First record of the Starry Owlet-Nightjar Aegotheles tatei in Indonesian New Guinea (Papua)

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Summary: The Starry Owlet-Nightjar Aegotheles tatei, also known as Spangled, Star-spotted or Rand's Owlet-Nightjar, is one of the least known birds of New Guinea's lowland rainforests. It was recognized as a distinct species as recently as 2000 and its vocalizations were first documented in 2008. Although hitherto all observations of the species were from Papua New Guinea, its presence in Papua (Irian Jaya) was predictable since the type locality is close to the Indonesian border. A 6-day targeted search for the Starry Owlet-Nightjar was undertaken in lowland forest along the Kali Muyu river. The first Indonesian record for this species was confirmed on 6 October 2012, when a bird was spotlighted and sound recordings of the song and the alarm call were obtained. According to local people, the species may be widespread in the area.

Ringkasan: Starry Owlet-Nightjar Aegotheles tatei yang didalam bahasa Inggris juga dikenal dengan nama Spangled, Star-spotted atau Rand's Owlet-Nightjar merupakan salah satu burung hutan hujan dataran rendah di Papua New Guinea yang paling sedikit diketahui. Burung ini dianggap sebagai spesies yang berbeda semenjak tahun 2000 dan karakter suaranya pertama kali didokumentasikan tahun 2008. Meskipun sampai saat ini semua hasil observasi berasal dari Papua New Guinea tapi kehadirannya di Papua wilayah Indonesia saat itu diperkirakan ada mengingat tipe lokalitas-nya dekat dengan batas wilayah Indonesia. Target pencarian selama enam hari untuk menemukan burung ini dilaksanakan di hutan dataran rendah sepanjang sungai Muyu. Laporan terkonfirmasi Kali pertama keberadaan spesies ini untuk adalah pada Indonesia tanggal 6 Oktober 2012 saat satu individu teramati dan rekaman suaranya didapatkan.

Introduction

The Starry Owlet-Nightjar *Aegotheles tatei* was originally described as a lowland subspecies of the Feline Owlet-Nightjar *Aegotheles insignis* (Rand 1941) and accepted as such by all subsequent authors (e.g. Coates 1985; Beehler *et al.* 1986). Pratt (2000) published a detailed morphological comparison of the four available specimens of Starry Owlet-Nightjar with 158 specimens of the montane forms of Feline Owlet-Nightjar *Aegotheles insignis*. That study showed that *tatei* differed from *insignis* in its small size and at least seven plumage characters. Moreover *tatei* has the shortest tarsi of all owlet-nightjars, has stiffer feathers on the throat and auricular area, and unlike its congeners, lacks recurved filamentous tips on its facial feathers (Pratt 2000). Moreover the two species have very different habitat requirements: the Starry Owlet-Nightjar is a bird of the extreme lowland (below 100m asl) rainforest, while the Feline Owlet-Nightjar inhabits montane forest from 1,140 to 2,800 m.

Accordingly Pratt (2000) proposed treating the form *tatei* as a distinct species, with the English name of Starry Owlet-Nightjar to draw attention to the star-like spotting on the crown and back of the adults. This feature, and the white barring on the upper tail which is another characteristic of this species (Cleere 2010), are visible on the photographed bird in Plate 1. Analysis of molecular data provided further evidence for the proposed split between *A. insignis* and *A. tatei*, and their position as sister taxa (Dumbacher 2003), and this treatment is now widely accepted (Cleere 2010; Gill & Donsker 2013). This paper documents the first record of the Starry Owlet-Nightjar in Indonesian New Guinea (Papua).



Plate 1 Left: A rare photo of the Starry Owlet-Nightjar, taken along the Elevala river, Western Province, Papua New Guinea. The star-like spotting on the crown and back, and white barring on the tail, are visible. **Right:** Feline Owlet-Nightjar, Arfak Mountains, West Papua, Indonesia.

Status and distribution

Very little is known of the distribution and habitat requirements of the Starry Owlet-Nightjar. The species is known from four museum specimens collected from primary forest at two widely separated lowland sites in Papua New Guinea (PNG) and a handful of recent observations. The type locality is 8km below Palmer Junction (approx. 5°45'0"S; 141°31'59"E) situated along the headwaters of the Upper Fly river in east-central New Guinea. The other locality, nearly 1,000km from Palmer Junction, is in the Amazon Bay region in southeast PNG (Pratt 2000). All known records are from lowland rainforest (at an elevation of 30-80 m) where rivers emerge from the foothills of the central cordillera. The species is considered as "either rare or much overlooked" (Holyoak 1999). In its assessment of the threat level of this species, Birdlife International lists the species as "Data Deficient" and mentions that "if *tatei* proves to be absent from many suitable sites, it may be classified as threatened on the basis of a highly restricted range" (Birdlife 2013). Birdlife International also mentions that "given the difficulties of surveying owlet-nightjars, especially given that the call of *tatei* is unknown, its status is currently uncertain". In August 2008 Frank Lambert recorded for the first time the territorial call (XC24620) and the alarm call (XC24621) of Starry Owlet-Nightjar. These recordings confirmed the distinctiveness of the species because its territorial call differs significantly from that of the Feline Owlet-Nightjar and all other owlet-nightjar species. These recordings were made close to the type locality in an area of lowland forest along the Elevala river (c. 6°05'S, 141°27'E; 45m asl) in the vicinity of Ekame Lodge, near Kiunga town in the Western Province of PNG. Since then, several other birding groups have observed it in the same area (e.g. Hornbuckle 2009; Banwell 2010).

The Indonesian side of this vast lowland forest region however remains largely unexplored due to its remoteness and general lack of facilities (such as transport, accommodation). This motivated the author to explore some forest areas in Indonesia that would offer comparable birding opportunities as the forests of the Kiunga region in PNG. After reporting at the police station and the forest department offices in the town of Tanah Merah and obtaining the required *surat jalan* permits, I arranged for a driver and a motorbike to transport me to various lowland and hill forest areas along the road (under construction) from Tanah Merah town to Mindiptana (5°55'S, 140°43'E) and Waropko (5°36'S, 140°50'E) (Fig. 1). From Mindiptana I then travelled to the village of Kanggup (c. 6°10'S, 140°53'E) via a network of logging roads and with the consent and help of the village head, based myself in a small settlement along the Kali Muyu river. The small settlement was located next to a large base of Korindo, a Korean company which manages a vast logging concession in the region.

From 5 to 10 October 2012, I explored the rainforests near Kanggup village, in the Sesnuk subdistrict of Boven Digoel District. This site lies at an elevation of c. 40m asl, and consists of selectively logged lowland rainforest and patches of primary forest. Rivers of varying sizes traverse the area. Parts of the alluvial forests are mixed with sago swamps and large areas of the forest are seasonally inundated. Many of the key birds sought by ornithologists in PNG were observed, such as Little Paradise Kingfisher *Tanysiptera hydrocharis*, New Guinea Flightless Rail *Megacrex inepta*, Southern Crowned Pigeon *Goura scheepmakeri*, Thick-billed Ground Pigeon *Trugon terrestris* and Southern Cassowary *Casuarius casuarius*. King Bird of Paradise *Cicinnurus regius*, Greater Bird of Paradise *Paradisaea apoda* and Twelvewired Bird of Paradise *Seleucidis melanoleuca* were common in the alluvial forests. Crocodiles, Cassowaries and Crowned Pigeons were seen daily along the riverbanks indicating that hunting pressure on animals at that time was low.

First observation of the Starry Owlet-Nightjar in Indonesia

Upon playing Lambert's recording of the Starry Owlet-Nightjar, one of my guides – Hendrikus Kemon – stated without hesitation that he knew the call and that this was

a nightbird to be found in the forests along Kali Muyu river. We therefore organized a 4 day trip and paddled in small canoes for an estimated 7-8km up the river from Kanggup, using the small camps of fishermen along the Kali Muyu river for shelter. On 6 October 2012, I heard and sound-recorded three different individual Starry Owlet-Nightjars in a flat area of selectively logged rainforest along an abandoned logging road some 5km up river from the Korindo logging camp. The best sound recordings were uploaded to <u>http://www.xeno-canto.org/</u> as XC154295 and XC154297.

The birds started calling spontaneously some 30 min after sunset. The territorial calls sounded very similar to the recordings made by Lambert in the Western Province of PNG (Fig. 2). When I used playback in an attempt to attract the birds and visually observe them, I noted that the vocal response was very limited. Typically, the birds called back only once or twice and then kept silent for prolonged periods of 15 minutes or more. I soon realized that while the birds did not respond to playback with calls, they were attracted to the source of the calls. On two occasions, my guide noted how a bird flew in after playback and perched in dense vegetation at a height of approximately 3m and less than 10m distant from us. After taping one bird's territorial call and playing it back one bird landed on its perch, and immediately bobbed its whole body up and down. On that occasion, I also recorded the alarm call, which again sounded very similar to a recording made by Lambert (Fig. 3).

My brief visual observations allowed me to see a medium-sized, brownish looking bird with a rather long tail and big eyes, perched upright. The bird was hiding in rather dense and thorny vegetation so I was unable to discern details of its plumage pattern or photograph it. The bird seemed very wary and flushed as soon as I accidentally made a noise while maneuvering myself into a position to obtain a better view. Thus while I was able to confirm that the bird was an Owlet-Nightjar from this brief view, my identification of its species identity was based on its vocalisations. Several more birds were heard in the same area during the following days.

My own observations and the information received from guides indicate that the Starry Owlet-Nightjar may be reasonably common in the extreme lowland rainforests along the Kali Muyu river, even in areas that have been selectively logged. On the other hand, it is worth noting that I failed to locate the species both in the more open swamp forests around Tanah Merah city (c. 30m asl) and in the lowland and hill forests (from 67 to 130m asl) further north around the villages of Mindiptana and Waropko, where I actively searched for nightbirds on several nights. While the Starry Owlet-Nighjar coexists with Wallace's Owlet-Nightjar *Aegotheles wallacii* in the Elevala river area in PNG, I was unable to find the latter species in the flat lowlands of the Kanggup area, although I did locate it in the hilly lowlands between Mindiptana and Waropko. The ecology of both species remains very poorly known and systematic surveys are required to better assess the status of these enigmatic birds.



Fig 1. Map of locations mentioned in the text.

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References

- Banwell, A. 2010. *Papua New Guinea (trip report)*, 7th June till 11th July 2010. http://www.surfbirds.com/trip_report.php?id=1890
- Beehler, B.M., Pratt, T.K. & D.A. Zimmerman. 1986. *The Birds of New Guinea*. Princeton University Press, Princeton, New Jersey.
- BirdLife International. 2013. Species factsheet: *Aegotheles tatei*. (Accessed on 4 November 2013 from http://www.birdlife.org/datazone/speciesfactsheet.php?id=30031)
- Cleere, N. 2010. *Nightjars, Potoos, Frogmouths, Oilbird, and Owlet-nightjars of the World.* Princeton University Press, Princeton, New Jersey.
- Coates, B.J. 1985. *The Birds of Papua New Guinea*, Vol. 1. Non-passerines. Dove Publications, Alderley, Queensland.
- Dumbacher, J.P., Pratt, T.K. & Fleischer, R.C. 2003. Phylogeny of the owlet-nightjars (Aves:Aegothelidae) based on mitochondrial DNA sequence. Molecular Phylogenetics and Evolution. 29. 540-549.
- Gill, F. & D. Donsker. eds. 2013. *IOC World Bird Names (v 3.4)*. Available at <u>http://www.worldbirdnames.org</u> [Accessed March 2013].
- Holyoak, D.T. 1999. Family Aegothelidae (Owlet-Nightjars). Pp 252-266 in Del Hoyo, J., Elliot, A. & Sargatal J. (eds.). *Handbook of the Birds of the World. Vol. 5. Barn Owls to Hummingbirds*. Lynx editions. Barcelona.

Hornbuckle, J. 2009. *Papua New Guinea (trip report).* 21st June to 11th July 2009. <u>http://www.surfbirds.com/trip_report.php?id=1695</u>

Lambert, F. (territorial call of Spangled Owlet-Nightjar). http://www.xeno-canto.org/24620

Lambert, F. (alarm call of Spangled Owlet-Nightjar). http://www.xeno-canto.org/24621.

- Pratt, T.K. 2000. Evidence for a previously unrecognized species of Owlet-nightjar. *The Auk* 117 (1): 1-11.
- Rand, A.L. 1941 Results of the Archbold expeditions. No. 32. New and interesting birds from New Guinea. *American Museum Novitates* No. 1102.
- Ranft, R, N. & N. Cleere. 1998. A sound guide to the Nightjars and related nightbirds. Yale University Press.



Fig 2. Sonograms of territorial calls of Starry Owlet-Nightjar along the Elevala river in Western Province, PNG (above; XC24620 by F. Lambert) compared to those along the Kali Muyu river, Papua (below; XC154295 by author).



Fig 3. Alarm calls of Starry Owlet-Nightjar along Elevala river, PNG (above; XC24621 by F. Lambert), compared with those from Kanggup area, Papua (below; XC154297 by author).