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REDISCOVERY OF HEINRICH'S NIGHTJAR Eurostopodus diabolicus

by K. David Bishop & Jared M. Diamond

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Sulawesi, the largest island of Wallacea, Indonesia, supports a rich and distinctive avifauna that includes 10 endemic genera and 41 species (White & Bruce 1986, Coates & Bishop in press). Among the least known of these endemics is Heinrich's Nightjar *Eurostopodus diabolicus* (Caprimulgidae) (or Diabolical and/or Satanic Nightjar in some recent literature), known previously only from the unique type (Stresemann 1931, 1940). We now report its rediscovery and field observations.

The type specimen, currently located in the American Museum of Natural History in New York (A.M.N.H.), is an adult female collected by Gerd Heinrich on 5 March 1931 at an elevation of 250 m near Kumarsot village on the slopes of Gunung Klabat, Minahassa district. North Sulawesi G. Klabat, with a summit elevation of 1995 m, is the highest mountain in the region and was forested at the time of Heinrich's visit, but the forest today has been cleared and replaced with coconut plantations up to at least 1000 m (K.D.B. pers. obs.). Heinrich summarised his field observations as follows: "Unfortunately, I can report virtually nothing about this newly discovered species. The sole specimen that I collected was flushed up by chance from a rattan thicket, in forest near Kumarsot in the Minahassa district" (Stresemann 1940, p. 427).

Heinrich was an experienced, skilled and successful collector and spent nearly two years collecting on Sulawesi but had no further encounters with *E. diabolicus*. Several subsequent smaller collections on Sulawesi failed to include it. An increasing number of bird watchers visiting Sulawesi since around 1981 has recorded nearly all of Sulawesi's resident species (exceptions include Red backed Buttonquail *Turnix maculosa* and Slaty legged Crake *Rallina eurizonoides* and Sulawesi Woodcock *Scolopax celebensis)*, and naturally *E. diabolicus* has been the subject of particular attention. Holmes & Wood (1980) and MacKinnon (in White & Bruce 1986) speculated that unidentified calls heard at night could come from this species, and King (1994) mentioned a possible but unconfirmed sighting.

During a recent visit to Lore Lindu National Park, Central Sulawesi, we observed single individuals of what was undoubtedly *E. diabolicus* on four occasions, at two nearby forested sites, between 13 and 16 May 1996. The first observation was at 18.15 18.25 h at 1000 m within an extensive area of primary hill forest on the eastern flanks of Gunung Nokilalaki. The other three observations were at a site approximately 10 km from the first site, at 1735 m along a ridge in primary montane forest that had been selectively logged, on the western slopes of Gunung Rorekatimbu, which forms part of the same massif as Gunung Nokilalaki. The three latter observations, all made within 20 m of each other, and presumably all of the same individual, were at 18.20 on 15 May, 05.30 on 16 May and 18.20 on 16 May. All observations fell between 15 and 30 minutes before sunrise or after sunset. Our observations were thus made in dim light, or in darknss with the bird illuminated by our spotlight, or with the bird perched on the road and illuminated at a distance of only 3 m from us. At both sites the road

was about 8 m wide and abutted immediately on forest, whose trees (20 25 m high) arched almost completely over the road at the first site.

Each of the four sightings was of what looked to be a smallish nightjar lacking the ear tufts of its congeners Great eared Nightjar *E. macrotis* and Malaysian Eared Nightjar *E. temminckii*. In flight it sailed on round, rather short wings held flat, with occasional bouts of wing fluttering. The tail was square and short. It flew at heights of 1 35 m, mainly 5 15m, close to the trees' foliage. The eyes reflected yellow in our spotlight.

Our first impression was of an entirely dark bird, lacking the white wing and/or tail patches and pale crown of some other caprimulgid species of the Oriental and Autralian regions. When illuminated head on from nearby, the bird's sole distinctive feature was a narrow whitish band, edged with rusty brown, across the entire width of the throat. The underparts appeared dark with fine specklings or markings. We once detected a possible hint of a small pale patch towards the tip of the outer primaries in flight. These plumage details fit the description of the unique type which K.D.B. had previously examined at the A.M.N.H.

The sole vocalisation heard in association with the sightings were two renditions of a fast series of weak notes initially ascending and then descending, heard just before our May 15 sighting. As soon as we heard the call, we guessed it to be some sort of nightjar, and then we saw *E. diabolicus* in flight. However, we did not actually observe the bird making that call, nor did we hear the call again.

We have had experience of all the nightjar species of the Oriental and Australian regions. None fits our sightings other than *E. diabolicus*. In particular, the three other resident nightjar species of Sulawesi (no migrant species have been recorded) are very different. *E. macrotis* is much larger and has conspicuous ear tufts, a complete pale collar, pale crown, and harrier like flight. Savannah Nightjar *Caprimulgus affinis* lives in open country and has conspicuous pale wing patches, pale appearing underparts, and (male only) white outer tail feathers. Sulawesi Nightjar *C. celebensis* (in the older literature treated as a subspecies of the widespread Large tailed Nightjar *C. macrurus*) has white wing and tail patches, a broad white throat, and a pale grey superciliary and intersperses long glides (wings held in a steep dihedral) with deep stiff winged flaps. All three have distinctive calls, quite unlike the call we heard in possible association with *E. diabolicus*.

The genus *Eurostopodus* consists of six other species, falling into three species pairs. We already described *E. macrotis*, a forest edge species distributed from India to Sulawesi and the Philippines; *E. temminckii* of the Malay Peninsula, Borneo, and Sumatra resembles a smaller version of *E. macrotis*. Spotted Nightjar *E. argus* (formerly *E. guttatus*) and White throated Nightjar *E. mystacalis* (formerly *E. albogularis*) have virtually complimentary geographic distributions within Australia and are very smilar to each other in their white throat and wing patches and dry woodland habitat. Papuan Nightjar *E. papuensis* of New Guinea lowland forest and Mountain Nightjar *E. archboldi* of New Guinea montane forest in turn resemble each other in their white throat bar and lack of bold other marks. *E. Diabolicus* is most similar in plumage, as well as in habitat, to New Guinea's two forest nightjar species, which may be its closest relatives.

Collar *et al.* (1994) speculated that *E. diabolicus* may be threatened by widespread deforestation of the Minahassa Peninsula. Our observations give cause for more optimism about its status, because of several considerations. First, *E. diabolicus* does still exist, 66 years after the first (and last) record of it. Second, its known geographic range is now greatly expanded, from the Minahassa

Peninsula of far northern Sulawesi to the mountains of north Central Sulawesi, a distance of 750 km overland from Minahassa. Third, the newly discovered population is in one of the largest expanses of undisturbed forest remaining on Sulawesi, some of it protected as a national park.

Finally, comparison with the other nightjar species of wet forest in the Oriental and Australian regions is instructive. The Oriental region has about nine resident species (*Eurostopodus macrotis, E. temminckii, Caprimulgus affinis, C. celebensis, C. macrurus.* Grey Nightjar C. *indicus,* Indian Nightjar C. *asiaticus,* Jerdon's Nightjar C. *atripennis,* and Philippine Nightjar C. *manillensis),* the Australian region three resident species (*E. argus, E. mystacalis* and *E. macrurus),* of open country, forest edge, or dry woodland caprimulgids. All of these species except C. *celebensis* are frequently observed, vocal, and considered reasonably common. In contrast, the three species of the wet forest interior of the Oriental region (*E. diabolicus,* Bonaparte's Nightjar C *concrefus,* and Salvadori's Nightjar C. *pulchellus)* and the two of the Australian region (*E. papuensis* and *E. archboldi)* are all rarely recorded and call infrequently, or their vocalisations remain unidentified, even though widely scattered records indicate substantial geographic ranges. For instance, in the combined years of field observed *E. papuensis* and *E. archboldi* a few times each. Hence *E. diabolicus* and all these other wet forest nightjars may just be difficult to detect and usually silent, rather than rare.

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Addresses

K. David Bishop, 'Semioptera', P.O. Box 68, Kincumber, NSW 2251, Australia¹.

Jared M. Diamond, University of California Medical School, Los Angeles, USA.

¹Address for correspondence and reprints.