## Sulawesi

## & Halmahera

## A Greentours Trip Report

 $3^{rd} - 19^{th}$  April 2018

Led by Phil Benstead

#### 4/4 to Makassar

Most of us left Heathrow on the evening of the 3<sup>rd</sup> and spent the day/night travelling and sleeping our way towards Makassar...

## 5/4 Bantimurung-Bulusaraung NP and Sungai Pattunuang Asue

After a relaxed start and a hearty breakfast, where we met up with Heather and Gordon, we headed out of town towards Bantimurung-Bulusaraung NP. Reaching the park we headed out into a small park area that was busy with local people. Hannah found us a superb adult Sulawesi sailfin lizard (the world's largest agamid), which perched nicely on a nearby midstream rock for photographs. Beautiful chlorocyphid damselflies appeared in the small streams. The waterfall thundered down, swollen with recent rain and with a regular patrol of glossy swiftlets shooting back and forth.

We mooched about and as the day warmed, Alf found us a nice longhorn beetle and we started to see more and more butterflies. A few birds appeared too, with a fine black sunbird taking the biscuit. We wandered up the waterfall trail and Alin found us a nice troupe of the endangered moor macaques before it was time to head back and check for mud-puddling butterflies. The day was warming up nicely and sure enough when we got back down the bottom there was a small knot of butterflies searching for salts, the group included at least five species of swallowtail.

The carpark at the park had a stall that allowed us to sample the famous and delicious durian fruit. Yum, Wallace's description of durian as a buttery custard with hints of almond is still a good one, but it is not to everyone's taste. Tired we took a break and lunch in a nearby restaurant before heading uphill to check out a different riverside trail.

At the river the weather broke down and we had a few sharp showers. There were a huge number of the big blousy satyrid *Faunis menado* on the wing here. A captive breeding unit produced views of the engaging and hyperactive tarsier that is endemic to southern Sulawesi (*fuscus*). Alf had a brief glimpse of a ruddy kingfisher and some of us saw a single Sulawesi babbler. With rain threatening again we headed back to the vehicles, spotting more moor macaques in distant trees, and headed into town for a quick dinner and the comfort of the hotel.

## 6/4 Karaenta Forest and Ramang-Ramang

This morning we were up at dawn for breakfast and the longer drive out to the Karaenta Forest. Alin worked hard here for birds and at our first stop we saw the local endemic black-ringed white-eye and a nice yellow-sided flowerpecker. Butterflies were much in evidence and many of them were new including a nice *Troides* birdwing and *Papilio ascephalus*. A second stop produced a pygmy squirrel for Alf and Alin tracked down the recently-split black-headed kingfisher. This bird sat still for nearly all of us as we negotiated the rather muddy slope to get to the scope. Moving on we stopped next at a roadside troupe of habituated moor macaques that finally allowed some photography to take place.

Dropping back downhill we stopped at the same restaurant as yesterday for lunch and muchneeded coffee and tea. Continuing on we headed to Remang-Remang for our eagerly anticipated boat trip, some of us enjoyed a fortuitous puncture by some fishponds that produced a number of new birds and dragonflies.

Catching up with the rest of the group we took to two small boats and chugged through an astonishing limestone karst wetland landscape. We passed under limestone outcrops, towering cliffs and past dense nipa swamps – an extraordinary place. We started to see some nice birds, we all caught up with collared and common kingfisher, striated herons, our first Sunda teal and a nice rangy purple heron. Passing through the main village we eventually disembarked to work an area of fishponds and rice paddies completely surrounded by limestone hills. The only way in along the small river running through the narrow gorge we had just come through. Here we chased butterflies and dragonflies. Phil found an exciting dragonfly a single male *Raphismia bispina*, a fairly widespread species but only the second record for the island and at least 108 years after the first one. Our first Sulawesi crows appeared. Rain threatened so we puttered back in the boats and braced ourselves for the Friday afternoon traffic on the way back into Makassar. Eventually we reached a restaurant, had a tasty dinner and headed for the hotel. Here we said goodbye to our Makassar team for tomorrow we fly.

## 7/4 flight to Palopo (Bua) and on to Tana Toraja (Rantepao)

Today we had another early breakfast and left with plenty of time to spare to check in for our domestic flight to Palopo at the top-end of South Sulawesi province, and our gateway to Tana Toraja. It was a typically Indonesian process but we got to the gate with half an hour to spare after a long check-in and the queue to pay for the inevitable excess baggage fee...

It was not too surprising that the flight was delayed by an hour but once we were aboard were were soon landing again! Palopo airport was delightfully small, the plane parking up by the terminal and the bags soon in our hands. Outside our new driver Charles and our new guide Martinus. Their names alone indicating that the Toraja are Christian. The bus bumped along in the lowlands for 20 km and then we started to climb up to a pass at about 1000m asl. The forest here was OK but unfortunately it bucketed down with rain for most of the ascent. Dropping down from the pass we started to see a lot of Torajan architecture in the roadside graves and granaries. Eventually we reached Rantepao and very overdue lunch, which was both tasty and most welcome.

Afterwards the rain started to ease and we elected to just drive slowly past the colourful fruit and veg market, the water buffalo saleyard and on to a nearby village. Here we spent an interesting hour-and-a-half. First we enjoyed the richly decorated, and buffalo skull adorned, Torajan huts and granaries and then we visited the cliff burial site nearby.

Modern crypts here were astonishing in design and still used to this day. Higher up the trail ancient sandalwood coffins perched on horizontal scaffold poles inserted into the limestone cliff face. Human skulls and large bones littered the area. Strange, slightly creepy, effigies and statues of the dead filled modern display cases and ancient cave sites alike. At the end of the trail a deep cave was still used for present day burials. Martinus delivered up an interesting stream of information throughout and answered our many questions. As dusk fell, we headed to the nearby hotel and settled in looking forward to more cultural delights in the morrow.

## 8/4 Tana Toraja

Phil checked the garden before breakfast for birds. It was quite busy with lemon-bellied and black-ringed white-eye and golden-bellied gerygone.

A leisurely start to our cultural proceedings this morning with a nice late 0830 start. It being Sunday there was going to be no opportunity to visit a funeral during the day but we heard plenty about the curious practices in Tana Toraja after death occurs. This place really has to be seen to be believed.

The sun was out and things looked great. Martinus took us to a nearby village to admire more of the incredible Torajan architecture. This area really is very extraordinary. Overhead Hannah spotted our first Sulawesi serpent eagles. The thatch in the traditional houses contained nesting munias and the roof spaces were being used by short-tailed starlings.

Driving on we headed uphill to look at, and photograph, upland rice cultivation. Climbing higher we stopped again by a small stream and a large volcanic erratic that had crypts carved into it each sealed with decoratively carved or painted doors. The river here had a new libellulid, an endemic *Diplacina* and a nearby shallow wetland had a few other new dragonfly species. Swallowtails were obvious and included *ascalaphus* and *agamemnon* again.

Dropping a short distance we lunched at a pleasant restaurant with an excellent view back down the valley towards Rantepao. After a tasty lunch, Heather and Martinus found some nice rhinoceros beetles and a huge endemic moon moth (*Actias isis*). Dropping more altitude we took some sneaky short cuts though very rural areas on rough tracks, seeing more amazing houses, before stopping again for a short walk downhill. This trail started at a fascinating baby burial tree (three words I never though I would type consecutively...). Infant mortality was very high before modern medicine apparently and stillborn babies and very young babies that died were immediately placed in a niche hacked from special banyan trees and the niche covered with a woven palm covering. The milky sap exuded from the wound in the tree 'fed' the baby, allowing it to grow. Yet another example of the unique attitude and relationship with death, and its attendant rites, held by the Torajan culture. Fascinating stuff.

The trail from here dropped down to a clearing filled with megalithic standing stones and surrounded by ornately carved funeral biers with the classic Torajan roofs. From here, pleased with our day, we trundled back towards the hotel, the long-threatened rain finally arriving with perfect timing.

## 9/4 the drive to Makassar and flying on to Manado

With a very long drive back to Makassar we elected for an early breakfast and departure this morning. Our first scheduled stop was just 15 km away at our last cultural spot of the tour. Here we found a village with a high cliff into which burial crypts had been carved and balconies with rows of effigies of the dead. Different again from sites we had visited in the past few days and just as interesting. Also here a number of new satyrids and hesperids. A black eagle was hunting along the road as we left the Toraja territory behind.

Driving on we enjoyed the rural scenery as we climbed up to another pass and then dropped slowly to sea-level there was never a moment when we were not in some sort of agricultural land though so we did not have to stop for wildlife. Our mid-morning break was taken at a roadside restaurant where we loaded up on drinks and snacks and enjoyed the views.

Eventually we could see the sea and we were soon down on the Trans-Sulawesi Highway under a blazing sun. Soon we were bypassing Pare-Pare and then pulling into a nice little beach-side restaurant on a rather tatty black-sand beach. Offshore a Japanese pearl farm was evident. We passed a pleasant hour here, grazing on prawns and fish, before it was time to head on. As we headed south we started going through some really industrially farmed rice areas and these started to produce a few new birds. A black bittern flew past. Pale-headed munias were locally common and we came across a mixed feeding flock of marsh terns. Stopping once again we sampled two different varieties of pomelo (with an optional spicy garam salt) and then we were quickly back on the outskirts of Makassar. We stopped at a restaurant to get ourselves sorted for flying and then it was time to get to the nearby airport. Last time we had been in the airport it had been standing room only and taken two-hours to check-in. This time the place was almost deserted! Check-in accomplished we headed in to await our flight.

All too predictably our flight was delayed by two hours and so it was a rather tired crew that finally arrived to be greeted by our North Sulawesi handlers at one o'clock in the morning. Thankfully the hotel was close to the airport and we did not have to get up terribly early the next morning.

#### 10/4 to Bunaken

We emerged into a hotel filled with religious-types (there was a big SE Asian Ecumenical shindig in progress). Breakfast taken we were shuttled to the harbour to wait for the boat to take us out to Bunaken island. We sat patiently and occasional dodged a tropical shower and then the boat arrived. Safely stowed we enjoyed the 40-minute ride in the sun, passing outrigger canoes and more modern boats but not spotting any wildlife of note.

Arriving at Bunaken, we were given the welcome speech and shown to our rooms and went for a tasty lunch. At 1500 some of us reconvened to check out the nearby reef drop-off and its attendant organisms. Walking the beach we scattered ghost crabs (*Ocypode cerathopthalmus*) ahead of us. The sandy, debris strewn grass flats before the reef had an identifiable fauna that included the beautiful horned sea star (*Protoreaster nodusus*). Closer to the reef the bright blue starfish (*Linkia leavigata*) became more common. The reef was rather good and we enjoyed marvelling at the colourful fish and other things. A more eloquent description of the joys of this reef will appear in tomorrow's edition...

#### 11/4 Bunaken Island

The snorkel team took to a boat this morning for a two-swim session before lunch. Idris the skipper jumped in complete with a nice bright orange life-vest to mark our progress and to provide a rallying point as we drifted over the reef and its drop-off. The fish were amazing and extremely diverse. We photographed over 100 species during the morning. The butterflyfish were especially impressive and we saw over 20 species during the morning.

It did not take long for the first of about a dozen green turtles to appear in the deep water at the edge of the drop-off. Swimming with turtles is decidedly serene and we all spent time following these graceful denizens of the sea as best we could. Smaller individuals were over the reef and made for great photographs.

Cleaner wrasse stations were busy with colourful customers of all sizes, the wrasse working to clean off parasites and loose scales and keep their clients in tip-top shape. Anemone fishes hassled us if we got too close.

The *Spirobranchus* (an ornate polychaete worm) diversity was extraordinary and produced a sea of colour on old coral boulders and rocks. Any idea that a boatload of small plastic Christmas trees had foundered on the reef was quickly dispelled by waving a hand over the colonies and watching them furl up and dart back into their holes at lightning speed.

At times the current picked up and we were whisked over the reef, sometimes passing over species we would have liked a better look at but there was no point fighting the current. Climbing in after the first swim we feasted on pineapples, biscuits and coffee. The next swim came too soon but we were keen to get in again for another go. A very memorable morning.

In the afternoon we went for a short swim on the nearby drop-off, very addictive. The species list attests to the sheer number of species present but not to the sheer enjoyment of floating along and looking at it all.

#### 12/4 to Halmahera

Today we were up very early for our boat back to Manado. The staff on Bunaken had got up early to cook our breakfast and so we took to sea well fed. This time we saw a few birds, as we waited on the sand for the stragglers to arrive from the restaurant we had a huge flyby channel-billed cuckoo and several pied imperial pigeons. At sea we saw a few terns at last.

Picked up in Manado we were whisked to the airport, for our longest check-in so far, it should have been simple... We only had 20 minutes to wait for the flight in the end though and it almost left on time! Mahar our new guide met us in Ternate and shuttled us to the speedboat port for the 40-minute run over to Halmahera. En route occasional flying fish skittered away from us.

Working our way through the crowds at the speedboat port we found our cars, drivers and sampled mangosteens. Lunch was required and we ate at a tasty Padang restaurant before we settled into a hotel up on the hill above Sofifi. At 1500 we headed out into a rather warm afternoon. We were trying to see a quartet of beautiful kingfishers. Down at the beach in town we looked for beach kingfisher without success but did see our first mudskippers. Checking a small area behind a school we were soon watching a single sombre kingfisher that allowed a close approach. Mahar was working hard and soon he had called in a superb common paradise-kingfisher too – a splendid animal. Emerald dove and black sunbird showed well here too.

Leaving here and heading through friendly rural villages, we stopped for a roadside blue-and-white kingfisher – kingfisher number three. We kept checking beach kingfisher sites and meeting the locals and eventually Mahar finds us a splendid individual – a striking kingfisher and our fourth and final one of the day. Also here, our first rainbow bee-eaters. Turning for home we were pleased with our haul.

We took dinner, in the middle of a strong electrical storm, in a small restaurant enjoying dragonfruit juice and fine local reef fish.

#### 13/4 to Subaim

The hotel provided a simple breakfast and lashings of coffee when we woke. The long drive was punctuated by regular stops. Early on we stopped to search through flocks of metallic starlings for the much scarcer endemic Moluccan starling, without success. An immature rufous-necked sparrowhawk shot through. We also stopped for a brief Halmahera goshawk that got away from most if us. Later Mahar spotted a group of red-cheeked parrots and this stop was very productive. Not only did we get great views of this attractive parrot, but we were treated to a procession of huge goliath coucals, a brief Halmahera friarbird and both Moluccan and shining monarch appeared in trees nearby.

Another stop netted us the endemic Halmahera white-eye and then we spent a lot of time scouting in vain for the endemic dollarbird. During these stops we encountered our first flyby Blyth's hornbills, as well as the dinky blue-capped fruit dove and a few Australian brush cuckoos.

We took lunch in a scruffy but very busy roadside restaurant that produced a delicious meal and then it was back to more searching for the azure dollarbird... A quick pitstop at our new home was possible and then we set off up to lower slopes of Gunung Uni-uni. In the village we finally found our mollucan starling (this pair being the only birds we saw of this species in the end), scoping dead trees proved to be a good gambit and produced the superbly plumaged grey-headed fruit dove and our first umbrella cockatoos. When dark fell we called in a feisty Mollucan scops-owl and then dropped lower down to search for Moluccan owlet-nightjar which, called in response to us but ultimately frustrated us and we reluctantly head back for dinner.

## 14/4 Foli and Gng Uni-uni

A very early start this morning was further compounded by the wretched hour time difference we had inherited when we landed in Ternate. We drove through the dark to Foli and then we all transhipped to a 4WD for the short drive uphill. That was the plan anyway but the rain from two nights ago had remodelled the track somewhat, whilst the guys went back for tools to repair the track we walked on uphill under a stunning night sky, the milkyway almost lighting our path.

We negotiated a short but muddy trail down into the forest to the standardwing lek viewing spot. The rear gunners arrived just in time to grab ten minutes of the action before the birds melted back in to the foreat. Viewing conditions were hardly ideal but most of us got good looks and a male was even in the scope for the lucky few. The frenetic display activity was indeed hardly conducive to lengthy views though as the birds bounced about between perches and hung around displaying their wares. Breakfast was at the other end in a small pondok, which spurred us back up the slope.

After breakfast we walked about on the old logging trail picking nice birds like Halmahera oriole and rufous-bellied triller. Red-flanked lorikeets were commonplace. Nicolle spotted a nice big female Halmahera goshawk perched in a tree. Wandering on some of us headed a short distance into the forest again with Mahar and we were treated to very close views of an enormous ivory-breasted pitta, standing to attention on low vegetation near the trail. Fantastic!

A sidetrack for monarchs and whistlers was not so productive but the day was warming nicely and roadside puddles produced our first *Orthetrum villosovittatum* and a nice *Agrionoptera longitudinalis*. Collecting ourselves together we got in the truck for the short bumpy track back to our waiting cars and we were whisked off to lunch.

In the afternoon we headed up the Buli road to look at the upper slopes of Gunung Uni-uni. This short session was stuffed full of birds and we got to grips with two new imperial pigeons, some great parrots (including Moluccan king) and best of all god views of Halmahera paradise crow. It might be drab but it was our second bird-of-paradise of the day.

After dark Phil and Mahar spent a frustrating hour again trying to tape lure in responsive but invisible Moluccan owlet-nightjars. One for next time.

#### 15/4 Subaim to Ternate

The long 5-hour slog back to Sofifi and then on by speedboat to Ternate was a necessary evil today if we were to get back to Sulawesi and we elected to break the journey with a few targetted bird stops. Our first involved walking up a dry riverbed and netted us great views of a pair of Wallacean monarchs. A longer stop searching for the elusive azure dollarbird was less successful. Our last scheduled stop produced good views of Halmahera friarbird. At one point Mahar spotted flying violet-necked lorys and we did not have to wait long for a splendid flyby of four of these little beauties. Heather poked about and found a fantastic terrestrial orchid and an attractive stick insect.

That just left the rest of the journey, broken only by lunch in Sofifi and then a bumpy speedboat ride back to Ternate and the palatial comfort of our hotel. Before we got to the hotel on Ternate though we stopped for a short session at Tolire Lake; a crater lake that surprised us all by

containing a large crocodile, as well as the more predictable little grebe and Torresian crow. Here we sampled yet another tropical fruit – the coconut – which provided much-needed fluids and tasty flesh. Probably the hottest day of the tour so far with the thermometer hitting 35 degrees just before lunch. A short drive got us to our comfortable hotel with some time to rest up before dinner.

## 16/4 Ternate to Tangkoko

We were all woken at 0430 by a small earth tremor (Gordon gauged it at 4.5 on the Richter scale) that shook the hotel for 3-4 seconds... Which set us up nicely for another early breakfast this morning and then we were loaded into the waiting cars for the short run through the bustling endless coastal strip around the island and on to the airport. We said our goodbyes to the amazing Mahar and the good-natured Ternate driving team. Amazingly although there were no check-in staff for about 40 minutes on arrival in Departures we were eventually all checked in and straight on to an ontime flight!

Flying over the island we looked down on Tolire Lake as Ternate slipped behind us and then headed out over a blue sea dotted with small fishing craft. In no time we were approaching the coast of Sulawesi and passing Tangkoko and the small village of Batuputih, our home for the next two nights. David and Hendrow were waiting with the zebra van and we were soon installed and heading out of town. First stop was a pharmacy... Second stop for ice creams... Third stop for durian tasting (the best stop by far for some). Having tasted this glorious fruit we strapped three more to the front of the van and headed off through several rain showers towards Tangkoko. On arrival we were quickly assigned rooms and settled down for a little rest before a splendid lunch and another rest. A large amount of rain landed during this period and we kept our fingers crossed for a dry afternoon session.

Meide (our ranger-guide) lead us out for a splendid walk in the coastal forest. Light rain fell at first but soon cleared up. He found us our first green-backed kingfisher, which sat patiently nearby as we all queued at the telescope. Walking on we stopped at an intricate fig tree that held a family party of tiny spectral tarsiers – all eyes and tiny retroussé noses. Walking further into the forest we chanced upon a recently dead bear cuscus that was being consumed by blowfly larvae. We hoped for a live encounter.

Meide kept on finding stuff to show us, next up was a fine roosting ochre-bellied boobook and nearby we had views of white-eyed spangled drongo and a brief and rather unsatisfactory encounter with a Sulawesi roller high in the canopy. Walking back to the tarsier fig for dusk Meide found us a superb lilac kingfisher and then two bear cuscus. What a session! At the fig we discovered that one of the female tarsiers had a tiny youngster and we watched one bouncing down a near vertical trunk at unbelievable speed. Here the rain started in real tropical earnest. We took shelter by the beach but with the last light disappearing we had to make a break for it and walk the final kilometre back to the waiting van. It was dark, it rained hard, frogs called from the many puddles we splashed through and we got very wet. Was it worth it? I think so.

## 17/4 Tangkoko

An early start for the majority saw us munching bananas and downing coffee for 0530 kick-off. Off we went in the van for the short shuttle to the park. We elected to chase macaques but they were hard to find this morning and we did not find them until the end of a fairly lengthy wander along various side trails and up and down in the rolling forested landscape. There were plenty of birds to look at en route. Meide found us two new pigeons at the start; a pair of close grey-cheeked green pigeons and a more distant silver-tipped imperial pigeon. Nice.

Kingfishers featured once again with great views of green-backed and lilac again and even a good scope view of the elusive ruddy kingfisher towards the end of the session. Searching dense vine tangles gave us good views of the endemic malkoha and bay coucal. David was looking for lizards and found us our first adult male flying lizard, complete with yellow throat flag and 'wings'. *Sphenomorphus* lizards appeared on the ground on trunks and roots of trailside trees – would they be identifiable?

We visited the tarsiers again for a quick photo session and chased a few elusive birds that gave us the slip. Walking back we bumped into the 100-strong 'Rambo 1' troupe of macaques and enjoyed watching them eating fruit, grooming and generally peacefully going about their business. These monkeys are a real rarity in Asia, unspoilt by unnecessary feeding they are completely used to human presence and behave totally naturally, without any begging or agressive behaviour. A special place this.

Our afternoon session involved boating in a nearby mangrove channel. We took the long way round by boat to meet the boatmen in a neighbouring village. The drive took us out of the forest and into farmed land that had large numbers of *Amorphophallus* plants. Seed heads were relatively numerous but we could not see any of the short-lived flowers... Also en route a large opencast gold mine.

Arriving back at the coast we debussed and wandered about whilst the boatmen negotiated the shallow water into the river mouth to pick us up. Once aboard we worked the mangrove channels for a long time searching for the elusive great-billed kingfisher, no luck with that species but it was a tranquil experience as the boatmen paddled us up the creeks. We did get a quick glimpse of a rather shy sacred kingfisher and we all saw a common kingfisher well. Eventually we called it a day. Half the team drove back the long way round and the other half headed out to sea to make the short crossing back to Batuputih and the waiting Sulawesi nightjar. As we puttered along we passed many stationary squid shacks at sea, big business here apparently.

As we approached the beach and ran up it, it became apparrent that the evening shower had commenced and we hoisted our umbrellas one more time for the short walk to the nightjar clearing and its shelter.

We did not have to wait long for dark and the rain stopped briefly allowing us to hear the calling nightjars. One flew overhead almost straight away and was picked out in the beam of the torch. Meide was working hard and found us a fine roosting Sulawesi bush-hen in a nearby tree. The rain started in earnest again so we sloshed back to the car park, arriving back just as Hendrow pulled in. On the way back Phil spotted several new frogs for the trip and we all saw the huge

roosting *Papilio gigon*. Hannah and Alf caught up with the roosting pale-blue monarch thay had missed the previous night.

### 18/4 Tangkoko and flight to Java

The last day in the field dawned fine after the rain yesterday evening. Meide had a surprise for us this morning. We drove uphill for 25 minutes and then a short walk along a ridgetop through a coconut plantation took us to a perfect vantage point to view the forest all around us. Here we had a frenzied session as birds appeared in tree-tops and fruiting trees. Our first and last Sulawesi hornbills fed in a tree and showed very well. Parrots stormed in, first blue-backed parrot and then Sulawesi racquet-tail and then both endemic species of hanging-parrot in quick succession. Pigeons behaved well too and we had great views of silver-tipped imperial pigeon and a quick look at white-faced cuckoo dove. Treetops nearby pulled in our first and only Sulawesi triller and lots of grosbeak myna with their big chunky orange bills and waxy rump feathers. Collared kingfishers and black-naped orioles were spotted here. As it got warmer things got quieter.

Having failed to see knobbed hornbill from the lower vantage we went higher in the van and another short trail took us straight to a really close female knobbed hornbill. Eventually we found another pair and got very good views of the male too. Time for breakfast!

After breakfast we went for a short walk down to the village. This was very interesting and we enjoyed looking at the gardens and the different fruit trees and found a few seeding *Amorphophallus*. Unfortunately before we could get into the village proper and the beach the heavens opened up and we radioed Hendrow to rescue us and take us back to the hotel.

Typically the sun was back out as we ate our last lunch and packed our bags... Taking to the zebra van for one last time we headed off to the airport hotel to drop off Heather and Gordon. This took just an hour-and-a-half despite some awful traffic on the Bitung road. Saying our goodbyes we left the Kiwi's to their three-night recovery holiday before their flight home.

The airport was close and soon we too were saying goodbye to David and the trusty Hendrow who had picked us up so many times from so many different places. Things seemed to be running smoothly in the airport and we had a trouble free check-in and passage through security.

The flight left on time and before we knew it we were in the suburbs of a very smoggy Jakarta, waiting for an airport shuttle to take us to our nearby hotel. Even at this time of night the traffic was astonishing.

#### 19/4 Java and home

We all had a 6-hour window to sleep before our next shuttle to the airport but because of yet another time zone change we mostly woke up after five! There was time for breakfast though and waiting for the bus later we were surprised to see at least two species of insectivorous bat hunting in the smog at dawn. Arriving at the airport we surrendered to the machinery.

#### Fish recorded at Bunaken Island

Blue-spotted ribbontail rayTaeniura lymmaBarred morayEchidna polyzonaBanded snake eelMyrichtys colubrinusGreystreak lizardfishSynodus dermatogenysCrocodile longtomTylosaurus crocodilusLattice soldierfishMyripristis violacea

Tailspot squirrelfishSargocentrum caudimaculatumSmooth flutemouthFistularia commersoniiTrumpetfishAulostomus chinensisReeftop pipefishCorythoichthys haemopterus

Redfin antheas Pseudanthias dispar Lethrinus harak Thumbprint emperor Cephalopholus argus Peacock grouper Flagtail grouper Cephalopholis urodeta Epinephelus merra Dwarf spotted grouper Scissortail fusilier Caesio caerulaurea Striped sweetlips Plectorhinchus vittatus Two-lined monocle bream Scolopsis bilineata

Black-and-white spinecheek
Big-eye bream
Dash-dot goatfish
Two-barred goatfish
Manybar goatfish
Parupeneus bifasciatus
Parupeneus multifasciatus
Parupeneus multifasciatus

Threadfin butterflyfish Chaetodon auriga 'Exquisite' butterflyfish Chaetodon cf austriacus Ornate butterflyfish Chaetodon ornatissimus Lined butterflyfish Chaetodon lineolatus Racoon butterflyfish Chaetodon lunula Speckled butterflyfish Chaetodon citrinellus Saddled butterflyfish Chaetodon ephippium Klein's butterflyfish Chaetodon kleinii Latticed butterflyfish Chaetodon rafflesi Reticulated butterflyfish Chaetodon reticulatus Dotted butterflyfish Chaetodon semion Ovalspot butterflyfish Chaetodon speculum Chevroned butterflyfish Chaetodon trifascialis Black-backed butterflyfish Chaetodon melanotis Redfin butterflyfish Chaetodon trifasciatus

Pacific double-saddled butterflyfish Chaetodona ulitiensis Teardrop butterflyfish Chaetodon unimaculatus Vagabond butterflyfish Chaetodon vagabundus Very longnose butterflyfish Forcipiger longirostris Longnose butterflyfish Forcipiger flavissimus Hemitauricthys polylepis Pyramid butterflyfish Heniochus chrysostomus Pennant bannerfish Heniochis varius Humphead batfish

Regal angelfishPygoplites diacanthusPearl-scaled angelfishCentropyge vrolikiKeyhole angelfishCentropyge tibicenBlue-girdled angelfishPomacanthus navarchusIndo-Pacific sargeantAbudefduf vaigiensisStaghorn damselAmblyglyphiodon curacaoSpinecheek anemonefishPremnas biaculeatusClark's anemonefishAmphiprion clarkii

Clark's anemonefish

Pink anemonefish

Amphiprion clarkii

Amphiprion perideraon

False clown anemonefish

Bicolor chromis

Surge demoiselle

Reticulated dascyllus

Amphiprion ocellaris
Chromis margaritifer
Chrysiptera leucopma
Dascyllus reticulatus

Dascyllus aruanas Humbug Threespot dascyllus Dascyllus trimaculatus Blackvent damsel Dischistodus melanonotus Behn's damsel Neoglyphidodon nigroris Blue damsel Pomatocentrus pavo Princess damsel Pomatocentrus vaiuli Arceye hawkfish Paracirrhites arcuatus Blackside hawkfish Paracirrhites forsteri Red-breasted wrasse Cheilinus fasciatus Slingjaw wrasse Epibulus insidiator

Bird wrasse Gomphosus varius
Checkerboard wrasse Halichoeres hortulanus
Barred thicklip Hemigymnus fasciatus
Bicolor cleaner wrasse Labroides bicolor
Cleaner wrasse Labroides dimidiatus
Sixbar wrasse Thalosoma hardwicke
Moon wrasse Thalassoma lunare

Blue-barred parrotfish

Bumphead parrotfish

Character and the state of the state o

Sharpnose sandperch Parapercis cylindrica Latticed sandperch Parapercis clathrata Blackfin dartfish Ptereleotris evides Decorated goby Istobygius decoratus Whitecheek surgeonfish Acanthurus nigricans Orangeband surgeonfish Acanthurus olivaceus Convict surgeonfish Acanthurus triostegus Lined bristletooth Ctenochaetus striatus Masked rabbitfish Siganus puellus

Spotted unicornfishNaso brevirostrisBrushtail tangZebrasoma scopusMoorish idolZanclus cornutusFoxfaceSiganus vulpinusOrange-lined triggerfishBalistapus undulatusTitan triggerfishBalistoides viridescensCircumtropical triggerfishMelichtys niger

Pinktail triggerfishMelichtys viduaWhite-barred triggerfishRhinecanthus aculeatus

Redtooth triggerfish Odonus niger

Blackpatch triggerfishRhinecanthus verrucosusSpotted boxfishOstracion mealeagrisStar pufferArothron stellatus

#### Odonata recorded in Sulawesi between 5th and 18th April

Libellago asclepiades Small numbers encountered at Bantimurung-Bulusaraung NP (South

Sulawesi). Endemic to Sulawesi.

Rhinocypha monochroa Recorded in small numbers at Bantimurung-Bulusaraung NP and Sungai

Pattunuang Asue. Endemic to Sulawesi.

Agriocnemis pygmaea Tana Toraja.

Ischnura senegalensis Remang-Remang (South Sulawesi).

Pseudagrion crocops One at Bantimurung-Bulusaraung NP (South Sulawesi). Endemic to Sulawesi.

Pseudagrion microcephalum A very widespread species seen in South Sulawesi.
Pseudagrion ustum One at Bantimurung-Bulusaraung NP (South Sulawesi).

Teinobasis helvola Bantimurung-Bulusaraung NP and Sungai Pattunuang Asue (South Sulawesi).

Anax sp. Remang-Remang (South Sulawesi).

Brachydiplax chalybea Recorded at Remang-Remang (South Sulawesi).

Celebothemis delecollei Single at Bantimurung-Bulusaraung NP (South Sulawesi). Endemic to

Sulawesi.

Crocothemis servilia Widespread.

Diplacina sanguinolenta Tana Toraja.

Diplacodes trivialis Widespread.

Macrodiplax cora Remang-Remang.

Neurothemis manadensis The widespread terminata-like Neurothemis on Sulawesi was this species.

Neurothemis ramburii Recorded at most sites in South Sulawesi.

Orthetrum pruinosum One on first day at Bantimurung-Bulusaraung NP. Tana Toraja. This

subspecies clelia (together with with the Sundaic subspecies schneideri) is

probably a good split from mainland Asian forms of pruinosum.

Orthetrum serapia Widespread and often common in South Sulawesi.

Pantala flavescens Frequently encountered.

Potamarcha congener Widespread in South Sulawesi lowlands.

Raphismia bispina Phil photographed a male in the village at Remang-Remang (South Sulawesi),

the first in Sulawesi since at least 1910 and only the second record!

Rhyothemis phyllis snelleni

Tholymis tillarga

Small numbers at Remang-Remang (South Sulawesi). Common in the late afternoon at Remang-Remang (South Sulawesi). Also seen

in the mangroves at Tangkoko.

Trithemis aurora Only in South Sulawesi at Sungai Pattunuang Asue (South Sulawesi).

Zyxomma obtusum One after rain in the late afternoon of the first day at Sungai Pattunuang Asue

(South Sulawesi).

## Odonata recorded on Halmahera between 12th and 16th April

Anax sp. A few seen.

Agrionoptera insignis A few recorded.

Agrionoptera longitudinalis One at Foli.

Camacina gigantea One on the way down from the standardwing lek at Foli. Perhaps only the

second record for the island.

Neurothemis manadensis The common Neurothemis in the lowlands on Halmahera.

Neurothemis ramburi Only recorded on Gng. Uni-uni.

Orthetrum serapia Widespread.
Orthetrum villosovittatum Recorded at Foli.

Pantala flavescens Scattered records, mostly along roads.

Tholymis tillarga Scattered records.

#### Birds recorded in Sulawesi, Halmahera and Ternate between 5th and 18th April

Sunda teal Anas gibberifrons A few at Remang-Remang (South Sulawesi). [Tabon scrubfowl] Megapodius cummingi [Tangkoko] [Dusky scrubfowl] Megapodius freycinet [Tolire Lake, Ternate] Little grebe Tachybaptus ruficollis Perhaps two pairs at Tolire Lake, Ternate, Rock pigeon Columba livia towns. Red collared dove Streptopelia En route to Karaenta Forest. tranquebarica Streptopelia chinensis Spotted dove En route to Karaenta Forest. Seen daily on Halmahera. Sultan's cuckoo dove Macropygia doreya One en route to Subaim (Halmahera). Several seen well on Gng Uni-uni. More en route to Subaim. White-faced cuckoo dove Turocoena manadensis One on the last morning at Tangkoko form Meide's coconut grove viewpoint. Great cuckoo dove Reinwardtoena One on Gng. Uni-uni. reinwardti Pink-necked green pigeon Treron vernans Remang-Remang. Grey-cheeked green pigeon Treron griseicauda Pair seen well in coastal forest in the early morning at Tangkoko. More on the last morning there. Asian emerald dove Chalcophaps indica Several around Sofifi (Halmahera). A few at Tangkoko. Blue-capped fruit-dove Ptilinopus monacha Small numbers daily on Halmahera. Heard on Ternate. Grey-headed fruit-dove Ptilinopus hyogastrus Small numbers daily on Halmahera. A striking bird. Moluccan imperial pigeon Ducula perspicillata A total of four seen on Gng. Uni-uni. More en route to Sofifi the next day. Green imperial pigeon Ducula aenea Many seen at Tangkoko. Cinnamon-bellied imperial Ducula basilica Several seen on Gng. Uni-uni (Halmahera). Pied imperial pigeon Ducula bicolor Small flock at dawn as we left Bunaken. Two flying over Gng. Uni-uni. Two at Tangkoko. Silver-tipped imperial Ducula luctuosa One seen well in coastal forest at Tangkoko. pigeon Sulawesi malkoha Rhamphococcyx Tangkoko. calyorhynchus Australian brush cuckoo Cacomantis variolosus Two en route to Subaim (Halmahera). Channel-billed cuckoo Scythrops One on Bunaken. novaehollandae Lesser coucal Centropus bengalensis A few on Halmahera and Sulawesi. Goliath coucal Centropus goliath En route to Subaim (Halmahera). Bay coucal Centropus celebensis One watched in coastal forest at Tangkoko. Moustached treeswift Hemiprocne mystacea One near Sofifi (Halmahera). Another on Gng. Uni-uni. **Grey-rumped treeswift** Hemiprocne longipennis A few at Bantimurung-Bulusaraung NP and Tangkoko. Glossy swiftlet Collocalia esculenta widespread Sulawesi. Sulawesi swiftlet Aerodramus sororum Remang-Remang and Tangkoko. Halmahera swiftlet *Aerodramus infuscatus* Halmahera. Uniform swiftlet Aerodramus Tangkoko. vanikorensis White-throated needletail Hirundapus caudacutus A few migrating over Halmahera on the first day. [Moluccan owlet-nightjar] Aegotheles crinifrons Heard only along the Buli Rd on two nights. Sulawesi nightjar Caprimulgus celebensis One seen very well in flight at Tangkoko. Barred rail Gallirallus torquatus One near the mangrove boat pick-up spot near Tangkoko. White-browed crake Poliolimnas cinereus A pair in the paddyfields at Subaim (Halmahera)

Makassar.

One found at night roosting in a tree at Tangkoko.

Amaurornis isabellina

Amaurornis

phoenicurus

Sulawesi bush-hen

White-breasted waterhen

Common sandpiper Actitis hypoleucos A few on fishponds near the hotel in Makassar. One on the river at Remang-Remang. More on Halmahera. Grey-tailed tattler Heteroscelus brevipes One on the fishponds near the hotel in Makassar. Terek sandpiper Xenus cinereus One on the fishponds near the hotel in Makassar. Whimbrel Numenius phaeopus One near Sofifi (Halmahera), another on the mangrove boat ride near Tangkoko. White-winged tern Chlidonias leucopterus Makassar rice paddies. Whiskered tern Chlidonias hybridus Makassar rice paddies. Great crested tern Sterna bergii One off Manado. Lesser crested tern Thalasseus bengalensis One off Manado. Little black cormorant Phalacrocorax One near Makassar (South Sulawesi). sulcirostris Black bittern Ixobrychus flavicollis One near Makassar (South Sulawesi). Cattle egret Ardea ibis A few in South Sulawesi, Manado and Halmahera. Eastern great egret Ardea modesta 1 near Makassar. Purple heron Ardea purpurea Two at Remang-Remang (South Sulawesi). Little egret Egretta garzetta Scattered records in Sulawesi. Pacific reef egret Egretta sacra One on the mangrove boat ride at Tangkoko. Javan pond heron Ardeola speciosus Rice paddies in Sulawesi. Butorides striatus Striated heron Good views from the boat at Remang-Remang. Rufous night-heron Nucticorax caledonicus One immature on the first afternoon at Tangkoko. Sulawesi serpent eagle Spilornis rufipectus Two at Tana Toraja. Ictinaetus malayensis Black eagle One at Tana Toraja and another the next day en route to Makassar. White-bellied fish-eagle Ichtyophyga leucogaster One sub-adult on Halmahera as we drove back to Subaim. Another from the 'night' boat as we crossed from the mangroves back to Batuputih (Tangkoko). **Brahminy kite** Haliastur indus A few in South and North Sulawesi and frequently encountered on Halmahera. Black kite Milvus migrans Remang-Remang. Halmahera goshawk Tachyspiza One subadult en route to Subaim. Another adult female henicogramma Rufous-necked Tachyspiza Immature en route to Subaim. sparrowhawk erythrauchen Moluccan scops owl Otus magicus One along the Gng. Uni-uni road (Halmahera). [Sulawesi scops owl] Otus manadensis Heard at Tangkoko. Ochre-bellied boobook Ninox ochracea One roosting at Tangkoko on the first day. Sulawesi hornbill Rhabdotorrhinus Two feeding in a close fruiting tree on the last morning exarhatus at Tangkoko. Blyth's hornbill Rhyticeros plicatus Small numbers noted daily on Halmahera. **Knobbed hornbill** Rhyticeros cassidix Three seen well on the last morning at Tangkoko. Green-backed kingfisher Actenoides monachus Several at Tangkoko. Black-headed kingfisher Actenoides capucinus One in the Karaenta Forest. A trip highlight. Common paradise-Tanysiptera galeata One male seen very well near Sofifi. kingfisher Sulawesi lilac kingfisher Cittura cyanotis At least two at Tangkoko seen well. Ruddy kingfisher Halcyon coromanda One at Sungai Pattunuang Asue for Alf. Two at Tangkoko for some of us. Blue-and-white kingfisher Todiramphus diops A few daily on Halmahera. Sombre kingfisher Todiramphus funebris One seen very well near Sofifi. Collared kingfisher Todiramphus chloris Common Sulawesi. A few on Halmahera. Beach kingfisher **Todirhamphus** One near Sofifi. saurophagus

One in the mangroves near Tangkoko.

*Todirhamphus sanctus* 

Sacred kingfisher

Bantimurung-Bulusaraung NP (1), Remang-Remang (1) Common kingfisher Alcedo atthis and the mangroves near Tangkoko (1). This sub-species may be elevated to species rank in the future. Blue-tailed bee-eater Merops philippinus Remang-Remang. Rainbow bee-eater Merops ornatus Halmahera. Sulawesi roller Coracias temmincki Tangkoko. Indonesian kestrel Falco moluccensis One on the hotel in Sofifi. A few daily thereafter. Oriental hobby Falco severus One at dusk on Gng. Uni-uni. Several on both days at Gng. Uni-uni and Foli. One at Umbrella cockatoo Cacatua alba Tolire Lake, Ternate. Violet-necked lory Eos riciniata Four birds seen well in flight on our drive to Subaim on the last day on Halmahera. [Ornate lorikeet] Trichoglossus ornatus Heard at Tangkoko. Red-flanked lorikeet Charmosyne placentis Noted daily on Halmahera. Mostly fast and in flight but great views at Foli. Red-cheeked parrot Geoffroyus geoffroyi A few whilst driving on Halmahera. Prioniturus platurus Sulawesi racquet-tail Heard at Tangkoko. Seen well on the last day. Blue-backed parrot **Tanygnathus** At least one male on the last morning at Tangkoko. It sumatranus got a bit confusing at one point, there were so many birds flying about. **Eclectus** parrot Eclectus roraratus One over Gng. Uni-uni on the first visit, another the next day there too. Moluccan king parrot A small number in fruiting trees on the second visit to Alisterus amboinensis Gng. Uni-uni. Sulawesi hanging-parrot Loriculus stigmatus One on the boat ride in the mangroves near Tangkoko. Moluccan hanging-parrot Loriculus amabilis One seen perched at Gng. Uni-uni. Pygmy hanging-parrot Loriculus exilis A few on the last mornoing at Tangkoko. [Sahul pitta] Erythropitta Heard on the last morning at Tangkoko. erythrogaster Pitta maxima Ivory-breasted pitta Frequently heard singing on Halmahera. One seen well at Foli. Dusky myzomela Myzomela obscura A few at Foli. Halmahera friarbird Melitograis giloloensis One seen en route to Subaim. A pair performed well on the return drive. Golden-bellied gerygone Gerygone sulphurea Widespread in Sulawesi, frequently heard. Halmahera oriole Oriolus phaeochromus Great views of several birds at Foli. Oriolus chinensis Black-naped oriole Heard at Bantimurung-Bulusaraung NP. Seen at Remang-Remang and Tangkoko. White-breasted Open habitats in both Sulawesi and Halmahera. *Artamus leucorynchus* woodswallow White-rumped Coracina leucopygia Pair seen well on the mangrove boat ride at Tangkoko. cuckooshrike Mollucan cuckooshrike Coracina atriceps Scattered records on Halmahera. White-bellied Coracina papuenis Sofifi (Halmahera) and frequently encountered cuckooshrike elesewhere. Wallacean cicadabird Lalage amboinensis One en route to Subaim (Halmahera). Sulawesi triller Lalage leucopygialis Two seen well on the last morning at Tangkoko. **Rufous-bellied triller** Lalage aurea A few en route to Subaim (Halmahera) but not seen well. Better views at Foli and en route to Subaim on the last day. Lesueur's triller Lalage sueurii En route to Bantimurung-Bulusaraung NP. Willie fantail Rhipidura leucophrys Frequently encountered on Halmahera and Ternate. White-eyed spangled Dicrurus leucops Tana Toraja and common at Tangkoko. drongo Halmahera spangled Dicrurus atrocaeruleus One en route to Subaim (Halmahera). Also at Foli and drongo Gng. Uni-uni.

Halmahera paradise-crow Lycorax pyrrhopterus One seen well and others heard on Gng. Uni-uni. Wallace's standardwing Semioptera wallacii Lek of 4-5 birds watched for a short time at Foli. Pale-blue monarch Hypothymis puella Heard at Bantimurung-Bulusaraung NP. Seen roosting at night at Tangkoko. Moluccan monarch Myiagra galeata Pair en route to Subaim (Halmahera). Shining monarch Myiagra alecto Male en route to Subaim (Halmahera). Wallacean monarch *Symposiachrus* Pair en route to Subaim on the last day on Halmahera. trivirgatus Corvus validus Long-billed crow An amazing species - daily on Halmahera. Torresian crow Corvus orru Pair on Ternate. Sulawesi crow Corvus celebensis Remang-Remang andf en route to Tangkoko. Pacific swallow Hirundo tahitica open habitats in Sulawesi. Sooty-headed bulbul Pycnonotus aurigaster introduced on Sulawesi where widespread in disturbed Yellow-vented bulbul Pycnonotus goiavier Makassar only (introduced). Hypsipetes chloris Halmahera golden bulbul Noted on in small numbers on every day on Halmahera. Sulawesi babbler Trichastoma celebense Single at Sungai Patannuang Asue. Lemon-bellied white-eye Zosterops chloris Tana Toraja. Black-ringed white-eye Zosterops anomalus Karaenta forest. Halmahera white-eye Zosterops fuscifrons One en route to Subaim (Halmahera). Others heard. [Mountain leaftoiler] Phyllergates cuculatus Heard at Tana Toraja. Australasian reed warbler Acrocephalus australis Two when we got a puncture outside Remang-Remang (South Sulawesi). Cisticola sp. Cisticola juncidis/exilis Heard at Remang-Remang. Metallic starling Aplonis metallica Halmahera and Ternate. Asian glossy starling Aplonis panayensis One in the mangroves near Tangkoko. Mollucan starling Aplonis mysolensis Two in Subaim (Halmahera). **Short-tailed starling** Aplonis minor Common in villages in Tana Toraja. Scissirostrum dubium Grosbeak myna Plenty on the last morning at Tangkoko. Red-backed thrush Geokichla erythronota One seen in coastal forest at Tangkoko. Yellow-sided flowerpecker Dicaeum Karaenta Forest and Tangkoko. aureolimbatum Brown-throated sunbird Anthreptes malacensis Bantimurung-Bulusaraung NP and in the mmangroves near Tangkoko. Black sunbird Bantimurung-Bulusaraung NP. Also recorded on Leptocoma sericea Ternate. Crimson sunbird Aethopyga siparaja One male at Tana Toraja. Sahul sunbird Cinnyris clementiae Tana Toraja. Halmahera. Lonchura punctulata

Tana Toraja.

widespread.

ubiquitous.

South Sulawesi.

Lonchura atricapilla

Lonchura pallida

Passer montanus

Scaly-breasted munia

Black-headed munia

Eurasian tree sparrow

Pale-headed munia

## Mammals recorded in Sulawesi and Halmahera between $5^{th}$ and $18^{th}$ April

[North Moluccan	Pteropus caniceps?	Animals flying at dawn at our Villa on
flying-fox]		Ternate may have been this species.
[Celebes pig]	Sus celebensis	Signs of rootling at Bantimurung-
		Bulusaraung NP.
Bear cuscus	Ailurops ursinus	Two at Tangkoko, near the corpse of a
	•	recently dead individual.
Moor macaque	Macaca maura	Small troupe at Bantimurung-Bulusaraung
-		NP and another at Sungai Pattanuang
		Asue. Also seen the next day in the
		Karaenta Forest and Remang-Remang.
Sulawesi crested	Macaca nigra	Seen on both days in the coastal forest of
macaque	<u> </u>	Tangkoko. We had encounteres with both
_		of the habituated troupes but did not find
		them easily the morning we went macaque
		tracking!
dwarf squirrel sp.	Prosciurillus sp.	Alf saw one at Karaenta Forest, probably
	,	murinus?
Celebes dwarf squirrel	Prosciurillus murinus	At least three at Tangkoko.
Gursky's tarsier	Tarsius spectrumgurskyae	Fig tree roost site visited on a number of
-	, 3	occasions at Tangkoko with up to four
		individuals noted.

# Reptiles and amphibians recorded in Sulawesi and Halmahera between $5^{th}$ and $18^{th}$ April

Asian toad	Duttaphrynus melanostictus	One at Sungei Pattanuang Asue. Probably part of a large currently unrecognised species-complex. Introduced on Halmahera where we saw a small number around the hotels.
Sulawesi toad	Ingerophrynus celebensis	One at night at Tangkoko.
Finch's warty frog	Limnonectes cf finchi	Seen after rain and dark at Tangkoko. This species is not <i>finchi</i> (which is confined to Borneo) and awaits formal description.
Iskander's striped tree- frog	Polypedates iskanderi	Noted after rain and after dark at Tangkoko.
Common house gecko	Hemidactylus frenatus	Ubiquitous.
Sulawesi sailfin	Hydrosaurus celebensis	Sungai Pattunuang Asue and Bantimurung- Bulusaraung NP. One full adult male seen.
Water monitor	Varanus salvator	One at Remang-Remang (South Sulawesi).
Minahassa flying lizard	Draco spilonotus	Several nice males seen at Tangkoko. Others glimpsed.
Skinks	Emoia spp.	We saw at least three species on Sulawesi and another, probably new, species on Halmahera. Currently one in three species in this region are
Forest skinks	Sphenomorphus spp.	unidentified making diagnosis very uncertain The same applies to the skinks observed in the forest at Tangkoko. Perhaps two species involved but difficult to diagnose due to the lack of work done so far on these lizards.
Saltwater crocodile	Crocodylus porosus	A huge surprise at Lake Tolire (Ternate) during our brief session in the field there was the presence of a
Green turtle	Chelonia mydas	large individual of this species in the crater lake. The snorkel squad were treated to views of perhaps up to 12 of these superb beasts in their element.

#### Butterflies recorded in Sulawesi and Halmahera between 5th and 18th April

Many butterflies from both Sulawesi but especially Halmahera remain to be identified...

Troides haliphron Karaenta Forest.

Papilio gigon Bantimurung-Bulusaraung NP and Tangkoko.

Papilio sataspes Bantimurung-Bulusaraung NP.

Papilio ascalaphusKaraenta Forest.Papilio memnonRemang-Remang.

Graphium anthedon Bantimurung-Bulusaraung NP.

Graphium agamenon Karaenta Forest.

Graphium rhesus
Graphium androcles
Graphium encelades
Gandaca harina
Eurema alitha

Bantimurung-Bulusaraung NP.
Bantimurung-Bulusaraung NP.
Sungai Pattanuang Asue.
Sungai Pattanuang Asue.

Hebomoia glaucippe Bantimurung-Bulusaraung NP and Tangkoko.

Cepora celebensis Bantimurung-Bulusaraung NP.

Faunis menado Bantimurung-Bulusaraung NP and Sungai Pattanuang Asue.

Cyrestis strigata
Bantimurung-Bulusaraung NP.
Lexias aeetes
Bantimurung-Bulusaraung NP.
Hypolimnas anomala
Bantimurung-Bulusaraung NP.
Idaea blanchardii
Bantimurung-Bulusaraung NP.
Vindula dejone
Bantimurung-Bulusaraung NP.