## NESTING RECORDS FROM THE LAKEKAMU BASIN

*By Roger Safford and Fred Atwood*

As is the case in many tropical rain forest areas, knowledge of the seasonality and nesting habits of New Guinea birds is limited. On seasonality, the main contribution is that of Bell (1982), who analyzed 460 breeding records gathered between 1965 and 1978 in lowland rain forest at Brown River, Central Province. Coates (1985, 1960) later summarized all knowledge of nesting habits of Papua New Guinea birds. This highlighted many species whose nesting habits or eggs remain undescribed and also showed how complex is the seasonality. This must partly be because timing and intensity of wet and dry seasons varies so much, both geographically and between years.

During the course of fieldwork in lowland rain forest in the Lakekamu Basin, Gulf Province, between October 1994 and March 1995, 31 active or colonies of 18 species were found. The basin and its birds are described by Beehler et al. (1993, 1995). Nest finding was not the aim of any study: all nests were found incidentally, and time did not allow the monitoring of their outcomes. Collecting unbiased data on nesting success in sufficient quantity for useful analysis is extremely time-consuming. The information we have for these 31 nests is given here. We hope that further studies will be carried out on the subject, in conjunction with year-round studies on food abundance and climate.

Nesting attempts are grouped by species. For each nest, the following information is given:
1. Dates between which the nest was checked
2. Suspected egg-laying month (estimated from typical incubation or fledging periods from the literature), indicated with a question mark where eggs are not known to have been laid e.g. nest found under construction and not monitored thereafter) or timing is uncertain.
3. Clutch or brood size and egg colour, if seen (C/1 = clutch of one egg)
4. Height of nest and height of plant supporting it ("15/25m" means nest was 15m up a 25m tree).
5. Outcome, if known.
6. Whether photographed

This is followed by a description of the situation and construction of the nest and behaviour of the parents.

Thick-billed Ground Pigeon *Trugon terrestris*
24 Feb.-2 Mar. Egg Feb. C/1, white. On ground. Failed. Photographed.
On ground at base of trunk of large tree, between two large buttresses. Platform of rootlets or small twigs, with a few leaves. When startled, bird erupted from nest (as when flushed while feeding), landing away. When nest approached in view, bird walked off nest stealthily, again stopping to watch observer ca 10m away.

Wompoo Fruit Dove *Ptilinopus magnificus*
1. 8-21 Dec. Egg Dec. (Nov.?) C/1, white. 2.5/8m. Fate unknown.
Tiny platform in spindly shrub. Flushed when approached to ca 10m.
2. 15 Dec. Egg Dec. (Nov.?) C/1, white. 4/?M. Fate unknown.
At fork on horizontal branch away from trunk, made of twigs and tendrils including spiny vines.
3. 28 Dec. Egg Dec. C/1, white. No further data.
4. 28 Dec. Egg Dec. C/1, white. No further data.
5. 18 Mar. Egg Feb./Mar.? Contents unseen. 5/6m. Fate unknown.
On thin horizontal branch of slim sapling, tiny platform with many vine tendrils.





Superb Fruit Dove *Ptilinopus superbus*
10-16 Mar. Egg Mar. C/1, white. 2/25m. Fate unknown.
Supported in three-way fork, similar to P. pulchellus nests, but ?thicker base. Female building 10 Mar, male incubating by day 16 Mar.

Beautiful Fruit-Dove *Ptilinopus pulchellus*
1. 4-13 Dec. Egg Nov./Dec. C/1, white. 0.5/ 0.5m. Failed. Photographed.
Tiny platform on crown of low shrub, large leaves radiating out like tree-fern. Approachable to 1m. After failure, bird still sitting on empty, intact nest.
2. 15 Dec. Egg Dec. (Nov.?). C/1, white. 1/1m . Fate unknown.
On flexible, bending palm leaf midrib: very precarious. Approachable to 1m.
3. 21 Feb.-12 Mar. Egg Feb. C/1, white. 0.7/1m. Failed.
On horizontal branch of shrub/miniature tree (not sapling). Incubation in progress 21 Feb.-10 Mar. (at least 18 days). 11 Mar: adult flushed and warm, pipped egg on ground below nest, replaced in nest but disappeared the next day.
4. 24-25 Feb. Egg Feb.? Contents not seen. 2.4/4m. Fate unknown.
On horizontal branch of sapling. Bird sitting.
5. 28 Feb. Egg Feb.? Contents not seen. 4/?M. Fate unknown.
On top of curving Pandanus leaf, where leaf is horizontal (cf. nest 2).
6. 10 Mar. Egg Feb./Mar. Contents not seen. 0.6/0.6m. Fate unknown.
Similar situation to nest 1. Bird sitting.

Red-cheeked Parrot *Geoffroyus geoffroyi*
4 Dec. No eggs? 20/20m. Abandoned?
Female excavating/improving cavity in top of tall, broken-off trunk. No subsequent sightings.

Rufous Babbler *Pomatostomus isidorei*
3 March, Eggs March ? 4/?m. Fate unknown.
Nest in typical situation (hanging from spiny palm vine), being built by 2 birds, bringing strips of material from on or near ground close by every minute or so. (This is not proof of breeding since nests are used for roosting (Coates 1990), it is unknown whether birds build nests for roosting, or merely roost in old ones).

Yellow-bellied Gerygone *Gerygone chrysogaster*
17-21 Oct. Eggs Oct.? 6/12m. Failed?
Retort-like nest, hanging by wide, loosely-woven belt from downward-pointing branch. Tail and entrance tube described by Coates (1990). Two birds attending, one (both?) building. All material seemed dead: various brown, not green fibres, also silk from under leaves in herb layer. Nest area demolished by treefall in November, but pair (one banded) still present.

Sooty Thicket Fantail *Rhipidura threnothorax*
5 Jan. Eggs Jan? 0.4/1/1m. Fate unknown. Photographed.
Being built in tangled but not dense undergrowth in meander bend of small stream. Tightly bound with cobwebs around 3 stems forking from single horizontal branch. Tiny cup so far, being built upwards from the fork, like a monarch. Tail 25 cm long, single stem hanging 10 cm below this. Material fine yellowish, straw-like strips.

Golden Monarch *Monarcha chrysomela*
13. Dec. Eggs Dec.? 5.5/5m. Fate unknown.

In top of stand of saplings in (tree-fall?) gap, partly exposed to sun. Base of nest in fork in large-leaved tree. Typical monarch nest, rim being built up from base. Much white "fluff" in base; male collecting moss, sitting on nest to incorporate it round rim.

Frilled Monarch *Arses telescophthalmus*
8 Dec. Eggs Nov./Dec. 8/15+M. Fate unknown.
In leaf bundle at end of long, down-pointing, vertical branch or liana, far from any other perch: superbly inaccessible. Male sitting.

Torrent Flycatcher *Monachella muelleriana*
13 Mar. Eggs Feb. 2 chicks. 3/-M. Fate unknown.
Exposed to sun, on a narrow shelf formed by base of roots of large fallen tree on gravel bar in middle of river. A wide, shallow cup; exterior mainly live green moss with white moss scattered over outside apparently lined with coarse black and grey rootlets. Proportions and sitting of nest like wood-pewee *Contopus* sp. Young near fledging age, noticeable different sizes.

Rusty Pitohui *Pitohui ferrugineus*
20-31 Oct. Eggs Oct. C/1, pinkish with purple-brown blotches. 2/3m. Failed. Photographed.
Large, deep cup in sapling. Dark materials: small creeper tendrils (corkscrew-like), black fibres, a few short twigs and leaves, no soft lining. Sitting bird extremely shy, flushing on sight of observer, even at 30m range, No distraction behaviour or mobbing. On 31 October, nest empty but intact.

Black Berrypecker *Melanocharis nigra*
1. 11-16 Mar. Eggs Feb./Mar. C/2. 2.5/3m. Fate unknown. Photographed.
Small, deep, smooth, tightly-woven cup attached at base to slender, horizontal, forking twigs. Materials: brown plant fibres, bark strips, cobwebs and pale lichen decoration. Female on eggs 11 Mar, on chicks 16 Mar. flushed at a few cm range: brooded with bill pointed up at 45.
2. 10 Mar. Eggs? Feb./Mar. C/2. 4/5m. Fate unknown. Photographed.
Very similar to nest 1, on leafy part of narrow branch, 10 cm from trunk.

Black Sunbird *Nectarinia aspasia*
25-27 Feb. Eggs? Mar. 3/30m. Fate unknown.
On underside of pinna of epiphytic fern on outside of "green wall" of vegetation at riverbank. Nest nearly complete, female collecting cobwebs, male only pestering her.

Unidentified *Meliphaga* sp. (Probably *M. Arfuensis analoga*)
1. 19 Oct. Eggs Sept./Oct. 10/15m. Fate unknown.
Hanging from fork in mid branches of slim tree. Appeared bag-like, as if slightly constricted round the rim. Pale brown strips, whole nest very smooth externally. Like "papier mache". Adult feeding nestlings.
2. 2 Mar. Eggs Feb. 6/12m. Fate unknown.
Slung by rim between small branches. Smooth, deep cup, all covered externally with dead leaves, mosaic-like. Adult feeding nestlings.

Yellow-eyed Starling *Aplonis mystacea*
20 Feb.-26 Mar. Eggs Jan & Feb. 20-30/30m. Fate unknown.
Active colony in single, live 30m tree in primary forest. Total ca 150 nests, many active every visit. Nests messy globes, often clustered, suspended, or attached to others. Begging chicks (2-3) at entrances of some nests.





Brown Oriole *Oriolus szalayi*
4 Nov. Eggs Oct. . 15/25m. Fate unknown.
In lowest outer branches of tall tree. Mossy cup hanging from rim; messy, with leaves loosely attached to outside. Adult visiting frequently to feed young. In same tree as nest 1 of Spangled Drongo (under construction).

Spangled Drongo *Dicrurus hottentotus*
1. 4 Nov. Eggs? Nov. 18/25m. Fate unknown.
In same tree as Brown Oriole nest, drongo's higher, about 5 m away. Being built in a fork. Neatly woven, translucent cup of brown fibres.
2. 7 Dec. ?/40m. No further data.
3. 8 Dec. No data (identical to nest 1).

Discussion
Two of the nests found- those of Sooty Thicket-Fantail and Yellow-eyed Starling - were previously undescribed. For several other species, such as Beautiful Fruit Dove (the abundant small fruit dove at this site) and Golden Monarch, very few nests have been recorded. The lack of knowledge of the nest of the Sooty Thicket-Fantail is surprising, considering the species' abundance (Coates 1990). The nest found was not well-concealed. The main difficulty in finding it was in following and observing the adult for long enough to track it down, once it had been seen carrying material. The nest and site seem typical of the genus. Our departure from the site prevented further observations on this nest, the eggs, as well as the completed nest, remain undescribed.

Yellow-eyed Starling is a virtually unknown species, being until recently thought to be confined in Papua New Guinea to lowland rainforest in the upper Fly River drainage. It was first identified in the Lakekamu Basin in 1992 (Beehler & Bino 1995) and is now known to be locally (or seasonally) common in the area (Safford 1996), occurring alongside the widespread Metallic Starling Aplonis metallica. This colony, apparently containing only Yellow-eyed Starlings, seems similar to Metallic Starling colonies described by Coates (1990). Further details are given by Safford (1996).

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## A TRIP TO IRIAN JAYA

by Chris Eastwood

In August 1995, I joined up with Margaret Cameron, Liz Kerr, Mike Carter and Michael Martin for a comprehensive tour of Irian Jaya which had been put together by Margaret. Margaret had done most of the planning and flights herself, but also used ground agents at all locations. In all we spent 26 days or so birding in the country, covering the following areas (more detailed information can be found in David Gibbs' trip report on Irian Jaya).

We first flew to Wamena from Jayapura and then drove from Wamena to Lake Habbema where we camped for three nights. The drive took about 4 to 5 hours, with few stops on the way. At Lake Habbema we birded mainly along the road but occasionally followed a track from our camp site into the forest. On our last day, we walked for about 5 hours down the road to meet our vehicles and then drove the rest of the way down making various birding stops. From Wamena we flew back to Jayapura and then drove to Nimbokrang, skirting Lake Sentani on the way where we camped for another 3 nights in a deserted logging camp. We birded primarily in the surrounding forest with the help of a local guide, called Jamil. It was dry during this whole period, possibly too dry as far as Nimbokrang was concerned.

Returning to Jayapura and, after a few problems with cancelled flights, we flew to Biak for two nights, having an afternoon and one full day to bird. From Biak we flew to Manokwari where we stayed two nights. We had intended to visit Warkapi but due to logistical problems (taxis not turning up etc) we ran out of time so instead birded along the road to Prafi. We then set off on a seven day trek in the Arfaks, setting off from Warmare and taking in Inat Beab, Cirauberi, Gunung Ngribou and Bini Bei. It had again been very dry, causing us some problems because of lack of water, but the last two days more than made up for this and we got extremely wet. Birding conditions were therefore not always ideal! Further, the gardens and scrub around Bini Bei had become overgrown (ironically, because the area is now a conservation area and the local people had had to stop their gardening) making the site much less attractive for birders.

After the trek and a day to recuperate in Manokwari, we flew to Sorong where it had been, and remained during our entire stay, unseasonably wet! We had intended to spend one morning





visiting the logging area referred to in David Gibb's book, but a bridge had been washed away so we had to make do with the main road and the relatively degraded forest along side it. From Sorong, we got a boat to Batanta where we stayed for four nights near the village of Wai Lebed. In between the rain, we birded around our camp and also had one morning on Salawati. From Batanta we returned to Sorong and then to PNG / Australia.

For those who know PNG, but not Irian Jaya, Irian Jaya's major attraction is the lack of any security problem making birding so much easier. However, in contrast the bureaucracy can be somewhat worse and catching flights or cashing traveller's cheques became very tedious. It was also necessary to register with the police in each district, though this was only a minor inconvenience. The standard of facilities provided by the various hotels was generally below the level found in PNG (although of course they were infinitely cheaper).

A list of all birds seen during our trip is given below, with comments being made on the more unusual sightings.

Northern Cassowary *Casuarius unappendiculatus*
Batanta (Liz and I stumbled across a large juvenile by the side of a track; it froze in full view of us and seemed unsure what to do before eventually skulking off into the undergrowth where it crouched down on the ground and froze); Salawati (h)
Great Frigatebird *Fregata minor*
Batanta
Lesser Frigatebird *Fregata ariel*
Batanta
Eastern Reef-heron *Egretta sacra*
Biak
Crested Hawk *Aviceda subcristata*
Sentani; Biak; Batanta
Long-tailed Buzzard *Henicopernis longicauda*
Nimbokrang; Arfaks
Brahminy Kite *Haliastur indus*
Sentani; Nimbokrang; Biak; Manokwari
Grey Goshawk *Accipiter novaehollandiae*
Sorong; Batanta
Black-mantled Goshawk *Accipiter melanochlamys*
Arfaks (an adult hunting in the forest on Gunung Ngribou, it flew from tree to tree, never more than 10 metres, where it perched for a minute or so before flying on to the next tree. A little later we saw presumably the same bird, flying back in the opposite direction, but again flying from tree to tree)
Gurney's Eagle *Aquila gurneyi*
Batanta
Little Eagle *Hieraaetus morphnoides*
Nimbokrang
Brown Falcon *Falco berigora*
Wamena
Oriental Hobby *Falco severus*
Biak
Radjah Shelduck *Tadorna radjah*
Batanta