Chapter 4

The mammal fauna of the Kaijende Highlands, Enga Province, Papua New Guinea

Kristofer M. Helgen

SUMMARY

I surveyed five sites in the Kaijende Highlands of Enga Province, Papua New Guinea between 25 August and 9 September 2005 to assess the diversity of mammals in this region. This survey confirmed the occurrence of one monotreme, 18 marsupials, nine rodents, two bats, and two non-native placental mammals (wild-living dogs and pigs). Previous surveys of the Kaijende Highlands during the 1980s recorded at least one marsupial species, three rodent species, and one bat species that were not detected in the current survey. This brings the total number of native marsupials, rodents, and bats recorded in the Kaijende Highlands to 35 and in Enga Province to 39. However estimates of inventory completeness suggest that many species remain to be detected and that the local mammal fauna is likely to be twice as diverse as currently recorded.

The Kaijende Highlands mammal fauna includes a poorly known assemblage of rare and threatened species restricted to high-altitude tree fern savanna, tussock grassland, and adjacent upper montane (elfin) forests. These include the wallaby *Thylogale calabyi*, the rodent *Rattus giluwensis*, an unnamed species of bandicoot (*Microperoryctes* sp.), and an unnamed genus and species of rodent. Important range extensions for New Guinea mammals include the third vouchered locality for Calaby's Pademelon (*Thylogale calabyi*) and the first record of the Giluwe Rat (*Rattus giluwensis*) outside of the immediate vicinity of Mt. Giluwe in Southern Highlands Province. Other species of conservation concern that occur in the Kaijende Highlands include the echidna *Zaglossus bartoni* (as documented by informants) and the tree-kangaroo *Dendrolagus dorianus* (as documented by "trophy" mandibles). Inasmuch as the Kaijende Highlands continue to support a largely intact mammal community that has not been reduced in diversity by overhunting, it is a region of great interest and importance for conservation.

INTRODUCTION

Enga Province has received less attention in surveys of mammalian biodiversity than any other province in Papua New Guinea. The paucity of mammal records for Enga Province is notable because the mammal faunas of several neighboring provinces (particularly Southern Highlands, West Sepik, Western, and Madang Provinces) have been the targets of considerable field collecting and systematic study (e.g. Morren 1989, Flannery and Seri 1990, Hyndman and Menzies 1990, Leary and Seri 1997, Flannery 1995, Bonaccorso 1998, Helgen 2007a). The few mammal specimens collected during previous survey work in Enga Province are deposited in the Papua New Guinea National Museum and Art Gallery (PNGNM) and the University of Papua New Guinea (UPNG), both in Port Moresby, and the Western Australian Museum (WAM) in Perth. Brief examinations of Enga specimens in these institutions prior to our 2005 RAP survey revealed just 18 mammal species, reinforcing the need for a more comprehensive assessment of the Province's mammal fauna.