



A new species of masked-owl (Aves: Strigiformes: Tytonidae) from Seram, Indonesia

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Abstract

We describe a new species of masked-owl from the lower montane forest of Seram, one of the largest islands in the Moluccas of eastern Indonesia, for which we propose the name *Tyto almae* (Seram Masked-Owl), **sp. nov.** Molecular (mitochondrial *cyt-b*) differences show that *Tyto sororcula* of Buru and Tanimbar is closely related to *T. novaehollandiae* of Australia and New Guinea (~1% uncorrected pairwise distance), and that *Tyto almae* of Seram differs by ~3% (uncorrected pairwise distance) from both of them. These differences are further corroborated by morphology and colouration. Although a photograph from Seram published in 1987 had already established the presence of a *Tyto* owl on the island, ours represents the first specimen of this species. The bird was mist-netted in wet, mossy lower montane forest at an elevation of 1,350 m. No further observations of the owl were made during four weeks of fieldwork in Seram.

Key words: Manusela, Moluccas, new taxon, owl, phylogeny

Introduction

Wallacea is the island region that forms the faunal transition between Asia and Australia. Faunal studies in this biologically unique part of the world inspired Alfred R. Wallace to write one of the earliest modern evolutionary syntheses (Wallace 1860, 1869, 1876), yet it remains one of the ornithologically least-studied regions on Earth, and some endemic Wallacean bird species have only been recorded a few times since their discovery (White & Bruce 1986; Coates & Bishop 1997).

One secretive and little known avian group from Wallacea is the masked-owl complex within the genus *Tyto*, which is closely related to the two species of Australo-Papuan sooty-owls (*Tyto tenebricosa* Gould and *T. multipunctata* Mathews; Bruce 1999; Norman *et al.* 2002; Wink *et al.* 2009). Current hypotheses about the evolutionary relationships within the masked-owls are largely based on morphology, and no comprehensive DNA studies have previously been undertaken to determine the systematic relationships within the group. The seven currently recognized species (Bruce 1999) are found (from west to east) on Sulawesi (*T. rosenbergii* Schlegel and *T. inexpectata* Schlegel), Taliabu in the Sula Islands (*T. nigrobrunnea* Neumann), the Moluccan islands of Buru and Tanimbar (*T. sororcula* Sclater), Australia and New Guinea (*T. novaehollandiae* Stephens), the island of Manus (*T. manusi* Rothschild & Hartert) and New Britain (*T. aurantia* Salvadori).

Tyto sororcula, from the south Moluccan islands of Buru (*T. s. cayelii* Hartert) and Tanimbar (*T. s. sororcula*), is sometimes considered a subspecies of the Australo-Papuan *Tyto novaehollandiae*, but differs by being smaller overall (Higgins 1999). *Tyto sororcula* is known from only four museum specimens representing these two insular subspecies. The nominate subspecies was collected on Tanimbar in 1882 and 1923 (Sclater 1883; Stresemann 1934), and *T. s. cayelii* is known only from two specimens from Buru collected in 1898 and in 1921 (Hartert 1900;