

## SHORT NOTE

# Observations of birds on Niue, South Pacific (2014 & 2022), with a new locality record for brown booby (*Sula leucogaster*) and sooty tern (*Onychoprion fuscatus*)

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Observations of birds on Niue, South Pacific, commenced with the publication of a comprehensive checklist in *Notornis* by Wodzicki (1971). Other reports, including checklists by Child (1982), Gibb *et al.* (1989), and Powlesland *et al.* (2000). Child (1982) reported that the fauna of living birds is 28 species, and Powlesland *et al.* (2000) confirmed that the living bird fauna comprises 28 species, of which 18 were seen during their study.

The National Museum of New Zealand published a report on the birdlife of Niue (Kinsky & Yaldwin 1981), with specific reviews on the status of the white-tailed tropic bird (*Phaethon lepturus*) and Pacific golden plover (*Pluvialis fulva*). Powlesland *et al.* (2006) reviewed the status of birds and rodents on Niue following the destructive Cyclone Heta in 2004. These authors also reviewed whether a decline of the Pacific pigeon (*Ducula pacifica*) population during 1994–2004 was attributed to Cyclone Heta or was caused by excessive hunting by people (Powlesland *et al.* 2008). More recently,

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Butler *et al.* (2012) comprehensively reviewed the status of birds, peka (Tongan flying fox, *Pteropus tonganus*), and reptiles in a report to the Pacific Regional Environment Programme and the Niue Government in 2012.

Niue is an elevated, mostly flat atoll, 26,100 ha in area, in the south-central Pacific Ocean (19.1°S, 169.9°W). It is 430 km east of Neiafu, Tonga, 1,070 km west of Rarotonga, Cook Islands, 600 km south-east of Apia, Samoa, and 2,350 km north-east of East Cape, New Zealand. The elevation of Niue is mostly 20–60 m a.s.l., with a maximum altitude of 69 m. a.s.l. Much of the shoreline is edged with steep rocky cliffs above a narrow wave-swept reef.

Short visits to Niue were made by Ingrid Hutzler (IH) in 2014 (9–17 May), and by Ian Armitage (IA) in 2022 (5–11 November). These visits, however short, enabled reliable observations to be made on this remote tropical island that is not often visited by observers of birds. This short note summarises records made by the authors and adds to the knowledge documented in earlier publications.

Most observations were made at spot positions and during walking counts of between 5- and 60-minutes duration through forests, bush gardens, villages, and on coastal reef habitats, and by viewing birds over reefs and the sea from coastal cliffs. Other counts on land were made whilst travelling slowly by car and by bicycle. Observations were also made by IA during one early morning offshore (pelagic) trip. Birds were observed using binoculars (10 x 42) and by watching without optical aids.

Records of the time for counts are a measure of the effort involved in making observations. Counts by IH were made for 940 minutes (coastal & sea sites 630 minutes, land sites 310 minutes). Counts by IA were made for 660 minutes (coastal & sea sites 250 minutes, land sites 410 minutes). No attempt has been made to separate the time spent observing each species.

Listing of bird species here (Table 1) follows the arrangement of orders shown in the *Checklist of the Birds of New Zealand (5<sup>th</sup> Edition)*, (Checklist Committee 2022). For some species the taxonomic nomenclature also follows the 2022 checklist, for others the taxonomic nomenclature used by Powlesland *et al.* (2000) is applied. Most localities are the names of Niuean villages.

We can confirm from our observations (Table 1) that the most common birds reported previously continue to be present on Niue. IH observed 18 species, IA observed 16 species.

Four brown booby (*Sula leucogaster*), probably adults, were observed by IH flying above the sea near the coastline of Tamakautoga village. Of these, three were near Ana'ana Point (12 May 2014), and one was near Matavai Resort (14 May 2014). Both

observations were in mid-morning and by using binoculars.

A pair of adult sooty terns (*Onychoprion fuscatus*) were observed by IA at Makefu Village in the early morning of 10 November 2022. The birds were observed for 4–5 minutes by eye and using binoculars at a range of 30–50 metres. Both birds were flying slowly, even hovering at times, over scrubby vegetation on the edge of a cliff.

In comparing the bird fauna on Niue with four other South Pacific Island groups Gibb *et al.* (1989) reports that the brown booby and sooty tern occur on Tonga, Samoa, southern Cook Islands, and Fiji but not on Niue. Observations reported by the authors are the first published records of brown booby and sooty tern on Niue.

Disappointingly, one species the authors did not observe was the blue-crowned lorikeet (*Vini australis*). Powlesland *et al.* (2000) recorded this species only occasionally in 1994–95. Child (1982) noted that “the locals believe them to be in decline”. This attractive species might continue to be present on Niue but probably in low numbers.

Numbers of birds of each species were recorded in the villages or other localities where they were observed. For sites that were visited more than once, only the highest number of individuals (of each species) was recorded.

Comparison of observations made in 2014 and 2022 (Table 1) suggest that the purple-capped fruit dove (*Ptilinopus porphyraceus*), banded rail (*Gallirallus philippensis*), white-tailed tropic bird, and reef heron (*Egretta sacra*) were less numerous in 2022 than in 2014 (Butler *et al.* 2012). This might be a seasonal effect, or a locality effect (more or less sampling effort in different localities between 2014 and 2022), or it might reflect a real decline in populations for these species from 2014. In the short time available the authors were unable to study this surprising finding that deserves further examination.

Feral chickens (*Gallus gallus*) are not reported here but are widespread and common in most localities. This species continues to be the only introduced bird on Niue.

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Table 1. Records of observations of birds on Niue made in May 2014 (IH – Ingrid Hutzler) and November 2022 (IA – Ian Armitage).

Species	May 2014 (IH)	Nov 2022 (IA)	Comments
Pacific pigeon ( <i>Ducula pacifica</i> )	37 (28 Vinivini Track in Huvalu Forest, 9 Fue)	10 (3 Makefu, 3 Hikutavake, 2 Hakupu, 2 Vinivini Track in Huvalu Forest)	Common in forested habitats; more often heard than seen; the counts are conservative & likely underestimate true numbers present
Purple-capped fruit dove ( <i>Ptilinopus porphyraecus</i> )	58 (42 Vinivini Track in Huvalu Forest, 12 Fue, 3 Alofi, 1 Tamakautoga)	6 (6 Makefu)	A strikingly attractive species, mostly seen & heard in forested sites
Long-tailed cuckoo ( <i>Eudynamis taitensis</i> )	1 (1 Hakupu)	-	One bird seen flying across a road
White-rumped swiftlet ( <i>Aerodramus spodiopygius</i> )	4 (4 Vinivini Track in Huvalu Forest)	13 (8 Makefu, 5 Lakepa)	Distribution is patchy; birds were observed in small flocks
Banded rail ( <i>Gallinallus philippensis</i> )	37 (11 Hanan Airport, 5 Hakupu, 5 Hikutavake, 4 Alofi, 4 Liku, 3 Mutalau, 3 Tamakautoga, 1 Namukulu, 1 Vinivini Track in Huvalu Forest)	3 (1 Niue Fooo Hospital Alofi, 1 Toi, 1 Tuapa)	Mostly observed running across roads to and from dense fern vegetation
South-west Pacific swamphen ( <i>Porphyrio melanotus</i> )	3 (3 Hanan Airport)	1 (1 near Alofi)	Birds tend to avoid open sites, preferring cover
Pacific golden plover ( <i>Pluvialis fulva</i> )	40 (16 Alofi, 9 Liku, 6 Mutalau, 4 Makefu, 4 Namukulu, 1 Hakupu,)	99+ (57+ Hanan Airport runway & taxiway on 11/11/22, 8 Makefu, 7 Tuapa, 7 Liku, 7 Toi, 5 Veli, 3 Alofi, 3 Hakupu, 2 Hikutavake).	Common & widely distributed in November, mostly on open grassy spaces in villages; the counts at the airport are conservative & underestimate true numbers present
Wandering tattler ( <i>Tringa incana</i> )	2 (1 Lakepa, 1 Tamakautoga)	4 (4 Makefu)	Flying along and/or resting/feeding on reefs
Sanderling ( <i>Calidris alba</i> )	2 (2 Namukulu)	-	Feeding on grassy sites & reefs
Brown noddy ( <i>Anous stolidus</i> )	48 (20 Alofi, 15 Tamakautoga, 7 Vinivini Track in Huvalu Forest, 3 Fue, 3 Lakepa)	33 (16 Makefu, 8 Lakepa, 4 Liku, 1 Toi, 2 Vinivini Track in Huvalu Forest, 2 at sea near Alofi)	Usually single birds, or in pairs flying between forests & the sea
White tern ( <i>Gygis alba</i> )	291 (150 Tamakautoga, 101 Alofi, 24 Vinivini Track in Huvalu Forest, 6 Fue, 6 Mutalau, 4 Lakepa)	66 (44 Makefu, 8 Veli, 4 Alofi, 4 Vinivini Track in Huvalu Forest, 4 at sea near Avatele, 2 Tuapa)	Common & widespread, often in pairs or up to 8, flying between forests & the sea. Birds were often seen flying inland carrying small fish in the bill; the counts at Alofi, Tamakautoga & Makefu are conservative & underestimate true numbers present
Sooty tern ( <i>Onychoprion fuscatus</i> )	-	2 (2 Makefu [near Anaiki Motel])	1 adult pair observed for 4–5 minutes on 10 November 2022 flying above a forested cliff edge

**Table 1.** Records of observations of birds on Niue made in May 2014 (IH – Ingrid Hutzler) and November 2022 (IA – Ian Armitage).

<b>Species</b>	<b>May 2014 (IH)</b>	<b>Nov 2022 (IA)</b>	<b>Comments</b>
White-tailed tropicbird ( <i>Phaethon lepturus</i> )	25 (15 Vinivini Track in Huvalu Forest, 4 Fue, 3 Alofi, 1 Lakepa, 1 Mutalau, 1 Tamakautoga)	3 (2 Makefu, 1 Veli, 1 Vinivini Track in Huvalu Forest)	Mostly single birds were observed flying from the sea or within & near Huvalu Forest
Great frigatebird ( <i>Fregata minor</i> )	7 (2 Hanan Airport, 2 Hakupu, 2 Uani, 1 Tamakautoga)	3 (1 Makefu, 1 Liku, 1 Veli)	The birds were in flight (soaring) over the sea & land
Brown Booby ( <i>Sula leucogaster</i> )	4 (4 Tamakautoga)	-	Birds were over the sea
Reef heron ( <i>Egretta sacra</i> ) - grey	7 (2 Avatele, 2 Mutalau, 1 Hakupu, 1 Namukulu, 1 Tamakautoga)	7 (2 Alofi, 3 Makefu, 1 Hakupu, 1 Vaiea)	Birds were seen singly on reefs & in village gardens
Reef heron ( <i>Egretta sacra</i> ) - white	15 (6 Avatele, 3 Hakupu, 2 Alofi, 2 Lakepa, 2 Tamakautoga)	-	Observed on reefs & at inland habitats
Barn owl ( <i>Tyto alba</i> )	-	1 (1 Makefu)	One bird seen flying amongst trees & houses on evening of 5 November 2022
Polynesian triller ( <i>Lalage maculosa</i> )	51 (31 Vinivini Track in Huvalu Forest, 16 Fue, 4 Hanan Airport)	18 (5 Alofi, 7 Hakupu, 2 Hikutavake, 2 Makefu, 2 Tuapa)	Mostly heard & seen in village & forested sites having a scattered or dense tree cover
Polynesian starling ( <i>Aplonis tabuensis</i> )	14 (12 Vinivini Track in Huvalu Forest, 2 Fue)	2 (2 Vinivini Track in Huvalu Forest)	Only observed in forested sites

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