

The Bismarck Archipelago

A Greentours trip report

3rd to 18th December 2019

Led by Phil Benstead

Days 1 & 2 December 3rd & 4th heading east!

We all start our journeys on different days and from different places! Alf and Hannah arriving a day early on the 4th to reduce the jetlag on the first day of the tour proper. Colin and Nigel travel through Singapore from London and experience more than their fair share of delays.

Day 3 December 5th to West New Britain

By dinnertime on Day 3 we are all together. Phil is the last in place arriving from Brisbane just an hour behind Nigel and Colin. We meet up, dine together and look forward to an exciting trip.

Day 4 December 6th Walindi – Christine and Joy Reefs and the Lodge

As the only non-jetlagged member of the team Phil enjoys a walk in the grounds between dawn and breakfast. It is full of wildlife. Common sandpipers trip along the beach and offshore are a groups of whimbrel on exposed sandbanks. The gardens are attracting good numbers of the spectacular New Guinea birdwing (*Ornithoptera priamus*), the huge females feeding at flowers with one or two excited males hovering in attendance. Occasionally a stunning bright blue ulysses (*Papilio ulysses*) darts through the midstory. Searching the tall *Casuarina* trees in the gardens reveals a few nice birds. Eclectus parrot is noisy and obvious. Knob-billed imperial pigeons are impressive. More elusive is a male shining flycatcher. Overhead New Britain friarbirds were noisy as were large flocks of metallic starlings. Birds mobbing a probable but unseen owl included the endemic ashy myzomela. A flowering tree attracted the endemic red-banded flowerpecker. It was time for breakfast.

We are clearly not going to starve here at Walindi! After stoking up we head for the boat jetty and get any snorkelling gear we need to borrow sorted out. Installed in the boat we take the 20-minute run out to Christine Reef under a beautiful blue sky.

Christine Reef had sadly seen better days with much rubble and signs of bleaching but despite the state of the coral the fish diversity was mind-boggling. Sadly damage to tropical coral reefs is commonplace nowadays but there were signs that different coral species were valiantly undertaking a slow colonisation and there is perhaps hope for the future.

Underwater visibility was excellent (the waters of Kimbe Bay are famed for their great clarity) and we started our first snorkelling session with great enthusiasm and set to work recording fish and other

critters. Diagnosing fish from the kaleidoscopic mass laid out in front of us was daunting at the beginning but with effort in the water, a camera and plenty of bookwork in the evenings we became much more proficient during the course of the fortnight.

Swimming from the boat we encountered a family of Eastern clown anemonefishes. There were also a few groups of Clark's anemonefish here too. During the tour we all enjoyed trying to find the many species of this iconic group of damselfish and trying to photograph them in the tentacles of the anemones that they call home. Schools of yellowtail fusiliers hung in the deeper water off the side of the reef and over the reef loads of various demoiselles, some brilliant blue, others dusky, still others shimmering gold. The parrotfish were today in small groups, each seemed to contain a pair of strikingly-marked foxface rabbitfishes. Bleeker's parrotfish was commonest but we also saw yellow-barred and swarthy. Regal angelfishes were a stunning sight and so too the groups of Moorish idols that drifted along.

As always in Kimbe Bay there were lots of butterflyfish, both in numbers and in variety. We got our list started with saddled, latticed, vagabond, Eastern triangular and redfin butterflyfishes. Five species of butterflyfish on our first snorkel session, this was going to be good. Pink and white-bonnet anemonefish were special here too. We clambered out of the water happy and a little tired.

A short trip in the boat took us to Joy reef which pleasingly was in much better condition. Here humphead wrasse hung about off the drop-off. Blue-girdled angelfish stunned us – a mixture of three colours; deep orange, royal and electric blue. We added eightband butterflyfish to the slowly growing list of this favourite family. Eventually we climbed out of the water and headed back to lunch at the lodge and a much needed free afternoon. Most snoozed away the time between lunch and dinner, still very tired after the epic journey to get here.

Day 5 December 7th Walindi – Kimbe Bay & Kulu River

A 0500 breakfast set the tone for the remainder of the trip, we worked hard. This morning we were taking the boat out into Kimbe Bay to check some of the islands that were good for birds and had superb fringing reefs. Sitting on the boat we enjoyed the company of a nearby grey-tailed tattler and then we were on our way. We motored out in the early morning light, looking back we could see the volcano that we were living next to quietly smoking and out to our left a large geysir field that occasionally did excellent giant 'whale blow' impressions. A very volcanic area!

The boat journey was quiet but occasionally we noticed pairs of a dragonfly (*Tramea transmarina*) flying over the sea. Lesser frigatebirds drifted idly by. Arriving at the two islands we started looking for birds from the boat. Restorff Island was first and produced a large number of island imperial pigeons. We worked harder for the beautiful Sclater's myzomela and a female mangrove golden whistler. A brief Nicobar pigeon here made us determined to come back and walk the surface of the tiny island later. Black noddy festooned the island and the next. Schaumann island had a fantastic pair of beach kingfishers and a white-bellied sea-eagle and then it was back to Restorff for a quick land-based attempt to see the Nicobar pigeon. We landed on a tiny beach and then waded around the island to the trailhead. A 60 metre trail took us to the centre of the island and we quickly found a couple of Nicobar pigeons that sat nicely for 'scope views.

Afterwards we had two very good snorkelling sessions, with a cracking lunch in between. As we lunched a beach clean-up team from the mainland arrived and flushed three enormous beach thick-knees

that kept lapping the island giving superb flight views. Back in the water we explored the reef fringing the island. Working the shaded areas under roosting black noddies and out over the drop-off. Plenty to see because the reef here is exceptional – the water visibility was excellent and fish were plentiful. Sandy patches had our first blackstreak surgeonfish. Six-banded wrasse and spot-nape and ornate butterflyfish haunted the coral. Beautiful masked rabbitfish and bruising titan triggerfish scuttled past us along the drop-off. The multicoloured displays of Christmas tree worms were rather special. On our second swim we found the much-wanted Klein's butterflyfish and we started documenting the soldierfish that were hiding away in the darker places on the reef. Eventually though we had to tear ourselves away from the reef and motor back to the Lodge.

After a short turnaround back at base most of us accompanied Joseph and David for a first look at the nearby Kulu River for birds and invertebrates. Conditions were far from perfect, it was very hot and a little overcast. Butterflies were few and far between to Nigel's disgust but he immediately found us our first odonate, the widespread *Agriocnemis femina*. This was swiftly followed by a female of the undescribed taxon of *Tetrathemis* that is known from these parts (it does not look like *irregularis* and is probably a new species to science). The heavily pigmented wings of *Neurothemis stigmatizans* were everywhere. The wonderfully pale local subspecies of varied goshawk put on a show. The tiny *Nannophya pygmaea*, one of the smallest dragonflies in the world became commonplace in the trackside vegetation.

Joseph was working hard on the birds whilst we potted along and found us our first long-tailed mynas. The two *Orthetrum* species known from New Britain (*serapia* and *villosovittatum*) appeared. At the end of the track on the river we found our only estuarine crocodile of the trip. Turning we headed back to the lodge stopping to look for crakes and rails and finding a skulking black bittern along the edge of one of the drains in the oil palm.

Back at the lodge we prepped for dinner and then struggled with fatigue through our nightly fish identification workshop (voted in place of the nightly checklist sessions on this fish-heavy tour).

Day 6 December 8th Garu WMA & Hanging Gardens Reef and Susan's Ridge

Another early 0500 start saw some of us heading out again with Joseph and David to the nearby Garu reserve for birds and invertebrates. The journey to Garu took us almost an hour, almost all of it, rather depressingly, through a one hundred thousand hectare oil palm plantation! To put it into perspective though there is still more land that is completely natural in New Britain than there is under cultivation.

Finally we reached the edge of the secondary forest and were immediately greeted by a superb set of purple-bellied lorries. Overhead shot our first buff-faced pygmy parrots. We worked hard over the next two hours whilst the heat built (we were enjoying a dry lead in to the wet season this year). A pair of inquisitive northern fantails came to see us briefly. The endemic black-capped paradise-kingfisher called nearby but failed to show well. A skulking and endemic violaceous coucal was most welcome as it crept through a hanging vine. Birdwings and ulysses kept us company. Blyth's Hornbills flew back and forth and two sat in a tree for us.

With the heat building and birds going off the boil we switched to invertebrates, finding the fantastic *Hypolimnas alimena* before David found us a superb white-mantled kingfisher (so much for birds going off the boil). Joseph took us in to the forest to a fascinating area along a hot stream. The banksides were

pock-marked with deep nestholes of the endemic Melanesian scrubfowl, a species that harnesses the heat of volcanic areas to incubate its eggs. We spent some time searching but the animals had obviously been spooked by an earlier visitor (perhaps a human preying on the eggs). Incredibly Joseph eventually managed to summon one up and we got 'scope views of it sitting in a tree in the end looking ugly. Dainty *Xiphiagrion cyanomelas* damselflies hung about in sunspots below the canopy.

The heat was intense now so what better than a dip in the hot river! Yes, after a cup of tea, the team got into their swimwear and had a float in the hot river. Very pleasurable by all accounts. Meanwhile Phil worked the surrounding area. Despite the temperature of the water in the river there were a surprising number of odonates here and Phil was thrilled to find the extraordinary Melanesian endemic damselfly; *Mortonagrion martini*. Another vehicle arrived from the Lodge and after their swim the team elected to escape the heat and return to the lodge. This left Phil a very sweaty hour to chase odonates that he put to good use.

The cooler streams along the track (and even in the drains in the oil palm) held good numbers of the recently-described endemic *Pseudagrion lorenzi*. Harder to find were the occasional and excellently mis-named *Nososticta africana* (a Melanesian endemic), these were only in the forest. Driving out we stopped at the shaded river by the oil palm nursery. This was a fantastic spot for dragonflies. Perches were adorned with flashy *Rhinocypha tincta*. *Nannophlebia imitans* was educational. A log in the stream hosted a superb male *Diplacina fulgens*. A single female *Nososticta commutata* was a bonus. Sadly it was time to get back to lunch but afterwards we had another excursion out to the reefs.

After lunch we went out to the Hanging Gardens, just five minutes by boat from Walindi Lodge. We moored up and were soon in the water, the conditions were perfect. We all found the beautiful cushion starfish and some of us encountered black-tip reef shark. Phil even had a white-tip. Big fin reef squid entertained us. On top of the reef in the shallows were abundant blue devils, also lots of other little demoiselles including the surge demoiselle. This was the home of young butterflyfish as well as blackpatch triggerfish and various little fish such as cardinalfish and several small wrasse. Back on the reef walls there was such a variety – spot-tail squirrelfish, striped surgeonfish, redfin bream, yellowstripe and two-barred goatfish, sixbar, crescent and checkerboard wrasse, and the yellow-striped Spanish flag. At the water's surface, or rather a centimetre or two below were sleek silver crocodilian longtoms whilst sitting quietly on a particularly massive coral were a couple of robust two-barred goatfish.

Next we moved the short distance to Susan's ridge for another session. Here we marvelled at the diversity of sea cucumbers, picking up Graeff's, leopard and edible to name but three. We also encountered the sinister crown-of-thorns starfish. Sated we clambered back aboard for the short run back to the lodge.

Our evening meal and fish identification session was interrupted by a visit by a tiny scrubfowl chick confused by the lights in the bar. It was swiftly captured and released somewhere dark.

Day 7 December 9th Susan's and Vanessa's reefs and Restorff Island

Another early morning start saw us at the jetty and boarding our snorkelling boat. We put in an order for dolphins this morning and about ten minutes off shore we bumped into a big pod of bottle-nosed dolphins. We had all heard of the famous Walindi boom nets and how close they could get you to dolphins in their element. A boom was secured to the bow and a net hung from it and Alf and Hannah

got into the water and got settled! The boat moved steadily to catch up with the dolphins and then they were among them. The dolphins bow-rode alongside the net, almost within touching distance, a great underwater encounter. Next it was Phil and Colin's turn. It was such good fun that we all did it twice, the dolphins never seeming to tire of the sport. Elated we re-started our journey and left the dolphins to go about their business.

Finally we got to Susan's reef. I am not sure I can recall this one some two weeks later but my photos indicate a good drop off with many big fish and our first racoon butterflyfish. We also got close to large six-banded angelfish and clown triggerfish.

After a short recovery period with tea and biscuits we were snorkelling the nearby Vanessa's reef. This proved to be a most fantastic place. Close to where we jumped in there was a huge shoal of fish by the drop-off that included humphead wrasse, surgeonfish, tangs and our first pyramid butterflyfish. The variety of butterflyfish on this reef was incredible with at least ten species recorded - dotted, lined, saddled, spot-tailed, Klein's, eastern triangular, racoon, ornate, redfin and speckled, as well as the aforementioned pyramid. There were groups of impressive steephead parrotfish, and large aggregations of yellow-barred and Bleeker's too. Bird and sixbar wrasse sought 'prey' along the join between deep and reef-top. There were vast schools of fish everywhere including yellowtail, rainbow and lunar fusiliers. At one point a superb shoal of circular spadefish travelled beneath us along the drop-off. Other fish highlights here were groups of fine-lined surgeonfish, bluespine unicornfish, broom filefish and some fabulous titan triggerfish. Just stunning as usual were the regal and blue-girdle angelfishes.

We took lunch moored just off the beach at Restorff Island. Opening the tupperware boxes revealed a tasty lunch and also that fish could hear the lurchy noises through the hull. We were soon surrounded by a throng of hungry fish and beneath them lurked a monstrous humphead wrasse. After lunch there was another chance to snorkel this special island reef before heading for home.

Day 8 December 10th Walindi out to Kimbe Bay, Kimbe Island, Otto's Reef and Namundo

Another early start saw us at the jetty just after dawn, fully fed and raring to go out to Kimbe Island. The local pair of moustached tree-swifts waved us off. Though one can see the island from the lodge it is a long way out and takes just over an hour to motor out to. Of course we had to stop en route for a nice pod of wake-riding bottle-nosed dolphins that we photographed at length as they frolicked behind us as we spun in tight circles in the boat. Also as we travelled our first brown boobies.

Reaching Kimbe Island we were stunned by the number of Nicobar pigeons in the air and soon we were watching them perched too, alongside numerous island imperial pigeons. A pair of beach kingfishers perched close to the boat as we moored up for some static boat birding. As we waited patiently we were treated to a parade of different species. A Mackinley's cuckoo-dove perched up briefly. Island monarch put in an appearance at last and there were constant Sclater's myzomela encounters. We were surprised but pleased to find a yellow-bibbed fruit-dove here. A pair of sacred kingfishers were watched on top of the island. The boatmen pointed out a close Nicobar pigeon and we had a chance to really look at this bird as it tripped along the shoreline. Incredibly this species may be the closest living relative to the dodo and it did indeed look rather otherworldly. Close examination allowed us to appreciate the scabrous legs and horrific, long yellow claws that looked like they needed trimming. A great bird.

It was time to get back into the water. We started right where we were moored. Once into the water we were in another world. Here there was striking corals on great walls that descended as cliffs into the blue below. The water was fantastically clear and shafts of sunlight pierced the water to great depths. Shoals of pale-tail chromis mixed with masses of purple and redfin anthias all mixing their colours with blue-green chromis, and lovely golden damsels. Lounging on corals were peacock groupers, freckled hawkfish and double-bar goatfish. On the reef top the tiny goby-like arc-eye hawkfish sat impassively for the camera! Out in the open water was a mass of fish. Groups of mix-and-match fusiliers included bluestreak, yellowtail, blue-and-yellow and the lovely blue lunar fusilier. Below us along the drop-off a small group of massive bumphead parrotfish cruised back-and-forth. We found our first stunning Bennett's, double-saddle and spot-nape butterflyfish and singular bannerfish here too. Our only teardrop butterflyfish was just exquisite. An inquisitive black-tip reef shark cruised twice around Phil at close range before moving on off over the shallower parts of the reef.

We moved around the more oceanic side of the island. Breakers rolled in and crashed on the reef. We swam along searching out novel species and finding the beautiful dot-and-dash butterflyfish. After all the birds, fish and swimming we were starting to get peckish so we motored half-way home to Otto's reef. Here we lunched and then swam one more time. We moored by the navigation marker. This reef is close to the not-so-busy shipping route that sees small container vessels, trading copra mainly, going in and out of Kimbe Harbour. If anything this reef had even better cliffs with massive coral growth resulting in big overhangs. Many of the species were similar to Kimbe Island but there were differences. Huge shoals of pyramid butterflyfish hung over the drop-off. We caught up with white-bonnet anemonefish again. A juvenile rockmover wrasse was just astonishing. The coral gardens were astonishing. Eventually we left the water and motored home tired and happy.

On arrival back at the lodge some of us got ready for birding quickly and headed back out with Joseph on his feedlot safari. We worked the tall grasslands that are cut to feed beef cattle for birds and got a nice selection of things. The grassland held Papuan grassbird and the endemic buff-bellied mannikin. On the road we searched out shy white-browed crane and buff-banded rail. A short diversion took us to a rainforest fragment that quickly produced yellow-tinted imperial pigeon. Back at the feedlot at dusk we checked the cattle pen for waders picking up Asian golden plover, marsh sandpiper and numerous sharp-tailed sandpipers. A great end to the day.

Day 9 December 11th Walindi – Katherine, Kirsty-Jayne and Donna Reefs & Kulu River

Up until today we had enjoyed blue-sky weather and very little rain. That changed today with rain appearing for the first time. Curiously the rain dragged the smell of sulphur down to ground-level reminding us we were living near an active volcano. This morning we had swapped our morning birding in favour of snorkelling, we would bird in the afternoon instead. Motoring out after breakfast we bumped into the bottle-nosed dolphins again for more photographic opportunities.

First stop today was the small but perfectly-formed Katherine reef. As we swam out from the boat big raindrops landed on our backs. We enjoyed the swim and then headed out to Kirsty-Jayne. Here we were met with a cross current and some nice fish including our only lionfish of the tour. More white-bonnet anemonefish here too.

Our last reef of the day was Donna and here we experienced a big cross current which finished us off

physically for the day! On one side of us was a coral covered ridge, then a dip where the water reached 9 metres and then a reef flat with walls. All quite compact but fantastically rich in fish. There were huge shoals of mixed demoiselles and purple anthias, the purple males simply brilliant. On the sides were large groups of surgeonfish and parrotfish. There were bluefin trevally and titan triggerfish. Our time on the glorious reefs of Kimbe Bay was over.

In the afternoon a small team accompanied Joseph and David to search for birds on the Kulu River. Joseph had been working in our absence and before we got in the minibus he took us to look at some feeding buffy-faced pygmy parrots. Pygmy indeed. We bumped off through the oil palm again stopping for a collared kingfisher (this race is often considered to be a separate species). Arriving at the gallery forest we walked along. Joseph heard nearby red-knobbed fruit doves and started imitating the call. No easy feat and he was hoarse from the efforts by the time this lovely little dove surrendered and perched in the nearby treetops. All the time we were here parrots were whizzing about and included tiny red-flanked lorikeets. We also had great views of pied coucal and failed again to creep up on a shy calling black-capped paradise-kingfisher. This was one endemic we were destined not to see. At dusk a swarm of feeding *Gynacantha kirbyi* pleased one member of the team.

Walking back from dinner in the dark Phil and Colin found a blind snake (*Ramphotyphlops* sp?) wriggling across the path.

Day 10 December 12th Walindi to Lissenung Island

We had a well-earned easy morning and enjoyed the lodge grounds before an early lunch today. Then it was time to say a sad farewell to Walindi and its staff who had looked after us so very well, and whose comfort, and wildlife-rich surroundings we'd so enjoyed, both above and below the water. We drove to Hoskins Airport for our flight to Rabaul and onward flight to Kavieng. These all went to plan and on the last leg Phil even found himself sitting next to Peter, the man who would be driving us down to the harbour and our waiting boat. We arrived in Kavieng in the gathering dusk and waited in the throng for our bags. Packing ourselves tightly into the Lissenung clown car was not to everyone's taste but the drive to the harbour was over very quickly. Rain fell here too and we anticipated a wet and bumpy crossing to the island. We were not wrong and I suspect more than one of us wondered quite what we were doing as we powered towards the island in the pitch dark! But eventually the lights on the island appeared and we could see Angie and Dietmar in the shallows guiding the boat in. A wet landing, we hastily removed our shoes and socks! We would not be needing them for a little while.

We had arrived! Onshore we were greeted by Dietmar and Angie and introduced to some of the staff and then shown to our spacious stilted cabins. Dinner was superb. Fish, chicken and vegetables wrapped in banana leaves and cooked on hot rocks in the local style.

Day 11 December 13th Lissenung Island

Phil checked out our tiny island (just 400 by 100m) before breakfast, Melanesian scrubfowls were very evident digging holes around the periphery. Parrots screeched. Beach kingfishers called out of sight from shoreline trees. Overhead an osprey passed carrying a reef fish. Colin took up the offer of a boatride out to two nearby islands to rescue turtle eggs before they were harvested by local people. They were unsuccessful this morning.

After breakfast we got sorted for gear and got stuck into the fabulous house reef for the first of two long sessions today. Lunch was vital for refuelling at half time! The water was very clear especially in the morning, and the fish and corals were amazing. This reef was probably the best we'd seen yet, and it was just off the beach by the restaurant! There were several new species of those delectable butterflyfish here, plus two bannerfish and two spadefish. The school of longfin spadefish was fabulous and you could just swim along next to them, almost touching. There were a few golden spadefish with them which caused a bit of confusion. The entrance to the water here is sandy and twenty metres out one encounters a coral head or bommie which was always swarming with fish, large numbers of mixed emperors and goatfish practically obscured the coral. We spent a lot of time checking this area over the days here. Working north took us along the spectacular architecture of this reef and the welcoming committee, a large shoal of big-eye trevally that you could almost embed within and swim against the current with. Superb. Often here too a huge shoal of pale, ghostlike fringe-lipped mullet.

Although quite a small area the house reef had a variety of substrates that all supported different fish and critter faunas. The sandy area at the start had a large number of nodose starfish on one day but we could not find them the next... Sandy areas with scattered rubble near the shore produced numerous nudibranchs (of an unidentified species) and many (unidentified) shrimp gobies coming out of their burrows accompanied by bulldozing shrimps! Clams were more abundant here than in Kimbe Bay and had a bewildering array of colours.

Out on the reef other butterflyfish abounded, best of all being the fantastic long-beaked coralfish but also – Bennett's, blackback, chevroned, dotted, double-saddle, eastern triangular, eightband, ornate, redfin, saddled, spot-nape, spot-tail, threadfin and vagabond to name some but probably not all. There was a new angelfish in the shape of the elegant and colourful yellowmask angelfish. Barracuda lurked off the drop-off.

There were schools of scissortail sergeants and staghorn damsels were as usual common on the top of corals. Corals – wow! There were so many. There were elegant table corals, curved fan-shaped cabbage corals, turquoise stagshorns, and great massed colonies of verrucose coral covering tens of square metres. There were bowl corals everywhere, and also anemones, including the purple-based magnificent sea anemone. Bristlestars lurked amongst the coral.

Back to the fish. There were shoals of yellowstripe goatfish, strongly red-tinted barred goatfish, tailed-barred freckled goatfish and striking dash-dot goatfish. There were not so many herds of parrotfish, but still a range of species including swarthy, Bleeker's, greensnout and steephead, and of course the wrasse were superbly varied with at least a dozen species including all the usual suspects and a bright golden version of the Slingjaw Wrasse which I at one point saw thrust its unwieldy looking jaw forward. Pipefish posed on coral. Phil found a young snapper with matching ectoparasitic isopods (Cymothidae) on each side of its face. Throughout we searched hard during the two sessions for the crocodilefish reputed to hang about by the beach at the start of the swim but failed to find it. Something for tomorrow or the next day.

Day 12 December 14th New Ireland – the Boluminski Highway

A pre-dawn departure saw some of us leaving the island for Kavieng complete with packed breakfast and lunch to chase things on New Ireland. We arrived in good shape but our birding team were late... They eventually arrived and headed out of town on the Boluminski highway, a road built for Count

Franz Boluminski, the German administrator of these islands for a decade or so from 1900. Apparently he wielded a fairly fierce rule and made each village build a section of the road, reputedly so that he could be carried in his coach along it. Now we drove on a superbly surfaced road through idyllic looking beaches with the Pacific waves lapping gently on the Eastern shore and a mix of plantation and secondary forest on the western side of the road.

A quick stop for breakfast on the beach allowed us to enjoy the peace and quiet of this part of the world. Then we started working side roads that took us into better habitat. The guides seemed to be searching out fruiting trees to show us pigeons and we quickly found red-knobbed imperial pigeon and knob-billed and white-bibbed fruit-dove. A clearing in the forest produced Hunstein's mannikin (endemic to the island) as well as varied triller, northern fantail and brush cuckoo. Things quickly went off the boil for birds though and our efforts were largely unrewarded after a good early start. We switched to invertebrates eventually, finding some nice dragonflies (including *Rhyothemis resplendens*) and very few butterflies. We finally caught up with the very noticeable blue (*Luthrodes cleotas*) that had been tormenting us throughout the tour. Eventually we dropped back down to the coast, passing through a little local melee (lots of drawn machetes and anger but no clear cause or fighting) and stopped again at the beach for lunch.

Back at the harbour we picked up our ride and headed back to the island. This left us time for a late afternoon session on the house reef. The easy highlight for Phil was catching up with the crocodilefish, as well as our first trumpetfish and the crazy anemone crabs (*Neopetrolisthes maculatus*). Luckily Nigel was still loafing on the shore and re-entered the water to see the crocodilefish.

Day 13 December 15th Lissenung Island and the Matrix

A chance for a lie-in before a 0700 breakfast this morning. After breakfast we motored out to the Matrix for a double snorkel session with the dive team this was sadly influenced by the strong spring tides and we were glad we had had plenty of swimming in the week beforehand. The Matrix is a very long reef that extends out from an island, our two swims here barely covered a tenth of it! We drifted with the current, our boatman keeping an eye on us and following at a distance ready to come in and pick us up when needed. As usual there was a spectacular variety of fish and some big schools, but the best thing was finally finding Meyer's butterflyfish (which was quite common here).

After lunch there was time for a session in the water for the keen, the house reef was impossible to resist. The dread chesty virus that we had been noticing in the neighbourhood had caught up with Phil here though and he did resist and elected to stay on dry land for this session. The birding in the garden was educational and at least one penny finally dropped. Not all the black sunbirds were black sunbirds, most in fact were Bismarck black myzomela... Also here a surprise song parrot and a visiting pied coucal.

Day 14 December 16th Lissenung to Port Moresby

A nice liesurely start if you wished this morning. After breakfast there was a choice between one last visit to the house reef, or birding in the garden (more black myzomela) before packing ready for the flight to Port Moresby. We set off nice and early for Kavieng, saying our reluctant goodbyes to Angie and Dietmar and their wonderful staff. Then it was one more trip in the 'clown car' with Bruno which took us back to the airport. This time it was the boot that jammed, Phil's comment of 'im buggerup' was well

received by Bruno as we struggled to empty the boot of heavy bags through the front door... Angie had packed us a little nose bag so Phil went foraging for drinks and we whiled away the hour before the plane left by eating and birding out onto the airstrip. More Hunstein's mannikins here and a few common waders.

The flight passed quickly and back we were in Port Moresby meeting our hotel shuttle. The hotel felt ridiculously over-the-top after our fortnight in dive lodges but was well-received by all. A dusk look around the hotel grounds produced fawn-breasted bowerbird and rufous-banded honeyeater for Phil.

Day 15 December 17th PAU grounds, Port Moresby and flight home

We were up early again this morning for a 0500 pickup for a birding session before breakfast at the PAU campus. Unfortunately Leonard and the team had other ideas and we did not see them until 0530. The hotel staff commiserated and brought us juice. In the end it was all a miscommunication as the gate in to PAU did not officially open until 0600 and we arrived there before that but managed to talk ourselves in. Any discontent at the tardy start was soon despatched by the birds. Leonard led us on a two-hour wander that took us from one bird to the next.

The campus is set in beautiful grounds. The road names tell you all you want to know about this place – Kingfisher Avenue, Egret Drive and Moorhen Close. Climbing out of the van we were greeted by a pair of noisy black-backed butcherbirds. A small flock of royal spoonbills flew overhead but did not stop. We started by a large pond covered in pink and white lotus. There were large numbers of little black cormorants in a dead tree and a few little pied too. Black-backed swamphens were abundant and there were a pair of dusky moorhen. Pacific black ducks were common and there were a few wandering whistling-ducks on the pond. Comb-crested jacanas tottered over the lily pads whilst on the shore was a single Asian golden plover and a Swinhoe's snipe.

The dragonflies were interesting too and included our only *Ictinogomphus leiftincki* of the trip. Walking on we put in an order for Papuan frogmouth. As we wandered we added peaceful and bar-shouldered dove on nearby wires. A fruiting tree was full of green figbirds and pigeons. In quick order we bagged Torresian imperial pigeon, and orange-fronted and orange-bellied fruit-dove. Rufous-banded honeyeaters put on a show. We went to look at the fawn-breasted bowerbirds bower with Leonard. This was an elegant little structure with a pile of vegetation topped with a neatly fenced alleyway, these decorated with fresh green berries and trinkets.

Leonard all the while was searching for frogmouths and showed us our first one pretty quickly. It was unusually semi-reclined on a large tree limb. Nearby a blue-winged kookaburra repeatedly smashed a large tree frog against a branch. Before we left we checked another frogmouth roost and got superb views of pair for photographs.

Then it was back to the Airways Hotel for a large breakfast and an anarchic, non-functioning checkout that saw Phil pursued to the very check-in queue at the nearby airport in the end to settle the groups meagre debts. Only in PNG! We sat in the lounge and said our goodbyes and incredibly our flights all boarded at the same time. We were on our way home after a great trip.

Systematic List Number 1 Marine life

Fish are listed first, other marine life afterwards. The fish is ordered according to an alphabetical listing of the families. It is woefully incomplete...

Surgeonfishes

Fine-lined surgeonfish	<i>Acanthurus grammoptilus</i>	Kimbe Bay (New Britain).
Striped surgeonfish	<i>Acanthurus lineatus</i>	widespread and very common.
Blackstreak surgeonfish	<i>Acanthurus nigricaudus</i>	Kimbe Bay (New Britain).
White-cheeked surgeonfish	<i>Acanthurus nigricans</i>	Kimbe Bay (New Britain).
Convict tang	<i>Acanthurus triostegus</i>	Lissenung (New Ireland).
Yellowfin surgeonfish	<i>Acanthurus xanthopterus</i>	Lissenung (New Ireland).
Gray unicornfish	<i>Naso caesi</i>	Kimbe Bay (New Britain).
Orangespine unicornfish	<i>Naso lituratus</i>	Kimbe Bay (New Britain).
Bluespine unicornfish	<i>Naso unicornis</i>	widespread.
Bignose unicornfish	<i>Naso vlamingii</i>	Kimbe Bay (New Britain).
Brushtail tang	<i>Zebrasoma scopas</i>	Kimbe Bay and Lissenung (New Ireland).
Pacific sailfin tang	<i>Zebrasoma veliferum</i>	widespread

Acanthuridae

Cardinalfishes

Orbicular Cardinalfish	<i>Sphaeramia orbicularis</i>	strikingly shaped and patterned species in the little creek by reception at Walindi (New Britain).
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Apogonidae

Trumpetfishes

Chinese trumpetfish	<i>Aulostomus chinensis</i>	Lissenung (New Ireland).
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Aulostomidae

Triggerfishes

Broom Filefish	<i>Amanses scopas</i>	Kimbe Bay (New Britain).
Clown triggerfish	<i>Balistoides conspicillum</i>	Kimbe Bay (New Britain).
Striped triggerfish	<i>Balistoides undulatus</i>	Kimbe Bay (New Britain).
Titan triggerfish	<i>Balistoides viridescens</i>	widespread.
Oceanic triggerfish	<i>Canthidermis maculata</i>	Lissenung (New Ireland).
Pinktail triggerfish	<i>Melichthys vidua</i>	widespread.
Yellowmargin triggerfish	<i>Pseudobalistes flavimarginatus</i>	Lissenung (New Ireland).
Blackpatch triggerfish	<i>Rhinecanthus verrucosus</i>	scattered.

Balistidae

Longtoms

Needlefish sp	<i>Platybelone</i> sp	everywhere!
Crocodylian longtom	<i>Tylosurus crocodilus</i>	scattered.
Estuarine halfbeak	<i>Zenarchopterus dispar</i>	in the creek at Walindi (New Britain).

Belonidae

Fusiliers

Yellowtail fusilier	<i>Caesio cuning</i>	Kimbe Bay (New Britain).
Lunar fusilier	<i>Caesio lunaris</i>	Kimbe Bay (New Britain).
Bluestreak fusilier	<i>Pseudocaesio tiles</i>	Kimbe Bay (New Britain).
Blue & yellow fusilier	<i>Caesio teres</i>	scattered

Caesionidae

Trevallies

Orange-spotted trevally
Giant trevally
Blue-fin trevally
Bigeye trevally

Carangidae

Carangoides bajad
Caranx ignobilis
Caranx melampygyus
Caranx sexfasciatus

scarce throughout.
Kimbe Bay (New Britain).
seen in all areas, usually in low numbers.
One of the highlights of Lissenung (New Ireland) was the huge shoal of this species that greeted you as you went off the beach at the house reef.

Butterflyfish

Threadfin butterflyfish
Eastern triangular butterflyfish
Bennett's butterflyfish
Speckled butterflyfish
Saddled butterflyfish
Klein's butterflyfish
Lined butterflyfish
Raccoon butterflyfish
Redfin butterflyfish
Blackback butterflyfish
Meyer's butterflyfish
Spot-tail butterflyfish
Eightband butterflyfish
Ornate butterflyfish
Spot-nape butterflyfish
Dot & dash butterflyfish
Latticed butterflyfish
Dotted butterflyfish
Chevroned butterflyfish
Double-saddle butterflyfish
Teardrop butterflyfish
Vagabond butterflyfish
Long-beaked coralfish

Chaetodontidae

Chaetodon auriga
Chaetodon baronessa
Chaetodon bennetti
Chaetodon citrinellus
Chaetodon ephippium
Chaetodon kleinii
Chaetodon lineolatus
Chaetodon lunula
Chaetodon lunulatus
Chaetodon melannotus
Chaetodon meyeri
Chaetodon ocellicaudus
Chaetodon octofasciatus
Chaetodon ornatissimus
Chaetodon oxycephalus
Chaetodon pelewensis
Chaetodon rafflesi
Chaetodon semeion
Chaetodon trifascialis
Chaetodon ulietensis
Chaetodon unimaculatus
Chaetodon vagabundus
Chelmon rostratus

Lissenung.
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain).
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain).
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain).
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain) and Lissenung (New Ireland).
The Matrix (New Ireland).
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain) and Lissenung.
Kimbe Island (New Britain).
Kimbe Bay (New Britain) and Lissenung.
Kimbe Bay (New Britain).
Lissenung (New Ireland).
Kimbe Bay (New Britain) and Lissenung.
Just one at Kimbe Island (New Britain).
Kimbe Bay (New Britain) and Lissenung.
Reasonably frequently encountered on the house reef at Lissenung (New Ireland).
Kimbe Bay (New Britain).
Kimbe Bay (New Britain) and The Matrix (New Ireland).
Abundant at just a few reefs.
widespread and common.
throughout but very local, eg The Matrix (New Ireland).
Kimbe Bay (New Britain).

Longnose butterflyfish
Pyramid butterflyfish

Forcipiger flavissimus
Hemitaurichthys polylepis

Pennant bannerfish
Singular bannerfish
Humphhead bannerfish

Henichos chrysostomus
Henichos singularis
Henichos varius

Sharks

Black-tipped reef shark
White-tipped reef shark

Carcharhinidae

Carcharhinus melanopterus
Triaenodon obesus

Kimbe Bay (New Britain) and Lissenung (New Ireland).
One on Joy's Reef (Kimbe Bay).

Hawkfish

Arc-eye hawkfish

Cirrhitidae

Paracirrhites arcuatus

Freckled hawkfish	<i>Paracirrhites forsteri</i>	
Marbled hawkfish	<i>Cirrhites pinnulatus</i>	
Porcupinefish	Diodontidae	
Spotted porcupinefish	<i>Diodon hystrix</i>	A huge individual occasionally loafing in the shade on the house reef at Lissening (New Ireland).
Spadefish	Ephippidae	
Golden spadefish	<i>Platax boersii</i>	Lissening (New Ireland).
Circular spadefish	<i>Platax orbicularis</i>	Kimbe Bay (New Britain).
Longfin spadefish	<i>Platax pinnatus</i>	Lissening (New Ireland).
Flying fish	Exocetidae	
Flying Fish sp		common in Kimbe Bay
Mudskippers	Gobiidae	
Mudskipper	<i>Periophthalmus</i> sp	mangroves and tidal creeks
Sweetlips	Haemulidae	
Oriental Sweetlips	<i>Plectorhinchus orientalis</i>	Kimbe Bay and Lissening, but scarce.
Gold-striped sweetlips	<i>Plectorhinchus chrysotaenia</i>	Lissening (New Ireland).
Diagonal-banded sweetlips	<i>Plectorhinchus lineatus</i>	Lissening (New Ireland).
Squirrelfish & soldierfish	Holocentridae	
Shadowfin soldierfish	<i>Myripristis adusta</i>	Kimbe Bay (New Britain).
Blotcheye soldierfish	<i>Myripristis murdjan</i>	Kimbe Bay (New Britain).
Violet soldierfish	<i>Myripristis violacea</i>	widespread.
Red soldierfish	<i>Myripristis vittata</i>	Lissening (New Ireland).
Spotfin squirrelfish	<i>Neoniphon sammara</i>	Lissening (New Ireland).
Long-jawed squirrelfish	<i>Sargocentron spiniferum</i>	Kimbe Bay (New Britain) and Lissening (New Ireland).
Tuskfishes and Wrasses	Labridae	
Anchor tuskfish	<i>Choerodon anchorago</i>	Lissening.
Split-level hogfish	<i>Bodianus mesothorax</i>	at most snorkeling sites.
Scarlet-breasted Maori wrasse	<i>Cheilinus fasciatus</i>	widespread.
Humphhead wrasse	<i>Cheilinus undulatus</i>	widespread.
Cigar wrasse	<i>Cheilio inermis</i>	Lissening (New Ireland).
Checkerboard wrasse	<i>Halichoeres hortulanus</i>	Kimbe Bay (New Britain).
Zigzag wrasse	<i>Halichoeres scapularis</i>	Lissening (New Ireland).
Barred thicklip	<i>Hemigymnus fasciatus</i>	scattered throughout.
Blackeye thicklip	<i>Hemigymnus melapterus</i>	widespread.
Tubelip wrasse	<i>Labrichthys unilineatus</i>	widespread.
Bird wrasse	<i>Gomphosus varius</i>	widespread.
Bicolor cleaner wrasse	<i>Labroides bicolor</i>	Kimbe Bay (New Britain).
Blue-streak cleaner wrasse	<i>Labroides dimidiatus</i>	Kimbe Bay (New Britain).
Blackspot cleaner wrasse	<i>Labroides pectoralis</i>	Kimbe Bay (New Britain).
Rockmover wrasse	<i>Novaculichthys taeniurus</i>	One crazy juvenile in Kimbe Bay (New Britain).

Sixbar wrasse	<i>Thalassoma hardwicke</i>	Kimbe Bay (New Britain).
Moon wrasse	<i>Thalassoma lunare</i>	widespread.
Sunset wrasse	<i>Thalassoma lutescens</i>	Kimbe Bay (New Britain).
Breams & emperors	Lethrinidae	
Thumbprint emperor	<i>Lethrinus harak</i>	Kimbe Bay (New Britain).
Long-nosed emperor	<i>Lethrinus olivaceus</i>	Lissening (New Ireland).
Redfin bream	<i>Monotaxis heterodon</i>	widespread.
Humpnose bigeye bream	<i>Monotaxis grandoculis</i>	Kimbe Bay (New Britain).
Snappers	Lutjanidae	
Two-spot snapper	<i>Lutjanus biguttatus</i>	Matrix (Lissening).
Spanish flag	<i>Lutjanus carponotatus</i>	
Flametail snapper	<i>Lutjanus fulvus</i>	Lissening.
Gold-lined snapper	<i>Lutjanus rufolineatus</i>	Lissening.
Black-banded snapper	<i>Lutjanus semicinctus</i>	widespread.
Midnight snapper	<i>Macolor macularis</i>	widespread – the juveniles have the most striking black and white markings.
Mullets	Mugilidae	
Fringelip mullet	<i>Crenimugil crenilabis</i>	Lissening (New Ireland).
Goatfish	Mullidae	
Yellowstripe goatfish	<i>Mulloidichthys flavolineatus</i>	widespread.
Dash-dot goatfish	<i>Parupeneus barberinus</i>	widespread.
Two-barred goatfish	<i>Parupeneus bifasciatus</i>	Kimbe Bay (New Britain).
Doublebar goatfish	<i>Parupeneus crassilabris</i>	Kimbe Bay (New Britain).
Freckled goatfish	<i>Upeneus tragula</i>	
Whiptails/monocle breams	Nemipteridae	
Bridled monocle-bream	<i>Scolopsis bilineata</i>	at most snorkeling sites.
Monogram monocle-bream	<i>Scolopsis monogramma</i>	widespread.
Lined monocle-bream	<i>Scolopsis lineata</i>	Kimbe Bay (New Britain).
Boxfish	Ostraciidae	
Spotted boxfish	<i>Ostracion meleagris</i>	widespread.
Flatheads	Platycephalidae	
Crocodilefish	<i>Cymbacephalus beauforti</i>	Lissening (New Ireland).
Angelfish	Pomacanthidae	
Pearl-scaled angelfish	<i>Centropyge vroliki</i>	widespread.
Vermiculated angelfish	<i>Chaetodontoplus mesoleucus</i>	Kimbe Bay (New Britain).
Regal angelfish	<i>Pygoplites diacanthus</i>	widespread and common.
Blue-girdled angelfish	<i>Pomacanthus navarctius</i>	Kimbe Bay (New Britain).
Six-banded angelfish	<i>Pomacanthus sexstriatus</i>	widespread.
Yellowmark angelfish	<i>Pomacanthus xanthometopon</i>	Lissening (New Ireland).

Damsels & sergeants

Blacktail sergeant	<i>Abudefduf lorenzi</i>	Lissening (New Ireland).
Scissortail sergeant	<i>Abudefduf sexfasciatus</i>	Lissening (New Ireland).
Banded sergeant	<i>Abudefduf septemfasciatus</i>	Kimbe Bay (New Britain).
Indo-Pacific sergeant	<i>Abudefduf vaigiensis</i>	at all snorkeling sites.
Golden damselfish	<i>Amblyglyphidodon aureus</i>	common in Kimbe Bay (New Britain).
Staghorn damselfish	<i>Amblyglyphidodon curacao</i>	widespread.
Orange-finned anemonefish	<i>Amphiprion chrysopterus</i>	frequent in Kimbe Bay (New Britain).
Clark's anemonefish	<i>Amphiprion clarkii</i>	at most snorkeling sites.
Red & black anemonefish	<i>Amphiprion melanopus</i>	scattered sites in Kimbe Bay (New Britain).
Eastern clown anemonefish	<i>Amphiprion percula</i>	scattered throughout but not common.
Pink anemonefish	<i>Amphiprion perideraion</i>	Kimbe Bay (New Britain).
Orange anemonefish	<i>Amphiprion sandaracinos</i>	Kimbe Bay (New Britain).
White-bonnet anemonefish	<i>Amphiprion leucokranos</i>	Scarce in Kimbe Bay (New Britain).
Sapphire damselfish	<i>Chrysiptera cyanea</i>	Widespread and common.
Surge demoiselle	<i>Chrysiptera leucopoma</i>	frequent in shallow areas of reef.
Yellow axil chromis	<i>Chromis xanathochira</i>	Lissening.
Black-tailed dascyllus	<i>Dascyllus melanurus</i>	widespread.
Reticulated dascyllus	<i>Dascyllus reticulatus</i>	widespread.
Three-spot dascyllus	<i>Dascyllus trimaculatus</i>	scattered throughout.
Spinecheek anemonefish	<i>Premnas biaculeatus</i>	Kimbe Bay (New Britain).
Melanesian damselfish	<i>Pomocentrus nigromanus</i>	Lissening.
Blackvent damselfish	<i>Neoglyphidodon melanotus</i>	widespread.
Black damselfish	<i>Neoglyphidodon melas</i>	common throughout.
Yellowtail damselfish	<i>Neoglyphidodon nigroris</i>	several reefs in Kimbe Bay (New Britain).

Pomacentridae**Dartfish**

Twotone Dartfish	<i>Ptereleotris evides</i>	Kimbe Bay (New Britain).
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Ptereleotridae**Parrotfish**

Bumphead parrotfish	<i>Bulbometopon muricatum</i>	A small shoal of these monsters at Kimbe Island (New Britain).
Bleeker's parrotfish	<i>Chlorurus bleekeri</i>	common. At all snorkeling sites.
Steephead parrotfish	<i>Chlorurus microrhinus</i>	scattered throughout.
Yellow-barred parrotfish	<i>Scarus dimidiatus</i>	widespread.
Swarthy parrotfish	<i>Scarus niger</i>	widespread.

Scaridae**Lionfish**

Common lionfish	<i>Pterois volitans</i>	Kimbe Bay (New Britain).
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Scorpaenidae**Rockcods**

Peacock rock cod	<i>Cephalopholis argus</i>	widespread.
Black-tipped rock cod	<i>Epinephelus fasciatus</i>	Lissening.

Serranidae**Tunas & mackerels**

Dogtooth tuna	<i>Gymnosarda unicolor</i>	Kimbe Bay (New Britain).
Bigmouth mackerel	<i>Rastrelliger kanagaruta</i>	Kimbe Bay (New Britain).

Scombridae

Rabbitfish

Golden rabbitfish

Masked rabbitfish

Gold-spotted spinefoot

Virgate rabbitfish

Foxface rabbitfish

Siganidae*Siganus guttatus**Siganus lineatus**Siganus puellus**Siganus punctatus**Siganus virgatus**Siganus vulpinus*

at most snorkeling sites.

Kimbe Bay (New Britain).

Kimbe Bay (New Britain).

Lissening (New Ireland).

scattered.

at most snorkeling sites.

Barracudas

Great barracuda

Sphyrnaeidae*Sphyrna barracuda*

Kimbe Island (New Britain) and Lissening (New Ireland).

Pipefish

Banded pipefish

Syngnathidae*Corythoichthys intestinalis* Lissening (New Ireland).**Grunters**

Crescent-banded Grunter

Terapontidae*Terapon jarbua*

Lissening (New Ireland).

Pufferfish

Masked pufferfish

Black-spotted puffer

Star puffer

Tetraodontidae*Arothron diadematus**Arothron nigropunctatus**Arothron stellatus*

Kimbe Bay (New Britain).

at most snorkeling sites.

Kimbe Bay (New Britain).

Moorish idol

Moorish Idol

Zanclidae*Zanclus cornutus*

at all snorkeling sites.

Critters etc

Leopard sea cucumber

Graeff's sea cucumber

Edible sea cucumber

Giant sea cucumber

Blue sea star

Cushion star

Crown-of-thorns

Nodose sea star

*Bohadschia argus**Bohadschia graeffei**Holothuria edulis**Thelonota anax**Linckia laevigata**Culcita novaguinea**Acanthaster planci**Protooreaster nodosus*

Kimbe Bay (New Britain).

at most snorkeling sites.

Kimbe Bay (New Britain).

very large – 30cm plus, Kimbe Bay (New Britain).

at most snorkeling sites.

Kimbe Bay (New Britain).

Kimbe Bay (New Britain).

Abundant in sandy areas around Lissening (New Ireland).

Noble feather star

Beautiful feather star

Pretty feather star

Bigfin reef squid

Christmas tree worm

Anemone crab

*Comanthina nobilis**Himerometra robustipinna**Cenometra bella**Sepioteuthis lessoniana**Spirobranchus giganteus**Neopetrolisthes maculatus*

Kimbe Bay (New Britain).

Kimbe Bay (New Britain).

at most snorkeling sites.

Kimbe Bay (New Britain).

Kimbe Bay (New Britain).

Skulking in anemones on the house reef at Lissening (New Ireland).

Systematic List Number 2 Butterflies

The nomenclature and taxonomy is taken from Michael Parsons *The Butterflies of Papua New Guinea* (1999 Academic Press). This list is incomplete as we lacked a field guide...

Papilionidae

- Ornithoptera priamus* a number seen at various localities in West New Britain, including offshore islands, mostly in flight, but the gardens at Walindi Lodge were excellent for getting close to this species.
- Papilio ulysses* Walindi Lodge grounds.

Pieridae

- Catopsilia pomona* Walindi (New Britain).

Lycaenidae

- Luthrodes cleotas* Walindi (New Britain) and New Ireland.
- Psychonotis* sp. Garu WMA.

Nymphalidae

- Hypolimnas alimena* Garu WMA.
- Parthenos sylvia* widespread.
- Taenaris phorcas* Walindi (New Britain).
- Vindula arsinoe* a Cruiser. Various forested areas in West New Britain.

Systematic List Number 3 Odonata

<i>Rhinocypha tincta</i>	Only at Haella Nursery (New Britain).
<i>Agriocnemis femina</i>	Small numbers at Kulu River and Garu WMA (New Britain). Also a few on New Ireland.
<i>Mortonagrion martini</i>	Just one male found at Garu WMA (New Britain) near the Hot River. Endemic to Melanesia.
<i>Pseudagrion lorenzi</i>	Common in and en route to Garu WMA (New Britain). Recently-described and endemic to New Britain.
<i>Pseudagrion microcephalum</i>	Two in tandem en route to Garu (in the oil palm). Surprisingly scarce.
<i>Xiphiagrion cyanomelas</i>	Frequently encountered at Garu WMA (New Britain). Also recorded on New Ireland.
<i>Nososticta africana</i>	A scattering of records at Garu WMA and Haella Nursery (New Britain). Also recorded on New Ireland. Endemic to Melanesia.
<i>Nososticta commutata</i>	One female at Haella Nursery (New Britain). Endemic to New Britain.
<i>Hemicordulia</i> sp.	Swarms on New Ireland. No records of this genus on the island... Probably two on Lissenung on the last morning too.
<i>Ictinogomphus leiftincki</i>	A few at PAU (Port Moresby).
<i>Anax</i> sp.	A few at Garu WMA and a single on New Ireland.
<i>Gynacantha kirbyi</i>	Recorded at Garu and Kulu River (New Britain).
<i>Agrionoptera insignis similis</i>	Garu and Kulu River (New Britain). Also on New Ireland. This subspecies is sometimes accorded species status.
<i>Diplacina fulgens</i>	Two males at Haella Nursery (New Britain). Endemic to New Britain.
<i>Diplacodes trivialis</i>	One in oil palm en route to Garu WMA (New Britain). Another at PAU (Port Moresby).
<i>Nannophlebia imitans</i>	A few on the river at Haella Nursery (New Britain).
<i>Nannophya pygmaea</i>	Kulu River and Garu WMA (New Britain). The race on New Britain seems to have much broader habitat requirements than elsewhere.
<i>Neurothemis stigmatizans bramina</i>	widespread (New Britain and Ireland).
<i>Orthetrum serapia</i>	Garu and Kulu River (New Britain). Also on New Ireland.
<i>Orthetrum villosovittatum</i>	Garu WMA (New Britain). The subspecies <i>bismarckianum</i> is endemic to New Britain. We also had one female on New Ireland.
<i>Pantala flavescens</i>	Scattered records (New Britain and Ireland).
<i>Rhyothemis phyllis</i>	Recorded flying around during our last breakfast in Port Moresby.
<i>Rhyothemis resplendens</i>	A few in New Ireland.
<i>Tholymis tillarga</i>	Oil palm wetlands at dusk (New Britain). Also at PAU (Port Moresby).
<i>Tramea loewii</i>	Apparently widespread on New Britain, even seen out at sea often in tandem!
<i>Trithemis</i> sp.	A female of a known but undescribed taxon at the Kulu River (New Britain).
<i>Zyxomma multinervorum</i>	One patrolling at dawn at Walindi (New Britain).

Systematic List Number 4 Birds

The nomenclature and taxonomy is taken from the *Birds of New Guinea* (1986 Princeton University Press) in places updated with Phil Gregory's *Birds of New Guinea and Associated Islands – a checklist* (2008).

Melanesian scrubfowl	<i>Megapodius eremita</i>	Impressive colony at Garu along the banks of the Hot River there and one adult seen (New Britain). A confused chick rocked up at the bar at Walindi that night too. Lots at dawn in the nest holes on Lissenung (New Ireland). Endemic to Melanesia.
Wedge-tailed shearwater	<i>Puffinus pacificus</i>	One close to the boat when moored in Kimbe Bay (New Britain).
Wandering whistling-duck	<i>Dendrocygna arcuata</i>	PAU (Port Moresby).
Grey teal	<i>Anas gracilis</i>	PAU (Port Moresby).
Pacific black duck	<i>Anas superciliosa</i>	New Britain and PAU (Port Moresby).
Glossy ibis	<i>Plegadis falcinellus</i>	PAU (Port Moresby).
Australian white ibis	<i>Threskiornis molucca</i>	PAU (Port Moresby).
Royal spoonbill	<i>Platalea regia</i>	PAU (Port Moresby).
Pied heron	<i>Ardea picata</i>	PAU (Port Moresby).
Great egret	<i>Egretta alba</i>	Namundo Plantation (New Britain). Also at PAU (Port Moresby).
Intermediate egret	<i>Egretta intermedia</i>	PAU (Port Moresby).
Pacific reef-egret	<i>Egretta sacra</i>	Walindi (New Britain). Also a few on New Ireland coast.
Eastern cattle egret	<i>Bubulcus coromandelicus</i>	Kavieng airport (New Ireland) and PAU (Port Moresby).
Nankeen night-heron	<i>Nycticorax caledonicus</i>	Garu and Kulu River (New Britain).
Black bittern	<i>Ixobrychus flavicollis</i>	Kulu River (New Britain).
Little black cormorant	<i>Phalacrocorax sulcirostris</i>	PAU (Port Moresby).
Little pied cormorant	<i>Microcarbo melanoleucos</i>	PAU (Port Moresby).
Greater frigatebird	<i>Fregata minor</i>	Kimbe Bay (New Britain).
Lesser frigatebird	<i>Fregata ariel</i>	Kimbe Bay (New Britain). Also on New Ireland.
Brown booby	<i>Sula leucogaster</i>	Kimbe Bay (New Britain).
Little pied cormorant	<i>Phalacrocorax melanoleucos</i>	Kulu River (New Britain).
Osprey	<i>Pandion haliaetus</i>	Walindi (New Britain).
Brahminy kite	<i>Haliastur indus</i>	Walindi (New Britain).
Variable goshawk	<i>Accipiter hiogaster</i>	Garu and Kulu River (New Britain). Also on New Ireland. The very pale race <i>dampieri</i> on New Britain.
White-bellied sea eagle	<i>Haliaeetus leucogaster</i>	Walindi (New Britain).
Pacific baza	<i>Aviceda subcristata</i>	Walindi (New Britain).
Black-backed swamphen	<i>Porphyrio melanotus</i>	Namundo Plantation (New Britain).
Dusky moorhen	<i>Gallinula tenebrosa</i>	PAU (Port Moresby).
Pale-vented bush-hen	<i>Amaurornis moluccana</i>	en route to Garu WMA (New Britain).
White-browed crane	<i>Porzana cinerea</i>	Walindi (New Britain).
Buff-banded rail	<i>Gallirallus philippensis</i>	en route to Garu WMA (New Britain). Also a few after rain along the road on New Ireland.
Pink-legged rail	<i>Gallirallus insignis</i>	Pair along the river at dusk (Kulu River, New Britain). A flightless trip highlight for some. Endemic to New Britain.

Comb-crested jacana	<i>Irediparra gallinacea</i>	PAU (Port Moresby).
Beach thick-knee	<i>Esacus magnirostris</i>	Three at Restorff Island on our first visit.
Masked lapwing	<i>Vanellus miles</i>	PAU (Port Moresby).
Pacific golden plover	<i>Pluvialis fulva</i>	Hoskins and Namundo Plantation (New Britain). One at PAU (Port Moresby).
Greater sand plover	<i>Charadrius leschenaultii</i>	One at Walindi (New Britain). Also at Kavieng airport (New Ireland).
Swinhoe's snipe	<i>Gallinago megala</i>	One at PAU (Port Moresby).
Whimbrel	<i>Numenius phaeopus</i>	Hoskins and Walindi (New Britain).
Turnstone	<i>Arenaria interpres</i>	Two in Kimbe Bay (New Britain).
Common sandpiper	<i>Actitis hypoleucos</i>	Walindi and elsewhere thereabouts (New Britain, New Ireland and Port Moresby).
Marsh sandpiper	<i>Tringa stagnatilis</i>	One at Namundo Plantation (New Britain).
Grey-tailed tattler	<i>Tringa brevipes</i>	Walindi (New Britain).
Sharp-tailed sandpiper	<i>Calidris acuminata</i>	Small numbers at Namundo Plantation (New Britain).
Common tern	<i>Sterna hirundo</i>	Walindi (New Britain).
Crested tern	<i>Sterna bergii</i>	Walindi (New Britain).
Little tern	<i>Sterna albifrons</i>	Walindi (New Britain).
Black-naped tern	<i>Sterna sumatrana</i>	A few offshore from Lissenung (New Ireland).
Black noddy	<i>Anous minutus</i>	Common in Kimbe Bay, especially Restorff Island (New Britain). A few offshore in New Ireland too.
Peaceful dove	<i>Geopelia striata</i>	PAU (Port Moresby).
Bar-shouldered dove	<i>Geopelia humeralis</i>	PAU (Port Moresby).
Slender-billed cuckoo-dove	<i>Macropygia amboinensis</i>	One at Garu WMA (New Britain).
Mackinlay's cuckoo-dove	<i>Macropygia mackinlayi</i>	One on Kimbe Island (New Britain).
Stephan's dove	<i>Chalcophaps stephani</i>	Kulu River and Namundo Plantation (New Britain).
Nicobar pigeon	<i>Caloenas nicobarica</i>	Restorff and Kimbe Island (New Britain).
Orange-fronted fruit-dove	<i>Ptilinopus aurantiifrons</i>	PAU (Port Moresby).
Superb fruit-dove	<i>Ptilinopus superbus</i>	Alf found us a female on New Ireland.
White-bibbed fruit-dove	<i>Ptilinopus rivoli</i>	New Ireland.
Orange-bellied fruit-dove	<i>Ptilinopus iozonu</i>	PAU (Port Moresby).
Yellow-bibbed fruit-dove	<i>Ptilinopus solomonensis</i>	One on Kimbe Island was a surprise.
Knob-billed fruit-dove	<i>Ptilinopus insolitus</i>	Kulu River (New Britain). Also on New Ireland.
Feral pigeon	<i>Columba livia</i>	Port Moresby.
Red-knobbed imperial-pigeon	<i>Ducula rubricera</i>	Walindi and Kulu River (New Britain). Also on New Ireland. A Melanesian endemic.
Island imperial-pigeon	<i>Ducula pristrinaria</i>	Kimbe Bay islands (New Britain).
Torresian imperial-pigeon	<i>Ducula spilorrhoa</i>	PAU (Port Moresby).
Yellow-tinted imperial-pigeon	<i>Ducula subflavescens</i>	Namundo Plantation and one outside Hoskins. Also a few in flight on New Ireland.
Coconut lorikeet	<i>Trichoglossus haematodus</i>	New Britain and Ireland.
Purple-bellied lory	<i>Lorius hypoinochrous</i>	Garu and Kulu River (New Britain).
Red-flanked lorikeet	<i>Charmosyna placentas</i>	Kulu River (New Britain) and Lissenung (New Ireland).
Blue-eyed cockatoo	<i>Cacatua ophthalmica</i>	Garu and Kulu River (New Britain). Endemic to New Britain.
Buff-faced pygmy-parrot	<i>Micropsitta pusio</i>	Garu and Walindi (New Britain).
Song parrot	<i>Geoffroyus heteroclitus</i>	A male on Lissenung was a surprise.
Eclectus parrot	<i>Eclectus roratus</i>	Walindi, Garu and Kulu River (New Britain). Also on

Brush cuckoo	<i>Cacomantis variolosus</i>	New Ireland and Lissenung (New Ireland). One over at PAU (Port Moresby). Pleasantly common.
Channel-billed cuckoo	<i>Scythrops novaeholladae</i>	Several on New Ireland.
[Pheasant coucal]	<i>Centropus phasianus</i>	Two at Garu WMA (New Britain).
Violaceous coucal	<i>Centropus violaceus</i>	Heard at PAU (Port Moresby).
White-necked coucal	<i>Centropus ateralbus</i>	Garu and Kulu River (New Britain). Endemic to the Bismarcks.
Papuan frogmouth	<i>Podargus papuensis</i>	Walindi and Kulu River (New Britain). Also on New Ireland and Lissenung (New Ireland). Endemic to the Bismarcks.
Glossy swiftlet	<i>Collocalia esculenta</i>	Three found roosting at PAU (Port Moresby).
Uniform swiftlet	<i>Aerodramus vanikorensis</i>	Kulu River (New Britain).
Moustached tree-swift	<i>Hemiproctne mystacea</i>	Namundo Plantation (New Britain).
[Black-capped paradise-kingfisher]	<i>Tanyiptera nigriceps</i>	Walindi (New Britain) and New Ireland.
Blue-winged kookaburra	<i>Dacelo leachi</i>	Heard at Garu and Kulu River (New Britain). Endemic to New Britain.
White-mantled kingfisher	<i>Todiramphus albonotata</i>	One frog-whacking individual watched at length at PAU (Port Moresby).
Collared kingfisher	<i>Todiramphus chloris</i>	One seen well at Garu WMA (New Britain). Endemic to New Britain.
Sacred kingfisher	<i>Todiramphus sanctus</i>	One at Kulu River (New Britain).
Beach kingfisher	<i>Todiramphus saurophaga</i>	Two on Kimbe Island (New Britain). Lissenung (New Ireland).
Common kingfisher	<i>Alcedo atthis</i>	Restorff and Kimbe Island (New Britain).
Dollarbird	<i>Eurystomus orientalis</i>	Walindi and Kulu River (New Britain).
Blyth's hornbill	<i>Aceros plicatus</i>	One at PAU (Port Moresby).
Fawn-breasted bowerbird	<i>Chlamydera cerviniventris</i>	Kulu River, Walindi and Garu WMA (New Britain). Also a few on New Ireland.
Ashy myzomela	<i>Myzomela cineracea</i>	PAU (Port Moresby), including a look at the bower.
Bismarck black myzomela	<i>Myzomela pammelaena</i>	Frequently encountered in the garden at Walindi (New Britain). Endemic to New Britain.
Sclater's myzomela	<i>Myzomela sclateri</i>	Common on Lissenung (New Ireland).
Rufous-banded honeyeater	<i>Conopophila albogularis</i>	islands in Kimbe Bay, West New Britain. Endemic to New Britain.
New Guinea friarbird	<i>Philomon novaeguineae</i>	PAU (Port Moresby).
New Britain friarbird	<i>Philemon cockerelli</i>	PAU (Port Moresby).
Black-backed butcherbird	<i>Cracticus mentalis</i>	Walindi (New Britain). Endemic to New Britain.
Varied triller	<i>Lalage leucamela</i>	PAU (Port Moresby).
White-bellied cuckoo-shrike	<i>Coracina papuensis</i>	New Ireland.
Common cicadabird	<i>Coracina tenuirostris</i>	Kulu River (New Britain). Also on New Ireland.
Bismarck whistler	<i>Pachycephala citreogaster</i>	New Ireland (3).
Mangrove golden whistler	<i>Pachycephala melanura</i>	Alf found us a single female on New Ireland.
Spangled drongo	<i>Dicrurus hottentotus</i>	islands in Kimbe Bay (New Britain). Also on Lissenung (New Ireland).
Island monarch	<i>Monarcha cinerascens</i>	Kulu River (New Britain).
Shining flycatcher	<i>Myiagra alecto</i>	Restorff and Kimbe Island (New Britain).
		Walindi (New Britain). Islands in Kimbe Bay (New Britain).

Papuan grassbird	<i>Megalurus macrurus</i>	Namundo Plantation (New Britain).
Australian reed-warbler	<i>Acrocephalus australis</i>	Namundo Plantation (New Britain).
Golden-headed cisticola	<i>Cisticola exilis</i>	Namundo Plantation (New Britain).
White-breasted wood-swallow	<i>Artamus leucorhynchus</i>	PAU (Port Moresby).
Northern fantail	<i>Rhipidura rufiventris</i>	Garu WMA (New Britain). Also on New Ireland.
Willie wagtail	<i>Rhipidura leucophrys</i>	widespread.
Green figbird	<i>Sphecotheres viridis</i>	PAU (Port Moresby).
Brown oriole	<i>Oriolus szalayi</i>	One at PAU (Port Moresby).
Torresian crow	<i>Corvus orru</i>	Port Moresby.
Bismarck crow	<i>Corvus insularis</i>	New Britain. Endemic to the Bismarcks.
Pacific swallow	<i>Hirundo tahitica</i>	widespread.
Eastern yellow wagtail	<i>Motacilla tshutschensis</i>	Namundo Plantation (4).
Singing starling	<i>Aplonis cantoroides</i>	occasional in New Britain but vastly outnumbered at sites visited by the next species. Also at Lissenung (New Ireland).
Metallic starling	<i>Aplonis metallica</i>	New Britain and New Ireland.
Yellow-faced myna	<i>Mino dumontii</i>	PAU (Port Moresby).
Long-tailed myna	<i>Mino kreffti</i>	Kulu River (New Britain). Also on New Ireland. A Melanesian endemic.
Red-banded flowerpecker	<i>Dicaeum eximium</i>	Walindi (New Britain). Also on New Ireland.
Black sunbird	<i>Nectarinia aspasia</i>	Walindi (New Britain). Also on Lissenung and New Ireland.
Yellow-bellied sunbird	<i>Cinnyris jugularis</i>	PAU (Port Moresby).
Grey-headed mannikin	<i>Lonchura caniceps</i>	PAU (Port Moresby).
Hunstein's mannikin	<i>Lonchura hunsteinii</i>	New Ireland. Endemic to that island.
Buff-bellied mannikin	<i>Lonchura melaena</i>	Namundo Plantation (New Britain). Endemic to the Bismarck archipelago.
Eurasian tree sparrow	<i>Passer montanus</i>	Walindi and Kimbe (New Britain).
House sparrow	<i>Passer domesticus</i>	Port Moresby.

Systematic List Number 5 Mammals

Great flying-fox	<i>Pteropus neohibernicus</i>	Scattered records in the Bismarck Archipelago.
Bottle-nosed dolphin	<i>Tursiops truncatus</i>	Kimbe Bay (New Britain).

Systematic List Number 6 Reptiles

Estuarine crocodile	<i>Crocodylus porosus</i>	One small one on the Kulu River on our first visit.
a blind worm	<i>Rhamphotyphlops</i> sp.	Walindi (New Britain).