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A common name for the bat family Rhinonycteridae—the Trident Bats

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Recent elevation in the rank of J.E. Gray's (1866) 'Leaf-nosed Bats' the Rhinonycterina to family level recognised the phylogenetic uniqueness of bats in the extant genera *Cloeotis*, *Paratriaenops*, *Rhinonictoris* and *Triaenops*, and the fossil genera *Brachipposideros* and *Brevipalatus* (Foley *et al.* 2015). In the systematic summary of that paper, attention was drawn to the issue of correct nomenclature because of past ambiguity around the appropriate spelling of the type genus *Rhinonictoris* (see also Simmons 2005; Armstrong 2006). However, no suggestion was made for the common name of the Rhinonycteridae, and that used for the Hipposideridae was simply duplicated—'Old World Leaf-nosed Bats'. It would be helpful for this newly distinguished family to have its own appellation—to avoid unnecessary confusion in the wider literature, and to recognise its distinctiveness and evolutionary history.

Attributing a new common name to the Rhinonycteridae is, like the scientific name, not straightforward (see section *Derivatio Nominis* in the supplementary information of Foley *et al.* 2015). One of the most conspicuous external features in species of *Cloeotis*, *Paratriaenops* and *Triaenops* is the complex noseleaf, and in particular its three dorsally-oriented fleshy projections in the posterior rhinarium (Hill 1982; Benda & Vallo 2009). Because of this, species in these genera are referred to currently as 'Trident Bats' (Table 1). In the past, species of *Triaenops* have also been called 'triple nose-leaf bats', and *Cloeotis percivali* the Trident-nosed Bat (e.g. Nowak 1994). The majority of species in the family are represented in these three genera, with the monotypic *Rhinonictoris aurantia* the only extant representative not having the trident feature. It therefore seems natural to suggest 'Trident Bats' as the common name for the family Rhinonycteridae. However, the word 'trident' is also in current use for the hipposiderid species of *Asellia* and *Aselliscus* (Table 1). If the word 'trident' is claimed for Rhinonycteridae, common names for *Asellia* and *Aselliscus* would need to be standardised to ensure that they are referred to as 'leaf-nosed bats' like other hipposiderids, whether or not this is prefixed by the word 'trident'.

Further, since *Rhinonictoris* does not have these three fleshy processes, and we do not have any information about the shape of the rhinaria in any extinct species of *Brachipposideros* or *Brevipalatus*, we suggest a new common name for *Rhinonictoris* species based on the overall and distinctive shape of their noseleaf ('Diamond-faced Bats'), and leave the extinct genera currently without common names as they are. We assume that the extinct *Paratriaenops goodmani* had a noseleaf structure similar to the extant members of this genus. There is precedence for changing the common name of *R. aurantia* for consistency within the family, with a past change from Golden (or Orange) Horseshoe Bat (Gray 1845; Wood Jones 1923–1925) to Orange Leaf-nosed Bat (Simmons 2005). Ideally, the form of the common name of the type genus *Rhinonictoris* would be consistent with that of the family, but there has been a history of usage of the term 'Trident Bats' to refer to the more speciose African and Middle Eastern genera in the past literature (e.g. Monadjem *et al.* 2010).

Common names are not subject to a strict set of rules in the same way that formal taxonomic names are governed by the International Commission on Zoological Nomenclature (1999), and there is argument that such names should probably be allowed to evolve naturally and be settled upon after the prevailing usage of one or more common forms

TABLE 1. Summary of English common names in usage and suggested standardised forms^{1,2}.

Scientific name	Common names in past and present usage	Suggested standardised common name
HIPPOSIDERIDAE		
<i>Asellia arabica</i> Benda, Vallo and Reiter, 2011	Arabia Trident Leaf-nosed Bat	Arabian Trident Leaf-nosed Bat
<i>Asellia italosomalia</i> De Beaux, 1931	Somali Trident Leaf-nosed Bat; Somalia Trident Leaf-nosed Bat	Somali Trident Leaf-nosed Bat
<i>Asellia patrizii</i> De Beaux, 1931	Patrizi's Trident Leaf-nosed Bat	Patrizi's Trident Leaf-nosed Bat
<i>Asellia tridens</i> (E. Geoffroy, 1813)	Geoffroy's Trident Leaf-nosed Bat; Trident Bat	Geoffroy's Trident Leaf-nosed Bat
<i>Aselliscus dongbacana</i> Tu, Csorba, Göröf, Arai, Son, Thanh and Hassamin, 2015	Dong Bac's Trident Bat	Dong Bac's Leaf-nosed Bat
<i>Aselliscus stoliczkae</i> (Dobson, 1871)	Stoliczka's Asian Trident Bat; Stoliczka's Trident Bat	Stoliczka's Leaf-nosed Bat
<i>Aselliscus tricuspispidatus</i> (Temminck, 1835)	Trident Leaf-nosed Bat; Temminck's Asian Trident Bat; Temminck's Trident Bat	Temminck's Leaf-nosed Bat
RHINONYCTERIDAE		
† <i>Brachiposideros nootaleebus</i> Sigé, Hand and Archer, 1982	Riversleigh Leaf-nosed Bat	Riversleigh Trident Bat
† <i>Brevipalatus meculoughi</i> Hand and Archer, 2005	McCullough's Leaf-nosed Bat	McCullough's Trident Bat
<i>Cloeotis percivali</i> Thomas, 1901	Percival's Trident Bat; Percival's Short-eared Trident Bat; Short-eared Trident Bat; East African Trident Bat; African Trident-nosed Bat	Percival's Trident Bat
<i>Paratriaenops auritus</i> (Grandidier, 1912)	Grandidier's Trident Bat	Grandidier's Trident Bat
<i>Paratriaenops furculus</i> (Trouessart, 1906)	Trouessart's Trident Bat; Golden Trident Bat	Trouessart's Trident Bat
<i>Paratriaenops pauliani</i> (Goodman and Ranivo, 2008)	Paulian's Triple Leaf-nosed Bat	Paulian's Trident Bat
<i>Triaenops afer</i> Peters, 1877	African Trident Bat	African Trident Bat
<i>Triaenops goodmani</i> Samonds, 2007	—	Goodman's Trident Bat
<i>Triaenops menamena</i> Goodman and Ranivo, 2009	Rufous Trident Bat	Rufous Trident Bat
<i>Triaenops parvus</i> Benda and Vallo, 2009	—	Yemeni Trident Bat
<i>Triaenops persicus</i> Dobson, 1871	Persian Trident Bat; Triple Nose-leaf Bat	Persian Trident Bat
<i>Rhinonicterus aurantia</i> (Gray, 1845)	Orange Leaf-nosed Bat; Golden Horseshoe Bat; Pilbara Leaf-nosed Bat	Orange Diamond-faced Bat; Pilbara Diamond-faced Bat [for the Pilbara population]

¹ Newly suggested common names in bold; existing names compiled from Nowak (1994); Simmons (2005); Benda *et al.* (2011); Goodman *et al.* (2011); Patterson & Webala (2012); Tu *et al.* (2015); IUCN (2016).

² *Triaenops rufus* Milne-Edwards, 1881 is a synonym of *T. persicus* (Goodman & Ranivo 2009; see also Benda & Vallo 2009:26) but has been called the Rufous Trident Bat. † Extinct.

becomes apparent. However, pragmatism requires that common names be proposed for clarity and consistency, given their utility in government policy and more generally in the literature outside taxonomic studies. Thus, considering all of the above, we propose that the Rhinonycteridae be referred to as the ‘Trident Bats’, and that various species in both the Hipposideridae and Rhinonycteridae be standardised as in Table 1.

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