SHORT COMMUNICATIONS

NOTES ON SOME BIRDS OF THE UPPER ELOA RIVER, PAPUA NEW GUINEA

Virtually no ornithological field work has been carried out on the southern watershed of the Morobe Province, Papua New Guinea. In this brief note I discuss observations made at a site along the Eloa River, about thirty-two kilometres south-south-west of Wau, Morobe Province. There I observed and mist-netted birds from 9 to 12 August 1978, at 850 metres altitude. The camp was about five kilometres downstream from the village of Yanina and about two kilometres upstream from the now disused village of Anandea, which is on most maps (Fig. 1).

The area where I worked was a streamside forest in the flat but narrow gorge of the Eloa River. The gorge is humid and the vegetation is lush and tall. The forest canopy rises to thirty-five metres with occasional emergents slightly higher. Because the canopy was quite complete and shaded the ground, it was easy to walk unhindered through the undisturbed forest. At the time of my study many of the forest trees were fruiting.

I watched and netted birds in about fifty hectares for four days, noting sixty-seven species and netting forty-nine individuals of twenty species.

In the systematic list below, notes on observations of particular interest with regard to altitudinal distribution, vocalization, abundance and field identification are included.

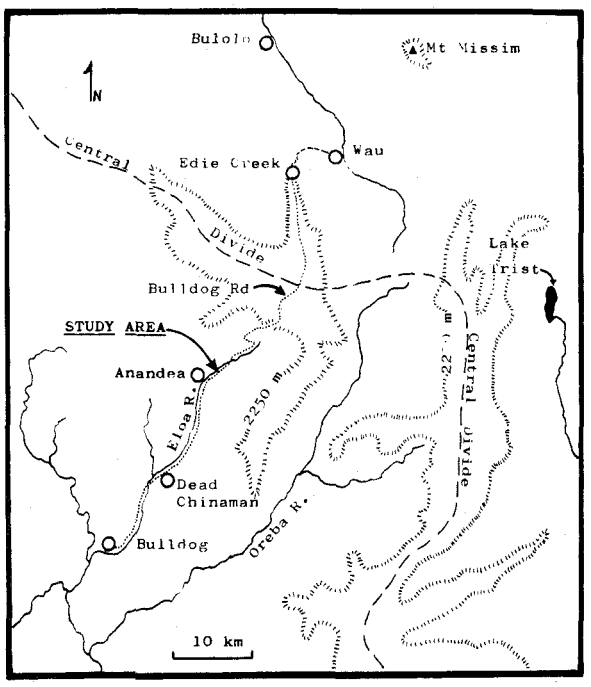

Figure 1. Map showing location of study area.

SYSTEMATIC LIST

Salvadorina waiguensis Salvadori's Teal

Accipiter buergersi Buergers' Goshawk (?)

I observed a black goshawk, probably *buergersi*, chasing and harrassing a Little Eagle *Hieraaetus morphnoides* forty metres above the ground in full sunlight. Buergers' Goshawk is one of the rarest accipiters in New Guinea, another being the very similar Meyer's Goshawk *Accipiter meyerianus*. Both occasionally occur in a black phase. The separation of such birds in the field is apparently impossible. Both are noticeably larger than the very common *A. novaehollandiae*.

Hieraaetus morphnoides Little Eagle

Megapodius freycinet Common Scrubfowl

Ptilinopus superbus Superb Fruit-Dove

Ptilinopus ornatus Ornate Fruit-Dove

Gymnophaps albertisii Mountain Pigeon

This bird was common, often in flocks of 15–25. It has no regular call but during the breeding season gives a single muted note that rises slightly in pitch: 'woom'. Easiest means of quick identification of birds in flight is the rushing noise produced by the wings.

An aerial display is another remarkable habit. One or two males accompany a female on a dead limb. One male then launches off its perch, dropping precipitously, then rising sharply to an apogee. At this point the bird closes its wings and drops nearly straight down, gaining momentum, and then arcing back upward to its perch beside the female. This is often repeated by one male after another, while the female looks on.

Macropygia amboinensis Brown Cuckoo-Dove

Macropygia nigrirostris Black-billed Cuckoo-Dove

Gallicolumba beccarii Beccari's Ground-Dove

Pseudeos fuscata Dusky-orange Lory

Domicella lory Western Black-capped Lory

Cacatua galerita Sulphur-crested Cockatoo

Psittrichas fulgidus Vulterine Parrot

A party of five birds visited a giant fig near camp, calling raucously and feeding on the fruits. Their voices are astounding loud screams, aptly described by Diamond (1972).

Collocalia sp Swiftlets

Collocalia esculenta Glossy Swiftlet

Ceyx lepidus Dwarf Kingfisher

Weight 15 g.

Lalage leucomela White-browed Triller

Coracina montana Black-bellied Greybird

This is a low altitude for this bird. It shared the forest with the similar *C. boyeri*. These two normally are separated altitudinally (Diamond 1972; Beehler MS).

Coracina boyeri Rufous-underwing Greybird

Coracina caeruleogrisea Stout-billed Greybird

Zoothera dauma White's Thrush

I took a single female of this rare hill-forest thrush. Ova were undeveloped, weight 72 g, iris dark brown.

Eupetes castanonotus Mid-mountain Eupetes

Sericornis spilodera Pale-billed Sericornis

Sericornis arfakianus Grey-green Sericornis

Sericornis arfakianus was the common *Sericornis* at my camp. I netted none but observed the species daily and heard its song several times, a wheezy but melodious series

of notes sounding like: 'pit-tu — weedu-weedu', delivered every few seconds.

Sericornis perspicillatus Buff-faced Sericornis
Most records of this bird for Papua New Guinea come from altitudes above 1,600 metres. I saw it foraging in small parties on two days and heard it calling on a number of occasions. It delivers a weak and sweet series of rising chips, similar to the call of *S. arfakianus*.

Sericornis papuensis Papuan Sericornis
I caught an adult male (testis 5 x 4; weight 9 g; wing (arc) 55.5 mm; iris dark brown). This is a downward extension of the bird's altitudinal range of 1,050 metres.

Gerygone chloronota Grey-headed Gerygone

Crateroscelis murina Lowland Fernwren

Phylloscopus trivirgatus Leaf Warbler

Peltops montanus Mountain Peltops Flycatcher

Rhipidura atra Black Fantail

Rhipidura hyperythra Chestnut-bellied Fantail

Monarcha frater Black-winged Monarch

Machaerirhynchus nigripectus Spot-breasted Boatbill
This is a low-altitude record for this species.

Microeca flavovirescens Olive Microeca

Tregellasia leucops White-faced Flycatcher

Monachella mulleriana River Flycatcher
Abundant, in pairs, on dead snags above the water; once three pairs were resting and foraging within fifty metres of each other. I saw no aggression between pairs and often observed the birds feeding with the Torrent Magpie-lark *Pomareopsis bruijnii*.

Peneothello bimaculatus White-rumped Thicket-flycatcher
Common in the understorey; its song is a pleasant whistle of six notes, lasting two seconds; graphically represented, it would be: ¯– – – _. I netted two, weighing 19.5 and 27 g.

Pachycephalopsis poliosoma White-throated Thicket-flycatcher

Pachycare flavogrisea Golden-faced Pachycare

Rhagologus leucostigmus Mottled Whistler

Pachycephala soror Sclater's Whistler

Pachycephala griseiceps Grey-headed Whistler

Myiolestes megarhynchus Brown Shrike-flycatcher

Pitohui dichrous Black-headed Pitohui

Oriolus szalayi Brown Oriole

Cracticus quoyi Black Butcherbird
I netted two birds, weighing 180 and 190 g.

Pomareopsis bruijnii Torrent Magpie-lark

Chaetorhynchus papuensis Mountain Drongo

Manucodia keraudrenii Trumpet Manucode

Diphyllodes magnificus Magnificent Bird-of-Paradise

Paradisaea raggiana Raggiana Bird-of-Paradise

Alluroedus crassirostris Green Catbird

Melilestes megarhynchus Long-billed Honeyeater

Toxorhamphus poliopterus Slaty-chinned Longbill

Toxorhamphus iliolophus Grey-bellied Longbill

Meliphaga mimikae Large Spot-breasted Meliphaga
M. mimikae is quite easy to identify in the hand by its large size, heavily mottled underparts and olive-ochre underwing.

Xanthotis chrysotis Brown Xanthotis

Pycnopygius ixoides Brown Honeyeater

Dicaeum geelvinkianum Red-capped Flowerpecker

Melanocharis nigra Black Berrypecker

Melanocharis longicauda Mid-mountain Berrypecker

Rhamphocharis crassirostris Spotted Berrypecker
A new low-altitude record. I saw a small but noisy congregation at a fruiting tree that had small soft fruits. The birds emit quiet notes like those of a baby bird: 'tseut — tseut — tseut . . .' I saw birds in spotted female plumage only.

Oreocharis arfaki Tit Berrypecker
A new low-altitude record. I saw a party of five or six birds on several occasions, foraging nervously in the forest canopy.

Zosterops novaeguineae Mountain White-eye

Erythrura sp Parrot-finch

DISCUSSION

The most intriguing result of my observations is finding highland forms inhabiting hill-forest in sympatry with typically lowland forms, e.g. *Coracina (boyeri* and *montana), Sericornis (perspicillatus, papuensis, spilodera* and *arfakianus)* and the dicaeids (*Dicaeum*, two *Melanocharis, Oreocharis* and *Rhamphocharis*). This is unexpected in light of Diamond's (1972) work on altitudinal distributions of forest birds. He found separation of many species with altitude, including the species listed above.

Breeding birds are tied to their nest-sites, their display areas or their helpless young. As breeding and rearing cease and because there are seasonal changes in availability of food (specially fruits and flowers), birds may wander far from their nesting areas. I think my observations at Eloa River are a product of these circumstances.

The unusual nature of the site also promoted mixing of highland and lowland forms. I studied birds in a narrow rich wet lowland-type forest (the gorge) that was surrounded by steep and well-drained, structurally and floristically different forest on mountain slopes that rose to almost 3,000 metres within five kilometres. This quirk of topography made possible the easy mixing of highland and lowland forms. The highland species, by moving only a kilometre or so from upland areas could gain or lose nearly 1,000 metres; some slight wandering would potentially bring them to this outpost of lowland habitat in the river gorge. The lowland forms are occupying the uppermost edge of their habitat, a fingerlike peninsula that extends into the mountains, tenuously connected with the vast expanse of flat coastal plain only thirty kilometres to the south. This lowland avifauna of the Eloa gorge was impoverished, however. Such typically abundant and conspicuous species as *Rhipidura rufiventris, Cracticus cassicus, Dicrurus hottentottus* and *Philemon novaeguineae* were not found at the study site.

ACKNOWLEDGEMENTS

I thank the Smithsonian Institution for financial support; the Government of Papua New Guinea for permission to study in their country; and my assistants Ninga Kawa and Michael Yamapao for help in the field.

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27 November 1978.