

TOUR HIGHLIGHTS

Either for rarity value, excellent views or simply a group favourite.

- Bulwer's Petrel
- Sulawesi Goshawk
- Small Sparrowhawk
- Gurney's Eagle
- Sulawesi Hawk-Eagle
- Moluccan Scrubfowl
- Maleo
- Red-backed Buttonquail
- Sulawesi Black Pigeon
- Red-eared Fruit Dove
- Oberholser's Fruit Dove
- Violet-necked Lory
- Ornate Lorikeet
- White Cockatoo
- Yellow-breasted Racquet-tail
- Moluccan King Parrot
- Yellow-billed Malkoha
- Sulawesi Masked Owl
- Ochre-bellied Boobook
- Moluccan Owlet-Nightjar
- Satanic Nightjar
- Lilac-cheeked Kingfisher
- Common Paradise-Kingfisher
- Sulawesi Dwarf Kingfisher
- Purple-bearded Bee-eater
- Sulawesi Dwarf Hornbill
- Ivory-breasted Pitta
- Sulawesi Pitta
- Pygmy Cuckooshrike
- Piping Crow
- Wallace's Standardwing
- Great Shortwing
- Red-backed Thrush
- Lompobattang Flycatcher
- Sulawesi Crested Myna
- Hylocitrea

SUMMARY:

Our third roller-coaster of a ride to these endemic-rich Indonesian islands produced a plethora of much-wanted birds and we ended up seeing a very respectable 111 endemics. We began amidst the wonderful forested hills of Lore Lindu where Purple-bearded Bee-eater, Satanic Nightjar and Hylocitrea were amongst the highlights. We followed this with a successful visit for the extremely localised endemic Lompobattang Flycatcher – and currently we are the only tour group visiting this site. We then flew to the endemic-heaven that is Halmahera and based ourselves at Foli in a comfortable hotel. What a fantastic time we had here with



an easy walk for lekking Wallace's Standardwing, stunning Ivory-breasted Pitta, skulking Dusky Megapodes and so much more. Another patch of forest held Sombre Kingfisher and Common Paradise-Kingfisher, but it was a shame that Invisible Rail lived up to its name and only called back at us! Returning to Sulawesi we visited Tangkoko where Sulawesi Pitta and a veritable feast of endemic kingfishers followed. We ended at Dumoga Bone and Tambun for a final flourish with Ashy Woodpecker, Maleo and Matinan Flycatcher amongst others. These islands continue to produce a fantastic array of rare and localised specialities, as well as some of the most stunningly beautiful birds on the planet. We cannot wait to return!

Days 1 - 2 5th to 6th September

Following our overnight flight from London to Dubai with Emirates Airlines we eventually arrived at Jakarta in the late afternoon. Following the usual immigration checks we transferred to a nearby hotel and managed to sneak in a quick bit of birding in the garden where the endemic **Javan Munia** was the highlight.

Day 3 Sunday 7th September

Couldn't believe our 5am flight to Palu in Sulawesi was on time, but it was! Upon arrival at 8am we met up with our local guide Royke Mananta and drove out of the town and spent a pleasant hour walking around a scrubby area near a river where we saw **Glossy, Uniform** and **Sulawesi Swiftlets**, **Collared Kingfisher**, a brief **Red-backed Buttonquail**, many **Savanna Nightjars**, **White-shouldered Triller**, **Gould's Bronze Cuckoo**, **Lemon-bellied White-eye**, and both **Pale-headed** and **Chestnut Munia**. It then took the best part of 3 hours to drive up into the hills of Lore Lindu, stopping at a roadside church for lunch!



Purple-bearded Bee-eater

Once up in the hills we birded the forest edge and quickly scored with at least 3 **Ivory-backed Woodswallows** and a flyover **Sulawesi Honey-Buzzard**. Driving on we hit a purple patch with **Dark-fronted White-eyes**, **Sulawesi Babbler**, **Blue-fronted Flycatcher** and **Rusty-bellied Fantail**. However, the pair of **Purple-bearded Bee-eaters** scoped in a tall tree over the road was definitely the best sighting of the day and little did we know that this was to be one of only two sightings of the entire tour! We then walked further along the road, getting some views of **Golden-bellied Gerygone** which was exciting for some, before driving lower down into the valley where **Short-tailed Starlings** and some flyover **White-bellied Imperial-Pigeons** were seen. Dinner at the Sindy Inn was rather nice and the cold beers even more so!

Day 4 Monday 8th September

We had a very, very early start to head up the fabled, infamous Anaso Track and had a profitable day with a birdlist that reads like a 'Who's Who' of Sulawesi endemics and specialities: **White-eared Myza**, a day roosting pair of **Satanic Nightjars**, **Red-eared Fruit-Dove**, groups of **Golden-mantled Racquet-tails** flying over, **Scaly Kingfisher**, **Purple-bearded Bee-eater**, **Malia**, **Great Shortwing**, **Sulawesi Leaf-warbler**, **Citrine Canary-Flycatcher**, **Grosbeak Starling**, **Dark-eared Myza**, **Streak-headed Dark-eye**, and several **Mountain Serins**.

Day 5 Tuesday 9th September

A really great day's birding today as we scoured the lake and roadside forest at Lore Lindu, and it all began with a **Sulawesi Masked Owl** showing well along the road. Some of the highlights this morning were **Spotted Kestrel**, **Sunda Teal**, **Yellow-and-green Lorikeet**, **Great Hanging-Parrot**, **Black-billed Koel**, **Sulawesi Pygmy Woodpecker**, **Cerulean** and **Pygmy Cuckooshrikes**, brief **Sulawesi Cicadabird**, **Sulawesi Drongo**, **Malia**, **Dark-eared Myza**, and both **Yellow-sided** and **Crimson-crowned Flowerpeckers**.

After lunch at the lodge we drove back up into the higher forest, seeing **Knobbed Hornbill** and a cracking **Sulawesi Serpent-Eagle** along the way. Unfortunately, the cloud cover was obscuring the tree tops and things were very gloomy indeed with hardly any bird activity to mention. A confiding **Chestnut-backed Bush-warbler** even walked along the road belying its true skulking nature at one point, but there wasn't much else. That was until dusk settled and the skies cleared somewhat, prompting a **Great Eared-Nightjar** to fly over, then a

Cinnabar Boobook to start calling and this cracker showed very well to our admiring group. We followed that up with a quick capture of a **Sulawesi Scops-owl** that took all of 30 seconds to fly in and perch up nicely in the spotlight. Unfortunately, a calling **Speckled Boobook** was spooked by passing traffic so we returned to the lodge for a later than usual dinner.

Day 6 Wednesday 10th September

Began the day scanning from an open, cultivated area at the edge of the forest where we were hoping to find **Sulawesi Crested Myna**. As we walked along the path just after daybreak a myna flew over and headed up into the hills, but we weren't happy with that sort of view, so set in for a lengthy vigil. Over the course of the next couple of hours we saw a close **Sulawesi Serpent-Eagle**, **Spotted Kestrel**, several fly pasts from **Slender-billed Cuckoo-Dove**, a perched flock of **Grey-cheeked Green-Pigeons**, **Grey-headed Imperial-Pigeon**, **Lesser Coucal**, 2 **Purple Needletails** flew over, **Grey Wagtail**, **Sulawesi Cicadabird**, **Great Hanging Parrot**, **Little Pied Flycatcher**, **Golden-headed Cisticola**, **Yellow-sided Flowerpecker**, **Lemon-bellied** and **Dark-fronted White-eyes**, **Fiery-browed** and **Grosbeak Starlings** and eventually a pair of the much-wanted **Sulawesi Crested Mynas** were scoped on their prominent perch.

Walking back to the cars we saw a brief **Black-naped Fruit-Dove**, **Gould's Bronze Cuckoo**, superb views of **Sulawesi Blue Flycatcher**, as well as a **Black Sunbird** and **Yellow-billed Malkoha**.



Satanian or Diabolical Nightjar

After we had finished here we drove up into the hills and began walking up the Anaso Track once again, and we took the steep descent at a leisurely pace. A **Sulawesi Hawk-Eagle** was scoped, and there was also **Malia**, **Citrine Canary-Flycatcher**, nice views of **Dark-eared Myza**, **Sulawesi Myzomela** and **Streak-headed Dark-eye**. The pair of **Satanic Nightjars** were still present at their day roost and we finally nailed a superb **Hylocitrea** feeding in a fruiting tree. We then hiked higher in search of **Geomalia** but it was too late in the day as we had to return to the waiting vehicles before dark.

Day 7 Thursday 11th September

As we had done so well here I wasn't too optimistic about notching up any more new birds today, but once again I was to be proved wrong. First of all we found a **Piping Crow** in a rather unusual place in the lowlands at the forest edge, and it performed in the treetops admirably. Then as we walked along the road a **Small Sparrowhawk** was seen in a roadside tree, and we watched it as it called incessantly for a minute or two. However, nearby we found a nest with two almost fully-grown immature birds perched next to it. After studying them for a while we had literally walked 50 metres when a **Spot-tailed Goshawk** began calling. It was somewhere below the road along the river and we staked it out in the heat of the day – after a 55 minute wait Marcelo spotted it partially obscured in the foliage of a tree overhanging the river. High-fives all round! Then we drove up higher and continued our run of good fortune with a **Blue-faced Parrotfinch** spotted high in the canopy above us. It was in company with **Pygmy** and **Cerulean Cuckooshrikes** and plenty of white-eyes but unfortunately not everyone managed to get a good enough view. As we had been working really hard and been so successful we decided to take the afternoon off and relax around the lodge, which was much appreciated by everyone!

Day 8 Friday 12th September

We left Lore Lindu early doors and drove down into the hot and sweaty lowlands where a walk around a scrubby area turned up several **Barred Buttonquails** and more importantly, several **Red-backed Buttonquails**. We also had views of our first **Black-faced Munia** here as well. In the afternoon we flew to Makassar and drove over 3 hours to our hotel at Lompobattang, seeing **Pacific & House Swifts**, plus some more **Black-faced Munias** along the way. Our accommodation was interesting to say the least, and I must admit I passed on a cold bucket wash tonight!

Day 9 Saturday 13th September

Following a night with high winds and debris dropping onto the roof of our 'hotel' we had a 4am breakfast before heading further into the hills. After half an hour's walk across some forested ridges we eventually tracked down the extremely localised **Lompobattang Flycatcher** – a bird restricted to just this one set of hills in southern Sulawesi. We had a really good look at this great little bird, along with our other key target bird of **Black-ringed White-eye**. We also saw **Streak-headed Dark-eye**, **Sulawesi Leaf-warbler**, **Sulawesi Myzomela**, **Yellow-sided Flowerpecker** and other familiar species from our stay at Lore Lindu. We returned to the hotel for a late morning lunch before driving almost three and a half hours to Makassar Fishponds where unusually high winds hampered our birding and the best we could come up with was **Long-toed Stint**, **Wood Sandpiper**, **Whimbrel** and a few other common species.



Lompobattang Flycatcher

Day 10 Sunday 14th September

After an hours delay we flew from Makassar to the island of Ternate, before getting taxis down to the small harbour and boarding a boat for the crossing to Sidangoli in Halmahera. It was a rather disappointing journey as there just weren't any seabirds, apart from a **Lesser Frigatebird** and some **Great Crested Terns**. As we approached Halmahera we took a short detour to find **Beach Kingfisher**, and there was also an **Eastern Osprey** carrying a fish and a **Pacific Reef Egret**. After lunch in the small town we drove north some 4 hours to Tobelo, arriving around 8pm. Along the way we inevitably made a few stops for new birds such as **Blue-and-white Kingfisher**, **White-bellied Cuckooshrike**, **Lesser Fish-Eagle**, **Grey-headed Fruit-Dove**, **Moustached Treeswift**, **Rainbow Bee-eater** and a **Blyth's Hornbill**. After dropping our bags into a hotel we had a quick dinner before another 45 minute drive to Galela where we walked through the forest for 20 minutes to a narrow creek in the mangroves and took some dugout canoes to an isolated beach. We were well behind schedule by now and it was around



Moluccan Megapode (also known as Moluccan Scrubfowl)

10pm when we finally arrived 'on site', and then another 90 minutes later we duly scored with cracking views of **Moluccan Megapode**. Good views of **Moluccan Scops-owl** also followed before we drove back to Tobelo, arriving around 2am and a welcome bed for the night!

Day 11 Monday 15th September

We drove for an hour and a half, stopping to watch a few **Red-flanked Lorikeets** and a **Cream-throated White-eye**, before boarding another boat for the crossing to Foli, and this time we did have some 'seabirds' with pride of place going to 3 **Bulwer's Petrels** flying in front of us. We also had **Lesser Frigatebird**, and both **Common** and **Roseate Terns**. The boat journey was a little problematical as the engine kept cutting out, but we finally made it to the harbour around 1pm and drove for 20 minutes to Baroka and a very nice little hotel which would be our base for the next 4 nights. We spent the late afternoon in some great forest at Foli where we were kept busy with many new birds, starting with a close **Dusky-brown Oriole** feeding beside the trail. There were also many **Grey-headed Fruit-Doves**, several **Moluccan Imperial-Pigeons**, **Pied Imperial-Pigeons**, **Blyth's Hornbills**, **Northern Golden Bulbul** and **Metallic Starling**.

At a large tree we had four new trip birds in a few seconds with **Rufous-bellied Triller**, **Halmahera Cuckooshrike**, a huge **Great-billed Parrot** and our first looks at **Moluccan Imperial-Pigeon**. A short while later a pair of **Drab Whistlers** appeared close by – stunners! Later in the afternoon a party of **Violet-necked Lory** flew around us, an **Eclectus Parrot** flew over calling several times, several **Red-cheeked Parrots** were around and eventually a **White Cockatoo** flew along a forested ridge in the distance, making a very impressive sight indeed.

Once it got dark we called in a pair of **Barking Owls** and then played cat-and-mouse with a **Moluccan Owlet-Nightjar**, which was eventually spotlighted to round off a very good day's birding.

Day 12 Tuesday 16th September

This morning was all about two birds in particular. We began watching a lek of **Wallace's Standardwing** shortly after sunrise, and this only involved a 15 minute walk from our parked vehicle as opposed to a 3 hour hike before dawn on our previous tours!

The other highlight of the morning was tracking down one of two calling **Ivory-breasted Pittas**... As we sat on the forest floor staking out this cracker we also saw a **Dusky Megapode** walking along the forest floor – a really good sighting of a super tough bird. And there was a **Moluccan Monarch** at the same spot as well, as well as **Common Cicadabird**, and several close **Blue-and-white Kingfishers**.



Wallace's Standardwing at Foli

In the afternoon we walked along the track at Foli and had a wonderful session with **White-streaked Friarbird**, **Cinnamon-bellied Imperial-Pigeon**, **Blue-capped Fruit-Dove**, **Moluccan Cuckooshrike**, **Moluccan Hanging-Parrot**, **Dusky Honeyeater**, a flyby **Moluccan King Parrot**, **Moluccan Goshawk**, **Goliath Coucal** and **Halmahera Flowerpecker** for some. We also had further views of **Violet-necked Lory**, **Great-billed**, **Red-cheeked** and **Eclectus Parrots**, **Red-flanked Lorikeet**, and a closer flyby from a **White Cockatoo**.

Day 13 Wednesday 17th September

A tough day today as the temperature soared and then in the evening a strong wind impeded any chance of owling success. However we began at daybreak on the main track at Foli with several close **Goliath Coucals** (at last), followed by very nice perched views of a group of **Violet-necked Lory** and a female **Eclectus Parrot**. There was also **Great-billed Parrot**, **Moustached Treeswift**, a perched **Paradise Crow** and **Slaty Flycatcher**, but it was a shame that a calling **Sombre Kingfisher** failed to appear. A few of us made another attempt at **Ivory-breasted Pitta**, which drew a blank although we did see a **Shining Flycatcher** and a **Moluccan Monarch**. But best of all this morning was a confiding **Gray's Grasshopper Warbler** creeping around some dried grass stems, and the noise it made burrowing its way through made it relatively easy to catch a glimpse of him!

Driving back to the forest after a lunchtime siesta we had a **Gurney's Eagle** soaring over the road again, but the birding was slow. It was still very hot and there was little bird activity although we still had superb views of many **Blyth's Hornbills** and the usual parrots to keep us entertained. Leaving in the dark we saw a few **Large-tailed Nightjars** in the headlights as we drove back to the hotel.

Day 14 Thursday 18th September

We headed to another forest some 2 hours drive from our hotel and arrived shortly after sunrise. After a picnic breakfast and a flyby **Paradise Crow** we waded along a small stream and made an attempt at **Invisible Rail** – needless to say without any success, although it did call twice. We also made several other attempts in the forest throughout the morning without any joy! However, our decision to come here was justified when, firstly a **Common Paradise-Kingfisher** performed admirably and was eventually dive-bombed by the other major miss so far on Halmahera, **Sombre Kingfisher**! The latter bird perched high up in the canopy and stayed there for everyone to admire for several minutes. At the same spot, Marcel saw a **White-naped Monarch** as well, and everyone managed to get some sort of view of it. We then followed a fairly easy trail through great forest for the rest of the morning seeing **Black-chinned Golden Whistler**, **Spectacled Monarch**, and many **White-streaked Friarbirds** as well.



The stunning Ivory-breasted Pitta

Lunch in the forest then saw the group split in two with Royke taking some of the group deeper into the forest in search of **Chattering Lory**, unsuccessfully. But they did get some **Eastern Yellow Wagtails** and plenty of other previously seen species. Nick returned along the same trail with the rest of the group in search of better views of **Ivory-breasted Pitta** – with Jeff spotting a calling bird high in the canopy some 50 metres away, which called for 10 minutes and allowed some decent photos.

Day 15 Friday 19th September

We left Foli and drove to Sidangoli, stopping along the way at a nice viewpoint across a forested hillside where we finally saw a **Chattering Lory**. Then we caught the boat back to Ternate, a taxi to the airport and a midday flight to Manado, where we arrived earlier than we departed due to the time difference! A couple of hours

driving and we were at the viewpoint near Tangkoko where **Isabelline Bush-hen** was seen by a few people, along with many **Grey-headed Imperial-Pigeons**, a few **White-bellied Imperial-Pigeons**, **Silver-tipped Imperial-Pigeons**, **Grey-cheeked Green-Pigeons**, the local race of **Green Imperial-Pigeon**, **Knobbed Hornbill**, **White-necked Myna** and a very close flyover from a **Black Eagle**.

Day 16 Saturday 20th September

We spent the morning in the magical forests of Tangkoko, starting with a **Red-backed Thrush** feeding right out in the open beside the path. We followed this with several **Philippine Scrubfowls** (also known as **Philippine Megapode**) scuttling along the forest floor nearby. As always, this is **THE** place for kingfishers and we duly scored with good views of several **Green-backed Kingfishers**, followed by a **Ruddy Kingfisher**, and ending with a rather sexy **Lilac-cheeked Kingfisher** that showed extremely well. Our other targets were also quite obliging with at least 2 showy **Sulawesi (Red-bellied) Pittas** that everyone thoroughly enjoyed watching for quite some time, followed soon after by a pair of day-roosting **Ochre-bellied Boobooks**, and a **Purple-winged Roller** was also seen nearby. At a huge tree a pair of rather cool **Spectral Tarsiers** were present, and as we followed an indistinct trail back towards our waiting vehicles we were shown a pair of day-roosting **Great Eared Nightjars** looking impressively large and well camouflaged in the dry leaf litter. A **Spot-tailed Goshawk** played hard to get in the canopy above us for a while but was eventually tracked down, and then we spent some time watching the antics of a troop of **Sulawesi Crested Macaques** bathing and playing in a lagoon beside the beach. We ended our morning session with a **Pale-blue Monarch** before returning to our excellent lodge for lunch.



Sulawesi Dwarf Kingfisher



Sulawesi Pitta

In the afternoon we set out in search of **Sulawesi Dwarf Kingfisher** along a different trail and although it took some finding we were rewarded with stunning views of a single bird perched below the trail. We also well and truly nailed **White-rumped Cuckooshrike**, along with **Bay Coucal**, **Stephan's Dove**, **Yellow-billed Malkoha**, **Blue-backed Parrot**, and at dusk enjoyed fine views of several displaying **Sulawesi Nightjars**.

Day 17 Sunday 21st September

An early morning watch from the viewpoint gave us a group of **Sulawesi Dwarf Hornbills**, a brief **Sulawesi Triller**, both **Small** and **Great Hanging-Parrots**, flocks of **Finch-billed Mynas**, and even a **Barred Rail**. Afterwards, we took a short boat ride into the mangroves for **Great-billed Kingfisher** which showed nicely after some time, and a **White-bellied Sea-Eagle** and **Great-billed Heron** were also new for the trip.

In the afternoon we walked a forest trail and had a group of 5 **Pied Cuckooshrikes**, **Sulawesi Cuckooshrike**, and enjoyed scope views of **Yellow-breasted Racquet-tail**. At the same spot we had a **Minahassa Masked Owl** call back briefly to my ipod but had crippling views of a **Sulawesi Scops-owl** beside our waiting cars.

Day 18 Monday 22nd September

One final look from the viewpoint at Tangkoko before leaving eventually resulted in a pair of **Ornate Lorikeets** feeding quietly in a nearby tree – well spotted Marcel! And then Wilfried found a perched **Sulawesi Goshawk** in a dead tree that looked superb in the scope, and we followed this with a close perched **Golden-mantled Racquet-tail**, **Grey-streaked Flycatcher** and **White-necked Myna**.

We then set out on the long drive to Tambun, seeing **White-browed Crake**, **Barred Rail** and **Sacred Kingfisher** along the way and some roadside **Java Sparrows**. We also called into the Maleo Resere in the afternoon but our visit failed to produce anything worth noting!

Day 19 Tuesday 23rd September

Headed up into the hills of Gunung Ambang at 4am and after an hour's drive we walked some 30 minutes to the forest edge. Another reasonably lengthy walk ensued and we flushed a **Blue-breasted Quail** from beside the path on the way up, but was worthwhile for the views of the rare endemic **Matinan Fltcatcher**, a pair of which showed superbly well. We also had nice views of a pair of **Malia**, **Slender-billed Cuckoo-Dove** and **Yellow-and-green Lorikeets**, before returning to our vehicles and then driving to Dumoga Bone, seeing a close **Spotted Harrier** along the way.

A walk across the river via a floating raft gave us great views of **Oberholser's Fruit Dove** reasonably quickly. We also saw a flock of **Purple Needletails** coming down to the river to drink and 10+ **Black Kites** and finally our long overdue **Ashy Woodpecker**. Unfortunately the day roosting **Speckled Boobook** had apparently been disturbed by another visiting group of birders so we had to call one in after dinner – but the views weren't great and the bird twice flew off when the spotlight was put on it.

Day 20 Wednesday 24th September

We returned to Tambun and the Maleo Reserve just after daybreak and then spent the next couple of hours waiting for a **Maleo** to appear. Whilst waiting we saw a **Bay Coucal** and **Sulawesi Dwarf Kingfisher**. With hopes dwindling and a dreaded dip seemingly on the cards, it was with much relief that the local ranger came running over to us with some good news. We followed him into the forest and after some frantic directions everyone locked on to the strange-looking **Maleo** perched high up in the canopy. Wow! What a relief after several frustrating hours searching for this much-wanted species and high-fives all round. Back at the entrance we enjoyed a pair of close **Sulawesi Trillers** and a **Yellow-sided Flowerpecker** also put in an appearance.



Maleo

After lunch we checked out a roadside marsh where we saw **Spotted Harrier** and a **White-browed Crake**, but a **Dusky Moorhen** was just a leader only sighting. And then, following a tip-off, we spent the remainder of the late afternoon and early evening back up in the hills at Gunung Ambang trying to spotlight a reported **Minahassa Masked Owl**. Well we never nailed it, but possibly heard it and driving back to town we had brief views of what was probably a **Sulawesi Masked Owl**.

Day 21 Thursday 25th September

This was mainly a travelling day as we returned to Manado for our flight back to Jakarta. But we still saw a few goodies along the way with **Cinnamon Bittern**, **Sunda Teal**, **Buff-banded Rail** and **Java Sparrow** being the best sightings. Upon arrival in Jakarta we checked into a transit lounge for a shower and some food before setting out on our various flights back home, arriving the following day and conclusion of a very successful tour.

I would like to thank Royke Mananta for his excellent guiding and logistical skills, and also a big "THANK YOU" to a brilliantly keen and fun group. We had a great trip and everyone contributed in finding some superb birds. Also, thanks to Kevin Bryan for his extremely detailed mammal list.

Nick Bray.



The superb Lilac-cheeked Kingfisher - Tangkoko

**SYSTEMATIC LIST - SULAWESI & HALMAHERA
SEPTEMBER 2014**

ANSERIFORMES: Anatidae

Wandering Whistling Duck
Sunda Teal

Dendrocygna arcuata
Anas gibberifrons

GALLIFORMES: Megapodiidae

Maleo S
Philippine (Tabon) Megapode
Moluccan Megapode M
Dusky Megapode

Macrocephalon maleo
Megapodius cumingii gilbertii
Eulipoa wallacei
Megapodius freycinet

GALLIFORMES: Phasianidae

Blue-breasted (King) Quail

Excalfactoria chinensis

PROCELLARIIFORMES: Procellariidae

Bulwer's Petrel

Bulweria bulwerii

PELECANIFORMES: Ardeidae

Cinnamon Bittern
Black-crowned Night Heron
Striated Heron
Javan Pond Heron
Eastern Cattle Egret
Great-billed Heron
Purple Heron
Great Egret
Intermediate Egret
Little Egret
Pacific Reef Heron

Ixobrychus cinnamomeus
Nycticorax nycticorax
Butorides striata
Ardeola speciosa
Bubulcus coromandus
Ardea sumatrana
Ardea purpurea
Ardea alba modesta
Egretta intermedia
Egretta garzetta
Egretta sacra

SULIFORMES: Fregatidae

Lesser Frigatebird

Fregata ariel

ACCIPITRIFORMES: Pandionidae

Eastern Osprey

Pandion cristatus

ACCIPITRIFORMES: Accipitridae

Sulawesi Honey Buzzard S
Sulawesi Serpent Eagle S
Sulawesi Hawk-Eagle S
Black Eagle
Gurney's Eagle
Sulawesi Goshawk S
Spot-tailed Sparrowhawk S
Grey-throated Goshawk M
Small Sparrowhawk S
Spotted Harrier

Pernis celebensis
Spilornis rufipectus
Nisaetus lanceolatus
Ictinaetus malaiensis
Aquila gurneyi
Accipiter griseiceps
Accipiter trinotatus
Accipiter griseogularis
Accipiter nanus
Circus assimilis

Black Kite
Brahminy Kite
White-bellied Sea Eagle
Lesser Fish Eagle
Rufous-winged Buzzard

Milvus migrans
Haliastur indus
Haliaeetus leucogaster
Haliaeetus humilis
Butastur liventer

GRUIFORMES: Rallidae

Barred Rail
Buff-banded Rail
Invisible (Drummer) Rail M (Heard Only)
White-browed Crake
Isabelline Bush-hen S
White-breasted Waterhen
Purple Swampphen
Common Moorhen
Dusky Moorhen (Leader only)

Gallirallus torquatus celebensis
Gallirallus philippensis
Habroptila wallacii
Porzana cinerea
Amaurornis isabellina
Amaurornis phoenicurus leucomelanus
Porphyrio porphyrio melanopterus
Gallinula chloropus
Gallinula tenebrosa

CHARADRIIFORMES: Turnicidae

Red-backed Buttonquail
Barred Buttonquail

Turnix maculosus
Turnix suscitator rufilata

CHARADRIIFORMES: Charadriidae

Pacific Golden Plover (leader only)

Pluvialis fulva

CHARADRIIFORMES: Scolopacidae

Whimbrel
Common Greenshank
Wood Sandpiper
Common Sandpiper
Long-toed Stint
Red-necked Phalarope

Numenius phaeopus
Tringa nebularia
Tringa glareola
Actitis hypoleucos
Calidris subminuta
Phalaropus lobatus

CHARADRIIFORMES: Laridae

Greater Crested Tern
Little Tern
Roseate Tern
Common Tern
Whiskered Tern

Thalasseus bergii
Sternula albifrons
Sterna dougallii
Sterna hirundo
Chlidonias hybrida

COLUMBIFORMES: Columbidae

Rock Dove
Red Collared Dove
Spotted Dove
Slender-billed Cuckoo-Dove
Slender-billed Cuckoo-Dove
Great Cuckoo-Dove
Sulawesi Black Pigeon S
Common Emerald Dove
Stephan's Emerald Dove
Zebra Dove
Pink-necked Green Pigeon (leader only)
Grey-cheeked Green Pigeon

Columba livia
Streptopelia tranquebarica
Spilopelia chinensis
Macropygia amboinensis albicapilla
Macropygia amboinensis albiceps
Reinwardtoena reinwardtii
Turacoena manadensis
Chalcophaps indica
Chalcophaps stephani
Geopelia striata
Treron vernans
Treron griseicauda

Red-eared Fruit Dove S
Oberholser's Fruit Dove S
Scarlet-breasted Fruit Dove M
Superb Fruit Dove
Blue-capped Fruit Dove M
Grey-headed Fruit Dove M
Black-naped Fruit Dove
White-bellied Imperial Pigeon S
Grey-headed Imperial Pigeon S
Green Imperial Pigeon
Spectacled Imperial Pigeon M
Cinnamon-bellied Imperial Pigeon M
Pied Imperial Pigeon
Silver-tipped Imperial Pigeon S

Ptilinopus fischeri
Ptilinopus epius
Ptilinopus bernsteinii
Ptilinopus superbus superbus
Ptilinopus monacha
Ptilinopus radiata
Ptilinopus melanospila melanospila
Ducula forsteni
Ducula radiata
Ducula aenea paulina
Ducula perspicillata
Ducula basilica basilica
Ducula bicolor bicolor
Ducula luctuosa

CUCULIFORMES: Cuculidae

Goliath Coucal M
Lesser Coucal
Bay Coucal S
Yellow-billed Malkoha S
Black-billed Koel S
Gould's Bronze Cuckoo
Brush Cuckoo (Heard only)
Rusty-breasted Cuckoo
Moluccan Drongo-Cuckoo (Heard only) M

Centropus goliath
Centropus bengalensis javanicus
Centropus celebensis celebensis
Rhamphococcyx calyrorhynchus
Eudynamys melanorhynchus
Chrysococcyx russatus jungei
Cacomantis variolosus
Cacomantis sepulcralis
Surniculus musschenbroeki

STRIGIFORMES: Tytonidae

Minahassa Masked Owl S (Heard only)
Sulawesi Masked Owl S

Tyto inexpectata
Tyto rosenbergii

STRIGIFORMES: Strigidae

Sulawesi Scops Owl S
Moluccan Scops Owl
Halmahera Boobook M (Heard only)
Barking Owl
Ochre-bellied Boobook S
Cinnabar Boobook S
Speckled Boobook S

Otus magicus leucospilus
Otus collari
Ninox hypogramma
Ninox connivens rufostigata
Ninox ochracea
Ninox ios
Ninox punctulata

CAPRIMULGIFORMES: Caprimulgidae

Satanic Nightjar S
Great Eared Nightjar
Large-tailed Nightjar
Sulawesi Nightjar S
Savanna Nightjar

Eurostopodus diabolicus
Lyncornis macrotis
Caprimulgus macrurus
Caprimulgus celebensis celebensis
Caprimulgus affinis

APODIFORMES: Aegothelidae

Moluccan Owlet-Nightjar M

Aegotheles crinifrons

APODIFORMES: Hemiprocnidae

Grey-rumped Treeswift
 Moustached Treeswift

Hemiprogne longipennis wallacii
Hemiprogne mystacea confirmata

APODIFORMES: Apodidae

Glossy Swiftlet
 Halmahera Swiftlet M
 Sulawesi Swiftlet S
 Uniform Swiftlet
 Purple Needletail
 Asian Palm Swift
 Pacific Swift
 House Swift

Collocalia esculenta
Aerodramus infuscatus
Aerodramus sororum
Aerodramus vanikorensis
Hirundapus celebensis
Cypsiurus balasiensis
Apus pacificus
Apus nipalensis

CORACIIFORMES: Coraciidae

Purple-winged Roller S
 Oriental Dollarbird

Coracias temminckii
Eurystomus orientalis orientalis

CORACIIFORMES: Alcedinidae

Green-backed Kingfisher S
 Scaly-breasted Kingfisher S
 Common Paradise Kingfisher
 Lilac Kingfisher S
 Great-billed Kingfisher S
 Ruddy Kingfisher
 Blue-and-white Kingfisher M
 Collared Kingfisher
 Beach Kingfisher
 Sacred Kingfisher
 Sombre Kingfisher M
 Common Kingfisher
 Sulawesi Dwarf Kingfisher S
 Variable Dwarf Kingfisher (Heard only)

Actenoides monachus monachus
Actenoides princeps
Tanysiptera galatea browningi
Cittura cyanotis cyanotis
Pelargopsis melanorhyncha
Halcyon coromanda rufa
Todiramphus diops
Todiramphus chloris chloris
Todiramphus saurophagus
Todiramphus sanctus
Todiramphus funebris
Alcedo atthis hispidoides
Ceyx fallax fallax
Ceyx lepidus

CORACIIFORMES: Meropidae

Purple-bearded Bee-eater S
 Blue-tailed Bee-eater
 Rainbow Bee-eater

Meropogon forsteni
Merops philippinus
Merops ornatus

BUCEROTIFORMES: Bucerotidae

Knobbed Hornbill S
 Sulawesi Hornbill S
 Blyth's Hornbill

Rhyticeros cassidix
Rhabdotorrhinus exarhatus
Rhyticeros plicatus

PICIFORMES: Picidae

Sulawesi Pygmy Woodpecker S
 Ashy Woodpecker S

Dendrocopos temminckii
Mulleripicus fulvus

FALCONIFORMES: Falconidae

Spotted Kestrel

Falco moluccensis

PSITTACIFORMES: Cacatuidae

White Cockatoo M

*Cacatua alba***PSITTACIFORMES: Psittacidae**

Great Hanging Parrot S

Loriculus stigmatus

Moluccan Hanging Parrot M

Loriculus amabilis amabilis

Pygmy Hanging Parrot S

Loriculus exilis

Chattering Lory M

Lorius garrulus garrulus

Violet-necked Lory

Eos squamata riciniata

Ornate Lorikeet S

Trichoglossus ornatus

Red-flanked Lorikeet

Charmosyna placentis

Yellow-and-Green (Citrine) Lorikeet S

Trichoglossus flavoviridis meyeri

Yellow-breasted Racket-tail S

Prioniturus flavicans

Golden-mantled Racket-tail S

Prioniturus platurus

Great-billed Parrot

Tanygnathus megalorhynchus

Blue-backed Parrot

Tanygnathus sumatranus sumatranus

Eclectus Parrot

Eclectus roratus vosmaeri

Red-cheeked Parrot

Geoffroyus geoffroyi cyanicollis

Moluccan King Parrot

*Alisterus amboinensis***PASSERIFORMES: Pittidae**

Sulawesi (Red-bellied) Pitta S

Erythropitta celebensis

Ivory-breasted Pitta M

*Pitta maxima maxima***PASSERIFORMES: Meliphagidae**

Dusky Myzomela M

Myzomela obscura simplex

Sulawesi Myzomela S

Myzomela chloroptera chloroptera

White-streaked Friarbird M

Melitograis gilolensis

Dark-eared Myza S

Myza celebensis celebensis

White-eared Myza S

*Myza sarasinorum chionogenys***PASSERIFORMES: Acanthizidae**

Golden-bellied Gerygone

*Gerygone sulphurea***PASSERIFORMES: Artamidae**

White-breasted Woodswallow

Artamus leucorhynchus

Ivory-backed Woodswallow S

*Artamus monachus***PASSERIFORMES: Campephagidae**

Moluccan Cuckooshrike M

Coracina atriceps magnirostris

Cerulean Cuckooshrike S

Coracina temminckii rileyi

Pied Cuckooshrike S

Coracina bicolor

White-rumped Cuckooshrike S

Coracina leucopygia

White-bellied Cuckooshrike

Coracina papuensis

Pygmy Cuckooshrike S

Coracina abbotti

Halmahera Cuckooshrike M

Coracina parvula

Common Cicadabird

Coracina tenuirostris grayi

Sulawesi Cicadabird S

Coracina morio morio

Sulawesi Triller

Lalage leucopygialis

White-shouldered Triller

Lalage sueurii

Rufous-bellied Triller M

Lalage aurea

PASSERIFORMES: Pachycephalidae

Maroon-backed Whistler S
Sulphur-vented Whistler S
Black-chinned Whistler M
Drab Whistler M

Coracornis raveni
Pachycephala sulfuriventer
Pachycephala mentalis
Pachycephala griseonota

PASSERIFORMES: Oriolidae

Dusky-Brown Oriole M
Black-naped Oriole

Oriolus phaeochromus
Oriolus chinensis celebensis

PASSERIFORMES: Dicruridae

Hair-crested Drongo
Sulawesi Drongo S
Spangled Drongo

Dicrurus hottentottus leucops
Dicrurus montanus
Dicrurus bracteatus atrocaeruleus

PASSERIFORMES: Rhipiduridae

Willie Wagtail
Rusty-bellied Fantail S

Rhipidura leucophrys
Rhipidura teysmanni

PASSERIFORMES: Monarchidae

Pale-blue Monarch S
White-naped Monarch M
Moluccan Monarch M
Shining Flycatcher
Moluccan (Slaty) Flycatcher M

Hypothymis puella
Carterornis pileatus pileatus
Symposiachrus bimaculatus gouldii
Myiagra alecto alecto
Myiagra galeata galeata

PASSERIFORMES: Corvidae

Slender-billed Crow
Piping Crow S
Long-billed Crow M

Corvus enca celebensis
Corvus typicus
Corvus validus

PASSERIFORMES: Paradisaeidae

Paradise Crow M
Wallace's Standardwing M

Lycocorax pyrrhopterus
Semioptera wallacii halmaherae

PASSERIFORMES: Hylocitreidae

Hylocitrea S

Hylocitrea bonensis

PASSERIFORMES: Stenostiridae

Citrine Canary-flycatcher

Culicicapa helianthea

PASSERIFORMES: Pycnonotidae

Sooty-headed Bulbul
Yellow-vented Bulbul
Northern Golden Bulbul
Malia S

Pycnonotus aurigaster
Pycnonotus goiavier analis
Thapsinillas longirostris chloris
Malia grata

PASSERIFORMES: Hirundinidae

Barn Swallow
Pacific Swallow

Hirundo rustica
Hirundo tahitica

PASSERIFORMES: Cettiidae

Mountain Tailorbird

*Phyllergates cuculatus***PASSERIFORMES: Phylloscopidae**

Sulawesi Leaf Warbler S

*Phylloscopus sarasinorum***PASSERIFORMES: Acrocephalidae**

Clamorous Reed Warbler

*Acrocephalus stentoreus***PASSERIFORMES: Locustellidae**

Chestnut-backed Bush Warbler S

Gray's Grasshopper Warbler

*Locustella castanea**Locustella fasciolata***PASSERIFORMES: Cisticolidae**

Zitting Cisticola

Golden-headed Cisticola

*Cisticola juncidis**Cisticola exilis***PASSERIFORMES: Pellorneidae**

Sulawesi Babbler S

*Trichastoma celebense***PASSERIFORMES: Zosteropidae**

Streak-headed White-eye S

Mountain White-eye

Lemon-bellied White-eye

Black-ringed White-eye S

Cream-throated White-eye M

Black-crowned White-eye S

*Lophozosterops squamiceps striaticeps**Zosterops montanus montanus**Zosterops chloris intermedius**Zosterops anomalus**Zosterops atriceps**Zosterops atrifrons***PASSERIFORMES: Sturnidae**

Metallic Starling

Asian Glossy Starling

Moluccan Starling

Short-tailed Starling

Sulawesi Crested Myna S

White-necked Mya S

Fiery-browed Starling S

Grosbeak Starling S

*Aplonis metallica metallica**Aplonis panayensis panayensis**Aplonis mysolensis mysolensis**Aplonis minor**Basilornis celebensis**Streptocitta albicollis**Enodes erythrophris**Scissirostrum dubium***PASSERIFORMES: Turdidae**

Red-backed Thrush S

Sulawesi Thrush S

*Geokichla erythronota**Cataponera turdoides***PASSERIFORMES: Muscicapidae**

Grey-streaked Flycatcher

Sulawesi Blue Flycatcher S

Blue-fronted Flycatcher S

Matinan Blue Flycatcher S

Island Verditer

Great Shortwing S

Snowy-browed Flycatcher

Lompobattang Flycatcher S

Little Pied Flycatcher

*Muscicapa griseisticta**Cyornis omissus**Cyornis hoevelli**Cyornis sanfordi**Eumyias panayensis**Heinrichia calligyna**Ficedula hyperythra**Ficedula bonthaina**Ficedula westermanni*

Pied Bush Chat

Saxicola caprata albonotata

PASSERIFORMES: Dicaeidae

Yellow-sided Flowerpecker S
Crimson-crowned Flowerpecker S
Halmahera Flowerpecker M
Grey-sided Flowerpecker S

Dicaeum aureolimbatum aureolimbatum
Dicaeum nehrkorni
Dicaeum schistaceiceps
Dicaeum celebicum celebicum

PASSERIFORMES: Nectariniidae

Brown-throated Sunbird
Black Sunbird
Olive-backed Sunbird

Anthreptes malacensis celebensis
Leptocoma sericea
Cinnyris jugularis

PASSERIFORMES: Passeridae

Eurasian Tree Sparrow

Passer montanus

PASSERIFORMES: Estrildidae

Blue-faced Parrotfinch
Black-faced Munia
Scaly-breasted Munia
Chestnut Munia
Pale-headed Munia
Java Sparrow

Erythrura trichroa
Lonchura molucca
Lonchura punctulata particeps
Lonchura atricapilla
Lonchura pallida
Lonchura oryzivora

PASSERIFORMES: Motacillidae

Eastern Yellow Wagtail
Grey Wagtail

Motacilla tschutschensis
Motacilla cinerea

PASSERIFORMES: Fringillidae

Mountain Serin

Chrysocorythus estherae

ZOOTHERA SULAWESI and HALMAHERA 2014 MAMMALS and OTHERS

A. INTRODUCTION

A.1 WHAT is WALLACEA?

The tour description on the Zoothera website provides a good summary of Wallacea. On a map, it looks like the following:-



Source:- http://en.wikipedia.org/wiki/File:Map_of_Sunda_and_Sahul.png
(Author [Maximilian Dörrbecker](#) ([Chumwa](#)))

The 'Wallacea' area lies between the Wallace Line and the Lydekker Line. In essence, Wallacea represents a transition region between Asian forms (west of Wallace) and Australasian forms (east of Lydekker). Where the 'cut-off' point lies, depends, to some extent, on the taxonomic group being considered.

Both Sulawesi and Halmahera are east of the Wallace line. Furthermore, Halmahera is also east of another imaginary line, the Weber line. The Weber line joins the tracts of the deepest waters within the overall Indonesian Archipelago. Halmahera (along with many other islands) remained separate from the other islands, including Sulawesi, even during the ice ages.

Nick Bray highlighted both the high degree of avian endemism on each of Sulawesi and Halmahera (in part, due to the 'Wallace line effect') and the significant differences in avifauna between Sulawesi and Halmahera (in part, due to the 'Weber line effect').

A.2 **SULWESI and HALMHERA**

Indonesia is a land of islands; some shared with other countries and some very large. Within the overall Indonesian picture; it's tempting to think of Sulawesi and Halmahera as smallish. Actually, they are both quite big; Sulawesi is about 85% the size of Great Britain and Halmahera is twice the size of Cyprus. The sizes of these island groups further contributes to endemism.

The Wallace-Weber effect applies to all fauna and flora; mammals are no exception. Sulawesi, for example, has approximately 130 species of mammal of which about 60% are endemic.

B. **SPECIES SUMMARIES**

B.1 **MAMMALS**

Taxonomy

For references and bibliography see Appendix 1.

Classification and nomenclature is based on Duff and Lawson (2004); itself, based on earlier versions of the major reference work by Wilson and Reader (2005).

This taxonomy is different from that used in each of Mittermeier et al 2013 and Wilson and Mittermeier 2011. However, in the present context, the important differences are few and are indicated where appropriate. As the Handbook of The Mammals of the World progresses it may become the popular default taxonomy. The species below were not necessarily seen by all members of the tour group.

Order: DIPROTODONTIA – Contains many of the 'familiar' marsupials

Diprotodontia is a large and diverse order of marsupials containing such familiar mammals as wombats, kangaroos and koala. It is not surprising that the face of the Bear Cuscus (see below) looks somewhat wombat like.

Family: Phalangeridae (Cuscuses and Brushtail Possums)

Bear Cuscus (Sulawesi Bear Cuscus / Sulawesi Bear Phalanger) (*Ailurops ursinus*)

Endemic to Sulawesi and adjoining islands. An uncommon forest dweller.

One of the larger cuscus, reaching 7.0 – 10.0 Kg (a Raccoon (*Procyon lotor*), for comparison, will weigh 3.5 – 9.0 kg). The dense dark fur of the Bear Cuscus making it seem larger still. An arboreal forest dwelling herbivore that feeds mainly on leaves. Seen on two occasions. On Mon 8 Sep a single animal was seen at 06:30 on the later stages of the Anaso Track (Lore Lindu) climb (altitude approx 2,100m). This animal appeared to be waking up. On Tue 9 Sep a single animal was seen at 15:30 in forest along a major road in the Lore Lindu reserve area (altitude approx 1,600m). This animal was mobile and actively feeding on leaves.

Mainly diurnal, this animal will spend periods resting in order to digest its' food (compare with sloths, also mostly foliar feeders).

Small Sulawesi Cuscus (Sulawesi Dwarf Cuscus) (*Strigocuscus celebensis*).

Endemic to Sulawesi and nearby adjacent islands.

Another forest dwelling arboreal cuscus. This species, which, at approx 1Kg, is much smaller than the Bear Cuscus, is mostly nocturnal and feeds on both fruit and leaves.

Seen on one occasion in the early stages of the Anaso Track (Lore Lindu) climb at 04:15 (altitude approx 1,800m) on Mon 8 Sep. A good encounter with an infrequently seen mammal. It was seen well (by torch-light) by several members of the group.

This sighting became the subject of much discussion – was it a cuscus? – mainly due to the speed of its' movement in the final seconds of the sighting. However, with good field descriptions and subsequent access to photographs; it was clearly this species – the nose, muzzle, eyes and tail being particularly distinctive.

In subsequent discussions with other field workers; it was noted that they can, at times, move fast. Also, the higher proportion of fruit in their diet (compared with the Bear Cuscus) may facilitate greater activity. Both these species of cuscus are threatened by habitat loss and hunting (particularly in the case of the Bear Cuscus). They also prefer undisturbed forest tracts and don't do well in parks and altered habitats.

Order: RODENTIA – Rodents

Family: Sciuridae (Squirrels)

Whitish Dwarf Squirrel (*Prosciurillus leucomus*)

Endemic to Sulawesi and neighbouring islands.

Seen on two occasions; Sat 20 Sep and (particularly well on) Tue 23 Sep - near the Tarsier site where it was found by one of the local reserve guides. Uncommon.

An attractive squirrel that looks more like a 'conventional' squirrel than the Sulawesi Dwarf Squirrel (see below). In fact, the Whitish Dwarf Squirrel looks a bit more like a squirrel of the genus *Sciurus* than it does of the genus *Prosciurillus*.

A forest species preferring lower elevations (the 23 Sep sighting was practically at sea level). Diurnal.

Sulawesi Dwarf Squirrel (*Prosciurillus murinus*)

Endemic to Sulawesi and some small adjacent islands.

Seen on a number of occasions (9, 10, 11, 20, 21 and 23 Sep), in a variety of forest habitats and at a range of altitudes.

A small squirrel with relatively long fur that looks 'thinned-out'. The tail looks a bit like a bottle-brush rather than being more thick-furred as in many squirrels. Very active and diurnal, most sightings were of singletons, although two animals were seen together on occasions. This animal was also seen on the ground. This squirrel does not look like the 'classical' squirrels of the genus *Sciurus* (eg the introduced (to the UK) Grey Squirrel (Eastern Grey Squirrel), *S. carolinensis*).

ORDER: CHIROPTERA – Bats

Any trip to the tropics usually yields numerous bat sightings and this was no exception; bats were encountered at all locations. The challenge always comes with their identification.

Small and medium sized bats were very numerous indeed; particularly at lower elevations and on both Sulawesi and Halmahera.

We also saw some very large bats of the 'Flying Fox' type on both islands; particularly on 13, 15 and 17 Sep. Individuals were seen at both dawn and dusk. However, classifying even these 'Megabats' (a specific taxonomic term for the sub-order Megachiroptera, family Pteropodidae) is difficult when there are multiple options.

There are nearly 20 'fruit bats' in Sulawesi and 10 in Halmahera. Future taxonomic work will probably elevate the numbers still further.

Some species are large and abundant (they are also consumed as bushmeat) and others very rare. There are many endemics.

In view of the options – and the fact that we saw small numbers, in flight, and away from their roosting sites – it would not be prudent to attempt speciation.

ORDER: PRIMATES – Primates

In these accounts, the more up to date taxonomy within Mittermeier et al (2013) is mostly used.

There are no native non-human primates on Halmahera (although there is an introduced population of *Macaca nigra* (see below) on Pulau Bacan island near Halmahera).

FAMILY: Tarsiidae (Tarsiers)

Spectral (Eastern / Sulawesi) Tarsier (*Tarsius tarsier*)

There are a large number of Tarsier species on Sulawesi; many of which are poorly described. Their taxonomy is in a state of flux and very much work in progress.

The species name *Tarsius tarsier* is now often reserved for the Selayer Tarsier (found only on the island of Selayer just south of Sulawesi) with *T. focus* being used for the remaining Sulawesi population (although, again, this approach to nomenclature is not universal).

In one text, the species we saw is described as - eastern tarsier (*Tarsius* sp.) 'Manado' form (Tangkoko Batuangus Nature Reserve) – all very succinct.

Either way, another species endemic to Sulawesi.

A small nocturnal primate with an endearing appearance. A singleton was seen well on Sat 20 Sep within Tangkoko Nature Reserve. The animal was approx 3m above ground inside the trunk of a known roosting tree. A carnivorous feeder preying on any suitably sized vertebrate or invertebrate. Highly active, nocturnal and arboreal. The tree would have hosted another four or five individuals that constitute the group. Published studies within the reserve give an average group size of 3.1. Group composition, ie adults, sub-adults, etc; will be influenced by group size.

FAMILY: Cercopithecidae (Old World Monkeys)

Sulawesi Crested Macaque (*Macaca nigra*)

Endemic to Sulawesi (the northern tip and a few neighbouring islands). A troop was seen and observed for 30 min within Tangkoko Nature Reserve on Sat 20 Sep.

A monkey with bold reddish-brown eyes that finds itself in many 'best of' natural history photographs. At a scientific level, this vulnerable mammal is reasonably well documented, particularly within Tangkoko.

The reserve supports about 500 individuals. This particular group (which is multi-male and multi-female) has been well studied and consisted of about 70 individuals. They were mostly on the ground and in a brackish lagoon about 50m from the sea. They were seen with a domestic dog which was not a threat and is often associated with the primate group.

It feeds mainly on fruit but will take a variety of plant and (suitably sized) animal material.

There are six or seven species of macaque on Sulawesi (depending on taxonomy) and *M. nigra* is the most endangered. It is also one of the smaller species of macaque.

Tonkean macaque (*Macaca tonkeana*)

Another species endemic to Sulawesi and an adjoining island.

This is the most widespread and abundant species of macaque in Sulawesi, it is also one of the largest. They prefer elevated forests and, despite their relative abundance, are not always encountered.

Seen on one day, Wed 10 Sep, at the Sulawesi Crested Myna site in the general Lore Lindu reserve area at 07:40. A group of approx 10 animals moved from the forest into a cleared (burned) agricultural area then back again. They were vocalising quite loudly. An attractive macaque that was only seen at a distance. Another sighting, on the same day, occurred on the Lore Lindu hill trail (Anaso Track) at approx 15:10. This consisted of a single large animal (presumed to be a male) in a tree. Upon being observed it rapidly descended and made away into forest cover.

They have adapted to forest clearances in some areas (as is the case here) and can exist in mixed agricultural areas providing there is forest to retreat to. They are often followed by Yellow-billed Malkoha that feed on the invertebrates that they disturb (Mittermeier et al (2013)).

Order: ARTIODACTYLA – Even-toed Ungulates

FAMILY: Suidae (Pigs)

Eurasian Wild Pig (Boar) *Sus scrofa* (and feral Domestic Pig (*S. domesticus*))

This species was not actually seen on the tour. However, loud vocalisations were heard on Thu 18 Sep. Pig sign was seen at a number of sites.

S. scrofa is the progenitor of the Domestic Pig, *S. domesticus*, and there are many instances, around the world, where domestic pigs have escaped and now live as feral populations in the wild.

On Sat 20 Sep we observed a large feral sow suckling numerous well developed piglets. These feral pigs were at the same lagoon as the Crested Macaques and were undisturbed and un-phased by either the monkeys or the very active domestic dog that accompanied them.

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B2. REPTILES

A large number and species of reptiles were seen; particularly 'lizards' of various types. Speciation of reptiles is often difficult and, for many groups, their taxonomy is very much work in progress and often disputed. Taxonomy was based on a number of internet sites. The following were identified.

Order: SQUAMATA – Lizards, Snakes and Amphisbaenids

Family: Gekkonidae – Geckos

Common House (Asian House) Gecko (*Hemidactylus frenatus*)

This species has many common names and many synonyms.

Although a native of S and SE Asia, this species – through introductions – now has a worldwide distribution.

A familiar animal in many of our accommodations.

FAMILY: Varanidae – Monitor Lizards

Asian (Common) Water Monitor (*Varanus salvator*)

After the Komodo Dragon (*V. komodoensis*), *V. salvator* is one of the largest monitor species. The water monitor is regarded as a species complex and has been subject to significant taxonomic work. It has a very large geographical range; in some countries it is remarkably common, in both rural and urban settings.

A small-medium sized individual was seen on Sat 13 Sep at the 'Fishpools' site.

This species will predate megapode eggs, including those of maleo.

FAMILY: Colubridae (Typical snakes)

This is the largest family of snakes, encompassing about 2/3 of snake species, the vast majority of which are non-venomous.

Celebes Black-tailed Rat Snake (*Gonyosoma janseni*)

There are multiple common names for this species which is endemic to Sulawesi.

A large, active, constricting predator that feeds on mammals and birds.

A particularly large specimen was seen in a tree on Thu 11 Sep at the first Spot-tailed Goshawk site – quite near to the road.

The animal remained in the tree for the duration of our stay at the site (approx 30 min).

The colouration, a mixed pattern of yellow and black, makes this a particularly attractive snake.

Coconut Snake (Brown Tree Snake) (*Boiga irregularis*)

This species has a wide distribution from Sulawesi through New Guinea to Australia.

Although mostly nocturnal, it was seen during the day on Fri 24 Sep at the Maleo site descending from the crown of a palm tree. A generalist feeder that has devastated the native bird population on Guam to where it was accidentally introduced.

This is one of the few Colubrid snakes that is venomous; it can also be aggressive. However, it is back-fanged and is not a significant danger to adult humans.

B3. AMPHIBIANS

As with the reptiles; there were many sightings of animals that were difficult to speciate. Taxonomy is based on a number of internet sites.

Order: ANURA – tailless amphibians

FAMILY: Bufonidae – True Toads

The Bufonidae has undergone significant revision in recent years. A large proportion of the species it contains were previously placed in the genus *Bufo*. Most have now been re-assigned to other genera. As such, they have *Bufo* synonyms.

Sulawesian Toad (*Ingerophrynus celebensis*) [Syn *Bufo celebensis*]

Seen on many occasions. At Sedy Inn they were particularly abundant; to the point where they had to be actively avoided around our accommodations.

This species is endemic to Sulawesi and some adjacent islands. It occurs in practically every lowland habitat where there is moisture and permanent or temporary water within which it can breed; this includes ditches in all but the most built up areas.

Asian Common Toad (*Duttaphrynus melanostictus*) [Syn *Bufo melanostictus*]

This species, which has multiple common names, is widespread throughout S and SE Asia and was introduced to Sulawesi. On many occasions, including at the Sedy Inn site, we encountered a larger '*Bufo*' type species that was quite probably this.

This form is probably a complex of more than species across its' range.

B4. FISH

Order: PERCIFORMES – Perch-like Bony-Fish

We saw many species of fish in the sea, in brackish water and in fresh water; some quite beautiful. Identification was not attempted.

On Sun 21 Sep we had good views of mudskippers in the mangrove area. Always interesting and good to see; these fish belong to the family Gobiidae (Gobies).

There are many candidate species; a strong possibility being the Barred Mudskipper (*Periophthalmus argentilineatus*). A species complex with a huge geographical range (from Africa right across to Australasia).