

SUPPLEMENTARY TABLE S1

Vertebrate Records Made on Rennell Island from 18 to 29 October 2018

Scientific Name	Common Name	Abundance	Detection
Squamates			
<i>Emoia rennellensis</i> *	Rennell blue-tailed skink	C	spec., obs.
<i>Emoia nigra</i>	Pacific black skink	C	spec., obs.
<i>Emoia atrocostata</i>	Littoral skink	R	spec., obs.
<i>Cryptoblepharus</i> sp.*	undescribed	R	spec., obs.
<i>Eugongylus rufescens</i>	red sheen skink	C	spec., obs.
<i>Gekko vittatus</i>	Sego gecko	C	obs.
<i>Lepidodactylus lugubris</i>	mourning gecko	C	spec., obs.
<i>Lepidodactylus</i> sp.*	undescribed	U	obs.
<i>Nactus multicaarinata</i>	Solomons slender-toed gecko	C	spec., obs.
<i>Varanus juxtindicus</i> *	Rennell monitor	C	obs.
<i>Candoia paulsoni</i>	Solomons ground boa	U	obs.
<i>Laticauda crockeri</i> *	Lake Te-Nggano sea krait	C	obs.
<i>Laticauda colubrina</i>	yellow-lipped sea krait	C	obs.
<i>Indotyphlops braminus</i>	Brahminy blindsnake	U	obs.
<i>Chelonia mydas</i>	Green turtle	U	obs.
Mammals			
<i>Aselliscus tricuspidatus</i>	Temminck's trident bat	C	spec., obs.
<i>Dobsonia inermis</i>	Solomon bare-backed fruit-bat	C	spec., obs.
<i>Hipposideros calcaratus</i>	Calcar leaf-nosed bat	C	spec., obs.
<i>Hipposideros diadema</i>	Diadem leaf-nosed bat	U	aud., obs.
<i>Miniopterus australis</i>	Little long-fingered bat	C	spec., aud., obs.
<i>Miniopterus blepotis</i>	Javanese long-fingered bat	C	spec., aud., obs.
<i>Miniopterus tristis</i>	Great long-fingered bat	C	spec., aud., obs.
<i>Myotis moluccarum</i>	Large-footed myotis	U	spec., aud., obs.
<i>Pteropus rennelli</i> *	Rennell Flying Fox	U	spec., obs.
<i>Pteropus tonganus</i>	Pacific Flying Fox	C	spec., obs.
<i>Rattus rattus</i>	Black rat	C	spec., obs.
<i>Felis catus</i>	Domestic cat	C	obs.
<i>Canis familiaris</i>	Domestic dog	C	obs.
Birds			
<i>Tachybaptus novaehollandiae rennellianus</i>	Australasian Grebe	U	obs.
<i>Threskiornis molucca pygmaeus</i>	Australian White Ibis	C	spec., obs.
<i>Ardea alba modesta</i>	Great Egret	R	obs.
<i>Sula sula</i>	Red-footed Booby	U	obs.
<i>Microcarbo melanoleucos brevicauda</i>	Little Pied Cormorant	C	obs.
<i>Phalacrocorax carbo novaehollandiae</i>	Great Cormorant	U	obs.
<i>Pandion cristatus</i>	Osprey	R	obs.
<i>Accipiter fasciatus fasciatus</i>	Brown Goshawk	C	aud., obs.
<i>Pluvialis fulva</i>	Pacific Golden Plover	U	obs.
<i>Numenius phaeopus</i>	Whimbrel	R	obs.
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	U	obs.
<i>Tringa brevipes</i>	Gray-tailed Tattler	U	spec., aud., obs.
<i>Macropygia mackinlayi arossi</i>	Mackinlay's Cuckoo-Dove	C	spec., aud., obs.
<i>Chalcophaps stephani [mortoni]</i>	Stephan's Emerald Dove	R	aud., obs.
<i>Alopecoenas beccarii solomonensis</i>	Bronze Ground Dove	U	spec., aud., obs.

SUPPLEMENTARY TABLE S1

Scientific Name	Common Name	Abundance	Detection
<i>Ptilinopus richardsii cyanopterus</i>	Silver-capped Fruit-Dove	C	spec., aud., obs.
<i>Ducula pacifica pacifica</i>	Pacific Imperial-Pigeon	C	aud., obs.
<i>Chrysococcyx lucidus barterti</i>	Shining Bronze Cuckoo	U	spec., obs.
<i>Collocalia esculenta desiderata</i>	Glossy Swiftlet	C	spec., obs.
<i>Aerodramus vanikorensis lugubris</i>	Uniform Swiftlet	C	spec., aud., obs.
<i>Todiramphus sacer amoenus</i>	Pacific Kingfisher	C	spec., obs.
<i>Todiramphus sanctus sanctus</i>	Sacred Kingfisher	U	spec., aud., obs.
<i>Micropsitta finschii finschii</i>	Finsch's Pygmy Parrot	C	spec., aud., obs.
<i>Geoffroyus heteroclitus hyacinthinus</i>	Song Parrot	U	obs.
<i>Lorius chlorocercus</i>	Yellow-bibbed Lory	U	spec., aud., obs.
<i>Myzomela cardinalis sanfordi</i>	Cardinal Myzomela	C	spec., aud., obs.
<i>Gerygone flavolateralis citrina</i>	Fan-tailed Gerygone	C	spec., obs.
<i>Coracina lineata gracilis</i>	Barred Cuckooshrike	U	obs.
<i>Coracina novaebollandiae [melanops]</i>	Black-faced Cuckooshrike	U	spec., aud., obs.
<i>Pachycephala feminina</i>	Rennell Whistler	C	spec., aud., obs.
<i>Rhipidura rennelliana</i>	Rennell Fantail	C	spec., aud., obs.
<i>Clytorhynchus hamlini</i>	Rennell Shrikebill	C	spec., aud., obs.
<i>Myiagra caledonica occidentalis</i>	Melanesian Flycatcher	R	spec., aud., obs.
<i>Woodfordia superciliosa</i>	Bare-eyed White-eye	C	spec., aud., obs.
<i>Zosterops rennellianus</i>	Rennell White-eye	U	spec., aud., obs.
<i>Aplonis cantoroides</i>	Singing Starling	C	aud., obs.
<i>Aplonis insularis</i>	Rennell Starling	U	spec., aud., obs.
<i>Turdus poliocephalus rennellianus</i>	Island Thrush	U	spec., aud., obs.

Abundance: C, common (detected daily in numbers); U, uncommon (detected regularly but not daily); and R, rare (singles detected once, only on a few occasions, or at a single collection site). Type of detection: spec. (voucher specimen collected), aud. (audio recordings), and obs. (observation). “**” denotes endemic species; species in bold are new records for Rennell Island.

Annotated List of Noteworthy Fauna Records

Lizards: skinks — The most common lizard species was the endemic *Emoia rennellensis*, a small-bodied skink found frequently on logs or other debris that served as perches but were low to the ground (>50% of captures on all transects/trap stations). A high proportion of captures also occurred on the ground (range = 38–45% of all captures). We captured 47 individuals on sticky traps, and incidental observations totaled well into the hundreds. This species was common in all habitat types, including the beach (although well-behind the high tide line) and highly disturbed garden areas.

The second most abundant species was *Emoia nigra*, a large melanic skink that is active

on the ground, felled logs, and at that base of large trees. The species is adept at climbing and often escapes by climbing upward rather than moving to or staying on the ground. We made 23 incidental sightings and captured eight individuals on sticky boards on all three transects. The species was abundant in forest clearings, gardens, plantations, and other disturbed areas.

We captured two skink species that occurred only in the eulittoral zone (intertidal or foreshore area) at Tuhugaga Beach. One was in the genus *Cryptoblepharus* and is regarded as an undescribed species (McCoy 2006). We documented 17+ incidental sightings and had 15 captures on sticky boards, all on limestone outcrops on the beach or on limestone cliff faces. Rennell is the only island

in the Solomons where this genus is represented. The second littoral species, *Emoia atrocostata*, is described in the main text.

Last, we captured a single individual of *Eugongylus rufescens* on a sticky board but observed six others by flipping rocks or logs. This skink was on the ground exclusively and occurred in both disturbed and primary forest settings. Rennell is the only island in the Solomons where this species occurs.

Lizards: geckos — The large-bodied gecko *Gekko vittatus* was common in disturbed areas. The species is a good climber, and like *E. nigra* it often evaded capture by moving higher up into trees. All sightings ($n = 14$) were incidental during night walks, occurring on tree branches, broad leaves, and on the walls of houses.

We collected two species of geckos in the genus *Lepidodactylus*, one of which is undescribed. Both are good climbers and are active at night, with only one capture occurring on a sticky board. The undescribed species (referred to as *Lepidodactylus* sp.), was common in mangrove and cut-nut trees (genus *Barringtonia*) near the shoreline of Lake Te-Nggano ($n = 10$ incidental captures). The other species, *Lepidodactylus lugubris*, is a geographically widespread unisexual species (females only) that was common in disturbed areas ($n = 6$ incidental captures). The fourth gecko, *Nactus multicarinata*, was relatively common but only in less disturbed forested areas ($n = 9$ incidentals; $n = 3$ on board traps). Sticky board captures occurred deep in to T1 and along T2, with most incidental sightings occurring in primary forest. We typically observed this species near the base of large ficus trees (~2–3 m off the ground), where individuals could easily escape into the roots.

Lizards: monitors — The single species of varanid, *Varanus juxtindicus*, was common in most areas but seemed to prefer disturbed settings. This large monitor lizard is believed to be a Rennell endemic and a member of the *Varanus indicus* species complex – its taxonomic status has not been verified using molecular data. It is an adept climber, engages in fast spring bursts, and is a good swimmer. On one occasion we observed a large individual swimming from one of the offshore

islands in Lake Te-Nggano to the ‘mainland’ shoreline near the village. We first observed it swimming at the surface with its head elevated slightly above water, but it readily dove and swam underwater when we tried to pursue it, holding its breathe for a considerable distance until it reached the shoreline.

Snakes: kraits — Two species of sea kraits occur in Lake Te-Nggano, the endemic *Laticauda crockeri* and the more geographically widespread *L. colubrina*. We observed both species while snorkeling just offshore from the village, with *L. crockeri* being the more common of the two species in that area. Snakes were observed swimming at the surface down to ~5 m deep, where they moved in and out of the porous limestone karst on the lake bottom. We collected seven *L. crockeri* and two *L. colubrina*. Despite their highly toxic venom, individuals of both species were extremely docile when pursued or handled. The local children had no inhibition in freely handling the snakes but were also unaware of the danger that the venom poses. Two community members conveyed to Richmond that the reason the snakes were so docile was because humans had arrived so recently on Rennell that the snakes did not recognize them as would be predators.

Snakes: boids — We made three incidental sightings for *Candoia paulsoni*, one on a tree branch along T1 approximately 3 meters off the ground, a second on the ground at Tuhugago beach along the cliff edge, and a third found dead but recently eviscerated while still hanging from a tree branch. We were unable to detect *C. bibroni*, a second *Candoia* species that has been previously documented on Rennell. *Candoia bibroni* is known to stay high in the tree canopy (10+ meters), although not exclusively (M. McCoy, pers. comm.), and opportunities to capture it on Rennell may be greater larger forest trees are felled for timber.

Mammals

Pteropus rennelli (*Mammalia: Pteropodidae*), *Rennell Flying Fox* — Only five specimens of *Pteropus rennelli* were known in world museum collections prior to these surveys. The holotype was collected by G.A.V. Stanley

in 1927 and is held by the Australian Museum (Troughton 1929). Two specimens are held in the collections of Universitetets Zoologiske Museum, Copenhagen, collected by Dr T. Monberg at Lavanggu in 1958 (Hill 1962). The final two specimens are in the collection of the American Museum of Natural History, taken at Nuipani and Hutuna in October 1962 and 1965 respectively (Hill 1968). We collected two individuals near Te-Nggano Village, accessioned as specimens at the University of Kansas Natural History Museum. Both animals were caught in an area of mixed primary forest and village gardens.

Although only two individuals were captured, the species appeared relatively common in East Rennell and was regularly observed roosting individually or in pairs in primary forests amongst the lower canopy branches. Animals began foraging in late afternoons, with one individual captured in a mist net at approximately 17:00. Pairs of animals were seen and heard squabbling over foraging resources shortly before sunset. It is unknown whether the distribution of this species extends to Bellona Island, and surveys to confirm this should be a priority.

Birds

Micropsitta finschii finschii (Aves: *Psittaculidae*), *Finsch's Pygmy Parrot* — Unlike on most other islands in the Solomon archipelago where this species is decidedly uncommon, it was abundant on Rennell, with small foraging flocks noted daily. We captured and observed this species in both mature primary forest and degraded secondary and even roadside scrubby trees, suggesting that this species is quite flexible in its habitat selection on Rennell.

Myiagra caledonica occidentalis (Aves: *Monarchidae*), *Melanesian Flycatcher* — We detected this species only three times, capturing two individuals and hearing one singing. All observations were in primary forest, suggesting that logging and forest degradation would likely have negative impacts on this

population. However, we did not survey extensively logged areas, nor did we detect the species along disturbed roadside edges or near human habitation.

Zosterops rennellianus (Aves: *Zosteropidae*), *Rennell White-Eye* — This species was mainly associated with primary forest, where we noted occasional small foraging flocks. We observed a few individuals in mixed species flocks foraging in roadside scrub, but it appeared that primary forest was the stronghold for this endemic species.

Aplonis insularis (Aves: *Sturnidae*), *Rennell Starling* — Although uncommon or rare, we noted this species in primary forest, along forest edges and gardens, and in open coconut plantations, suggesting that habitat selection is flexible for this species. It appeared that our timing was during the nesting season for this species, which may have altered their habitat association.

Turdus poliocephalus rennellianus (Aves: *Turdidae*), *Island Thrush* — Similar to *Z. rennellianus*, this species was nearly exclusively associated with the dark undergrowth of primary forest. We observed a pair of individuals from the road, but this was in areas adjacent to intact primary forest. Within the geographic Solomon Islands, the population on Rennell is the only lowland population, with all others being strictly montane.

Notes on Nesting Species and Non-Breeding Visitants — We noted nest-building or other signs of breeding in many species including: Australasian Grebe (nest building), Brown Goshawk (nearly fledged young in nest), and Singing Starling (scouting nest holes). Two unseasonable Austral migrants were recorded (Sacred Kingfisher and Black-faced Cuckoo-shrike), these species typically depart the Solomon Islands for their breeding grounds in Australia by September (Dutson 2011). Our observations of these during their breeding season confirm that some individuals remain on their wintering grounds through the Austral summer.