

OPINION 2028 (Case 3073)***Vespertilio pipistrellus* Schreber, 1774 and *V. pygmaeus* Leach, 1825
(currently *Pipistrellus pipistrellus* and *P. pygmaeus*; Mammalia,
Chiroptera): neotypes designated**

Abstract. The Commission has designated neotypes for two broadly sympatric species of pipistrelle bats, which until recently have been considered to be a single taxon under the name *Pipistrellus pipistrellus* (Schreber, 1774). The existence of two separate species was first detected from differences in the ultrasonic echolocation calls of the two species.

Keywords. Nomenclature; taxonomy; Mammalia; Chiroptera; bats; VESPERTILIONIDAE; *Pipistrellus*; *Pipistrellus pipistrellus*; *Pipistrellus pygmaeus*.

Ruling

- (1) Under the plenary power all previous fixations of type specimens for the following nominal species are hereby set aside:
 - (a) *Vespertilio pipistrellus* Schreber, 1774 and the adult male specimen no. BMNH 1997.81 from Beauvais Cathedral, Normandy, France, collected in October 1996, is designated as the neotype;
 - (b) *Vespertilio pygmaeus* Leach, 1825 and the adult female specimen no. BMNH 1999.43 from Chew Valley Lake, Bath and North East Somerset, U.K., collected in October 1998, is designated as the neotype.
- (2) The name *Pipistrellus* Kaup, 1829 (gender: masculine), type species by monotypy *Vespertilio pipistrellus* Schreber, 1774, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) *pipistrellus* Schreber, 1774, as published in the binomen *Vespertilio pipistrellus* and as defined by the neotype designated in (1)(a) above (specific name of the type species of *Pipistrellus* Kaup, 1829);
 - (b) *pygmaeus* Leach, 1825, as published in the binomen *Vespertilio pygmaeus* and as defined by the neotype designated in (1)(b) above.

History of Case 3073

An application for the designation of neotypes for *Vespertilio pipistrellus* Schreber, 1774 and *V. pygmaeus* Leach, 1825 was received from Prof Gareth Jones (*University of Bristol, Bristol, U.K.*) and Dr Elizabeth M. Barratt (*Institute of Zoology, Zoological Society of London, London, U.K.*) on 21 October 1997. After correspondence the case was published in BZN 56: 182–186 (September 1999). Notice of the case was sent to appropriate journals.

The application sought to establish names for two reproductively isolated cryptic species of pipistrelle bats which until 1993 were considered to be a single taxon under the name *Pipistrellus pipistrellus* (Schreber, 1774). The species are distinguished by

the frequency of their ultrasonic echolocation calls and other features (para. 4 of the application). It was proposed that the much used name *P. pipistrellus* be retained for the species with the lower frequency call (45 kHz) and that the oldest available synonym, *P. pygmaeus* (Leach, 1825), be adopted for the species with the higher frequency call (55 kHz).

The intention of the application was to stabilise both *P. pipistrellus* and *P. pygmaeus* by the designation of neotypes that are in accord with the current usage of the names (i.e. for taxa distinguished by their phonic calls), and the application was submitted to the Commission for a ruling under Article 75.6 of the Code.

Some of those who commented on the case welcomed the use of the name *P. pipistrellus* for the 45 kHz phonic type but favoured the adoption of *P. mediterraneus* Cabrera, 1904, rather than *P. pygmaeus*, for the 55 kHz phonic type. As noted in a number of comments, *P. mediterraneus* was not the earliest available name after *P. pygmaeus*; it is, in fact, 91 years junior to *pygmaeus* and one of the most recent names. There are 15 available synonyms between *P. pygmaeus* and *P. mediterraneus* and it is not known to which phonic type or types any of the names applies. If adopted, *P. mediterraneus* could potentially have been displaced by one of the intermediate synonyms.

Five comments in support of the application were published in BZN 57: 49–50 (March 2000), together with a comment opposing the use of the name *P. pygmaeus* for the 55 kHz phonic type.

A comment by Drs Otto von Helversen and Frieder Meyer (*Universität Erlangen, Erlangen, Germany*) and Dr Dieter Kock (*Forschungsinstitut Senckenberg, Frankfurt am Main, Germany*), published in BZN 57: 113–115 (June 2000), supported the use of *P. pipistrellus* and the designation of a neotype for the 45 kHz calling species, but proposed the adoption of *P. mediterraneus* rather than *P. pygmaeus* for the second species. A comment in support of the application, and another from one of the authors of the application, Prof Gareth Jones, were published at the same time.

A reply to Helversen et al. by Prof Gareth Jones was published in BZN 58: 60–61 (March 2001).

A comment from Dr Victor Van Cakenberghe (*Universiteit Antwerpen, Antwerp, Belgium*), published in BZN 58: 230–231 (September 2001), supported the designation of a neotype for *P. pipistrellus* but favoured the use of *P. mediterraneus* rather than *P. pygmaeus*. A reply to this comment by Prof Gareth Jones was published in BZN 58: 309 (December 2001).

Decision of the Commission

On 1 September 2002 the members of the Commission were invited to vote on the proposals published in BZN 56: 185.

At the close of the voting period on 1 December 2002 the votes were as follows: 24 Commissioners voted FOR the proposals, 1 Commissioner voted AGAINST, no votes were received from Böhme and Dupuis, Ng was on leave of absence.

Voting for, Cogger commented: 'While some proponents for and against the selection of *Pipistrellus pygmaeus* as the name for the second cryptic species have exaggerated the strength of their cases and/or the weakness of the opposing arguments, there is clearly an element of personal preference for a name rather than for the most stable nomenclatural outcome. I agree with the applicants that their

proposed solution is likely to result in the greatest stability and least confusion'. Voting against, Alonso-Zarazaga commented: 'I am fully in favour of adopting the name *P. mediterraneus* for the 55 kHz phonic type and, if necessary, setting aside any possible prior synonyms. The adoption of *P. pygmaeus* for this taxon seems unjustified to me'.

Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- Pipistrellus* Kaup, 1829, *Skizzirte Entwicklungs-Geschichte und Natürliches System der Europäischen Thierwelt . . . Erster Theil (welcher die Vogelsäugethiere und Vögel, nebst Andeutung der Entstehung der letzteren aus Amphibien enthält)*, pp. 98, 188.
- pipistrellus, Vespertilio*, Schreber, 1774, *Die Säugthiere in Abbildungen nach der Natur mit Beschreibungen*, vol. 1, p. 167.
- pygmaeus, Vespertilio*, Leach, 1825, *Zoological Journal*, 1(4): 559.