

9th Session of the Meeting of the Parties

Brijuni, Croatia, 10 – 13 October 2022

Resolution 9.2:

Amendment of the Annex to the Agreement



The Meeting of the Parties to the Agreement on the Conservation of Populations of European Bats (hereafter “the Agreement”),

Recalling Resolution 7 Amendment of the Agreement adopted at its third Session (Bristol, July 2000), which amends the Agreement and incorporates an Annex of bat species occurring in Europe to which the Agreement applies;

Recalling also that ‘Europe’ for the purposes of the Agreement is as defined in Doc. EUROBATS.MoP2.8.AnnexAFin (Resolution 2.5);

Recognising that there will be the need to amend the Annex from time to time in the light of recent research results;

Further recognising that the names of bat species included in the Annex should conform to the rules of nomenclature laid down by the International Commission on Zoological Nomenclature;

Acknowledges the establishment of an Advisory Panel of specialists to consider potential changes to the Annex;

Agrees to adopt the following changes to the Annex, on the recommendation of the Advisory Panel; and

Notes other potential changes to the Annex, but which are rejected or deferred pending the availability of further information;

and

Decides to:

1. Add the species *Myotis crypticus* Ruedi, Ibáñez, Salicini, Juste & Puechmaille, 2019 to the Annex to the Agreement;
2. Add the species *Myotis tschuliensis* Kuzyakin, 1935 and *Myotis hovei* Harrison, 1964 to the Annex to the Agreement;

3. Add the species *Plecotus gaisleri* Benda, Kiefer, Hanák & Veith, 2004 to the Annex to the Agreement;
4. Change the authorship of *Rhinolophus hipposideros* from (Borkhausen, 1797) to (André, 1797);
5. Amend the author name Keyserling to von Keyserling in the species *Eptesicus nilssonii* (von Keyserling & Blasius, 1839) and *Pipistrellus nathusii* (von Keyserling & Blasius, 1839);
6. Amend the author name Bobrinskii to Bobrinskoj in the species *Eptesicus ognevi* Bobrinskoj, 1918;

and accordingly

Adopts the revised list of species for the Annex to the Agreement as attached to this Resolution in Annex I, with evidence for these revisions presented in Annex II.

Annex I

Bat species occurring in Europe to which the Agreement applies:

Pteropodidae

Rousettus aegyptiacus (Geoffroy, 1810)

Emballonuridae

Taphozous nudiventris Cretzschmar, 1830

Rhinolophidae

Rhinolophus blasii Peters, 1866

Rhinolophus euryale Blasius, 1853

Rhinolophus ferrumequinum (Schreber, 1774)

Rhinolophus hipposideros (André, 1797)

Rhinolophus mehelyi Matschie, 1901

Vespertilionidae

Barbastella barbastellus (Schreber, 1774)

Barbastella caspica Satunin, 1908

Eptesicus anatolicus Felten, 1971

Eptesicus isabellinus (Temminck, 1840)

Eptesicus nilssonii (von Keyserling & Blasius, 1839)

Eptesicus ognevi Bobrinskoj, 1918

Eptesicus serotinus (Schreber, 1774)

Hypsugo savii (Bonaparte, 1837)

Myotis alcaethoe von Helversen & Heller, 2001

Myotis bechsteinii (Kuhl, 1817)

Myotis blythii (Tomes, 1857)

Myotis brandtii (Eversmann, 1845)

Myotis capaccinii (Bonaparte, 1837)

Myotis crypticus Ruedi, Ibáñez, Salicini, Juste & Puechmaillé, 2019

Myotis dasycneme (Boie, 1825)

Myotis daubentonii (Kuhl, 1817)

Myotis davidii (Peters, 1869)

Myotis emarginatus (Geoffroy, 1806)

Myotis escalerae Cabrera, 1904

Myotis hovei Harrison, 1964

Myotis myotis (Borkhausen, 1797)

Myotis mystacinus (Kuhl, 1817)

Myotis nattereri (Kuhl, 1817)

Myotis punicus Felten, 1977

Myotis schaubi Kormos, 1934

Myotis tschuliensis Kuzyakin, 1935

Nyctalus azoreum (Thomas, 1901)

Nyctalus lasiopterus (Schreber, 1780)

Nyctalus leisleri (Kuhl, 1817)

Nyctalus noctula (Schreber, 1774)

Otonycteris hemprichii Peters, 1859

Pipistrellus hanaki Hulva & Benda, 2004

Pipistrellus kuhlii (Kuhl, 1817)

Pipistrellus maderensis (Dobson, 1878)

Pipistrellus nathusii (von Keyserling & Blasius, 1839)

Pipistrellus pipistrellus (Schreber, 1774)

Pipistrellus pygmaeus (Leach, 1825)

Plecotus auritus (Linnaeus, 1758)

Plecotus austriacus (Fischer, 1829)

Plecotus gaisleri Benda, Kiefer, Hanák & Veith, 2004

Plecotus kolombatovici Dulic, 1980

Plecotus macrobullaris Kuzyakin, 1965

Plecotus sardus Mucedda, Kiefer, Pidinchredda & Veith, 2002

Plecotus teneriffae Barrett-Hamilton, 1907

Vespertilio murinus Linnaeus, 1758

Miniopteridae

Miniopterus pallidus Thomas, 1907

Miniopterus schreibersii (Kuhl, 1817)

Molossidae

Tadarida teniotis (Rafinesque, 1814)

Annex II

Review of Species to be listed on the Annex to the Agreement

With reference to Resolution 3.7 (Doc.EUROBATS.MoP3.12.Rev.4), the attention of the Advisory Committee is drawn to the following matters, which may affect the Annex of bat species occurring in Europe and to which the Agreement applies. The Advisory Committee may wish to propose amendments to the Annex at the next MoP.

This updates similar documents produced for MoP5 (Doc.EUROBATS.MoP5.9, Inf.EUROBATS.MoP5.9, EUROBATS.MoP5.Record.Annex6), MoP6 (Doc.EUROBATS.MoP6.10, Inf.EUROBATS.MoP6.45, EUROBATS.MoP6.Record.Annex5) and MoP7 (Inf.EUROBATS.MoP7.48, EUROBATS.MoP7.Record.Annex5), and MoP8 (EUROBATS.MoP8.Resolution 8.2, Inf.EUROBATS.MoP8.9).

EUROBATS.MoP8.Resolution8.2 presents a list of species revised in accordance with amendments adopted at MoP8 (Monte Carlo, 2018). The report presented here includes recommendations for further changes to the Annex of species to which the Agreement applies. This report represents the opinions of members of an 'Advisory Panel' established for the purpose of assessing potential changes to the Annex of species. The panel comprises Stéphane Aulagnier (France), Petr Benda (Czech Republic), Gabor Csorba (Hungary), Javier Juste (Spain), Sergei Kruskop (Russian Federation), Peter Lina (Netherlands) and Friederike Spitzenberger (Austria) and co-ordinated by Tony Hutson (UK). This panel has no 'official' nomenclatural status. As 'ex-officio', Danilo Russo (chairman of EUROBATS Advisory Committee) and Suren Gazaryan (Secretariat to EUROBATS) are also circulated for information and comment.

Mammal Species of the World has been regarded by the International Union for the Conservation of Nature and Natural Resources (IUCN) and CMS as the standard list of mammals (see UNEP/CMS/Recommendation 9.4). A revised (3rd) edition (with the bats compiled by Nancy Simmons of the American Museum of Natural History) was published in early 2006 (Simmons, 2005). It has been recommended that unless there is over-riding reason, the Agreement should (in line with the policy of IUCN, CMS and others) adopt at least the generic (and higher) classification proposed in this work but may adopt changes to the species list as appropriate. However, Simmons (op. cit.) recognised that the higher classification of bats is in a state of flux and refrained from presenting a new higher-level classification. Further, it should be noted that this list is now 17 years old. It is, therefore, considered that well-supported revision of higher classification should be considered in maintaining the Annex of species. The *Handbook of the Mammals of the World, Vol 9*

Bats (Wilson & Mittermeier, 2019) provides an updated list and classification and can act as a benchmark. The report presented here may contribute to maintaining the online constantly up-dated *Bat Species of the World – A taxonomic and geographical database* (Simmons & Cirranello [2022]; <http://batnames.org>.) and the American Society of Mammalogists' Mammal Diversity Database (<http://mammaldiversity.org/>).

As far as is possible, the Annex to the Agreement will agree with the species list for the forthcoming revised Atlas of European Mammals (expected 2024).

Nomenclature should conform to the rules proposed by the International Commission on Zoological Nomenclature (ICZN, 1999).

Potential amendments to the Annex at MoP9

1. *Myotis nattereri*-group: *Myotis crypticus* Ruedi, Ibáñez, Salicini, Juste & Puechmaille 2019

Following Ibáñez et al. 2006, *Myotis escalerae* Cabrera 1904 was recognised as distinct from *M. nattereri* by García-Mudarra et al. (2009). At the same time, these authors suggested that further taxa might be separable within the *Myotis nattereri*-species group complex and identified *Myotis* sp A and *Myotis* sp B. These two taxa have been referred to as such widely in subsequent literature until 2019, when two papers almost simultaneously gave formal names to these species.

Myotis sp A was described as *Myotis crypticus* Ruedi, Ibáñez, Salicini, Juste & Puechmaille 2019 (in Juste et al. 2019; type locality La Rioja, Spain; distribution central and northern Spain, southern France, Italy and probably adjacent south-western parts of Austria) and as *M. nattereri helverseni* Çoraman, Mayer & Dietz 2019 (in Çoraman et al. 2019).

Myotis sp B was described as *M. zenatius* Ibáñez, Juste, Salicini, Puechmaille & Ruedi 2019 (in Juste et al. 2019; type locality Tetouan, Morocco; distribution Morocco & Algeria) and as *M. escalerae cabrerae* Çoraman, Mayer & Dietz, 2019 (in Çoraman et al. 2019).

Although electronic publication of the paper by Çoraman et al. appears to have been published very shortly before the paper by Juste et al., the descriptions are considered to fail to meet the requirements of the ICZN for the recognition of a new species by electronic publication for the reasons given in Ruedi et al. (2019) and the names *helverseni* and *cabrerae* for these taxa are considered as *nomina nuda*. They may also fail to meet the requirements of the ICZN for the subsequent printed version (in which case the names would remain available).

Recommendation: the species *Myotis crypticus* Ruedi, Ibáñez, Salicini, Juste & Puechmaille 2019, type locality Spain, should be added to the Annex to the Agreement.

2. *Myotis nattereri*-group: *M. tschuliensis* Kuzyakin, 1935, *M. araxenus* Dahl, 1947, *M. hovei* Harrison, 1964

Çoraman et al. (2019) also recognised *M. tschuliensis* Kuzyakin, 1935, *M. araxenus* Dahl, 1947, *M. hovei* Harrison, 1964 as separate species. They are discussed as ‘sp. nov.’, but should be ‘stat. rev.’ or ‘stat. nov.’.

M. tschuliensis Kuzyakin, 1935 (type locality Turkmenistan) was described as a subspecies of *M. nattereri* (*Bulletin de la Société des Naturalistes de Moscou* 44: 434,447).

M. araxenus Dahl, 1947 (type locality Armenia) was described as a subspecies of *M. nattereri* (*Doklady Akademii Nauk Armyanskoi SSR* 7: 173-178) and later regarded as a synonym of *M. schaubi* Kormos, 1934.

M. hovei Harrison, 1964 (type locality Israel) was described as a subspecies of *M. nattereri* (*Zeitschrift für Säugetierkunde* 29: 179-181).

The Handbook of Mammals of the World recognises *araxenus* as a synonym of *schaubi*, and recognises *tschuliensis* and *hovei* as subspecies of *M. nattereri* pending further investigation. However, a recent paper by Uvizl & Benda (2021) does recognise *tschuliensis* and *hovei* as distinct species based on morphology and molecular genetic analysis. Smirnov et al. (2020) had also recognised ‘*M. cf tschuliensis*’ as a species, but had been unsure about the application of this species name. *M. tschuliensis* is recorded from Ukraine, Russian Federation, Georgia, Azerbaijan, Armenia, Türkiye (as well as Iran and Turkmenistan), and *hovei* from Cyprus, Türkiye (as well as Syria, Jordan, Lebanon and Israel). *M. hovei* is also accepted as a species by the AMNH Bat List (Simmons & Cirranello [2022]).

Recommendation: *M. araxenus* Dahl should continue to be regarded as a synonym (or subspecies) of *M. schaubi*; the species *M. tschuliensis* Kuzyakin, 1935 (type locality: Turkmenistan) and *M. hovei* Harrison, 1964 (type locality: Israel) should be added to the Annex to the Agreement.

3. *Myotis nattereri*-group: *Myotis* sp C

A further species of the *M. nattereri*-group, *M. sp. C* (type locality Corsica, France) has been recognised by Puechmaille et al. (2012) and is awaiting formal description.

Recommendation: no action until formal publication of the species.

4. *Plecotus gaisleri* Benda, Kiefer, Hanák & Veith, 2004

This taxon is recorded in North-west Africa from North-west Libya (type locality) to Morocco. The status and distribution (including Europe) of this taxon was discussed for MoP8 (see Inf.EUROBATS.MoP8.9) but was left unresolved. Further research suggests that there seems general agreement that the taxon is distinct and that it occurs on Malta and Pantelleria (Italy), but that there is disagreement as to whether it should be regarded as a species or subspecies. Mifsud & Vella (2019), Batsleer et al. (2019), and Ancillotto et al. (2020) regard it as a species, whereas Spitzenberger (2020) gives a reasoned argument for retaining it as a subspecies. Razgour (2020) summarises the history of the nomenclature of this taxon. It is regarded as a full species in Wilson & Mittermeier (2019) and Simmons & Cirranello.

For the purposes of the Annex, a majority of those consulted recommend regarding this as a species and hence to be added to the Annex, but there is widespread opinion that this matter may not be settled and further research may recommend that on taxonomic grounds this taxon again be relegated to subspecies.

Recommendation: The species *Plecotus gaisleri* Benda, Kiefer, Hanák & Veith, 2004 should be added to the Annex to the Agreement.

5. *Rhinolophus hipposideros* (André, 1797)

The last MoP (MoP8) adopted a change of authorship for *Rhinolophus hipposideros* from Bechstein 1800 to Borkhausen 1797 (see Inf.EUROBATS.MoP8.9). Benda & Mlikovsky (2022) have further investigated this and find that the earliest valid binomial description of the species is by André (1797), where the species is described under the binomen *Noctilio hipposideros*; they show that André's work was published by 19 April 1797, whereas Borkhausen's work (1797) was not published by March and probably not in April, but certainly by 30 September 1797. Thus, although both works were published in the same year, André's work has priority over that of Borkhausen.

Recommendation: Amend *Rhinolophus hipposideros* (Borkhausen, 1797) to *Rhinolophus hipposideros* (André, 1797) in the Annex to the Agreement.

6. *Eptesicus nilssonii* (von Keyserling & Blasius, 1839), *Pipistrellus nathusii* (von Keyserling & Blasius, 1839)

It has been suggested that if we accept the prefix "von" for von Helversen (as in the co-author of *Myotis alcathoe* von Helversen & Heller, 2001), we should also accept such a prefix for von Keyserling (co-author of *Eptesicus nilssonii* (von Keyserling & Blasius,

1839) and *Pipistrellus nathusii* (von Keyserling & Blasius, 1839); both these authors published the bat names under their family names including that prefix.

Recommendation: Amend *Eptesicus nilssonii* (Keyserling & Blasius, 1839) and *Pipistrellus nathusii* (Keyserling & Blasius, 1839) to *Eptesicus nilssonii* (von Keyserling & Blasius, 1839) and *Pipistrellus nathusii* (von Keyserling & Blasius, 1839) in the Annex to the Agreement.

7. *Eptesicus ognevi* Bobrinskoj, 1918

It has been pointed out that the author of the species *Eptesicus ognevi* should be Bobrinskoj (Бобринской) and not Bobrinskii or Bobrinskij. Although this zoologist himself later changed his name in accordance with a new (post-revolution) Russian grammar to Bobrinskij (Бобринский) and published many papers and books under this version of his name, the species *E. ognevi* was described before this change of the grammar and of the name; equally, for the famous Russian writer nobody uses the name Tolstyj (meaning fat, obese) in accordance with the current grammar, but rather the traditional version of the name, Tolstoj or Tolstoj; this is an identical case to that of Bobrinskoj/Bobrinskij.

Recommendation: Amend *Eptesicus ognevi* Bobrinskii, 1918 to *Eptesicus ognevi* Bobrinskoj, 1918 in the Annex to the Agreement.

Summary

The following changes are recommended for the Annex of species to which the Agreement applies:

1. The species *Myotis crypticus* Ruedi, Ibáñez, Salicini, Juste & Puechmaille, 2019 should be added to the Annex to the Agreement.
2. The species *Myotis tschuliensis* Kuzyakin, 1935 and *Myotis hovei* Harrison, 1964 should be added to the Annex to the Agreement.
3. The species *Plecotus gaisleri* Benda, Kiefer, Hanák & Veith, 2004 should be added to the Annex to the Agreement.
4. *Rhinolophus hipposideros* (André, 1797) should replace *Rhinolophus hipposideros* (Borkhausen, 1797) in the Annex to the Agreement.
5. *Eptesicus nilssonii* (von Keyserling & Blasius, 1839) and *Pipistrellus nathusii* (von Keyserling & Blasius, 1839) should replace *Eptesicus nilssonii* (Keyserling & Blasius, 1839) and *Pipistrellus nathusii* (Keyserling & Blasius, 1839) in the Annex to the Agreement.
6. *Eptesicus ognevi* Bobrinskoj, 1918 should replace *Eptesicus ognevi* Bobrinskii, 1918 in the Annex to the Agreement.

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