## Dendrolagus scottae n.sp. (Marsupialia: Macropodidae): a New Tree-kangaroo from Papua New Guinea

TIM F. FLANNERY<sup>1</sup> & LESTER SERI<sup>2</sup>

<sup>1</sup>Australian Museum, PO Box A285, Sydney South, NSW 2000, Australia

<sup>2</sup>Division of Wildlife, PO Box 6601, Boroko, Papua New Guinea

ABSTRACT. Dendrolagus scottae n.sp. inhabits mossy forest above 1,200 m on the North Coast Range, Papua New Guinea. Its total known habitat area is estimated at about 25-40 km². The species is gravely endangered, and its plight is symptomatic of that of many large mammals in Melanesia. Dendrolagus scottae differs from all other tree-kangaroos in its uniform blackish colouration, narrow but long dentary, shallow face, and wide P/3 with a large posterobuccal cusp. The combination of large cheekteeth but small masticatory muscles suggest that D. scottae n.sp. has a different feeding strategy to other tree-kangaroos. Dendrolagus scottae n.sp. and D. dorianus possess a number of features which are unique among near relatives. These include the presence of a greatly reduced superior lachrymal foramen, large cheekteeth, uniformly dark dorsal and ventral colouration, and a very short tail. These derived features indicate that these two species are each other's closest relatives.

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The tree-kangaroos (genus *Dendrolagus*) are the only arboreal members of the marsupial family Macropodidae, which also includes the more familiar terrestrial kangaroos and wallabies. Tree-kangaroos are restricted to the rainforests of both north-eastern Australia (two species) and New Guinea (seven species). The two Australian species and the New Guinean *Dendrolagus inustus* form a plesiomorphic group (Groves, 1982; Flannery & Szalay, 1982). *Dendrolagus inustus* is the only species previously reported from the North Coast Range. A group of specialised, highly arboreally-adapted species inhabits the New Guinean Central Cordillera and

some outlying ranges (Groves, 1982) (Fig.1). Dendrolagus dorianus is the most apomorphic member of this group. It is largely restricted to high-altitude mossy forests along the Central Cordillera, but one subspecies inhabits the Wondiwoi Peninsula of Irian Jaya. Dendrolagus dorianus, the largest previously-known species, is almost bear-like in its proportions, with fore- and hindlimbs subequal in length, a domed forehead and a very short tail. In addition to the living species, a very large extinct species (Dendrolagus noibano) is known from Pleistocene fossil remains from Chimbu Province Papua New Guinea (Flannery, Mountain & Aplin, 1983). It is dentally and