

***Tarphonomus*, a new genus of ovenbird (Aves: Passeriformes: Furnariidae)
from South America**

R. Terry Chesser* and Robb T. Brumfield

(RTC) USGS Patuxent Wildlife Research Center, National Museum of Natural History,
Smithsonian Institution, P.O. Box 37012, Washington, D.C. 20013, U.S.A.,
e-mail: terry.chesser@usgs.gov;

(RTB) LSU Museum of Natural Science, 119 Foster Hall, Louisiana State University, Baton
Rouge, LA 70803, U.S.A., e-mail: brumfld@lsu.edu

Abstract.—*Tarphonomus*, a new genus of ovenbird (Aves: Passeriformes: Furnariidae) from South America, is described. Species included in the new genus, formerly placed in *Upucerthia*, are *T. certhioides* and *T. harterti*.

Upucerthia is an endemic South American genus of the family Furnariidae, the type species of which is *U. dumetaria* (Saint-Hilaire, 1832). The genus is generally considered to be composed of nine species commonly known as earthcreepers (Sibley & Monroe 1990, Dickinson 2003, Remsén 2003). Variation in plumage and bill morphology suggests that the genus includes three species groups (Remsén 2003): 1) *U. dumetaria*, *U. albigula*, *U. jelskii*, and *U. validirostris*; 2) *U. andaecola* and *U. ruficaudus*; and 3) *U. certhioides* and *U. harterti*. The ninth species, *U. serrana*, has been considered closely related to *U. andaecola* (Cory & Hellmayr, 1925) and to both *U. ruficaudus* and *U. andaecola* (Ridgely & Tudor, 1994), although it has also been paired with *U. dumetaria* (Vaurie, 1980).

As behavior of species of *Upucerthia* has become better known, vocalizations and habitat preferences of *U. certhioides* and *U. harterti* have been noted as being distinct from those of other members of the genus. The songs of *U. certhioides* and *U. harterti*, series of penetrating notes that increase in intensity while descending in frequency, differ markedly from those of other species of *Upucerthia* (Ridgely &

Tudor 1994, Remsén 2003), which tend to be drier and less penetrating and lack the characteristic patterns of those of the two aforementioned species (see Remsén 2003). In addition, *U. certhioides* and *U. harterti* typically occupy dense arid scrub and woodland habitats at low to middle elevations (up to 3000 m), often with a dense undergrowth of terrestrial bromeliads, *Dyckia* spp. (Remsén et al. 1988, Kratter et al. 1993), in contrast to the more open montane scrub and grassland areas frequented by most species of *Upucerthia*. These differences have been judged sufficient by some (e.g., Ridgely & Tudor 1994) to indicate that these species may be generically distinct from *Upucerthia*.

Recent molecular data confirm that a separate genus is indeed warranted for *U. certhioides* and *U. harterti* (Fig. 1; Chesser et al. 2007). DNA sequences from all species of *Upucerthia*, gathered as part of a larger phylogenetic study of the family Furnariidae, indicate that *U. certhioides* and *U. harterti* form a clade closely related to *Pseudocolaptes* and only distantly related to *Upucerthia sensu stricto*. Thus, the traditional genus *Upucerthia* constitutes a non-monophyletic group. *Upucerthia certhioides* and *U. harterti* form a tight well-defined clade,

* Corresponding author.

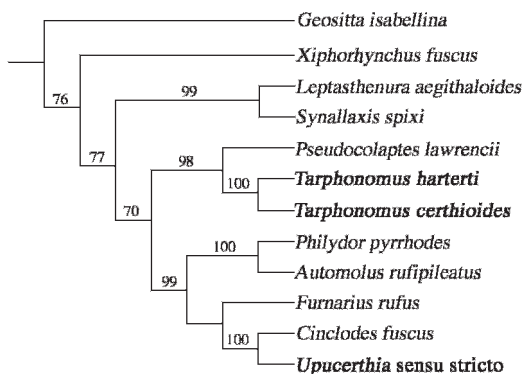


Fig. 1. Simplified molecular phylogeny of the Furnariidae, highlighting the distinctness of *Tarphonomus* species versus *Upucerthia sensu stricto*. This tree, constructed using maximum likelihood methods and modified from Chesser et al. (2007), is based on sequences of the mitochondrial genes ND3 and COII and of intron 7 of the nuclear gene β -fibrinogen. Numbers above the branches indicate bootstrap support values based on 1000 replicates.

substantially different from *Pseudocolaptes*, but no generic name is available for this species pair. *Upucerthia certhioides* was described as *Anabates certhioides*, but *Anabates* is a junior synonym of *Synallaxis* (Cory & Hellmayr, 1925). Therefore, we describe a new genus for *U. certhioides* and *U. harterti* below.

Tarphonomus, genus nov.

Type species.—*Anabates certhioides* d'Orbigny & Lafresnaye, 1838.

Included species.—*Tarphonomus certhioides* (d'Orbigny & Lafresnaye, 1838) comb. nov., Chaco Earthcreeper; *Tarphonomus harterti* (Berlepsch, 1892) comb. nov., Bolivian Earthcreeper.

Diagnosis, morphology.—Medium-size passerine birds, typically 16 cm in total length, 18–31 g (Remsen 2003). Plumage predominantly brown; bill long, thin, very slightly decurved; upper mandible dark gray to black; lower mandible lighter, although darkish distally; upperparts dark (*certhioides*) or medium (*harterti*) brown; wings short and rounded, slightly rufescent (*certhioides*) or brown (*harterti*), remiges rufous basally; tail rounded, dark

rufescent brown (*certhioides*) or rufous (*harterti*); indistinct rufous-orange (*certhioides*) or broad whitish (*harterti*) supercilium; rufous-orange (*certhioides*) or medium brown (*harterti*) forehead; throat white, contrasting with rich brown (*certhioides*) or buffy (*harterti*) underparts; sexes alike. Distinguished from *Upucerthia* by shorter wings (*Tarphonomus* wing length 62.1–71.7 mm [$n = 11$]; *Upucerthia* wing length 82.9–115.6 mm [$n = 22$]), lower ratio of wing length to tail length (*Tarphonomus* wing/tail 0.92–1.03 [$n = 11$]; *Upucerthia* wing/tail 1.13–1.36 [$n = 22$]), shorter bill (*Tarphonomus* culmen length nares to tip 16.4–19.0 mm [$n = 11$]; *Upucerthia* culmen length nares to tip 22.1–33.7 mm [$n = 22$]), and less strongly decurved bill. The angle of gonys is typically more pronounced in *Tarphonomus* than in *Upucerthia*.

Etymology.—The generic name, from the Greek *tarphos* (thicket) and *nomos* (place or condition for living), denotes the habitat typical of *T. certhioides* and *T. harterti*, which prefer thickets in arid scrub. The name is masculine in gender and emphasizes the distinctness of the habitat of these species from those of their former congeners in *Upucerthia*, which typically occupy more open arid scrub or grassland.

Molecular analyses.—Definitive placement of the new genus within the Furnariidae awaits complete phylogenetic analysis of the family, but molecular analyses indicate that *Tarphonomus* clearly lies outside the clade that constitutes much of the traditional subfamily Furnariinae, including *Furnarius*, *Cinclodes*, and *Upucerthia* (Fig. 1; Chesser et al. 2007).

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