48. The special birds of Manu'a

The Manu'a Islands are famous for their history, culture, and spectacular beauty, but the wildlife of Ta'u, Ofu, and Olosega is also special. Given that these islands are only 60 miles east of Tutuila, you might expect that the same kinds of birds and animals would be found in both places. But in fact there are four kinds of birds living in Manu'a that do not occur on Tutuila.

The most beautiful of these is Samoa's only parrot, the *segavao*, or Bluecrowned Lory. This is a tiny jewel of a bird, only 7 inches long, but colored with emerald green back and wings, ruby red face and throat, and a sapphire blue crown. In historic times, these colorful feathers were used to decorate finemats.

Segavao often come in to villages to feed on the nectar of coconut (niu) and coral tree (gatae) flowers, but they are not easy to see in spite of their bright colors. Your first clue to their presence is often their high-pitched whistles, given as they fly overhead or scramble in the top of a coconut tree. This pretty little parrot is also found in western Samoa, but does not live on Tutuila. We don't know why. Tutuila seems to have some of the food segavao like, including aoa fruits, but perhaps there are not enough flowers all year round. In the forests of Manu'a, segavao particularly like the flowers of Astronidium pickeringii, a species for which we know no Samoan name. This tree of the melastome family is common in the high forests of Manu'a.



Another special bird of Manu'a is the *sega o le vau*, the Lesser (Fiji) Shrikebill. This is a charcoal-grey bird with tiny white corners on its tail, although if you get a very good look you might see a little brown along its sides, or its blue-grey legs. *Sega o le vau* are about the same size as *iao*, but are stockier and have bigger heads and wider beaks. This bird is found nowhere else in the Samoan islands. It also occurs in Fiji, but birds there look very different and are mostly brown. *Sega o le vau* can be seen on all three islands of Manu'a, but they are not closely tied to a particular habitat. They are usually heard before they are seen, as they often make a loud chatter as they poke through dead vines or *ie'ie* leaves. They also make a clear two-toned whistle, and



may answer if you imitate this call. These birds seem sociable and often move through the forest in small groups of two or three. They often ignore people, and if you sit very still they will sometimes feed within arms reach.

The Spotless Crake is a small black bird that looks like a half-grown Banded Rail (*ve'a*). It is extremely rare and has only been found in American Samoa on Ta'u Island. It lives in dense grass, is active mostly at dawn and dusk, and is very shy. All these habits makes it very hard to see, and only a few birds have been sighted in recent years.



Another rare land bird in American Samoa is the *tuaimeo*, the Friendly Ground-Dove. This bird gets its name because it was first discovered in Tonga, once called the Friendly Islands. A better name would probably be the Shy Ground-Dove, as this bird will sit very still on a low branch and hope you do not notice it. Your best chance of seeing one is if it happens to be walking in the path you are using, as it may run ahead of you or fly up onto a

tree limb. You may also hear its call, a single, drawn-out coo that is slightly lower and much longer than the rapid, short coos of the fruit-doves *manutagi* or *manuma*. If you are very close, you can hear a slight variation in the tone of the call. *Tuaimeo* are mostly dark brown birds, although like many doves

the males can be very pretty if seen in good light. Unlike other doves or pigeons in American Samoa, this bird spends most of its time on the ground, where it feeds on fallen seeds, fruit, and buds. *Tuaimeo* can be seen on Ofu and Olosega, as well as in Fiji, Tonga, and Samoa.

Birds are not the only unique wildlife of Manu'a. For example, Ta'u is home to American Samoa's only native snake, the *gata*, or Pacific Boa. This dark brown snake is



harmless to people, apparently living mostly on a diet of lizards (*mo'o* and *pili*), birds and bird eggs. It is rare, or at least very hard to find in the deep forests of Ta'u, and should be left undisturbed whenever it is found.

Why is the wildlife in Manu'a so different from that on Tutuila? One reason could be the wildness of Manu'a: large areas, mostly on Ta'u, are untouched by villages, plantations, and roads. Another reason may be that in Manu'a the native birds have fewer problems caused by introduced birds, animals, diseases, or plants. Or, it could be that the terrain in Manu'a, which has many areas with steep yet forested ridges that have quite different plants than similar ridges, such as Alava, on Tutuila. Each of the special birds of Manu'a may have different reasons for being there, but the absence of all of them from Tutuila suggests there might be a single explanation for this pattern, and this remains an interesting biological question about American Samoa.

Joshua Seamon, Pepper Trail DMWR



Manu'a

49. American Samoan Christmas bird count

"Christmas counts" are conducted by bird enthusiasts almost everywhere, including American Samoa. The survey is conducted on a single day during the period December 14 to January 5. Counts are made within a 15-mile diameter circle. The numbers and species of birds seen will depend on the number of observer teams. On 17 December 1992, seven observers traveling in three parties recorded 1337 birds of 30 species on Tutuila Island, American Samoa:

- 227 Red-footed Booby
- 143 White Tern
- 131 Pacific Golden Plover
- 118 White-rumped Swiftlet
- 116 Wattled Honeyeater
- 97 Samoan Starling
- 91 Red-vented Bulbul (alien)
- 86 Brown Noddy
- 46 Jungle Myna (alien)
- 31 Brown Booby
- 30 Purple-capped Fruit-Dove
- 27 Cardinal Honeyeater
- 25 Common Myna (alien)
- 24 White-tailed Tropicbird
- 23 Ruddy Turnstone
- 21 Banded Rail

- 21 Collared Kingfisher
- 14 Pacific Pigeon
- 13 Reef Heron
- 12 Wandering Tattler
- 9 Polynesian Starling
- 7 Lesser Frigatebird
- 6 Bridled Tern
- 4 frigatebird spp.
- 4 Great Frigatebird
- 4 Many-colored Fruit-Dove
- 3 Sanderling
- 1 Purple Swamphen
- 1 Blue-gray Noddy
- 1 Rock Dove (alien)
- 1 Barn Owl



The count circle was centered at the peak of Matafao Mountain and included the entire island except the areas west of Fagamalo and Nua villages, and east of Aoa and Alofau villages. The total viewer-hours were 9.5: 3.5 hours on foot and 6 hours by vehicle. Participants traveled 2.5 miles on foot and 35 miles by vehicle. Percentage of time in each habitat was: 30% in villages, 30% in nearshore/reef, 10% in plantations, 10% in montane scrub, 10% in rainforest, and 10% in shore/scrub.

Four of the species recorded are introductions. The Rock Dove is not established as a breeding bird in the territory and we believe that the one observed is an escapee from a small colony of homing pigeons maintained by a private individual in Tafuna. The Red-vented Bulbul has been established on Tutuila since at least the early 1960's. Both species of mynas became established here in the 1980's and are currently undergoing rapid range expansions in urban areas.

The observation of Bridled Terns is noteworthy. This species has been considered a rare visitor to American Samoa and is not a confirmed breeder. However, during the Christmas Count, we observed at least two pairs of birds repeatedly landing on ledges of the Pola Islet. This is the primary breeding area for boobies and frigatebirds on Tutuila. The terns' behavior suggested breeding activity, but we could not confirm this. We have repeatedly observed Bridled Terns in Pago Pago Harbor and at various points along the coast between October and March.

Gilbert S. Grant, Pepper Trail, DMWR



Appendix 1. Events of local interest, by year

Year	
1880	Navy stockpiles coal on harbor shoreline from 1880 to 1920.
1900	Population size in territory: 5,679. Size in 2005: 62,000.
1941	Build-up of Navy base in harbor.
1947	USS Chehalis sinks at fuel dock and may still have fuel load aboard.
1954	Van Camp tuna cannery built in harbor.
1963	Starkist tuna cannery built in harbor.
1973	Rose Atoll National Wildlife Refuge estab.; PO in 1975 expands seaward boundary to 3 miles.
1974	American Samoa Environmental Protection Agency (ASEPA) established.
1978	Tutuila hit hard by crown-of-thorns starfish invasion; massive mortality of corals.
1980	Coastal Zone Management program established; enacted in 1990 (PL 21-35).
1981	Cyclone Esau
1982	Nutrient levels from cannery effluent in harbor exceed ASEPA levels from 1982 to 1991.
1985	Fagatele Bay National Marine Sanctuary established.
1986	Department of Marine & Wildlife Resources established (originally the Office of MWR).
1987	Cyclone Tusi (January 19); Manu'a heavily impacted.
1988	National Park of American Samoa established (PL 100-571); lease agreement signed in 1993.
1988	Public Notification & Review System (PNRS) established to coordinate multi-agency reviews of land-use applications in territory.
1988	Tuna canneries required to transport high-nutrient wastes daily to dump zone 5 miles offshore.
1990	Cyclone Ofa (Feb. 3-4).
1990	Natural Resources Commission established for local endangered species (PL 21-39) but inactive.
1991	Cyclone Val (Dec. 6-10); major impact to buildings, rainforests, birds, bats, coral reefs.
1991	Hunting banned to allow birds and fruit bats recover after cyclones (ban still in place in 2005).
1991	Canneries required to stop wastewater discharge in inner harbor; effluent now piped to outer harbor.
1992	Rats eradicated at Rose Atoll due to their adverse impact on native flora and fauna.
1993	Longliner Jin Shiang Fa ran aground at Rose Atoll, spilling full fuel load, with long-term impacts.
1993	Taro blight (a fungus) wipes out local taro crop. Resistant strains imported from Palau.
1994	Widespread warm-water bleaching of corals in territory.
1994	Vaoto Marine Park estab. (PL 23-13, 18.0214) as compensation for dredging Faleasao harbor.
1994	Sewage treatment plants in Tafuna & Utulei upgraded to increase primary treatment capacity.
1995	Governor's interagency Coral Reef Advisory Group (CRAG) established.
2000	9 shipwrecks from cyclone in 1991 were removed from harbor reefs.
2000	Task Force on Population Growth produces report on unsustainable growth rate in A.Samoa.
2000	Collection of "live rock" (corals fragments) was banned to allow reef recovery (EO 002-2000).
2000	Governor Sunia directs CRAG to establish 20% of territory's coral reefs as Marine Protected Areas.
2001	Use of scuba gear while fishing was banned because reefs are overfished (EO 002-2001).
2002	Sea Grant program established at American Samoa Community College.
2002	Widespread warm-water bleaching of corals in territory.
2003	Widespread warm-water bleaching of corals in territory.
2003	Sea turtle & marine mammal sanctuary established in all territorial waters, 0-3 mi (EO 005-2003).
2003	Ocean Resource Management Process established to coordinate nearshore, harbor, offshore,
	and watershed management plans (EO 004-2003).
2003	Shark finning (taking fins only) was banned in territorial waters (EO 066-2003).
2004	Cyclone Heta (Jan. 4-5); moderate damage to buildings, forests and coral reefs.
2005	Cyclone Olaf (Feb. 16); this Category 5 cyclone slammed directly into Manu'a.

Abbreviations: EO (Executive Order), PL (Public Law), PO (Presidential Order)

Appendix 2. Index of some Samoan plant names used in text

Samoan	Common	Scientific
a'amati'e		Elaeocarpus floridanus
ala'a		Planchonella garberi
aoa	banyan	Ficus prolixa/obliqua
asi toa	•	Syzgium inophylloides
atone	nutmeg	Myristica inutilis (fatua)
au'auli	Samoan ebony	Diospyros samoensis
esi	papaya	Carica papaya
fa'i	banana	Musa x paradisiaca
fetau		Calophyllum inophyllum
filimoto	Indian plum	Flacourtia rukam
futu	•	Barringtonia asiatica
gasu		Palaquium stehlinii
gatae	coral tree	Erythrina variegata
ie'ie		Freycinetia spp.
ifi	Polynesian chesnut	Inocarpus fagifer
ifilele	·	Intsia bijuga
ma'ali		Canarium vitiense
magele		Trema cannabina
malili		Terminalia richii
mamala		Dysoxylum samoense
mamalava		Planchonella samoensis
mamalupe		Faradaya amicorum
maota		Dysoxylum maota
masame		Glochidion ramiflorum
mati	fig	Ficus spp.
moso'oi	perfume tree	Cananga odorata
niu	coconut	Cocos nucifera
nonu	Indian mulberry	Morinda citrifolia
o'a	•	Bischofia javanica
olioli	tree fern	Cyathea spp.
palulu	morning glory	Operculina turpethum?
poumuli		Flueggea flexuosa
pua lulu		Fagrae berteroana
pulu	Mexican rubber tree	Castilla elastica
soga		Pipturus argenteus
talo	taro	Colocasia esculenta
taputoi		Elattostachys falcata
tava	island lychee	Pometia pinnata
ti	ti plant	Cordyline fruticosa
togo	mangrove	Bruguiera/Rhizophora
toitoi	scaevola	Scaevola taccada
ulu	breadfruit	Artocarpus altilis
vaepovi	orchid tree	Bauhinia monandra
vavae	kapok tree	Ceiba pentandra
	1	*



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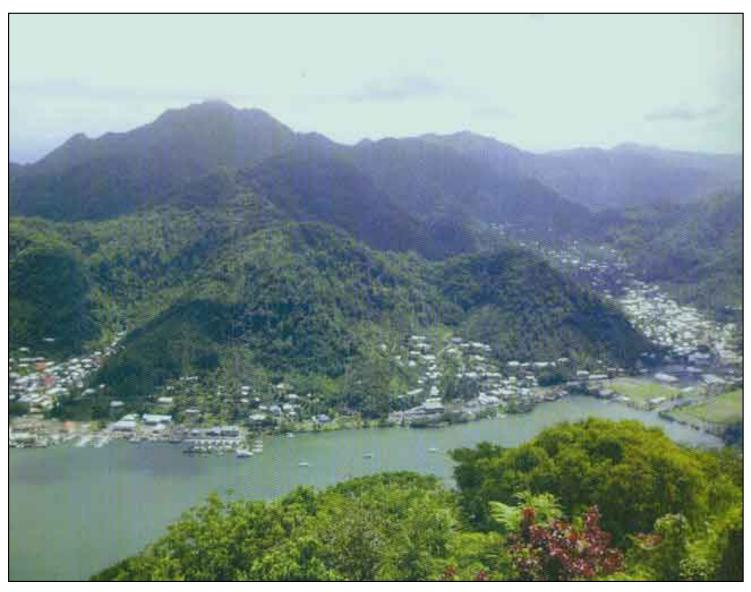
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