



A new genus for *Philydor erythrocerum* and *P. fuscipenne* (Aves: Furnariidae)

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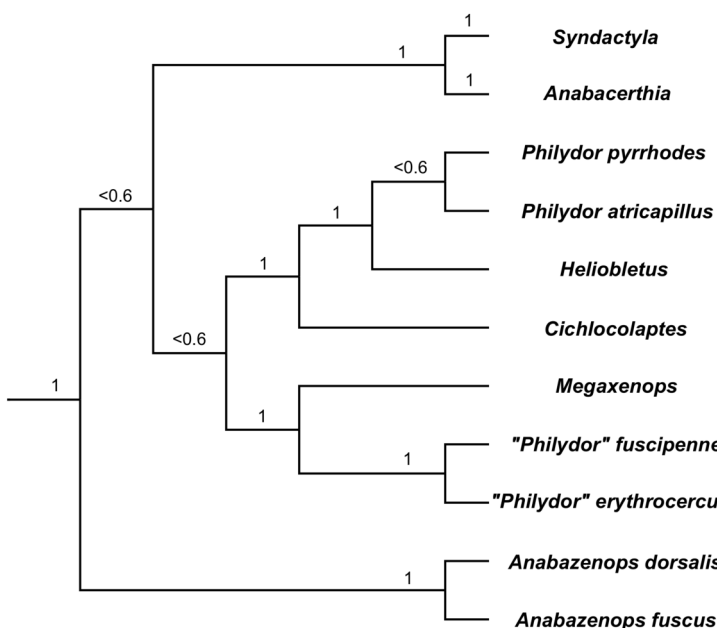
A major task of modern taxonomy is to ensure that taxonomic groups above the species category are monophyletic (Hennig 1966; Cracraft 1981). Recent phylogenetic studies of the ovenbirds (Furnariidae) revealed numerous non-monophyletic genera and resulted in a step-wise revision of the group, including the description of six new genera (Chesser & Brumfield 2007; Chesser *et al.* 2009; Claramunt *et al.* 2010; Derryberry *et al.* 2010a, 2010b; Claramunt 2014; see also Claramunt *et al.* 2013). The first comprehensive species-level phylogeny of the group was based on three mitochondrial genes, one nuclear intron and two nuclear exons (Derryberry *et al.* 2011). This study revealed *Philydor* von Spix, 1824 as a taxonomically problematic genus, showing a fivefold polyphyly. This has been partially addressed in subsequent taxonomies by the placement of *P. erythropterum* (P.L. Sclater, 1856) and *P. rufum* (Vieillot, 1818) in the genus *Dendroma* Swainson, 1837 (Chesser *et al.* 2020; Gill *et al.* 2023; Remsen *et al.* 2023) and *P. ruficaudatum* (d'Orbigny & Lafresnaye, 1838) and *P. lichtensteini* (Cabanis & Heine, 1860) in an expanded genus *Anabacerthia* Lafresnaye, 1840b (Dickinson & Christidis 2014; Gill *et al.* 2023; Remsen *et al.* 2023). However, *Philydor*, as currently delimited (Gill *et al.* 2023; Remsen *et al.* 2023), is still polyphyletic because *P. erythrocerum* (von Pelzeln, 1859) and *P. fuscipenne* Salvin, 1866 are not closely related to the type species of *Philydor* (*P. atricapillus* zu Wied-Neuwied, 1821). In the phylogeny by Derryberry *et al.* (2011), *P. erythrocerum* and *P. fuscipenne* were sister to the monotypic genus *Megaxenops* Reiser, 1905, with strong support, whereas *P. atricapillus* and *P. pyrrhodes* (Cabanis, 1849) were inferred to be sister to the monotypic genus *Heliobletus* Reichenbach, 1853, again with strong support (Fig.1).

A more recent study by Harvey *et al.* (2020) used phylogenetic analysis of 2389 ultra-conserved genomic elements (UCEs) to estimate the relationships among suboscine passerines, including Furnariidae. In this study, the relationships among foliage-gleaners were incongruent with those inferred by Derryberry *et al.* (2011) (Fig. 1). However, *Philydor* (sensu Gill *et al.* 2023; Remsen *et al.* 2023) was again polyphyletic, with *P. erythrocerum* and *P. fuscipenne* inferred as the sister-group of the two species of *Anabazenops* Lafresnaye, 1840a (*A. dorsalis* (Sclater & Salvin, 1880) and *A. fuscus* (Vieillot, 1816)), and *P. atricapillus* as the sister species of *Heliobletus*, which together were the sister group of *P. pyrrhodes*.

Phylogenetic analysis clearly supports the removal of *P. erythrocerum* and *P. fuscipenne* from *Philydor*, which would become restricted to *P. atricapillus*, *P. novaesi* Teixeira & Gonzaga, 1983, and possibly *P. pyrrhodes*. Differences in structure (see below) strongly suggest that it would be unwise to group *P. erythrocerum* and *P. fuscipenne* with either of their inferred sister-taxa, *Megaxenops* or *Anabazenops* (Fig. 2), which would unnecessarily expand the morphological diversity of these genera. Thus, a separate genus is warranted for *P. erythrocerum* and *P. fuscipenne*.

No generic name appears to have been proposed for *P. erythrocerum* and *P. fuscipenne* (Sclater 1890; Sharpe 1901; Ridgway 1911; Cory & Hellmayr 1925; Peters 1951; Wolters 1977). Therefore, we suggest:

(a) Derryberry *et al.* (2011)



(b) Harvey *et al.* (2020)

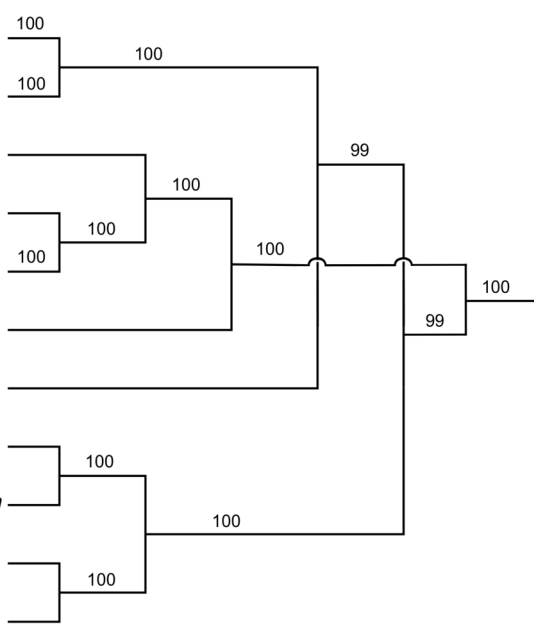


FIGURE 1. Phylogenetic trees (cladograms) of *Philydor* and select representatives from related genera based on (a) Derryberry *et al.* (2011) and (b) Harvey *et al.* (2020). Numbers above branches refer to (a) posterior probability values and (b) bootstrap values. Nomenclature follows Gill *et al.* (2023).

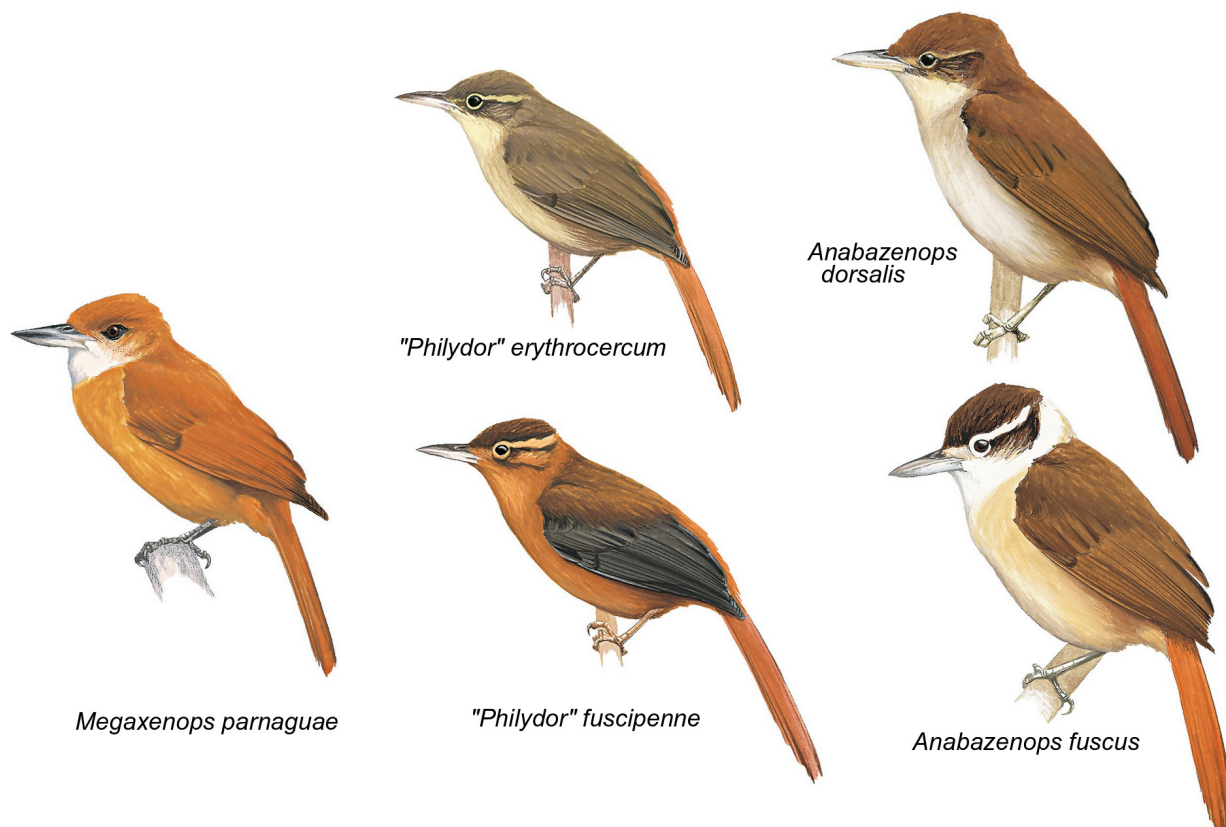


FIGURE 2. External morphology of five species of foliage-gleaner (Philydorinae). Illustrations by Tim Worfolk (used with permission from *Birds of the world* / Lynx Edicions).

Neophilydor new genus

Type species: *Anabates erythrocerus* von Pelzeln, 1859 (currently *Philydor erythrocerum*).

Diagnosis: Small-sized foliage-gleaners (14–17 cm) most closely related to either *Megaxenops* or *Anabazenops*. Differs from both genera in having more elongated wings (hand-wing index 18–20 versus 12–17 in *Megaxenops* and *Anabazenops*, Claramunt *et al.* 2013), a generally shorter bill (length from nares ranges: 10.4–12.6 mm versus 12.5–16.9 mm, Claramunt *et al.* 2013), and generally shorter tarsus (17.8–20.8 mm versus 20.0–24.9 mm). The bill is overall straight with a slightly downcurved culmen in *Neophilydor*, contrasting with the heavy and deep bills of *Megaxenops* and *Anabazenops*. Bills of *Megaxenops* and *Anabazenops* have a straight culmen and, in *Megaxenops* and *A. fuscus*, an upturned tomium. The two species of *Neophilydor* further differ from *Megaxenops* in the presence of a pale postocular stripe (absent in *Megaxenops*), and darker, browner wings (bright rufous in *Megaxenops*). The species of *Neophilydor* further differ from *Anabazenops* by their smaller size, slender build (stocky in *Anabazenops*), and claw of hallux decidedly shorter than digit (claw equally long in *Anabazenops fuscus*; Ridgway 1911).

Differs from *Philydor* (*P. atricapillus*, *P. novaesi*, *P. pyrrhodes*) in generally less rounded tail (R1/R6 ratio: 1.09–1.25 versus 1.18–1.60).

Included taxa: *Neophilydor erythrocerum* **new comb.** (von Pelzeln, 1859) and *Neophilydor fuscipenne* **new comb.** (Salvin, 1866).

Etymology: Derived from the Greek νεος (*neos*) meaning new and *Philydor*, the genus of similar-looking foliage-gleaners in which the two species were formerly included. The gender of the name is neuter.

Acknowledgements

We thank Lynx Edicions for permitting the use of paintings of ovenbirds from the *Handbook of the Birds of the World*. Terry Chesser and Pamela Rasmussen provided helpful comments and edits that improved the quality of our paper.

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