

EDITORIAL

This issue, Volume 7 number 1, January 1995, commences a new volume. The aim is to produce 3 issues of *Muruk* during a 12 month period and we are now back on schedule. We are again pleased to publish papers in this issue about the birds of little studied areas. Given the rapid pace of development in PNG such base-line inventory studies will assume increasing significance when hard choices about the best usage of the environment have to be made.

Future issues will summarize major sightings over the past year, with some revised criteria applying to what is published:

E = Extension of range, records away from previously known range.

A = Altitudinal extension of range.

B = Breeding records, lacking for many quite common species.

R = Rare, scarce or seldom recorded species.

M = Migrants, with first and last dates of interest or numerical records of note.

G = General interest, may be behavioural, unusual numbers or localities, plumage abnormalities etc.

Records not fitting the above categories are usually from lesser known areas.

Contributors of sightings have been very few in recent years, and we encourage both residents and visitors to submit their records. Please use the above criteria as guidelines.

We particularly welcome copies of tour group reports, as many interesting sightings lie hidden in these inaccessible databases and it is a courtesy to the host country to make copies available to the PNGBS.

Such reports form part of our archives, and only excerpts would be used if such permission is given.

Feedback to notes and papers is welcomed, if you know better please write and tell us, we will be happy to publish, a major aim being to stimulate study and increase the knowledge of New Guinea birds.

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Please continue to send submissions to:

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All contributions will be acknowledged.

COVER: Dwarf Cassowary head study by Jones Hiaso

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FURTHER STUDIES OF THE BIRDS OF THE OK TEDI AREA, WESTERN PROVINCE, PAPUA NEW GUINEA

Phil Gregory

The area around Tabubil in the remote Western Province of Papua New Guinea near the border with Irian Jaya has been the subject of three previous ornithological studies, namely Bell (1969), Coates and Lindgren (1978) and Murray (1988). This paper serves to up-date and amend those data sources and is primarily based on my own observations from Jan 1991-Oct 1994, plus some records collected from visitors during this period. The area is still relatively poorly known ornithologically, with the discovery of over 50 species additional to those previously known bearing out this fact. Major finds have been the discovery of a population of the Greater Melampitta (*Melampitta gigantea*) and Logrunner (*Orthonyx temminckii*) on Mt. Robinson and the continued existence of Black Sicklebill (*Epimachus fastuosus*) at several sites.

The avifauna has a significant component of western New Guinea forms, with north slope species largely absent. Western forms include Archbold's Owllet-nightjar (*Aegotheles archboldi*), Streaked Lorikeet (*Charmosyna multistriata*), Lorentz's Whistler (*Pachycephala lorentzi*), Western Mountain White-eye (*Zosterops fuscicapillus*) and Splendid Astrapia (*A. splendidissima*).

The habitat is being progressively altered, particularly along the roads as new settlements develop and the higher altitude villages are abandoned. The population of Tabubil in 1994 is well in excess of 10,000 people. However much forest remains intact and, contrary to the statement in Murray (1988) lowland forms such as Magnificent Bird-of-Paradise (*Cicinnurus magnificus*), and Golden Cuckoo-shrike (*Campochaera sloetii*) are still frequent in the area. Male Greater Bird-of-Paradise (*Paradisaea apoda*) Black Sicklebill and Vulturine Parrot (*Psittichas fulgidus*) are however under severe hunting pressure, with skins regularly on sale in the Tabubil market. Shotguns are mercifully still scarce, but catapults (shangis) and the traditional (low environmental impact!) bow-and-arrow are commonly used to hunt birds.

A remarkable total of at least 16 species of Bird-of-Paradise are confirmed to occur within the study area, comparing favourably with the famous Ambua/Tari Gap region of Southern Highlands Province. It would be fascinating to determine the occurrence or otherwise of Ribbon-tailed Astrapia (*A. mayeri*) and Crested Bird-of-Paradise (*Cnemophilus macgregorii*), two ornithological distribution mysteries which still persist and whose key is likely to be in this area.

The scarcity of species in the town itself reflects the propensity of the younger males of the human population to stone any species foolhardy enough to sit still within range. Sacred Kingfishers (*Halcyon sancta*) suffer a high mortality every year, as do many other species. Only the shy or high-flying survive around Tabubil town!

This study documents the occurrence of 321 species in the area, about 50 more than previously known. Some are quite common, others merely vagrants or visitors. The status of many is altering as habitats change, and a number of species such as Pied Chat (*Saxicola caprata*) and Black-headed Whistler (*Pachycephala monacha*) have colonised secondary growth areas. Losses have been few, with only the Buff-banded Rail (*Rallus philippensis*), Brown Quail (*Coturnix australis*) and Tawny Grassbird (*Megalurus timoriensis*) seemingly gone.

Area studied

The area concerned may for the purposes of this study be defined as follows : the valley of the Ok Tedi extending south to Km 90 (N. of Kiunga) on the Kiunga road and north-west as far as Mt. Binnie inside the mine site itself. The Hindenburg Walls (actually some three such structures, spectacular knife-edge limestone escarpments forming part of the foothills of the Hindenburg Range) form a natural boundary to the east. The western boundary comprises the Lukwi valley beyond the village of Ok Ma.

Some important sites within this area are:

Dablin Creek, a steep track running up from the main mine access road some 7km north of Tabubil town, rising from 700m to over 1000m at the top part and transecting rich hill forest.

Ok Menga is another good site, being a ridge bordering the valley of the Ok Menga and giving access to drier forest at the 700-750m altitude.

The **Ok Ma** road was built as the access road to a projected tailings dam and follows a ridge up through hill forest to the 750m mark and down into the Lukwi valley where lowland forest comes to predominate.

Townsville drill site is a geological survey camp at 1500m on the slopes of Mt Akrik adjacent to the mine area and gives access to moss forest up to 2200m via a network of trails linking helipads and drill site clearings. These were my main sites, with access to the latter being by helicopter and mainly surveyed in 1992.

Mt. Robinson dominates Tabubil town to the north, and is a steep hill rising up to 1500m with moss forest on the top 300m or so.

Km 115 is a picnic spot by a stream in the forest along the Kiunga road. Incidental observations were made in the town area especially along the escarpment track by Cloudlands Hotel.

Climate

The climate of the area is remarkably wet, varying from 9104 mm at Fubilan in the mine area at 2200m to about 7900mm at Tabubil around the 500m altitude. The wettest months are March-April with about 29.2 mm of rain daily, and the driest is August with 15.3mm daily average. Completely dry days are rare but September seems to have a few annually. Cloud cover is usually present, particularly at the higher altitudes, though mornings are occasionally clear around Tabubil, except during June-July when cloud cover is constant. Tabubil temperatures average 24.6 C in April to 22.2 C in August, but are more extreme as one goes higher. The heavy rainfall and frequent cloud cover tends to depress the average temperature.

Habitat

Vegetation zones in the study area may be divided into 4, following the classification adopted by Hyndman and Menzies (1990). The characteristic vegetation is rain forest, with occasional gardens, and can be classified to type by floristic composition and altitude.

1. **Foothill Rain Forest/ Hill Forest** is a mixed evergreen type with 3 poorly defined layers up to 60m height, with a dense shrub layer, extending up to about the 900/1000m height and surrounding the town itself. Ok Menga and Ok Ma would fall within this category, as would the lower reaches of the Dablin Creek site.

2. **Lower Montane Rain Forest / Mid-montane Forest** 1000m -3000m approx is a mixed evergreen forest with a canopy 25-30m high. This is the preferred settlement zone throughout most of New Guinea (Brass 1941). The lower slopes of Mt Robinson and Townsville drill site would be of this forest type.

Much secondary woodland occurs along the lines of road, especially along the Ok Ma and mine access roads, and the proportions of this habitat grow annually as settlement increases.

3. **Lower Mid-montane Rain Forest** 1800-2200m with a canopy up to 30m occurs in a narrow band at the base of the Hindenburg Walls and on Mt Fubilan., and probably the top 300m of Mt Robinson from 1200-1500 m.

4. **Mid-montane Rain Forest** occurs above 2300m above the Hindenburg Walls on the Hindenburg Plateau, and is just outside the main study area though the upper reaches of Townsville / Mt. Akrik and Mt. Binnie would be of this type. A characteristic species would be the Splendid Astrapia.

Much forest along the roads is secondary growth, and the plateau where the town lies was cleared during the construction phase, with regrowth areas now scattered throughout. Streams are an important habitat for some species, though the Ok Tedi itself supports virtually no bird-life now due to the high volumes of rock waste precluding the development of food sources. The airstrip, golf course and sports fields are attractive to migrant waders at passage periods, whilst the airstrip and the industrial "lay-down" area support several pairs of Little Ringed Plover (*Charadrius dubius*).

Lake Wangbin (Sogolomik) is the only lake in the area and still supports a few Eurasian Coot (*Fulica atra*); the pond at Sawmill has become overgrown since Murray's time.

This paper summarises the current status of all species known to have occurred in the Ok Tedi area, making reference to previous papers and also to the collections made by Gilliard and LeCroy (1961) in the Hindenburg Range just to the north. Many of these species were found north of the watershed and are not found at Ok Tedi, being north slope birds or montane grassland species.

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Conservation

Coates and Lindgren made several recommendations about suitable measures that could be taken to improve the conservation ethic in the Ok Tedi area. The banning of shotguns was a key point, as these have a far greater environmental impact than the previous simple technologies used.

The following simple and inexpensive strategies would be worthy of serious consideration :

* Clearing for farms and gardens should avoid very steep slopes where erosion will be very rapid given the high rainfall and relatively weak geological structure. Some form of watershed protection education at village level may be appropriate.

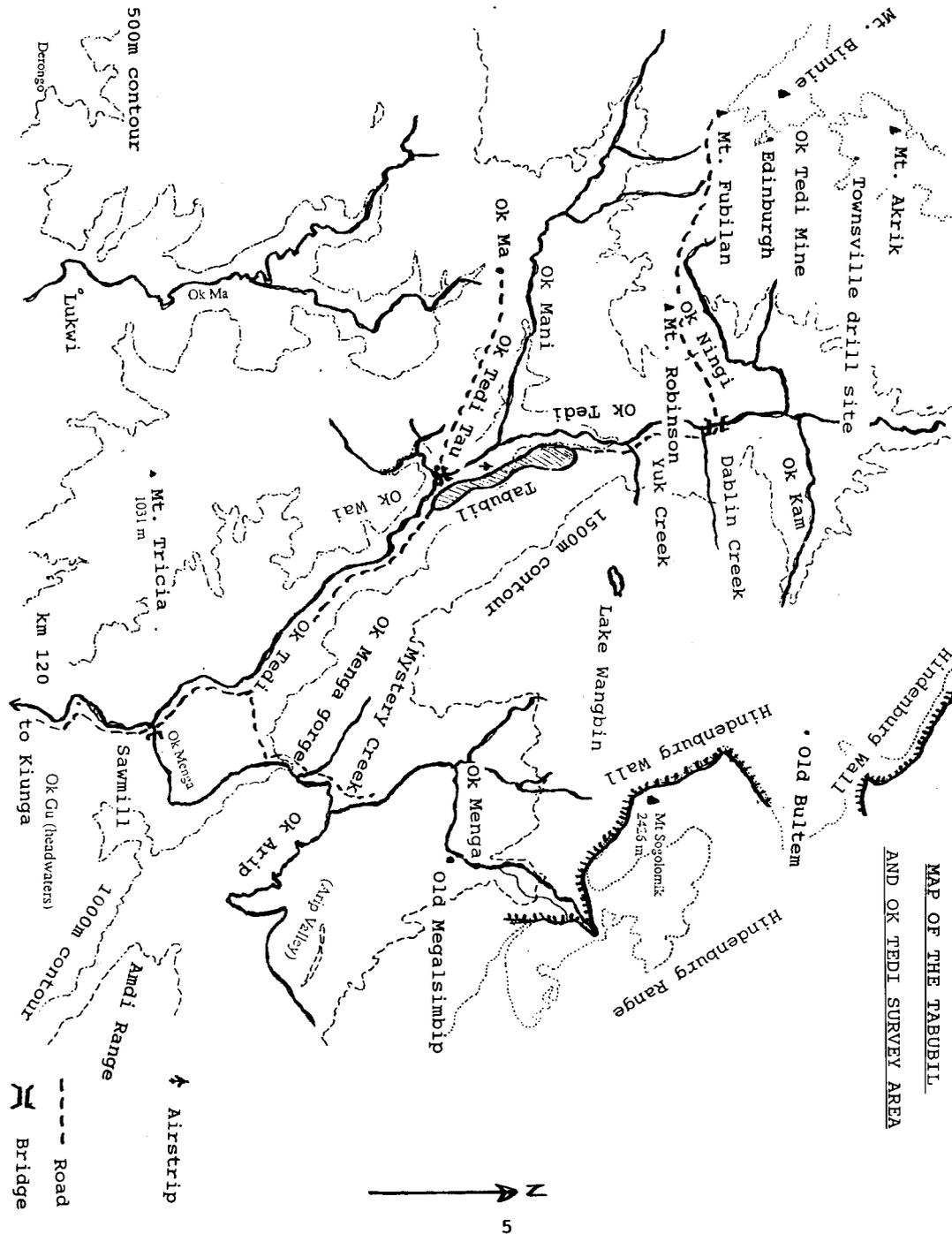
* Logging is as yet not a major problem, but the walkabout sawmill concept is spreading rapidly and needs careful monitoring to stay within sustainable levels.

* Shotguns are still scarce, and ready availability should be discouraged. An outright ban is unlikely to be feasible.

* An education programme / wildlife awareness programme for the community schools would be very useful, maybe in conjunction with school wildlife or conservation clubs and perhaps with overseas funding and resources.

* Cats and dogs in the town should be neutered to minimise the feral animal problem. This is already OTML policy but needs much stronger reinforcement.

* The provision of education materials for local schools on wildlife and conservation needs to be upgraded. Posters, books and videos would all be useful, preferably in both English and Pidgin, sourced from both overseas and within country.



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THE BIRDS OF THE OK TEDI AREA, WESTERN PROVINCE, PAPUA NEW GUINEA :
A CHECKLIST AND STATUS GUIDE

* Denotes an addition to the area list since Murray (1988)

C & L denotes Coates and Lindgren (1978)

x [Not recorded within the study area]

1. **Dwarf Cassowary** *Casuarius bennetti*
Seldom seen, Ok Menga is the usual area for tracks or sightings. The Southern Cassowary (*C. casuarius*) may occur in the lower regions, but market specimens of this species are usually brought up from Kiunga. Likely to occur in the lower altitude areas.
2. **Australian Dabchick** *Tachybaptus novaehollandiae*
Lake Wangbin only, one or two pairs still present in 1994.
3. **Little Pied Cormorant** *Phalacrocorax melanoleucos*
Occasional singles along the Ok Tedi valley and at Lake Wangbin.
- 4.* **Little Black Cormorant** *Phalacrocorax sulcirostris*
Vagrant; a flock of 30 flying high to the south down the Ok Tedi valley Oct 12 1994.
5. **Lesser Frigatebird** *Fregata ariel*
Vagrant, single birds over the Tabubil plateau in Oct 72, Jun 87 and Oct 94.
6. **Australian Darter** *Anhinga novaehollandiae*
Vagrant; from Sawmill and Ok Ma area 1978/85/87. One at Lake Wangbin Jan 94 (I. Burrows, pers. comm)
7. **Great White Egret** *Egretta alba*
Occasional along the Ok Tedi valley, usually singly.
8. **Pied Heron** *Egretta picata*
First recorded in Aug 1987 with a single bird (Murray). Now an occasional visitor with an influx of 11 in trees by the Tabubil PTC on 6 July 91, and 20 by the "White House" the same day; 4 birds still present on 16 July 91, and 3 on 26 Aug 91.
A single bird only in 1992 and none in 1993, with just one in Aug 94 which stayed for a week.
9. **Intermediate Egret** *Egretta intermedia*
Occasional along the Ok Tedi valley, most records in the austral winter, with up to 3 individuals.
10. **Little Egret** *Egretta garzetta*
Rare visitor to the Ok Tedi valley, singles only.
11. **White Faced Heron** *Egretta novaehollandiae*
Vagrant; none since 1985.

- 12.* **Black Bittern** * *Ixobrychus flavicollis*
Rare visitor, an imm trapped at the mine on 12 Jun 93. Another imm caught at Ok Menga on 13 Sept 93
13. **Royal Spoonbill** *Platalea regia*
Vagrant; recorded by Cole in 1973.
14. **Crested Hawk** *Aviceda cristata*
Fairly common at low and mid-elevations, even sometimes in the town. One of the commonest raptors around the area.
15. **Long-tailed Buzzard** *Henicopernis longicauda*
The common large raptor of the lower and middle levels, usually seen singly or in pairs. Often in very heavy moult in Mar - April.
16. **Black Kite** *Milvus migrans*
Vagrant; recorded twice by Bell in April 1966.
17. **Whistling Kite** *Haliastur sphenurus*
Vagrant; recorded by Murray on 8 Mar 87 at Yuk Creek. None since.
18. **Brahminy Kite** *Haliastur indus*
Fairly common along the Ok Tedi valley, where it nests. Quite frequent over the town.
- 19.* **White-bellied Sea-eagle** * *Haliaeetus leucogaster*
Vagrant, an imm by Cloudlands Hotel 30 July 92, seen later that day at Sawmill.
- 20.* **Papuan Harrier** * *Circus spilonotus* (Spotted Marsh Harrier)
Vagrant; a single flying north over the town 23 Feb 91.
21. **Brown Goshawk** *Accipiter fasciatus*
Rare; recorded by Murray in the Ok Tedi and Ok Menga valleys.
22. **Grey (Variable) Goshawk** *Accipiter novaehollandiae*
Common, the usual urban raptor as well as in the cleared areas, from the lowlands up to at least 800m. All birds so far have been the usual grey phase. Nesting recorded in Oct.
23. **Black-mantled Goshawk** *Accipiter melanochlamys*
Uncommon, from 750m upwards, recorded from Townsville drill site, Folomian and near Yuk Creek.
24. **Grey-headed Goshawk** *Accipiter poliocephalus*
Uncommon and shy. Recorded from hill forest at Ok Menga, Dablin Creek and Ok Ma. Immature birds suggest that the species breeds locally.
An undescribed melanistic morph occurs, as along the Ok Ma Road on 28 July 92. *Bare part colours as usual, with orangey-red cere and legs, but the entire plumage was blackish-slate.*

25. **Collared Sparrowhawk** *Accipiter cirrhocephalus*
Rare; seen by Murray, April 1987 at Ok Menga and FG Inc July 92 along the Ok Ma road.
- 26.* **Meyer's Goshawk** * *Accipiter meyerianus*
Rare, recorded from Dablin Creek July 93 (K. D. Bishop pers. comm.). Unconfirmed sightings by Murray, Coates and Lindgren and Gregory (Ok Ma road July 92).
- 27.* **Doria's Hawk** * *Megatriorchis doriae*
Rare, two records from along the Ok Ma road at km 1 (K. D. Bishop) and an imm. bird at km 6 along this road on 20 Oct 92.
- 28.* **New Guinea Harpy-eagle** * *Harpyopsis novaeguineae*
Rare, recorded from the Mine access road (K. D. Bishop pers comm), heard along the Ok Ma road and a single caught at Ok Menga in March 93. Murray had probable sightings at Lukwi in 1985.
- 29.* **Gurney's Eagle** * *Aquila gurneyi*
Rare, recorded from Folomian (K.D. Bishop, pers comm) and at Km 122 on 28 April 91.
30. **Little Eagle** *Hieraaetus morphnoides*
An uncommon resident, known from Dablin Creek, Ok Ma road, Waterfall Creek just north of the town and Ok Menga where a pair is resident near the tunnel.
31. **Brown Falcon** *Falco berigora*
Rare; recorded by Murray on the town plateau in April and Nov 86 and Nov 87. A single just N. of the town on 8 Aug 93.
32. **Australian Kestrel** *Falco cenchroides*
Scarce irruptive migrant recorded in the austral winters of 1986, 87 and 93 (May and June, max 2 birds).
33. **Oriental Hobby** *Falco severus*
An uncommon resident, recorded from the town, Ok Menga and Ok Ma road. Seen singly or in pairs, often perched on dead branches atop trees. Curiously erratic, none seen for months then a spate of sightings.
- 34.* **Australian Hobby** * *Falco longipennis*
A rare migrant, a single over Tabubil on 1 May 93.
- 35.* **Peregrine Falcon** * *Falco peregrinus*
Uncommon, all altitudes from the mine site down to Km 90.
Usually seen singly, and seen to catch a Rainbow Lorikeet on one occasion at Dablin Creek.
36. **Spotted Whistling Duck** *Dendrocygna guttata*⁶
Vagrant; recorded by Murray at Sawmill in 1987.

37. **Wandering Whistling Duck** *Dendrocygna arcuata*
Vagrant; 20 recorded at the airstrip by Cole (? 73), and curiously 15 there on 5 Oct 93 which flew south. Murray recorded 2 from Sawmill pond (now overgrown) in Feb 87.
38. **Radjah Shelduck** *Tadorna radjah*
Vagrant; a single recorded by L. Murray on 24 Sept 86 6km south of the town. Recorded by Bell at Ningerum, out of the survey area.
39. **Salvadori's Teal** *Salvadorina waigiensis*
Very uncommon, but still present on the Ok Menga above the gorge with 3 birds by the intake on 14 Aug 93 (D. Simon pers comm). A single near old Megalsimbip on 15 Mar 92. Recorded again at the Ok Menga intake site in Mar and July 1994.
- 40.* **Grey Teal** * *Anas gibberifrons*
Vagrant; a single on Lake Wangbin 9 Aug 92.
41. **Pacific Black Duck** *Anas superciliosa*
Rare; from L. Wangbin and near the airstrip only, where suitable habitat still exists.
- 42.* **Common Scrubfowl** * *Megapodius freycinet*
Very uncommon; seen by the Ok Ningi in 1991. Listed by Murray from just outside the area.
43. **Black-billed Brush-turkey** *Talegalla fuscirostris*
Status uncertain. A juv seen by Cole in 1974 may not have been of local origin and the same applies to records of feathers. Mounds could belong to either species. Likely to occur at the lower levels.
- 44.* **Wattled Brush-turkey** * *Aepyodius arfakianus*
Uncommon, Mt Robinson only so far. Brush-turkeys with an odd dry, guttural "kaw-ka" call heard along Ok Ma road and at Dablin Creek may be this species.
45. **Brown Quail** *Coturnix australis*
C&L recorded it from Mt. Fubilan which is now in the mine working area. Recorded by Murray near the airstrip in 1985 but no subsequent records to date.
- x. **[King Quail** *Coturnix chinensis*]
Not recorded in the Tabubil area, listed by Murray as a Gilliard and LeCroy record from Telefomin.
- 46.* **Red-backed Buttonquail** * *Turnix maculosa*
Rare, a single flushed from secondary growth near Cloudlands Hotel on 24 Aug 92. was very unexpected.
47. **Buff-banded Rail** *Rallus philippensis*
Quite often recorded by Murray from the town area, but not since 1988. The much increased cat and dog population may be the cause of the decline.
- x **[Chestnut Forest Rail** *Rallina rubra*]
- x. **[Forbes' Forest Rail** *Rallina forbesi*]
- x **[Lewin's Rail** *Rallus pectoralis*]
Recorded from the Hindenburg Range by Gilliard and LeCroy and listed as such by Murray, but not within the survey area. All three species are possible from the less accessible areas.
- 48.* **Red-necked Rail** * *Rallina tricolor*
Uncommon, heard at Cloudlands Hotel and Dablin Creek.
- 49.* **Bare-eyed Rail** * *Eulabeornis plumbeiventris*
Singles caught at the Mine site, 2100m, in Aug and Sept 93. One brought into town Sept 94.
50. **Bush-hen** *Amaurornis olivacea*
Quite common, in second growth and kunai grass, heard even in the town outskirts, but extremely difficult to see well. The Cloudlands area is a good site for the species.
- 51.* **Dusky Moorhen** * *Gallinula tenebrosa*
Rare, a single on Lake Wangbin on 19 Sept 93..
52. **Eurasian Coot** *Fulica atra*
Rare, known from Lake Wangbin only where first discovered in PNG by Bell in 1966. Believed shot-out in 1978 (C & L) but rediscovered in July 92 with up to 9 birds, and still present in August 93. One of the few PNG sites for the species. Juvenile birds seen in June 1994.
53. **White-headed Stilt** *Himantopus leucocephalus*
Vagrant; seen by Cole at Tabubil in Oct ?73.
54. **Australian Pratincole** *Stiltia isabella*
A sparse passage migrant and wintering bird during the austral winter (May-Sept), with up to 8 birds at the airstrip in July 94.
55. **Pacific Golden Plover** *Pluvialis fulva* (Lesser Golden Plover *P. dominica*)
The *fulva* form is a sparse passage migrant in small flocks in Sept-Nov. Usually on the airstrip, golf course or sports fields.
56. **Little Ringed Plover** *Charadrius dubius*
Fairly common resident, usually at the airstrip and Sawmill, and almost certainly breeds as this is the local race *dubius* with the pink base to the lower mandible, and a harsh "peee" or "keee" upward inflected flight call, quite unlike the plaintive disyllabic whistled "pee-oo" of the Eurasian race.

A maximum of 8 birds at the airstrip Sept 94, also visits the gravel areas by the rugby pitches. At least three pairs are resident in Tabubil at the lay-down and airstrip areas.

- 57.* **Whimbrel** * *Numenius phaeopus*
A scarce migrant in Sept - Oct, max 3 in 1991, 1993 and 1994. Occasionally seen with Little Whimbrel.
58. **Little Whimbrel** *Numenius minutus*
A scarce migrant in Sept-Oct, maxima 13 on 30 Sept 93 and 12 on 5 Oct 93 on the golf course and rugby pitches.
59. **Common Sandpiper** *Tringa hypoleucos*
A common visitor Sept-May; max 13 on the golf course during a morning of low cloud on 27 Feb 91. Reaches as high as the mine site at 2200m and often found along the Ok Tedi.
- 60.* **Wood Sandpiper** * *Tringa glareola*
Vagrant, a single on the golf course on 28 Aug 93. 2 on soccer pitch Sept 12 94.
- 61.* **Grey-tailed Tattler** * *Tringa brevipes*
Vagrant, a single by Palliser in mid-Sept 1987 (Hobcroft 1988)
62. **Swinhoe's Snipe** *Gallinago megala*
A scarce passage migrant Sept/Nov, also recorded by Murray in Feb/March, max 8 on 10 Nov 91 and 8 Oct 93. Earliest arrival 2 on 29 Sept 93.
A trapped specimen in Nov 91 was definitely this species, and the stout bodied appearance of the birds suggests that *G. megala* is the species involved. They also seem to like the slightly drier edge habitats in this area. The call is a quiet "skap", slightly shorter and less raspy than that of European Snipe (*G. gallinago*). The Japanese Snipe (*G. hardwickii*) is quite likely to occur as well but seems to have a more easterly route in PNG.
- x. **[Rufous Woodcock** *Scolopax saturata*]
Murray records a possible sighting from Lake Wangbin, and the species may well occur.
- 63.* **Great Knot** * *Calidris temirostris*
Vagrant, 1 on the airstrip and later the rugby pitch from 11-14 Nov 91. The first inland record for New Guinea (Gregory 1994)
- 64.* **Sharp-tailed Sandpiper** * *Calidris acuminata*
A fairly common passage migrant in Sept-Nov, in small flocks.
- 65.* **Red-necked Stint** * *Calidris ruficollis*
Vagrant, 2 on 9 Oct 93 on the rugby pitch and 1 on 17 Aug 94 on the airstrip.
- 66.* **Ruff** * *Philomachus pugnax*
Vagrant, a single with Sharp-tails on the rugby pitch on 8 Oct 93.
67. **Sooty Tern** *Sterna fuscata*
Vagrant, 2 in Oct 73 (Cole) and 1 picked up on the airstrip 29 Sept 93.
- 68.* **White-throated Pigeon** * *Columba vitiensis*
Rare, odd records of single birds from Ok Menga at 750m, and from Dablin Creek at a similar height.
69. **Brown Cuckoo-dove** *Macropygia amboinensis*
Common, and regularly seen in the town.
70. **Black-billed Cuckoo-dove** *Macropygia nigrirostris*
Very uncommon from about 640m upwards.
71. **Great Cuckoo-dove** *Reinwardtoena reinwardtii*
Uncommon, usually seen singly or in pairs, with display noted in March 92 at Ok Menga.
- 72.* **New Guinea Bronzewing** * *Henicophaps albifrons*
Rare, with single birds at Dablin Creek at 800m and Mt. Robinson at 1100m the sole records.
73. **Thick-billed Ground-dove** *Trugon terrestris*
Rare, a single record by Murray from Ok Menga. Conceivably much over-looked as the habitat is so inaccessible.
74. **Pheasant Pigeon** *Otidiphaps nobilis*
Rare, heard from the Ok Ma road and Ok Menga. No longer around the areas adjacent to the town.
- x. **[Southern Crowned Pigeon** *Goura scheepmakeri*]
Recorded by Bell (1969) up to 400m, but none near Ningerum where exterminated by hunting. May have reached the lower elevations of the survey area in the past. Two birds were being held captive in the town in 1993, obtained from near Kiunga.
75. **Wompoo Fruit-dove** *Ptilinopus magnificus*
Uncommon, up to about 700m, in singles or pairs.
- 76.* **Pink-spotted Fruit-dove** * *Ptilinopus perlatus*
Uncommon; at lower elevations than *P. ornatus*. Known from Lukwi and Km 115.
77. **Ornate Fruit-dove** *Ptilinopus ornatus*
Common, as high as the mine site at 2200m and often in flocks of up to 20 birds.
78. **Superb Fruit-dove** *Ptilinopus superbus*
Common; up to at least 800m, usually singly or in pairs.
79. **Beautiful Fruit-dove** *Ptilinopus pulchellus*
Quite common up to at least 800m, usually singly.
- 80.* **White-breasted Fruit-dove** * *Ptilinopus rivoli*
Quite common above 750m, but usually singles. Dablin Creek and Mt. Robinson are good sites for

this species. A male flew into a classroom at the International School and killed itself in Aug 94, an unusually low altitude (500m) for the species.

- 81.* **Orange-bellied Fruit-dove** * *Ptilinopus iozonus*
Uncommon; only from the lower altitudes in the km 90 area.
- 82.* **Dwarf Fruit-dove** * *Ptilinopus namus*
Uncommon; recorded from Km 90, Dablin Creek and Ok Menga, usually singles. Seems to be highly nomadic in this area, no doubt related to food source supply.
- 83.* **Rufescent Imperial Pigeon** * *Ducula chalconota*
Rare; known from Mt Robinson with 4 on 3 Oct 92 (C. Eastwood, pers. comm) and Dablin Creek with a single in July 94..
84. **Pinon Imperial Pigeon** *Ducula pinon*
Uncommon; from the lower altitudes only, south of Km 115.
85. **Collared Imperial Pigeon** *Ducula muellerii*
Rare; known only from the lower altitudes at Lukwi (Murray)
86. **Zoe Imperial Pigeon** *Ducula zoeae*
Common up to about 750m, but usually seen singly. Ok Menga and the Ok Ma area are good localities for this species.
87. **Papuan Mountain Pigeon** *Gymnophaps albertisii*
Common at all altitudes but varying greatly in numbers. Hundreds may be seen flying over in October - Nov.
88. **Greater Streaked Lory** *Chalcopsitta scintillata*
Uncommon, from the lower altitudes only at Km 90 and Lukwi.
89. **Dusky Lory** *Pseudeos fuscata*
Common, with a roost of several thousand at Ok Menga. Evening roost flights over Ok Ma may total several thousand birds heading east. Occasional at flowering trees in the town.
90. **Rainbow Lorikeet** *Trichoglossus haematodus*
Common, but far out-numbered by the Dusky Lory. Usually in flocks of under 20, or in pairs. Occasional at flowering trees in the town but does not seem to mix with the former species.
91. **Goldie's Lorikeet** *Trichoglossus goldiei*
Rare, recorded by Murray at 700m and by Coates and Lindgren and Gregory on Mt Binnie at 2100m.
92. **Western Black-capped Lory** *Lorius lory*
Common; usually seen in pairs. Extends up to about 800m locally, in any forested area. C & L give a record from 1535m

93. **Streaked Lorikeet** *Charmosyna multistriata*
Fairly common, with a regular afternoon flyover at Dablin Creek, up to 125 birds (9 May 93). Also recorded from the Ok Menga and Ok Ma areas but infrequent there. Once found feeding with *C. placentis* in the town itself. The very misty months of July and August seem to have lower numbers flying over.
- 94.* **Pigmy Lorikeet** * *Charmosyna wilhelminae*
Very uncommon; recorded from Ok Ma road, Ok Menga and at the mine site. Max 5 birds.
95. **Red-flanked Lorikeet** *Charmosyna placentis*
Common at lower and mid-levels to about 750m, but flocks usually less than 10 birds.
96. **Little Red Lorikeet** *Charmosyna pulchella* (Fairy Lorikeet)
Fairly common; in flocks of up to 30 but more usually 5/6, from Dablin Creek, the Ok Ma area and Ok Menga. Ranges up to at least 1700m at times, once at 2180m (C & L).
97. **Josephine's Lorikeet** *Charmosyna josefinae*
A rare species, known from Dablin Creek at 750m, Ok Menga at 750m and Townsville drill site area at 1600m. Maximum 6 birds.
98. **Papuan Lorikeet** *Charmosyna papou*
Fairly common at the higher altitudes, 1500m and above. Both red and black phases occur. Murray records a long floating tailed lorikeet, presumably this species, at 600m at Ok Menga, well below the usual altitudinal spread. Lake Wangbin, Mt. Binnie and Townsville drill site are reliable spots for the species.
99. **Whiskered Lorikeet** *Oreopsittacus arfaki* (Plum-faced Lorikeet)
Uncommon at higher altitudes above 1500m such as Townsville drill site and Mt. Binnie, in small flocks of up to 6 birds.
100. **Yellow-billed Lorikeet** *Neopsittacus musschenbroekii* (Musschenbroek's Lorikeet)
Uncommon at higher altitudes such as Townsville drill site and Mt. Binnie.
101. **Orange-billed Lorikeet** *Neopsittacus pullicauda*
Uncommon at higher altitudes, only recorded from Townsville drill site and Edinburgh (C & L).
102. **Palm Cockatoo** *Probosciger aterrimus*
Generally uncommon, up to 750m but becomes more frequent at lower levels. Usually seen singly or in pairs.
103. **Sulphur-crested Cockatoo** *Cacatua galerita*
Fairly common, usually seen singly or in pairs, but small flocks of 5 or 6 are not uncommon, seeming to gather in the late afternoon.
104. **Pigmy-parrot** *Micropsitta sp*
A form resembling **Red-breasted Pigmy-parrot** *M. bruijnii*, but with a distinctive yellowish cap

is common in the area. This form was first recorded by Murray (Murray 1988) on Mt. Binnie on 20 Sept 1987 and was rediscovered by Gregory and Johnston at Dablin Creek on 29 Nov 1991 (Gregory 1994).

Frequent sightings since with 40 flying N at Ok Menga 750m on 4 Oct 92.; 220 N there on 25 Oct 92; 45 on 8 Nov 92 and 650 heading NE on 22 Nov 92 were unprecedented. A pair excavating a chamber in a stump at Townsville drill site at 1650m in Sept 92. Flocks of 40-50 are frequent at Ok Menga and Dablin Creek.

The **Yellow-capped Pigmy-parrot** *M. keiensis* is unrecorded (or confused with the other form) but possible lower down the valley.

105. **Orange-breasted Fig-parrot** *Cyclopsitta gulielmiterti*
Common, groups of 5 or 6 birds are frequent throughout the lower and mid-level forests to 750m.
106. **Double-eyed Fig-parrot** *Cyclopsitta diophthalma*
Tentatively recorded by Murray at Ok Menga; to be expected at the lower elevations.
- 107 * **Large Fig-parrot** * *Psittaculirostris desmarestii*
Uncommon. Only from south of km 114 at lower levels except for a record from km 122 near the Ok Menga turn-off in 1993 (FG Inc).
108. **Painted Tiger-parrot** *Psittacella picta*
Recorded by Coates and Lindgren from 1700m at (old) Bultem. High altitude only.
109. **Modest Tiger-parrot** *Psittacella modesta*
Recorded by Coates and Lindgren at 1600m on Mt Robinson. (A female in the subalpine meadow at 2200m by the Ok Tit/Ok Flim on the southern slopes of the Hindenburg range on 29 and 30 Mar 93. This site is just north of Luplupwintem cave and just outside the study area boundary.)
110. **Madarasz's Tiger-parrot** *Psittacella madaraszii*
Recorded at 2100m by Coates and Lingren, from Townsville at 1600m, and from Lake Wangbin at 1400m. Usually singly.
111. **Red-cheeked Parrot** *Geoffroyus geoffroyi*
Common at lower altitudes, up to 750m at times. Overlaps with Blue-collared Parrot (*G. simplex*) at Ok Menga.
112. **Blue-collared Parrot** *Geoffroyus simplex*
Commonly heard flying over at a considerable height, even over the town, overlaps with *G. geoffroyi* at Ok Menga. Occurs down to at least 500m elevation. Flocks of up to 30 at Lake Wangbin May 94.
113. **Eclectus Parrot** *Eclectus roratus*
Common at lower and mid-altitude levels. Males outnumber females by about 5:1 it seems.

114. **Vulturine Parrot** *Psitttrichas fulgidus*
Still not uncommon away from habitation but becoming rare as hunting persists. Two fledged juvs brought to town 21 Dec 93. Flocks of up to 5 or 6 still occur but singles or pairs are more usual. The Ok Ma road is a favoured area, with Ok Menga, Dablin Creek and Mt Robinson much less frequented. Occurs up to at least 1200m and may also be seen anywhere along the Kiunga road.

Skins cost about K20 when they are brought to market, as happens on a few occasions each year.
115. **Papuan King-parrot** *Alisterus chloropterus*
Uncommon at lower altitudes such as Ok Menga.
116. * **Papuan Hanging Parrot** * *Loriculus aurantiifrons* (Bat Lorikeet)
Uncommon but unobtrusive; recorded from Ok Menga, Ok Ma road and Km 119, maximum 5 birds. More often heard than seen. One male at Ok Menga in July 93 hung upside-down in an *Albizzia* for about 5 minutes, seemingly asleep, hence the old name of Bat Lorikeet.
117. **Oriental Cuckoo** *Cuculus saturatus*
Uncommon migrant during the austral summer, Oct-Mar, singles only.
118. **Brush Cuckoo** *Cacomantis variolosus*
Common at lower and mid-levels. More often heard than seen, sometimes in Tabubil town.
119. **Chestnut-breasted Cuckoo** *Cacomantis castaneiventris*
Common at lower and mid-levels where the trilling call is a frequent sound, and may be confused with the call of Yellow-billed Kingfisher (*Halcyon torotoro*). It is strange how the calls of this pair of cuckoo species are so similar to the kingfisher sibling species calls.
120. **Fan-tailed Cuckoo** *Cacomantis flabelliformis*
Common at higher altitudes, 1400m+ where the trilling call is a frequent sound too, and also confusable with the call of the Mountain Yellow-billed Kingfisher (*Halcyon megarhyncha*).
121. * **Malay Bronze-cuckoo** * *Chrysococcyx minutillus* (Gould's Bronze-cuckoo)
Rare, a single record from Tabubil town in Mar 1991 of an imm bird with a reddish-brown, black barred chin and throat, but to be expected at lower elevations.
122. **White-eared Bronze-cuckoo** *Chrysococcyx meyerii*
Common in hill forest, usually singles but sometimes pairs. An imm. *Chrysococcyx* in forest edge just north of the town on 2 Mar 91 was almost certainly this species: *mostly light brown above, heavily spotted whitish on scapulars and wing coverts. Finely barred black on crown, pale but short and indistinct supercilium, tail entirely closely barred dark on a brownish back ground. May have had pale tips to outermost feathers. Underparts mostly buff, well spotted in an irregular fashion on sides of chest and flanks. Undertail coverts unmarked cinnamon colour.* The imm. plumages of this species are undescribed.
123. **White-crowned Koel** *Caliecthrus leucolophus*
Quite common in hill forest up to 1000m+, far more often heard than seen.

- 124.* **Dwarf Koel** * *Microdynamis parva*
Uncommon, only from Ok Menga, with a m. and f. there on 20 Aug 92. and often heard, and from Dablin Creek at 750m, where regularly heard calling.
125. **Common Koel** *Eudynamis scolopacea*
Common in hill forest, seemingly resident. Which subspecies is involved is as yet uncertain.
126. **Channel-billed Cuckoo** *Scythrops novaehollandiae*
Vagrant, a few records during the austral winter in Feb, March and May (Murray).
- 127.* **Greater Black Coucal** * *Centropus menbeki*
Rare, recorded at Ok Menga once Aug 93 (D. Simon pers comm).
128. **Lesser Black Coucal** *Centropus bernsteini*
Uncommon, recorded from the escarpment track in town and near Dablin Creek, as well as along the Kiunga road south of the town. Seems curiously silent in this area and very unobtrusive.
129. **Papuan Boobook** *Ninox theomacha*
The common small owl species, very vocal around Cloudlands Hotel at dusk. The Barking Owl (*Ninox connivens*) and Rufous Owl (*N. rufa*) may also occur but no confirmed records as yet.
130. **Papuan Frogmouth** *Podargus papuensis*
Quite common. Both grey and rufous phases occur. The escarpment track in Tabubil is a good place for this species.
- 131.* **Marbled Frogmouth** * *Podargus ocellatus*
Rare. A juvenile for sale in the market for K20 in Oct 91 had been obtained locally. Heard along the Ok Ma road.
132. **Wallace's Owlet-nightjar** *Aegotheles wallacii*
Single birds in a garden area of the plateau were seen in flight on 4 Jan 86 and 6 Sept 86. and thought by Murray to be this species, as too small for *A. insignis*. (Though the Barred Owlet-nightjar (*A. bennettii*) seems equally plausible given the problems of identification within this group). Doubtless much under-recorded like all its family.
- 133 * **Archbold's Owlet-nightjar** * *Aegotheles archboldi*
Recorded from the Hindenburg Range by Gilliard and Lecroy, but no survey area records until one was mist-netted and photographed by Ian Burrows at 1450m on Mt Robinson in Jan 1994, well below the recorded altitudinal range of 2100m+.
- 134.* **Feline Owlet-nightjar** * *Aegotheles insignis*
A dead bird in the washroom at Townsville camp 1600m in Sept 92 had been killed in the forest nearby. One mist-netted and photographed by Burrows and Gregory at 1400m on Mt Robinson in July 94.

135. **Large-tailed Nightjar** *Caprimulgus macrurus*
Common up to at least 600m. Claims of Papuan Nightjar *Eurostopus papuensis* come from a site where this species is abundant, although it is possible in the area. The escarpment track and airstrip are good sites for *C. macrurus*.
- 136.* **White-throated Nightjar** * *Eurostopus mystacalis*
Vagrant. A single flew north over the town swimming pool at dusk on 29 April 93.
137. **Moustached Tree-swift** *Hemiprocne mystacea*
Quite common at lower and mid-levels, particularly likes power lines south of the town, and very active towards dusk. Nests seen in August. Groups of up to 10 birds are seen, more usually 3-4.
138. **Uniform Swiftlet** *Collocalia vanikorensis* (Lowland Swiftlet)
Common; exact extent of altitudinal range uncertain though I have a specimen from 650m. This or the following species range all the way to the mine at 2200+m, the town birds being presumably this species. Specimens are needed to resolve the altitudinal limits of each species.
139. **Mountain Swiftlet** *Collocalia hirundinacea*
Swiftlets are common around the mine site at 2200m, presumably this species though quite where the changeover comes between the two sibling species of swiftlets is uncertain.
140. **Glossy Swiftlet** *Collocalia esculenta*
Common, particularly around streams and valleys. Extends up to the highest levels of the mine site.
- x. **[Three-toed Swiftlet** *Collocalia papuensis*]
A single specimen captured at Luplupwintem Cave just north of the central Hindenburg Wall in April 1993 was the first such for PNG (Rowland 1994). Conceivably much overlooked and likely to occur in the survey area.
141. **White-throated Needletail** *Hirundapus caudacutus*
Vagrant; a small party in 1966 30km NE of Ningerum (Cole), 6+ in front of a storm at Ok Ma 29 Oct 92.
142. **Fork-tailed Swift** *Apus pacificus* (Pacific Swift)
Vagrant; a single by Cole in 1973, a single over the town Nov 22-23 1992, and 3 at Ok Menga Oct 16 1994.
143. **Papuan Spinetail** *Mearnsia novaeguineae*
A rare visitor to the low altitudes, recorded from km 90.
144. **White-tailed Paradise-kingfisher** *Tanysiptera sylvia*
An irregular visitor from low altitudes, with a bird described from Lukwi which was presumably this species (Murray 1988). A small influx of first year birds occurred on May 13 1994, with at least 3 individuals in the town, one of which was caught and killed by a cat. Birds were still present and calling in late July 94, and a late adult bird (? locally moulted into this plumage) on Oct 13th 1994.

- 145.* **Hook-billed Kingfisher** * *Melidora macrorrhina*
Common, calling mostly at dawn and dusk but almost impossible to actually see. Cloudlands Hotel is a good locality, as is the Ok Ma road. A juv was at Cloudlands on 28 Oct 92.
146. **Rufous-bellied Kingfisher** *Dacelo gaudichaud*
Common and noisy at lower levels, up to about 750m, usually in pairs.
- 147.* **Forest Kingfisher** * *Halcyon macleayi*
Vagrant, a single by the swimming pool on 13 Aug 92.
148. **Sacred Kingfisher** *Halcyon sancta*
Common migrant from Australia, Mar-Oct. Winters in the town and thus frequently killed.
- 149.* **Mountain Yellow-billed Kingfisher** * *Halcyon megarhyncha*
Fairly common but difficult to see from about 750m upwards. Dablin Creek, Ok Ma road, Townsville Drill Site and near Folomian are all localities for this species.
150. **Yellow-billed Kingfisher** *Halcyon torotoro*
Lower elevations only. Murray recorded it from Sawmill.
- 151.* **Dwarf Kingfisher** * *Ceyx lepidus*
Not uncommon but hard to find. Sites are Ok Ma road at 700m and Mt. Robinson at 1000m, where probably nesting in October.
152. **Rainbow Bee-eater** *Merops ornatus*
A common migrant at passage periods Mar-Apr and Aug-Sept.
153. **Dollarbird** *Eurystomus orientalis*
Uncommon and erratic in occurrence, some birds appearing then going later, all months. Presumably both resident and migrant races are involved.
154. **Blyth's Hornbill** *Rhyticeros plicatus*
Uncommon and declining due to hunting, but still occurs away from the town and often for sale in the market (K20). Lower and middle elevations, in pairs or small flocks. Nothing like the big aggregations seen on the Fly River occur around Ok Tedi.
- 155.* **Blue-breasted Pitta** * *Pitta erythrogaster*
Uncommon in hill forest along the Ok Ma road up to 750m, heard calling in August and October.
- 156.* **Hooded Pitta** * *Pitta sordida*
Uncertain, seems rare but recorded in town on 8 July 91 and in June 92 and 93, clearly migrant birds as caught by hand. A single by Cloudlands Hotel in mid- 1992. Never heard calling in the survey area !
157. **Barn Swallow** *Hirundo rustica*
A regular austral summer visitor Oct-Mar in small numbers, particularly to the lay-down area.

158. **Red-rumped Swallow** *Hirundo daurica* {Striated Swallow (*H. striata*)}
A fairly common austral summer visitor Nov-April in recent years, maxima being 16 at the lay-down on 30 Nov 91, 7 on 2 Feb 92, 4 on 28 March 92, 18 on 28 Feb 93.
159. **Pacific Swallow** *Hirundo tahitica*
Common resident; one of the few species that breeds in the town, with juvs. recorded in Oct and Nov. Quite often perches on dead tree branches.
160. **Tree Martin** *Hirundo nigricans*
Uncommon migrant in the austral autumn, May-June.
161. **Fairy Martin** *Hirundo ariel*
Vagrant to Tabubil (and PNG), one on 26 Sept 86 (Murray) and a single was perched with Pacific Swallows at the rugby pitch fence on 9 Oct 93.
162. **Yellow Wagtail** *Motacilla flava*
Uncommon passage migrant in Oct-Nov to playing fields and the airstrip, max 2 birds. Some presumed imm. birds were very greyish above and white below, with pale supercilia. Recorded by Bell from L. Wangbin 13.4.66, the first for PNG (then the Territory of Australian New Guinea). A single bird on 28 March 92 showed the characters of the race *simillima*.
163. **Grey Wagtail** *Motacilla cinerea*
Common austral summer visitor, wintering along small streams and puddles, as high as the mine site 2200m.
164. **Hooded Cuckoo-shrike** *Coracina longicauda*
Sparse resident at higher altitudes, recorded from Folomian.
- x. **[White-bellied Cuckoo-shrike** *Coracina papuensis*]
Recorded by Bell at Ningerum, just outside the study area.
165. **Black-faced Cuckoo-shrike** *Coracina novaehollandiae*
A sparse migrant in some austral winters, recorded from secondary growth in the town in 92, 93 and 94, but not seen every year.
166. **Large-billed Cuckoo-shrike** *Coracina caeruleogrisea* (Stout-billed Cuckoo-shrike)
A fairly common species in the hill forest, frequent at Ok Menga, Ok Ma and the Dablin Creek areas, usually in pairs.
167. **Yellow-eyed Cuckoo-shrike** *Coracina lineata*
Murray recorded a party of 5 or 6 on 6 April 86 east of the town, showing features of the resident endemic race *axillaris*. This remains the only record.
168. **Boyer's Cuckoo-shrike** *Coracina boyeri*
Quite common in small flocks below 750m. A pair nested at Ok Menga in Nov 92

169. **Cicadabird** *Coracina tenuirostris* (Slender-billed Cuckoo-shrike)
Fairly common up to 1000m, recorded even in the town at times. Seemingly resident, calling most obvious July-Sept.
170. **Black-shouldered Cuckoo-shrike** *Coracina morio (incerta)* (Sharpe's Cicadabird)
Uncommon, but widely distributed, especially along the Ok Ma and Ok Menga roads. Easily overlooked or confused with other *Coracina* species
171. **Grey-headed Cuckoo-shrike** *Coracina schisticeps* (Black-tipped Cuckoo-shrike)
The commonest lower-mid altitude cuckoo-shrike, usually seen in pairs. The scolding nasal calls are a good pointer to its presence.
All the local *Coracina* species seem to keep apart except for this species and the much larger *C. caeruleogrisea*, both of which may sometimes be found associating with Golden Cuckoo-shrikes *Campochaera sloetii*.
172. **Black Cuckoo-shrike** *Coracina melaena*
Uncommon, recorded from Ok Ma and Ok Menga 700-750m. One of the scarcest of the local *Coracina* species, usually singly or in pairs. Recorded by C & L from 570m.
173. **Black-bellied Cuckoo-shrike** *Coracina montana*
The common mid to higher altitude species, frequent above 1000m on Mt Robinson, Mt Binnie, Wangbin Ridge and at Townsville drill site. Recorded as low as 750m at Dablin Creek. Usually in small and noisy groups like the Boyer's Cuckoo-shrike of the lower levels.
174. **Golden Cuckoo-shrike** *Campochaera sloetii*
Quite common in flocks of up to 6 birds with males outnumbering females. This is contrary to the report from Murray who only had a single record and suggested loss of primary forest might be affecting it. Very vocal from 750m down in hill forest, flocks seeming to stay together via their calls like other Cuckoo-shrike species. The species is particularly associated with *Albizia* trees in the Tabubil area, preying on caterpillars. Juveniles recorded in May. Despite behavioural similarities the species appears more like a *Pericrotus* Minivet than a *Coracina*.
175. **Varied Triller** *Lalage leucomela*
Common, singly or in pairs, particularly along forest edge at the Ok Ma, Ok Menga and Dablin Creek areas 700-800m elevation.
- 176.* **Pied Chat** * *Saxicola caprata*
First recorded at the airstrip in Mar 91 and now common in the scrub there. Also common along the mine road as far as Folomian at 1900m, perching on buildings. The species has benefited from the clearing of roads and building sites and would appear to be a recent colonist of the area. Colonised the area opposite the International School in 1994.
- 177.* **Island Thrush** *. *Turdus poliocephalus*
Quite common at Townsville from 1500m upwards.
- 178 * **Logrunner** * *Orthonyx temminckii*
A female in moss forest near the top of Mt. Robinson in January 1994 (Dr I. Burrows pers. comm) fills an apparent gap in the range between Tari and the Snow Mts.
179. **Chestnut-backed Jewel-babbler** *Ptilorrhoa castanonotus*
Quite common, frequently heard but hard to see from 700m upwards to 1340m. The Blue Jewel-babbler *P. caerulescens* might occur at lower altitudes in the south of the survey area.
- 180.* **Spotted Jewel-babbler** * *Ptilorrhoa leucosticta*
Recorded from Townsville drill site at 1600m altitude.
181. **Lesser Melampitta** *Melampitta lugubris*
Recorded by Bell (1969) from Lake Wangbin at 1500m in 1966, and doubtless still present as the habitat is largely intact.
182. * **Greater Melampitta** * *Melampitta lugens*
Discovered on Mt. Robinson at 1000m on 31 Oct 92, with at least 2 birds calling in one area. Also heard at two other sites on Mt Robinson at about 1100m, but calling appears to be highly seasonal, only recorded in Oct-Dec. This may partly account for the difficulty in locating the species, though the birds are extremely cryptic and wary. The birds here are not associated with karst formations as they are elsewhere in New Guinea (Diamond 1983).
183. **Blue-capped Ifrita** *Ifrita kowaldi*
Quite frequent at Townsville drill site 1500-1700m. Recorded by Coates and Lindgren from Mt. Binnie at 1970m in 1970.
- x. **[Rufous Babbler** *Pomatostomus isidorei*]
Recorded by Bell up to 400m but not yet confirmed for the survey area.
- x. **[Gray's Grasshopper Warbler** *Locustella fasciolata*]
A single large unstreaked *Acrocephalus/Locustella* Warbler was skulking in fern scrub opposite the International School on 22 Mar 91.
A persistent "tack" call revealed the presence of a largish rather pale grey/brown warbler, with a pale supercilium and small dark eyestripe. The underparts were dingy whitish with some faint thin streaks on chin and dingy chest; the tail appeared rounded and rather ragged. The legs were dull pale pink, almost fleshy colour. The tail was flicked up and down several times.
B. Coates (*in litt.*) opts for Gray's Grasshopper Warbler due to the pink legs and dingy chest. The rounded tail suggests a *Locustella* but the plumage might suggest *Acrocephalus orientalis* (ref. Burrows and Hicks 1988, and Coates 1990). Either species is a possible migrant here, perhaps from the Trans-Fly, where both occur in some numbers (Finch 1985).
184. **Tawny Grassbird** *Megalurus timoriensis*
Recorded by both Coates and Lindgren and Murray but no records since 1986. Expected to be still present as secondary growth is ever-increasing in area.

185. **Island Leaf-warbler** *Phylloscopus trivirgatus*
Common at the higher altitudes from 750m upwards. Recorded from Dablin Creek, Townsville drill site and Mt Robinson.
186. **Wallace's Fairy-wren** *Sipodotus wallacii*
This very scarce and elusive species is found along forest edge at Dablin Creek, Ok Menga and Ok Ma, ranging up into the canopy of fair sized trees at times.
187. **Emperor Fairy-wren** *Malurus cyanocephalus*
Unexpectedly rare, with only a single record of a pair from near Cloudlands Hotel on 10 Feb 91, suggesting that the plateau is generally at too high an elevation for this lowland form. Expected at the lower levels in the south of the survey area.
188. **White-shouldered Fairy-wren** *Malurus alboscapulus*
A common secondary growth/edge species. The race here has the sexes similar.
189. **Orange-crowned Fairy-wren** *Clytomias insignis*
Recorded from Lake Wangbin at 1500m, as it was by Bell (1969).
190. **Rusty Mouse Warbler** *Crateroscelis murina*
A common resident in hill and lower montane forest up to at least 1535m.
191. **Mountain Mouse Warbler** *Crateroscelis robusta*
Recorded above 1500m by Coates and Lindgren and Bell. A curious *Crateroscelis* at 1700m at Townsville drill site on 21 Sept 92 had a white throat and rusty underparts, brown above, with a call unlike either species.
192. **Large Scrub-wren** *Sericornis nouhuysi*
Quite common along the Lake Wangbin track above 1200m and at Townsville drill site from 1500m. A group seen there on 13 Sept 92 had whitish buff edgings to the the greater coverts forming a small but distinct wing-bar. "Weese weese" calls
193. **Buff-faced Scrub-wren** *Sericornis perspicillatus*
Common at Townsville at 1600m
- x. [**Papuan Scrub-wren** *Sericornis papuensis*]
A probable in moss forest near Bultem at 1700m on 17 Feb 78 by Coates and Lindgren. Murray mentions it from the Hindenburg Range by Gilliard and LeCroy, out of the survey area. Likely to occur.
- 194.* **Grey-green Scrub-wren** * *Sericornis arfakianus*
Murray gives out of survey area records by Gilliard and LeCroy. Recorded from Mt Robinson at 1200m in moss forest, Dablin Creek at the rather low altitude of 750m and from the mine road below Folomian at about 1800m.

- 195.* **Pale-billed Scrub-wren** * *Sericornis spilodera*
Uncommon at 700-750m at Dablin Creek, Ok Ma road and Ok Menga. Also from Mt Robinson at 1000-1100m.
- 196.* **Grey Gerygone** * *Gerygone cinerea*
Uncommon at Townsville drill site from 1600m; probably recorded as heard by Coates and Lindgren from Mt Binnie and (old) Bultem 1700m.
197. **Yellow-bellied Gerygone** *Gerygone chrysogaster*
Recorded by C & L from Ok Tedi Tau at 620m. Likely in the lower parts of the survey area but clearly a vagrant to the plateau. A single bird was at Dablin Creek at 750m in Aug 94.
198. **Green-backed Gerygone** *Gerygone chloronota*
Common around the plateau margins, Ok Ma road and Ok Menga up to 750m but hard to see. Sings along the escarpment track in town.
199. **Fairy Gerygone** *Gerygone palpebrosa*
Uncommon, recorded from Ok Menga and the Ok Ma road.
- 200.* **Brown-breasted Gerygone** * *Gerygone ruficollis*
Fairly common at Townsville drill site at 1600m upwards, overlapping with *G. cinerea*.
201. **Sooty Thicket-fantail** *Rhipidura threnothorax*
Quite common around Tabubil and along the road south, also at Ok Menga and Ok Ma but very difficult to see.
202. **White-bellied Thicket-fantail** *Rhipidura leucothorax*
A common scrub habitat species around the plateau and the road south.
203. **Rufous-backed Fantail** *Rhipidura rufidorsa*
Uncommon, recorded from Ok Menga and Dablin Creek at about 750m.
- 204.* **Dimorphic Fantail** * *Rhipidura brachyrhyncha*
Uncommon at higher elevations, recorded from Lake Wangbin, Mt Robinson and Townsville drill site.
205. **Black Fantail** *Rhipidura atra*
Quite common from about 750m upwards.
- 206.* **Chestnut-bellied Fantail** * *Rhipidura hyperythra*
Very uncommon, only found at Ok Menga at 750m. Listed by Murray as a Gilliard and LeCroy record at Telefomin.
207. **Friendly Fantail** *Rhipidura albolimbata*
The common high altitude fantail from 1400m upwards.

208. **Northern Fantail** *Rhipidurafiventris*
Quite common in the hill forest around the town.
209. **Willie Wagtail** *Rhipidura leucophrys*
Common in the town, one of the few urban species. Also in edge habitats at mid and lower levels.
210. **Black Monarch** *Monarcha axillaris*
Uncommon, recorded from Dablin Creek, Ok Menga and Ok Ma at about 750m and from Lake Wangbin at 1400m. Recorded by C & L up to 2110m.
- x. [**Black-faced Monarch** *Monarcha melanopsis*]
Not recorded, listed by Murray as a record by Bell from Ningerum, out of the survey area.
211. **Black-winged Monarch** *Monarcha frater*
Rare, recorded from Dablin Creek at 750m on 1 Aug 91, 8 Sept 93 and 25 Sept 94 only. Recorded by C & L from 1025m on 13 Feb 78 east of Tabubil.
212. **Spot-winged Monarch** *Monarcha guttula*
Fairly common in hill forest at Ok Menga and Ok Ma.
213. **Golden Monarch** *Monarcha chrysomela*
Uncommon in hill forest, recorded from Ok Menga, Ok Ma road, Km 115 and Sawmill.
- 214.* **Friiled Monarch** * *Arses telescopthalmus*
Quite common in hill forest throughout the area.
215. **Leaden / Satin Flycatcher** *Myiagra rubecula / cyanoleuca*
The sole record is of the single f. seen at Lukwi by Murray which was one of these two species, most likely the former on known distribution in PNG.
216. **Shining Flycatcher** *Myiagra alecto*
Recorded by Murray in Sept /-Oct 86 and Feb 87, but not since, though there is every reason to expect it to be here at the lower levels.
217. **Yellow-breasted Boatbill** *Machaerirhynchus flaviventer*
Rare. Recorded from Sawmill only, as by Murray, until one seen at 750m at Dablin Creek in Sept 94.
218. **Black-breasted Boatbill** *Machaerirhynchus nigripectus*
Uncommon from high altitudes, with records from Townsville drill site at 1600m and the Lake Wangbin track at 1300m. Fairly common in moss forest in 1978 (C&L).
219. **Torrent Flycatcher** *Monachella muelleriana*
Quite common but has disappeared from some of the more disturbed riverine areas such as the Ok Menga bridge, where it nested actually on the bridge girders in 1991. Ok Menga is an excellent area to see the species with about 1 pair every 200m of stream. Found nesting at km 119 in August
- 93, the nest high in an *Albizzia* tree. Sometimes seen along tracks several hundred metres away from water.
- x. [**Lemon-bellied flycatcher** *Microeca flavigaster*]
Listed by Murray as a Gilliard and LeCroy Telefomin record, and thus out of the survey area. It has not been found subsequently and is unlikely to occur.
220. **Yellow-legged Flycatcher** *Microeca griseiceps*
Found by Murray and Coates and Lindgren but not recorded since 1988. May well still occur at low densities.
- 221.* **Olive Flycatcher** * *Microeca flavovirescens*
Rare; a single bird at 700m at Dablin Creek in early 1993 was unexpected.
222. **Canary Flycatcher** *Microeca papuana*
Quite common from about 1400m upwards, recorded from Mt. Robinson, Townsville, Lake Wangbin track and Mt. Binnie.
- 223.* **Garnet Robin** * *Eugerygone rubra*
Rare; a male at Townsville drill site at 1500m in Sept 92, a female at Lake Wangbin in May 94 and a female at the mine site in Sept 1987 (Hobcroft 1988) are the only records to date.
224. **White-faced Robin** *Tregellasia leucops*
Rare; a single record by Murray at 1000m E of Tabubil in Nov 85, of a red billed orange/red-legged bird. Also found by Coates and Lindgren in lower montane forest above Yass at 1300m and at 1185m. Surprisingly not found since until seen by Burrows on Mt Robinson at 1300m in July 94.
225. **Ashy Robin** *Poecilodryas albispecularis*
Uncommon. Recorded at Townsville drill site at 1600m+, Edinburgh on Mt. Binnie and from the Lake Wangbin track at 1300m. All records in moss forest.
226. **Black-throated Robin** *Poecilodryas albonotata*
Uncommon, recorded from Townsville drill site at 1600m. and from Edinburgh at 2190m by Coates and Lindgren. Moss forest.
227. **Black-sided Robin** *Poecilodryas hypoleuca*
Two records by Murray from the golf course pre-clearance and from Sawmill, but not found since. To be expected in the lower lying regions.
- 228.* **Northern Scrub-robin** * *Drymodes superciliaris*
Heard at Dablin Creek at 800m, and seen at Ok Menga at 750m, an exceedingly difficult species to view.
229. **White-rumped Robin** *Peneothello bimaculatus*
Uncommon, recorded along the Ok Ma road at 750m, at Ok Menga from 700m, on Mt. Robinson

- at 1100m and at Dablin Creek at 850m. Recorded by Coates and Lindgren up to 1680m in the mine area. The species is losing habitat to gardens along the tracks at Ok Ma and Ok Menga, and is easily overlooked until the quiet "telephone purring" call is known..
230. **Blue-grey Robin** *Peneothello cyanus*
Common at the higher elevations above 1400m on Mt Robinson and at Townsville drill site.
231. **White-eyed Robin** *Pachycephalopsis poliosoma*
Rare; found by Bell at Lake Wangbin and above Yass at 1540m by Coates and Lindgren. Heard near Folomian (K. D. Bishop pers. comm).
232. **Dwarf Whistler** *Pachycare flaveogrisea*
Quite common from 750m upwards to 1430m, localities being Ok Ma road, Ok Menga, Dablin Creek, Mt. Robinson and Townsville drill site.
233. **Mottled Whistler** *Rhagologus leucostigma*
Rare; a female at 1200m below Folomian on 29 July 92; seen by Coates near old Bultem at 1750m (Murray) and by Burrows at Lake Wangbin in Jan 94.
234. **Slater's Whistler** *Pachycephala soror*
Common above 1000m, and scarcer down to about 750m, localities being Mt Robinson, Lake Wangbin, Ok Ma road, Mt. Binnie and Ok Menga.
235. **Regent Whistler** *Pachycephala schlegelii*
Uncommon, recorded from Townsville drill site at 1650m-1750m, and on Mt. Binnie at 1970m (C & L).
236. **Golden-backed Whistler** *Pachycephala aurea*
Found by Murray at Sawmill and at least 2 pairs resident along the river edge at km 119, in fringing vegetation and scrub but also at times quite high up in *Albizzia* trees. Often vocal in the heat of the day. Juveniles seen in August 91 and 93, a single bird on each occasion. Also recorded by Palliser at Ok Tedi Tau in Sept 87, but now apparently gone from that site.
237. **Lorentz's Whistler** *Pachycephala lorentzi*
Fairly common at Townsville drill site from 1600m; recorded by Coates above Edinburgh at 1980m (Murray).
238. **Grey Whistler** *Pachycephala simplex*
Fairly common along the Ok Ma road, at Ok Menga and at Dablin Creek, 700-850m
239. **Rusty Whistler** *Pachycephala hyperythra*
Uncommon, recorded from Dablin Creek at 750-850m and at Ok Menga at 750m. C & L recorded it from 600-1070m
- 240.* **Black-headed Whistler** * *Pachycephala monacha*
Found in 1993 at Ok Menga at 750m, maybe moving in as the forest is cleared as not found here
- previously, though recorded not far away by Bell (in the Arip valley, outside the survey area).
- x. **[Brown-backed Whistler** *Pachycephala modesta*]
Not yet found in the area, though recorded by Gilliard and LeCroy in the Hindenburg range, and suitable habitat is plentiful.
241. **Rufous-naped Whistler** *Pachycephala rufinucha*
Common but skulking above 1400m, from Lake Wangbin, Mt. Binnie and at Townsville drill site.
242. **Sooty Whistler** *Pachycephala tenebrosa*
Recorded from Townsville drill site with 1+ on 13 Sept 92 and 2+ there at 1800m on 19 Sept 92. Found by Bell at Lake Wangbin 1500m and nest building at Edinburgh in Dec 84 (Finch). Also recorded by Buck in Aug. 1986 near Folomian.
243. **Little Shrike-thrush** *Colluricincla megarhyncha*
A common but unobtrusive species of the hill forest understorey
244. **Variable Pitohui** *Pitohui kirhocephalus*
An uncommon species of forest edge, recorded from Ok Menga and Ok Ma. Local birds appear to show characters of the brown headed form *brunneiceps*.
245. **Hooded Pitohui** *Pitohui dichrous*
A common resident, replacing the Variable Pitohui from about 750 m upwards and a regular member of mixed species flocks. Apparently local birds are edible without harmful effects, maybe because the toxins lie in the feathers!
246. **Rusty Pitohui** *Pitohui ferrugineus*
An uncommon forest edge species from about 600m down, also joining mixed species flocks. Sawmill is a good locality for it.
247. **Crested Pitohui** *Pitohui cristatus*
An uncommon resident, recorded from Ok Menga and Ok Ma but exceptionally difficult to see, usually heard only. My highest records are only from about 700m but Coates and Lindgren recorded it as heard at 1070m.
248. **Black Berrypecker** *Melanocharis nigra*
Very sparse, a few records from Dablin Creek at 750m; recorded by C & L at Tabubil and Ok Tedi Tau at 620m. Bell recorded an adult male in the Ok Tedi gorge at 600m in 1966.
249. **Fan-tailed Berrypecker** *Melanocharis versteri*
Quite common in higher altitude forest from 1500m upwards.
- 250.* **Mid-mountain Berrypecker** * *Melanocharis longicauda*
Found at Townsville drill site in Sept 92, and by Burrows (pers comm) on Mt Robinson at 1400m in July 94.

251. *Melanocharis* sp.
A *Melanocharis* recorded as **Obscure Berrypecker** *M. arfakiana* by C & L was seen in hill forest at 640m on 8 Feb 78. *The yellow pectoral tufts and some orange on the gape or bill base suggested an imm. bird.* Murray reported a similar yellow tufted bird at the plateau edge on 17 April 87.
- Gregory and Eastwood found two small canopy haunting *Melanocharis*-type berrypeckers at Dablin Creek on 1 Oct 92, *with yellow pectoral tufts and orange bills, but also with faint dark streaks underneath* (Gregory 1993). *In July 1993 orange billed yellow tufted birds without streaks were common in the same area, haunting the canopy and having a high pitched buzzy song identical to unidentified berrypeckers discovered at Boana on the south ern Huon by FG Inc in 1991. The Boana birds have yellow pectoral tufts, but also an eye ring, which is lacking in the Tabubil form (Whitney and Pierson, pers comm).*
- Clearly much work needs to be done to reveal the identity of these forms, which may be referable to Obscure Berrypecker, or represent an undiscovered taxon (or taxa!) Specimens collected 7/94.
- It is also worth recording that C & L also report a drab olive *Melanocharis* of the *striativentris/longicauda* type at 2220 m on Mt. Binnie in moss forest, but with strong black streaking down the sides of the abdomen and white pectoral tufts (C & L 1978). Identity unknown.
252. **Spotted Berrypecker** *Rhamphocharis crassirostris*
A single found by Bell at Lake Wangbin at 1400m in 1966. Not recorded since.
253. **Tit Berrypecker** *Oreocharis arfaki*
Fairly common at the higher elevations, recorded from Townsville drill site at 1600m, Lake Wangbin at 1440m and by C & L on Mt Binnie and at Old Bultem at 1700m.
- x [**Crested Berrypecker** *Paramythia montium*]
Recorded by Gilliard and LeCroy from the Hindenburg Range, may occur at the highest levels.
254. **Black Sunbird** *Nectarinia aspasia*
Quite common, singly or in pairs, around the town and from the Ok Menga and Ok Ma areas.
255. **Yellow-bellied Sunbird** *Nectarinia jugularis*
Vagrant; a single seen by Cole at Tabubil on 21 Oct 74. must have wandered up from the lowlands.
256. **Black-fronted White-eye** *Zosterops atrifrons*
Uncommon in the hill forest up to about 800m; recorded from Dablin Creek, Ok Menga and the Ok Ma areas. Recorded up to 1185m by C & L.
257. **Western Mountain White-eye** *Zosterops fuscicapillus*
Uncommon, some overlap with the preceding species at around the 700m height band. Recorded from Dablin Creek at 700m, Lake Wangbin at 1400m, Townsville drill site at 1600m, Mt Robinson and Mt Binnie. *A juv bird at Lake Wangbin on 14 May 1994 had an orange bill, no dark face (unlike the adult), and paler yellow flanks.*
- x [**Olive Straightbill** *Timeliopsis fulvigula*]
Recorded from the south slope of the Hindenburg Range near Luplupwintem cave in 1993, just outside the study area, and likely to be found eventually at suitable sites within it.
258. **Long-billed Honeyeater** *Melilestes megarhynchus*
Quite common, seen on most outings but usually singly. It is one of the few garden birds in Tabubil. Recorded from below 600m up to at least 1440m locally.
259. **Slaty-chinned Longbill** *Toxorhamphus poliopterus*
Uncommon, recorded from 700m up to at least 1600m at Lake Wangbin. Regularly seen along the Wangbin track and from Dablin Creek.
260. * **Yellow-bellied Longbill** * *Toxorhamphus novaeguineae*
This lowland species is occasional from Ok Menga at 650m.
261. **Dwarf Honeyeater** *Oedistoma iliolophus*
Uncommon, recorded from Ok Ma, Dablin Creek and Ok Menga at 700-800m. The call is a quiet purring Estrildine finch-like trill. C & L recorded it up to 1180m.
262. * **Pigmy Honeyeater** * *Oedistoma pygmaeus*
Very sparse but unobtrusive. Found at Ok Menga and the Ok Ma road area, usually in small groups.
- x [**Silver-eared Honeyeater** *Lichmera alboauricularis*]
A single bird was reported by Palliser from the Ok Ma road at about 750m in 1988. This would be a huge range extension and I have to date been unable to obtain details of the sighting beyond the mention in an unpublished trip report and in Hobcroft (1988). It may be worth recording that I have on two occasions (at Ok Ma and Ok Menga) had brief views of honeyeaters with apparently dark streaked underparts and pale ear spots.
263. * **Green-backed Honeyeater** * *Glycichaera fallax*
Recorded twice from Dablin Creek at 740m in Oct 91 and Oct 92, a new species for the area.
264. **Red-throated Myzomela** *Myzomela eques*
Uncommon at forest edge from Ok Menga, Dablin Creek and Ok Ma, generally singly.
265. **Red Myzomela** *Myzomela cruentata*
Uncommon and nomadic, appearing at flowering trees almost anywhere in the area from 400m to km 90 to above 1600m (C & L).
266. **Papuan Black Myzomela** *Myzomela nigrita*
Fairly common at Ok Ma, Dablin Creek and Ok Menga, up to about 720m. Rarely in the town.
267. **Red-collared Myzomela** *Myzomela rosenbergii*
A common species from 1400m and above, recorded from Mt. Binnie, Mt. Robinson, Lake

- Wangbin and Townsville drill site.
268. **Mountain Meliphaga** *Meliphaga orientalis*
Quite common and noisy from about 640m upwards, at Dablin Creek, Mt. Robinson, Mt. Binnie and Townsville drill site. Mist-netted on Mt. Robinson at 1450m.
269. **Scrub White-eared Meliphaga** *Meliphaga albonotata*
The common *Meliphaga* of the town area and secondary growth, from the lower areas up to at least 970m at Helsinki Gate.
270. * **Spot-breasted Meliphaga** * *Meliphaga mimikae*
This large and mottle-chested species is uncommon at Ok Ma, Yuk Creek and Dablin Creek at about 700-730m.
271. * **Puff-backed Meliphaga** * *Meliphaga aruensis*
Uncommon at Ok Menga and the Ok Ma areas.
- Meliphaga* spp. The following species have tentatively been identified from the area, but field identification remains problematic and I have erred on the side of caution :
272. **Mimic Meliphaga** *M. analoga* from the Ok Ma area.
273. **Graceful Meliphaga** *M. gracilis* from the Ok Ma area.
274. **Black-throated Honeyeater** *Lichenostomus subfrenatus*
Common and noisy above 1400m at Lake Wangbin, Mt Binnie and Townsville drill site.
275. * **Obscure Honeyeater** * *Lichenostomus osbcurus*
A rare species recorded singly from Ok Ma, Ok Menga and the Ok Menga / Ok Tedi confluence area. Maximum height of occurrence is about 750m.
276. **Spotted Honeyeater** *Xanthotis polygramma*
Uncommon; recorded up to 1070m (C&L) but generally present at Ok Menga, Ok Ma and Dablin Creek in hill forest.
277. **Tawny-breasted Honeyeater** *Xanthotis flaviventer*
A common species up to 1100m, the "whit jieh" call being a characteristic sound of the forest locally. Occasional in the town.
278. * **Plain Honeyeater** * *Pycnopygius ixoides*
Uncommon; recorded from Ok Menga at 750m, usually singly.
279. **Streak-headed Honeyeater** *Pycnopygius stictocephalus*
Fairly common in hill forest at Ok Menga at 750m, also from Ok Ma and Km 120, easily overlooked as Brown Oriole (*Oriolus szalayi*) or Helmeted Friarbird (*Philemon buceroides*) but much smaller-billed than either. Sings along the escarpment track in the town itself.
280. **Helmeted Friarbird** *Philemon buceroides* (*novae-guineae* New Guinea Friarbird)
Abundant and noisy up to about 1000m, seems to call virtually throughout the year, often duetting. One of the few urban species.
- x [**Meyer's Friarbird** *Philemon meyeri*]
Not yet recorded from the area but should occur at the lower elevations. Recorded by Bell at (Old) Megalsimbip just outside the survey area.
281. **Leaden Honeyeater** *Ptiloprora plumbea*
Rare, recorded by C & L from Old Bultem at 1750m in secondary growth and gardens, and from Lake Wangbin in Jan and June 94 in similar habitat at 1400m.
282. **Grey-streaked Honeyeater** *Ptiloprora perstriata*
A fairly common species above 1500m, recorded from Folomian and Townsville drill site. *P. guisei* seems to be absent from the area.
283. **Sooty Melidectes** *Melidectes fuscus*
What was presumably this species ("A large, sooty black long billed honeyeater") was recorded by Bell in 1966 at Lake Wangbin, in secondary growth in the beech forest. Interestingly, the eye skin patch was noted as reddish, unlike the normal blue patch. Also found by Murray at 1140m on Mt. Binnie in 1987, though she did not publish the eye patch colour. Birds at 3200m at Dokfuma in the Star Mts had this patch bluish-white in colour (Gregory and Johnston 1993).
284. **Yellow-browed Melidectes** *Melidectes rufocrissalis*
Common from 1400m, on Mt Binnie, Townsville drill site and at Lake Wangbin. Local birds have pale foreheads, pale blue-grey bills and orangey throat wattles. *M. belfordi* may occur at the higher levels and the possible occurrence of hybrids would be worth noting, as the habitat remains reasonably intact as yet..
285. **Ornate Melidectes** *Melidectes torquatus*
Uncommon above 750m, occasionally recorded from Dablin Creek at that height, but more regular along the mine road above Helsinki gate to at least 1900m. Found by C & L atop Mt Robinson and at Old Bultem.
286. **Smoky Honeyeater** *Melipotes fumigatus*
Common above 1400m at Lake Wangbin, Mt Binnie and Townsville drill site. Also occasionally seen at much lower altitudes at Ok Menga and Dablin Creek at 750m, presumably in times of food scarcity at the higher levels as these sporadic records coincide with the very misty and wet mid-year period, when activity seems to be depressed at the higher elevations.
287. **Blue-faced Parrot-finch** *Erythrura trichroa* (Blue-faced Finch)
Fairly common singly or in pairs, but usually heard and seldom seen well. Recorded throughout the area above 700m, up to at least 1500m at Townsville drill site. It is quite possible that the Papuan Parrot-finch (*E. papuana*) is also present e.g. a probable at the Townsville drill site in Sept 92, but these finches seldom permit close scrutiny. The call is a quiet, trilling "titt" series, easily overlooked like the bird itself. C & L give the altitudinal range as 570-1770m.

288. **Metallic Starling** *Aplonis metallica*
Very sparse, at the lower elevations. Recorded in small numbers only from the Ok Ma area at 750m and along the Kiunga road below the Ok Menga confluence.
- 289 * **Yellow-eyed Starling** * *Aplonis mystacea*
A rare bird, recorded occasionally from Ok Menga at 700m, with a maximum of 20 (5imm) there on June 20th 1992. Sightings are annual but are both seldom and unpredictable. The nasal tuft is a surprisingly good field character in flight. Not found as yet with Metallic Starling in this area, probably due to the scarcity of *Aplonis* species locally, though both occur together at Kiunga.
290. **Golden Myna** *Mino anais*
Uncommon, seemingly resident in small numbers of less than 10, usually in pairs or family groups from the Ok Ma area, Ok Menga and the Kiunga road. Never found above the town of Tabubil, 750m seems to be the height limit here, in lowland or hill forest.
291. **Yellow-faced Myna** *Mino dumontii*
A common resident, in pairs or small groups below about 800m. Occasionally in the town area.
292. **Brown Oriole** *Oriolus szalayi*
A common resident though not in the urban area proper, being an edge species of the lower altitudes below about 1000m.
293. **Mountain Drongo** *Chaetorhynchus papuensis*
Very uncommon but unobtrusive, recorded singly at Dablin Creek, Ok Ma and Ok Menga, around the 750m height upwards.
294. **Spangled Drongo** *Dicrurus hottentottus*
Found all year, but migrants as well as residents are likely. Recorded from all forest areas below 1000m.
295. **Torrent-lark** *Grallina bruijnii*
Uncommon, but still present on the smaller streams such as Dablin Creek, Mystery Creek, Namacus Creek and the Ok Menga itself. Recorded from 700m up to at 1400m at Lake Wangbin, often in pairs or small groups of up to 5. Nesting suspected in mid-year at Ok Menga gorge. A very shy species, quickly departing when man appears.
- 296.* **White-breasted Wood-swallow** * *Artamus leucorhynchus*
Vagrant, a single by the swimming pool in Tabubil in June 1993 had strayed up from the lowlands, where recorded as high as Ningerum by Bell (1966).
297. **Great Wood-swallow** *Artamus maximus*
An urban species in Tabubil, with at least 4 separate groups in the town, of up to 10 birds each. Found breeding in the industrial lay-down area on 11 Oct 92. when 3 juv were in a nest in an epiphytic clump 20m up in a dying *Albizzia* tree. Juvs. also seen in Feb. The species is general over forest clearings up to at least 2200m.
298. **Hooded Butcherbird** *Cracticus cassicus*
A common resident of the forest edge, even around the margins of the town along the escarpment track. Extends up to about the 1000m mark.
299. **Black Butcherbird** *Cracticus quoyi*
Uncommon, more often heard than seen, like many other species. Occurs in all forest areas below about 750m (Dablin Creek).
300. **Mountain Peltops** *Peltops montanus*
The common *Peltops* species in the Ok Tedi area, generally seen in pairs perched high atop dead branches, and found in most forest clearing sites from 600m upwards to at least 2000m. Does not occur in the town. The dry call like running a finger down a comb is a typical forest sound.
301. * **Lowland Peltops** * *Peltops blainvillii*
Not recorded by me, but found and heard calling along the Kiunga road about 2km below the Ok Menga turn-off at km 124 by Bret Whitney in 1993. Clearly overlaps with its sibling species as Mountain Peltops is known from Km 115, at a lower elevation than this site.
302. **Spotted Catbird** *Ailuroedus melanotis* (Black-eared Catbird)
Murray quotes records by Bell at Derongo, which is out of the present survey area, and C & L only list it as probably heard throughout by Bell in 1966. I have never found it, and the only confirmation of its presence comes from it being listed as heard by the FG Inc Tour of 1993 at an unspecified Tabubil area locality.
303. * **White-eared Catbird** * *Ailuroedus buccoides*
First recorded from Dablin Creek in Oct 92, and heard from the Ok Ma road and Ok Menga, but clearly not common.
- x. [**Macgregor's Bowerbird** *Amblyornis macgregoriae*]
Never recorded in the survey area, this is one of the surprising omissions as much suitable habitat exists, and it is found as close as the Hindenburg Range (Gilliard & Le Croy). Likely to occur in the seldom frequented height zones.
304. **Yellow-breasted or Fawn-breasted Bowerbird** *Chlamydera lauterbachii* / *C. cerviniventris*
Murray recorded a *Chlamydera* sp. on 12 Sept 1985 which resembled a Fawn-breasted in colouration, lacking yellow underparts. Range would suggest Yellow-breasted as the more likely, occurring as close as Telefomin and the Star Mts grasslands. An intriguing record.
305. **Loria's Bird-of-Paradise** *Cnemophilus loriae*
Quite common above 1400m at Townsville drill site, at Lake Wangbin and on Mt. Robinson. Males were calling the quiet, unobtrusive, rising and upward inflected "zhee" note at Townsville in Sept 1992 and Mt. Robinson in July 94.
- x. [**Crested Bird-of-Paradise** *Cnemophilus macgregorii*]
The occurrence of this species is a possibility given the recent discovery of it along the border in eastern Irian Jaya (K.D. Bishop, pers. comm)

306. **Yellow-breasted Bird-of-Paradise** *Loboparadisaea sericea*
A male foraging quietly at 1500m in the mid-stratum layer of moss forest at Townsville drill site in Sept 1992 is the only published record I can trace (Gregory 1994) of this rare species, apart from a male flushed from off the road below the mine gate on 24 Aug 86. (Buck 1986). One of the most elusive of all the paradisaeids.
307. **Glossy-mantled Manucode** *Manucodia atra*
Uncommon at the lower elevations, recorded from the ridge just north of Tabubil town, and in the Ok Tedi valley at 570m (C & L).
- 308.* **Crinkle-collared Manucode** * *Manucodia chalybata*
The commonest manucode of the area, found at the mid-levels and generally above the Glossy-mantled Manucode habitat. The Ok Ma road and Dablin Creek are two such sites, both around the 750-800m height.
309. **Trumpet Manucode** *Manucodia keraudrenii*
Quite common at Ok Menga at 700m, with display noted in May 94: a bird in flight called a descending musical series as it dropped down, wings open, before flying back up to its perch. A harsh frog-like rattle was given by another perched bird with wings spread wide. At least 3 individuals seemed to be involved, 2 of them calling the frog-like rattle note with spread wings. A beautiful musical whistled flutey "ee-loo" call is a common vocalization here, but I have yet to hear in the Ok Tedi area the loud retching, "waughhh" note given as a typical call by Kiunga birds.
310. **Short-tailed Paradigalla** *Paradigalla brevicauda*
Quite common above about 1400m, from Lake Wangbin, Townsville drill site and the Mine area. Birds in Sept 92 at Townsville gave a quite loud rising, bell-like "zheee" call, reminiscent of the bell call of Eclectus Parrot; one would call and another would reply, spaced at about 150m intervals in the moss forest, suggesting some form of territorial advertisement.
311. **Magnificent Riflebird** *Ptiloris magnificus*
Quite common and vocal, but males in particular are very difficult to see, quite unlike the eastern form *intercedens* around Port Moresby which is easy to find. The form here is the western race *magnificus*, with distinctive disyllabic 'wolf-whistle' type calls, unlike the growling calls of the eastern form (split by Sibley and Monroe though the evidence in the contact zone is far from conclusive).

Along the Ok Ma road males call every 500m or so, with up to 12 in an afternoon. Along 2km of track at Ok Menga there are at least 4 calling birds. Female plumaged birds are rarely found along the escarpment track in town. 750m appears to be about the upper height limit in this area.
312. **Black Sicklebill** *Epimachus fastuosus*
The species is still found at Lake Wangbin, Townsville drill site, Mt. Robinson and within the mine site on Mt. Binnie, all around the 1400m-1900m height band. Males have been heard in Sept-Dec and also Jan and June at least.
Skins of males sometimes appear in the market and have recently been priced at K250 for top-grade specimens, so the species is undoubtedly under hunting pressure in the more accessible spots such as Lake Wangbin. Shotguns have a drastic impact on the mortality figures of this large and spectacular bird.

C & L listed it as extinct, shot out by migrant workers in the set-up phase of the mine operation.
- x [**Brown Sicklebill** *Epimachus meyeri*]
Not recorded, though should be found above 2000m in areas inaccessible to ornithologists. Occurs just north of the central Hindenburg Wall near Luplupwintem, on the southern slopes of the Hindenburg Range, just outside the area. In 1991 a single f / imm. skin was once seen in the market, priced at K20.
- x [**Buff-tailed Sicklebill** *Epimachus albertisii*]
Not yet recorded though I suspect it does occur here in the 1400m + height band. Bell had a possible sighting in 1966, and A. Rogers had a similar sighting in 1994, also at Lake Wangbin.
- 313.* **Splendid Astrapia** * *Astrapia splendidissima*
A female recorded by Palliser in 1988 at about 2100m above the mine site. (Quite common along the Ok Titi stream near Luplupwintem cave north of the central Hindenburg wall in Mar 93, the males having a curious "tch tch tch" clicking call).
A single male skin was in the market in 1993 for K20.

I have no records of any other Astrapia species locally, but some hunters say that Ribbon-tailed Astrapia *A. mayeri* occurs "in the cold places," and the proof or otherwise of this statement remains a major ornithological priority and mystery awaiting solution.
314. **Superb Bird-of-Paradise** *Lophorina superba*
Quite common from about 1100m upwards, found on Mt. Robinson. Mt. Binnie, Townsville drill site, Lake Wangbin and the ridges to the west of there as far as Dablin Creek, where occasionally recorded from about 750m. Skins cost about K5 in the market and are popular *bilas* headpieces or chest-pieces.
315. **Carola's Parotia** *Parotia carolae*
Fairly common and quite vocal, a two- or three-syllabled rather raspy Melidectes-like "wrenh" note is the usual call. The best sites are Mt. Robinson from the lower slopes upwards, or at Dablin Creek from 750m. The upper height limit would seem to be about 1640m. Also rarely found along the Ok Ma road and at Ok Menga, where presumably the food plants are not the most favoured as appearances at either site are very sporadic. Adult males are outnumbered about 3:1 by female plumaged birds.
316. **King-of-Saxony Bird-of-Paradise** *Pteridophora alberti*
Not uncommon at the higher levels, from about 1500m upwards. Males are still found at Mt. Binnie in the mine area, and the species is also found at Townsville drill site. Skins very seldom appear in the local market, at about K20 for a plumed bird.

- 317.* **King Bird-of-Paradise** * *Cicinnurus regius*
Found near Km 114 in 1993, in riparian thicket at about 400m, unexpectedly high for this mainly lowland bird, though I have verbal reports of it up to nearly 2000m in the mountains to the north where it is an important cult bird (Dr C Roberts pers comm).
Market skins cost K5, but are very rarely on sale. By local tradition women are not permitted to handle this species.
318. **Magnificent Bird-of-Paradise** *Cicinnurus magnificus*
A common and very vocal species of the hill forest, though suffering from habitat loss as forest by roads is cleared for farms. Females and imm birds far out-number adult males, which are shy and elusive. Ok Menga and the Ok Ma road are good areas for this species, also Dablin Creek and Mt. Robinson up to about 1020m. Market skins are rare and again sell for about K5.
319. **Raggiana Bird-of-Paradise** *Paradisaea raggiana*
Recorded by Murray from Lukwi and at Ok Menga, where she observed fully plumed males at both sites. I have never definitely found the species locally, though some birds at Ok Menga may be Raggiana. It presumably comes up from the lowlands and interdigitates with Greater Bird-of-Paradise habitat. Hybrids between this species and *P. apoda* would be very difficult to identify given the variation amongst the immature plumages.
Market skins (red-plumed) are quite common and come from the lowlands, selling for K20 for a good male skin.
320. **Greater Bird-of-Paradise** *Paradisaea apoda*
The commonest paradisaeid species in the Ok Tedi area, found up to 750m but commonest south of the town at Ok Ma and Ok Menga. Fully plumed males are scarce due to hunting pressure, but females and immature birds are frequent. Display trees at Ok Menga and along the Ok Ma road have birds active in June/July. The species extends down to Kiunga and is often seen along the road. Male birds have deep apricot orange/yellow plumes when adult.
Market skins are scarce, fetching about K20-25 per specimen.
- x [**Lesser Bird-of-Paradise** *Paradisaea minor*]
Does not seem to occur south of the central ranges watershed within the area, but skins (lemon-yellow plumed) are frequently traded from the Telefomin area.
321. **Grey crow** *Corvus tristis*
Common in lowland and hill forest up to about 1000m, and with a great variety of plumages. Usually in small and noisy flocks with distinctive plaintive, yelping calls. Once recored at 1600m (Bell)

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BROWN-COLLARED BRUSH-TURKEY (*Talegalla jobiensis*) USED FOR DRUM SKIN

Don Niles

In July 1994 Clement Gima and I of the Music Department of the National Research Department conducted an ethnomusicological survey of traditional music in the Hewa area in the northern part of Southern Highlands Province. The opening of the Wanakipa airstrip (5_156S, 142_316E) in August 1990 and air

service from Mt. Hagen has enabled increased access to the area, previously accessible only by a difficult day's walk from Kapiago, lying to the south. The Hewa people themselves also inhabit the adjoining provinces of Enga, East Sepik, and West Sepik. The c. 3000 Hewa live in very scattered houses over an immense geographic area and culturally are much more linked to their neighbours in the Sepik, than to other Highlanders.

In addition to recording and documenting traditional forms of music and instrumental playing, we also routinely inquire about the use of flora and fauna in decoration and instrument construction. In common with many parts of Papua New Guinea, the Hewa make use of a drum (wa) in some of their singsings. Throughout the country, a wide variety of skins are used on a drum. In coastal areas, lizards and snakes (aquatic and terrestrial) are commonly used, while in mountainous areas various marsupials are typical. In addition to such animals, however, the skins of crocodiles, fish, pigs, and dogs may be used, as well as cats, deer, cows, goats, and even empty plastic rice bags.

Armed with this knowledge of the "norm", we were quite surprised when the Hewa told us in Tok Pisin that they prefer the use of the "*welpaul*" (*tinya*), with occasional drums being made with marsupial skins (*malama, pian, wai*). The main ethnographic account of the Hewa (Steadman 1971) notes that an unspecified bird skin is used for drums. With the assistance of a single feather brought back and knowledge of the eggs, Dr. Ian Burrows (University of Papua New Guinea) was able to identify the bird as the Brown-collared Brush-turkey.

Among the Hewa, drums are highly valued and require about two weeks of work for construction. They average one meter in length and are carved and painted at the open end with patterns similar to those put on arrows. The shape is similar to drums found in the Telefomin area to the west (where a lizard skin is used) and contrast significantly with the much smaller drums found in the main part of the Southern Highlands. A piece of wood from the eponymous *wa* tree (*Litsea* sp.?) is initially hollowed from both ends with axes, leaving just a centre obstruction. The maker hits his hand on the end of a stick to begin breaking through. While doing this he speaks the name of the (unidentified) *yaifofo* bird. The *yaifofo* is a small brown bird with a very loud voice. When he is just about to break through, the maker calls the name of the *tinya* (or the name of a marsupial if that is the skin that will be fastened) as the centre part is broken. Then, the maker's wife (or, if he is unmarried, his mother or sister) pulls a le kolakola vine through the perforation, from the proximal end to the distal end while reciting certain special words. The vine is then discarded. The centre perforation is then enlarged with a thorned vine. The feathers of the *tinya* are removed and the skin is dried out above the fire in a house. Later it is put into water to soften it before fastening it to the instrument. Tuning is done with clumps of beeswax (probably *Trigona* sp.), attached by the maker's wife, mother or sister. The same woman also first plays the instrument. In Wanakipa a properly tuned drum sounds the name of a creek which runs near where the wood is cut.