



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

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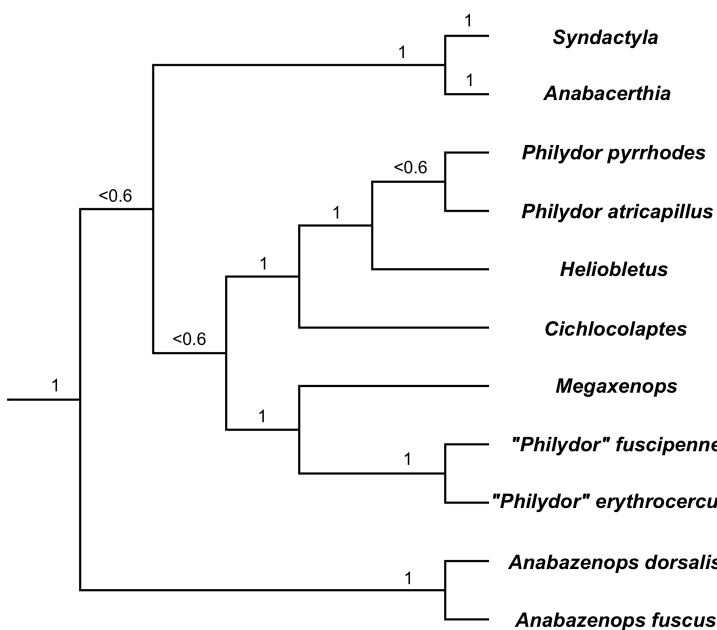
A major task of modern taxonomy is to ensure that taxonomic groups above the species category are monophyletic (Hennig 1966; Cracraft 1981). Recent phylogenetic studies of the ovenbirds (Furnariidae) revealed numerous non-monophyletic genera and resulted in a step-wise revision of the group, including 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)

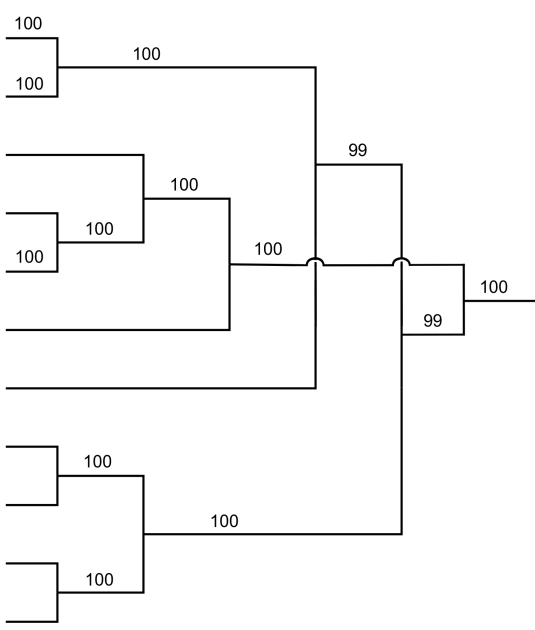


FIGURE 1. Phylogenetic trees (cladograms) of *Philydor* and select representatives from related genera based on (a) Derryberry *et al.* (2011) and (b) Harvey *et al.* (2020). Numbers above branches refer to (a) posterior probability values and (b) bootstrap values. Nomenclature follows Gill *et al.*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

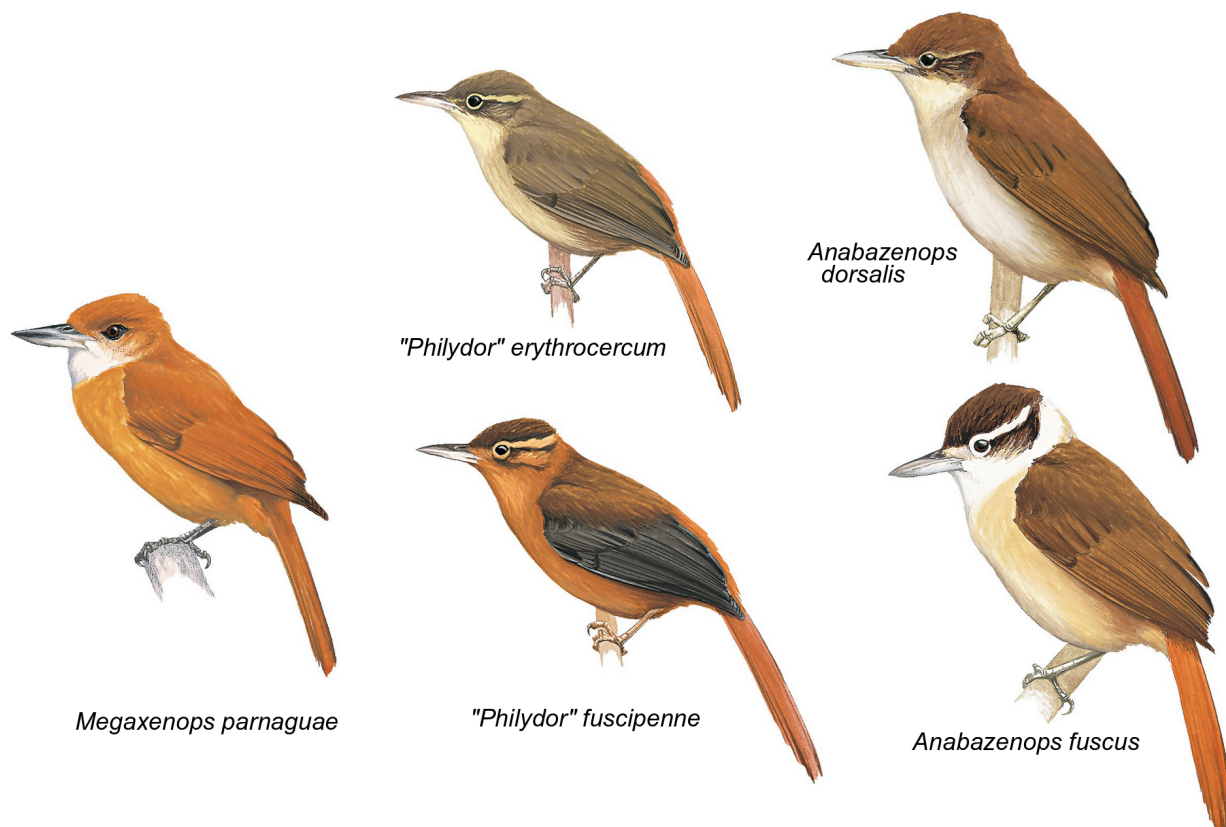


FIGURE 2. External morphology of five species of foliage-gleaner (Philydorinae). Illustrations by Tim Worfolk (used with permission from *Birds of the world* / Lynx Edicions).

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.

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