

# Raja Ampat

## *Whale Sharks, Wilson's Bird of Paradise & ...*

### A Greentours Tour Report

16<sup>th</sup> February to 1<sup>st</sup> March 2019

Led by Ian Green, Kees Groeneboer, Anastasia Louhenapessy & Phil Benstead

#### **18/2            arrival, walking the road outside Kaimana**

After two nights of flying a rather disorientated crew arrived at Kaimana in the mid-morning. Kees and Anastasia were there to pick us up with a fleet of taxis and we were whisked to a nearby hotel. Alf and Hannah had tried to arrive the day before but met up with us in Sorong for the final flight as their flight yesterday had never really existed...

After a little briefing we were ready to tackle brunch. Offshore on a sandbar our first waders – far eastern curlews, whimbrel and common sandpiper. Overhead lesser frigatebird and crested tern. Looking down we could see Mudskippers and the little Crescent Grunters, a fish seeming to have a target on its back!

After a short rest we headed out mid-afternoon as the day started to cool for a walk along a road outside town. This past through patches of very disturbed forest and occasional gardens. This proved to be a good place to watch the large birds of the Papuan forest. Hornbills appeared occasionally and we were treated to a soaring Gurney's eagle at the beginning.

We searched the tree tops for perching birds and were rewarded with 'scope views of various excellent species including orange-bellied fruit dove and pinon imperial pigeon. Overhead we grappled with parrot in-flight identification picking out the splendid ninja black lory, nippy large fig parrots, speedy coconut lorikeets, a lumbering antidiluvian palm cockatoo and many noisy eclectus parrots. Brown cuckoo-doves perched nicely but we only had a flight glimpse of the more splendid great cuckoo-dove.

Golden and yellow-faced mynas appeared for some of us. Phil got busy with the dragonflies in passing. Amongst the common libellulids was a pretty but undescribed damselfly – a *Nososticta*. Eventually we returned to town and finding the hotel restaurant closed headed for a beachside fish shack for an excellent supper of fresh fish.

#### **19/2            Kaimana road site again and off on the boat to Namatote (Tumberawasi)**

Discovering that our yacht, the *Katharina*, would not be ready for us until 1130 today had a silver lining as it allowed many of us to go birding in the early morning and we headed back to the Kaimana road site that we looked at yesterday. This morning session was predictably bird-packed and we managed a good number of new species.

Ian found us the superb and very excellent emperor fairy-wren. Trees lining the road were in fruit and attracted a number of species of interest. A selection of cuckooshrikes was most welcome (and included Boyer's cuckooshrike and grey-headed cicadabird). Mimic and scrub meliphaga confused us. A small fruiting bush produced good views of olive-crowned flowerpecker (a recent Vogelkop split). Our first birdwing the impressive *Ornithoptera meridionalis* floated high in the canopy. Eventually though we had to pull ourselves away and head back to the hotel to check out and get down the docks.

On board we had to wait for a while for our harbour clearance documents but eventually we were underway. Our only great frigatebirds of the trip saw us off. After lunch Anastasia and Kees introduced us to the crew and outlined the safety procedures on board. Our first two-hour journey was punctuated by occasional bursts of excitement. We cruised through small rafts of red-necked phalaropes. Our first cetaceans were spotted. Two or more Bryde's whales at distance but showing a little on the surface and with a nice columnar blow that was seen by all. Lastly Peter found us at least one feeding Indo-pacific sailfish (*Istiophorus platypterus*) that was harrying a gang of large bait fish on the surface. At one point it jumped clear of the water, a glorious sight.

Dropping anchor near Tumberawasi. The Indonesian team went to arrange for a whale shark feeding in the morning with the local fisherman living on a nearby platform or *bagan*. Our afternoon session took us to nearby karst cliffs for ancient rock art and a good showing of a *Nepenthes*. This *Nepenthes* was recognized as a new species less than ten years ago and we are not certain whether it has yet been given a name, so for now, *Nepenthes* 'misool'.

We had time for a swim at end of day, allowing an equipment check ahead of tomorrow's potential excitement with the whale sharks. As Anastasia explained we weren't likely to see much good coral or fish here, it was just a chance to get our masks wet, but still there was much of interest. The very first fish I saw was a Blue Blanquillo snakily swimming off in front. There were sandy patches where we could see Two-spot Lizardfish and Speckled Sandperch. We followed a cliff edge along from one small beach to another and by the rock face noted Tail-spot Soldierfish, Pale-tail Chromis, Split-level Hogfish, White-lined Rock Cod and the lovely Jansen's Wrasse. There were just a few little coral heads and around these our first Butterflyfish of what would be an incredible trip for them. Here there Eastern Triangular, Vagabond and Speckled Butterflyfishes. Groups of Dash-and-Dot Goatfish and there was a Horned Bannerfish or two and even the stunning Regal Angelfish. Kees gave a great lecture on the beasts (and the rock art) before our first of many splendid *Katharina* dinners.

## 20/2      **Whale Sharks in Bitsyaru Bay. Triton Bay and Lobo village**

An early breakfast was no problem for anyone this morning, for we were heading for a snorkel encounter with a whale shark. Great excitement! We took to the dinghies, something we would get increasingly proficient at during the course of our stay on board. A ten or fifteen minute ride depending on which dinghy you were in got us to the *bagan*. The slower dinghy being rewarded with a small group of Risso's dolphins. Approaching the *bagan* we could see that sharks were being fed and then one swam under the dinghy, completely dwarfing it!

We exited the dinghy very fast in some cases and were soon sharing an aquatic space with these gentle giants. Incredibly we were in the water with five whale sharks! An amazing experience. Keeping out of their way was difficult there being so many but those who made contact reported

gentle nudging. Occasionally the biggest shark hung vertically in the water with its mouth open below the bucket to gorge on fish direct from source. One of the whale sharks had a group of three immature Golden Trevallies living literally at the entrance to its huge mouth and all had a large flock of attendant Remoras. All in all, rather good.



Next we took a long dinghy around Triton Bay to enjoy the excellent karst geomorphology and a few new birds including singing starling and white-breasted woodswallow. The easy highlight though was the close encounter we had with a huge sei whale on the way back to the boat. It was just 100 metres away and gave us a couple of complete breathing sequences to allow identification as we struggled to keep up with it. Back on the boat the villagers came out to collect the permit fees for yesterday's rock art visit.

After a late lunch we headed for nearby Lobo village. Landing here allowed us to check out the village and get some custard-apples and a few birds including our first willie-wagtails. Gathering again at the beach we headed up a river for a short run upstream. Hornbills were evident and our only Zoe's imperial pigeons flew over the river at one point. Dusk came too soon though and we headed back to the *Katharina* for dinner and a lecture by Anastasia on reef fish and creatures.

Overnight we motored along the coast of the Vogelkop peninsula to Kiti Kiti.

Our day started in the water with snorkelling along coast next to the fantastic waterfall that drops from the forest edge into the sea. We found here that the fish were more diverse than yesterday and we were soon enjoying a rich variety of colourful species. Cigar Wrasse and African Coris are both unusually shaped but strongly coloured members of the Wrasse family and we had our first encounter here with the stunning Indo-Pacific Blue Tang a fish that is simply electric-blue. Groups of them hung around coral heads just below the surface so that the light quite literally lit them up. Locals call them the 'stupid fish' because when they hide they stick their heads just a little way into the coral leaving the rest of their brightly coloured bodies entirely visible outside! The aptly-named Clown Triggerfish made a grand entrance and there were relatives around too; Orange-lined, Black, and Pink-tail Triggerfishes. Butterflyfish now came into their own. This beautiful group of fish are very diverse in this region and on some snorkels we'd see fifteen or more species. Here there were Panda, Saddled, Blacklip, Raccoon, Redfin, Blackback, Latticed, Oval-spot, Chevron, and some of the species we'd already seen. A Giant Moray went down very well. Blue-spotted Cornetfish drifted up to our masks and peered in. Looking under ledges Shadowfin Soldierfish lurked and in one spot there was a spectacular Radial Firefish. A gorgeous Yellow Boxfish drifted about fluttering its little fins amongst some more extensive corals where Bluestreak and Blackspot Cleaner Wrasse had set up their feeder stations. They had plenty of visitors - One-spot Rabbitfish, Vermiculated Angelfish, Bleekers and Green-snout Parrotfish, and even both Long-nosed and Stripe-faced Unicornfish. A superb group of powerful-looking Mackerel Tuna cruised through. The variety of Parrotfish out on the coral flats was very impressive with Bullethead, Pacific Longnose, White-spot, Blue-barred and both Tricolor and Bicolor Parrotfish all present. In the open water next to the corals there were large shoals of both Dark-banded and Yellow and Blueback Fusiliers. Other fish noted here were both Masked and Foxface Rabbitfish, Flagtail Rock Cod and the little Freckled Hawkfish. As we moved on the heavy swell (we experienced very little generally) caused a few problems with those that were still adapting to the life at sea...

We took lunch when we arrived at reef north of Kiti-Kiti and many of us took to the sea for more snorkelling. We snorkeled in a little bay with nice coral patches and sandy areas where we could see both Blackpatch and Half-moon Triggerfishes mooching about. A Brown Reticulated Stingray carpeted off out of the reef. We saw many of the same butterflyfish as the morning but this time there was Spot-tailed and the very striking Meyer's Butterflyfishes. The related Threeband Pennantfish was also here and we saw Three-spot and the very well-named Bicolor Angelfish. We were starting to get used to the many brilliantly coloured fish now so time to spend some time with their smaller relatives, the Chromises. Though some of these, such as Blue Devil which was here, have brilliant colours, many are plainer. This afternoon, amongst probably many others we saw Lined Chromis, Bicolor Chromis, Pale Spot Damsel and Scaly Damsel. There were some spectacular groups of anemones and in these found little groups of the rather pugnaous Spinecheek Anemonefish. A Blacktip Reef Shark cruised slowly through the little bay and seeming almost as big (probably because it was very close) was a large black white-spotted Midnight Snapper. Its relatives, Red Snapper, Big-eye and Paddletail Snappers were all noted as well as Redfin Bream and little groups of the distinctive Goldspot Sunbream. Also noted during the snorkel were Bird Wrasse, Yellowtail Tubelip, Yellow-margin Triggerfish, Blue-lined and Orange-banded Surgeonfishes, the lovely Spotted Boxfish and a whole host of Wrasse which we were gradually unravelling the mysteries of identifying - here Dusky, Axilspot, Chiseltooth, Two-tone and Six-bar Wrasse.



The late afternoon was spent chugging towards Pulau Pisang, south of Misool. A journey that was to take all night. In the late afternoon we came across a big gang of streaked shearwaters that crossed the bows heading south. A feeding concentration of cetaceans en route included our only short-finned pilot whales of the trip and perhaps some more exciting species but views were brief and inconclusive sadly. After dinner tonight Kees gave another lecture this time on Wallace and his line.

## 22/2 Pulau Pisang

A strong adverse current meant a late arrival at Pulau Pisang which put the kybosh on an early morning dinghy birding session but we were rocking gently at anchor in time for breakfast. Afterwards we had a great snorkelling session on the reef surrounding these remote islands. I should point out that from now on descriptions of the snorkeling sessions automatically assume that most of the species previously mentioned in this report were seen again and a haul of at least fifteen species of butterflyfish! There was some great coral on this snorkel. All manner of forms and colours from the great hollow 'amphoras' some almost a metre high to great wispy brilliant orange red fans. Tunicates were abundant and colourful and Christmas Tree worms decorated rocky patches with all the colours of Liquorice Allsorts. Anastasia as ever was finding Nudibranchs in the shape of a red flouncy Flabelina and a striking blue, black and white Willian's Sea Slug. As Anastasia and Kees had said the reefs would get better and better as we went up towards Raja Ampat and this was very much the best yet. Huge shoals of colourful fish dazzled around the biggest coral heads. This was the first time we'd seen the elegant Anthiases in numbers – here was the beautiful Threadfin Anthias and lovely Charlotte's Anthias in numbers mixing with all manner of damsels and chromis. Of particular note were the groups of lovely Blue-green Chromis and also some Kuiters' Damsels too. Those that spent some time drifting in the half metre of water on top of the coral reef had the benefit of staggeringly brilliant light and fish so close you could have eaten them! The lovely Speckled Damsel was enjoyed everywhere but here looked amazing, its orange top lined with blue and large blue and black eyespot on the back fin. The stunning blue and orange Regal Damsel mixed with the well-named Neon Damsel and little groups of delicate Lemon Damsels were common. In most parts of the World sergeants are common, but these, the Blacktail Sergeant and the Indo-Pacific Sergeant, were the first we'd noticed on the voyage. Looking down through the corals on the edge we saw huge Green Bumphead Parrotfish drift past and a Scrawled Filefish was quite impressive. Bar-cheeked Trevallies swam past in large groups of shimmering silver. Peacock Grouper was as ever enjoyed and new were Yellow Barred Parrotfish, Javan Rabbitfish, Scythe Triggerfish, Lined Sea



Perch, and Yellow-banded Sweetlips, which were simply huge. And there was a new Butterflyfish, the Spot-naped Butterflyfish, and the related Singular Bannerfish was also new. Tremendous afternoon!

Landing on one of the islands later produced some classic supertramp birds including island whistler, moluccan (white-bibbed) fruit dove, Arafura fantail and lemon-bellied white-eye. Evidence of one of the scrubfowls in the form of a huge nesting mound was exciting but we could not scare up the animals in question.

Our post afternoon snorkelling not nearly so successful due to visibility issues and in the end we hauled up the anchor and headed for Misool. Whilst others snorkelled Phil spent a happy hour on the island again chasing reptiles and birds. After dinner Kees delivered a lecture covering the history and culture of Raja Ampat with a little sidebar on hornbills.

## **23/2      Pulau Wayil, sailing to Kapatcol and time around the village**

We awoke anchored off Pulau Wayil but light rain effectively stopped any birding by tender at dawn as had been planned. Afterwards we cruised to Kapatcol (Misool) and anchoring off the village we indulged in a little snorkelling. The reef was not that exciting looking but the habitat was different enough to offer up a different assortment of fish. Notable among them were some exceptionally large Angelfish notably the huge Six-bar Angelfish, and the Blue-girdled Angelfish was appreciated too. The 'original' Clown Anemonefish was here and careful searching of coral tops revealed some of the smaller fish inhabitants such as Blue-stripe Fangblenny and the Needlespine Coral Goby. There were a number of the rich red Coral Groupers about, and also one or two of the superficially similar Yellow-edged Lyretail, a really rather beautiful fish. We also saw Pearl-scaled Angelfish and Threadfin Butterflyfish.

Later we landed at the village to make arrangements for the morning bird of paradise session which allowed us to be nosey or take a walk behind the village on a trail into disturbed forest. This was quite good for butterflies and birds but we did not have long here sadly. The large white eye-spotted satyrid *Taeneris* butterflies were spotted. Tall trees produced displaying sulphur-crested cockatoos, pinon imperial pigeons, and a hooded butcherbird.

Before dinner Kees delivered a lecture on lesser and king bird of paradises, the targets of our session in the morning to come.

## **24/2      Kapatcol (bird of paradise), snorkelling, relocation to Farfat Hill**

We assembled pre-dawn again for the night-walk into the bird of paradise site above Kaptacol. The team from the village came out in their long boat to guide us to the trail head up a nearby river. We all got wet feet on this one as we had to cross the river several times in the early stages of the walk. Before dawn we were all sitting about waiting for things to happen. First light arrived after half an hour and quickly we heard the first calls from nearby male lesser bird of paradises. But then we heard an ominous drumming on the canopy in the distance. Surely rain was not going to arrive just before the moment of truth! It did! And sadly it completely scuppered our chances of seeing this fantastic bird displaying. Bad luck I guess but hard to take.

Most of us hung around a while in the rain before calling it a day and going to check out the nearby red bird of paradise tree. This was perhaps even more frustrating. Despite the rain the male was present but we could only get glimpses of parts of it occasionally! In the end we dropped down to the waiting boats keenly aware that the tides would soon be against extraction over the sand bars at the river mouth. On the way we had poor views of more species including the dwarf kingfisher, a fast dusky scrubfowl and a monstrous great-billed parrot.

For the rest of the morning we enjoyed great snorkelling along a cliff wall with a spectacular reef drop off and fantastic architecture including some epic barrel sponges. The nudibranchs were superb here and Anastasia worked hard to show us all the splendid blue dragon (*Pteraelidia lanthinia*), quite



common here and a huge favourite. We also saw the extraordinary funeral sea slug, *Jorunna funebris* here too. With the steep drop-off next to the reef we could expect some larger fish to appear and perhaps a turtle or two. Certainly there was a nice Green Turtle in close to the reef at one point. There were some shoals of the large Bluefin Trevally flickering silver and blue at us but most impressive were the speedy and powerful Rainbow Runners that flew by. There were huge groups of Fusiliers. Though each shoal was usually comprised of one or two species these differed from Shoal to shoal and during the course of the snorkel we saw Gold-banded, Lunar, Dark-banded and Yellow & Blueback Fusiliers. Back to the larger fish – there were some half-metre or more sweetlips about. These are seriously chunky fish and here there were both Gold-striped and Indo-Pacific Oriental Sweetlips. We looked under ledges and photographed the Soldierfish this time coming up with three species, namely Big-scale, Scarlet and Latticed Soldierfishes, and there were groups of the oddly-shaped little Blackspot Sweeper lurking in dark corners. The gorgeous Blueface Angelfish drifted along the edge of wall. Back up in the brightly lit coral tops Japanese Damsel and Yellowtail Demoiselle were added to our increasingly impressive damselfish family list along with the beautifully named Reticulate Humbug. Orange Clownfish and Pink Anemonefish vied for anemone space. Tiny species on top included Pixie Hawkfish, the lovely little Redspot Cardinal, the Banda Blenny and Threadless Blenny. A Lemon Shark was seen.





After lunch we relocated to near Farfat hill, another viewpoint set amongst really harsh karst topography. En route more fantastic rock art featuring many of the animals we were becoming familiar with at sea. The walk up the hill produced nurses shark, a turtle and a great view. From the top we watched predatory fish decimate a large shoal of smaller fish in the blue waters below before heading down to the waiting dinghy. Just before the jetty Ian and Peter found a superb pair of birdwings, these *Ornithoptera tithonus*. The female sat plumply upon a leaf

whilst the male maintained a perfect stationary hover just above her. Way to woo.

Before dinner tonight Anastasia delivered a short lecture on the jellyfish we would be swimming amongst in the morning.

## 25/2 Tomolol Bay (jellyfish lake and sacred cave)

A very different day for us today in many ways. Dawn found us anchored up outside of the security zone of a massive pearl farm and we motored in the dinghies for 40 minutes through the farm to get to the start of the short trail that would take us to the jellyfish lake. Kicking off the jetty gently to avoid any disturbance we floated out into the centre of the small lake and in amongst the jellyfish. This was a rather surreal experience.

The beautiful orange lagoon jellyfish (*Mastigias papua*) floated all around us in a range of sizes in a very photogenically appealing fashion. Anastasia showed us the larvae of this species clinging in clusters to rockface vegetation around the edges of the lake. She also showed us the extraordinary upside-down jellyfish (*Cassiopea*) on the bottom of the lake. The diaphanous moon jellyfish (*Aurelia* sp) scarcely got a look-in but added to the ethereal nature of the experience as we floated about.

Next and very much in keeping with the otherness of the day was a chance to swim through a dark sacred cave and what an extraordinary experience this was. With a few head torches strapped on the team floated off into the depths of the cave. It never got completely dark but the torches allowed us to see the cathedral-like high ceiling, festooned with stalactites and the occasional roosting fruit bat. The tide was too high for us to take the far exit so we paddled back slowly the way we had come.

We spent the afternoon relocating by cruising to Pulau Piaynemo. The highlight of the journey was the discovery of a dead whale complete with a great pack of terns and a single streaked shearwater. The tern flock included a single black noddy, as well as white-winged and common terns.

Before dinner tonight we were treated to the second installment of Kee's lecture on bird of paradise, this time on the Waigeo speciality species; red and wilson's bird of paradise.



A short pre-dawn dinghy ride took us to the steps that took us to an island-top vantage point for the dawn view from Pulau Piaynemo. This proved to be great for birds although the sun failed to turn up for the hoped-for photographs! A nearby dead tree filled with fantastic species. First up was a bruising spice imperial pigeon that was just desperate to be photographed. The tree soon filled with loafing singing starlings and occasional diminutive claret-breasted fruit doves and white-bellied cuckooshrikes put in an appearance. Our first ospreys gave close flybys and both Brahminy kite and white-bellied sea-eagles put on a show. Puttering back on the last dinghy the diehard birders were treated to great views of blue rock-thrush.

Breakfast and then a quick relocation saw us anchoring off a small atoll, the so-called Manta Sandy, famed as a cleaning station for manta rays. Snorkelling on Manta Sandy did indeed produce views of Giant Oceanic Manta Ray for most but some of us had to make do with just the superb atoll reef snorkelling. Most also saw turtles either on the reef or in depths below – both Hawksbill and Green Turtles were noted and some had very nice close encounter with them. Big fish abounded. A Black-tip Reef Shark cruised through and a Blue-spotted Ribbon-tail Ray sand-hopped away. There were huge shoals of Fusiliers including all the usual species and here a new one, the Black-tip Fusilier. We noted small groups of Yellow-tail Blue Snapper pretending to be Fusiliers! There were several of the majestic Titan Triggerfish about as well as the large and strangely proportioned Scrawled Filefish. Parrotfish were many and particularly varied at this spot, new ones being Bower's and Dark-capped Parrotfish. There was also an exceptional variety of Rabbitfish with the usual Masked and Foxface Rabbitfishes joined by Gold-spotted and Dusky Rabbitfishes. There were so many little fish in the shallows. Blacktail Humbugs danced atop corals and a crazy variety of Damsels and Chromis including many by now familiar species as well as new ones like Blackvent Damsel, the brilliant Blue & Gold Damsel, lovely Bluespot Damsel, and the even more gorgeous Bluestreak Damsel. There were groups of Dark Surgeonfish and Orange-socket Surgeonfish, and some beautiful Wrasse including Pin-striped Wrasse and the Blackeye Thicklip. Groups of fabulous Golden Spadefish hung in the water like kites. Also new were Black-banded Sea Perch and Three-striped Whiptail.

Sailing on to Waigeo some of us saw a huge breaching manta ray flying but despite considerable effort not much else! Arriving we were greeted by Begannes and our Waigeo bird of paradise team and they took us for a walk in the woods behind their homestay. It did not take long before we were looking at a superb rufous-bellied kookaburra. Phil and Peter got lucky on the walk up the hill later when the rest of the team flushed a pheasant pigeon for them. Arriving at the red bird of paradise lek we sat down and waited. Our guide started imitating the bird and as the afternoon drew on we started to hear the male responding. Then with a rush of wings it was there in front of us and sitting beautifully for photographs. What a bird! Dropping back down we bumped into another bird of paradise, the rather drab velvet-mantled manucode, which was occupying a tree that was also hosting our only pink-spotted fruit doves of the trip. A successful afternoon session. We yomped back down the hill, the anticipation preceding the coming morning session bubbling away nicely.

Dinner was preceded by another lecture by Anastasia on reef creatures.

27/2

## Sapokren (Waigeo), Pulau Friwin and Pulau Mioskon

We all assembled pre-dawn on deck and Begannes was there with a trusty crew to take us to the trail-head near the village. Begannes pleaded illness and left us in charge of what may well have



been the B team for this morning's activity. The near hides for the Wilson's bird of paradise were occupied by other teams so we had to walk a long way. En route though we were delighted to find a superb Waigeo cuscus up a tree but we were less delighted by our guides knowledge of the paths further away from their village...

Eventually though and just in the nick of time we were squeezing into a ramshackle hide and waiting with baited breath as the guides repaired it around us. A male Wilson's bird of paradise could be heard in the trees above us. Had we

disturbed it? Would it come down into the display ground? Thankfully the answer was yes although the tension was considerable for some ten minutes before it put us out of our misery!

What a bird. It is hard to describe adequately what it is like to gaze upon this avian jewel. Not only is it an incredibly colourful species with an extraordinary lekking behaviour but you cannot help but feel a connection to Wallace, Attenborough and other heroic figures who have all made the same pilgrimage to see this fantastic bird. After watching this male we moved a short distance to look at another and then trundled home at various speeds. Going slow the birding team was pleased to see a longbill and the pitohui and other birds were spotted too including a fine pair of Gurney's eagles.



Back on board we lunched and then headed to the nearby Pulau Friwin for some snorkeling. In fact we had two sessions here, one from the boat and another later one as dusk approached from the land. It is a measure of just how amazing the snorkeling is here that we probably saw more new species for the trip on this last afternoon in the water than we had at any previous stage of the tour! It was particularly excellent for anemone fish



with many if not all of the previously encountered species and Yellow Clown Fish which was a new one. Of course there were so many Butterflyfish here. We saw at least twenty species, new one being two rather lovely species, Ornate Butterflyfish and Eight-band Butterflyfish, and there was also the closely related Golden-girdled Coralfish. Blue Blanquillos wriggled their way across the shallow parts near the beach and another Blue-spotted Ribbon-tail Ray batted away. I haven't got close to going through all my pictures of

damsels and chromis from this end of the tour but certainly new here were Dusky, Philippine and Ternate Chromises as well as Arnaz's Damselfish and Charcoal Damsel. Little flocks of Razorfish swam in the characteristically vertical fashion, a really strange sight. Vanikoro Sweeper lurked in recesses whilst the new species kept coming above them - Twin-spot Snapper, One-spot Sea Perch, Rough Flutemouth and the really spotty Blue-spotted Rock Cod. More prosaic species include Topsail Drummer, Longfin Emperor, Big-eyed Bream, Shoulder-bar Soldierfish and lots of Goatfish including Indian and Manybar Goatfishes which were new for us. Six-banded and Yellow-bar Parrotfishes were both strikingly marked species, and there were new *Acanthuridae* too in the shape of Brown, Striated and Mimic Surgeonfishes. The elegantly two-dimensional Sailfin Tang was much appreciated by those that saw it. There were plenty of gorgeous Wrasse including Zigzag Wrasse and Silver-streaked Wrasse. The Barred Soapfish hardly deserves such a boring name it is a most amazingly marked yellow and black fish. In slightly deeper water were Orange-spotted and amazing Bludger Trevallies, and the amazing Longfin Spadefish serenely sailed past in small groups. One felt quite out of breath at the end of the snorkel!

Snorkelling done we headed for a fruit bat roost finale at Pulau Mioskon. As dusk drew in the huge fruit bats started to get busy and eventually started to leave for the fruit trees of Waigeo. Soon countless fruit bats headed overhead in a steady stream a nice sight on a warm night at sea. That left a big farewell party, the crew joined us for dinner and we sang and danced for a while and thanked them all for delivering a superb tour and looking after us so well.

After the party it was back to work for the crew as we motored through the night to Sorong through some rather lumpy seas, dropping anchor at 0200. We all had our sea-legs by now though and most of us slept through it all.



## 28/2 Sorong

Those who woke early to go birding this morning found themselves at anchor in Sorong roads and watching a terrible fire on nearby Pulau Doom as they drank their coffee. The peace and calm onboard was in very stark contrast to the noise and activity on shore as desperate people either fought the noisy blaze or tried to get out of its path. Eventually we were all fuelled and assembled for a dinghy shuttle to our waiting taxi fleet.

The short drive to Hutong Lindu got us to the site just after dawn and it should have been very good for birding... But this morning overcast conditions made for an incredibly slow start. Birds did eventually show up though. A large congregation of orange-fronted fruit doves was nice. A singing black butcherbird constituted our only sighting of the tour. Ian worked hard picking up red-cheeked parrot, yellow-capped pygmy parrot, Pacific baza, black-sided robin and black sunbird.

Those chasing smaller invertebrate prey did rather well in the cooler conditions securing some nice images of the butterflies and dragonflies that were on the wing. But all too soon it was time to return to the boat for an early meal and the transfer to the airport and the start of our long journey home.



The trip was over but what an extraordinary journey we had undertaken and one that has got more than a few of us addicted to tropical reef snorkelling.

## Birds recorded in West Papua between 18<sup>th</sup> and 28<sup>th</sup> February

Dusky megapode	<i>Megapodius freycinet</i>	One shot overhead on the walk down from the Kapatcol Bird of paradise site.
White-throated pigeon	<i>Columba vitiensis</i>	Two overhead at Kapatcol (Misool).
Brown cuckoo dove	<i>Macropygia amboinensis</i>	A few at Kaimana and Sorong.
Great cuckoo dove	<i>Rheinwardtoena reinwardti</i>	One at Kaimana and another on Waigeo.
Pheasant pigeon	<i>Otidiphaps nobilis</i>	One flushed into flight by the rest of the team for Peter and Phil at Sapokren on the afternoon visit.
Spice imperial pigeon	<i>Ducula myristicivora</i>	Small numbers seen very well at Pulau Piaynemo at dawn.
Pinon imperial pigeon	<i>Ducula pinon</i>	Widespread in mainland forest.
Banded imperial pigeon	<i>Ducula zoeae</i>	Four in flight as we motored up the Lobo river.
Pied imperial pigeon	<i>Ducula bicolor</i>	widespread, often seen from the boat.
[Wompoo fruit dove]	<i>Ptilinopus magnificus</i>	Heard only at Kapatcol (Misool), Sapokren (Waigeo).
Pink-spotted fruit dove	<i>Ptilinopus perlatus</i>	Three at Sapokren (Waigeo).
Orange-fronted fruit dove	<i>Ptilinopus aurantiifrons</i>	Small numbers on the last morning at Sorong.
Moluccan fruit dove	<i>Ptilinopus prasinorrhous</i>	Small numbers on the islet visited in Pisang archipelago. Formerly considered part of <i>Ptilinopus rivoli</i> .
Claret-breasted fruit dove	<i>Ptilinopus viridis</i>	Small numbers at Pulau Piaynemo at dawn.
Orange-bellied fruit dove	<i>Ptilinopus iozonus</i>	A few at Kaimana.
[Papuan frogmouth]	<i>Podargus papuensis</i>	A few heard at forested sites before dawn.
[Large-tailed nightjar]	<i>Caprimulgus macrurus</i>	Heard at Pulau Piaynemo before dawn.
Glossy swiftlet	<i>Collocalia esculenta</i>	Kaimana.
Uniform swiftlet	<i>Aerodramus vanikorensis</i>	Kaimana
[Brush cuckoo]	<i>Cacomantis variolosus</i>	Heard on Misool and Waigeo.
Streaked shearwater	<i>Calonectris leucomelas</i>	Big flock encountered at dusk en route to Pisang archipelago. Two as we left Pisang. Thereafter a few scattered records.
[Javan pond heron]	<i>Ardeola speciosa</i>	A few on the airport grasslands at Ujung Pandang (Sulawesi).
Striated heron	<i>Butorides striata</i>	Lobo river and Kapatcol.
Great-billed heron	<i>Ardea sumatrana</i>	One briefly on a small islet offshore from the jellyfish pond.
Pacific reef egret	<i>Egretta sacra</i>	Widespread.
Lesser frigatebird	<i>Fregata ariel</i>	Frequently encountered.
Greater frigatebird	<i>Fregata minor</i>	A few over the harbour at Kaimana whilst we waited for our clearance paperwork.
Brown booby	<i>Sula leucogaster</i>	Occasional singles and twos at sea, perhaps 6-7 in total.
Whimbrel	<i>Numenius phaeopus</i>	Four on the sandbar near the hotel in Kaimana
Far eastern curlew	<i>Numenius madagascariensis</i>	Four on the sandbar near the hotel in Kaimana.
Common sandpiper	<i>Actitis hypoleucos</i>	Kaimana.
Red-necked phalarope	<i>Phalaropus lobatus</i>	Occasionally encountered at sea.
Black noddy	<i>Anous minutus</i>	One feeding in the tern flock over the dead whale on day 7.
Sooty tern	<i>Onychoprion fuscatus</i>	A few seen feeding around the dead whale mentioned above.

Bridled tern	<i>Onychoprion anaethetus</i>	Small numbers feeding over the dead whale on day 7.
White-winged tern	<i>Chlidonias hybridus</i>	A few as we motored along the coast of Misool on day 7.
Common tern	<i>Sterna hirundo</i>	Good numbers as we motored along the coast of Misool on day 7.
Crested tern	<i>Thalasseus bergii</i>	Frequently encountered at sea and in harbours.
Osprey	<i>Pandion haliaetus</i>	Scattered records during the last half of the trip.
Long-tailed honey buzzard	<i>Henicopernis longicauda</i>	A poor view along the Rio Lobo.
Pacific baza	<i>Aviceda subcristata</i>	Ian and the birders had two at Sorong on the last morning.
Gurney's eagle	<i>Aquila gurneyi</i>	One on the first visit to Kaimana. Pair overhead at Sapokren.
White-bellied sea-eagle	<i>Haliaeetus leucogaster</i>	Frequently encountered.
Brahminy kite	<i>Haliastur indus</i>	Widespread.
[Papuan boobook]	<i>Uroglaux dimorpha</i>	Heard before dawn at Sapokren.
Papuan hornbill	<i>Rhyticeros plicatus</i>	Widespread.
Variable dwarf kingfisher	<i>Ceyx lepidus</i>	One shot overhead on the way down from the Kapatcol Bird of paradise site.
[Yellow-billed kingfisher]	<i>Syma torororo</i>	Frequently heard pre-dawn in the forest.
Collared kingfisher	<i>Todiramphus chloris</i>	Seen well on Pulau Pisang. Others heard elsewhere
Rufous-bellied kookaburra	<i>Dacelo gaudichaud</i>	Common low down at Sapokren (Waigeo).
Palm cockatoo	<i>Probosciger aterrimus</i>	Small numbers in flight on both visits to Kaimana.
Sulphur-crested cockatoo	<i>Cacatua galerita</i>	Widespread.
Yellow-capped pygmy parrot	<i>Micropsitta keiensis</i>	Sorong.
Eclectus parrot	<i>Eclectus roratus</i>	Kaimana, Waigeo and Sorong.
Red-cheeked parrot	<i>Geoffroyus geoffroyi</i>	Sorong.
Great-billed parrot	<i>Tanygnathus megalorhynchos</i>	One on the walk back down from the Kapatcol Bird of paradise site. Much better views the next day on Pulau Piaynemo.
Black lory	<i>Chalcopsitta atra</i>	Small numbers (always in flight) at Kaimana and Kapatcol.
Coconut lorikeet	<i>Trichoglossus haematodes</i>	Kaimana and Sapokren (Waigeo). The rainbow lorikeet has recently been split into a number of species.
Large fig parrot	<i>Psittaculirostris desmarestii</i>	Kaimana and Kapatcol (the latter the distinctive Misool race <i>blythii</i> ).
[Papuan pitta]	<i>Pitta macklotii</i>	Heard at Kapatcol. A recent split from <i>erythrogaster</i> .
Emperor fairywren	<i>Malurus cyanocephalus</i>	Small numbers of this stunning little bird, only on the mainland at Kaimana and Sorong.
Mimic honeyeater	<i>Meliphaga analoga</i>	Scattered records in lowland forest both on the mainland and the islands.
Scrub honeyeater	<i>Microptilotis albonotatus</i>	Scattered records in lowland forest both on the mainland and the islands.
Meyer's friarbird	<i>Philemon meyeri</i>	Scattered records in lowland forest on the mainland.
Helmeted friarbird	<i>Philemon buceroides</i>	Widespread, the New Guinea subspecies are sometimes considered to represent a full species.
Yellow-bellied gerygone	<i>Gerygone chrysogaster</i>	one at Sorong
Yellow-bellied longbill	<i>Toxorhamphus novaeguineae</i>	One hyperactive individual at Sapokren (Waigeo).



White-breasted woodswallow	<i>Artamus leucorhynchus</i>	A few in Triton Bay. Some came on board when we were parked off the fruit bat roost island on the last night.
Boyer's cuckooshrike	<i>Coracina boyeri</i>	Seen in very small numbers at Kaimana on the morning visit.
White-bellied cuckooshrike	<i>Coracina papuensis</i>	Kaimana and Pulau Piaynemo.
Grey-headed cicadabird	<i>Edolisoma schisticeps</i>	A few in a fruiting tree at Kaimana on the second visit.
Island whistler	<i>Pachycephala phaionota</i>	At least one bird on Pulau Pisang.
Raja Ampat pitohui	<i>Pitohui cerviniventris</i>	One at Sapokren for Phil only. Recently split from variable pitohui.
Brown oriole	<i>Oriolus szalayi</i>	Small numbers on both visits to km14 at Kaimana.
Black butcherbird	<i>Melloria quoyi</i>	One at Sorong on the last morning.
Hooded butcherbird	<i>Cracticus cassicus</i>	Widespread on the mainland.
Willie-wagtail	<i>Rhipidura leucophrys</i>	Recorded at Lobo and on Waigeo.
Arafura fantail	<i>Rhipidura dryas</i>	Small numbers on Pulau Pisang.
Brown-headed crow	<i>Corvus fuscicapillus</i>	Three on the way down from the the Wilson's Bird of paradise site (Sapokren).
Grey crow	<i>Corvus tristis</i>	An excellent species. Small numbers at Kaimana
Torresian crow	<i>Corvus orru</i>	Frequently encountered along the coast.
Glossy-mantled manucode	<i>Manucodia ater</i>	One at Sapokren.
King bird-of-paradise	<i>Cicinnurus regius</i>	Very poor views of a male in the rain at Kapatcol (Misool).
Wilson's bird-of-paradise	<i>Cicinnurus respublica</i>	Superb views of two different displaying males at Sapokren (Waigeo).
Red bird-of-paradise	<i>Paradisaea rubra</i>	Single splendid male on our afternoon session at Sapokren.
[Lesser bird-of-paradise]	<i>Paradisaea minor</i>	Heard only when we were denied a displaying bird by untimely rain on Misool.
Black-sided robin	<i>Poecilodryas hypoleuca</i>	One at Sorong on the last morning.
Olive-crowned flowerpecker	<i>Dicaeum pectorale</i>	Very small numbers at Kaimana and Sorong.
Black sunbird	<i>Leptocoma aspasia</i>	Sorong.
Olive-backed sunbird	<i>Cinnyris jugularis</i>	Widespread.
House sparrow	<i>Passer domesticus</i>	Sorong.
Tree sparrow	<i>Passer montanus</i>	Kaimana and Sorong.
Pacific swallow	<i>Hirundo tahitica</i>	Scattered records.
Barn swallow	<i>Hirundo rustica</i>	Scattered records.
Lemon-bellied white-eye	<i>Zosterops chloris</i>	Small numbers on Pulau Pisang.
Yellow-faced myna	<i>Mino dumontii</i>	A few at Kaimana and Sapokren.
Golden myna	<i>Mino anais</i>	Very small numbers recorded daily at Kaimana.
Singing starling	<i>Aplonis cantoroides</i>	Scattered records, mostly on offshore islets but large numbers on the last day at Sorong.
Blue rock thrush	<i>Monticola solitarius</i>	Two at Pulau Piaynemo.

## Mammals recorded in West Papua between 18<sup>th</sup> and 28<sup>th</sup> February

Brown Dorcopsis	<i>Dorcopsis muelleri</i>	One on the nightwalk to the Bird of paradise site on Misool at Kapatcol. Identified?
Waigeo cuscus	<i>Spilocuscus papuensis</i>	One on the pre-dawn stroll to the Bird of paradise site at Sapokren.
fruit bat sp		Large roost enjoyed on the last evening coming from a small island south of Waigeo.
Sei whale	<i>Balaenoptera borealis</i>	One very close on the Triton Bay rib ride. A trip highlight.
Bryde's whale	<i>Balaenoptera edeni</i>	At least two in the first couple of hours sailing as we approached the first rock paintings near Tumberawasi.
Long-snouted spinner dolphin	<i>Stenella longirostris</i>	Our most frequently encountered dolphin and very occasionally we got bow-riding.
Bottlenose dolphin	<i>Tursiops truncatus</i>	Quite common but remained rather aloof. Sometime cruising around the boat though making it easier to photograph than other species.
Risso's dolphin	<i>Grampus griseus</i>	Ian's small rib had a group whilst motoring over to the whale shark bagan on day 2.
Indopacific humpbacked dolphin	<i>Sousa plumbea</i>	Just one brief glimpse for Phil from the boat.

## Odonata recorded in West Papua between 18<sup>th</sup> and 28<sup>th</sup> February

<i>Nososticta cf auriantica</i>	This known but undescribed species was seen in a stream at Kaimana. It was originally only known from Yapen Island on the north coast so this record may constitute a range extension. But also recorded at Waisai (Waigeo) and Sorong which suggests it is widespread in the Vogelkop region.
<i>Agriocnemis pygmaea</i>	A few on the last morning at Sorong.
<i>Archibasis sp.</i>	The <i>Archibasis</i> at Waisai was an undescribed species.
<i>Ceriagrion inaequale</i>	Waisai, on a stream where it was a surprise. Are there previous records for Waigeo?
<i>Xiphiagrion cyanomelas</i>	A male near Waisai.
<i>Brachydiplax duivenbodei</i>	Waisai and Sorong.
<i>Diplacodes trivialis</i>	One at Sorong.
<i>Macrodiplax cora</i>	Single male at Kaimana.
<i>Nannophya pygmaea</i>	A single male at Sorong.
<i>Neurothemis ramburi</i>	Kaimana.
<i>Neurothemis stigmatizans</i>	Kaimana, Sapokren and Sorong.
<i>Orthetrum serapia</i>	A few at Kaimana.
<i>Pantala flavescens</i>	Widespread on land and sometimes seen at sea.
<i>Tholymis tillarga</i>	Two at dawn at Sorong.
<i>Tramea eurybia</i>	A few photographed in flight at Kaimana.

## Marine Fish recorded in West Papua between 18<sup>th</sup> and 28<sup>th</sup> February

### RHINCODONTIDAE

*Rhincodon typus* Whale Shark Bitsyaru Bay

### GINGLYMOSTOMATIDAE

*Ginglymostoma cirratum* Nurse Shark seen from Farfat Hill!

### CARCHARHINIDAE

*Carcharhinus limbatus* Blacktip Reef Shark Several sightings

*Negaprion brevirostris* Lemon Shark Kapatcol

### DASYATIDIDAE

*Dasyatis leylandi* Brown Reticulated Stingray Kiti Kiti

*Taeniura lymma* Blue-spotted Ribbontail Ray Manta Sandy & Pulau Friwin

### MOBULIDAE

*Mobula birostris* Giant Oceanic Manta Ray Manta Sandy and in the channel  
Near there

### MURAENIDAE

*Gymnothorax javanicus* Giant Moray Kiti Kiti

### SYNODONTIDAE

*Synodus dermatogenys* Two-spot Lizardfish Near Namatote

### HOLOCENTRIDAE

*Myripristis adusta* Shadowfin Soldierfish Common

*Myripristis berndti* Big-scale Soldierfish Kapatcol

*Myripristis kuntzei* Shoulder-bar Soldierfish Palau Friwin

*Myripristis pralinia* Scarlet Soldierfish Kapatcol

*Myripristis violacea* Lattice Soldierfish Common

*Sargocentron caudimaculatum* Tail-spot Squirrelfish Common

### FISTULARIIDAE

*Fistularia commersonii* Blue-spotted Cornetfish Common

*Fistularia petimba* Rough Flutemouth Pulau Friwin

### CENTRISCIDAE

*Aeoliscus strigatus* Razorfish Pulau Friwin

### SYNGNATHIDAE

Pipefish Nigel photographed Pulau  
Friwin

### EXOCESTIDAE

*Exocoetus spp* Flying Fish At least two species seen –  
difficult to identify unless in the  
hand!

### SCORPAENIDAE

*Pterois radiata* Radial Firefish Kiti Kiti

### ISTIOPHORIDAE

*Istiophorus platypterus* Indo-Pacific Sailfish At least one in Kaimana Bay

### SERRANIDAE

*Anyperodon leucogrammicus* White-lined Rock Cod Near Namatote

*Cephalopholis argus* Peacock Grouper Common



<i>Cephalopholis cyanostigma</i>	Blue-spotted Rock Cod	Pulau Friwin
<i>Cephalopholis miniata</i>	Coral Grouper	Common
<i>Cephalopholis urodeta</i>	Flagtail Rock Cod	Kiti Kiti
<i>Diploprion bifascitum</i>	Barred Soapfish	Palau Friwin. Highly distinctive bright yellow fish with black bars
<i>Pseudanthias charleneae</i>	Charlene's Anthias	Pulau Pisang
<i>Pseudanthias huchtii</i>	Threadfin Anthias	Common north of Misool
<i>Variola louti</i>	Yellow-edged Lyretail	Kapatcol
<b>CIRRHITIDAE</b>		
<i>Cirrhitichthys oxycephalus</i>	Pixie Hawkfish	Kapatcol
<i>Paracirrhites forsteri</i>	Speckled Hawkfish	Common
<b>TERAPONTIDAE</b>		
<i>Terapon jarbua</i>	Crescent Grunter	Kaimana
<b>APOGONIDAE</b>		
<i>Ostorhinchus parvulus</i>	Redspot Cardinal	Frequent north of Misool
<b>MALACANTHIDAE</b>		
<i>Malacanthus latovittatus</i>	Blue Blanquillo	Near Namatote and Pulau Friwin
<b>CARANGIDAE</b>		
<i>Carangoides bajad</i>	Orange-spotted Trevally	Pulau Friwin
<i>Carangoides gymnostethus</i>	Bludger Trevally	Pulau Friwin
<i>Carangoides plagiotaenia</i>	Bar-cheeked Trevally	Pulau Pisang
<i>Caranx melampygus</i>	Bluefin Trevally	Kapatcol
<i>Elagatis bipinnulata</i>	Rainbow Runner	Kapatcol
<i>Gnathanodon speciosus</i>	Golden Trevally	Bitsyaru Bay – in the Whale Sharks mouth!
<b>LUTJANIDAE</b>		
<i>Lutjanus biguttatus</i>	Twin-spot Snapper	Pulau Friwin
<i>Lutjanus bohar</i>	Red Snapper	Common
<i>Lutjanus decussatus</i>	Lined Sea Perch	Frequent
<i>Lutjanus gibbus</i>	Paddletail Snapper	Frequent
<i>Lutjanus lutjanus</i>	Big-eye Snapper	Kiti Kiti
<i>Lutjanus monostigma</i>	One-spot Sea Perch	Pulau Friwin
<i>Lutjanus semicinctus</i>	Black-banded Sea Perch	Manta Sandy
<i>Macolor macularis</i>	Midnight Snapper	Juveniles at several localities
<i>Paracaesio xanthura</i>	Yellow-tail Blue Snapper	Manta Sandy
<b>CAESIONIDAE</b>		
<i>Caesio caerulaurea</i>	Gold-banded Fusilier	Frequent
<i>Caesio lunaris</i>	Lunar Fusilier	Frequent
<i>Caesio teres</i>	Yellow and Blueback Fusilier	Common
<i>Pterocaesio digramma</i>	Black-tip Fusilier	Manta Sandy
<i>Pterocaesio tile</i>	Dark-banded Fusilier	Frequent
<b>HAEMULIDAE</b>		
<i>Plectorhinchus chrysotaenia</i>	Gold-striped Sweetlips	Kapatcol

<i>Plectorhinchus lineatus</i>	Yellow-banded Sweetlips	scattered
<i>Plectorhinchus vittatus</i>	Indian Ocean Oriental Sweetlips	Scattered
<b>LETHRINIDAE</b>		
<i>Gnathodentex aureolineatus</i>	Goldspot Sunbream	Frequent
<i>Lethrinus erythropterus</i>	Longfin Emperor	Pulau Friwin
<i>Monotaxis grandoculis</i>	Big-eye Bream	Pulau Friwin
<i>Monotaxis heterodon</i>	Redfin Bream	Common
<b>NEMIPTERIDAE</b>		
<i>Pentapodus trivittatus</i>	Three-striped Whiptail	Manta Sandy
<i>Scolopsis lineata</i>	Striped Monocle Bream	Common
<b>MULLIDAE</b>		
<i>Mulloidichthys flavolineatus</i>	Yellowstripe Goatfish	Frequeny
<i>Parupeneus barberinus</i>	Dash-and-Dot Goatfish	Common
<i>Parupeneus crassilabris</i>	Double-bar Goatfish	Common
<i>Parupeneus indicus</i>	Indian Goatfish	Pulau Friwin
<i>Parupeneus multifasciatus</i>	Manybar Goatfish	Pulau Friwin
<b>PEMPHERIDAE</b>		
<i>Pempheris oualensis</i>	Blackspot Sweeper	Kapatcol
<i>Pempheris vanicolensis</i>	Vanikoro Sweeper	Pulau Friwin
<b>KYPHOSIDAE</b>		
<i>Kyphosus cinerascens</i>	Topsail Drummer	Tomolol and Pulau Friwin
<b>CHAETODONTIDAE</b>		
<i>Chaetodon adiergastos</i>	Panda Butterflyfish	Frequent
<i>Chaetodon auriga</i>	Threadfin Butterflyfish	Kapatcol
<i>Chaetodon baronessa</i>	Eastern Triangular Butterflyfish	Widespread
<i>Chaetodon citrinellus</i>	Speckled Butterflyfish	Namatote and Kiti Kiti
<i>Chaetodon ephippium</i>	Saddled Butterflyfish	Widespread
<i>Chaetodon kleinii</i>	Blacklip Butterflyfish	Widespread
<i>Chaetodon lunula</i>	Raccoon Butterflyfish	Widespread
<i>Chaetodon lunulatus</i>	Redfin Butterflyfish	Widespread
<i>Chaetodon melannotus</i>	Blackback Butterflyfish	Scattered
<i>Chaetodon meyeri</i>	Meyer's Butterflyfish	Widespread
<i>Chaetodon ocellicaudus</i>	Spot-tail Butterflyfish	Widespread
<i>Chaetodon octofasciatus</i>	Eight-banded Butterflyfish	Pulau Friwin
<i>Chaetodon ornatissimus</i>	Ornate Butterflyfish	Pulau Friwin
<i>Chaetodon oxycephalus</i>	Spot-nape Butterflyfish	Pulau Pisang
<i>Chaetodon rafflesii</i>	Latticed Butterflyfish	Scattered
<i>Chaetodon speculum</i>	Oval-spot Butterflyfish	Widespread
<i>Chaetodon trifascialis</i>	Chevron Butterflyfish	Widespread
<i>Chaetodon ulietensis</i>	Pacific Double-saddled Butterflyfish	Pulau Pisang and Kapatcol
<i>Chaetodon vagabundus</i>	Vagabond Butterflyfish	Widespread
<i>Coradion chrysozonus</i>	Golden-girdled Coralfish	Pulau Friwin
<i>Heniochus chrysostomus</i>	Threeband Pennantfish	Kiti Kiti
<i>Heniochus singularius</i>	Singular Bannerfish	Pulau Pisang

<i>Heniochus varius</i>	Horned Bannerfish	Widespread
<b>POMACANTHIDAE</b>		
<i>Apolemichthys trimaculatus</i>	Threespot Angelfish	Kiti Kiti
<i>Centropyge bicolor</i>	Bicolor Angelfish	Widespread
<i>Centropyge vrolikii</i>	Pearl-scaled Angelfish	Kapatcol
<i>Chaetodontoplus mesoleucus</i>	Vermiculated Angelfish	Scattered
<i>Pomacanthus navarchus</i>	Blue-girdled Angelfish	Kapatcol
<i>Pomacanthus sexstriatus</i>	Sixbar Angelfish	Kapatcol
<i>Pomacanthus xanthometopon</i>	Blueface Angelfish	Kapatcol
<i>Pygoplites diacanthus</i>	Regal Angelfish	Widespread
<b>POMACENTRIDAE</b>		
<i>Abudefduf lorenzi</i>	Blacktail Sergeant	Pulau Pisang
<i>Abudefduf vaigiensis</i>	Indo-Pacific Sergeant	Scattered
<i>Amblyglyphidodon curacao</i>	Staghorn Damsel	Kiti Kiti
<i>Amphiprion chrysopterus</i>	Orange-fin Anemonefish	Kiti Kiti
<i>Amphiprion clarkii</i>	Yellowtail Clownfish	Scattered
<i>Amphiprion ocellaris</i>	Clown Anemonefish	Kapatcol and northwards
<i>Amphiprion percula</i>	Orange Clownfish	Kapatcol and Pulau Friwin
<i>Amphiprion perideraion</i>	Pink Anemonefish	Kapatcol
<i>Amphiprion sandaracinos</i>	Yellow Clownfish	Pulau Friwin
<i>Chromis caudalis</i>	Dusky Chromis	Pulau Friwin
<i>Chromis lineata</i>	Lined Chromis	Scattered
<i>Chromis margaritifer</i>	Bicolor Chromis	Frequent
<i>Chromis scotochiloptera</i>	Philippines Chromis	Pulau Friwin
<i>Chromis ternatensis</i>	Ternate Chromis	Pulau Friwin
<i>Chromis viridis</i>	Blue-green Chromis	Scattered
<i>Chromis xanthura</i>	Pale-tail Chromis	Scattered
<i>Chrysiptera arnazae</i>	Arnaz's Damsel	Pulau Friwin
<i>Chrysiptera chrysopoecilus</i>	Pale-spot Damsel	Kiti Kiti
<i>Chrysiptera cyanea</i>	Blue Devil	Widespread
<i>Chrysiptera hemicyanea</i>	Azure Damsel	Widespread
<i>Chrysiptera kuiteri</i>	Kuiter's Damsel	Pulau Pisang and northwards
<i>Dascyllus melanurus</i>	Blacktail Humbug	Manta Sandy
<i>Dascyllus reticulatus</i>	Reticulate Humbug	Widespread
<i>Dischistodus melanotus</i>	Blackvent Damsel	Manta Sandy
<i>Neoglyphidodon melas</i>	Black Damsel	Widespread
<i>Neoglyphidodon nigroris</i>	Blue & Gold Damsel	Manta Sandy
<i>Neoglyphidodon oxyodon</i>	Bluestreak Damsel	Manta Sandy
<i>Neopomacentrus bankieri</i>	Japanese Damsel	Kapatcol
<i>Neopomacentrus cyanomos</i>	Regal Damsel	Pulau Pisang
<i>Neopomacentrus nemurus</i>	Yellowtail Demoiselle	Kapatcol
<i>Plectroglyphidodon dickii</i>	Dick's Damsel	Kiti Kiti
<i>Pomacentrus bankanensis</i>	Speckled Damsel	Widespread
<i>Pomacentrus brachialis</i>	Charcoal Damsel	Pulau Friwin
<i>Pomacentrus coelestis</i>	Neon Damsel	Scattered

<i>Pomacentrus grammorhynchus</i>	Blue-spot Damselfish	Manta Sandy
<i>Pomacentrus lepidogenys</i>	Scaly Damsel	Scattered
<i>Pomacentrus moluccensis</i>	Lemon Damsel	Widespread
<i>Pomacentrus tripunctatus</i>	Threespot Damsel	Pulau Friwin
<i>Premnas biaculeatus</i>	Spinecheek Anemonefish	Kiti Kiti
<b>LABRIDAE</b>		
<i>Bodianus mesothorax</i>	Split-level Hogfish	Widespread
<i>Cheilio inermis</i>	Cigar Wrasse	Kiti Kiti
<i>Coris gaimard</i>	African Coris	Kiti Kiti
<i>Diproctacanthus xanthurus</i>	Yellowtail Tubelip	Widespread
<i>Gomphosus varius</i>	Bird Wrasse	Scattered
<i>Halichoeres hortulanus</i>	Checkerboard Wrasse	Widespread
<i>Halichoeres marginatus</i>	Dusky Wrasse	Scattered
<i>Halichoeres melanurus</i>	Pin-striped Wrasse	Manta Sandy & Pulau Friwin
<i>Halichoeres podostigma</i>	Axilspot Wrasse	Scattered
<i>Halichoeres scapularis</i>	Zigzag Wrasse	Pulau Friwin
<i>Hemigymnus melapterus</i>	Blackeye Thicklip	Manta Sandy
<i>Labroides bicolor</i>	Bluestreak Cleaner Wrasse	Widespread
<i>Labroides pectoralis</i>	Blackspot Cleaner Wrasse	Widespread
<i>Pseudodax moluccanus</i>	Chisel-tooth Wrasse	Kiti Kiti
<i>Stethojulis strigiventer</i>	Silver-streaked Wrasse	Pulau Friwin
<i>Thalassoma amblycephalum</i>	Two-tone Wrasse	Kiti Kiti
<i>Thalassoma hardwicke</i>	Sixbar Wrasse	Scattered
<i>Thalassoma janseni</i>	Jansen's Wrasse	Namatote
<b>SCARIDAE</b>		
<i>Bolbometopon muricatum</i>	Green Bumphead Parrotfish	Pulau Pisang
<i>Cetoscarus bicolor</i>	Bicolor Parrotfish	Kiti Kiti & Manta Sandy
<i>Chlorurus bleekeri</i>	Bleeker's Parrotfish	Widespread
<i>Chlorurus bowersi</i>	Bower's Parrotfish	Manta Sandy
<i>Chlorurus sordidus</i>	Bullethead Parrotfish	Kiti Kiti & Pulau Friwin
<i>Hipposcarus longiceps</i>	Pacific Longnose Parrotfish	Kiti Kiti
<i>Scarus dimidiatus</i>	Yellow-barred Parrotfish	Pulau Pisang
<i>Scarus forsteni</i>	White-spot Parrotfish	Kiti Kiti
<i>Scarus frenatus</i>	Six-banded Parrotfish	Pulau Friwin
<i>Scarus ghobban</i>	Blue-barred Parrotfish	Kiti Kiti
<i>Scarus oviceps</i>	Dark-capped Parrotfish	Manta Sandy
<i>Scarus schlegeli</i>	Yellow-bar Parrotfish	Pulau Friwin
<i>Scarus spinus</i>	Green-snout Parrotfish	Scattered
<i>Scarus tricolor</i>	Tricolor Parrotfish	Scattered
<b>PINGUIPEDIDAE</b>		
<i>Parapercis hexophthalma</i>	Speckled Sandperch	Near Namatote
<b>BLENNIIDAE</b>		
<i>Ecsenius bandanus</i>	Banda Blenny	Kapatcol
<i>Meiacanthus anema</i>	Threadless Blenny	Kapatcol
<i>Plagiotremus rhinorhynchus</i>	Blue-striped Fangblenny	Kapatcol



**GOBIIDAE***Gobiodon acicularis*

Needlespine Coral Goby

Kapatcol

**EPHIPPIDAE***Platax boersii*

Golden Spadefish

Manta Sandy

*Platax teira*

Longfin Spadefish

Pulau Friwin

**SIGANIDAE***Siganus doliatus*

Barred Rabbitfish

Kapatcol

*Siganus fuscescens*

Dusky Rabbitfish

Manta Sandy

*Siganus javus*

Javan Rabbitfish

Pulau Pisang

*Siganus puellus*

Masked Rabbitfish

Scattered

*Siganus punctatus*

Gold-spotted Rabbitfish

Manta Sandy

*Siganus unimaculatus*

One-spot Rabbitfish

Kiti Kiti

*Siganus vulpinus*

Foxface Rabbitfish

Widespread

**ACANTHURIDAE***Acanthurus auranticavus*

Orange-socket Surgeonfish

Manta Sandy

*Acanthurus lineatus*

Blue-lined Surgeonfish

Kiti Kiti

*Acanthurus nigrofuscus*

Brown Surgeonfish

Pulau Friwin

*Acanthurus nubilus*

Dark Surgeonfish

Manta Sandy

*Acanthurus olivaceus*

Orange-banded Surgeonfish

Kiti Kiti

*Acanthurus pyroferus*

Mimic Surgeonfish

Pulau Friwin

*Ctenochaetus striatus*

Striated Surgeonfish

Pulau Friwin

*Naso brevirostris*

Long-nosed Unicornfish

Kiti Kiti

*Naso lituratus*

Stripe-faced Unicornfish

Kiti Kiti

*Paracanthurus hepatus*

Indo Pacific Blue Tang

scattered

*Zebrasoma scopas*

Brushtail Tang

Widespread

*Zebrasoma veliferum*

Sailfin Tang

Pulau Friwin

**SPHYRAENIDAE***Sphyræna qenie*

Blackfin Barracuda

Manta Sandy

**SCOMBRIDAE***Euthynnus affinis*

Mackerel Tuna

Bitsyaru Bay

**BALISTIDAE***Balistapus undulatus*

Orange-lined Triggerfish

Widespread

*Balistoides conspicillum*

Clown Triggerfish

Kiti Kiti

*Balistoides viridescens*

Titan Triggerfish

Manta Sandy

*Melichthys niger*

Black Triggerfish

Kiti Kiti

*Melichthys vidua*

Pink-tail Triggerfish

Scattered

*Pseudobalistes flavimarginatus*

Yellow-margin Triggerfish

Kiti Kiti

*Rhinecanthus verrucosus*

Blackpatch Triggerfish

Scattered

*Sufflamen bursa*

Scythe Triggerfish

Pulau Pisang

*Sufflamen chrysopteron*

Halfmoon Triggerfish

Kiti Kiti

**MONACANTHIDAE***Aluterus scriptus*

Scrawled Filefish

Pulau Pisang and Manta Sandy

**OSTRACIIDAE***Ostracion cubicus*

Yellow Boxfish

Kiti Kiti, Manta Sandy & Pulau  
Friwin

*Ostracion meleagris*

Spotted Boxfish

Pulau Pisang