



Troublesome Birds of Fiji Islands

Edward Narayan

Fiji Islands, as a geographically recent, isolated island, has a small avifauna, though it is one of the richest Pacific island countries for rainforest birds. Today, we are unaware of many colorful *endemic* and *native* bird species of Fiji Islands because they are often only seen in locally abundant patches. We may encounter some of our beautiful birds such as the Fiji Parrot Finches at Nadi Airport, Collared Lories flies around towns and villages, and shining parrots in the forests. The current decline of our native avifauna is contributed via *anthropogenic* activities such as *deforestation* of the rainforest. Birds which we frequently encounter today, were introduced to our shores, either intentionally, for agriculture, recreational purposes (sport hunting), or aesthetic purposes, either by missionaries, indentured laborers or the early Fijian settlers. In history, several deliberate attempts of introducing birds, such as turkey, pheasant, an unidentified grouse species, laughing Kookaburra, Tawny Frogmouth and Partridge, failed due to predation, lack of potential prey or because these birds could not adapt to the new tropical environment and hence they were wiped out without passing their *latency period* in the new location. Today, 11 introduced bird species have successfully established in the Fiji Islands. The Invasive alien species (IAS), recognized by the Global Invasive Species Database (GISD) include, Red-Vented Bulbul, Common Mynah and Jungle Mynah. Since their introductions, these birds have established themselves in almost every habitat, posing a natural threat to our native birds as they may drive them out of the rainforest. They also act as sources of parasites, diseases and damage agricultural crops and buildings. There are 8 other introduced birds including, Java sparrow, Feral Pigeon, Spotted-Necked Dove, Red Avadavat, Jungle Fowl, Australian Magpie, Swamp Quail and European Starling. The Feral Pigeon, Spotted-Necked Dove, Java Sparrow and European Starling have been reported to damage to our flora, fauna and our livelihoods, but currently only the Feral Pigeon and Spotted-Necked Dove are abundant in Fiji Islands, but yet they are not recognized as IAS by the GISD. The other introduced birds listed above are presently found in small numbers within localized habitats and hardly cause any damage. (Refer to Appendix Table 1.0 for information on the introduced non-invasive birds currently in Fiji Islands). The following section provides necessary information on the introduced invasive birds of the Fiji Islands, their effects on our flora, fauna, livelihoods and their control.

Red-Vented bulbul- *Pycnonotus cafer*

Local name: bulubulu (Lomaiviti), uluribi (Yasayasaira), ulurua (Ra), mainanisala (Lomaivitlevu).

Origin: India (Native to the Indian sub-continent). Total of seven sub-species, the sub-species *P. cafer benalenis*, a native of Bengal (a region in the northeast of [South Asia](#)), was introduced to Fiji Islands.

Date of introduction: Possibly introduced from India in 1900s, first noted in 1903.

Introduction: Intentional but the actual reason remains unclear. A theory suggests, being a favorite folklore bird, it was brought by indentured laborers (1900s) probably as a cage bird, or alternatively it may have been brought as a gaming or sporting bird.

Current Distribution: Widespread on mainland Vitilevu (Suva, Nausori High Rd., Saweni Flats, Sigatoka Dunes, Colo-i-Suva Park., even as high as on the central plateau around the Monasavu dam (Naitasiri). It has not yet spread widely in Vanualevu and has been reported only from Labasa. Widespread in Mamanuca, Lomaiviti Groups, Viwa, Ovalau and Wakaya Islands. Rare on Taveuni and Beqa Islands.

Identification hints: The adult size is about 20.5 cm in length and weighs between 26 and 45 grams. Generally black colored and is crested with a white rump, black tail with white tips and grey-black lower abdomen. The small feathers under the tail are bright red giving the bird part of its common name.

Small feathers on the head can be raised at will, making it look like a miniature cockatoo.



Red-vented Bulbul (photo: Paddy Ryan)

Habitat: It is common in all man-modified habitats, and scrubby bushes, cultivation, parks and gardens. It is also found along roadsides, river banks and other disturbed secondary areas. It does not occur deep within large tracts of forest.

Breeding: It nests from October to February and usually lays 1-3 white eggs marked with darker spots and streaks. Their nest is cup-shaped, made of plant matter, with spider webs binding the outside and lined with soft material. When not breeding, they gather together in large flocks in communal roosts.

Problems caused: Recognized as *noxious*, as it destroys commercially-grown fruits such as bananas, tomatoes, pawpaw and other soft fruits.

Control: Secure your soft fruit gardens using proper mesh wire fencing and assist in *reforestation* of land in your community by planting trees since these birds do not like to stay in forested areas.

Indian Mynah- *Acridotheres tristis*

Local name: maina (Yasayasairā, Rā, Lomaivitilevu, Lomaiviti, Vanualevu, Lau).

Origin: A native of India and western Southeast Asia.

Date of introduction: Around 1880s or 1890s.

Introduction: Intentionally introduced to help control various insects such as orthopterous pests of the emerging sugar industry.

Current Distribution: Common on mainland Vitilevu and Vanualevu. Especially common on the drier, *leeward* sides of the two main islands. It is also common on Viwa, Taveuni, Ovalau and Vatulele Islands.

Identification hints: The adult size is 22cm in length. Basically brown appearance and does not have any tuft of hair-like feathers above the bill. Eyes have brown *iris* and a conspicuous yellow patch of bare skin or wattle behind each eye. Usually found in pairs, defending each other in encounters with other couples, and have strongly defended territories. They have a range of calls, and with intelligence approaching or exceeding that of parrots. Their territorial disputes are usually “fun” to watch, and such combats stop only when a party pins the adversary to the ground.



Common Mynah (photo: Ian Morley)

Habitat: The favorite nesting places are under the eaves of houses, a nook or cranny in houses. In the evening, large groups gather in communal roosts, most noticeably in the non-breeding season. They also forage on tidal flats for crabs and are often seen riding on the backs of grazing cattle for mites.

Breeding: It nests from November and February and usually lays 3-4 light blue eggs. Uniquely a mating pair will bond throughout life, hence they are strictly *monogamous*.

Problems Caused: An economic problem because they damage fruits and grain crops. They also disturb our livelihoods at home, office buildings, farms, during traveling, and even when we are asleep. The noises from large groups can be deafening. They are highly responsible for driving native birds deeper into the bush.

They cause health problems by spreading mites and have the potential to spread diseases to people and domestic animals.

These birds become quite fearless of people if not hassled and can be a

problem in outdoor eating areas by stealing food off people's plates.

Control: We cannot entirely remove them because they live as our companion, in large numbers during breeding seasons. So to protect our livelihoods, we should provide them with an artificial nest-box hanging on an outside wall and this practice will distract them from building nests in the roofs of our homes and offices.

Jungle Mynah- *Acridotheres fuscus*

Local Name: mainaloa (Generally in Fiji).

Date of introduction: About 1900 from the Indian *sub-continent*.

Introduction: Intentional introduction for the specific purpose of combating Armyworm (the caterpillars of the moth *Mythimna separata*) which can appear in plague numbers from time to time.

Current Distribution: Common and well established on the wet, *windward* side of Vitilevu but it is rare on Vanualevu. Absent from Taveuni. Often sighted on Nasoata, Rabe, Ovalau and Viwa Islands.

Identification hints: The adult size is about 22-24 cm body length. *Plumage* is a uniform brownish grey, white wing patches very noticeable when in flight. A *morphological* difference from the common mynah is their lack of yellow patch of skin behind the eyes and their iris is yellow. They have a crest of feathers at the base of the bill that can be raised at will. They are darker and slimmer than common mynah.



Jungle Mynah (photo: Paddy Ryan)

Habitat: Mostly common about country and garden areas than in the towns proper and often seen in large flocks in fields, often perched on the backs of feeding cattle, fluttering down to catch insects disturbed by beasts. They survive in urban areas and villages, mainly eating garbage and nests under roofs even in occupied buildings.

Breeding: Usually lays 3-4 *turquoise* eggs between November and February.

Problems Caused: Causes damage to commercial crops, guavas and other fruits. Spread diseases, parasites, and may compete with our native birds for nesting sites in villages.

Control: Keep their nests out of the roof if at all possible. Do not keep too many soft fruit plants (pawpaw, guavas, and bananas) near your compound. Keep gardens properly fenced. Do not cut down vegetations unnecessarily and try to promote reforestation in your community.

Feral Pigeon-*Columba livia*

Local Name: ruve (Yasayasairā, Rā, Lomaivitilevu, Lomaiviti, Vanualevu, Lau).

Origin: Native to Europe, North Africa, and South Western Asia.

Date of introduction: Introduced before 1840 but did not become well established until the 1950s and 1960s.

Introduction: Intentionally brought by early European missionaries probably as a cage bird.

Current Distribution: Today it is common in many large towns (plenty around Suva) and larger villages (Such as in Taveuni; Somosomo, Bouma and Vidawa villages). They are still very much associated with human settlement and dependent on buildings for nesting sites.

Identification hints: Adult size is 30cm in length and variable in color with a dark bluish-gray head, neck, and chest with glossy yellowish, greenish, and reddish-purple iridescence along its neck and wing feathers. Females tend to show less *iridescence* than the males. Their bill is dark grayish-pink. Their lifespan averages 3-5 years in the wild.

Breeding: Peak breeding season is between March and July but they can breed all year round. Normally 2 eggs are laid with 2-4 broods each year. Hawks often take eggs and nestling.

Problems caused: Affects farmers as they damage garden plots by digging for planted seeds. They may also live in our

house roofs and make noises at night. Fecal deposit causes damage to buildings, monuments and cars. There are plenty around bus stands in towns and around markets and this affects movement of people and motorists.



Feral Pigeon (photo: Edward Narayan)

Control: Netting-off breeding sites, shooting, trapping, habitat modification, frightening, repellents, toxicants, and nest removal are all effective control methods.

Spotted-necked Dove- *Streptopelia chinensis*

Local name: kukuru (Yasayasairā, Rā, Lomaivitilevu, Lomaiviti, Vanualevu, Lau).

Origin: Southeast Asia.

Date of introduction: Probably early 1900s.

Introduction: Probably intentional introduction as a cage bird.

Current Distribution: Common in towns, farmland and scrubby bush on Vitilevu (Suva, Saweni Flats and Korotogo) and Vanualevu. Also found in Nanuyalevu-

Turtle Islands, and abundant on Viwa, Taveuni (Somosomo and Vidawa villages) and Ovalau Islands and their outliers; the Yasawa and Mamanuca Groups.

Identification hints: Adult size is 30cm in length, upper-parts light brown, under-parts pinkish grey. Characteristic broad black band spotted with white around the back of the neck.



Spotted-necked Dove (photo: Ian Morley)

Spotted-neck difficult to see except with a good view. Head and eyes are generally pale in coloration. Broad white tips to *lateral* tail feathers. Call, a soft cooing.

Habitat: Common in open habitats (both wild grassland and cultivated land), sometimes feed in flocks of 10-20 in the gardens. Usually present in the village and town areas. Rather terrestrial, they are nevertheless also often seen *perching* on wires or low trees.

Breeding: Supposedly breeds all year round. Nests are made in low trees or tall bushes, usually near open ground. Both parents build the nest. 1-2 white eggs are

laid. Both parents share incubation duties. Mating involves a male performing a flight display of a steep climb accompanied by loud wing claps followed by a downward swoop in a circular dive with outstretched wings to rest on the perch of its mate.

Problems caused: Recognized as one of the most destructive birds, especially when seen in flocks of 10-20, as it consumes large quantities of rice.

Control: Trap them live, put heavy nets in gardens to ensure the birds re-locate, do not throw peas, rice etc., in your compound. A “dummy-farmer” made from sticks and pieces of old clothe keeps them away from rice paddy.

European starling- *Sturnus vulgaris*

Local name: katakata-kacu (Lau).

Origin: The Eurasian species which have been introduced to many countries, including Australia and New Zealand.

Date of introduction: 1930

Historical Record: European starling was first discovered in 1951 in the southernmost islands of the Lau Group.

Introduction: Probably an accidental introduction by a passing ship, via the Kermadec Islands, but no record exists of its deliberate introduction. It appears to be a recent addition to the avifauna.

Current Distribution: It spreads no further than islands of Southern Lau, Votua, Onoilau and some of the smaller clusters.

Identification hints: Plumage almost black with light gray flecks giving the effect of a metallic sheen.

Habitat: Agricultural sites and villages.

Breeding: Builds an untidy nest in holes in trees, cliffs, or buildings. 4-7 pale blue eggs in temperate countries-clutch size in Fiji not recorded.



European Starling
(photo: Dick Watling)

Problems caused: Described as a notorious pest on the distributed islands and it feeds on soft fruits such as tomatoes, pawpaw and banana.

Control: Need strong quarantine checks on local sea-air traveling, especially to avoid risk of accidental or intentional release to Viti Levu.

Records of Invasive Indigenous Bird Species

The impact of introduced birds on our flora and fauna has been well documented. It is, however, not a simple matter to assess to what extent any birds, diverse to be called noxious- many of those that take some toll on grain and fruits are also largely insectivorous and in this way more useful than harmful. As an example, the European starling in Fiji has been regarded as a nuisance in towns and built-up areas. Overseas the best informed opinion is that this bird exerts a useful control to certain insect pests, although it does attack stone fruit crops in season. It cannot, however, be disputed that its further spread on our shores should be prevented and steps have already been taken towards this end. The level of invasiveness is not limited to alien birds, as we have records of indigenous birds which may for one reason or another be regarded as troublesome. (Refer to Appendix Table 1.2).

A well documented record of an indigenous troublesome bird is given below:

Common name: Purple Swamphen

Scientific name: Porphyrio porphyrio
sub. Sp. *vitiensis* Peale).

Local name: Teri

Distribution: This bird, commonly known as purple gallinule or swamp hen is a very handsome species of land rail, native of Fiji, New Caledonia, New Zealand and Australia. In Fiji, Teri was formerly common, but is now extinct on the larger islands, but still occurs on Naigani, Viwa, Gau and Kadavu. They were reported from Taveuni by Wood 1923. At Naiqani (about nine miles off the east coast of Vitilevu and is part of a proclaimed bird sanctuary) the birds are common and there were several near the village. They are recorded on bananas and in a "vuci" or swamp densely covered with *Acrostichum* fern (*Boreti*) and sedge. They feed at early morning and late afternoon when, according to the Fijians, they enter the outskirts of the village.

Description: Deep purple blue, darker above. Brick-red bill and frontal plate, white undertail.



Purple Swamphen (photo: Dick Watling)

Breeding: They nest in dense thickets of reed grass (*Gasau*) on lie hillsides and also in the coastal fern and sedge swamps. The nests are built on the ground or placed on low branches; three eggs are usually laid and the young run immediately after hatching. The local breeding time is during the period January to March when the reed grass is in flower.

Habitat: The birds well known for their *sagacity* and also for their "bizarre ideas on gardening." They normally spend most of their time on the ground: vegetable substances form the principal food, but they also eat snails, insect larvae and worms. They often dig out and eat root crops and, in New Zealand, destroy grain in some districts. When disturbed they can fly well, but the flight is labored and awkward. The habits of this bird render it an easy prey to mongoose; and the burning of the vegetation, especially when the young birds are about, destroys many birds.

Status as a pest: At Naigani it is certainly doing much damage to bananas and it appears that food gardens and banana plots weeded and cleared of much undergrowth gives the swamp hen shelter and confidence.

Control: Control of the birds can obviously be achieved by (1) mongoose, (2) burning, (3) shooting and (4) poison baits.

(1) The introduction of mongoose is not wanted by the Fijians themselves; they have refused to consider this before and are quite definite about it. This measure is too severe as it would result in the extermination often, of other native birds, including the very rare Bici

(*Rallus philippensis*) and of domestic poultry. It would not itself be controlled later, unless only one sex was introduced to the island.

(2) Burning off is favored by the Fijians and is probably the traditional means of controlling the numbers of the birds. Actually, controlled burning may well be a solution of the problem.

(3) The gun is a ready means of reducing numbers. There are obvious difficulties, but it seems likely that one or two short

guns used by approved wardens only on birds in food gardens would help to reduce the numbers and perhaps frighten the birds away.

(4) Poison baits would be difficult to arrange and are probably too dangerous to human life to be seriously considered.

A further possibility arises from the fact that the Teri does not frequent forested areas. It might be possible to plant trees in strategic belts on the hills so as to remove nearby breeding grounds.

Appendix Table 1.0: Information on Introduced Non-Invasive Birds of Fiji Islands			
Names	Introduction	Status and Distribution	Reason for Non-Invasive Status
<p>Java Sparrow- <i>Padda oryzivora</i></p> <p>manumanu niraisi (Lomaiviti)</p> <p>(PLATE 1)</p>	<p>Intentional introduction about 1930s to towns and farmland in parts of Southern Vitilevu, Taveuni and southern Vanualevu.</p>	<p>Locally abundant and appears to be surviving now only around Suva.</p>	<p>Due to patchy distribution. Also due to lack of natural habitat locations and food such as rice since there are only few rice mills around today.</p>
<p>Jungle Fowl- <i>Gallus gallus</i></p> <p><i>Toa ni vei kau</i></p> <p>(PLATE 2)</p>	<p>Intentional introduction by early Fijians or early Pacific human colonists. Plays an important role in the culture of Polynesians who valued them for their feathers, sacrificial purposes, cockfighting and food.</p>	<p>Confined to a few large islands without mongoose such as Taveuni, Ovalau, Koro (Common) and Vatulele Islands. Breeds (not recorded but presumed to breed on Nanuyalevu-Turtle Islands.</p>	<p>Due to being common only on few localized habitats. Declining through over-trapping. And as a result of predation it was eradicated on mongoose-infested islands.</p>
<p>Red Avadavat (Strawberry finch)- <i>Amandava amandava</i></p> <p>(PLATE 3)</p>	<p>Intentional introduction probably as a cage bird.</p>	<p>Present on Vitilevu (e.g. Nausori Airport, Momo) and probably on Vanualevu, Taveuni, and Lomaiviti Group, only recorded with certainty on the Nadrau plateau at about 3,000' above sea-level.</p>	<p>Current small numbers indicate they do not require control. Excellent at breeding in an aviary and make a good species for the beginner.</p>
<p>Australian Magpie- <i>Gymnorhina tibicen</i></p> <p>mekepai (Vanualevu, Lau).</p> <p>(PLATE 4)</p>	<p>Intentional introduction probably 1880s and early 1900s specifically introduced to Taveuni to control coconut stick insects.</p>	<p>Locally abundant and restricted to Taveuni, Laucala and Cicia Islands. It has not colonized near Vanualevu.</p>	<p>No reports on any problems caused to our herpetofauna a reason could be the current small numbers and presence only in local environments.</p>

Appendix Table 1.0: Information on Introduced Non-Invasive Birds of Fiji Islands			
Names	Introduction	Status and Distribution	Reason for Non-Invasive Status
Brown Quail- <i>Coturnix ypsilophora</i> Moa (Generally in Fijian). (PLATE 5)	Deliberate introduction probably in the 1900s on western Viti Levu and in central Macuata on Vanua Levu.	Currently rare and restricted to the grasslands of western Vitilevu, and Vanualevu.	Due to rare status as it has declined drastically in number due to predators such as mongooses and via habitat destructions.

Table 1.2: Record of troublesome indigenous bird from Fiji Islands.

Common Name	Scientific Name	Distribution	Remarks
Swamphen (Teri) (Plate 6)	<i>Porphyria porphyrio</i>	Subsp. <i>Vitiensis</i> on smaller islands only: formerly common elsewhere. Recorded pest 1952.	Destroying bananas and root crops at Naigani, 1953.
Kaka or yellow- breasted musk parrot (Plate 7)	<i>Prosopiea personata</i>	Vitilevu; recorded as pest 1942.	Eats green bananas 1942: <i>Kauvula</i> 1953.
Kingfisher (<i>Lesi,</i> <i>sese</i>) (Plate 8)	<i>Halycon saneta</i>	Throughout Colony	Attacks young chickens at Lau 1953.
Goshawk (Ige, swamp harrier) <i>manu-levu</i> (Plate 9)	<i>Circus approximans</i>	Throughout Colony	Slow on wing, not very dangerous to poultry
Fiji Goshawk sparrow hawk (<i>Reba</i>) (Plate 10)	<i>Accipiter rufitorques</i>	Throughout Colony	Quick on wing, dangerous to young chicks.

REFERENCE PHOTO PLATES

PLATE 1



Java Sparrow (photo: Paddy Ryan)

PLATE 2



Jungle fowl (Domesticated) (photo: Edward Narayan)

PLATE 3



Red Avadavat (photo: Paddy Ryan)

PLATE 4



Australian Magpie (photo: Paddy Ryan)

PLATE 5



Brown Quail (photo: Ian Morley)

(Plate 6)



Purple Swamphen (photo: Dick Watling)

(Plate 7)



Masked Shining parrot (photo: Dick Watling)

(Plate 8)



Kingfisher (photo: Paddy Ryan)

(Plate 9)



Swamp Harrier (photo: Dick Watling)

(Plate 10)



Fiji Goshawk (photo: Paddy Ryan)

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