

Vertebrates of Tetepare Island, Solomon Islands¹

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Abstract: Tetepare is the largest unlogged and uninhabited lowland rain-forest island in the South Pacific and is being managed primarily for conservation. An inventory was conducted, and 25 reptile, 4 frog, 76 bird, and 13 mammal species were recorded from Tetepare, including several birds and turtles of international conservation significance. Their relative abundance and local names were collected to assist landowners in attracting researchers and ecotourists and also to develop a conservation management plan for Tetepare.

TETEPARE ISLAND (8° 45' S, 157° 32' E) (Figure 1) is the largest uninhabited island (11,880 ha) in the South Pacific. The terrestrial, freshwater, and adjacent marine ecosystems are largely intact due to their isolation from human habitation since the landowners fled Tetepare in the mid-1800s. At the western tip of the island 375 ha were planted with coconuts in 1907–1918, but the rain forest is now reclaiming the plantation, which was progressively abandoned between 1942 and 1990. The common canopy trees of the unlogged predominantly tall lowland forest of Tetepare include *Pometia pinnata*, *Buchanania arborescens*, *Gmelina moluccana*, *Vitex cofassus*, *Celtis latifolia*, *Intsia bijuga*, *Calophyllum kajewskii*, *Heritiera littoralis*, and emergent *Ficus* spp. (Hansell and Wall 1976). Despite the paucity of biological information for the island, Tetepare has been recommended for conservation by J. Diamond (in an unpublished 1976 report on a proposed forest reserve system and conservation strategy for the Solomon Islands), Dahl (1980), SPREP (1985), and Lees (1990).

Customary landowners of Tetepare established the Tetepare Descendants' Association (TDA) in 2002 to oversee resource management and conservation on the island. TDA is promoting sensitive low-level ecotourism as the dominant land use on Tetepare to achieve the joint aims of conservation and income generation for the stakeholders. A newly constructed field station on Tetepare provides a base for researchers, ecotourists, and rangers, by whom an informed resource management plan is being established.

This inventory of the amphibians, reptiles, and birds, with notes on the mammals, of Tetepare Island was conducted by TDA to provide a basis for conservation planning and as an incentive for future biological research on the island. The Tetepare language has almost totally vanished; hence the names of species recorded were sourced from the three closest languages to Tetepare: Roviana, Marovo, and the Touo language of southern Rendova. Recording of these local names will assist guides, researchers, and ecotourists in knowledge sharing and also serve as a valuable written record for each of these languages.

MATERIALS AND METHODS

Reptiles, amphibians, and birds but not freshwater fish were surveyed opportunistically for a minimum of 2 days and nights in the vicinity of eight campsites on Tetepare from 1999 to 2003 (Table 1). All surveys were conducted in the months from April to December (Table 1). The Lelei area was surveyed in 2002 before construction of the

¹Worldwide Fund for Nature (Solomon Islands) assisted logistically with this research and provided indemnity from research permits through their Memorandum of Understanding with the Solomon Islands Government. Manuscript accepted 8 March 2005.

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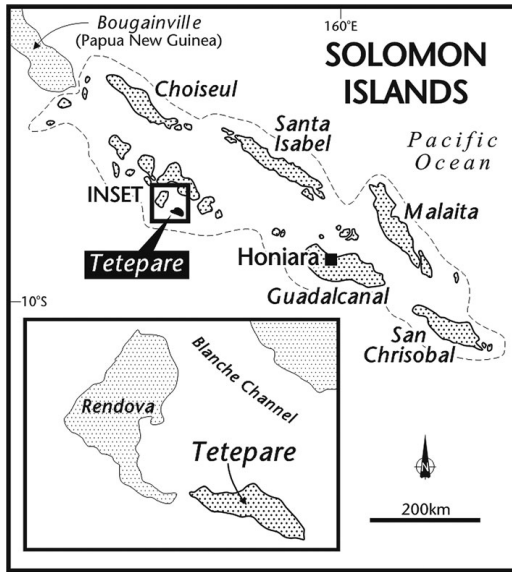


FIGURE 1. Location of Tetepare Island in the Solomon Islands.

Tetepare Field Station and subsequently in 2003 after localized clearing of the regenerating coconut plantation.

All surveys were conducted with the help of local guides. Herptiles (amphibians and reptiles) were searched for by day and night, and records of all small species were verified at least once by capture and identification (McCoy [2000] and Steve Richards from the South Australian Museum). Turtle nests

were typically identified by the distinctive tracks of the three local species. Avifauna were recorded by call and sighting. Birds were identified with the aid of binoculars with reference to Beehler et al. (1986) and Doughty et al. (1999), and nomenclature follows Mayr and Diamond (2001). A harp trap and mist nets were used by David Gee to trap bats in the vicinity of Lelei Point in July–August 2003 (Gee 2003). Other bats were captured opportunistically by the authors and identified using Flannery (1995).

This survey did not quantify abundance or densities; however a conservative estimate of individuals observed at each site was recorded to indicate relative abundance and distribution of herptiles and birds. Although recording minimum numbers tends to amplify the numbers of conspicuous broad-ranging species relative to more cryptic taxa, this technique was considered to be less ambiguous than estimation of abundance classes by observers not initially experienced with the local fauna.

The local name and spelling of all reptiles, amphibians, birds, and mammals recorded on Tetepare were sourced in the field from guides. Additional Touo names were sourced by questioning Henry Gumi, Levan Eroni, and Jonathon Suka in Lokuru. Alfred Bisili from Munda and John Lau from Roviana Lagoon provided additional Roviana names, and Romulus Paoni of Lagoon Lodge and Hviding (1995) were used to confirm Marovo

TABLE 1
Localities and Dates of Fauna Survey Sites on Tetepare Island

Camp	Latitude	Longitude	Date	Observers ^a
Raro River	08° 42.347' S	157° 32.329' E	October 1999	JR, KM, KH, JT, EL
Fiha Beach	08° 45.661' S	157° 33.093' E	October 1999	JR
Keife River	08° 46.730' S	157° 39.112' E	October 1999	JR
Qeuru Beach	08° 44.773' S	157° 29.709' E	April 2001	JR, KM, MB, TB, SU
Erava River	08° 42.421' S	157° 28.535' E	April 2001	JR, KM, MB, TB, SU
Tavara	08° 42.192' S	157° 26.565' E	April 2001	JR, KM, MB, TB, SU
Hokata	08° 42.957' S	157° 35.097' E	August 2002	JR, KM, MD, MB, TB
Lelei	08° 43.318' S	157° 26.628' E	Nov., Dec. 2002	JR, KM
Lelei	08° 43.318' S	157° 26.628' E	June 2003	JR, CF, CS, VR, HL, WK, TB

^a JR, John Read; KM, Katherine Moseby; KH, Keto He bale; JT, John Tume; EL, Edwin Lau; MB, Mary Bea; TB, Twomey Ben; SU, Suhero; MD, Matthias Daly; CF, Chris Filardi; CS, Catherine Smith; VR, Vanya Rohwer; HL, Hobete; WK, William Kodo.

names. The local names and suggested spelling of vertebrates occasionally differed between informants. In all cases the names provided by the older informants were subsequently accepted by younger guides or informants.

RESULTS

Common, scientific, and local names of reptiles, amphibians, birds, and mammals recorded on Tetepare are given in Tables 2–4.

Emoia schmidti was the most abundant of six *Emoia* species and 25 reptile species re-

corded during this survey (Table 5). Other widespread abundant reptiles on Tetepare were the goanna *Varanus indicus*, the gecko *Nactus multicaarinatus*, and several small *Spheonomorphus* species (Table 5). Sea snakes (*Laticauda* spp.), which were not observed but have been reported by guides, would increase the snake inventory to five species. *Platymantis solomonis* was the most frequently recorded of four frog species (Table 5). Despite limited data from the study sites, both Green (*Chelonia mydas*) and Hawksbill (*Eretmochelys imbricata*) Turtles appeared to be relatively abundant in the waters adjacent to Tetepare,

TABLE 2
Touo, Roviana, and Marovo Names of Herptiles from Tetepare

Taxon	Touo	Roviana	Marovo
Crocodyles			
<i>Crocodylus porosus</i>	Seoto	Basioto	Vua
Goannas			
<i>Varanus indicus</i>	Sosi	Regu	Erebaichi
Skinks			
<i>Corucia zebrata</i>	Bukasi	Bukulu	Bukulu
<i>Emoia atrocostata</i>	Fei edo Qore	—	Kaburu kude
<i>E. caeruleocauda</i>	Qore	—	Kokojiolo
<i>E. cyanura</i>	Qore	—	—
<i>E. cyanogaster</i>	Vava kiaka	Kokoziolo	Kokojiolo
<i>E. nigra</i>	Kudu makau	Gulugulou	Vulouvulou
<i>E. schmidti</i>	Qore	Kokoziolo	Kokojiolo
<i>Lamprolepis smaragdina</i>	Barairi bukasi	Kive	Kokobutongo buma
<i>Prasinohaema virens</i>	Barairi bukasi	Kive	—
<i>Sphenomorphus bignelli</i>	—	Kokoziolo	Lakuhu
<i>S. concinnatus</i>	—	Kilikoso	Kokogilo
<i>S. cranei</i>	—	Kilikoso	Kokogilo
Geckos			
<i>Nactus multicaarinatus</i>	—	Varu razi	—
<i>Gebyra oceana</i>	Zaru mata/Tutuombi	Geko	Kumalacha
<i>Lepidodactylus guppyi</i>	—	—	Tumajeluku
Snakes			
<i>Boiga irregularis</i>	Lelefe	Unara rou	Noki malipara/rou
<i>Candoia carinata</i>	Kofutu	Noki putarane/Noki ekekoi	Noki oreke
<i>Dendrelaphis salomonis</i>	Visoroqi	Noki tapuru	Noki charava
<i>Salomonelaps par</i>	Vasirai	Noki varipiwei	Noki picha
<i>Laticauda</i> sp.	Fei Edonoi	Noki nungununguru pere	Noki nungununguru pere
Turtles			
<i>Dermochelys coriacea</i>	Oihare	Tavatolu	Kautolu
<i>Eretmochelys imbricata</i>	Safi	Kohale kappa	Vonu pede
<i>Chelonia mydas</i>	Foforo	Kohale igana	Vonu ihana
Frogs			
<i>Discodeles guppyi</i>	Kurusu	Bakarao	Bangasasa
<i>Platymantis solomonis</i>	Kuni	Kuni	Kuni kuni
<i>Litoria thesaurensis</i>	Vorandae	Roa	—
<i>Ceratobatrachus guentheri</i>	Daka	Daka	Kuchumango

TABLE 3

Touo, Roviana, and Marovo Names of Birds from Tetepare

Common	Scientific	Touo	Roviana	Marovo
Little Pied Cormorant	<i>Phalacrocorax melanoleucos</i>	Muscuwe manozo	—	—
Melanesian Megapode	<i>Megapodius eremita</i>	Ngio	Eo	Io
Rufous Night Heron	<i>Nycticorax caledonicus</i>	Qore	Kuarape	Chou chigo
Striated Heron	<i>Butorides striatus</i>	Sokodele	Sokodele	Chokodele
Black Bittern	<i>Ixobrychus flavicollis</i>	Fiuko	—	Chou chigo
Eastern Reef Egret	<i>Egretta sacra</i>	Sou	Soa	Chou
Pacific Black Duck	<i>Anas superciliosa</i>	Ego	Nara	Aranga
Crested Hawk	<i>Aviceda subcristata</i>	Tito	Pito	Pito
Brahminy Kite	<i>Haliaeetus indus</i>	Neqa	Nae	Ke
Solomon Sea-Eagle	<i>Haliaeetus sanfordi</i>	Atao	Atata	Kakaka(pato)
Osprey	<i>Pandion haliaetus</i>	Nuru	Manuvu	Chogachoga ingana
Variable Goshawk	<i>Accipiter novaehollandiae</i>	Mano uo	Vari ivu	Tuma/Ivu
Pied Goshawk	<i>Accipiter albogularis</i>	—	Kurukuru pella (juv.)	—
Purple Swampphen	<i>Porphyrio porphyrio</i>	Bisa	Balikuhi	Bichere
Pacific Golden Plover	<i>Pluvialis fulva</i>	Givi	—	Suviviu
Mongolian Plover	<i>Charadrius mongolus</i>	—	—	—
Gray-tailed Tattler	<i>Tringa brevipes</i>	Hirahira foti	Suviu	Pivivi
Whimbrel	<i>Numenius phaeopus</i>	Hirahira foti	Bokala nguzu	Chori minate
Beach Thick-knee	<i>Burhinus giganteus</i>	Gio	Bilikiki	Bilikiki
Red-necked Stint	<i>Calidris ruficollis</i>	—	Pivivi	—
Common Sandpiper	<i>Tringa hypoleucos</i>	Kivi	Pivivi	Chegochego mati
Bridled Tern	<i>Sterna anaethetus</i>	—	Bulava	Chelekae
Black-naped Tern	<i>Sterna sumatrana</i>	Serekae	Helekae	Chelekae
Crested Tern	<i>Sterna bergii</i>	Farao	Vaqolo	Vagolo
Black Noddy	<i>Anous minutus</i>	Ofo/Ofongo	Dekere	Dekere
Great Frigatebird	<i>Fregata ariel</i>	Amaqi	Belama	Belama
Lesser Frigatebird	<i>Fregata ariel</i>	Amaqi	Belama	Belama
Brown Booby	<i>Sula leucogaster</i>	Farao	Paraparao	—
Nicobar Pigeon	<i>Caloenas nicobarica</i>	Buko	Bakupa	Bakupa
Stephan's Ground Dove	<i>Chalcophaps stephani</i>	Buti	Buti	Buti
Crested Cuckoo-dove	<i>Reinwardtoena crassirostris</i>	—	—	Voku
Claret-breasted Fruit-dove	<i>Ptilonopus viridus</i>	Kuvo	Kukuva	Kukuva
Superb Fruit-dove	<i>Ptilonopus superbis</i>	Muqi kuvo	Voku	—
Red-knobbed Imperial Pigeon	<i>Ducula rubricera</i>	Muqi ngausu	Baruku soloso	Kurukuru/Isu binga
Island Imperial Pigeon	<i>Ducula pistrinaria</i>	Kovo kovo	Baruka masa	Kurukuru
Cardinal Lory	<i>Chalcopsitta cardinalis</i>	Siriki	Siri	Chiri
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	Visuru	Vilisuru	Chiri chaligere
Eclectus Parrot	<i>Eclectus voratus</i>	Kara	Kara siri (fem.), Kara mahi (m.)	Kara (fem.), Karamahi (m.)
Finch's Pygmy-parrot	<i>Micropsitta finschii</i>	—	Kappakappa ngema	Kira kiki
Singing Parrot	<i>Geoffroyus heteroclitus</i>	Kine	Kinkine	Kara kindolo
Solomon Cockatoo	<i>Cacatua ducorpsii</i>	Keka	Kakia	Kaka
Common Koel	<i>Eudynamis scolopacea</i>	Sengi	Tovao	—
Buff-headed Coucal	<i>Centropus milo</i>	Mozu, Sagaza (I)	Nao, Sengenge (I)	Ao, Chehohu (I)
Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	Barogana	Kukua ranga buko	Paraparao
Shining Bronze Cuckoo	<i>Chrysococcyx lucidus</i>	—	—	—

TABLE 3 (continued)

Common	Scientific	Touo	Roviana	Marovo
Glossy Swiftlet	<i>Collocalia esculenta</i>	Sidoroi	Pepe rekoho	—
Uniform Swiftlet	<i>Collocalia vanikorensis</i>	Sidoroi	Pepe rekoho	—
Common Kingfisher	<i>Alcedo atthis</i>	Siqe	Siqe	Chige
Little/Mangrove Kingfisher	<i>Alcedo pusilla</i>	Siqe	—	—
Variable Kingfisher	<i>Ceyx lepidus</i>	Kiu kiu	—	Chige (Pipi)
Collared Kingfisher	<i>Halcyon chloris</i>	Siqe	Tarambua	Pipi
Beach Kingfisher	<i>Halcyon saurophaga</i>	Kiokio	Kikio	Kiokio
Dollarbird	<i>Eurystomus orientalis</i>	Kakahuka	Kikiora	Keke rakocho
Blyth's Hornbill	<i>Rhyticeros plicatus</i>	Omehe	Omehe	Omehe
White-throated Nightjar	<i>Eurostodopus mystacalis</i>	Fehryi	Totoa/Opopotae	Totoa
Barn Owl	<i>Tyto alba</i>	Duru duru	Kuarape	—
Moustached Tree Swift	<i>Hemiprocne mystacea</i>	Bingehera	Pilisiu	Chiku reta
Pacific Swallow	<i>Hirundo tabitica</i>	—	Hikikoro Busa	Keja
White-bellied Cuckoo-shrike	<i>Coracina papuensis</i>	Vizako	Pisale	Pisale
Yellow-eyed Cuckoo-shrike	<i>Coracina lineata</i>	Hote ula	—	Pisale
Melanesian Cuckoo-shrike	<i>Coracina caledonica</i>	Mbisi	—	Matakekeve
Common Cicadabird	<i>Coracina tenuirostris</i>	—	—	—
Yellow-vented Myzomela	<i>Myzomela eichborni</i>	Zeuzeu Taraqo	Buhi siri	Mimili
Common Golden Whistler	<i>Pachycephala pectoralis</i>	Siosio	Zozovaho	—
Willie Wagtail	<i>Rhipidura leucobryis</i>	Fitikole	Pitikole	Pitikole
Rufous Fantail	<i>Rhipidura rufifrons</i>	—	Pepeka erovo	—
White-winged Fantail	<i>Rhipidura cockerelli</i>	—	Buhi pitikole	Pitikole
White-capped Monarch	<i>Monarcha richardsii</i>	Vingo/Viara	Pakupaku banga	Vivoho
Kolombangara Monarch	<i>Monarcha browni</i>	Viara	Ri zeze	—
Steel-blue Flycatcher	<i>Myiagra ferrocyanea</i>	Vie	—	—
Tetepare White-eye	<i>Zosterops rendovae tetiparius</i>	Siokoli	Pika	Chikubusa
Yellow-bellied Sunbird	<i>Nectarinia jugularis</i>	Vihu	Hilihiliboe	Viu
Yellow-faced Myna	<i>Mino dumontii</i>	Fisikoli	Kinio	Kolioro
Singing Starling	<i>Aplonis cantoroides</i>	Neo	Mata kekeve	Chichiu
Metallic Starling	<i>Aplonis metallica</i>	Neo	Hiuheze	Ea (Chichiu)
Brown-winged Starling	<i>Aplonis grandis</i>	Mbissi	Hindoko	—

and Leatherbacks (*Dermochelys coriacea*) were the most frequently recorded turtle species nesting on Tetepare's Qeuru, Tofa, and Keife beaches.

A total of 72 bird species (Table 6) was recorded from Tetepare Island during this survey. Four other species can be added to this inventory. The Black Bittern (*Ixobrychus flavicollis*) was recorded by J. Diamond (pers. comm.), and Great Frigatebird (*Fregata ariel*) and Channel-billed Cuckoo (*Scythrops novaehollandiae*) were recorded on Tetepare by G. Dutson (pers. comm.). Sacred Kingfishers (*Halcyon sancta*) could not be confidently identified in the field but are likely to be migratory visitors to Tetepare during the austral winter and were recorded by C. Filardi and C. Smith (pers. comm.). Thirteen mammal species (Table 4) have been recorded from this incomplete mammal survey of Tetepare.

Each of the languages used different names for adult and juvenile Buff-headed Coucal

TABLE 4
Touo, Roviana, and Marovo Names of Mammals from Tetepare

Common	Scientific	Touo	Roviana	Marovo
Large Flying Fox		Rano suri	Veke taluaba	Samuru
“Hissing” Flying Fox		Eruru suri	Veke sui	Vahu
“Kissing” Flying Fox		—	Veke lagiso	Lagiso
Solomons Bare-backed Fruitbat	<i>Dobsonia inermis</i>	Hovi	—	—
Small Melanesian Bent-winged Bat	<i>Miniopterus macrocneme</i>	—	—	—
Common Roussette Bat	<i>Rousettus amplexicaudatus</i>	Eru eru	—	—
Northern Blossom-bat	<i>Macroglossus minimus</i>	—	—	—
Fardoulis’ Blossom-bat	<i>Melonycteris fardoulisi</i>	—	—	—
New Guinea Pipistrelle	<i>Pipistrellus angulatus</i>	Rika	Peperekoho	Tataemoa
Solomon Island Tube-nosed Bat	<i>Nyctimene bougainville</i>	—	—	—
Horseshoe-bat	<i>Hipposideros maggietaaylorae</i>	—	—	—
Dugong	<i>Dugon dugon</i>	Vena	—	Rumu
Cuscus	<i>Pbalanger orientalis</i>	Odo	Manue	Binahere
Small Rat	<i>Rattus</i> sp.	Siro	Gilgale	Kutu
Pig	<i>Sus scrofa</i>	Bo	Boko	Moa
Cat	<i>Felis catus</i>	—	—	—

(*Centropus milo*), and all guides questioned considered that the juvenile birds were a separate species from the differently colored adults. In contrast, locals used a single name for several groups of similar taxa, such as several of the small skinks, small waders, and swiftlets. Many of the local names were onomatopoeic, including the frogs Kuni and Roa and the birds *Halcyon saurophaga* (Kiokio) and *Cacatua ducorpsii* (Kaka). The local names of some species either had been forgotten or were not known by some observers. Most unnamed species were either rare nomads or migrants (*Reinwardtoena crassirostris*, *Chrysococcyx lucidus*, *Charadrius mongolus*) or cryptic species (*Alcedo pusilla*, *Accipiter albogularis*, *Coracina tenuirostris*). Due to the similarity of the two languages, it is not surprising that the Roviana and Marovo names are often identical or similar. It is apparent that some of the contemporary Touo names, in particular, have been adopted from Roviana names of similar species.

DISCUSSION

Although species inventories are possibly incomplete for many of the Solomon Islands, the 21 terrestrial reptile species recorded on Tetepare exceeded that recorded for the

nearby similar-sized islands of Vangunu (15), Ranonga (14), Rennell (13), and Kolombangara (11) (McCoy 2000). Five more reptile species have been recorded from the large nearby island of New Georgia compared with Tetepare, with the greater richness of geckos (7:3) and blind snakes (2:0) being the main difference between the two reptile faunas (McCoy 2000). The much larger islands of Malaita (29) and Guadalcanal (39) and especially Bougainville (48) support a richer reptile fauna than any of the islands in the Western Province.

Leatherback Turtles (*Dermochelys coriacea*), which nest on Tetepare, have been predicted to decline to extinction in the South Pacific within the next decade (Spotila et al. 2000). Scavenging of nests by abundant Mangrove Monitors (*Varanus indicus*), harvesting by hunters, and inundation by high tides appear to inflict considerable mortalities on Tetepare’s turtle nests (pers. obs.). Green Turtles (*Chelonia mydas*) also nest on Tetepare’s beaches, and up to 16 individuals were recorded foraging in the sea-grass beds on the western and southern coasts. These sea-grass beds, particularly in the sheltered lagoon at the western extremity of Tetepare, were also used by an apparently resident Dugong (*Dugon dugon*) population. Local divers reported

TABLE 5
Qualitative Abundance of Herptiles from Eight Fauna Survey Sites on Tetepare

	Rano	South beach	Kiefe	Qeuru	Erava	Tavara	Hokata	Lelei 2002	Lelei 2003
Crocodiles									
<i>Crocodylus porosus</i>		1 ^a		1		1			
Goannas									
<i>Varanus indicus</i>	5+	5+	5+	2	2	3	8	2	1
Skinks									
<i>Corucia zebrata</i>		1			1				
<i>Emoia atrocostata</i>			5	4	1	1		2	2
<i>E. caeruleocauda</i>	1 ^a								
<i>E. cyanura</i>							1		
<i>E. cyanogaster</i>		2					1	1	
<i>E. nigra</i>	1						2	1	2
<i>E. schmidti</i>	20+	20+	20+	13	6	50+		20+	10+
<i>Lamprolepis smaragdina</i>		1			1			2	
<i>Lipinia noctua</i>									1
<i>Prasinohaema virens</i>		4						1	
<i>Sphenomorphus bignelli</i>	10+				1		4	1	3
<i>S. concinnatus</i>	5	2			1		2	7	4
<i>S. cranei</i>	1					2	2		
Geckos									
<i>Nactus multicaudatus</i>	7	2	5	2	1	5	1		
<i>Gebyra oceana</i>		2		1	2			1	2
<i>Lepidodactylus guppyi</i>		1	1						
Snakes									
<i>Boiga irregularis</i>					1			1	1
<i>Candoia carinata</i>	1				1				2
<i>Dendrelaphis salomonis</i>	1 ^a								1
<i>Salomonelaps par</i>	2	2	1	2		1			
Turtles									
<i>Dermochelys coriacea</i>		2 ^a		1(n) ^b					
<i>Eretmochelys imbricata</i>		1				1			
<i>Chelonia mydas</i>							1		1
Frogs									
<i>Discodeles guppyi</i>	1	5+	1+	5	1		1		
<i>Platymantis solomonis</i>	10+	10+	10+	100+	30	2	10	2	5
<i>Litoria thesaurensis</i>	1				1	3			
<i>Ceratobatrachus guentheri</i>	2			15	5	1	4		3

^a Recorded >1 km from campsite.

^b Nesting.

frequent encounters with Dugong including calves in this lagoon. Hawksbill Turtles (*Eretmochelys imbricata*) were frequently recorded in the reefs around the more sheltered northern coast of Tetepare.

The Prehensile-tailed Skink (*Corucia zebrata*), endemic to the Solomon Islands, is reportedly the largest skink in the world. The Prehensile-tailed Skink is also unusual in being arboreal, herbivorous, and nocturnal. Estimations of abundance of this cryptic species in undisturbed rain forest are problemat-

ical, because most *C. zebrata* on other islands are found when trees are felled. McCoy (2000) considered that wild populations of *C. zebrata*, along with *Varanus indicus* and *Candoia* spp., are vulnerable to extinction from unregulated collection for the international pet trade. Protection of these three taxa on Tetepare may therefore be of national importance. Another interesting arboreal skink found on Tetepare is *Prasinohaema virens*, one of the few vertebrates in the world with green blood (Austin and Jessing 1994).

TABLE 6
Minimum Counts of Birds Recorded from Fauna Survey Sites on Tetepare

Common Name	1999	Qeuru	Erava	Tavara	Hokata	Lelei 2002	Lelei 2003
Little Pied Cormorant				2			
Melanesian Megapode	*(b)	1		2	2	2	3
Rufous Night Heron	*(b)	1		2		1	
Striated Heron	*		2	2	1	1	1
Eastern Reef Egret	*	4			1	3	1
Pacific Black Duck	*		1	5	2	9	9
Crested Hawk	*	1	2	2	3		
Brahminy Kite	*	1	3	2		2	
Solomon Sea-Eagle	*	1	2	1	1	2	1
Osprey	*	1		1		1	2
Variable Goshawk				1			2
Pied Goshawk							1*
Purple Swampphen	*		1	1		1	2
Pacific Golden Plover	*	3					
Mongolian Plover	*	3					
Gray-tailed Tattler	*	5		6			
Whimbrel	*	1		1		1	
Beach Thick-knee	*	2		2		2	1
Red-necked Stint	*						
Common Sandpiper	*		1		3	1	
Bridled Tern	*						
Black-naped Tern	*				5	8	12
Crested Tern	*					4	3
Black Noddy	*					10	
Lesser Frigatebird	*	1		1		1,000+	20
Brown Booby						2	
Nicobar Pigeon	*	5 (3i)	4		5		
Stephan's Ground Dove	*		2	4		2	1
Crested Cuckoo-dove		1*					
Claret-breasted Fruit-dove	*	3+	2	1		4	20+
Superb Fruit-dove							1
Red-knobbed Imperial Pigeon	*	1+	10		+		3
Island Imperial Pigeon	*	10+	100+	10	+(b)	20	20+
Cardinal Lory	*	6	50	20	+	50+	10
Rainbow Lorikeet	*	5	100+	50		10+	8
Eclectus Parrot	*	1	1			4	6
Finch's Pygmy-parrot	*			2*			
Singing Parrot						2	4
Solomon Cockatoo	*	12	5	4	1	6	4
Common Koel		1		1		2	2
Buff-headed Coucal	*	5+	3	3	3	4	3
Shining Bronze Cuckoo				1			
Glossy Swiftlet	*	100	10	100		5	4
Uniform Swiftlet				10		12	15
Common Kingfisher	*	2	3	2		1	
Little/Mangrove Kingfisher							2
Variable Kingfisher			1		1		
Collared Kingfisher	*		1	2		1	2
Beach Kingfisher	*	2		6	2	2	1
Dollarbird	*		1	1	2		
Blyth's Hornbill	*	2	2	1	2	4	5
White-throated Nightjar	*(b)					1	
Moustached Tree Swift	*			1		4	5
Pacific Swallow	*	2	2		6	2	4
White-bellied Cuckoo-shrike	*		2		2	2	2
Yellow-eyed Cuckoo-shrike	*					2	2

TABLE 6 (continued)

Common Name	1999	Qeuru	Erava	Tavara	Hokata	Lelei 2002	Lelei 2003
Melanesian Cuckoo-shrike				1			
Common Cicadabird							2
Yellow-vented Myzomela			1	1			5
Common Golden Whistler				1			
Willie Wagtail	*(b)	4	4	4(b)	2(b)	1	2
Rufous Fantail							2
White-winged Fantail					3		1
White-capped Monarch	*(b)		4(b)	4	10(b)		8
Kolombangara Monarch		2	3	4	2		1
Steel-blue Flycatcher		1		4	1	2(b)	2
Tetepare White-eye	*	6	10	20	12	15(b)	20
Yellow-bellied Sunbird	*	2	4(b)	10	4(b)	2	4
Yellow-faced Myna	*	5	4	1	3	8	6
Singing Starling		20	4		2	10	
Metallic Starling	*		4		20+		15
Brown-winged Starling						3(b)	2

* Unspecified location on Tetepare; (b), breeding record; (i), immature.

The 62 species of nonmigratory land birds recorded from Tetepare compares favorably with the 37 species recorded from the larger, yet more remote island of Rennell (Filardi et al. 1999) and the 76 resident species recorded from the very much larger Santa Isabel (Kratler et al. 2001), also in the Solomon Islands. Several rare species recorded on Tetepare are discussed later in this section. Sixteen additional resident avifauna species have been recorded from lowland forests in the Western Province by Mayr and Diamond (2001) augmented by C. Filardi (pers. comm.). In addition to the three regionally uncommon raptor and pigeon species, the most notable absentees from the Tetepare inventory are ground-dwelling crakes (*Porzana* spp.), rails (*Gallirallus* spp.), bush-hens (*Amaurornis olivaceous*), and ground-doves (*Gallicolumba* spp.). Further surveys, particularly in the dense vegetation around Lake Tavara and lowland swamps on the weather (southern) coast of Tetepare, may record some of these species, but it is possible that dense pig populations may have affected some ground-dwelling bird populations on Tetepare.

The Solomon Sea Eagle (*Haliaeetus sanfordi*), listed as a vulnerable bird species by BirdLife International (2000), was widespread throughout the island, and one individual

was observed taking a Bare-backed Fruit-bat (*Dobsonia inermis*) that had been disturbed from its diurnal roost. Near-threatened species (BirdLife International 2000) recorded from Tetepare were Beach Thick-knee (*Burhinus giganteus*), Crested Cuckoo-dove (*Reinwardtoena crassirostris*), Nicobar Pigeon (*Caloenus nicobarica*), and Kolombangara Monarch (*Monarcha browni*). Several immature Nicobar Pigeons were observed, and it is likely that Tetepare's lowland forests are important feeding grounds for this declining species that nests colonially on nearby Ngirasa Island. Tetepare is also an important feeding ground for Island Imperial Pigeons (*Ducula pistrinaria*) that fly to Tetepare in their thousands from adjacent nesting atolls. The Kolombangara Monarchs on Tetepare had considerably larger and squarer white cheek patches than those illustrated in Doughty et al. (1999). The Crested Cuckoo-dove record was a solitary individual observed at close quarters flying near the coast. Our guides had seen this distinctive species on Tetepare only once before.

White-throated Nightjars (*Eurostopodus mystacalis*) were recorded breeding at Keife in October 1999, and several other individuals were recorded in near-coastal habitats on Tetepare. The scarcity of cats and dogs may render Tetepare an important refuge

for these beach-nesting birds, believed to possibly represent a threatened species, endemic to the Solomons (G. Dutson, pers. comm.). Two Little Pied Cormorants (*Phalacrocorax melanoleucos*), which also inhabit the larger Lake Rano on adjacent Rendova, were recorded on Lake Tavara on Tetepare for the first time. Despite only colonizing the major islands of the New Georgia group of islands since the 1940s (Mayr and Diamond 2001), Papuan Hornbills (*Rhyticeros plicatus*) were widespread and relatively abundant on Tetepare (Dutson 2001; this study).

The Tetepare White-eye (*Zosterops rendovae tetiparius*) was easily distinguished from all other white-eyes in Doughty et al. (1999) by the combination of absence of a white eye ring; black bill; black mask from bill to eye; distinct green bib; gray-white belly; yellow on the bend of the wing, underside of thighs, and tail; and yellow legs. Live specimens differed from the illustration in Mayr and Diamond (2001) by the prominent yellow patch on the bend of the wing that was clearly visible on all of the hundreds of individuals observed. This yellow patch on the wing and the absence of a yellow belly clearly distinguish it from its sister subspecies on Rendova, less than 3 km away. *Zosterops r. tetiparius* was abundant in coastal, riverside, and regenerating forest throughout Tetepare and was also recorded from inland forest canopy.

Extensive rocky tidal flats on both the western and southeastern extremities of Tetepare may prove to be valuable staging grounds for migratory waders. Whimbrels (*Numenius phaeopus*), Mongolian Plovers (*Charadrius mongolus*), Pacific Golden Plovers (*Pluvialis fulva*), Red-necked Stints (*Calidris ruficollis*), Gray-tailed Tattlers (*Tringa brevipes*), and Common Sandpipers (*Tringa hypoleucos*) were recorded in these habitats during these brief surveys.

The dense populations of frogs on Tetepare may be indicative of the unpolluted rivers and the absence of Cane Toads (*Bufo marinus*). Cane toads are believed to have been introduced to the western Solomons during World War II and are now abundant at Munda, Gizo, and northern and western Rendova and have recently been introduced

to the Rendova village of Lokuru, adjacent to Tetepare. If introduced to Tetepare, these poisonous toads have the potential to seriously affect native fauna populations. We recorded one cat from the Lelei region, but pig hunters report that feral cats were occasionally found throughout the island. The control of these pests should assist in the conservation of many vertebrates, particularly ground-nesting bird species.

The fauna species and communities of note identified by these preliminary vertebrate surveys of Tetepare, combined with the continued extensive logging of adjacent islands, suggest that Tetepare may be a valuable refuge for many species of conservation concern. More detailed bat surveys are a priority, especially considering the records of a potentially different *Hipposideros* taxon on Tetepare (Gee 2003) and *Melonycteris fardoulisi* that was only described in 1993 (Flannery 1995). A recently discovered *Pteralopex* flying fox, the New Georgia Monkey-faced Bat, is also apparently restricted to lowland primary rain forest in the vicinity of Tetepare (Fisher 1992).

Our surveys confirm that Tetepare Island remains a largely untouched wilderness island, with considerable conservation value on regional, national, and international scales. Of particular note are the large stands of lowland and coastal forest, habitats that have been extensively exploited for plantations, gardens, and logging elsewhere in the Solomon Islands. With the assistance of international scientists and ecotourists, the conservation and resource management plan currently being implemented by the Tetepare Descendants' Association should help to maintain the increasingly valuable biological communities, traditional knowledge, and bush resources of Tetepare Island.

ACKNOWLEDGMENTS

The Tetepare Descendants' Association (TDA) and its precursor, the Friends of Tetepare, granted permission to visit, encouraged research on Tetepare, and provided logistical support with canoe and field station accommodation during the later surveys.

TDA is supported financially by NZAid and European Union Microprojects. We thank guides and field assistants Mary Bea, Twomey Ben, Keto He bale, John Tume, Edwin Lau, Suhero, Matthias Daly, Vanja Rohwer, Hobete, and William Kodo for their efforts in the field and Isaac Molia for arranging our initial visit to Tetepare. David Gee conducted a pilot bat survey on Tetepare in August 2003, Steve Richards assisted with the identification of amphibians and reptiles, and we thank Chris Filardi, Catherine Smith, Guy Dutson, and Jared Diamond for sharing their bird observations on Tetepare and commenting on the manuscript.

Literature Cited

- Austin, C. C., and K. W. Jessing. 1994. Green-blood pigmentation in lizards. *Comp. Biochem. Physiol.* 109:619–626.
- Beehler, B. M., T. K. Pratt, and D. A. Zimmerman. 1986. *Birds of New Guinea*. Princeton University Press, Princeton, New Jersey.
- BirdLife International. 2000. *Threatened birds of the world*. Lynx Edicions and BirdLife International, Barcelona and Cambridge, United Kingdom.
- Dahl, A. 1980. Regional ecosystem survey of the South Pacific area. SPC/IUCN Technical Paper 179. South Pacific Commission, Noumea.
- Doughty, C., N. Day, and A. Plant. 1999. *Birds of the Solomons, Vanuatu and New Caledonia*. Christopher Helm Publishers, London.
- Dutson, G. 2001. New distributional ranges for Melanesian birds. *Emu* 101:237–248.
- Filardi, C. E., C. E. Smith, A. W. Kratter, D. W. Steadman, and H. P. Webb. 1999. New behavioral, ecological, and biogeographic data on the avifauna of Rennell, Solomon Islands. *Pac. Sci.* 53:319–340.
- Fisher, D. 1992. An ecological study of a new species of monkey-faced bat from the islands of New Georgia and Vangunu, the Solomon Islands. Unpubl. report (available from Australian Museum, Sydney).
- Flannery, T. 1995. *Mammals of the South West Pacific and Moluccan Islands*. Australian Museum/Reed Books, Chatswood, New South Wales, Australia.
- Gee, D. 2003. Bat survey of Tetepare Island. Tetepare Descendants' Association Technical Report 2. World Wildlife Fund, Solomon Islands.
- Hansell, J. R. F., and J. R. D. Wall. 1976. *Land resources of the Solomon Islands. Land Resource Study 18*. Land Resources Division, Ministry of Overseas Development, Surrey, England.
- Hviding, E. 1995. *Of reef and rainforest: A dictionary of environment and resources in Marovo Lagoon*. University of Bergen, Bergen, Norway.
- Kratter, A. W., D. W. Steadman, C. E. Smith, C. E. Filardi, and H. P. Webb. 2001. Avifauna of a lowland forest site on Isabel, Solomon Islands. *Auk* 118:472–483.
- Lees, A. 1990. A protected forests system for the Solomon Islands. Maruia Society, Nelson, New Zealand.
- Mayr, E., and J. Diamond. 2001. *The birds of northern Melanesia: Speciation, ecology, and biogeography*. Oxford University Press, Oxford.
- McCoy, M. 2000. *Reptiles of the Solomon Islands*. CD, Zoographics, Kuranda, Australia.
- Spotila, J. R., R. D. Reina, A. C. Steyermark, P. T. Plotkin, and F. V. Paladino. 2000. Pacific leatherback turtles face extinction. *Nature (Lond.)* 405:529–530.
- SPREP (South Pacific Regional Environment Programme). 1985. *Country review, Solomon Islands*. 3rd SPREP conference. South Pacific Commission, Apia, Western Samoa.

