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Taxonomy and redescription of the Yellow-footed *Antechinus*, *Antechinus flavipes* (Waterhouse) (Marsupialia: Dasyuridae)

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Abstract

We provide a taxonomic redescription of the ubiquitous and variable dasyurid marsupial Yellow-footed Antechinus, *Antechinus flavipes* (Waterhouse), which comprises three currently recognized subspecies whose combined geographic distribution spans almost the length and breadth of Australia. *A. flavipes leucogaster* Gray is confined to south-west Western Australia; *A. flavipes flavipes* is distributed in south-eastern Australia across four states—South Australia, Victoria, New South Wales and Queensland; *A. flavipes rubeculus* Van Dyck is confined to the wet tropics of Queensland. *A. flavipes* is readily distinguished from all extant congeners based on external morphology by the following combination of features: a grey head; orange-yellow toned flanks/rump, feet and tail base; pale eye-rings and a darkened tail tip. *A. flavipes* skulls are stout, being broad at the level of the rear upper molars, have small palatal vacuities and small entoconid cusps on the lower molars. However, notable differences among subspecies of *A. flavipes* prevent any obvious collection of skull characters being diagnostic for species-level discrimination among congeners. *A. flavipes rubeculus* is the largest of the three subspecies of Yellow-footed Antechinus and most similar in skull morphology to *A. leo*, *A. bellus* and *A. godmani*—all four species are geographically limited to tropical Australia. *A. f. rubeculus* is notably larger in many characters than its conspecifics: *A. f. flavipes*, the next largest, and *A. f. leucogaster*, the smallest of the group. *A. f. flavipes* and *A. f. leucogaster* diverge significantly at only a few skull characters, and both subspecies have cranial morphological affinities with the recently discovered *A. mysticus*, most notably *A. f. leucogaster*. Phylogenies generated from mt- and nDNA data strongly support *Antechinus flavipes* as monophyletic with respect to other members of the genus; within *A. flavipes*, each of the three recognized subspecies form distinctive monophyletic clades.

Key words: Australia, morphological, genetic, evolutionary, carnivorous marsupial, dasyurid