

An Overview of Recent Taxonomic Changes and Additions to the Avifauna of New Guinea

by Phil Gregory

None of the major New Guinea ornithological references have been revised since they were published, and as a consequence the taxonomy is now somewhat out of date. The excellent standard field guide, Beehler et al *The Birds of New Guinea* was published in 1986, Brian Coates classic *The Birds of Papua New Guinea Vol. 1 & 2* was published in 1985 and 1991 respectively, with Coates and Peckover *Birds of New Guinea and the Bismarck Archipelago: A Photographic Guide* in 2001.

This overview was developed from taxonomic notes devised for tour groups, trying to follow the complex and ever-changing New Guinea taxonomy, which has suffered from years of overlumping, conservative treatments with broad species concepts, and some still remarkably poorly-known species. Some New Guinea field workers have long used alternative species limits, based on fieldwork and especially vocalizations, and it is refreshing to note that the IOC is now in the forefront of making changes based on still rigorous but more flexible and narrower species concepts. This will hopefully draw attention to many hitherto neglected taxa, some with significant conservation implications. The following species limits have been revised since these older field guides were published, and a number of others are pending in a fast changing and exciting field.

A variety of new species have also been recorded in New Guinea or its territorial waters for the first time, especially the still poorly known seabirds, and brief details are given of such sightings. There may well be others as yet unreported or unpublished, and further details would be appreciated.

The standard Australian Check list *The Taxonomy and Species of Birds of Australia and its Territories* by Christidis and Boles (RAOU 2008) makes some significant taxonomic alterations, whilst Schodde & Mason (1999) made some innovative and far-sighted suggestions with relevance to New Guinea. The *Checklist of the Birds of New Guinea and Associated Islands (v. 3.1.4 2011)* by Phil Gregory breaks down the avifauna as shown below:

Some Statistics of Bird Diversity from New Guinea:

Three families are currently recognized as endemic-

Melanocharitidae- Berrypeckers and Longbills

Paramythiidae- Tit-Berrypecker and Crested Berrypecker

Cnemophilidae- Satinbirds, formerly somewhat anomalous members of the Birds of Paradise.

Four species are treated as Incertae Sedis at present and may represent distinct families- **Lesser Melampitta** (*Melampitta lugubris*) and **Greater Melampitta** (*M. giganteus*), **Wattled Ploughbill** (*Eulacestoma nigripectus*) and **Blue-capped Ifrita** (*Ifrita kowaldi*)

Total Bird Species in New Guinea : 889

Total species from mainland and nearby islands, excluding Bismarcks, Admiralties & Bougainville: 763

Total endemics in Checklist 434

Endemics of PNG 31

Endemics of West Papua 44

Endemics of mainland New Guinea 370

Endemics of Bismarck Archipelago 46- (16 New Britain, 9 New Ireland, 2 BA & MA)

Endemics of Manus: 7 + 1 MA & MU

Endemics of Mussau: 3

Endemics of Bougainville: 7

The status as per the main world checklists latest editions is often given: Clements 6th edition (2006), Dickinson et al *The Howard and Moore Complete Checklist of the Birds of the World* (2003) and the International Ornithological Congress (IOC) on-line checklist updates from 2011.

C & B=Christidis, L., & Boles, W. (2008), *Systematics and Taxonomy of Australian Birds*

H & M=Dickinson, E. J. (2003) *Complete Checklist of the Birds of the World*
HBW=*Handbook of the Birds of the World*.

* Addition to New Guinea list since Beehler et al (1986)

** Taxonomic change since Beehler et al (1986)

Dwarf Cassowary *Casuarius bennetti*

The taxon *westermanni* from the Vogelkop is sometimes recognized and may be morphologically distinct with a white occipital region, and might be sympatric with the nominate, further research is required.

** **New Guinea Scrubfowl** *Megapodius decollatus*

Beehler lumps this form in Dusky Scrubfowl *M. freycinet*, using Common Scrubfowl for the specific name. The group is now split into 5 species: **Dusky Scrubfowl** (*M. freycinet*) of West Papuan islands, **New Guinea Scrubfowl** *M. decollatus* (synonym *affinis*) of northern NG, **Biak Scrubfowl** *M. geelvinkianus* from Biak, **Orange-footed Scrubfowl** *M. reinwardt* of Australia and southern New Guinea, and **Melanesian Scrubfowl** *M. eremita* of the Bismarcks and Bougainville.

* **Tufted Duck** *Aythya fuligula*

A vagrant immature was seen near Rabaul in Jan. 1998 (Dutson 2009), and was new for the region.

[**Black-footed Albatross** *Phoebastria nigripes*]

Cheshire (2010) has distant views at approximately 800 metres of a dark black-brown albatross: 4 August 1985, 1°01'N 150°01'E 138 nm NNE from Mussau PNG (nm= nautical miles, 1 nautical mile = 1.852 kilometres) Later in the day, with the ship still on station at this position, an albatross passed within 100 m of the stern. It was seen by Alan Poole of CSIRO who described it as 'similar to a Sooty Albatross (a bird he has seen during voyages to the Southern Ocean), but pale at the base of the bill and definitely not a Giant Petrel'. The bird was likely to have been an immature Black-footed Albatross. It is the first record of an albatross from New Guinea waters, with this species likely to be a rare vagrant.

* **Herald Petrel** *Pterodroma heraldica*

Vagrant, so far only one record from near Tench Is. (Tarburton 2009) and 4 records detailed in Cheshire (2010), but likely to be more regular as nearest breeding colony is Raine Is in Coral Sea.

* **Providence Petrel** *Pterodroma solandri*

Vagrant, one off Buka 2003 (Shirihai 2008), but likely to be regular, nearest breeding stations off Norfolk and Lord Howe Is.

Kermadec Petrel *Pterodroma neglecta*

Vagrant, one taken Duke of York Is, Bismarck Archipelago 1899, one Kimbe Bay 1999 (Coates pers obs.) and one off Emira Is. in 2000 (Tarburton 2009). Nearest breeding grounds on Lord Howe Is.

* **Pycroft's Petrel** *Pterodroma pycrofti*

Extreme vagrant, Vulnerable and rare New Zealand endemic breeder, one ringed in NZ was found alive in Milne Bay Province PNG in May 2005 (Pierce 2009).

* **Collared Petrel** *Pterodroma brevipes*

A recent addition to the avifauna (Hobcroft and Bishop 2011, this issue), this species is sometimes lumped with Gould's Petrel but plumage differences and different seasonal reproductive biology warrant it kept as a full species until the different populations can be thoroughly assessed genetically.

* **Beck's Petrel** *Pterodroma becki*

This rare and almost unknown species is recently recorded in PNG with sightings by Shirihai off New Ireland, where it probably breeds in the mountains (Shirihai 2008). Sometimes treated as conspecific with Tahiti Petrel (*P. rostrata*) but substantially smaller and with distinct jizz. At sea identification from Tahiti Petrel remains problematic and some records of Tahiti Petrel types may well refer to this species.

[? **Fiji Petrel** *Pseudobulweria macgillivrayi*]-Shirihai (2008) reports 3 sightings of dark petrels that might belong to either this species or an undescribed taxon, off Kimbe Bay 2003, and in southern New Ireland waters in 2007. Observers in Bismarck seas should bear this in mind!

* **Christmas Shearwater** *Puffinus nativitatis*

Vagrant from central Pacific, one bird in Equatorial Pacific waters of PNG on 4 August 1985, at 1° 20' N 150° 00' E, 155 nm NNE from Mussau, PNG (Cheshire 2010). One record from off Feni Is in 2007 (Shirihai 2008).

Hutton's Shearwater *Puffinus huttoni*

Status in NG waters uncertain, but regular in Coral Sea in austral summer and to be expected in Gulf of Papua, with tentative sighting off Cape Suckling May 1983. Probably a regular visitor during migration times.

** **Tropical Shearwater** *Puffinus bailloni*

Poorly known, may be regular visitor from Polynesia, Cheshire (2010) records two birds on 7 October 1985 at 11° 00' S 156° 36' E, 46 nm ESE from Pocklington Reef, Coral Sea and one on 5 February 1986 at 4° 06' S 152° 30' E, 3 nm NE from Duke of York Is, Bismarck Sea and these were actually the first for New Guinea waters. Also known as a vagrant between New Ireland and Djaul Is (Dutson July 1997) and off Bougainville (1987). This taxon is now split from Audubon's Shearwater (*P. lherminieri*) of the Caribbean

Heinroth's Shearwater *Puffinus heinrothi*

A rare, poorly known and restricted range species, known from off New Britain (off Kimbe Bay) and from New Ireland between Kavieng and Djaul Is, also off Nissan Is. and historically from Watom Is. off New Britain, and near Arawa, Bougainville.

Sooty Shearwater *Puffinus griseus*

Status in NG waters is uncertain due to past confusion with possible Heinroth's Shearwaters complicating claims, requires confirmation but to be expected in Gulf of Papua and Coral Sea. Probably regular visitor during migration times. Cheshire (2010) saw just one large all dark shearwater in the western Solomon Sea that he considered to be a Sooty rather than the similar Short-tailed Shearwater on 23 July 1985 at 6°41'S 148°55'E, 31 nm S from Cape Merkus, New Britain. Identified on the basis of dark sooty-brown plumage with whitish primary and median underwing coverts and a general impression of size and shape particularly the long pointed wings and sloping forehead.

Short-tailed Shearwater *Puffinus tenuirostris*

Status in NG waters uncertain, currently a vagrant that has been seen off Cape Suckling, Gulf of Papua; expected to be a regular migrant and see Cheshire (2010) for confirmation: He saw a significant northward passage of the species in the New Britain and New Ireland area in May 1988 with 120 northbound birds in 1 hour on 11 May 1988 at 4° 25' S 152° 30' E in the southern approaches to St. Georges Channel between New Britain and New Ireland. Additional records were 60 birds/hr flying N on 13 May 1988 at 1° 54' S 152° 52' E, 52 nm NNE from Mahur Is between 0830-1130 hrs, and c. 250 flying NNW at 1° 27' S 152° 52' E, 106 nm NNE from New Ireland, later on the same day. On the 15 May 1988 at 0° 11' N 152° 59' E, 200 nm NNE from New Ireland, between 0800-1100, 20 bird/hr were recorded flying NNW. From the 15 to 18 May 1988, when the ship was working along the equator between 153°E and 147° E, he saw the species throughout each day moving north to NNW in small flocks.

Flesh-footed Shearwater *Puffinus carneipes*

Status uncertain in NG waters, with a handful of sightings off Port Moresby and Madang, also from Kavieng, on New Ireland and near both Emira and Tench Is, but likely to be a regular visitor from Australian colonies. Cheshire (2010) records just one in the western Solomon Sea on 14 January 1988, at 10° 09' S 150° 47' E, in the Goshen Strait.

* **Bulwer's Petrel** *Bulweria bulwerii*

Status in NG waters uncertain, has been seen off Tench Is (Dutson 2009), Cheshire (2010) had 3 day records of 5 birds which were actually the first for New Guinea in 1990 and again in 2000. Expected to be a regular migrant from further east, now known to be regular in Arafura Sea off NW Australia.

Wilson's Petrel *Oceanites oceanicus*

Status in NG waters very poorly known, currently seems to be a vagrant, recorded off Port Moresby and SW West Papua, likely to be a regular visitor. Cheshire (2010) recorded one in the northern Coral Sea and 2 in the Bismarck Sea.

* **Leach's Storm Petrel** *Oceanodroma leucorhoa*

Vagrant, with one record of nominate N. Pacific race 186 nautical miles NNW of Mussau, with 2 seen next day 35 Nautical miles WNW of Mussau (Cheshire 2010). Taxonomy unsettled, some of the N. Pacific races may be elevated to species status on the basis of vocalizations, timing of breeding season and morphological differences.

[**Madeiran Storm Petrel** *Oceanodroma castro*]

Probable vagrant, one reported off Bougainville seems plausible wanderer from Pacific, but requires confirmation.

* **Matsudaira's Storm Petrel** *Oceanodroma matsudairae*

Vagrant, but likely to be a regular migrant as now known as annual in Arafura Sea off NW Australia. Records thus far from between Manus and NG, off Emira Is (Tarburton 2009), southern New Ireland, Nuguria Is and west of Buka and n of Bougainville (Shirihai 2008), and small numbers off the Sepik and in the Bismarck Sea South of New Ireland and north along the 150°E meridian to 3°N.(Cheshire 2010).

* **White-faced Storm Petrel** *Pelagodroma marina*

A solitary White-faced Storm Petrel was seen for a few minutes close to the ship (30 metres) in the Solomon Sea on 21 August 1985 at 7° 26' S 149° 04' E, 69 nm NE from Cape Ward Hunt. This sighting is a long way from any known wintering area and is the first record for PNG waters (Cheshire 2010).

White-bellied Storm Petrel *Fregatta grallaria*

Vagrant, with two old records from waters off Central Province, PNG, which really need confirmation in the light of modern day identification techniques. Closest population breeds off Lord Howe Is.

* **Black-bellied Storm Petrel** *Fregatta tropica*

Recorded by Cheshire (2010) 6 nautical miles N. of Lunn Is, Louisiades in July 1988. New for PNG.

Black-necked Stork *Ephippiorhynchus asiaticus*

The local Trans-Fly (and Australian) race *E. a. australis* is a potential split from the far distant nominate form of India and SE Asia.

** **Australian White Ibis** *Threskiornis molucca*

Listed by Beehler as Sacred Ibis *T. aethiopicus*, but long since split.

** **Australasian Little Bittern** *Ixobrychus (minutus) dubius*

Split by C & B, Clements and the IOC as a distinct species to Little Bittern (*I. minutus*), with quite different plumages and vocalizations.

[**von Schrenk's Bittern** *Ixobrychus eurhythmus*]

A bird flushed from a wet garden on Lou Island near Mussau in May 1999 appeared to be a small bittern with chestnut on the mantle and wing coverts (pers obs). The species is known as a vagrant at Christmas Is.

* **Cinnamon Bittern** *Ixobrychus cinnamomeus*

Recorded from West Papua, but beware a cinnamon form of Black Bittern (*I. flavicollis*) which is known from the Karawari R, of the Sepik drainage. This shows a shorter bill and darker primaries but is rich cinnamon colour..

[**Javan Pond Heron** *Ardeola speciosa*]

Claims from near Walindi on New Britain were actually dark backed but white winged leucistic examples of Black Bittern (pers obs. 1999). Vagrancy for both this and Chinese Pond Heron (*A. bacchus*) is quite likely as both have now reached Northern Australia as vagrants.

Great Egret *Ardea alba*

The race *modesta* was split by C & B as Eastern Great Egret, but subsequent data seems to show retention within the broad species group may be best pending further work.

Little Egret *Egretta garzetta nigripes*

The local race has some differences in leg colouration and displays, and may be worthy of specific status, requires some genetic work to elaborate further.

**** Eastern Cattle Egret *Bubulcus (ibis) coromandus***

Significant differences in breeding plumage suggest a split from nominate Western Cattle Egret, as adopted by the IOC.

(Christmas Island Frigatebird *Fregata andrewsi*)

Reported as probable from the Gulf of Papua (Simpson 1990) and likely to be correct, requires documentation.

*** Abbot's Booby *Papasula abbotti***

Listed as being sighted in West Papua by Coates & Peckover (1991) but details are lacking, likely to be correct.

**** Australian Darter *Anhinga novaehollandiae***

Beehler lumps this form in the enlarged species group Darter *A. melanogaster*. Most authorities now recognize 4 species, an appropriate treatment given distinct plumage and perhaps vocal differences between the taxa.

**** Papuan Harrier (Eastern Marsh Harrier / Spotted Marsh Harrier) *Circus (spilonotus) spilothorax***

This taxon has a complex history and has been regarded as part of Eastern Marsh Harrier (*C. spilonotus*), though C & B place it as a part of Swamp Harrier *C. approximans*, which seems odd. The authoritative *Harriers of the World* title by Simmons splits it, as do Ferguson Lees and Christie (2005) and the IOC. Treatment as an endemic island allospecies seems warranted.

**** Grey Goshawk: *Accipiter novaehollandiae***

Now split as **Variable Goshawk** *A. hiogaster*, the birds being quite unlike the Australian endemic Grey Goshawk except that this species also has a white phase, which was seemingly the original reason for lumping it with that species! It is quite likely that there are more than one species in this *hiogaster* complex, with both the Bismarck and Solomons/Bougainville groups being quite distinct:

Ten local races:

A. h. leucosomus mainland;

misiorensis (Biak) small, brown-grey above with paler head, finely barred tail, greyish throat, plain rufous underparts;

pallidimas (D'Entrecasteaux Archipelago) mid-size, grey-above, rufous neck collar, plain tail, rufous barring on flanks and belly; *misulae* (Louisiades) mid size, slate-grey above, traces of rufous collar, plain tail, plain rufous chest, barred belly and wing linings; *dampieri* (New Britain) small, grey above, variable intensity rufous beneath, barred on flanks, belly and wing-linings, plain tail;

lavongai (New Hanover and probably New Ireland) mid-size, slaty-grey above, plain tail, greyish on throat, rufous underparts;

manusi (Admiralty Is) and *matthiae* (St. Matthias) like *lavongai* but small and paler;

lihiensis (Lihir and Tanga) large, dark grey above, sometimes traces of collar, plain tail, dark rufous below with some barring on flanks, belly and wing-linings;

bougainvillei (Bougainville & Buka) small, slaty-grey above, grey throat, rich rufous below.

These dark rufous-breasted forms from Bougainville/Solomons could be specifically distinct as *Accipiter pulchellus*, and Bismarck Archipelago birds could well be another.

Extralimitally there are eight other races in the Sundas and Moluccas, Indonesia with *griseogularis* often split as Grey-throated Goshawk. With acknowledgement to Ferguson-Lees and Christie (2005)

**** Pygmy Eagle *Hieraaetus (Aquila) weiskei***

(Little Eagle, New Guinea Hawk-Eagle, Papuan Little Eagle)

Previously lumped with Little Eagle (*Hieraaetus (Aquila) morphnoides*) of Australia, but has striking morphological differences, and genetic work confirms status as a biological species (Gjershaug et al 2009).

Mayr's Forest Rail *Rallina mayri*

Split by all authorities, but very little known and possibly conspecific with Forbes's Forest Rail (*R. forbesi*), with voice reported to be similar.

Pale-vented (Common) Bush-hen *Amaurornis (olivaceus) moluccana*

Both Beehler and Coates list this species as Plain Bush-hen *A. olivaceus* (now *olivacea*) of the Philippines. The Australian authorities C & B now list it as Pale-vented Bush-hen *A. moluccana*, as do the IOC and Clements, who calls it Rufous-tailed Bush-hen.

**** Pacific (Purple) Swamphen** *Porphyrio porphyrio*

The local taxa *samoensis*, *melanopterus* and *melanotus* can be separated as **Pacific Swamphen** *P. melanotus*, with the complex proposed as being split into 6 species (Sangster et al 1999). Pending taxonomic review all the main checklists have adopted the status quo, as species limits need to be defined. Gregory has been proactive and split it from the complex as Pacific Swamphen *P. (p.) melanotus*.

Eurasian Coot *Fulica atra*

Somewhat isolated Australasian taxa *lugubris* and *australis* require genetic work to define relationships with Palearctic taxa. Rasmussen and Anderton (2005) suggest morphological and vocal differences may justify a split, but all authorities currently keep them lumped.

**** White-headed Stilt** *Himantopus (h.) leucocephalus*

Beehler lumps this species in Black-winged Stilt *H. himantopus*, as do Coates and C & B, but both Clements and the IOC regard the group as comprising 4 allospecies, which seems an appropriate treatment given the distinct plumage and call differences between the various taxa.

Masked Lapwing *Vanellus miles*

Two races, nominate *miles* breeding and hybrids with southern Australian race *novaehollandiae* recorded. These two races have a narrow hybrid overlap zone in central Queensland, but maintain very distinct identity either side, could be better treated as two recently diverged allospecies similar to Carrion (*Corvus corone*) and Hooded Crows (*C. cornix*) in the UK.

**** Pacific Golden Plover** *Pluvialis fulva*

Listed in Beehler and Coates as Lesser Golden Plover *P. dominica*, the old name for what are now regarded as the species pair **American Golden** *P. dominica* and **Pacific Golden Plover** (*P. fulva*). The former has been reported as a vagrant in PNG but is unconfirmed, full details and photos are required for such a tricky species. whilst the latter is a common migrant.

Little Ringed Plover *Charadrius dubius*

The species requires genetic evaluation, the former endemic race *papuanus* was subsumed into nominate *dubius* of Philippines, but is highly distinct from *curonicus* and perhaps also this nominate form, which is still remarkably poorly known. It is resident, has a pink base to lower mandible, broad yellow eye-ring, lacks a very distinct non-breeding dress, and is smaller. Also has distinct call notes with an emphatic single “keeee!” sometimes repeated two or three times, and a harsh “chi chit” both quite different to Palearctic *curonicus* which has a plaintive, disyllabic “pee-oo”

Mongolian (Lesser) Sand Plover *Charadrius mongolus*

(Mongolian Sand Plover, Mongolian Plover)

The nominate race is a quite common eastern Palearctic migrant throughout coastal mainland and all satellite islands. This is increasingly being mooted as a split from *atrifrons*, the **Lesser Sand Plover** of central Asia, as yet unreported here.

**** New Guinea Woodcock** *Scolopax rosenbergii*

Formerly considered as **Rufous Woodcock**, and treated as conspecific with Javan Woodcock (*S. saturata*) of Java and Sumatra, but it is now split by all the main checklists.

*** Bristle-thighed Curlew** *Numenius tahitiensis*

Recorded as a vagrant to Manus by Kennerley & Bishop (2001)

*** South Polar Skua** *Stercorarius maccormicki*

Brown (Subantarctic) Skua *S. antarcticus*

South Polar Skua is now sighted in PNG waters, with Brown Skua probable as well (Cheshire 2010):
23 Nov 1992 2°32'S 154°55'E 46 n. miles NNE from Nuguria Island 1 large dark skua

6 Feb 2000 10°41'S 149°34'E 20 n. miles S from Orangerie Bay, Coral Sea, 1 large dark skua

4 Mar 2002 7°25'S 148°03'E Huon Gulf, 1 positive *maccormicki*

11 Mar 2002 3°33'S 144°51'E 3 n miles N from Bam Island, Bismarck Sea, 1 positive *maccormicki*

He also had positive sightings of pale morph South Polar Skuas on the 4 and 11 March 2002 in the Huon Gulf and Bismarck Sea. They are split by all the major world checklists and C & B. Note the genus *Catharacta* now subsumed into *Stercorarius*, and some authorities such as the BOU still keep them all as subspecies of Great Skua (*S. skua*)

**** Slender-billed Cuckoo-Dove *Macropygia amboinensis***

Beehler and Coates list this species as Brown Cuckoo-Dove *M. phasianella*, which is the Australian species as given in Christidis and Boles. Sometimes lumped with Brown Cuckoo-Dove (*M. phasianella*) of eastern Australia but vocally and morphologically quite distinct, there seems no good reason not to treat this as an allospecies.

**** Common Emerald Dove *Chalcophaps indica***

**** Pacific Emerald Dove *Chalcophaps longirostris***

Beehler and Coates list these as Emerald Dove (*C. indica*), but IOC and various others now split *longirostris* of the mainland and Bismarcks from the grey-crowned *indica* group of India and SE Asia to Indonesia, Borneo, Philippines and small islands of West Papua.

Southern Crowned Pigeon *Goura scheepmakeri*

(Scheepmaker's Crowned Pigeon, Goura Pigeon)

The three species of *Goura* are allospecies which replace each other geographically. The two distinctive subspecies of Southern Crowned Pigeon could perhaps be classed as allospecies, but requires research in possible overlap zone.

G. s. sclaterii extends from Mimika R. east to Fly R. area. Nominate *G. s. scheepmakeri* extends from Orangerie Bay west to at least Hall Sound and probably as far as Fly R drainage, but is largely gone from much of eastern portions of this range.

White-bibbed Fruit Dove *Ptilinopus rivoli*

(White-breasted Fruit Dove)

Divides into two groups, yellow-breasted mainland form *bellus* and white-breasted island taxa, requires genetic work to check affiliations and to see if allospecies are involved.

Yellow-bibbed Fruit Dove *Ptilinopus solomonensis*

(Yellow-breasted Fruit Dove)

P. (s.) speciosus Geelvink Bay Islands is geographically disjunct and with distinct plumage and maybe vocalizations, coming from an important endemic bird area also this could well be a distinct species, requires genetic and field work.

Spice Imperial Pigeon *Ducula myristicivora*

Two well-defined races that may well represent different species. Nominate race from West Papuan Islands of Batanta, Misool, Salawati, Schildpad, Sinapang and Waigeo, with old extralimital record from Widi off SE Halmahera, also wandering birds near Sorong. Race *geelvinkiana* occurs Biak, Numfor and Meos Num in Geelvink Bay, with a vagrant from Arfak foothills near Manokwari (Gibbs 2001).

***Foya Imperial Pigeon *Ducula* sp. nov.**

An as yet undescribed and officially unnamed species of *Ducula* is known from the Foya Mts of West Papua, with photographs appearing in several popular articles. The quite distinctive bird has a pale greyish chest and rich chestnut underparts including the undertail coverts

**** Pied Imperial Pigeon *Ducula bicolor***

**** Torresian Imperial Pigeon *Ducula spilorrhoa***

**** Yellowish Imperial Pigeon *Ducula subflavescens***

(Yellow-tinted Imperial Pigeon)

Beehler and Coates list *spilorrhoa* in Pied Imperial Pigeon *D. bicolor*, as do Christidis and Boles. IOC separate as 3 allospecies, with morphologically distinct Yellowish Imperial Pigeon (*D. subflavescens*) of Bismarcks and Manus.

Bismarck Hanging Parrot *Loriculus tener*

(Green-fronted Hanging Parrot)

Sometimes lumped with Papuan Hanging Parrot (*L. aurantiifrons*) but plumage quite distinct and seems as distinct as any other of the *Loriculus* species.

**** Coconut (Rainbow) Lorikeet** *Trichoglossus haematodus*

Complex taxonomy, the Rainbow Lorikeet group of Beehler and Coates recently split up into component allospecies, occurs throughout mainland and offshore islands, except some small and isolated islands, but avoids high montane areas. Birds that can be grouped within Coconut Lorikeet are as follows:

T. h. haematodus West Papuan Islands east through Vogelkop to Geelvink Bay, and east to around 141°E.

T. h. intermedius (= *haematodus*) from Sepik Basin to Astrolabe Bay and south to Purari R. and Karimui, also on Manam, meant to have less blue on head.

T. h. nigrogularis Aru Is. from *haematodus* by blackish belly patch, narrower barring on more orange breast, lighter blue head streaking.

T. h. micropteryx E. mainland west to Huon Peninsula and Lake Kutubu, and to around Hall Sound in south, also on Misima. Smaller and paler than *haematodus* with more orange breast and narrower barring.

T. h. caeruleiceps S. mainland from lower Fly R. to around Hall Sound, breast with narrow barring and head entirely streaked blue.

T. h. nesophilus, endemic to Ninigo Is and possibly Hermit Is, has some red on nape.

T. h. flavicans, endemic to Admiralties and Lavongai, and possibly this subspecies on St Matthias group, Nuguria and Hermit Is, has green or bronze-yellow upperparts, some red on vent, thighs, nape and hind-crown and grey-green streaks on head.

T. h. massena, endemic to the rest of the Bismarcks, including Karkar, also to Solomons and Vanuatu. Differs in having a smaller red breast patch.

**** Rainbow Lorikeet** *Trichoglossus moluccanus*

Uncertain in NG following taxonomic revision, but birds resembling nominate of eastern Australia have been seen at Bensbach in Trans-Fly, and occasional occurrence within range of Coconut Lorikeet *caeruleiceps* taxon not surprising.

**** Biak Lorikeet** *Trichoglossus rosenbergii*

(Shawl-collared Lorikeet)

An island allospecies split off from the Rainbow Lorikeet complex.

Painted Tiger Parrot *Psittacella picta*

Three races, of which western *lorentzii* may be an incipient species, seems as distinct from others as Modest and Madarasz's Tiger Parrot are from each other.

Nominate *P. p. picta* SE PNG in Wharton and Owen Stanley Ra. *P. p. excelsa* Central mountain ranges inc. Star, Hindenburg, Victor Emanuel and east through highland provinces. Crown more olive-brown than nominate *P. p. lorentzi* Snow Mts. A distinctive taxon that may be an incipient species, not well known. Crown olive-brown, male has yellow mark bordered black in front on sides of neck, both sexes with bluey-green cheeks and ear coverts, and rump barred black and yellow, not red.

Double-eyed Fig-Parrot *Cyclopsitta diophthalma*

The complex of races in New Guinea and indeed Australia would be worth analyzing for genetic distances as some seem very distinct and some are essentially allopatric.

**** Oriental Cuckoo** *Cuculus optatus*

**** Himalayan Cuckoo** *C. saturatus (horsfieldi)*

The form *optatus* is now usually split on the basis of song, but there seem to be no morphological differences that would be of use in the field. Both have occurred in Australia, with Oriental seemingly the more usual. New Guinea birds are likely to comprise both species, but specimens of *saturatus* would be useful to confirm its presence.

Malay Bronze-Cuckoo *Chrysococcyx minutillus*

This complex includes both Gould's (*russatus*) and Little Bronze-Cuckoos, which are have often been split in Australia but are now lumped by C & B and the major checklists. The calls and songs are identical and the situation in New Guinea makes identifying the two highly problematic, so best lumped pending further study.

**** Eastern (Australian) Koel** *Eudynamys cyanocephala*

A migrant species from Australia, which may be resident in southern New Guinea. Beehler and Coates list this as Common Koel *E. scolopacea*, as do Christidis and Boles. The Dickinson H & M list ducks the issue by lumping everything as Common Koel, including the obviously distinct Black-billed Koel *melanorhynchus* taxon in Sulawesi, which sounds nothing like any of the others.

**** Asian Koel *E. scolopacea***

See above. Listed as Common Koel along with the Australian *cianocephala* by Beehler, Coates and Christidis and Boles. It is now split by Clements and the IOC as Asian Koel, of Asia and northern NG, based on very different female plumages

Fan-tailed Cuckoo *Cacomantis flabelliformis*

(formerly *C. pyrrhophanus*)

Two races, *C. f. excitus* may be a distinct endemic montane isolate resident species, requires DNA work to substantiate. *C. f. flabelliformis* of E and S. Australia, with greyer upperparts and more buffy-rufous underparts, rarely occurs as a non-breeding migrant, known from Aru Is. and scattered lowland localities, also some mid-mountain sightings in PNG Highlands.

Elsewhere, other subspecies (or species) breed in New Caledonia, Vanuatu and Fiji. This complex needs genetic work to unravel relationships, as some calls and plumages are quite distinct amongst the group, it may well comprise several distinct species.

Sooty Owl *Tyto tenebricosa*

(Greater Sooty Owl)

Tyto (t.) arfaki throughout NG range, may be distinct species as very disjunct from Australian birds with some morphological differences, requires further study. The situation parallels that of Logrunners (*Orthonyx temminckii* and *novaeguineae*) which are another complex with isolated Australian and Papuan populations separated by a sibling species.

Manus Masked Owl *Tyto manusi*

This very rare and almost unknown species, perhaps the least-known NG bird, has in the past been lumped with Australian Masked Owl (*T. novaehollandiae*), which has obscured its status and makes no sense given highly disjunct range.

**** Eastern Barn Owl *Tyto javanica***

(Common Barn-Owl (*Tyto alba*); Pacific Barn Owl, Australian Barn Owl *Tyto delicatula*)

Listed as Barn Owl (*T. alba*) in the field guides.

The Barn Owl complex is almost world-wide and has recently begun to be unraveled from years of over-lumping, which has obscured status and identification. König & Weick (2008) recognize 11 of these taxa as specifically distinct including the **Boang Barn Owl** (*T. crassirostris*) from Boang Is in the Tanna group of the Bismarcks, and research continues.

**** Biak Scops Owl *Otus beccarii*.**

Has been lumped with the wide-ranging **Moluccan Scops Owl** (*Otus magicus*), with which it is listed in Beehler and Coates. It has a highly disjunct range from an island with many other allopatric endemic taxa, and is morphologically distinctive. This distinctive isolated island form is best treated as a separate endemic species

Southern Boobook *Ninox boobook*

Sometimes lumped with Morepork (*N. novaeseelandiae*) of New Zealand, which is much darker and vocally completely distinct. The whole complex is currently under taxonomic review.

**** Solomons Boobook *Ninox jacquintii***

The local race is *N. j. eichorni*. TN The *jacquintii* group is now split into two additional species, **East Solomons Boobook** (*N. roseoaxillaris*) and **Guadalcanal Boobook** (*N. grantii*) (Dutson in press, König & Weick 2008)

**** Solomons Frogmouth *Rigidipenna inexpectata***

Previously considered a subspecies of **Marbled Frogmouth** *Podargus ocellatus inexpectatus*, as in all the field guides, but morphologically and vocally quite distinct (Cleere et al 2007).

White-throated Nightjar *Eurostopodus mystacalis*

The White-throated Nightjar complex is now split into 3 species with highly distinctive **New Caledonian exsul** and **Solomons nigripennis** elevated to species rank (Cleere 2010).

**** Solomons Nightjar** *Eurostopodus nigripennis*

Formerly lumped with White-throated Nightjar (*E. mystacalis*) but clearly highly distinct in plumage, vocals and habitat. Monotypic.

**** Grey (Jungle) Nightjar** *Caprimulgus (i.) jotaka*

Split from what was **Jungle Nightjar** (*C. indicus*) by Cleere (2010) and the IOC. Vagrant in far west.

**** Starry Owlet-nightjar** *Euaegotheles tatei* (Spangled Owlet Nightjar)

Formerly lumped with **Feline Owlet-nightjar** (*E. insignis*) but morphologically and vocally distinct, with lowland not montane habitat, see Pratt (1990).

Archbold's Owlet-nightjar *Aegotheles archboldi*

Probably best subsumed within **Mountain Owlet-nightjar** (*A. albertisi*) as that species is polymorphic and highly variable, and the odd checkerboard distribution encompassed within the range of that species does not make zoogeographic sense. Mountain Owlet-nightjar may lack a well-defined whitish hindneck collar and can be less boldly spotted above, but there is much variation and it does not seem safely separable. Vocally unknown.

**** Vogelkop Owlet-nightjar** *Aegotheles affinis*

Also known as Salvadori's Owlet-nightjar, a poor name as *salvadorii* actually refers to a taxon of Mountain Owlet Nightjar; Formerly lumped with **Barred Owlet-nightjar** as race *affinis*, but seems morphologically fairly distinct and occupies different habitat. The race *terborghi* is placed with this species by Cleere (2010), but given lack of knowledge and just one specimen, seems best left with Barred Owlet-nightjar (*A. bennettii*)

**** Bare-legged Swiftlet** *Aerodramus nuditarus*

Formerly lumped with rare extralimital Whitehead's Swiftlet (*A. whiteheadi*) of Philippines, and still virtually unknown.

**** Mayr's Swiftlet** *Aerodramus orientalis*

(*Collocalia orientalis*)

An almost unknown species, endemic to New Ireland, Bougainville (and Guadalcanal) but may also occur on other islands.

A. o. leletensis, endemic to Lelet plateau on New Ireland, has very dark upperparts glossed blue and an indistinct grey rump band.

An undescribed taxon on Bougainville has browner upperparts with an only obscurely paler rump band, and darker underparts.

Variable Dwarf Kingfisher *Ceyx lepidus*

(Variable Kingfisher, Dwarf Kingfisher)

May be several species in the complex, requires modern-day assessment, 5 races in NG with dark-billed *solitarius* on mainland, red or red and black billed birds in Bismarcks /Admiralties and Bougainville.

Moustached Kingfisher *Actenoides bougainvillei*

Two distinct races, nominate on Bougainville, *A. b. excelsus* on Guadalcanal which has green backed female, the male being unknown. This may be a separate species but remains very poorly known. Some recent reports from lower montane forest on Bougainville, but cryptic, probably mainly crepuscular and at very least uncommon, perhaps rare.

Kofiau Paradise Kingfisher *Tanysiptera elliotii*

Sometimes treated as conspecific with Common Paradise Kingfisher, but treatment as island allospecies seems appropriate.

Biak Paradise-Kingfisher *Tanysiptera riedelii*

Sometimes treated as conspecific with Common Paradise Kingfisher, but treatment as island allospecies seems appropriate on the grounds of distinct plumage.

**** Black-headed Paradise Kingfisher *Tanysiptera nigriceps***

Sometimes lumped with Buff-breasted Paradise Kingfisher, but allopatric range with many other regional endemics, distinctive plumage and call indicate better treated as specifically distinct.

Blue-black Kingfisher *Todiramphus nigrocyaneus*

(Black-sided Kingfisher)

3 morphologically distinct races may conceivably represent 2 or even 3 allospecies, more study required.

Nominate race occurs from Batanta and Salawati to Geelvink Bay in N and Princess Marianne Strait in S. Distinctive northern race *T. n. quadricolor* occurs from Yapen Is east to Madang and Astrolabe Bay; male has narrow transverse white band on lower breast, belly chestnut, back purplish-blue. Female similar to male but with white belly. Distinctive southern race *T. n. stictolaema* occurs from Fly R. to Central Province, seems rare and seldom recorded. Male upperparts as *quadricolor*, but throat blue with some white, breast blue, belly blue and may have white centre, sides of neck, flanks and lower belly black, female similar but with throat and belly white and broad blue breast band.

Collared Kingfisher *Todiramphus chloris*

(Mangrove Kingfisher)

Considerable number of races on the islands, some of which may well merit specific rank with quite different habitats, plumage and voice. Possible sympatry of taxa on New Ireland needs investigation, the whole complex of 49 taxa badly in need of analysis with modern genetic techniques.

Spotted Catbird *Ailuroedus melanotis*

New Guinea birds are quite distinct morphologically from Australian birds, most taxa are montane, and all are much shyer, it would be good to have some genetic work to see if these populations represent distinct species.

Archbold's Bowerbird *Archboldia papuensis*

The two races are sometimes split as the **Archbold's Bowerbird** in West Papua and Sanford's Bowerbird in PNG, but supposed differences in male plumage do not seem to stand up and the most recent works lump them (Frith & Frith 2004), HBW and the IOC.

Macgregor's Bowerbird *Amblyornis macgregoriae*

The taxon *germanus* from the Huon builds a quite distinct bower and coming from a long-isolated area of high endemism this may well indicate divergence at species level, the **Huon Bowerbird** as suggested by Coates & Peckover. Likewise birds from Mt. Bosavi are reported to show distinct bowers. There is a major puzzle that needs genetic work to resolve here.

Vogelkop Bowerbird *Amblyornis inornata*

Birds from the Bomberai Peninsula apparently build distinct bowers and this might represent yet another cryptic species.

**** Black-faced (Masked) Bowerbird *Sericulus aureus***

**** Flame Bowerbird *S. ardens***

The black faced montane "**Flame Bowerbird**" of NW NG was long lumped with the allopatric southern lowland forest species *S. ardens*, on the basis of a supposed intergrade, even though the two taxa do not come into contact. Plumage and habitat are quite different and it is clearly distinct, now generally split as the **Black-faced** or **Masked Bowerbird**.

**** Broad-billed Fairywren *Malurus grayi***

**** Campbell's Fairywren *Malurus campbelli***

These rather rare and poorly known species were originally separated by Schodde (1982) on the basis of allopatric distributions like many NG species pairs, and distinct plumage differences. LeCroy and Diamond (1995) lumped them on the grounds of inconsistent variation, but recent opinion has swung the other way and treatment as allospecies seems justified, and the IOC now split them. The identity of birds at Kiunga needs to be resolved, they are presumably **Campbell's Fairywren**.

Graceful Honeyeater *Meliphaga gracilirostris*

**** Elegant Honeyeater *M. cinereifrons***

The distinctive SE PNG *cinereifrons* taxon of what was Graceful Honeyeater is now split as **Elegant Honeyeater** on the basis of genetic distinction from that species, and somewhat different morphology (Norman et al 2007). The whole *Meliphaga* group remains in need of further work to resolve the status of other taxa such as *stevensi* of the NW. Field characters of some are problematic and vocalizations little known and confusing. This is one of the hardest of all genera to identify to species level in some cases.

Puff-backed Honeyeater *Meliphaga aruensis*

Birds from SE PNG are reportedly genetically distinct and this may well represent yet another cryptic species in the complex, it awaits further research (Norman et al 2007).

**** New Guinea Friarbird** *Philemon novaeguineae*

Beehler, Coates and C & B all lump this form in the complex array of taxa known as **Helmeted Friarbird** *P. buceroides*. Gregory regards it as quite distinct based on calls and morphology, whilst the IOC split it (and also separate out *yorki* in Far North Queensland as **Hornbill Friarbird**). The whole group badly needs genetic research to establish species limits, there are likely to be several species involved.

Ashy Myzomela *Myzomela cineracea*

Split from Red-throated Myzomela (*M. eques*) of mainland New Guinea, it seems inconsistent to treat this distinctive form as a species, yet lump the Bismarck forms of Red Myzomela.

Red Myzomela *Myzomela cruentata*

Birds from New Ireland and nearby islands seem quite distinct as the *erythrina* group and are separated from the nominate group of the mainland and New Britain in another area of high endemism. This would repay investigation as specific status seems probable, with the name **Reddish Myzomela** suggested.

Papuan Black Myzomela *Myzomela nigrita*

Some island races show a red cap and genetic work is desirable to establish the levels of divergence here, it is possible some cryptic species could be involved.

Dusky Myzomela *Myzomela obscura rubrobrunnea*

This Biak taxon was originally described by Mayr as an endemic species, potentially another Biak endemic, but Higgins et al (2008) show Dusky Honeyeater comprising two groups, a Wallacean *simplex* group and the nominate group of NG and Australia. Requires further work to establish species limits.

*** Wattled Smoky Honeyeater** *Melipotes carolae*

A new species discovered by Beehler et al (2007) on his recent expeditions to the Foya Mts. and previously overlooked as Smoky Honeyeater.

Belford's Melidectes *Melidectes belfordi brassi*

This form of SE PNG may be sympatric with nominate birds, the smaller form at lower altitudes. According to Mayr & Rand (1937) the two forms do not intergrade but abruptly replace each other, which may have species level implications, it requires both field studies and genetic work. However Clements, no doubt in error, seems to subsume all SE populations into the nominate and restricts *brassi* to NW NG mountains.

Mountain Mouse Warbler *Crateroscelis robusta*

Beehler & Prawiradilaga (2010) suggest future consideration for elevation to species status of the 'buff-breasted group' (*sanfordi*, *bastille*), and possibly also the 'pale-washed group' (*deficiens*, *peninsularis*), with white-throated birds (inc. *diamondi*) forming the rest.

Perplexing Scrubwren *Sericornis virgatus*

This aptly named cryptic group is often placed within Tropical Scrubwren (*S. beccarii*). Forms part of an overlapping complex of species involving Large Scrubwren (*S. nouhuysi*), Large-billed (*S. magnirostris*) and Tropical Scrubwren, with a number of as yet unnamed forms from Mt. Bosavi/L. Kutubu and Kumawa and Fakfak Mts, which may equally belong with *S. beccarii* complex. There may be both montane and lowland

cryptic species involved. Genetic and vocal studies are desirable to help unravel the relationships in this complex of often poorly known taxa (Gregory 2008).

Tropical (Beccari's) Scrubwren *Sericornis beccarii*

Taxonomy unsettled and has been considered a part of the Large-billed Scrubwren (*S. magnirostris*) complex despite very different vocalizations and behaviour, and distinct plumage of most taxa. Forms part of a complex of species involving Large Scrubwren (*S. nouhuysi*), Large-billed and Perplexing Scrubwren (*S. virgatus*). There may be both montane and lowland cryptic species involved. Genetic and vocal studies are desirable to help unravel the relationships in this complex of poorly known taxa (Gregory 2008).

**** Biak Gerygone** *Gerygone (m) xanthocollis*

Split by BirdLife then lumped back into Large-billed Gerygone (*G. magnirostris*), despite no other taxa of that species showing yellow below, and with vocal data uncertain. Gerygones with yellow underparts have recently caused confusion on Biak, prompting thoughts of Fairy Gerygone apparently! Gregory thought it quite distinct and decidedly sparse, Clements and the IOC still split it.

Goldenface (Dwarf Whistler) *Pachycare flavogriseum*

Now shown to be not a Pachycephalid at all but a part of the Acanthizids, albeit an aberrant one.

**** Papuan Logrunner** *Orthonyx novaeguineae*

The New Guinea form has a highly disjunct "leapfrog" range from Australian birds, as do some *Tyto* and *Zoothera*. It is also notably smaller and has very distinctive songs and calls, quite unlike those of the Australian *temminckii*. It is now split (Schodde 2002) as a new species, **Papuan Logrunner** *O. novaeguineae*. It is possible the western nominate birds represent another species.

Loria's Satinbird (Cnemophilus) *Cnemophilus loriae*

Crested Satinbird *Cnemophilus macgregorii*

Yellow-breasted Satinbird *Loboparadisaea sericea*

Dickinson in H & M (2003) followed Cracraft and separated this lineage from the Birds of Paradise and put into a new and separate family, the Satinbirds, resolving many contradictions with the former grouping. Sadly a conservative treatment in HBW 14 maintained the old grouping, but the new placement is becoming widely accepted. These become another endemic New Guinea family.

Dwarf Longbill *Oedistoma iliolophus*

Pygmy Longbill *O. pygmaeum*

Yellow-bellied Longbill *Toxorhamphus novaeguineae*

Slaty-chinned Longbill *T. poliopterus*

Formerly treated as honeyeaters, but now placed by Dickinson in H & M (2003) with the berrypeckers in the new endemic NG family *Melanocharitidae*. There are rumours of a new and genetically very distinct form of berrypecker from the eastern highlands!

Tit-Berrypecker *Oreocharis arfaki*

Crested Berrypecker *Paramythia montium*

These two species are split in Clements and the IOC into an endemic NG family, the *Paramythiidae*.

Dickinson in H & M subsumes them back into *Melanocharitidae* berrypeckers and longbills, making that a strangely diverse group.

Jewel-babblers *Ptilorrhoa* spp.

Clements put them with Quail-thrushes in the family *Cinclosomatidae*, but H & M separated them out as a distinct family the *Eupetidae*, whilst later treatments recognize *Psophodidae*, the whipbirds, quail-thrushes and jewel-babblers, with *Eupetidae* consisting of the Malaysian Rail-babbler (*E. macrocercus*). Clements (2010) places Blue-capped Ifrita with this otherwise monotypic family but this has not been widely accepted and the IOC maintain *Eupetidae* as monotypic.

Blue Jewel-babbler *Ptilorrhoa caerulescens*

**** Brown-capped Jewel-babbler** *P. geislerorum*

The NE New Guinea taxon of Blue Jewel-babbler is split by Coates as Brown-capped Jewel-babbler *P. geislerorum*. This is likely to be correct and is now widely accepted.

Barred (Yellow-eyed) Cuckooshrike *Coracina lineatus axillaris*

The *axillaris* form from mainland NG has rather distinct plumage and also vocalizations from the nominate of N. Queensland, and may well be a distinct species, with the Bismarck and Solomon birds also worthy of further work to establish their affinities.

**** North Melanesian Cuckooshrike** *Coracina welchmani*

Birds from Bougainville and the Solomons are split in HBW from **South Melanesian Cuckooshrike** (*C. caledonica*) of New Caledonia and Vanuatu, on the basis of calls, morphology and eye colour.

**** Manus Cuckooshrike** *Coracina ingens*

Schodde and Mason (1999) split this from White-bellied Cuckooshrike (*C. papuensis*) as **Manus Cuckooshrike**, endemic to Manus. It is certainly larger, greyer beneath and may have different calls, but remains poorly known. IOC and Gregory accept it pending further study of the complex.

Black-shouldered Cuckooshrike (Black-shouldered Cicadabird) *Coracina incerta*

Beehler lists this as part of Sulawesi Cicadabird *C. morio*, using the name Black-shouldered Cuckoo-shrike. Coates splits it off as *C. incerta*, Sharpe's Cicadabird, noting that it is usually treated with *C. morio*.

Common Cicadabird *Coracina tenuirostris*

Cicadabird taxonomy is complex and badly in need of unravelling, there is a New Guinea resident form of *C. tenuirostris* that calls like southern Australian birds, with the intervening Far North Queensland birds currently called *melvillensis* having entirely different songs, maybe paralleling the "leapfrog" situation with Logrunners and Sooty Owls where northern and southern forms are separated by a distinct group, specifically distinct as in Chowchilla and arguably so with Lesser Sooty Owl.

In addition, a smaller form *aruensis* from Trans-Fly, SW and Aru Is has distinct calls and is suggested as the specifically distinct **Lesser Cicadabird** (*C. aruensis*) by Coates.

**** Grey-capped Cicadabird** *Coracina remota*

Bismarck birds of the taxa *remota*, *ultima*, *saturation* and *erythropgygia* are split from Common Cicadabird by HBW and IOC on the basis of distinct female plumage (and the calls are also distinct from Common Cicadabird)

White-winged Triller *Lalage (sueurii) tricolor*

Split from the morphologically and vocally distinct Indonesian and Timor White-shouldered Triller (*L. sueurii*) by the IOC, but lumped by Schodde & Mason and C & B.

**** Mussau Triller** *Lalage conjunctiva*

Formerly lumped with Varied Triller (*L. leucomela*) in the field guides, Coates (1991) listed it as distinct and subsequent fieldwork by Gregory (1997) came out in support of this, as the species is more like Black-browed Triller (*L. atrovirens*) than Varied, with a quite distinct song. The species is endemic to Mussau and remains very little known.

**** Papuan Sittella** *Daphoenositta papuensis*

Schodde & Mason (1999) split this from the Varied Sittella *D. chrysoptera* of Australia, based on distinct montane habitat and morphology. The calls also differ considerably. IOC agrees.

Golden Whistler *Pachycephala pectoralis*

**** Bismarck Whistler** *P. citreogaster*

**** Oriole (Yellow-throated) Whistler** *P. orioloides*

The long overdue unpicking of the greatly overlumped Golden Whistler complex was begun by the IOC, following Galbraith (1956). The race *balim* of Australian Golden Whistler is the mainland form, with the *citreogaster* group on the Bismarcks and Admiralties and the *orioloides* group on Bougainville.

**** Bougainville (Hooded) Whistler** *Pachycephala (implicata) richardsi*

The little-known taxon *richardsi* on Bougainville is morphologically very distinct from the *implicata* taxon on Guadalcanal and is likely to be a distinct species, **Bougainville Whistler**.

Rufous Whistler *Pachycephala rufiventris*

**** White-bellied Whistler** *P. leucogastra*

The distinct PNG taxon of what was "**Rufous Whistler**" in Beehler is now split by all the major checklists as White-bellied Whistler *P. leucogastra*. Plumage and calls are very distinct and the female is nothing like

Rufous Whistler, the sole grounds for lumping may have been one call that vaguely resembles a contact note of that species! Black-headed Whistler (*P. monacha*) actually seems to be more similar and hybrids are reported from Sogeri in Coates (1990). affinities with Drab Whistler (*P. griseonota*) of the Lesser Sundas are also reported in Coates.

Grey Whistler *Pachycephala simplex*

The form found in NG and NE Australia is sometimes split as Grey-headed Whistler *P. griseiceps*. The residual *P. simplex* of northern Australia is then called Brown Whistler.

Sooty Shrike-thrush *Colluricincla umbrina* (Sooty Whistler)

Formerly known as the Sooty Whistler *Pachycephala tenebrosa*, but now placed instead with the shrike-thrushes.

Long-tailed Shrike *Lanius schach stresemanni*

This montane isolate may be an endemic allospecies and needs further research to establish its relationships.

Australasian Figbird *Sphecotheres vieilloti*

Beehler lumps this in the Timor or Green Figbird (*S. viridis*), as do Coates and Clements, but most checklists now list it as a part of Australasian Figbird (*S. vieilloti*).

Variable Pitohui *Pitohui kirhocephalus*

The pitohuis have been recently analysed by Dumbacher et al (2007) and a major rearrangement has resulted. The only remaining members of the genus *Pitohui* are now the **Hooded** (*P. dichrous*) and **Variable**, the latter comprising 3 separate lineages which seem likely to result in 3 distinct species groupings, from the West Papuan Islands, the NW and the rest of the mainland. An analysis by Jonsson et al (2010) also makes a radical change and now shifts them to within Oriolidae.

The other former pitohui species remain within the Pachycephalidae family but change place in the sequence: **Black Pitohui** is now *Melanorectes nigrescens*, with **Crested Pitohui** *Oronectes cristatus*; **Rusty Pitohui** becomes *Colluricincla ferrugineus* and **White-bellied Pitohui** *Colluricincla incertus*, both transferred to the shrike-thrush clade within the broad family. Finally, **Rufous-naped Whistler** is moved out of the whistler clade and becomes *Aleadryas rufinucha* at the end of the family sequence.

**** Papuan Spangled Drongo** *Dicrurus (bracteatus) carbonarius*

Beehler and Coates include this in Hair-crested Drongo *D. hottentotus*, using the name Spangled Drongo. More research may well reveal further species as mainland *carbonarius* call differently to Australian migrants, whilst Bismarck birds are different again. Coates (2002) splits New Guinea birds as Papuan Drongo *D. carbonarius*, and Gregory (2011) favours this treatment.

Mangrove Fantail *Rhipidura phasiana*

Split by Beehler, Coates and C & B, with distinct plumage and song; previously sometimes included in Grey Fantail *R. albiscapa* of Australia, with equally distinct *fuliginosa* now split as New Zealand Fantail

**** Arafura Fantail** *Rhipidura dryas*

Rufous Fantail *Rhipidura rufifrons*

Schodde and Mason (1999) split **Arafura Fantail** from **Rufous**, and both taxa occur in NG, the former as a coastal species along the Gulf of Papua as far as Hisiu. Rufous Fantails of the nominate form are scarce winter migrants from Australia to the southern and middle Trans-Fly (Kiunga), whilst isolated island races *louisiadensis* and *commoda* from the D'Entrecasteaux group and Bougainville and Buka respectively, would repay further research to establish their affinities.

**** Ochre-collared (Rufous-collared) Monarch** *Arses insularis*

The northern NG form is usually now split as Ochre-collared Monarch *A. insularis*, as was indicated as likely in Beehler and subsequently accepted by Coates.

**** Frilled Monarch** *Arses telescopthalmus*

The Cape York form of what was Frilled Monarch, which has the sexes the same, is now often split as a separate species under the name *A. lorealis*, the Frill-necked Monarch, though curiously C & B still lump it. Frilled Monarch thus becomes a New Guinea endemic.

Bismarck Pied or Black-tailed Monarch *Monarcha verticalis* **Djaul Pied Monarch** *Monarcha verticalis ateralba*

The Djaul Pied Monarch was once split from Bismarck Pied, but vocally they are very alike and plumage differences are not great, this taxon seems best lumped with the latter species.

Lesser Shining Flycatcher *Myiagra hebetior*

The taxon *eichorni* of New Britain, New Ireland and New Hanover seems distinct in both plumage and calls from nominate *hebetior* on Mussau, an island with high endemism and poorly-known taxa, with *cervinicolor* on Djaul also worthy of some research to see where it is best placed. It is likely that two species are involved.

**** Bismarck Crow** *Corvus (o.) insularis*

This distinctive Bismarck endemic is more distinct in character and appearance than many of the Australian corvids, and with very distinct calls. It is surprising that it was lumped for so long in Torresian Crow (*C. orru*), but Dutson, Gregory & Boles have a paper in press splitting it. Finch (1988) suggested it as being allied to Bougainville Crow (*C. meeki*) but the two are not at all similar

Bougainville Crow *Corvus meeki*

A Bougainville endemic, split from White-billed Crow *C. woodfordi* of the Solomons which is likely to be closely related.

Lesser Melampitta *Melampitta lugubris*

DNA studies suggest a link with Birds of Paradise, but this has not been widely accepted as so many points of difference remain. It is quite likely a separate family and is listed it as being of uncertain affinity in all the major checklists except Clements.

Greater Melampitta *Melampitta gigantea*

As above, but some recent work suggests these two highly divergent melampitta are not closely related at all, having nothing in common bar colour and terrestrial habits! Retained as Incertae Sedis in the IOC Checklist, there are some suggestions this species could belong with whistlers.

Blue-capped Ifrita *Ifrita kowaldi*

A curious species of uncertain family placement, and another poisonous bird too (Dumbacher 2008). Clements places it in *Eupetidae* along with Rail-babbler, a course not followed by others.

Trumpet Manucode *Phonygammus keraudrenii*

This complex is badly in need of genetic work as it comprises a series of taxa with very distinct vocalizations and, curiously, both montane and lowland distributions. It is likely to consist of several cryptic species.

**** Growling (Eastern) Riflebird** *Ptiloris (m.) intercedens*

Beehler includes this in Magnificent Riflebird *P. magnificus*, as do Coates and Frith and Beehler (1998) on the Paradisaidae. Vocally they are very distinct, and the situation parallels the morphologically very similar wedgebills (*Psophodes* spp.) in Australia. More research in the areas where the taxa abut is much needed. The Cape York form *alberti* is also quite distinct and needs genetic work to place its affinities, curiously enough the call is more like western Magnificent Riflebird than the geographically far closer Growling Riflebird.

**** Ashy Robin** *Poecilodryas albispecularis*

Clements splits this from the Grey-headed Robin *H. cinereifrons* of far north Queensland, but C & B and H & M lump it, overlooking the quite distinct song and habitat.

Torrent Robin (Flycatcher) *Monachella muelleriana*

Birds of the rare and little-known taxon *coultasi* from New Britain seem rather different and would repay genetic work to establish whether this may be an island allospecies.

*** Bismarck Flyrobin (Flycatcher)** *Microeca* sp. nov.

Gregory and Hornbuckle (2002) give details of a number of sightings of an as yet undescribed species of what appears to be a *Microeca* Flycatcher from the Bismarcks. Photos have now been obtained and trapping birds is desirable to establish the full scientific details and enable it to be named.

**** Pacific Robin *Petroica multicolor***

This was split by Schodde and Mason (1999) from the Australian endemic Scarlet Robin *P. boodang*. It is a Pacific island allospecies, now widely accepted and in our area known from the mountains of Bougainville.

**** Island Leaf Warbler *Phylloscopus poliocephala***

Beehler includes this in Mountain Leaf Warbler *P. trivirgatus*, using the name Island Leaf Warbler.

**** Australasian Reed Warbler *Acrocephalus australis***

Beehler includes this with Clamorous Reed Warbler *A. stentoreus*, C & B separate it. The form *sumbae* may itself be specifically distinct, see Kennerley & Pearson (2010).

**** Papuan Grassbird *Megalurus papuensis***

Dickinson in H & M (2003) follows Schodde & Mason (1999) and splits this highland form from the Tawny Grassbird *M. timoriensis* of Australia and the NG lowlands, on the basis of distinct habitat and morphology. It also has entirely different calls and lacks the high pitched reeling song of the lowland species.

**** Bougainville Thicketbird *Megalurulus llanae***

**** New Britain Thicketbird *Megalurulus grosvenori***

These montane taxa are sometimes lumped in Melanesian Thicketbird (*M. whitneyi*) of the Solomons and Vanuatu, but seem better treated as island allospecies, both are still almost unknown in life.

*** Bougainville Bush Warbler (Odedi) *Cettia haddeni***

The legendary Odedi was known vocally for many years but remained unseen until collected by John Toroura and given to local birder Don Hadden, who sent it to Mary LeCroy for formal designation as a new species (LeCroy & Barker 2006). Don and Lane Hadden have what is for modern times a unique double, each with a Bougainville endemic named after them.

**** Black-fronted White-eye *Zosterops minor***

Beehler and Coates lump *chrysolaeus* and *minor* in what was then Black-fronted White-eye *Z. atrifrons* of Sulawesi, using that name for the enlarged species group. Calls and songs are quite distinct and it is clearly not the same species as what is now Black-crowned White-eye (*Z. atrifrons*) in Sulawesi. Additionally the race *Z. m. delicatulus* of SE PNG, Goodenough and Fergusson might be a distinct species, this requires further research as some of the races in this complex have distinct vocalizations.

Capped (Western Mountain) White-eye *Zosterops fuscicapilla*

The isolated montane form *crookshanki* on Goodenough Is would be well worth a look to see whether it could be a distinct species.

Pied Bushchat *Saxicola caprata aethiops*

This is a rather isolated form (Urquhart 2002) and would repay investigation as to its nearest relatives, it is possible an insular species might be involved.

Scaly Thrush *Zoothera dauma*

Russet-tailed Thrush *Z. heinei*

Mussau Thrush *Z. (h.) eichorni*

The former Scaly or White's Thrush of the field guides comprises another greatly overlumped species group. The remarkably little-known mainland NG birds seem to belong with Russet-tailed Thrush *Z. heinei*, another instance of a "leapfrog" distribution with NG birds separated from Australian conspecifics by a distinct species in Queensland (cf *Orthonyx*, *Tyto*). The mainland NG birds may conceivably represent another species, *Z. papuensis*. The almost unknown taxon *eichorni* on Mussau is very distinctive, being small, quite pale buffy and short-tailed, with far fewer black scalings on upperparts and underparts and thus is likely to be another Mussau endemic, **Mussau Thrush**.

**** Bougainville Thrush *Zoothera atrigena***

**** New Britain (Black-backed) Thrush *Z. talaseae***

These two virtually unknown taxa are morphologically very distinct and it makes sense to treat them as distinct species (Dutson in press). Voice remains as yet unknown.

Yellow-faced Myna *Mino dumontii*

**** Melanesian (Long-tailed or Island) Myna** *M. krefftii*

The Bismarck-Solomons form is now split from mainland Yellow-faced Myna as **Melanesian Myna** *M. krefftii*, as initially suggested by Coates.

**** Papuan Flowerpecker** *Dicaeum pectorale*

Beehler and Coates list these in Olive-crowned Flowerpecker *D. pectorale*, using the name Papuan Flowerpecker for the enlarged species, which is now usually split into 3- the western endemic **Olive-crowned** *D. pectorale*, the eastern and central NG **Red-capped** (*D. geelvinkianum*) and **Louisiade Flowerpecker** (*D. nitidus*).

Olive-backed (Yellow-bellied) Sunbird *Cinnyris jugularis idenburgi*

This isolated black-bellied form from the Idenburg R. of West Papua needs analysis as it seems somewhat different to other taxa included in this group, and might well be a distinct species.

*** Eurasian Tree Sparrow** *Passer montanus*

Now recorded from Kimbe (2007) and Port Moresby (Gregory 2009). Clearly colonizing via container ships and filling a largely vacant niche

**** New Hanover Mannikin** *Lonchura (hunsteini) nigerrima*

Clements split this from Hunstein's Mannikin (*L. hunsteini*) of New Ireland, which is clearly very similar but has a paler and more mottled head pattern. Requires genetic work to see if this has actually reached specific threshold.

White-spotted Mannikin *Lonchura leucosticta*

Coates and H & M lump this with Streak-headed Mannikin *L. tristissima*. They are similar but maintain their identity with only a small overlap zone, so there seems little point in lumping them pending a modern review of the genetics of this closely-related and rapidly speciating group.

**** Eastern Yellow Wagtail** *Motacilla tschutschensis*

Split from Western Yellow Wagtail in Alstrom & Mild (2004), with the nominate race (= *simillima*), *macronyx* and *taivana* as part of it. The latter race was split by C & B as Green-headed Wagtail, but this does not seem logical pending a full review of all the component taxa

**** Australasian Pipit** *Anthus australis*

Beehler and Coates list this as Richard's Pipit *A. novaehollandiae*, but it is long since split off from that superspecies group and now separated as *A. australis*. New Zealand Pipit *A. novaeseelandiae* is a New Zealand endemic in Dickinson's (2003) H & M checklist, but the rather conservative New Zealand Checklist (2010) strangely lumps it. Genetic work is needed on the poorly-known highland New Guinea taxon *exiguus* which may well be yet another species.

References

- Alstrom, P. & Mild, K. (2003). *Pipits & Wagtails of Europe, Asia and North America*. Helm. London.
- Beehler, B. M. Prawiradilaga, D. M. de Fretes, Y. and Kemp N. (2007) A new species of smoky honeyeater (*Meliphagidae: Melipotés*) from western New Guinea. *Auk* **124** (3):1000-1009.
- Beehler, B., Pratt, K. K. and Zimmerman, D (1986). *Birds of New Guinea*. Princeton University Press, Princeton.
- Beehler, B. M. & Prawiradilaga, D. M. (2011) New taxa and new records of birds from the north coastal ranges of New Guinea. *BBOC* **130** (4):277-285.
- Beehler, B. M. & Swaby, R. J. (1991). Phylogeny and biogeography of the *Ptiloris* riflebirds (Aves, Paradisaeidae. *Condor*, **93**: 738-745.
- Checklist Committee OSNZ: *Checklist of the Birds of New Zealand* 4th Edition (2010) OSNZ/ Te Papa Press, Wellington.
- Cheshire, N. (2010) *Procellariiformes* observed around Papua New Guinea including the Bismarck Archipelago from 1985 to 2007. *South Australian Ornithologist*, **36** (parts 1 & 2): 9-24.
- Cleere, N. (2010). *Nightjars, Potoos, Frogmouths, Oilbird and Owlet-nightjars of the World*. Princeton.
- Cleere, N., Kratter, A.W., Steadman D.W., Braun M.J., Huddleston C.J., Filardi C.E., & Dutson G. (2007). A new genus of frogmouth (Podargidae) from the Solomon Islands – results from a taxonomic review of

- Podargus ocellatus inexpectatus* Hartert 1901. *Ibis* **149**, 271-286.
- Clements, J. F. (2006). *Birds of the World: A Checklist*. 6th Edition. Pica Press / Ibis Publishing.
- Coates, B.J. (1985). The Birds of Papua New Guinea Vol. 1. Non-Passerines. Dove Pub. Alderley, Qld.
- Coates, B.J. (1990). The Birds of Papua New Guinea Vol. 2. Passerines. Dove Pub. Alderley, Qld.
- Coates, B. J. & Peckover, W. S. (2001). *A Photographic Guide to the Birds of New Guinea and the Bismarck Archipelago*. Dove Publications, Alderley.
- Coates, B.J., Dutson, G.C.L., Filardi, C.E. & Gregory, P. A. (2006) Family Monarchidae (Monarch-Flycatchers) in del Hoyo, J. Elliott, A. & Christie D. eds. (2006). Muscicapidae-Sylviidae *Handbook of the Birds of the World* Vol 11. Lynx Edicions, Barcelona.
- Dekker, R., Fuller R., Baker G. *Megapodes: status survey and conservation action plan 2000-2004*. WPA, BirdLife/SSC /Megapode Specialist Group.
- Dickinson, E. C. (Editor) 2003. *The Howard and Moore Complete Checklist of the Birds of the World*. 3rd Edition. Christopher Helm, London.
- Dumbacher, J. P., Deiner, K., Thompson, L. & Fleischer, R. C.(2008). Phylogeny of the genus *Pitohui* and the evolution of toxicity in birds. *Molecular Phylogeny & Evolution* **49**:774-781.
- Dutson, G., Gregory, P. & Boles, W. (in press) The Bismarck Crow *Corvus (orru) insularis* warrants species status.
- Dutson, G. (2009) Bulwer's Petrel (*Bulweria bulwerii*) new to Papua New Guinea. *Muruk* **9**:3 Pp. 139-140.
- Dutson, G. (2009). Tufted Duck (*Aythya fuligula*) New to Papua New Guinea. *Muruk* **9**:3 p. 141.
- Ferguson-Lees, J. & Christie, D. (2005) *Raptors of the World: A Field Guide*. Helm, London.
- Finch, B.W & McKean, J. (1987) Some Notes of the Birds of the Bismarcks. *Muruk* **2**:1 Pp. 3-28.
- Frith, C. W. & Beehler, B. M. (1998). *The Birds of Paradise*. OUP.
- Galbraith, I. C. J. (1956). Variation, relationships and evolution in the *P. pectoralis* superspecies (Aves, Muscicapidae) *Bull. Br. Mus. Nat. Hist.* **4**:133-222.
- Gibbs, D. (1994). Undescribed taxa and new records from the Fakfak Mountains, Irian Jaya. *Bull.B.O.C.* **114** (1):1-38.
- Gill, F. & Wright, M. (2006) *Birds of the World: Recommended English Names*. Helm, London.
- Gill, F. et al *IOC Checklist of the Birds of the World* 2.9 (2011) www.worldbirdnames.org.
- Gill, F. et al *IOC Checklist of the Birds of the World- subspecies draft v.3.0* (2011) www.worldbirdnames.org.
- Gregory, P. and Hornbuckle, J. (2002). Further Observations of a *Microeca* Flycatcher from the Bismarck Archipelago. *Bull. B.O.C.* **122**: (4) 317-320.
- Gregory, P. A. (2007). Family *Acanthizidae* (Thornbills etc) Pp. 544-611: in Del Hoyo, J., Elliot, A. & Christie, D. A. eds. (2007) *Handbook of the Birds of the World* Vol. 12 *Picathartidae-Paridae*. Rockfowl-Titmouse, Lynx Edicions, Barcelona.
- Gregory, P. A. (2008) Family *Melanocharitidae* (Berrypeckers & Longbills) pp. 322-339: in Del Hoyo, J., Elliot, A. & Christie, D. A. eds. (2008). *Handbook of the Birds of the World* Vol. 13 *Remizidae-Laniidae*, Penduline Tits to Shrikes, Lynx Edicions, Barcelona.
- Gregory, P. (2007). Notes on the Mussau (St Matthias) Triller (*Lalage conjunctiva*). *Muruk* **8** (3), 145.
- Gregory, P. (2009). Eurasian Tree Sparrow (*Passer montanus*) in PNG. *Muruk* **9**:2 Pp.96-97.
- Gregory, P. (2011) *A Checklist of the Birds of New Guinea and its Islands*. v. 3.1.3 Sicklebill Safaris, Kuranda.
- Gregory, P. (draft in press) *A Field Guide to the Birds of New Guinea* (including the Bismarck Archipelago, Admiralty Is and Bougainville) Lynx Edicions, Barcelona.
- Gibbs, D., Barnes, E. & Cox, J. (2001). *Pigeons and Doves*, Pica Press, Sussex.
- Gjershaug, J. O. Lerner, H. & Diserud, O. H. (2009) Taxonomy and Distribution of the Pygmy Eagle *Aquila (Hieraetus) weiskei* Accipitriformes; Accipitridae. *Zootaxa* **2326**, 24-38.
- Hadden, D. (2004). *Birds and Bird Lore of Bougainville and the North Solomons*. Dove Pub. Alderley, Qld.
- Higgins, P. J. et al Family *Meliphagidae* (Honeyeaters) Pp. 498-691: in Del Hoyo, J., Elliot, A. & Christie, D. A. eds. (2008) *Handbook of the Birds of the World* Vol. 13 *Remizidae-Laniidae*, Penduline Tits to Shrikes, Lynx Edicions, Barcelona.
- Hobcroft, D. & Bishop, K. D. (2011). Birds of the Laughlan Islands, Milne Bay Province, *Muruk* Vol 10:1.
- Jonsson, K. A. et al (2010). Phylogeny & biogeography of *Oriolidae* (Aves: Passeriformes). *Ecography* **33**:232-241.
- Kennerley, P. & Bishop, K. D. 2001. Bristle-thighed Curlew *Numenius tahitiensis* on Manus, Admiralty Islands, Papua New Guinea. *The Stilt* **38**, 54-55.
- Kennerley, P. & Pearson, D. (2010) *Reed and Bush Warblers*. Helm, London.
- König, C & Weick F. (2008) 2nd Edition. *Owls of the World*. Christopher Helm, London.

- LeCroy, M. & Barker F.K. (2006). A new species of Bush-Warbler from Bougainville Island and a monophyletic origin for southwest Pacific *Cettia*. *Amer. Mus. Novit*, **3511**, 1-20.
- LeCroy, M. & Diamond, J. (1995). Plumage variation in the Broad-billed Fairywren *Malurus grayi*. *Emu* **95**: 185-193.
- Mayr, E. and Diamond J. (2001). *The Birds of Northern Melanesia: Speciation, Ecology and Biogeography*. OUP, Oxford.
- Mayr, E. (1945). *Birds of the South-west Pacific*. Wheldon & Wesley. New York.
- Mayr, E. & Diamond, J. (2001), *Birds of Northern Melanesia*. Oxford University Press, Oxford.
- Mayr, E. and Rand, A. L. (1937). Results of the Archbold Expeditions:14, Birds of the 1933-34 Papuan Expedition. *Bull. Amer. Mus. Nat. Hist.* **73**:1-248.
- Norman, J. A., Rheindt, F. E., Rowe, D. L. & Christidis, L. (2007). Speciation dynamics in the Australo-Papuan *Meliphaga* honeyeaters. *Molecular Phylogenetics & Evolution* **42**: 80-91.
- Perron, R. M. (2011) The taxonomic status of *Casuaris bennetti papuanus* and *C. b westermanni* *BBOC* **131** (4):54-58.
- Pierce, R. (2009). A Pycroft's Petrel in Papua New Guinea. *Notornis* **9**:223-224
- Pratt, T. K. (2000). Evidence for a previously unrecognised species of owl-nightjar. *Auk* **117** (1):1-11.
- Rasmussen P. & Anderton, J. (2005). *A Guide to the Birds of South Asia*, Vol. 1 & 2. Lynx Edicions, Barcelona.
- Restall, R. (1996). *Munias and Mannikins*. Pica Press, Sussex.
- Rowley, I. et al Family *Maluridae* (Fairywrens) Pp. 490-531: in Del Hoyo et al (2007) *Handbook of the Birds of the World* Vol. 12. *Picathartidae-Paridae*. Lynx Edicions, Barcelona.
- Sangster, G. (1998). Purple Swampphen is a complex of species. *Dutch Birding* **20**: 13-22.
- Schodde, R. and Weatherly, R. (1982). *The Fairy-wrens: A Monograph of the Maluridae*. Lansdowne Editions, Melbourne.
- Schodde, R. and Mason, I. J. (1999) *The Directory of Australian Birds*. CSIRO, Collingwood.
- Simmons, R. E. (2000). *Harriers of the World. Their Behaviour and Ecology*.
- Simpson, D. M. (1990). Paradise Lost? Birdwatching along the Fly River, PNG, (including probable records of Christmas Is Frigatebird). *Sea Swallow* **39**:53-57.
- Tarburton, M. (2009). New birds and other interesting sightings from Melanesia. *Muruk* **9**:(2) 56-91.
- Urquhart. E. (2002) *Stonechats; A Guide to the Genus Saxicola*. Helm, London.