

Photographically confirmed sighting of the New Britain Goshawk *Tachyspiza princeps*

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Abstract. An adult of the endemic, globally threatened (Vulnerable) New Britain Goshawk *Tachyspiza princeps* was photographed in the rainforest at Pomio, in the Nakanai Ranges of New Britain, Bismarck Archipelago, Papua New Guinea, on 16 March 2024. This represents the first photograph and only so-confirmed record of the species in 55 years. The forest habitat of this species is threatened by clearing, logging and mining.

Introduction

The New Britain Goshawk *Tachyspiza princeps* (Catanach *et al.* 2025) is endemic to the island of New Britain in the Bismarck Archipelago, Papua New Guinea, where it is known from four specimens and few recent sightings (BirdLife International 2025). The type series of three specimens came from an elevation of between 750 and 1100 m above sea level (asl) above Wide Bay (East New Britain), and a single male from 1150 m on Mt Talawe (West New Britain) (Mayr 1934; Diamond 1971). There was a probable sighting in December 1979 at 1100 m asl in the Nakanai Mountains, West New Britain, and one was seen feeding on a Black-backed Thrush *Zoothera talaseae* trapped in a mist-net on Mt Talawe at 1425 m asl (Diamond 1971; Bishop 1983). Although this goshawk appears to be rare and primarily confined to mountains, an adult was reported in September 1996 ~50 m asl just south of Walindi, in roadside scrub at the interface of secondary forest and cattle pasture, ~1 km inland from the northern coast of West New Britain (Bishop & Jones 2001). There are two mapped records in eBird (eBird 2025), from near Walindi and in the Nakanai Mountains, neither of which had visual documentation although supporting notes exist (see below).

The distribution of this goshawk and its habitats were summarised as hill and montane primary rainforest at 760–1425 and up to 1600 m asl, and with a single record at 200 m, and occasional records from lowland forest, including unconfirmed records down to sea level (Ferguson-Lees & Christie 2001; Dutson 2011; Gregory 2017; Debus *et al.* 2024). Davis *et al.* (2018) reported five survey sightings of the goshawk from the late 1990s and 2010 in old-growth hill forest (300–950 m asl) and (once) in moderately degraded montane forest (700–1400 m asl). However, records mainly in hill and montane forest may also be attributed to habitat degradation and loss in the lowlands.

The New Britain Goshawk is listed as Vulnerable under the global IUCN (2023) Red List of Threatened Species (BirdLife International 2024), and is threatened by habitat loss and degradation, especially of lowland forests extensively logged and cleared for oil palm *Elaeis* sp. plantations; and by expansion of logging, mining and infrastructure in upland forests (Buchanan *et al.* 2008; Davis *et al.* 2018; Debus *et al.* 2024). The last record of

the New Britain Goshawk, as verified by a specimen, was that of Diamond (1971), collected in 1969 and held at the American Museum of Natural History. In the absence of recent photographic, audio or video records, the goshawk was identified as a 'lost species' (Rutt *et al.* 2024). Here, I record a sighting, accompanied by a photograph, being the first record supported by visual evidence of the species in 55 years.

Observation

In March 2024, I was on a scoping trip of 2 weeks for the World Wildlife Fund (WWF) in Pomio (Nakanai Ranges, eastern New Britain), and on one morning was guided through the forest by three hunters and members of the local community. The purpose was to document and photograph flora and fauna. I photographed several bird species, including a New Britain Goshawk on 16 March, in the rainforest at ~850–1000 m elevation, without knowing its identity or significance at the time. The photograph of the hawk, perched in an emergent tree (Figures 1–2), was confirmed as a New Britain Goshawk first by the community on iNaturalist (<https://www.inaturalist.org/observations/204361575>), a citizen-science platform, and its status as a lost species was confirmed by the Search for Lost Birds (2024). The photograph appears to be the first of a New Britain Goshawk in life.

Diagnosis

The hawk was unmistakably an adult New Britain Goshawk, showing the unique (on New Britain) and characteristic plumage of grey, unbarred upperparts with darker wingtips, white underparts, and striking orange-red eyes and orange-yellow cere connected by orange-yellow loreal skin. The eyes and bare facial skin in life are brighter than in published illustrations in Ferguson-Lees & Christie (2001), Dutson (2011) and Gregory (2017) that were based on museum specimens, whose bare parts might have faded and shrunk. Its build is also characteristic, being robust with short wings and (for a goshawk) fairly short tail. The legs and feet are not visible in the photograph.

The New Britain Goshawk is a rather large goshawk: 38–45 cm in length, with a wingspan of 75–86 cm, and



Figure 1. Adult New Britain Goshawk, Pomio, New Britain, 16 March 2024. Photo: Tom Vierus/WWF-Papua New Guinea

robust legs and feet, and is thus comparable to a Brown Goshawk *Tachyspiza fasciata* or Variable Goshawk *T. hiogaster*, being more the shape of the latter (Ferguson-Lees & Christie 2001; Dutson 2011; Gregory 2017). Of the other adult raptors on New Britain, all can be ruled out on the following basis (cf. Ferguson-Lees & Christie 2001; Dutson 2011; Gregory 2017; Debus *et al.* 2024).

1. Meyer's Goshawk *Astur meyerianus*: larger (length 43–53 cm, wingspan 85–105 cm), black above and white below with fine ventral barring, barred tail; or (dark morph) all black with a barred tail.
2. Variable Goshawk *T. h. dampieri* (New Britain subspecies): similar (slightly smaller) in size, shape and dorsal plumage though paler, with pale-rufous underparts, less strikingly coloured bare parts.
3. Slaty-mantled Goshawk *T. luteoschistacea*: smaller (length 28–36 cm, wingspan 55–65 cm), darker dorsally, underparts with buff wash and faint grey barring.
4. New Britain Sparrowhawk *T. brachyura*: smaller (length 27–34 cm, wingspan 50–62 cm), darker dorsally with rufous collar, pale grey ventrally, red eyes.

The eBird records

Supporting notes for the two eBird records of the New Britain Goshawk are here placed on public record, courtesy of David Bishop (eBird reviewer for Papua New Guinea).

1. Charles Davies, 2 October 2023, at 1000 m asl at a 'lower' camp in the Nakanai Mountains:

Almost at lower camp, walking from upper camp in moderate rain. [The hawk] flew in and perched for a few seconds close to a trunk in the subcanopy/midstorey, then continued in opposite direction. Smart, mid-grey back and head with bright orange cere and legs, similar to Grey-headed Goshawk [*T. poliocephala*]. Fairly large (my first impression – based on size – was Brahminy Kite [*Haliastur indus*]). Silent. [<https://ebird.org/checklist/S151381576>]



Figure 2. Illustration of the New Britain Goshawk as seen at Pomio, including the orange-yellow legs and feet not captured photographically in Figure 1. Artwork: Ilusea Studio © Tom Vierus

2. Chris Eastwood, 26 September 1998, Kulu River area (essentially flat lowlands in the midst of vast oil palm estates and remnant patches/strips of lowland forest, largely along rivers):

The bird was seen well if briefly when it flew in and perched in a bare tree for a few seconds; undoubtedly a Grey-headed Goshawk type – all grey with red legs; [another observer present] also saw a red cere. [<https://ebird.org/checklist/S67756629>]

Some of the sightings reviewed herein raise questions about the New Britain Goshawk's true altitudinal range, habitat preferences and ability to live in remnants (e.g. riparian) of lowland forest.

Discussion

The present sighting and photograph confirm the New Britain Goshawk's ongoing presence in the upland rainforests of New Britain, and provide insights into how the species appears in life. According to Oscar Pileng (locally born WWF Pomio-based officer), local residents and leaders in the area where the goshawk was photographed said that this species is rare in Pomio and is locally referred to as 'keango' or 'kulingapa'. Some confirmed that it is not found in coastal areas but only in the hinterlands of Pomio, and is rarely seen. It must be noted, however, that several raptor species occur around Pomio, including the visually similar goshawks mentioned opposite, and misidentification is possible. Persecution of hawks may also be an issue. According to a WWF colleague (pers. comm.), villagers had recently killed two goshawks for suspected damage to their interests, presumably poultry.

The juvenile plumage of the New Britain Goshawk has not been formally described, although Bishop (1983) detailed a close-range (3 m) sighting of what was probably a juvenile. Described as large, its ventral barring would rule out a juvenile Meyer's Goshawk (which is streaked ventrally), and its size would rule out juveniles of the smaller endemic

New Britain hawks (sources as above). Its plumage was described as similar to the juvenile of the allospecific but smaller Grey-headed Goshawk of mainland New Guinea. Clearly, there is much to be learned about the New Britain Goshawk's biology and ecology.

The Nakanai Ranges are a rugged, biodiverse system of forested mountains that form a section of the Sublime Karsts of Papua New Guinea, a proposed UNESCO World Heritage site (UNESCO 2006). WWF is collaborating with traditional Indigenous communities, including in the Pomio region, to develop a comprehensive program of community-based conservation, by supporting local stewardship to safeguard the future of such biodiversity hotspots. Protected habitat and local involvement would facilitate further study of the New Britain Goshawk and other (and possibly 'new') fauna species in a region lacking biodiversity studies.

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