

# Contributions to the Mammalogy of New Guinea

*edited by*

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# The Last Land. A History of Mammalogy in New Guinea

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After Greenland, New Guinea is the second largest island on Earth. It is a region of exceptional biodiversity, as its eastern part alone—the independent nation of Papua New Guinea, ranks twelfth among nations for biodiversity (Williams, 2001). New Guinea’s indigenous mammalian fauna consists of four major clades: monotremes (Tachyglossidae), marsupials (Australidelphia), murids (Muridae), and bats (Microchiroptera), each of which has a differing zoogeographic history in the New Guinean region (Flannery, 1995a). New Guinea lies east of Wallace’s Line, and its northwestern and southern parts form the northern margin of the Australian Plate, while the rest of the island is largely made up of rocks of oceanic crust and island arc origin (Baldwin *et al.*, 2012). Unlike Australia, which is dry and flat, New Guinea is rain-soaked and mountainous, creating a perfect natural laboratory to investigate how faunas with a common ancestry evolve under different conditions.

To the west of New Guinea lies the geographic region known as Wallacea, which has its own distinctive fauna (Flannery, 1995b). Composed of many islands, Wallacea is varied, with some island groups, such as the Spice Islands, sharing mammal lineages with New Guinea, while others are dominated by mammalian lineages originating in Asia (see Helgen & Jones, 2023). The mammalian fauna of the Spice Islands (modern Maluku Utara, Indonesia) was first documented by Europeans as early as the mid-sixteenth century (Calaby, 1984), yet it was not until the end of the nineteenth century that a sense of the composition of the mammalian fauna of New Guinea itself was established. Indeed, the island was such a terra incognita that as late as 1875 a fictitious account of a purported expedition to New Guinea could be published and read by a credulous public, which reported encounters with man-like apes, tigers, and enormous herds of buffalo (Lawson, 1875).

The earliest account of a mammal that was clearly collected on the island of New Guinea appears to be René-Primevère Lesson’s and Prosper Garnot’s observations of *Dorcopsis veterum* Lesson & Garnot, 1826 (synonym of *Dorcopsis mülleri* (Schlegel, 1866)) made at Dorei (present day Manokwari) on Vogelkop. The two were surgeons who also worked as zoologists aboard the French vessel *Coquille*, under the command of Louis Isodore Duperrey, during its circumnavigation of the globe from 1822 to 1825. The *Coquille* reached ‘*le harvre du Dorery*’ on 26 July 1824, and the encounter with the wallaby must have occurred shortly thereafter (Duperrey, 1826).

Opportunistic and sporadic records of mammal specimens from the lowlands of New Guinea continued to be made throughout the nineteenth century. Among the most significant were those of Salomon Müller, a zoologist and botanist at the short-lived settlement of Fort Du Bus (in Triton Bay, now in Kaimana Regency, Indonesia), where in 1828 he collected specimens of *Dendrolagus inustus* and *D. ursinus*. In 1840, Müller published accounts of both species, making them the first tree-kangaroos known to western science (Müller, 1840). Other important collections, principally from the lowlands, made during the nineteenth century were those of the Russian Nicholas Mikluho Maclay in southeastern New Guinea between 1871–1880 (e.g., Miklouho-Maclay, 1884), various German collectors working in German New Guinea (e.g., Matschie, 1912), and Sir William Macleay’s 1875 Chevert Expedition to the Gulf of Papua (Macleay, 1875; Fulton, 2018).

The New Guinea highlands (areas above 1000 m) with their rich endemic mammal fauna, were not visited by a European zoologist until the Italian naturalist Luigi Maria D’Albertis reached the Arfak Mountains on Vogelkop. Singing arias from popular Italian operas to fortify himself as

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