

The correct family-group name for a clade of pigeons (Columbidae) including *Chalcophaps* Gould, 1843, *Turtur* Boddaert, 1783, and *Oena* Swainson, 1837

Steven M. S. Gregory

COPYRIGHT: © 2023 Gregory. This is an article distributed under the terms of the Creative Commons Attribution Licence, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABSTRACT: The uses of Turturinae prior to Verheyen (1957) are shown to be based on unavailable names or a junior homonym under Article 12.2.4 (ICZN, 1999: 16) and Article 39 (ICZN, 1999: 46), and that the informal use of Turturini by Oliver *et al.* (2023) must be replaced by the oldest available name for a clade of Pigeons consisting of *Chalcophaps* Gould, 1843, *Turtur* Boddaert, 1783, and *Oena* Swainson, 1837; *Chalcophabini* Bonaparte, 1855, under Article 23.1 (ICZN, 1999: 24).

KEYWORDS: Columbidae, Turturinae, Oenini, Chalcophabini, G.R. Gray, Bonaparte, Verheyen, *Chalcophaps*, *Turtur*, *Oena*, International Code of Zoological Nomenclature.

ZOOBANK LSID: EB076D0C-BDFE-479C-8524-3A91FDDA321C

A recent paper by Oliver *et al.* (2023) presented a supermatrix phylogeny of the Columbidae, which included a clade consisting of *Chalcophaps* Gould, 1843, *Turtur* Boddaert, 1783, and *Oena* Swainson, 1837. This was informally labelled ‘Turturini’ in their figure 2 (Oliver, 2023: 444), presumably following Bock (1994), although that work was not cited in the references.

Bock (1994: 139) implied that the type genus of Turturinae G.R. Gray, 1840, was *Turtur* Boddaert, 1783. That was incorrect, however, as Gray (1840: 58) used ‘Turtur’ Ray (Figure 1), a pre-Linnean name taken from either the Willughby-Ray *Ornithologiae* (Willughby & Ray, 1676) or Ray’s *Synopsis Methodica Avium* (Ray, 1713) and thereby invalidating Turturinae G.R. Gray, 1840, under Article 12.2.4 (ICZN, 1999: 16) which requires the formation of a family-group name from an available generic name.

The generic names established by Boddaert (1783) were not generally recognized or used by ornithologists in the 19th century. *Turtur* Boddaert, 1783, type by monotypy *Columba afra* Linnaeus, 1766, now *Turtur afer* (Linnaeus, 1766) is a very different genus from *Turtur* Selby, 1835 (= *Streptopelia* Bonaparte, 1855) type by monotypy *Columba risoria* Linnaeus, 1758, now *Streptopelia risoria* (Linnaeus, 1758). Gray (1840) clearly had the latter in mind by including a reference to Pl. Enl., pl. 394 (Daubenton, 1765–80), which is of *La Tourterelle* (Figure 2), depicting a European Turtle Dove *Streptopelia turtur* (Linnaeus, 1758). Gray never used the name Turturinae again in his published works, treating *Turtur* Selby, 1835, as a member of the Columbinae.

Bonaparte (1854: 140) used Turturinae in his ‘Conspectus Systematis Ornithologiae’. This too is invalid under Article 12.2.4 (ICZN, 1999: 16) as he ascribed ‘Turtur’ to ‘Br.’, his usual shorthand for Brisson. This was not one of the genera accepted as available from Brisson’s *Ornithologia* (Brisson, 1760), as it was not listed in the even numbered pages (26–61) of the ‘Tabula synoptica Avium secundum Ordines’, as confirmed by Direction 105 (ICZN, 1963). In the classification adopted by Bonaparte (1855: 219), ‘Columbarum Conspectus Systematicus’, his Turturinae (subfamily 8) was clearly based on *Turtur* Selby, 1835, and both that genus and *Streptopelia*

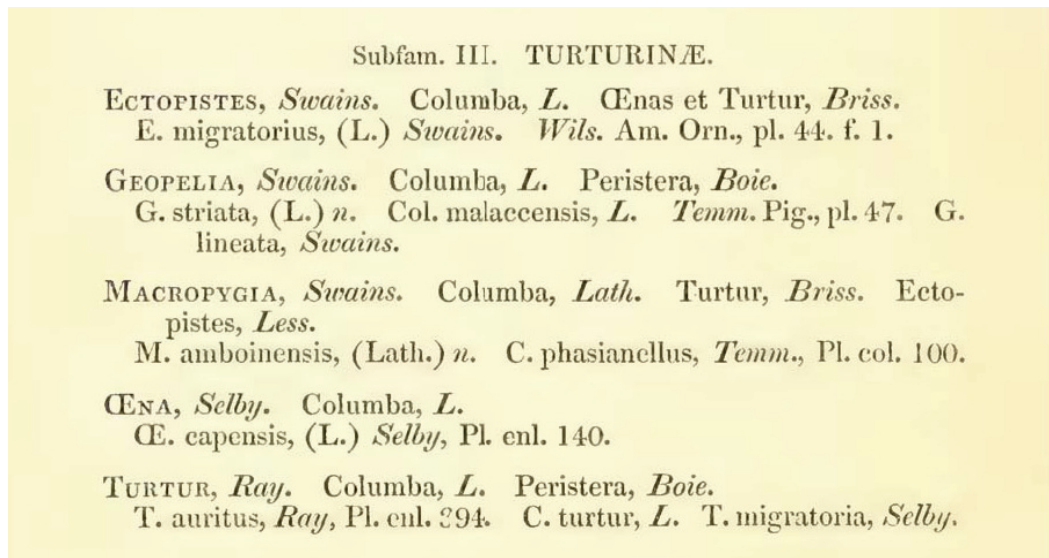


Figure 1. Section of page 58 from G.R. Gray (1840), showing the first use of 'Turturinae', 'Turtur' Ray, and the reference to pl. 394 of Daubenton's *Planches Enluminées*. [Biodiversity Heritage Library].

Bonaparte, 1855, were included. This was repeated by Bonaparte in the second volume of his *Conspectus Generum Avium* (Bonaparte, 1857: 60), and the table 'Conspectus Generum Columbarium', in the *Iconographie des Pigeons* (Bonaparte, 1857-8), which probably appeared with the first livraison in 1857. In all of these cases, Turturinae is invalid under Article 39 (ICZN, 1999: 46) as the name of the type genus is a junior homonym.

Subsequent uses of Turturinae appear to be *sensu* Bonaparte (1855) i.e., for the birds placed in *Turtur* Selby, 1835, type by monotypy *Columba risoria* Linnaeus, 1758, and now usually placed in *Streptopelia* Bonaparte, 1855, following the gradual acceptance of Boddaert's generic names in the early 20th century after his work was reprinted by Tegetmeier (1874).

It was not until the work of Verheyen (1957) that a family-group name was established with *Turtur* Boddaert, 1783, as its type genus. Although Verheyen did not name it as such, *Turtur chalcospilos* (Wagler, 1827), one of the five species now included in *Turtur* Boddaert, 1783, was used in his morphological analysis, so the diagnosis presented for Turturini (Verheyen, 1957: 34) is *sensu* *Turtur* Boddaert, 1783, and not *Turtur* Selby, 1835. This is further evidenced by the fact that *Streptopelia* (which includes the junior homonym *Turtur* Selby, 1835) was listed as a component of the tribe Columbini (Verheyen, 1957: 37).

In the classification presented by Verheyen, the tribe Turturini was one of five in the subfamily Turturinae, so both ranks were established simultaneously. Verheyen also established a tribe Oenini, under the Columbinae, with *Oena capensis* (Linnaeus, 1766) used in the analysis and therefore the diagnosis. Both *Turtur* Boddaert, 1783, and *Oena* Swainson, 1837, were used by Verheyen as valid, and meet the criteria required by Article 11.7.1.1 (ICZN, 1999: 12). Furthermore, because Turturinae Verheyen, 1957, was established at a higher rank than Oenini Verheyen, 1957, the former has precedence over the latter, Article 24.1 (ICZN, 1999: 30), whenever the two taxa are combined.

This leaves the third component of the clade identified by Oliver *et al.* (2023), *Chalcophaps* Gould, 1843. A family-group name, Chalcophapeæ, was established by Bonaparte (1855: 221) in a table which clearly included '*Chalcophaps* Gould'. Bonaparte used a suffix (-eæ) at the rank of



Figure 2. Plate 394 *La Tourterelle* from volume 4 of Daubenton's *Planches Enluminées*. Clearly depicting a European Turtle Dove *Streptopelia turtur* (Linnaeus, 1758). [Biodiversity Heritage Library].

tribe, which can be corrected as an incorrect original spelling under Article 32.5.3.1 (ICZN, 1999: 41), and under Article 29.3.1 (ICZN, 1999: 32) the genitive of *phaps* (Greek: wild pigeon) is *phab-os* giving *Chalcophabini* Bonaparte, 1855, which becomes the oldest available family-group name for a taxon that includes *Chalcophaps* Gould, 1843, *Turtur* Boddaert, 1783, and *Oena* Swainson, 1837. If *Chalcophaps* were to be removed, the remaining two genera would form a taxon named *Turturini* Verheyen, 1957. The operation of the Principle of Priority, Article 23.1 (ICZN, 1999: 24) is clear-cut in this case, as all uses of *Turturinae* before Verheyen (1957) were based on unavailable names (Article 12.2.4) or a junior homonym (Article 39).

REFERENCES

- Bock, W.J., 1994. History and nomenclature of avian family-group names. – *Bulletin of the American Museum of Natural History*, 222: 1–281.
- Boddaert, P., 1783. *Table des planches enluminées d'histoire naturelle de M. D'Aubenton*. i–xv, 1–58. – Utrecht.
- Bonaparte, C.L., 1854. *Conspectus Systematis Ornithologiae*. – *Annales des Sciences Naturelles (Paris)*, ser. 4, Zoologie 1: 105–152.
- Bonaparte, C.L., 1855. *Columbarum Conspectus Systematicus*. – *Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences, Paris*. 40 (5): 216–221.
- Bonaparte, C.L., 1857. *Conspectus Generum Avium*. 2, [i–ii], 1–232. – E.J. Brill, Lugduni Batavorum [Leiden].
- Bonaparte, C.L., 1857–8. *Iconographie des Pigeons non figurés par Mme Knip (Mlle Pauline Decourcelles) dans les deux volumes de MM. Temminck et Florent Prévost*. [i–xviii], 55 pll. and text. – P. Bertrand, Paris.
- Brisson, M.J., 1760. *Tabula synoptica Avium secundum Ordines* (pp. 26–61) In: *Ornithologia sive synopsis methodica sistens avium divisionem in ordines, Sectiones, Genera, Species, ipsarumque Varietates. Cum accurata cujusque speciei descriptione, Citationibus Auctorum de iis tractantium, Nominibus eis ab ipsis & Nationibus impositis, Nominibusque vulgaribus*. Vol. 1. – Jean-Baptiste Bauche, Paris.
- Daubenton, E.L., 1765–80. [*Planches Enluminées d'Histoire Naturelle*.] 4. pll. 301–400. – Paris.
- Gould, J., 1843. *The Birds of Australia*. Part 13, pl. 8 [= vol. 5, pl. 62 and text]. – London.
- Gray, G.R., 1840. *A list of the genera of birds with an indication of the typical species of each genus compiled from various sources*. [i]–viii, 1–80, addenda & errata [i]–ii. – Richard & John E. Taylor, London.
- I.C.Z.N. [International Commission on Zoological Nomenclature], 1963. Direction 105. Brisson, 1760, Ornithologie: restriction to certain portions of that work of the validation granted under the Plenary Powers. – *Bulletin of Zoological Nomenclature*, 20 (5): 343–344.
- I.C.Z.N. [International Commission on Zoological Nomenclature], 1999. *International Code of Zoological Nomenclature*. 4th edition. i–xxix, 1–306. – International Trust for Zoological Nomenclature, London.
- Oliver, P.M., A.F. Hugall, A. Prasteya, A. Slavenko & S. Zahirovic, 2023. Oligo-Miocene radiation within South-west Pacific arc terranes underpinned repeated upstream continental dispersals in pigeons (Columbiformes). – *Biological Journal of the Linnean Society*, 138: 437–452.
- Ray, J., 1713. *Synopsis Methodica Avium*. [i–iv], 1–198, [i–xx]. – London.
- Selby, P.J., 1835. *The Naturalist's Library, Ornithology*, 5, *Pigeons*. [1]–228. – Lizars, Edinburgh.
- Swainson, W., 1837. *On the Natural History and Classification of Birds*. 2, i–vi, 1–398. – Longman, Rees, Orme, Brown, Green & Longman, and John Taylor, London.
- Tegetmeier, W.B., 1874. *Reprint of Boddaert's Table des Planches Enluminées d'Histoire Naturelle*. [i–iv], i–xv, 1–58. – London.

Verheyen, R., 1957. Analyse du Potentiel Morphologique et Projet de Classification des Columbiformes (Wetmore 1934). – *Bulletin de l'Institut royal des Sciences naturelles de Belgique*, 33 (3): 1–42.

Willughby, F. & J. Ray, 1676. *Ornithologiæ Libri tres: In quibus Aves omnes hactenus cognitæ in methodum naturis suis convenientem redactæ accuratè describuntur, Descriptiones Iconibus elegantissimis & vivarum Avium simillimis, Æri incisæ illustrantur.* [i–vi], 1–307. – London.

Address

Steven M. S. Gregory (✉), 35 Monarch Road, Northampton NN2 6EH, UK.
e-mail: sgregory.avium@ntlworld.com.