

4th Session of the Meeting of Parties

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

(prepared by A.M. Hutson)



Ref: Resolution 3.7 (Doc.EUROBATS.MoP3.12.Rev.4)

Further to document Inf.AC6.18 (2001) and Inf.AC7.18 (2002) the attention of the Advisory Committee is drawn to the following matters, which may affect the Annex of bat species occurring in Europe to which the Agreement applies. The Advisory Committee may wish to propose amendments to the Annex at the next MoP.

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 Gabor Csorba (Hungary), Ivan Horacek (Czech Republic), Dieter Kock (Germany), Sergei Kruskop (Russian Federation), Nancy Simmons (USA) and Friederike Spitzenberger (Austria) and co-ordinated by Tony Hutson (UK). This panel is not 'official' in any way, but as 'ex-officio' Peter Lina (chairman of EUROBATS Advisory Committee) and Andreas Streit (Secretariat to EUROBATS) are also circulated for information and comment.

1. *Mammal Species of the World*. This is regarded by IUCN - The World Conservation Union as the standard list of mammals. Last published in 1993 (bats by Koopman, in Wilson & Reeder), a revised version (with the bats compiled by Nancy Simmons of the American Museum of Natural History) is in press and expected in 2004. This work is here referred to as Simmons (in press).

Recommendation: unless there is over-riding reason, the Agreement should (in line with IUCN policy) adopt the generic classification proposed in this work, but may adopt changes to the species list as appropriate.

2. *Rousettus (a)egyptiacus* (Geoffroy 1810)

In 1818, Geoffroy emended his *egyptiacus* (of 1810) to *R. aegyptiacus*. *R. aegyptiacus* was regarded as an unjustified emendation by Corbet & Hill (1992) and

this has been generally accepted. However, Kock (2001) argues that this was a justified emendation and that the name *aegyptiacus* should be adopted. Some authorities argue (in litt.) that not all of Kock's arguments are correct under the current International Code of Zoological Nomenclature (1999). However, they accept that *aegyptiacus* can be used on the basis of prevailing usage in accordance with the current Code (Art. 33.2.3.1.).

Recommendation: It is recommended that we revert to the use of *aegyptiacus*.

3. *Myotis*, gender of

Woodman (1993) proposed that the correct gender for the generic name *Myotis* is feminine. The acceptance of this would require a change in ending of *mystacinus* to *mystacina*, *emarginatus* to *emarginata* (and *oxygnathus* to *oxygnatha*, and *punicus* to *punica*). Thus far this has not been widely accepted, but it has been proposed by some authors, including in Europe (e.g. Kock, 2000). However, Woodman (op.cit.) made no reference to an earlier decision of ICZN that the genus *Myotis* should be regarded as masculine (ICZN, 1958. Direction 98; Interpretation under the Plenary Powers of the nominal species *Vespertilio murinus*. ... Pp 144-145 in Opinions and Declarations Rendered by the International Commission on Zoological Nomenclature. Vol 1. Section F. Part F.9. Pp 127-160.). The decision of ICZN is supported by Pritchard (1994).

Recommendation: There seem insufficient grounds for dismissing the Opinion of ICZN and it is therefore recommended that the Annex to the Agreement should continue to regard *Myotis* as masculine.

4. *Myotis mystacinus* group

1. Benda & Tsytsulina (2000) introduced three new species names to the European fauna:

M. aurascens Kujakin 1935: Greece through Ukraine and Caucasus to SE Siberia

M. hajastanicus Argyropulo 1939: Armenia (Lake Sevan)

M. nipalensis (Dobson 1871): Caucasus (and eastwards)

2. Helversen et al (2001) described a new species:

M. alcaethoe von Helversen & Heller 2001: Greece, Hungary

While there is overlap in distribution between *M. aurascens* and *M. alcaethoe* current opinion regards them as distinct (e.g. Hanak et al. 2001). How the recognition of these

species affects the regional distribution of *M. mystacinus* and *M. brandtii* remains to be clarified. The presence of *M. alcathoe* in Hungary was confirmed by Estok (2002), and its presence in France established by Ruedi et al. (2002).

There seems broad acceptance for all of these species, except that *aurascens* is regarded as genetically very close to *mystacinus* by Mayer & Helversen (2001), and Simmons (in press) includes it as a synonym of *M. mystacinus davidii* (Peters, 1869) (type locality: China).

Recommendation: It is suggested that the four species should be accepted, while noting the possible synonymy of *aurascens* with *mystacinus* and that the species-group needs further investigation.

5. *Myotis* cf. *punicus* Felten 1977 (in Felton, Spitzenberger & Storch, 1977)

Castella et al. (2000) suggested that *Myotis myotis* in Morocco should be regarded as a separate species, *M. cf. punicus* (described as a subspecies of *M. blythii* (sic)). They further suggested that the populations on Corsica and Sardinia should also be identified with *M. cf. punicus*. They reserved commitment to this classification (and its nomenclature) pending further studies. Ruedi & Mayer (2001) in a wider molecular study of *Myotis*, supported the separation of *punicus*, but also suggested a clear separation between other subspecies of *blythii*, namely *oxygnathus* Monticelli 1885 of the western Palaearctic (type locality: Italy) and *blythii* Tomes 1857 of the eastern Palaearctic and Indomalayan region (type locality: India).

M. punicus was regarded as a separate species and new for Corsica by Beuneux (2002).

The subspecies name *punicus* has also been used for the species on Malta (Felten et al, 1977; Borg et al., 1998).

M. punicus could be accepted now. However, the separation of the species *oxygnathus* and *blythii* would require a change of name (to *oxygnathus*) for much of the rest of the European distribution, and would leave the status of the taxon in eastern Turkey and the Caucasus states uncertain (?*blythii* or *omari* – see, e.g. Horacek et al., 2000, pp. 43 and 113; Topal & Ruedi, 2001).

Recommendation: await further investigations of the whole species-group.

6. *Eptesicus bottae*

Hanak et al. (2001) referred Greek (Rhodes) and Turkish material of *E. bottae* to subspecies *E. b. anaticus* Felten 1971, which they considered may be a separate species distinct from *bottae*. If that were accepted assignment of Caucasus material would need to be determined.

Recommendation: await further developments.

7. *Pipistrellus pipistrellus* and *pygmaeus/mediterraneus*

An application was made to the International Commission on Zoological Nomenclature (ICZN) to establish the nomenclature of the two sibling species formerly recognised solely as *Pipistrellus pipistrellus*. For details of the proposal see *Bulletin of Zoological Nomenclature* 56:182-186 (1999). For published discussion on this proposal see *BZN* 57: 47-50 (2000), 57: 113-115 (2000), 58: 60-61 (2001), 58: 230-231 (2001), 58: 309 (2001). ICZN distributed voting forms to its Commissioners in September 2002. The decision of the Commission of ICZN is that the names *pipistrellus* and *pygmaeus* with designated neotypes should be accepted for these species, in accordance with the original application. This has been published as Opinion 2028 in the *Bulletin of Zoological Nomenclature*, Volume 60, Part 1, pages 85-87 (March 2003).

Recommendation: accept the decision of ICZN, viz. use *pygmaeus* Leach 1825 for the second species (and consider *mediterraneus* Cabrera 1904, which has also been used in recent publications for the same species, as a synonym of *pygmaeus*).

8. *Hypsugo savii*

The revised edition of *Mammal Species of the World* (Simmons, in press) now accepts the genus *Hypsugo* Kolenati, which includes *Pipistrellus savii*.

Recommendation: accept this change.

9. *Plecotus*

1. Spitzenberger et al. (2001) separated a third species of *Plecotus*, allied to *P. auritus* (although originally described as a subspecies of *austriacus*):

P. kolombatovici Dulic 1980: Croatia; southern Austria, Bosnia and Greece.

Kiefer & Veith (2002) described a new species of *Plecotus* allied to *P. auritus*:

P. alpinus Kiefer & Veith 2002: France; Austria, Croatia, Greece, Liechtenstein, Switzerland.

Spitzenberger in Spitzenberger et al. (2002) described a new species of *Plecotus* allied to *P. auritus*:

P. microdontus Spitzenberger, in Spitzenberger, Haring & Tvrtkovic 2002: Austria; Slovenia, Italy.

Following Spitzenberger et al. (2001), Mayer & Helversen (2001) also recognised three forms of *Plecotus*, but suggested the assignment of the name *P. kolombatovici* to a species more closely allied to *P. austriacus*. But they also wanted to recognise a fourth species, which they ally to *P. auritus*, and which Kiefer & Veith (2002) described as *P. alpinus* n.sp.

At the same time, Spitzenberger et al. (2002) revised their earlier opinion and agreed that the name *kolombatovici* should be used for the sister species to *austriacus* and Spitzenberger described the sister species of *auritus* as a new species, *P. microdontus*.

It was clear that *P. alpinus* and *P. microdontus* are synonymous. However neither paper was made available on the date given on the publication and it was unclear which name had priority. Kock (2002) reviewed the situation and, since an actual publication date for both journal (parts) is not available, proposes priority for *alpinus* on the basis that this publication was received by recognised libraries before that of *microdontus*.

Kiefer et al. (2002) confirmed the lineages proposed by Spitzenberger et al (2002) with the species names of the four species as *P. auritus* allied to *P. alpinus* (= *kolombatovici* sensu Spitzenberger et al. 2001) and *P. austriacus* allied to *P. kolombatovici*.

Recommendation: While appearance in recognised libraries may not be a very satisfactory way of establishing priority, it seems the only option in this case. This would recognise the species *alpinus* (= *microdontus*, and *kolombatovici* sensu Spitzenberger et al. 2001), *auritus*, *austriacus* and *kolombatovici*.

2. Mucedda et al. (2002) described a new species of *Plecotus*, *P. sardus*, from Sardinia.

Recommendation: accept as a valid species

Note: the panel was not unanimous on the acceptance of the new *Plecotus* species, particularly with respect to *sardus*, and also recognised the possibility that these new names might fall as synonyms to one or more of the many earlier names available.

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Summary

The balance of opinion of the panel would suggest the following amendments to the EUROBATS Annex of species occurring in the Agreement area (noting that the Agreement does not include North Atlantic island territories belonging to Europe, i.e. Canaries, Madeira, Azores).

1. Changes to nomenclature

Rousettus egyptiacus to *Rousettus aegyptiacus*

Pipistrellus savii to *Hypsugo savii*

2. Additions to be proposed in 2003

Myotis alcathoe von Helversen & Heller 2001

Myotis aurascens Kusjakin 1935

Myotis hajastanicus Argyropulo 1939

Myotis nipalensis (Dobson 1871)

Pipistrellus pygmaeus (Leach 1825) (= *mediterraneus* Cabrera 1904)

Plecotus alpinus Kiefer & Veith 2002 (= *microdontus* Spitzenberger 2002)

Plecotus kolombatovici Dulic 1980

Plecotus sardus Mucedda et al. 2002

3. Potential changes to be deferred pending further developments

Myotis cf. *punicus* Felten 1977 and related species/subspecies

Eptesicus bottae/anatolicus

Those changes that are agreed should be incorporated into a Resolution (without the background information) for adoption by the 4th Session of the Meeting of Parties to the European bats Agreement (EUROBATS). A draft preamble to that Resolution is attached. It is assumed that the preamble would be more or less standard for future Meeting of Parties, so we should get it 'right' at this early stage.

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