1.600-2.100 bats rescued in period 2014-2018 by all Romanian organizations combined, for a total of 12 species (N. noctula, N. leisleri, V. murinus, P. pipistrellus, P. pygmaeus, P. nathusii, P. kuhlii, E. serotinus, P. auritus, P. austriacus, M. emarginatus, M. daubentonii). A minimum of 17 people are involved currently in bat rehabilitation in Romania, from 5 NGOs and 1 University.

Comments (optional)

> Databases of rehabilitated bats are kept by NGOs, universities and freelance bat experts. There is no joint database, neither official, nor unofficial. But work is being done on the Wild Alert platform (by WRC), that will offer this option to all specialists (downloading all of the relevant cases at any time).

Resolution 7.11. Bats and building insulation

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

Yes

Please provide details

> There is no request for a pre-insulation survey to get a permit for reconstruction/insulation of a building. Bat researchers and the public cannot stop by any means the insulation process of a building. Cases of local cooperation resulting in bat salvage exists, but these are usually by chance.

5.33. Which actions including mitigation and compensation measures were undertaken to address these conflicts?

> Only in some cases there is post-insulation survey and only in some cases there is mitigation using bat boxes (on voluntary basis). General guidelines about impact assessment involving bats were developed the Romanian Bat Protection Association in 2008 (in Romanian):

https://lilieci.ro/wp-content/uploads/2017/05/ghid_APLR_impact.pdf

General guidelines about conservation of building dwelling colonies were developed by the Romanian Bat Protection Association in 2016 (in Romanian):

https://lilieci.ro/wp-content/uploads/2016/11/ghid_APLR_adaposturi_antropice.pdf

A guideline about bat rehabilitation that discusses also aspects of insulation was developed by Wilderness Research and Conservation in 2018 (in Romanian):

<http://www.wildernessrc.ro/resurse/ghid2018/>

One workshop was organized in 2015, by the Romanian Bat Protection Association, in order to train bat experts in passive exclusion methods and to facilitate the process of informing the public about contact with bats.

One workshop organized by Wilderness Research and Conservation in 2018 for local authorities in Bucharest, in frame of the Bats in the urban environment project, funded by IKEA Romania.

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

No

Comments (optional)

> A current report was submitted at the 2018 AC in Tallinn to the IWG on this topic.

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

Yes

Studies on:

	Winter roosts	Summer roosts	Swarming sites	Migration	Spatial and habitat use	Foraging behaviour	Diet
Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add below or attach a list of references

> - Bücs Sz., Jakab E., Jére Cs., Csósz I., Jakab R. I., Barti L., Szodoray-Parádi F., Popescu O. (2014): The status of Blasius’s horseshoe bat (Rhinolophus blasii) in the Pădurea Craiului Mountains, Romania: answers from molecular markers. XIIIth European Bat Research Symposium, Sibenik, Croatia

- Jére Cs., Bücs Sz., Csósz I., Barti L., Szodoray-Parádi F. (2013): Isolated populations or hidden connections: the presence of Blasius's Horseshoe Bat (*Rhinolophus blasii*) in the Pădurea Craiului Mountains. XIVth Cluj Biology Days, Cluj-Napoca, Romania

- Jére Cs., Bücs Sz., Csósz I., Szodoray-Parádi F., Barti L. (2017): The northernmost *Rhinolophus blasii* colony in Europe: permanent presence in the Pădurea Craiului Mountains, Romania. North-Western Journal of Zoology 13(1): 163-168, Art. no. e162801.

Nyctalus lasiopterus (Schreber, 1780)

Some studies have been conducted (are ongoing) for this species in the country

Yes

Studies on:

	Winter roosts	Summer roosts	Swarming sites	Migration	Spatial and habitat use	Foraging behaviour	Diet
Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add below or attach a list of references

> - Estók P., Görföl T., Szóke K., Barti L. (2017): Records of Greater Noctule Bat (*Nyctalus lasiopterus*) from Romania - with new additions. North-western Journal of Zoology 13(2): 375-376.

- Pocora E.I., Pocora V. (2012): Ghid practic pentru identificarea lilieciilor cu ajutorul sonogramelor. Alexandru Ioan Cuza University Press, Iași.

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

Yes

Please attach documents

> - Görföls T., Dombi I., Barti L., Bücs Sz., Jére Cs., Pocora V., Pocora I. Szodoray-Parádi F., Paunovic M., Karapandza B., Csósz I. (2018): A review of the occurrence data of the pond bat (*Myotis dasycneme*) in its southern distribution range. *North-Western Journal of Zoology* 14(1): 135-141, article nr. e174702. http://biozoojournals.ro/nwjz/content/v14n1/nwjz_e174702_Gorfol.pdf

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

> Tens of conference presentations deal with Romanian underground roosts in the 2011-2018 period, and also some articles in bat-themed scientific journals:

- Albuică A., Pușcaș R., Gabor G., Ghițescu A., Chachula O.M. (2014): Contribution of the Prusik Speleological Association Timișoara to the bats' protection and conservation of the Cave Peștera Mare from Șălitrari, Cernei Mountain, Romania. Book of Abstracts of EuroSpeleo Forum, 9th Edition, "Where the Carpathians Meet the Danube", 22 to 24 August, 2014, Băile Herculane, Romania

- Borda D., Uricariu R., Mulec J. (2016): Bat caves and guano in Romania – a potential biohazard? The 2nd Romanian Bat Research Conference. Volume of abstracts.

- Borda D., Năstase-Bucur R., Keneszi M., Petculescu A. (2016): The Tăușoare cave – a hibernacula of national importance. The 2nd Romanian Bat Research Conference. Volume of abstracts.

- Borda D., Năstase-Bucur R.M., Spînu M., Uricariu R., Mulec J. (2014): Aerosolized Microbes from Organic Rich Materials: Case Study of Bat Guano from Caves in Romania, *Journal of Cave and Karst Studies*, 76 (2): 114-126.

- Bücs Sz., Csósz I., Cociuba (Borda) D., Coroiu D., Măntoiu D., Pocora I., Sinculeț T., Bălășoiu D., Jére Cs. (2017): Status of Romanian bat populations: the 2010-2017 review of research and conservation. XIIIth European Bat Research Symposium, Donostia – San-Sebatian, the Basque Country

- Bücs Sz., Csósz I., Jére Cs., Bartha Cs., Jakab E., Szodoray-Parádi F., Barti L. (2015): Distribution of bat species in key karstic areas of Southern Romania, and directions for the long-term protection of the most important colonies. Xth Hungarian Bat Research Conference, Bălnaca, Romania

- Bücs Sz., Csósz I., Jére Cs., Bartha Cs., Szodoray-Parádi F., Telea A., Bălășoiu D., Sinculeț T. (2015): New data regarding the status and distribution of horseshoe bats (genus *Rhinolophus*) in karst areas of Southern Romania. 7th International Zoological Congress of "Grigore Antipa" Museum, Bucharest, Romania

- Bücs Sz., Jakab E., Jére Cs., Csósz I., Jakab R. I., Barti L., Szodoray-Parádi F., Popescu O. (2014): The status of *Blasius's* horseshoe bat (*Rhinolophus blasii*) in the Pădurea Craiului Mountains, Romania: answers from molecular markers. XIIIth European Bat Research Symposium, Sibenik, Croatia

- Bücs Sz., Jére Cs., Borda D. (2014): Cave access and bat protection in Romania: legislation and guidelines. XIIIth European Bat Research Symposium, Sibenik, Croatia

- Bücs Sz., Jére Cs., Csósz I., Barti L., Bartha Cs., Jakab E., Hoffmann R., Szodoray-Parádi F. (2014): Bat conservation measures and preliminary results in protected areas of North-Western Romania. XVth Cluj Biology Days, Cluj-Napoca, Romania

- Bücs Sz., Jére Cs., Csósz I., Barti L., Bartha Cs., Jakab E., Szodoray-Parádi F. (2013): Actual status of the cave-dwelling bat fauna in the Romanian Western Carpathians. XIVth Cluj Biology Days, Cluj-Napoca, Romania

- Bücs Sz., Jére Cs., Csósz I., Barti L., Dobrosi D. (2017): Ruins or more: the bat fauna of the fortified Carol line, North-Western Romania. XIIIth European Bat Research Symposium, Donostia – San-Sebatian, the Basque Country

- Bücs Sz., Jére Cs., Csósz I., Barti L., Dóczy A., Szodoray-Parádi F. (2014): The winter bat fauna of anthropic underground roosts in Romania. XIIIth European Bat Research Symposium, Sibenik, Croatia

- Bücs Sz., Jére Cs., Csósz I., Barti L., Szodoray-Parádi F. (2012): Distribution and conservation status of cave-dwelling bats in the Romanian Western Carpathians. *Vespertilio* 16: 97-113.

- Bücs Sz., Jére Cs., Csósz I., Barti L., Szodoray-Parádi F. (2013): New bat colony discoveries in the region of the Apuseni Mountains. IXth Hungarian Bat Research Conference, Királyrét, Szokolya, Hungary

- Bücs Sz., Jére Cs., Csósz I., Barti L., Szodoray-Parádi F. (2017): Bat conservation in North-Western Romania during the LIFE08 NAT/RO/000504 project in the Pădurea Craiului, Bihor and Trascău Mountains. Closing

- conference of LIFE+ project „Carrying out necessary conservation work on a territory of Szachownica Cave designated within Natura 2000”, Osjakow, Polonia
- Bücs Sz., Jére Cs., Csósz I., Barti L., Szodoray-Parádi F., Dóczy A., Szántó L. (2016): Cave-dwelling bats of Romania: present status and future challenges of conservation. The 2nd Romanian National Bat Research Conference, Plaiul Fcii, Braşov, Romania
 - Bücs Sz., Jére Cs., Csósz I., Barti L., Szodoray-Parádi F., Dóczy A., Szántó L. (2016): Cave-dwelling bats of Romania: present status and future challenges of conservation. The XXVth Polish National Bat Research Conference, Morsko, Poland
 - Bücs Sz., Jére Cs., Csósz I., Telea A., Bălăşoiu D., Szodoray-Parádi F., Chachula O., Barti L. (2017): An update on the bat fauna of the Dobrogea region, South-Eastern Romania. XIIIth European Bat Research Symposium, Donostia – San-Sebatian, the Basque Country
 - Bücs Sz.L., Csósz I., Barti L., Sinculeţ T.A., Telea E.A., Creţi G., Gönczi-Vass I., Jére Cs. (2018): The cave-dwelling bats of Romania: research and conservation in key European sites. National Bat Conference, Nottingham, United Kingdom
 - Chachula O.M., Coroiu I., Sopincean A., Meşter L., Farcaş A. (2012): Monitoring of bat's fauna from the Ponoric-Cioclvina Karstic System in Sureanu Mountains (Romania). Book of Abstracts of 4th Annual Zoological Congress of “Grigore Antipa”, Bucharest, 21-23.11.2012.
 - Chachula O.M., Mărginean G., Bostan A.D., Sopincean M., Coroiu I. (2015): Analyses on cranial parameters and mortality case of *Nyctalus noctula* colony (Chiroptera: Vespertilionidae) in a cave from Grădiştea Muncelului – Ciclovina Natural Park, Romania. Book of Abstracts of Annual Zoological Congress of “Grigore Antipa”, Bucureşti 18-21.11.2015
 - Chachula O.M., Mărginean G., Coroiu I. (2014): Studies regarding bats from Meridional Carpathians Mountains, Romania. Book of Abstracts of XIIIth European Bat Research Symposium, 1-5 September, 2014, Sibenik, Croatia.
 - Chachula O.M., Meşter L.E., Spătaru C.G., Mărginean G. (2015): New data regarding bat species from caves in Bucegi National Park, Romania”, abstract in Book of Abstracts of Annual Zoological Congress of “Grigore Antipa”, Bucureşti 18-21.11.2015
 - Chachula O.M., R. Puşcaş, Adrian A., Meşter L.E. (2016): Peştera Mare de la Şălitrari (Cerna Valley) - an important bat shelter (Chiroptera, Mammalia) from SW Romania". Muzeul Olteniei Craiova. Oltenia. Studii şi comunicări. Ştiinţele Naturii, vol XXXII/2/2016
 - Coroiu I. (2018): Bat Fauna in Caves of Romania. In: Ponta, Gh., Onac, B. (Eds.). Cave and Karst Systems of Romania, Springer, 2018, 493-500.
 - Coroiu I., Chachula O.M., Mester L.E. (2011): Bats Ossuary in Bulba Cave, Mehedinti County (Romania). Book of Abstracts of Annual Zoological Congress of “Grigore Antipa”, Bucharest, 23-25.11.2011
 - Coroiu I., David A., Stermin A., Soros H (2018): Speleotourism and bats. Case study: Cetăţeaua Mare from Turzii Gorge. The 3rd Romanian Bat Research Conference. Volume of abstracts.
 - Coroiu I., Furray F., Iţcuş C., David A., Onac B., Brad T., Stermin A.N., Negruţ A. (2016): Zidită de la Mada Cave – an important bat roost. The 2nd Romanian Bat Research Conference. Volume of abstracts.
 - Csósz I., Jére Cs., Bücs Sz., Bartha Cs., Barti L., Szodoray-Parádi F. (2015): The presence of Mehely's horseshoe bat *Rhinolophus mehelyi* in South-Western Romania. North-western Journal of Zoology 11(2): 351-356.
 - Csósz I., Jére Cs., Bücs Sz., Bartha Cs., Barti L., Szodoray-Parádi F. (2015): Confirmation of the presence of Mehely's horseshoe bat (*Rhinolophus mehelyi* Matschie, 1901) in the Banat region of Romania. Xth Hungarian Bat Research Conference, Bălnaca, Romania
 - Done A, Chachula O.M., Romaşcan G. (2016): 15 years of monitoring in the Natura 2000 site Rarău – Giumalău. The 2nd Romanian Bat Research Conference. Volume of abstracts.
 - Done A., Chachula O.M. (2014): The Bats cave in Rarău Mountains. Book of Abstracts of EuroSpeleo Forum, 9th Edition, "Where the Carpathians Meet the Danube", 22-24 August, 2014, Băile Herculane, Romania
 - Done A., Chachula O.M., Muraru A. (2011): Peştera Liliecilor din Rarău – consideraţii preliminare asupra monografiei. Ed. Fundaţia Speologică Bucovina, Suceava
 - Jére Cs, Bücs Sz. (2013): Liliecii şi managementul adăposturilor subterane – ghid metodologic. Elaborat în cadrul proiectului “Conservarea speciilor de lilieci în Munţii Pădurea Craiului, Bihor şi Trascău” LIFE08/NAT/RO/000504. pp. 40.
 - Jére Cs., Bücs Sz., Csósz I., Barti L., Hoffmann R., Szodoray-Parádi F., Szodoray-Parádi A. (2012): Conservation efforts of bat protection in the important caves of the Bihor, Pădurea Craiului and Trascău Mountains. Cave-roosting Bats International Conference, Miskolc, Hungary
 - Jére Cs., Bücs Sz., Csósz I., Barti L., Szodoray-Parádi F. (2013): Isolated populations or hidden connections: the presence of Blasius's Horseshoe Bat (*Rhinolophus blasii*) in the Pădurea Craiului Mountains. XIVth Cluj Biology Days, Cluj-Napoca, Romania
 - Jére Cs., Bücs Sz., Csósz I., Szodoray-Parádi F., Barti L. (2017): The northernmost *Rhinolophus blasii* colony in Europe: permanent presence in the Pădurea Craiului Mountains, Romania. North-Western Journal of Zoology 13(1): 163-168, Art. no. e162801.
 - Jére Cs., Bücs Sz., Szodoray-Parádi A., Szodoray-Parádi F., Csósz I. (2011): Conservation status of cave-dwelling bats in western Romania. Winner in category: Best Poster from a country with economy in transition. XIIth European Bat Research Symposium, Vilnius, Lithuania
 - Jére Cs., Csósz I., Bücs Sz., Barti L., Gönczi-Vass I., Bartha Cs., Jakab E., Szodoray-Parádi F. (2014): Autumn

swarming of bats at underground sites in the Apuseni Mountains (Romania). XIIIth European Bat Research Symposium, Sibenik, Croatia

- Jére Cs., Csósz I., Bücs Sz., Barti L., Szodoray-Parádi F., Bartha Cs., Jakab E. (2015): Aspects of bat activity during the mating season in underground roosts in the Apuseni Mountains. The 2nd Romanian National Bat Research Conference, Plaiul Foi, Braşov, Romania

- Jére Cs., Csósz I., Bücs Sz., Jakab E., Barti L., Szodoray-Parádi F. (2013): Distribution of medium-sized horseshoe bat species in Romania, in light of new field data. IXth Hungarian Bat Research Conference, Királyrét, Szokolya, Hungary

- Jére Cs., Simon L., Bücs Sz., Csósz I., Barti L., Dóczy A., Szodoray-Parádi F. (2015): Distribution of the northern bat *Eptesicus nilssonii* (Keyserling & Blasius, 1839) in Romania, in light of new field data. Xth Hungarian Bat Research Conference, Bâlnaca, Romania

- Jére Cs., Simon L., Bücs Sz., Csósz I., Barti L., Szodoray-Parádi F., Dóczy A. (2018): The distribution of the Northern Bat *Eptesicus nilssonii* (Keyserling & Blasius, 1839) in Romania. North-Western Journal of Zoology 14(1): 130-134, article nr. e174701.

- Măntoiu D.Ş., Chişamera G., Mirceni R.P., Stanciu C.R., Mărginean G., Chachula O.M. (2014): Bat distribution in the Dobrogea area, Romania. Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 19-22.11.2014

- Măntoiu D.Ş., Mirea I.C., Năstase-Bucur R., Borda D., Moldovan O.T. (2016): Bats from tourist caves: spatial models of optimal habitat selection based on microclimate. The 2nd Romanian Bat Research Conference. Volume of abstracts.

- Măntoiu D.Ş., Mirea I.C., Şandric I.C., Moldovan O.T. (2018): Spatial models of distribution of cave-dwelling bats based on microclimate. The 3rd Romanian Bat Research Conference. Volume of abstracts.

- Mărginean G., Chachula O.M., Done A., Sopincean A., Creţu I., Coroiu I. (2017): Long-term bat population trends in east, central and south-west Romania. Book of Abstracts of 14 th European Bat Research Symposium - EBRs Donostia the Basque Country, 1-5 august 2017, p 138.

- Mărginean G., Creţu I., Chachula O.M. (2016): Colţul Surpat Cave – an important hibernacula of Piatra Craiului National Park, Făgăraş Mountains, Romania. Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 16-19.11.2016, p. 111.

- Mărginean G., Creţu I., Chachula O.M., Murariu D. (2014): New data regarding distribution of bats (Mammalia: Chiroptera) from Piatra Craiului Natural Park area, Romania. Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 19-22.11.2014.

- Mărginean G., Creţu I., Spătaru C., Chachula O.M. (2015): *Myotis myotis* and *Myotis blythii* (Mammalia - Chiroptera) preference for the use of Piatra Craiului caves during their mating and hibernation periods. Muzeul Olteniei Craiova. Oltenia. Studii şi comunicări. Ştiinţele Naturii, vol XXXI/2/2015, ISSN 1454-6914, pp 167-172;

- Onodi H. (2018): Bats of Sugău Cave (Giurgeului Mountains, Eastern Carpathians). The 3rd Romanian Bat Research Conference. Volume of abstracts.

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- Pocora I., Pocora V., Baltag St E. (2012): Swarming activity of bats at the entrance of Lilişilor Cave from Rarău Mountains, Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" Iaşi, s. Biologie animală, Tom LVIII, pp. 151 – 158.

- Pocora I., Pocora V., Baltag St. E. (2012): Bat communities (Chiroptera: Vespertilionidae) from Lilişilor Cave of Rarău Mountains (Suceava county), Analele Ştiinţifice ale Universităţii "Alexandru Ioan Cuza" Iaşi, s. Biologie animală, Tom LVIII, pp. 137 – 150.

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- Spătaru C.G., Ienăşoiu G., Chachula O.M. (2014): Preliminary study regarding bat (Ord Chiroptera) population in Bucegi National Park, Romania. Book of Abstracts of "Forest and Sustainable Development", Braşov, Romania, 23-24 October 2015.

- Szodoray-Parádi F., Bücs Sz., Jére Cs., Csósz I. (2014): Bat conservation measures and preliminary results in caves of NW Romania. 3rd EuroSpeleo Protection Symposium, Băile Herculane, Romania

- Uhrin M., Boldogh S.A., Bücs Sz., Paunović M., Miková E., Juhász M., Csósz I., Estók P., Fulín M., Gombkötő P., Jére Cs., Barti L., Karapandža B., Matis Š., Nagy Z.L., Szodoray-Parádi F., Benda P. (2012): Revision of the occurrence of *Rhinolophus euryale* in the Carpathian region, Central Europe. *Vespertilio* 16: 289-328.

- Uhrin M., Hüttmeier U., Kipson M., Estók P., Sachanowicz K., Bücs Sz., Karapandža B., Paunović M., Presetnik P., Bashta A.T., Maxinová E., Lehotská B., Lehotský R., Barti L., Csósz I., Szodoray-Parádi F., Dombi I., Görföl T., Boldogh S.A., Jére Cs., Pocora I., Benda P. (2016): Status of Savi's pipistrelle *Hypsugo savii* (Chiroptera) and range expansion in Central and south-eastern Europe: a review. *Mammal Review* 46(1): 1-16.

6.3. National research on bats in forests

Yes

Please list references

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The 2nd Romanian Bat Research Conference. Volume of abstracts.

- Bodea F.V, Gönczi Vass I, Szigeti M., Stan O.M., Bücs Sz.L. (2018): ROSCI vs. NOSCI – Bats of the Făget forest, a comparison between the protected area and its surroundings. The 3rd Romanian Bat Research Conference, 19-21 October 2018. volume of abstracts p. 5.

- Bücs Sz., Jéré Cs., Csósz I., Barti L., Hoffmann R., Bartha Cs., Szodoray-Parádi F. (2013): Rate of occupancy and species spectrum in bat boxes placed in protected areas of North-Western Romania. IXth Hungarian Bat Research Conference, Királyrét, Szokolya, Hungary

- Bücs Sz., Pál F., Popa H., Zaha C., Constantinescu M. (2017): The bat fauna of the Făget forest: research and conservation next to a buzzing city. XIIIth European Bat Research Symposium, Donostia – San-Sebatian, the Basque Country

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- Chachula O.M., Stanciu C.R., Măntoiu D.Ș., Mărginean G. (2016): Aspects about the bat population of the Natura 2000 site Pădurea și Valea Canaraua Fetii – Iortmac (ROSCI0172), Constanța county, Romania. The 2nd Romanian Bat Research Conference. Volume of abstracts.

- Done A., Romașcan G., Done T. (2018): Preliminary study on the bat populations of the Natura2000 site ROSCI0075 Pădurea Pătrăuți, Suceava county. The 3rd Romanian Bat Research Conference. Volume of abstracts.

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- Pocora I., Pocora V. (2011): The use by bats (Chiroptera: Vespertilionidae) of various habitat types in Moldova and the Danube Delta (Romania), Travaux du Muséum National d’Histoire Naturelle «Grigore Antipa», București, Vol. LIV (1), pp 223-242.

Comments (optional)

> Some research is ongoing for bats in forests, however this is a very understudied area of Romanian bat conservation. Some data are also available from the baseline evaluation of Natura 2000 sites and personal projects of Romanian bat researchers.

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

> Ministry of Health

Web: <http://www.ms.ro/>

Email: <http://www.ms.ro/contact/>

Phone: 021 3072 500; 021 3072 600

Comments (optional)

> The Ministry of Health has the responsibility for the national rabies surveillance network, but currently it is done only in case of individual requests. There is no national reporting requirement in standing.

Vaccination is mandatory for the workers of the Luana Wild Animal Rehabilitation Centre in Bucharest and Wilderness Research and Conservation NGO.

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)

> In frame of the “Uniting the efforts of Romanian bat conservation”, implemented by Szilárd-Lehel Bücs, during the 2015-2017 Klaus Toepfer Fellowship Programme, the development of an ethical guideline was initiated jointly by Romanian bat research community (<https://lilieci.ro/en/bat-research/ethical-bat-research/>), that contains also aspects about all aspects of bat research, sampling, ringing, etc. This guideline, first created in 2016, is now in the process of updating, but also needs to be officialised, in order to make it viable and useful.

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

Rhinolophus ferrumequinum (Schreber, 1774)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from monitoring by the CBRC (Banat region) and by the CBRC & RBPA (NW Romania, Batlife project)

Myotis blythii (Tomes, 1857)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from monitoring by the CBRC and RBPA (NW Romania, Batlife project)

Myotis myotis (Borkhausen, 1797)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from monitoring by the CBRC and RBPA (NW Romania, Batlife project)

Nyctalus lasiopterus (Schreber, 1780)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

No

Nyctalus leisleri (Kuhl, 1817)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from Wilderness Research and Conservation and the "Emil Racoviță" Institute of Speleology

Nyctalus noctula (Schreber, 1774)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from Wilderness Research and Conservation and the "Emil Racoviță" Institute of Speleology, and:

- Năzăreanu G.Ş., Chachula O.M. (2014): Observation points of species *Nyctalus noctula* (Mammalia: Chiroptera) migration routes in East Romania. Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", Bucureşti 19-22.11.2014.

Pipistrellus nathusii (Keyserling & Blasius, 1839)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from Wilderness Research and Conservation and the "Emil Racoviţă" Institute of Speleology.

Vespertilio murinus Linnaeus, 1758

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Data from Wilderness Research and Conservation and the "Emil Racoviţă" Institute of Speleology.

Miniopterus schreibersii (Kuhl, 1817)

New data on daily movements was obtained

No

New data on seasonal movements was obtained

Yes

Comments (optional)

> Barti L, pers. comm. and data from Wilderness Research and Conservation and the "Emil Racoviţă" Institute of Speleology

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

Yes

Please provide a list of references

> - Ciocănașu M.A., Chachula O.M., Măntoiu D.Ș., Ștefan G., Alexe M.L., Daneș D. (2015): Potential consequences of pesticide use upon local bat population (Order Chiroptera). Book of Abstracts of Annual Zoological Congress of "Grigore Antipa", București 18-21.11.2015

7.2. Raising awareness of product users is taking place

Yes

Please provide details

> Some interpersonal discussions with architects and engineers about bat friendly substances and specific bat conservation approaches are taking place, however, these efforts would be greatly enhanced by official and/or legal positions and guidance.

7.3. Legislation on products which have any adverse effects on bats

Doesn't exist

Comments (optional)

> Only an unofficial guideline was developed by the Romanian Bat Protection Association, in frame of a Norwegian Grant, and distributed across Romania, including at a specific, building renovation conference: https://lilieci.ro/wp-content/uploads/2016/11/ghid_APLR_adaposturi_antropice.pdf

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

No

7.5. Research on the use of antiparasitic drugs

No

7.6. Recommendations in Annex I to the Resolution 6.15 are adopted

Yes

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

Give details or provide links

> Currently 90 Natura 2000 sites contain in their standard form a list of bat species, however, there are numerous errors in these documents (omission of species actually there, or inclusion of species not present in the site). Several members of the Romanian bat research community, including NGOs and institutions did participate in the 2011-2018 period in the evaluation of several of these Natura 2000 sites across Romania, in preparation for their management plan.

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

> 28.01.2019