

Ornithological Observations on Yap, Western Caroline Islands

H. DOUGLAS PRATT

*Museum of Zoology, Louisiana State University, Baton Rouge,
Louisiana 70893*

PHILLIP L. BRUNER and DELWYN G. BERRETT

*Division of Natural Sciences, Brigham Young University-Hawaii Campus,
Laie, Hawaii 96762*

The Yap Group has been the least known of all the major Micronesian island groups in terms of the bird fauna. Baker's (1951) treatise on the birds of Micronesia contains little information regarding the Yapese avifauna. Fisher (1950) reported on a month's ornithological observation and collecting on Yap in 1946. For a discussion of the topography and vegetation of Yap, the reader is referred to that paper. Virtually nothing has been written in the subsequent quarter century concerning Yapese birds.

We visited Yap for the purpose of studying and collecting birds in the summer of 1976. Pratt and Bruner were in the islands from 14 to 25 June and Berrett from 23 to 25 June and again from 16 to 18 August as part of an expedition to all the larger Micronesian islands that can be reached by commercial aircraft. Most of our observations were made on the main island of Yap, but we also visited Gagil-Tomil and Map Islands. We were able to tape record bird vocalizations and we thus gained many insights denied to earlier investigators. Our field observations provided many preliminary judgments as to relationships of the birds of the area and some of these will be discussed herein.

Our studies on Yap yielded six species new to the islands, as well as many observations that differ importantly from published reports. The listing that follows includes only those species that we observed while on Yap and should not be considered a complete list of the birds of that island group. Comments are given only for those species for which we offer new information. Owen (1977b) has prepared a complete list of Micronesian birds with English language names. We have used these names unless they differ from those used by the American Ornithologists' Union (1957). Species of which we collected specimens are indicated by an asterisk. These specimens are now in the collections of the Brigham Young University-Hawaii Campus (BYUH) who sponsored our work in Micronesia.

Species Accounts

Gallus gallus-RED JUNGLEFOWL.

These feral chickens were greatly reduced in numbers as a result of World

War II (Fisher, 1950), but they are now fairly common and widespread in forested areas of Yap.

Poliolimnas cinereus-WHITE-BROWED RAIL.*

These rails inhabit virtually every taro patch on Yap. Their presence is easily detected by playback of their recorded vocalizations. The birds respond by approaching the tape recorder and seem at such times to lose all timidity. They can readily be coaxed into the open in this manner. Sometimes the birds respond with such a loud cackling that many individuals seem to be present. Investigation, however, showed that two birds alone could produce the entire chorus. When not responding to playback, the birds' most frequent vocalizations are a quiet *keek* and a louder *squeak-you*. These rails are occasionally found in dry grassy places. Contrary to Fisher's (1950) report, we found more than two birds in a single taro patch on several occasions.

Pluvialis squatarola-BLACK-BELLIED PLOVER.

We saw a winter-plumaged individual of this species on the beach at Giliman on 22 June. This species has not been previously reported from Yap. It could be distinguished from the American Golden Plover by its whitish rump patch and black axillary patches.

Charadrius sp.

We saw dotterels on several occasions on Map and Yap Islands, but were unable to obtain any. *C. mongolus* (Mongolian Plover) has been taken on Yap (Fisher, 1950) and presumably the birds we saw were of that species. The possibility that they were *C. leschenaultii* (Greater Sand Plover) cannot be ruled out.

Limosa limosa-BLACK-TAILED GODWIT.

Neither Baker (1951) nor Fisher (1950) list this species for Micronesia, but Owen (1977a) has seen it at Palau. We saw two individuals on the morning of 25 June on a wet grassy lawn near the Yap airport. As our equipment was packed for our departure we were unable to obtain a specimen or photograph. The birds were well seen and allowed close approach leaving no doubt as to their identity. They were distinguished from the Bar-tailed Godwit by the solid black tail band and white upper wing stripes.

Calidris acuminata-SHARP-TAILED SANDPIPER.

This species has not previously been reported from the Yap Group. On 25 June we saw four individuals on the same lawn where we observed the Black-tailed Godwits. The sandpipers showed traces of the breeding plumage sufficient to distinguish them from the Pectoral Sandpiper (*Calidris melanotos*). All birds showed a diffuse, not sharply demarcated, breast band and one possessed a distinctly rufous crown.

Sterna hirundo-COMMON TERN.*

According to Baker (1951) this species is known in Micronesia only from two nineteenth century specimens from Palau. Recent observations (Owen, pers. comm.) indicate that it is a regular visitor to western Micronesia. We collected one speci-

men (BYUH 2024) over a freshwater pond near the Yap airport on 23 June. This bird constitutes the first record for Yap.

Anous stolidus-BROWN NODDY TERN.

Fisher (1950) did not find this species on the larger islands of the Yap Group, but we found it to be generally distributed over all the islands we visited. Several birds were sitting in tall trees at the edge of dense forest in central Tomil.

Gallicolumba xanthonura-WHITE-THROATED GROUND DOVE.*

These doves are highly secretive but their low moaning call notes betray their presence. We heard them in virtually every forested area. The call is ventriloquial and can seldom be used to locate the bird. We saw females more frequently than males. Fisher (1950) found these doves only in or near mangrove thickets, but we found them much more often in the heavy forests of interior valleys. Perhaps the birds had been eliminated from such accessible places by Japanese troops during World War II.

Ducula oceanica-MICRONESIAN PIGEON.*

We found these birds to be uncommon on Yap but far from rare. They are rather secretive and are heard more often than seen. We rarely heard the single-note call described by Fisher (1950). Usually the call is a series of low hoarse barking notes accelerating and dropping in pitch. Tall, dense, leafy trees are their preferred roosting sites.

Cuculus saturatus-ORIENTAL CUCKOO.*

This cuckoo has been previously reported in Micronesia only from Palau (Baker, 1951). We collected one specimen (BYUH 2009) near Colonia on 22 June and saw two others there the following day. Berrett saw another individual north of Giliman on 17 August. All birds were in the gray color phase. The bird collected had a damaged tail with new feathers just beginning to emerge.

Eurystomus orientalis-DOLLAR BIRD.*

We collected a Dollar Bird (BYUH 2000) a short distance west of the Yap airport on 18 June. The bird was perched on a high dead snag over an open garden plot. The specimen was moderately fat. The only previous Micronesian records are from Palau (Baker, 1951).

Coracina tenuirostris nesiotis-CICADABIRD.*

Baker's (1951) account of this form is enigmatic. He states that the type is an immature and that the adult is unknown, but then he describes the adults of both sexes! He saw no specimens. Fisher (1950) apparently did not find the bird. The Yap race of the Cicadabird is either extremely secretive or quite rare.

On 19 June Bruner collected an adult female (BYUH 2044) and saw another similar bird in a deep heavily forested valley about two miles west of Colonia. Pratt and Bruner saw another Cicadabird on 23 June near the road just south of the Yap airport. On the following day, Berrett and Pratt saw three individuals perched together in a tree at the edge of the forest where the first bird had been collected.

These three birds were two apparent females and one apparent adult male. Bruner glimpsed several others deeper in the same forest.

The female specimen is much larger than representatives of this species on Palau and Ponape and differs from the Palau bird in being much more rufous-buff in color with less barring of the underparts (Fig. 1). The two "females" seen with the "male" mentioned above seemed somewhat paler than the specimen, but were not seen in adequate light for a valid comparison. The "male" was very dark gray or black with a pale band at the tip of the tail and a diffuse pale patch in the belly. The iris was dark. None of these birds uttered any sounds.

Much additional information is needed before the status of this mysterious bird can be accurately determined. The great size and plumage differences between it and the birds on Palau and Ponape may indicate that the Yap Cicadabird deserves the full specific rank it once held.



Fig. 1. Cicadabird (*Coracina tenuirostris nesiotis*)

Monarcha godeffroyi-YAP MONARCH.*

This abundant endemic is the most conspicuous forest bird on Yap. Most individuals we saw were in the black and white, supposedly adult, plumage. Several immatures still being fed were in the brown plumage resembling that of *M. takatsukasae* of Tinian. Three brown specimens collected, however, had fully ossified skulls. Fisher's (1950) observations also suggested that some adults retain the brown plumage type. Most birds we saw seemed to be paired, and all such pairs were in the black and white plumage.

The Yap Monarch is active and boisterous and is readily attracted by squeaking sounds. When a pair is thus attracted, the male appears to be more inquisitive, approaching within a few feet of the observer and remaining for a longer period of time. The monarch's vocalizations are quite varied. A harsh chatter usually precedes a "wolf whistle" or single whistled note. One call strikingly resembles that of the Elepaio, *Chasiempis sandwichensis*, of Hawaii, perhaps indicating close relationship. Occasionally the monarch sings a more complex song of various whistled phrases.

Rhipidura rufifrons versicolor-RUFIOUS-FRONTED FANTAIL.*

This flycatcher is common on Yap. It resembles the races of this species occurring in the Mariana Islands to the north, but its habits differ in several respects. Whereas Mariana birds (*uraniae*, *saipanensis*, and *mariae*) habitually forage on or near the ground, *versicolor* is a bird of the midlevel in the forest and is usually seen 3 m or more from the ground. The song of the Yap form is slower and less musical than that of the Mariana races, but it is otherwise rather similar. We found one nest about 2 m above the ground in a small tree at the edge of a taro patch. It was a tightly woven cup of plant fibers and grasses and was placed in a fork. A woven tube trailed below the cup for about 10 cm.

Zosterops conspicillata hypolais-BRIDLED WHITE-EYE.*

This white-eye is common on Yap, moving about in small flocks of 5-10 individuals. The distinctiveness of this form has been emphasized by Baker (1951), Fisher (1950), and Mees (1969). The iris of *hypolais* is white or yellowish white, rather than chestnut or brown as in other *Z. conspicillata*. The overall aspect is that of a nondescript drab gray and white bird with a faint yellow wash on the underparts. We cannot agree with Mayr's description (in Fisher, 1950) of the underparts as more yellowish than those of *Z. c. rotensis* of Rota. In fact, *hypolais* and *rotensis* could well represent the extremes of white or yellow coloration respectively among the races of *Z. conspicillata*.

Our observations indicate that the peculiarities of *hypolais* include not only plumage characters but vocalizations and postures as well. In foraging, *hypolais* is slower and more deliberate in its movements than other *conspicillata*. When perched, *hypolais* has a characteristic upright stance and presents a large-headed profile by fluffing the feathers of the head (Fig. 2). The vocalizations include a distinctive buzzy *zee-up* as well as thin *chee* calls that resemble those of many species of *Zosterops*. The song is slower than those of other races of *conspicillata* and consists of a repeated *chee-twee-chulip*.

Z. c. hypolais is found in a variety of situations on Yap. In forests, it keeps to the canopy but forages near the ground in open areas. We saw several small flocks feeding in grasses less than 1 m tall. One nest was a woven cup of grasses suspended in the fork of a tree at the edge of dense forest and was about 3 m above the ground.

We believe that *Z. c. hypolais* is distinctive in so many ways that further study will show it to be a species separate from *Z. conspicillata*.



Fig. 2. Bridled White-eye (*Zosterops conspicillata hypolais*)

Rukia oleaginea-YAP GREATER WHITE-EYE.*

Fisher (1950) saw only two individuals of this species. In contrast, we found the bird to be uncommon but certainly not rare. We saw at least a few individuals every day and were able to collect a good series. This white-eye is generally distributed over the forested parts of the islands. *Rukia* on Yap forages deliberately in the branches and leaves of small to medium-sized trees. It characteristically hangs head downward to explore for food among leaves, flowers, or fruits, and seems especially fond of the seed-pods of tangen-tangen (*Leucaena*). One crop contained a small berry. *Rukia* somewhat resembles in its movements the Cardinal Honey-eater, *Myzomela cardinalis*, and except for the prominent white eye-ring could easily be mistaken for the female of that species by a casual observer. We saw the large white-eyes usually in pairs (Fig. 3).

Mayr (in Fisher, 1950) describes the legs of *R. oleaginea* as being "grayish horn color rather than yellow as in *sanfordi*." All of the birds we saw had bright orange-

yellow legs and bills. Perhaps the color is lost in prepared specimens. The iris is reddish brown.

The call note of the Yap Greater White-eye is a shrill, harsh *cheee*. The melodic whistled song is unlike that of other Micronesian white-eyes with which we are familiar. The pattern varies somewhat, but the song typically resembles the phrase "Tickle me, Peter!"

The relationships of *R. oleaginea* have been the subject of much speculation in the absence of adequate specimen material. Most authors (Fisher, 1950; Baker, 1951; Mayr, 1967) have included this species with the other large Micronesian white-eyes in the genus *Rukia*. Our observations of this species and *R. palauensis* of Palau indicate that these two species are not closely related. In fact, we find it inconceivable that they could be congeneric, as they differ strikingly in voice, feeding behavior, postures, and choice of habitat, as well as in gross morphology. Thus our observations support the opinion of Mees (1969) that *palauensis* should be separated from *Rukia*. He places it in the monotypic genus *Megazosterops*. We have not seen the nominate *R. ruki* of Truk in life, but our brief acquaintance with *R. longirostra* of Ponape indicates that further studies of behavior and ecology are needed before we can accept without reservation that *oleaginea*, *ruki*, and *longirostra* are monophyletic.

We also observed the following 13 species during our studies on Yap: *Phaethon lepturus* (White-tailed Tropicbird), *Ixobrychus sinensis* (Yellow Bittern), *Egretta*



Fig. 3. Yap Greater White-eye (*Rukia oleaginea*)

sacra (Pacific Reef Egret), *Pluvialis dominica* (American Golden Plover), *Numenius phaeopus* (Whimbrel), *Heteroscelus brevipes* (Polynesian Tattler)*, *Arenaria interpres* (Ruddy Turnstone)*, *Sterna sumatrana* (Black-naped Tern), *Thalasseus bergii* (Great Crested Tern), *Gygis alba* (White Tern), *Myzomela cardinalis* (Cardinal Honeyeater)*, *Lonchura punctulata* (Scaly-breasted Mannikin)*, *Aplonis opacus* (Micronesian Starling)*.

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