

Rediscovery of the New Guinea Big-eared Bat *Pharotis imogene* from Central Province, Papua New Guinea

CATHERINE HUGHES^{1*}, JULIE BROKEN-BROW¹, HARRY PARNABY²,
STEVE HAMILTON³, AND LUKE K.-P. LEUNG¹

¹ School of Agriculture & Food Sciences, University of Queensland, Gatton Queensland 4343, Australia

² Australian Museum, 6 College Street, Sydney New South Wales 2010, Australia

³ PO Box 22, Dodges Ferry Tasmania 7173, Australia

catherine.hughes@uqconnect.edu.au

ABSTRACT. The New Guinea Big-eared Bat *Pharotis imogene* has not been reported since the first and only specimens were collected in 1890 and the species was presumed extinct. We document the capture of one individual of the species from the coastal district of Abau, in Central Province, Papua New Guinea, 120 km east of the only previous known locality at Kamali. We recommend that field surveys be urgently undertaken to assess the conservation status of the species.

KEYWORDS: *Pharotis*; Chiroptera; Vespertilionidae; bat conservation; endemic species; New Guinea

HUGHES, CATHERINE, JULIE BROKEN-BROW, HARRY PARNABY, STEVE HAMILTON, AND LUKE K.-P. LEUNG. 2014. Rediscovery of the New Guinea Big-eared Bat *Pharotis imogene* from Central Province, Papua New Guinea. *Records of the Australian Museum* 66(4): 225–232, <http://dx.doi.org/10.3853/j.2201-4349.66.2014.1632>

The diverse bat fauna of Papua New Guinea includes ten genera and 34 species of pteropids (“fruit bats”, Pteropidae) and an assemblage of 25 genera and 57 echolocating species (Bonaccorso, 1998). Of these 35 bat genera, the endemic, monotypic genus *Pharotis* is one of the most poorly known. The New Guinea Big-eared Bat *Pharotis imogene* Thomas, 1914 and the long-eared bats (also called big-eared bats) of the genus *Nyctophilus*, are distinguished from all other Papua New Guinea genera of the family Vespertilionidae by a combination of large ears and a simple nose-leaf immediately posterior to the nostrils (Bonaccorso, 1998). The phylogenetic relationships of *Pharotis* and *Nyctophilus*

to each other and to remaining genera of Vespertilionidae remains unclear. Both genera have been placed either in their own subfamily Nyctophilinae (e.g., by Hill & Harrison, 1987) or in the subfamily Vespertilioninae, sometimes as a distinct tribe nyctophilini or in the tribe vespertilionini (see Roehrs *et al.*, 2010).

The largest of the four species of *Nyctophilus* known from Papua New Guinea is distinguished by body size (Flannery, 1995). Previously known as the Greater Long-eared Bat *N. timoriensis* (Geoffroy, 1806), it is now recognized as a distinct endemic New Guinea species *N. shirleyi* Parnaby, 2009. The Small-eared *Nyctophilus* *N. microtis* Thomas,

* author for correspondence