

# **EUROBATS**

# **EUROBATS National Implementation Report MoP9**

This questionnaire reflects obligations of the Parties listed in Resolution 8.11 Implementation of the Conservation and Management Plan (2019 - 2022) and other effective Resolutions.

In case of technical issues and questions, please use a support center button in the bottom before contacting the Secretariat.

#### A. General Information

Name of your country >>> Hungary

Period covered by this report >>> 2018-2021

Is your country a party to EUROBATS Agreement? 
☑ Yes

#### Competent authority

Title, address, phone, fax, e-mail and other contact details >>> Biodiversity and Gene Conservation Department Ministry of Agriculture 1055 Budapest, Kossuth Lajos tér. 11. Hungary +36 1 795 2771 eva.fejes@am.gov.hu

Personal details of administrative focal point (s) >>> Ms. Éva Fejes biodiversity advisor Biodiversity and Gene Conservation Department Ministry of Agriculture + 36 1 795 2771 eva.fejes@am.gov.hu

Please give details of designated scientifical focal points >>> Mr. Gergő Gábor Nagy Natura 2000 advisor Department for Nature Conservation Ministry of Agriculture +36 1 795 5864 gabor.gergo.nagy@am.gov.hu

Compilers and contributors to this report >>> Ms. Éva Fejes - administrative focal point Mr. Gergő Gábor Nagy - scientific focal point

## Bats species which occur in the territory

Please select only species which were recorded from your country

## Species: Rousettus aegyptiacus (Geoffroy, 1810)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

 $\ensuremath{\square}$  Other

>>> does not occur

#### Conservational status

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> ·

## **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Taphozous nudiventris Cretzschmar, 1830

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

#### **Natura 2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

# Species: Rhinolophus blasii Peters, 1866

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### Conservational status

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

√ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Rhinolophus euryale Blasius, 1853

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend
Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Rhinolophus_euryale\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Rhinolophus\_euryal\_e\_2019.pdf

# Species: Rhinolophus ferrumequinum (Schreber, 1774)

#### Status of the species within the territory

#### Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend 

Stable

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

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13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>> The change in numbers of specimens at hibernating sites and roosts is not significant. Specifically, results from non-managed buildings indicate moderate decline, while roosts in managed buildings show moderate increase in numbers. R. ferrumequinum seems to respond well to conservation measures. Boldogh S. A., Estók P., Hegyi Z., Dobrosi D., Görföl T., Bihari Z., Dombi I., Gombkötő P., Paulovics P., Mészáros J., Máté B., Bereczky A., Szatyor M. & Géczi I. 2019. "Hogy vagytok denevérek?" - Az országos monitorozó program első 15 évének néhány eredménye. - In: Váczi O., Varga I. & Bakó B. (eds.): A Nemzeti Biodiverzitásmonitorozó Rendszer eredményei II. - Gerinces állatok. Körös-Maros Nemzeti Park Igazgatóság, Szarvas, pp. 97-122.

You have attached the following Web links/URLs to this answer.

 $\underline{\text{https://termeszetvedelem.hu/\_user/browser/File/NBmR/Publik\%C3\%A1ci\%C3\%B3k/NBmR\_EredmenyekII\_vegleges\_kote} \\ \underline{\text{t.pdf}}$ 

## Species: Rhinolophus hipposideros (Borkhausen, 1797)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

## **Conservational status**

Overall national trend

Positive

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

...

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Rhinolophus\_hipposideros\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Rhinolophus\_hipposideros\_2019.pdf

#### Species: Rhinolophus mehelyi Matschie, 1901

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

#### Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

#### Species: Barbastella barbastellus (Schreber, 1774)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Resident: breeding

#### **Conservational status**

Overall national trend
Indeterminate

Status in the National Red List

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13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

# Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report
>>> Our knowledge has increased significantly about the distribution and other
parameters of the species because of a widely used new method based on
ultrasound detection. However, it is a strictly protected species relying on old trees with holes in forests in
hills or mountainous areas, as they predominantly roost in tree holes in winter and summer.

## Species: Barbastella caspica Satunin, 1908

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

✓ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

## Natura 2000 or Emerald reports

If yes, explain reasons for changes or provide a link to the report

## Species: Eptesicus ognevii Bobrinskoi, 1918

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### Conservational status

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

## **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

☑ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Eptesicus nilssonii (Keyserling & Blasius, 1839)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Occasional

#### **Conservational status**

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Eptesicus\_nilssonii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Eptesicus\_nilssonii\_2019.pdf

#### Species: Eptesicus anatolicus Felten, 1971

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### Conservational status

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

#### Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Eptesicus isabellinus (Temminck, 1840)

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### Conservational status

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

>>>

Year of the Red List assesment

>>> -

# Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Eptesicus serotinus (Schreber, 1774)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend 

☐ Stable

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

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Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

, >>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Eptesicus\_serotinus\_2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/ user/browser/File/Natura2000/HD 17 adatlap es terkep fajok 2019/Eptesicus serotinus

#### Species: Hypsugo savii (Bonaparte, 1837)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

Positive

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

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13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

>>>

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Hypsugo\_savii\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Hypsugo\_savii\_201\_9.pdf

#### Species: Myotis alcathoe von Helversen & Heller, 2001

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

...

 $https://termeszetvedelem.hu/\_user/browser/File/Natura 2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_alcathoe\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_alcathoe\_20\_19.pdf

#### Species: Myotis davidii (Peters, 1869)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

#### Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Myotis bechsteinii (Kuhl, 1817)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_bec hsteinii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_bechsteinii\_2019.pdf

## Species: Myotis blythii (Tomes, 1857)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

## **Conservational status**

Overall national trend 
☑ Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### **Natura2000 or Emerald reports**

Yes

If yes, explain reasons for changes or provide a link to the report

>>> The number of Myotis blythii specimens has been declining at an alarming rate. They show steep decline at hibernating sites, and moderate decline within the survey programme of buildings. Having been considered one of the commonest species, M. blythii has been showing a negative trend similar to that of the neighboring countries. The species seems to respond well to conservation management.

Boldogh S. A., Estók P., Hegyi Z., Dobrosi D., Görföl T., Bihari Z., Dombi I., Gombkötő P., Paulovics P., Mészáros J., Máté B., Bereczky A., Szatyor M. & Géczi I. 2019. "Hogy vagytok denevérek?" - Az országos monitorozó program első 15 évének néhány eredménye. - In: Váczi O., Varga I. & Bakó B. (eds.): A Nemzeti Biodiverzitásmonitorozó Rendszer eredményei II. - Gerinces állatok. Körös-Maros Nemzeti Park Igazgatóság, Szarvas, pp. 97-122.

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_blythi\_2019.pdf

https://termeszetvedelem.hu/\_user/browser/File/NBmR/Publik%C3%A1ci%C3%B3k/NBmR\_EredmenyekII\_vegleges\_kotet.pdf

## Species: Myotis brandtii (Eversmann, 1845)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend
Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

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13 2001 protected and strictly protected species.docx

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https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_brandtii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/ user/browser/File/Natura2000/HD 17 adatlap es terkep fajok 2019/Myotis brandtii 201 9.pdf

## Species: Myotis capaccinii (Bonaparte, 1837)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### Conservational status

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>>

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

#### Species: Myotis dasycneme (Boie, 1825)

# Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

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13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_das ycneme 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_dasycneme\_2019.pdf

## Species: Myotis daubentonii (Kuhl, 1817)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

☑ Indeterminate

Status in the National Red List

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Year of the Red List assesment >>> 2001

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Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_dau bentonii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_daubentonii\_2019.pdf

#### Species: Myotis emarginatus (Geoffroy, 1806)

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend 
☑ Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

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13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

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>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_em arginatus 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_emarginatus\_2019.pdf

## Species: Myotis escalerai Cabrera, 1904

# Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

## Natura2000 or Emerald reports

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Myotis myotis (Borkhausen, 1797)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend 
☑ Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

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Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>> The number of Myotis myotis specimens has been declining at an alarming rate. They show steep decline at hibernating sites, and moderate decline within the survey programme of buildings. Having been considered one of the commonest species, M. myotis has been showing a negative trend similar to that of the neighboring countries. The species seems to respond well to conservation management.

Boldogh S. A., Estók P., Hegyi Z., Dobrosi D., Görföl T., Bihari Z., Dombi I., Gombkötő P., Paulovics P., Mészáros J., Máté B., Bereczky A., Szatyor M. & Géczi I. 2019. "Hogy vagytok denevérek?" - Az országos monitorozó program első 15 évének néhány eredménye. - In: Váczi O., Varga I. & Bakó B. (eds.): A Nemzeti Biodiverzitásmonitorozó Rendszer eredményei II. - Gerinces állatok. Körös-Maros Nemzeti Park Igazgatóság, Szarvas, pp. 97-122.

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_myotis\_201\_9.pdf

https://termeszetvedelem.hu/\_user/browser/File/NBmR/Publik%C3%A1ci%C3%B3k/NBmR\_EredmenyekII\_vegleges\_kotet.pdf

#### Species: Myotis mystacinus (Kuhl, 1817)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend
Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_my stacinus 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_mystacinus\_2019.pdf

## Species: Myotis nattereri (Kuhl, 1817)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend
<a href="#">Indeterminate</a>

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### **Natura2000 or Emerald reports**

Yes

If yes, explain reasons for changes or provide a link to the report

...

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_nattereri~2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Myotis\_nattereri\_20\_19.pdf

## **Species: Myotis punicus Felten, 1977**

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Myotis schaubi Kormos, 1934

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Nyctalus azoreum (Thomas, 1901)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

## **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Nyctalus lasiopterus (Schreber, 1780)

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend

☑ Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_lasiopterus\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_lasiopterus\_2019.pdf

## Species: Nyctalus leisleri (Kuhl, 1817)

# Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### Natura 2000 or Emerald reports

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_leisleri 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_leisleri\_20\_19.pdf

#### Species: Nyctalus noctula (Schreber, 1774)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

☑ Stable

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

>>>

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_noctula\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Nyctalus\_noctula\_2019.pdf

## Species: Otonycteris hemprichii Peters, 1859

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Pipistrellus hanaki Hulva & Benda, 2004

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### Conservational status

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

#### **Natura 2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

## Species: Pipistrellus kuhlii (Kuhl, 1817)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text

boxes are expandable. 
☑ Resident: breeding

#### **Conservational status**

Overall national trend
Positive

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

√ Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus kuhlii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus\_kuhlii\_2019.pdf

#### Species: Pipistrellus maderensis (Dobson, 1878)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

#### Natura 2000 or Emerald reports

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

## Species: Pipistrellus nathusii (Keyserling & Blasius, 1839)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend
Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus nathusii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus\_nathusii\_2019.pdf

#### Species: Pipistrellus pipistrellus (Schreber, 1774)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus\_pipistrellus\_2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus\_pipistrellus\_2019.pdf

#### Species: Pipistrellus pygmaeus (Leach, 1825)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend
Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### **Natura 2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus \_pygmaeus\_2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Pipistrellus\_pygmae\_us\_2019.pdf

#### Species: Plecotus auritus (Linnaeus, 1758)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### Conservational status

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

>>>

 $https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Plecotus\_auritus\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Plecotus\_auritus\_2019.pdf

## Species: Plecotus austriacus (Fischer, 1829)

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

☑ Negative

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

#### Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

 $https://termeszetvedelem.hu/\_user/browser/File/Natura 2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Plecotus\_austriacus\_2019.pdf$ 

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Plecotus\_austriacus\_2019.pdf

## Species: Plecotus kolombatovici Dulic, 1980

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### Conservational status

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

## **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

>>> -

If yes, explain reasons for changes or provide a link to the report

# Species: Plecotus macrobullaris Kuzyakin, 1965

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

# Species: Plecotus sardus Mucedda, Kiefer, Pidinchedda & Veith, 2002

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

 $\ensuremath{\square}$  Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

#### **Natura2000 or Emerald reports**

✓ No

If yes, explain reasons for changes or provide a link to the report

## Species: Plecotus teneriffae Barrett-Hamilton, 1907

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

☑ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

>>> -

## Natura 2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report >>> -

## Species: Vespertilio murinus Linnaeus, 1758

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

☑ Indeterminate

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment

>>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

Yes

If yes, explain reasons for changes or provide a link to the report

>>>

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Vespertilio\_murinus\_2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Vespertilio\_murinus\_2019.pdf

## Species: Miniopterus pallidus Thomas, 1907

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

Other

>>> does not occur

#### Conservational status

Overall national trend

✓ Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> -

Year of the Red List assesment

>>> -

#### **Natura2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

✓ No

If yes, explain reasons for changes or provide a link to the report

#### Species: Miniopterus schreibersii (Kuhl, 1817)

#### Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Resident: breeding

#### **Conservational status**

Overall national trend

Stable

Status in the National Red List

Please indicate status of the species in the national red data list or similar document >>> strictly protected in Hungary by law

You have attached the following documents to this answer.

13 2001 protected and strictly protected species.docx

Year of the Red List assesment >>> 2001

## Natura2000 or Emerald reports

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

If yes, explain reasons for changes or provide a link to the report

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Miniopterus schreibersii 2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/Natura2000/HD\_17\_adatlap\_es\_terkep\_fajok\_2019/Miniopterus\_schreib\_ersii\_2019.pdf

## Species: Tadarida teniotis (Rafinesque, 1814)

## Status of the species within the territory

Status of occurence

Please give details if the species is not resident. E.g. year of extinction, description of occasional findings etc. Text boxes are expandable.

☑ Other

>>> does not occur

#### **Conservational status**

Overall national trend

Not studied

Status in the National Red List

Please indicate status of the species in the national red data list or similar document

Year of the Red List assesment

#### **Natura 2000 or Emerald reports**

Has the national status reported under the Article 17 of the Habitat Directive(2019) or for the Emerald network (non-EU countries) changed since the previous assessment?

√ No

If yes, explain reasons for changes or provide a link to the report >>> -

## 1. Legal Requirements

# Resolution 4.6. Guidelines for the issue of permits for the capture and study of captured wild bats

System of permits or licences for the keeping of bats for educational or animal welfare purposes 
☐ In place

System of permits or licences for sampling, ringing, killing of bats for scientific study  $\square$  Exists

#### Comments

>>> Dedicated paragraphs of the Government Decree No. 348/2006 (XII.23.) on the Detailed Rules on Protection, Keeping, Display and Utilization of Protected Species state that protected and strictly protected species are not allowed to be kept, displayed or utilized for other than nature conservation or for public purposes.

Ringing exams are organized yearly by the Ministry of Agriculture, licenses are issued by nature conservation authorities. The Government Decree No. 348/2006 (XII.23.) appoints the Museum of National History being responsible for the coordination of the ringers and the ringing activities, the communication and cooperation with foreign ringing centers, and the management of the national bat ringing database. Permissions issued by nature conservation authorities are required for sampling and killing.

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

National Code of Practice that addresses the context and legitimacy of acquisition, due diligence, long-term care, documentation, relevance and institutional aims

☐ Exists

Please give details or provide links

>>> The Hungarian Bat Ringing Centre issued the document Rules of Bat Ringing as a guideline on ethics during ringing activities.

Act on Nature Conservation No. 53 of 1996 is the national legislation on the protection of nature, wildlife, plants, animals, fungi and lichens.

Dedicated paragraphs of the Government Decree No. 348/2006 (XII.23.) on the Detailed Rules on Protection, Keeping, Display and Utilization of Protected Species state that protected and strictly protected species are not allowed to be kept, displayed or utilized for other than nature conservation or for public purposes. The Decree of the Minister for Environment No. 13/2001 (V. 9.) contains the protected and strictly protected plant and animal species, strictly protected caves and on the plant and animal species of Community importance, including all bat species having occurred within the borders of the EU at least once. There are 28 bat species in Hungary, out of which 20 are protected and 8 are strictly protected.

Other activities carried out under this resolution (optional) >>> -

Please, give details of the legislation which is protecting bats

>>> Act on Nature Conservation No. 53 of 1996 is the national legislation on the protection of nature, wildlife, plants, animals, fungi and lichens.

The Decree of the Minister for Environment No. 13/2001 (V. 9.) contains the protected and strictly protected plant and animal species, strictly protected caves and the plant and animal species of Community importance, including all bat species having occurred within the borders of the EU at least once. There are 28 bat species in Hungary, out of which 20 are protected and 8 are strictly protected.

Which species are not protected and why?

>>> All the 28 bat species occurring in Hungary are protected by law.

#### 2. Population survey and monitoring

## Resolution 2.2. Consistent monitoring methodologies

Implementation of EUROBATS guidelines published in EUROBATS Publication n°5 to ensure consistency and

## Please give details

>>> There is an ongoing cooperation with Slovakian bat researchers in relation to the migratory routes of bats, in particular the Greater Horseshoe Bat (Rhinolophus ferrumequinum). There is a significant Hungarian population migrating to Slovakia to winter in caves and mines.

There is a close cooperation with Romanian colleagues to survey the caves and the bat colonies in Transylvania. Certain populations in Eastern Hungary overwinter in Romania.

We are in contact with the Bat Conservation Trust of the United Kingdom in the iBats project.

The transboundary project BAT4MAN raises environmental awareness of bats in local communities by joint conservation actions in cross-border regions of Hungary, Slovakia, Romania and Ukraine. The lead partner E-Consult Association (Romania) and its partners (BirdLife Hungary, Slovak Bat Conservation Society and the Institute of Ecological and Religious Studies from Ukraine) aim to lessen the negative attitude of society towards bats and involve local communities in bat conservation.

## Resolution 5.4. Monitoring bats across Europe

#### Involvement details

#### Please, give details of involvement

>>> Bat communities have been studied and data have been gathered regularly since 2004 in order to track population changes in the most important colonies. Hibernating sites (caves, mine tunnels), summer roosts in buildings (especially churches), swarming sites, the regular checking of the roosts of Schreibers's bat (Miniopterus schreibersii) and the monitoring of the impact of different bat conservation activities. Several surveying methods are described below.

Daylight counts: used for colonies dwelling in buildings. Using a strong torch, experts walk around at the roosting site to identify species and estimate the number of adults.

Winter counts: applied to monitor cave-dwelling, hibernating bat communities. Accurate ID and population size can be determined. During winter nearly 50 underground localities (caves and mines) are also monitored and thousands of individuals of ca. 20 species are identified and counted.

Monitoring in mating caves: ID and morphological data are gathered through mist netting, which gives also an opportunity for banding. In the 25 mating caves monitored, thousands of individuals of 20+ species are captured and banded every year.

Monitoring in the woods: forest-dwelling species are monitored and identified by detecting the ultrasound they emit, specific to the species.

Monitoring in buildings: since 2004, nearly 700 buildings, especially churches have been monitored. During annual surveys, ca. 150 buildings are monitored for bats in over 100 settlements. 10+ species can be tracked annually by this method, often recording more than 20 000 individuals.

The data gathered are assessed to develop short-term and long-term trends of changes in populations. Most of the statistical analyses have not indicated significant changes in population sizes, but the decline detected in the populations of the large Myotis species (M. myotis and M. blythii) is alarming. The hibernating population of Lesser Horseshoe Bat (Rhinolophus hipposiderus) is increasing. The results of the monitoring activities reveal threats such as inappropriate forest management, poorly designed lighting of buildings or harmful human activities. Adequate measures can be applied in due course.

In the recent period, field research, including ringing activities, were greatly limited due to the pandemic. Precautionary measures were recommended for researchers and cavers to minimize the risk of transmitting COVID from humans to bats.

Awareness-raising of the importance of underground sites  $\ riangledown$  Yes

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

#### Please provide details

>>> There is an ongoing cooperation with Slovakian bat researchers in relation to the migratory routes of bats, in particular the Greater Horseshoe Bat (Rhinolophus ferrumequinum). There is a significant Hungarian population migrating to Slovakia to winter in caves and mines.

There is close cooperation with Romanian colleagues to survey the caves and the bat colonies in Transylvania. Certain populations in Eastern Hungary overwinter in Romania.

The transboundary project BAT4MAN raises environmental awareness of bats in local communities by joint

conservation actions in cross-border regions of Hungary, Slovakia, Romania and Ukraine. The lead partner E-Consult Association (Romania) and its partners (BirdLife Hungary, Slovak Bat Conservation Society and the Institute of Ecological and Religious Studies from Ukraine) aim to lessen the negative attitude of society towards bats and involve local communities in bat conservation.

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

Other activities under Resolution 5.4.

>>> -

## Resolution 6.13. Bats as indicators for biodiversity

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

✓ Yes

#### Please provide details

>>> The Hungarian Biodiversity Monitoring System is a national program developed and operated by the Department for Nature Conservation of the ministry responsible for nature protection. Its mission is the long-term surveillance of the state and trends of biological diversity in Hungary. Bats are included in the program as biodiversity indicators for the following reasons:

- they are relatively easy to observe and monitor
- they feed on insects
- balanced population dynamics
- they give noticeable reactions to changes of the environment.

For the conservation of the 20 protected and 8 strictly protected bat species, it is of key importance to track population changes in the most important colonies. The identification of the species and data gathering require special expertise. Monitoring and field work take place in caves, mines, churches and other buildings, panel buildings (especially because of the insulation layer inhabited by bats), roosting and hibernating places under and over the ground, swarming areas. Please see the point 'Resolution 5.4. Monitoring bats across Europe – Involvement details' for details.

Results of the biomonitoring programme:

Boldogh S. A., Estók P., Hegyi Z., Dobrosi D., Görföl T., Bihari Z., Dombi I., Gombkötő P., Paulovics P., Mészáros J., Máté B., Bereczky A., Szatyor M. & Géczi I. 2019. "Hogy vagytok denevérek?" - Az országos monitorozó program első 15 évének néhány eredménye. - In: Váczi O., Varga I. & Bakó B. (eds.): A Nemzeti Biodiverzitásmonitorozó Rendszer eredményei II. - Gerinces állatok. Körös-Maros Nemzeti Park Igazgatóság, Szarvas, pp. 97-122.

Attached are the chapter (HU) and the summary (ENG) of the chapter concerning the monitoring of bat species

You have attached the following documents to this answer.

hogy vagytok deneverek nbmr2019.pdf

how are you bats summary nbmr2019.pdf

You have attached the following Web links/URLs to this answer.

 $\underline{https://termeszetvedelem.hu/\_user/browser/File/NBmR/Publik\%C3\%A1ci\%C3\%B3k/NBmR\_EredmenyekII\_vegleges\_kote\_t.pdf$ 

Body in charge for gathering the data for these indicators

>>> Department for Nature Conservation, Ministry of Agriculture

#### Please specify or give links

>>> National park directorates provide data to the Ministry. NPDs acquire the data from either their own staff or from contracted researchers. The website of the Ministry responsible for nature conservation is open to public: www.termeszetvedelem.hu. Reports can be viewed or downloaded.

There are regular meetings and seminars held with the participation of the Ministry and the NPDs to cover

botanical and zoological topics, and as many bat experts are actually employed by NPDs, those are excellent platforms for data exchange and personal interaction between them.

The 13th Conference of Hungarian Bat Research and Protection was held 15-17 October, 2021 in Kecskemét, where independent researchers and experts along with the ones employed by NPDs, NGOs and other institutions participated. Apart from the presentations, the program included a field trip and the installation of bat boxes.

Other activities carried out under this resolution (optional)

### Resolution 7.7. Bat conservation and sustainable forest management

Please attach a file or provide a link

>>> https://www.dunaipoly.hu/uploads/2016-02/20160202200526-ros-kk-ketto-7ihye3ht.pdf

You have attached the following Web links/URLs to this answer.

https://www.dunaipoly.hu/uploads/2016-02/20160202200526-ros-kk-ketto-7ihye3ht.pdf

Examples of best practice for forest management are submitted to the Secretariat  $\ \square$  No

If no, provide explanations or give links to available examples

>>> Unfortunately, no national guideline for bat conservation and sustainable forestry has been developed, due to lack of capacity. However, forest management in protected areas and in Natura 2000 forests is suitable for bat conservation.

The Act on Nature Conservation No. 53 of 1996 (national legislation regarding the protection of nature, wildlife, plants, animals, fungi and lichens) determines general protection for bat species occurring in Hungary. Moreover, the authorization of the nature conservation authority is required for the following activities according to the Act:

(1) It shall be prohibited to disturb, harm, torture or destroy protected animal species, or to threaten the success of their breeding or any other vital functions as well as to destroy or damage their habitats, sites of occurrence, shelters, feeding, nesting, resting or roosting places.

Important habitats and roosting places for bats, such as dead and old trees with holes, are also protected by law. In case of logging, it is obligatory to leave groups of old trees in the managed forest sections which may serve as roosting place for several species (noting that some species are sensitive to habitat fragmentation). The use of pesticides in forests is unfortunately rising. However, it is the unfortunate timing of the chemical spraying of mosquitoes at wetlands, e.g. swamps and alluvial forests that raises an increasing issue, as it often takes place when bats are still nursing.

Within the frame of several projects, forest ponds and other small water bodies have been created and maintained by state forestry. These new aquatic habitats provide additional feeding and drinking opportunities for forest-dwelling bat species.

Research in forest management that is sustainable for bats (attach file or provide links) >>> http://karpatierdeink.hu/eng/denevereink-vedelme

http://www.erdtudkoz.hu/fileadmin/dokumentumok/emk/erfaved/ErdTudKozl/Szamok/2017/10-Dobrosi.pdf

You have attached the following Web links/URLs to this answer.

http://www.erdtudkoz.hu/fileadmin/dokumentumok/emk/erfaved/ErdTudKozl/Szamok/2017/10-Dobrosi.pdf http://karpatierdeink.hu/eng/denevereink-vedelme

Other activities carried out under this resolution (optional)

#### Resolution 7.10. Bat Rescue and Rehabilitation

Collaboration between bat rehabilitators and scientists 

☑ Exists

Provide examples of collaboration

>>> Budapest Zoo was one of the first institution in the world to specialise in keeping, exhibiting and breeding

bats back in 1912. It has become the central bat rehabilitation facility in Hungary. The experts and the veterinarians working at the zoo are in contact with other professionals and researchers working at labs and other institutions. As the rescue of bats also requires expertise, researchers are involved in many cases.

Bat rehabilitators submit their data to a national database  $\ensuremath{\square}$  No

Other activities carried out under Resolution 7.10 (optional)

>>> In 2021, the number of bats in need of rescue increased at an uprecedented rate. This could be the result of growing aversion to bats due to the pandemic. A real-life example is the rescue of colonies roosting in the insulation of apartment buildings. Driven by fear rooted in misconceptions, the inhabitants of the building block the entrance of the roost while the colony still resides there. Approximately 1000 specimens were rescued and  $\sim$ 200 received long- or short-term care and treatment.

### Resolution 7.12. Priority species for autecological studies

### Priority Species Rhinolophus blasii Peters, 1866

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No		Ø		Ø	<b>7</b>	<b>7</b>	<b>7</b>

Please add below or attach a list of references

## Priority Species Eptesicus isabellinus (Temminck, 1840)

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	<b>7</b>	Ø	$\square$	<b>7</b>	<b>☑</b>	V	<b>7</b>

Please add below or attach a list of references >>> The species does not occur in Hungary.

## Details Consider

### Priority Species Myotis escalerai Cabrera, 1904

Some studies have been conducted (are ongoing) for this species in the country  $\ensuremath{\square}$  No

### The species occures in the country and some studies have been done

Studies on:

<sup>&</sup>gt;>> The species does not occur in Hungary.

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	Ø	Ø		<b>7</b>	V	<b></b>	<b>7</b>

Please add below or attach a list of references

>>> The species does not occur in Hungary.

## Priority Species Nyctalus azoreum (Thomas, 1901)

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	Ø			Ø	\[      \]	<b>7</b>	<b></b> ✓

Please add below or attach a list of references

>>> The species does not occur in Hungary.

## Priority Species Nyctalus lasiopterus (Schreber, 1780)

Some studies have been conducted (are ongoing) for this species in the country  $\ riangle$  Yes

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes		Ø	<b>7</b>			V	<b>7</b>
No	<b></b>			Ø	<b>7</b>		

#### Please add below or attach a list of references

>>> Estók, P. & Görföl, T. 2009. Erdőlakó denevér együttesek kutatása, különös tekintettel a Nyctalus lasiopterusra – egy 2009-es EUROBATS projekt előzetes eredményei. [The research of forest-dweller bat ensembles with special respect to Nyctalus lasiopterus – preliminary results of a EUROBATS project conducted in 2009.] - In: Görföl, T., Estók, P. & Molnár, V. (eds.): A VII. Magyar Denevérvédelmi Konferencia (Felsőtárkány, 2009. október 16-18.) kiadványa. [Proceedings of the 7th Conference on Bat Conservation in Hungary (Felsőtárkány, 16th to 18th of October 2009).] BEKE & MDBK, Eger, pp. 53-60.

Estók, P. & Siemers, B.M. 2009. Calls of a bird-eater: the echolocation behaviour of the enigmatic greater noctule, Nyctalus lasiopterus. Acta Chiropterologica. 11(2): 405-414.

Estók, P. 2007. 2007 az óriás-koraidenevér (Nyctalus lasiopterus [Schreber, 1780]) éve - a faj hazai adatainak áttekintése, új eredmények. [The year of Greater Noctule (Nyctalus lasiopterus [Schreber, 1780]) 2007 - review of Hungarian data and new results]. - In: Molnár, V. (ed.): Az V. Magyar Denevérvédelmi Konferencia (Pécs, 2005. december 3-4.) és a VI. Magyar Denevérvédelmi Konferencia (Mártély, 2007. október 12-14.) kiadványa [Proceedings of the 5th Conference on the Bat Conservation in Hungary (Pécs, 3rd to 4th of December 2005) and the 6th Conference on the Bat Conservation in Hungary (Mártély, 12th to 14th of October 2007)], CSEMETE Egyesület, Szeged pp. 80-84.

https://www.hunbat.hu/html/publikaciok\_link/cikkek/konferencia3/DKK3\_12\_80-84\_estok.pdf Estók, P.& Gombkötő, P. 2007. Review of the Hungarian data of Nyctalus lasiopterus (Schreber, 1780). Folia Historico Naturalia Musei Matraensis, 31: 167-172.

http://www.matramuzeum.hu/e107 plugins/docrep menu/docrep.php?0.show.0.2.0.0

Estók, P., Gombkötő, P. & Cserkész, T. 2007. Roosting behaviour of the greater noctule Nyctalus lasiopterus Schreber, 1780 (Chiroptera, Vespertilionidae) in Hungary as revealed by radio-tracking. Mammalia, 71(1-2): 86-88

https://www.hunbat.hu/html/publikaciok link/cikkek/roosting greater noctule.pdf

You have attached the following Web links/URLs to this answer.

https://www.hunbat.hu/html/publikaciok link/cikkek/konferencia3/DKK3 12 80-84 estok.pdf

http://www.matramuzeum.hu/e107 plugins/docrep menu/docrep.php?0.show.0.2.0.0

https://www.hunbat.hu/html/publikaciok link/cikkek/roosting greater noctule.pdf

# Priority Species Pipistrellus hanaki Hulva & Benda, 2004

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No				Ø	Z	<b>7</b>	<b>7</b>

Please add below or attach a list of references

# Priority Species Pipistrellus maderensis (Dobson, 1878)

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

## The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	<b>7</b>	<b>7</b>	<b>7</b>	Ø	Z	Ø	<b>7</b>

Please add below or attach a list of references

## Priority Species Plecotus kolombatovici Dulic, 1980

Some studies have been conducted (are ongoing) for this species in the country  $\ \ \, \square$  No

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	<b>7</b>	<b>4</b>	<b>7</b>	<b>7</b>	V	<b>I</b>	<b></b>

<sup>&</sup>gt;>> The species does not occur in Hungary.

<sup>&</sup>gt;>> The species does not occur in Hungary.

Please add below or attach a list of references >>> The species does not occur in Hungary.

# Priority Species Plecotus sardus Mucedda, Kiefer, Pidinchedda & Veith, 2002

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	<b>7</b>	Ø		<b>7</b>	V	V	<b>\</b>

Please add below or attach a list of references

>>> The species does not occur in Hungary.

# Priority Species Plecotus teneriffae Barrett-Hamilton, 1907

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

### The species occures in the country and some studies have been done

Studies on:

	Swarming sites	Winter roosts	Summer roosts	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No	<b></b>	<b>7</b>	Ø	<b>7</b>	V	Ø	<b></b> ✓

Please add below or attach a list of references

>>> The species does not occur in Hungary.

Other activities carried out under Resolution 7.12 (optional)

>>> Nyctalus lasiopterus is the only priority species native in Hungary (it is a very rare, strictly protected species). Hungary is not a range state for the other species listed above.

## Resolution 8.3. Monitoring of daily and seasonal movements of bats Studies on daily/seasonal movements

#### References

Provide references to completed or ongoing studies on daily/seasonal movements of bats in your country in the text field below or attach a file

>>> 'How are you bats?' - some results of the first 15 years of the National Biomonitoring Programme: Boldogh S. A., Estók P., Hegyi Z., Dobrosi D., Görföl T., Bihari Z., Dombi I., Gombkötő P., Paulovics P., Mészáros J., Máté B., Bereczky A., Szatyor M. & Géczi I. 2019. "Hogy vagytok denevérek?" - Az országos monitorozó program első 15 évének néhány eredménye. - In: Váczi O., Varga I. & Bakó B. (eds.): A Nemzeti Biodiverzitásmonitorozó Rendszer eredményei II. - Gerinces állatok. Körös-Maros Nemzeti Park Igazgatóság, Szarvas, pp. 97-122.

You have attached the following documents to this answer.

how are you bats summary nbmr2019.pdf

hogy vagytok deneverek nbmr2019.pdf

You have attached the following Web links/URLs to this answer.

https://termeszetvedelem.hu/\_user/browser/File/NBmR/Publik%C3%A1ci%C3%B3k/NBmR\_EredmenyekII\_vegleges\_kotet.pdf

### **Resolution 8.4 Wind Turbines and Bat Populations**

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

Yes

If yes, how?

>>> The study on the effects of wind farms on birds described in the publication below, bats are included: Váczi M. & Prommer M. (2009): A Mosonszolnok-levéli szélerőműpark területén végzett madártani vizsgálatokról. Heliaca 7, p. 78-85.

https://www.mme.hu/binary\_uploads/2\_magunkrol/heliaca/heliaca\_2009\_online.pdf

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/binary\_uploads/2\_magunkrol/heliaca/heliaca\_2009\_online.pdf

Are impact assessment procedures and post-construction monitoring undertaken by appropriately experienced experts?

Yes

#### Please, give details

>>> In 2005, the former Ministry of Environment and Water issued guidance on nature and landscape conservation aspects of the planning and the location of wind farms in Hungary. Zones not recommended for the implementation of wind turbines have been defined in the guidance. The Government Decree No. 314/2005. determines Environmental Impact Assessments to be carried out for wind turbines or wind farms with their total capacity exceeding 10 MW in protected areas. The environmental authority may call for EIA for wind turbines or wind farms with their total capacity exceeding 600 kW planned in non-protected areas, or 200 kW planned in protected areas, Natura 2000 sites or cave protection zones. The Government Decree 2/2005. on Strategic Environmental Assessments applies for plans and programmes in the energy sector including elements covered by the Government Decree No. 314/2005. that have potentially significant detrimental effects on protected areas, Natura 2000 sites or certain water bodies.

National guidelines have been developed following Eurobats Pub. No. 6  $\ \square$  No

National guidelines are implemented

✓ No

Please, list references, attach reports and articles

>>> Váczi M. & Prommer M. (2009): A Mosonszolnok-levéli szélerőműpark területén végzett madártani vizsgálatokról. Heliaca 7, p. 78-85.

https://www.mme.hu/binary\_uploads/2\_magunkrol/heliaca/heliaca\_2009\_online.pdf

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/binary\_uploads/2\_magunkrol/heliaca/heliaca\_2009\_online.pdf

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

If yes, give details

☑ No

Developers of wind energy projects and responsible authorities make raw data from impact assessment and post-construction monitoring available for independent analysis.

✓ No

Measures such as blade feathering, higher turbine cut-in wind speeds and shutting down turbines are implemented

**☑** No

Other activities carried out under Resolution 7.5 (optional)

>>> -

## Resolution 8.10 Recommended Experience and Skills of Experts with regard to Quality of Assessments

### **Compliance with Annex to Resolution 8.10**

Experts/groups of experts carrying out assessment of projects, plans and programmes on populations of European bats meet the minimum standard of skills, knowledge and experience as described in the Annex to Resolution 8.10

☑ Yes, completely or partially

### If yes

Please provide details

- >>> The experts involved in providing and assessing data are either
- employed by national park directorates as rangers or zoology experts, and/or
- researchers specialised in bats, or
- employed by the ministry responsible for nature conservation, currently the Ministry of Agriculture. In all cases above, adequate qualification and expertise are required to fulfil the functions, therefore all persons involved meet the standards set by Res. 8.10. Deficiency may only arise by lack of capacity meaning shortage of personnel.

#### 3. Roosts

#### Resolution 4.5. Guidelines for the use of remedial timber treatment

Small projects to provide basic data to allow an assessment of the potential impact of industry on bat populations

✓ No

Raising awareness of product users is taking place

✓ No

Legislation on products which have any adverse effects on bats 
☐ Doesn't exist

Comments (optional)

>>> .

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

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

Please, give details or links

>>> The 10 national park directorates keep record on and monitor the most important overground roosts. Boldogh S.A. (szerk.). 2019. Útmutató denevérvédelmi intézkedésekhez és a denevérbarát épületfelújításokhoz: A mesterséges éjszakai megvilágítás hatása a denevérekre és a védekezés lehetőségei. Magyar Madártani és Természetvédelmi Egyesület Emlősvédelmi Szakosztály, Budapest, 13 p. [Boldogh, S.A. (ed.). 2019: Guideline to Bat Conservation Measures and Bat-Friendly Building Renovations: The Impact of Artificial Night Lighting on Bats and Possibilities for Control. Mammal Protection Working Group of BirdLife Hungary, Budapest, 13 p.]

(http://www.mme.hu/sites/default/files/emlos/deneverek\_es\_fenyszennyezes\_boldoghs\_mme.pdf.)

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/sites/default/files/emlos/deneverek\_es\_fenyszennyezes\_boldoghs\_mme.pdf

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

✓ No

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

>>> -

#### Other activities carried out under this resolution (optional)

>>> According to Article 21/A in Act No 53 of 1996 on Nature Conservation in Hungary, natural values discovered during construction work carried out according to the Act on the Design and Protection of the Built Environment, the contractor must immediately report it to the nature protection authority, and leave the natural value and its locality undisturbed until the authorities take action.

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

List of important underground sites for bats and measures of their protection (including Natura 2000, Emerald or other status) was submitted to EUROBATS  $\square$  No

Updated counts of bats at each listed site are submitted to the Secretariat  $\ \square$  No

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

☑ Yes

Other relevant activities for the protection of underground habitats

>>> Underground sites are managed according to Publication nr 2. through actions such as mine entrance reconstruction and vegetation management.

All natural caves are protected by law since 1961.

Regulation nr. 63/2017. (X. 16.) on the declaration of the protection of artificial cavities significant for nature conservation ensured the protection of 24 artificial cavities, out of which 19 are important bat habitats. Several of these cavities are data collection sites for National Biodiversity Monitoring System. In order to preserve the natural values, including the wildlife of caves, reconstruction activities were carried out in cca. 100 natural caves and 10 artificial cavity systems between 2015 and 2020, with the involvement of EU funds.

In order to facilitate the undisturbed conditions for bats, national park directorates implemented entrance reconstruction at 13 crucial sites, out of which 9 are protected artificial cavities. Between 2015 and 2020, reconstruction of 5 sites were completed.

### Resolution 8.5. Conservation and Management of Important Overground Sites for Bats

Most important overground roosts are identified at the national level considering the guidance on site selection developed by the Advisory Committee and using the national databases.

If yes, please give details

>>> The 10 national park directorates have inventories of the most important sites. The sites are monitored annually. National guidance has not been developed due to lack of capacity.

### Resolution 8.9. Bats, Insulation and Lining Materials

Are bats included in the impact assessment of insulation programs at a strategic level?

If yes, please give details

>>> Not on a strategic level. Inclusion of the necessitiy of EIA and pre-insulation survery for insulation projects would reduce the conflicts and improve the protection of bats, especially if the costs were covered by the budget of tenders.

Are any actions undertaken to ensure that insulation projects comply with national legislation regarding bat protection and conservation by implementing appropriate pre-insulation survey and assessment, mitigation and compensation to avoid roost loss and bat mortality?

Please provide information concerning such actions and attach files, if required

>>> Although outside the period covered by this report, a study has been done on the issue. This paper provides solutions to the conflicts arising from bat colonies dwelling in the insulation of apartment buildings. The study as well as the solutions outlined in the paper has been communicated to the authorities as a practical guideline to these cases. The techniques described have been in use since then and are becoming more widespread.

Gombkötő, P. 2008. Panelépületekben előforduló denevérek által okozott problémák és megoldási lehetőségük. [Problems caused by house-dwelling bats in the urban areas and the possible solutions]. Denevérkutatás - Hungarian Bat Research News. 4: 50-56.

You have attached the following documents to this answer.

insulation bats Gombkötő2008.pdf

### Resolution 8.12. Purpose-built Man-made Roosts

Examples provided by the review document included as Annex 1 to Resolution 8.12 are considered whenever new roosting structures are planned or existing structures are renovated for bats

Please give details, if it is the case

>>> On the website of BirdLife Hungary, there is a page dedicated to creating new roosting places and renovating old ones: https://www.mme.hu/keszitsunk-nyari-szallast-denevereknek.

Most of the national parks and the NGOs involved in the conservation of bats (and usually birds) mount artifical roosting structures regularly. These bat boxes of variuos size are built according to the guide above, using wood treated with bat friendly materials. The larger bat houses have the capacity to accomodate thousands of specimens. Some national parks have included these in projects funded by the sate or EU sources. These large bat roosts are designed, built and placed by bat experts, according to the guidelines, and are monitored regularly.

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/keszitsunk-nyari-szallast-denevereknek

Are existing purpose-built Bat Roosts monitored and further studies on their effectiveness promoted?

If yes, please give details

>>> Regionally yes. Please see the answer to the question 'Examples provided by the review document included as Annex 1 to Resolution 8.12 are considered whenever new roosting structures are planned or existing structures are renovated for bats' above.

#### 4. Habitats

Click "expand" to see the guestions!

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

Are national guidelines which are based on the general guidance given in EUROBATS Publication No. 9 are developed and published? Please provide details or add a file.

>>> There have been no national guidelines developed due to lack of capacity. But, the Act on Nature Conservation No. 53 of 1996 (national legislation regarding the protection of nature, wildlife, plants, animals, fungi and lichens) determines general protection for bat species occurring in Hungary, which includes the habitats they use. Moreover, the authorization of the nature conservation authority is required for the following activities according to the Act:

43 § (1) It shall be prohibited to disturb, harm, torture or destroy protected animal species, or to threaten the success of their breeding or any other vital functions as well as to destroy or damage their habitats, sites of occurrence, shelters, feeding, nesting, resting or roosting places.

Other activities carried out under this resolution (optional)

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

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

Yes

Please give details or attach a file with description

>>> The Government Decree No. 314/2005. regulates Environmental Impact Assessments (EIA), while the Government Decree No. 2/2005. provides for Strategic Environmental Assessments (SEA). EIA is mandatory for projects listed in the appendix for having potentially serious impact on wildlife. EIA may also be required by the environmental authority for smaller projects listed in the corresponding appendix, especially in protected areas and Natura 2000 sites. SEA is required for plans and programmes in the sectors of agriculture, forestry, fishing, energy, transport, traffic, waste management, water management, electronic communication, tourism and regional development including elements covered by the Government Decree No. 314/2005., having significant detrimental effects on protected areas, Natura 2000 sites or certain water bodies.

Pre-construction strategic and environmental impacts assessment procedures are mandatory ☑ Required occasionally

Post-construction monitoring

☑ Required occasionally

Raw data from environmental impact assessment and post-construction monitoring is available for

independent scientific analysis ☑ No

Research into the impact of new and, where appropriate, existing roads and other infrastructure on bats and into the effectiveness of mitigation measures

Other activities carried out under Resolution 7.9 (optional)

### Resolution 8.6. Bats and Light Pollution

Is national guidance taking due account of the EUROBATS Publication Series No. 8 on Bats and Light Pollution developed and promoted? If yes, please give details or attach a file.

>>> A general guideline has been developed including a section dedicated to bat conservation:
Boldogh S.A. 2020. A fényszennyezés denevérvédelmi célú kiküszöbölésének alapvető szempontjai, az ezzel
összefüggő tevékenységek és eredmények az Aggteleki Nemzeti Park Igazgatóság működési területén. In:
Árgay Z. (szerk.). 2020. A fényszennyezésről – világosan! Pp. 57-60. Agrárminisztérium & Hortobágyi Nemzeti
Park Igazgatóság, Budapest. 82 p. [ Boldogh, S.A. 2020. Aspects for the elimination of light pollution for bat
protection, the implemented interventions and their results in the Aggtelek National Park Directorate (NEHungary). In: Árgay, Z. (ed.) 2020. About light pollution – clearly and simply! Pp. 57-60. Ministry of Agriculture
& Hortobágy National Park Directorate, 82 p.]

The most important information on light pollution and bat protection has also been summarized by BirdLife Hungary:

Boldogh S.A. (szerk.). 2019. Útmutató denevérvédelmi intézkedésekhez és a denevérbarát épületfelújításokhoz: A mesterséges éjszakai megvilágítás hatása a denevérekre és a védekezés lehetőségei. Magyar Madártani és Természetvédelmi Egyesület Emlősvédelmi Szakosztály, Budapest, 13 p. [Boldogh, S.A. (ed.). 2019: Guideline to Bat Conservation Measures and Bat-Friendly Building Renovations: The Impact of Artificial Night Lighting on Bats and Possibilities for Control. Mammal Protection Working Group of BirdLife Hungary, Budapest, 13 p.]

https://www.mme.hu/sites/default/files/emlos/deneverek\_es\_fenyszennyezes\_boldoghs\_mme.pdf The EUROBATS Publication Series No. 8 was also translated into Hungarian as part of the Interreg project 'Bat4Man HUSKROUA/1702 6.1 0021' by BirdLife Hungary. It is planned to be published in digital format. Preliminary consultations have taken place with EUROBATS.

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/sites/default/files/emlos/deneverek es fenyszennyezes boldoghs mme.pdf

## **5. Promoting Public Awareness of Bats and their Conservation and Providing Advice** Click "expand" to see the questions!

International Bat Night. Give details for each year: number of events and number of people participated >>> Apart from the Bat Night, there are other events regularly held focusing on bats. According to the statistics acquired from national park directorates, the attendance of these events is described below. Please note that not all of the 10 NPDs provided data. Also, other organisations, for example NGOs and Budapest Zoo organize events concerning bats.

2018: 27 events altogether

Bat Night: 230 ppl (data from 2 NPDs)

Other events concerning bats (camps and open-air schools for children, lectures and presentations): 548 ppl

(data from 2 NPDs)

Visitors of the Bat Museum in Abaliget: 20 829 ppl

Number of attendees: 21 377 ppl 2019: 30 events altogether

Bat Night: 209 ppl (data from 3 NPDs)

Other events concerning bats (camps and open-air schools for children, lectures and presentations, drawing

contest): 709 ppl (data from 3 NPDs)

Visitors of the Bat Museum in Abaliget: 381 ppl

Number of attendees: 1299 ppl

2020: 2 events altogether - COVID year! Bat Night: 100 ppl (data from 1 NPD)

Other events concerning bats (camps and open-air schools for children, lectures and presentations): 30 ppl

(data from 1 NPD)

Visitors of the Bat Museum in Abaliget: 18 104 ppl

Number of attendees: 18 234 ppl 2021: 26 events altogether - COV

2021: 26 events altogether - COVID year! Bat Night: 30 ppl (data from 1 NPD)

Other events concerning bats (camps and open-air schools for children, lectures and presentations): 570 ppl (data from 2 NPDs)

Visitors of the Bat Museum in Abaliget: 19 086 ppl

Number of attendees: 19 686 ppl

Details of other important activities which are worth to mention (educational centres, etc.)
>>> Permanent and temporary poster and photo exhibitions were organised by national park directorates and the BirdLife Hungary Mammal Working Group.

An educational booklet entitled 'Batmania' was published in Hungary in Hungarian, Slovak, Romanian and Ukrainian as a result of an international project.

A small new exhibition about bats was established in NE Hungary (Szinpetri) with interactive elements, beside the Bat Museum in SW Hungary (Abaliget).

More than 50 presentations and lectures were held in primary schools about bats.

News about bats (e.g. 'The bat species of the month' series) and different guidelines on the protection of bats (e.g. how to save bats, how to make bat boxes) are published regularly on the website of BirdLife Hungary (https://www.mme.hu/tevekenyseg/denevervedelem).

The transboundary project BAT4MAN raises environmental awareness of bats in local communities by joint conservation actions in cross-border regions of Hungary, Slovakia, Romania and Ukraine. The lead partner E-Consult Association (Romania) and its partners (BirdLife Hungary, Slovak Bat Conservation Society and the Institute of Ecological and Religious Studies from Ukraine) aim to lessen the negative attitude of society towards bats and involve local communities in bat conservation.

An excellent example for citizen science is an initiative called WildWatcher ('Vadonleső'), launched in 2009 by the ministry responsible for nature protection. Participants are encouraged to observe wildlife and collect data and submit them through a website dedicated to the programme. The range of species include bats.

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/tevekenyseg/denevervedelem

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

>>> None in the period covered by this report, because of lack of capacity.

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

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 
>>> Association for the Protection of the Values of Abaúj-Zemplén / Abaúj-Zemplén Értékeiért Közhasznú 
Egyesület (HU): regular inspections of known bat habitats (attics, cellars, former mine tunnels) in Zemplén 
Mountains and Bodrogköz since 2001. Since 2001, the association has been participating in the program 
"artificial cavities important for bat conservation" coordinated by Aggtelek National Park Directorate. 
Within the framework of the national programs of the Hungarian Bat Researchers' Circle, during the 1990`s 
Zemplén Mountains and its area became one of the best mapped areas in the country in terms of bat species 
inhabiting buildings. More than a hundred summer habitats have become known, where the personal contact 
and knowledge transfer with the owners and caretakers ensures the protection of the bats. 
http://www.azertke.hu/programok/denevervedelem

Bakony Bat Research / Bakonyi Denevérkutatás (HU): NGO in Bakony Hills, where 27 out of the 28 species in Hungary occur. Main activities: open-air school and summer camp for children, surveying buildings, presentations, lectures, mounting artificial bat boxes, monitoring, participating in events with bats. https://bakonyidenever.hu/

CSEMETE: a range of nature conservation activities, specialised in camps and open-air schools for children with various programmes including bats.

https://www.csemete.com/index.php

Fehér Holló Foundation: bat research, surveying buildings, mounting artificial bat boxes, monitoring, giving lectures, participating in events with bats, particularly in Zala county (Western part of Transdanubia) Portal of the Hungarian Mammalogy: The mammalogical scientific web portal and the Hungarian Yearbook of Mammalogy is a common project of BEKE (Bükk Mammalogical Socitey), Milvus Group (Romania) and the Museum of Natural History of Hungary.

Aims of establishment were to facilitate the information flow among mammalogists and also the research, to strengthen the research community, to collect new results and present them on a central site. http://mammalogy.hu/

Tolna County Foundation for Nature / Tolna Megyei Természetvédelmi Alapítvány (HU): nature conservation activities in the South Transdanubia region since 1995, based on research, involving and educating the youth. Surveying and monitoring bats (especially M. dasycneme, M. daubentonii and M. schreibersii), mounting artificial bat boxes, participating in events with bats.

http://www.tmta.hu/

Local groups of BirdLife Hungary (MME) are often involved in activities for bat protection. The MME website

includes a page dedicated to bats.

https://www.mme.hu/tevekenyseg/denevervedelem

You have attached the following Web links/URLs to this answer.

https://www.mme.hu/tevekenyseg/denevervedelem

http://www.tmta.hu/

http://mammalogy.hu/

https://www.csemete.com/index.php

https://bakonyidenever.hu/

http://www.azertke.hu/programok/denevervedelem

### Resolution 8.13. Insect Decline as a Threat to Bat Populations in Europe

Awareness of the multiple ecological services provided by bats, especially for the agricultural sector and regarding the concerns about the published evidence of dramatic loss of insect biomass in open land is raised with land managers and other stakeholders.

Please, give details

>>> The agricultural sector is definitely aware of the loss of insect biomass, as the issue has been raised on both national and international platforms. The severe reduction of pesticides is promoted (or demanded) by the Farm to Fork strategy and biodiversity strategies, such as that of the EU, and is accentuated in the current draft of the post-2020 GBF, and it is also one of the targets of the national biodiversity strategy. However, the actual restrictions can only be applied in protected areas and on lands in Natura 2000 areas. Awareness-raising specifically on the ecological services provided by bats has not taken place.

#### 6. Insect declines

### Resolution 8.13. Insect Decline as a Threat to Bat Populations in Europe

Activities to encourage and support scientific research on the impact of the insect decline on bat populations

Please give details of such activities.

>>> Apart from using pesticides on farmlands, another serious issue is the chemical spraying of mosquitoes, as the chemicals used are not specific, but kill a wide range of invertebrae and has high impact on nature.

Moreover, spraying happens at the time of bats nursing their young.

According to 18 § (1) of Act on Nature Conservation No. 53 of 1996 (the national legislation regarding the protection of nature, wildlife, plants, animals, fungi and lichens), it is prohibited to apply chemicals dangerous to waters and aquatic organisms within 1000 meters of the shoreline of natural or near-natural watercourses and wetlands. This restriction is applied to areas protected by law and Natura 2000 sites. (Biologial treatment is an exception as it is considered less harmful to the environment.)

Because of the ongoing issue about aerial spraying of chemicals for mosquito control, there has been a growing concern and public awareness about avoiding chemicals and using biological control instead. As it concerns human health as well, there is more emphasis on research on the impact of both pesticides and biocides, even though it is not induced solely by bat (or bird) conservation efforts.

Attached is a link on the National Plant Protection and Forestry Light Trap Network which was developed in the 1950's, and has continuously provided masses of data since then. There are numerous assessments and studies made on the basis of the data from the traps which are located in forests all over the country. Again, it is an indirect achievement serving nature protection in general, including the aims of the conservation of bats.

You have attached the following Web links/URLs to this answer.

http://klima.erti.hu/home/a-fenycsapda-halozat-rovid-tortenete/

Requirements to ensure that bats are being considered in pesticide risk assessments

Please describe these requirements, in case they exist >>> -

Describe measures to avoid the use of pesticides, particularly those problematic for bats and their food resources, in and around important areas for bat conservation

Please give details in case such measures have taken place

>>> Please see the answer to question 'Activities to encourage and support scientific research on the impact of the insect decline on bat populations'.

### 7. International co-operation

Implementation of Resolutions 7.10, 7.12, 8.3, 8.7

Please give information on the international cooperation with the aim of implementing the recommendations of Resolutions 7.10, 7.12, 8.3, 8.7.

>>> 7.12: N. lasiopterus is the only priority species occurring in Hungary, it is strictly protected by law. Cooperation for research of the species in Romania took place outside the period covered by the current report, but nevertheless attached as it has not been mentioned before.

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: 375-376.

8.3: There is an ongoing cooperation with Slovakian bat researchers in relation to the migratory routes of bats, in particular the Greater Horseshoe Bat (Rhinolophus ferrumequinum). There is a significant Hungarian population migrating to Slovakia to winter in caves and mines.

There is a close cooperation with Romanian colleagues to survey the caves and the bat colonies in Transylvania. Certain populations in Eastern Hungary overwinter in Romania.

We are in contact with the Bat Conservation Trust of the United Kingdom in the iBats project.

The transboundary project BAT4MAN raises environmental awareness of bats in local communities by joint conservation actions in cross-border regions of Hungary, Slovakia, Romania and Ukraine. The lead partner E-Consult Association (Romania) and its partners (BirdLife Hungary, Slovak Bat Conservation Society and the Institute of Ecological and Religious Studies from Ukraine) aim to lessen the negative attitude of society towards bats and involve local communities in bat conservation.

You have attached the following Web links/URLs to this answer.

http://biozoojournals.ro/nwjz/content/v13n2/nwjz e177701 Estok.pdf

#### 8. Diseases

Click "expand" to see the questions!

### Resolution 5.2.Bat rabies in Europe

National bat rabies surveillance network 

☐ Yes

#### Please give details

>>> Rabies surveillance network does exist, mainly for dogs, cats and foxes, and it covers bats as well. There was one known case in 2015 (outside the period covered by the current report) of a rabies-infected specimen, which was taken to the rescue centre of Budapest Zoo, where it was kept separated from other animals and humans. before it died.

Vaccination of risk groups against rabies is compulsory 
☑ Yes

Details of the institution(s) in charge of recording of all test results and their submission to the World Health Organisation

>>> National Food Chain Safety Office (NFCSO) 1024 Budapest, Keleti Károly u. 24., Hungary

Other activities carried out under this resolution (optional)

>>> It is important to highlight the outstanding results achieved in the research of diseases threatening bats other than rabies, particularly in the case of recently discovered Lloviu cuevavirus (LLOV), which caused massive die-offs in the Mediterranean region in the early 2000's. In 2016, LLOV was detected during the investigation of Miniopterus schreibersii fatalities in Hungary. In 2021 (and also in 2022), significant information was gained about the distribution, biology, genetics and pathogenic potential of the virus in Hungary.

Kemenesi G., Kurucz K., Dallos B., Zana B., Földes F., Boldogh S. A., Görföl T., Carroll M. W. & Jakab F. 2018: Reemergence of Lloviu filovirus in Miniopterus schreibersii bats, Hungary, 2016. in Emerging Microbes & Infections 67: 6. DOI: 10.1038/s41426-018-0067-4

You have attached the following Web links/URLs to this answer.

https://www.tandfonline.com/doi/full/10.1038/s41426-018-0067-4

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

Surveillance for the presence of fungal infections 
☑ No

### 9. EUROBATS Projects Initiative (EPI)

Donations to Eurobats Project Initiative

Has your country provided funding to EPI? Please give details below. >>> Hungary has not contributed to the Project Initiative.

### 10. Climate change

### Resolution 8.7. Bats and Climate Change

Resolution 8.7 Bats and Climate Change

Please provide details on changes in species migration, hibernation, reproductive and range shift patterns and consequent species interactions, if those changes have been studied in your country. Add files if required >>> Temperature and humidity data have been collected inside 10-12 roosts to evaluate the characteristics of microclimatic changes and to investigate the reactions of bats in NE Hungary since 2010. Results of 15 years of monitoring and the assessment of the data collected in the frame of National Biodiversity Monitoring Programme have been published here:

Boldogh S.A.; Estók P.; Hegyi Z.; Dobrosi D.; Görföl T.; Bihari Z.; Dombi I.; Gombkötő P.; Paulovics P.; Mészáros J.; Máté B.; Bereczky A.; Szatyor M.; Géczi I.. 2019. "Hogy vagytok denevérek?" – Az országos monitoring program első 15 évének néhány eredménye. ["How are you bats?" - Some results of the first 15 years of the national monitoring programme.] Pp. 97-122. In: Váczi, O.; Varga, I. & Bakó, B. (szerk.): A Nemzeti Biodiverzitás-monitorozó Rendszer eredményei II. – Gerinces állatok.[ Results of the National Biodiversity Monitoring System II - Vertebrates.] Körös-Maros Nemzeti Park Igazgatóság, Szarvas. (In Hungarian) Observations published on the effects of extreme climatic events on bats:

Boldogh, S.A. 2013. Overheating of artificial roosts: a new, climate change-induced bat conservation challenge in Central Europe. 3rd. International Berlin Bat Meeting: Bats in the Anthropocene. [Berlin, 1-3 March, 2013]. Poster.

You have attached the following documents to this answer.

 $\underline{Overheating of artificial roosts\_anewclimate change-induced bat conservation challenge in Central Europe\_Boldogh.ipg}$ 

You have attached the following Web links/URLs to this answer.

https://www.researchgate.net/publication/324006852 Overheating of artificial roosts a new climate change-induced bat conservation challenge in Central Europe

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

Give details or provide links >>> No other activities to share.

## C. 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 >>> 12.07.2022