

Taxonomy of *Dendrolagus goodfellowi* (Macropodidae: Marsupialia) with Description of a New Subspecies

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ABSTRACT. Three subspecies of *Dendrolagus goodfellowi* can be distinguished. The nominotypical form is known from two skins and a skull collected in south-eastern New Guinea. *Dendrolagus g. buergersi* (of which *D. g. shawmayeri* is here considered a synonym) is the best represented in museum collections, and is distributed along the Papua New Guinea Central Cordillera, from Wau in the east to Mount Bubiari in the west. *Dendrolagus g. pulcherrimus* n.subsp. is known from a complete spirit specimen, one skin and two skulls collected near Sibilanga in the North Coast Ranges. It is the most distinctive of the subspecies, readily distinguished from all other forms by the broad P³ with large posterobuccal cusp, orange shoulders, head and ear, pale yellow to white tail rings, white ear margins and pinkish limbs and face. Questioning of local hunters suggests that it is already extinct through most of its original range.

FLANNERY, T.F., 1993. Taxonomy of *Dendrolagus goodfellowi* (Macropodidae: Marsupialia) with description of a new subspecies. Records of the Australian Museum 45(1): 33–42.

Dendrolagus goodfellowi is one of the smallest members of the genus *Dendrolagus*. A sight record from the Foja Mountains, Irian Jaya by Diamond (1985), and specimens from the eastern Torricelli Mountains here described as a new subspecies, suggests that it was once widespread along the New Guinean North Coastal Ranges. Along the Central Cordillera it is known only from eastern New Guinea; from Mount Bubiari (approximately 15 km east of the Papua New Guinea/Irian Jaya border) in the west to the mountains of the extreme south-east of the New Guinean mainland in the east (Flannery, 1990; Flannery & Seri, 1990a). *Dendrolagus goodfellowi* occurs in mid-montane oak forest, at elevations of between 1,000–1,200 m and 2,865

m on the Central Cordillera, but extends as low as 680 m in the North Coast Ranges. Its ecology is poorly known, but it is unusual among tree-kangaroos, and indeed among the medium-sized to large macropodids in general, in that it is not sexually dimorphic in size. This study, however, has revealed sexual dimorphism in the extent of convergence of the parietal crests on the skull. It is represented in museum collections by relatively few wild caught specimens and is declining in the wild. Fortunately, however, it breeds readily in captivity (George, 1978; Flannery, 1990).

The taxonomy of *Dendrolagus goodfellowi* Thomas, 1908 has long been confused, partly due to a dearth of specimens. For example Rothschild & Dollman (1936)