# Report of a birding trip to Sulawesi & Halmahera (Indonesia)

11 September –9 October 2009

by

# Nicolaas and Robert van Zalinge



Red-bellied Pitta – Tangkoko, October 2009 ©Nicolaas van Zalinge

# 1. Summary

In total we saw 210 bird species. As we had been to Sulawesi before, we mostly limited ourselves to areas not visited previously: Dumoga-Bone and Gunung Ambang, but revisited Tangkoko. The island of Halmahera was new to us and therefore we spent nearly half the time there. For us the top ten birds were: Spotted Harrier, Maleo, Moluccan Owlet-Nightjar, Great-billed -, Scaly – and Paradise Kingfishers, Purple Roller, Ivory-breasted and Redbellied Pittas and Wallace's Standard-wing Bird of Paradise.

Though we missed quite a few specialties, esp. rails and owls, we regard the trip as a great success. We had the help of a travel agency and local guides in organizing transport and accommodation, but found most of the birds ourselves. The weather was hot and muggy with almost no rain.

In retrospect we feel it would have been more productive to spent a day longer in Gunung Ambang and a day less in Tambun. Even though probably nearly all Halmahera species can be found in the Kali Batu Putih area near Sidangoli, a number of species were definitely much easier to find in Foli.

The situation with Moluccan Scrubfowl is worrying. Clearly protective measures should be taken urgently.

#### 2. Introduction

We met at Manado, Robert flying in from Phnom Penh and Nicolaas from Amsterdam. Liwayne Adventure Tour & Travel based in Manado arranged the trip to Dumoga-Bone, Gunung Ambang and later Tangkoko on Sulawesi. They also purchased our tickets to fly to Ternate. There we picked up the guide (Abdullah Iskandar) for Halmahera. When Nicolaas departed on 5 Oct., Robert stayed a few days more in the diving resort of Bunaken near Manado. In April 2001 we visited Sulawesi for the first time and concentrated mainly on Tangkoko and Lore Lindu.

# 3. Logistics, Guiding, Accommodation & Food, Health & Safety

Nicolaas flew with Singapore Airways from Amsterdam to Singapore and onwards with Silk Air to Manado. Robert flew with Air Asia from Phnom Penh via Kuala Lumpur, where he had to spend the night, to Manado. For citizens of the EU a one month visa for Indonesia is obtainable at the airport for US\$ 25. Nicolaas took a daily malaria pill (Malarone), but Robert did not and did not suffer any consequences. Only in Sidangoli on Halmahera we were once briefly harassed by the police, but otherwise we felt quite safe and people were friendly.

One needs plenty of cash Rupiah as foreign currency is not widely accepted and –as far as we know- can only be changed in Manado. As we arrived on a Sunday, the airport banks were closed, but one money changer was open, obviously not offering the best rates. The exchange rate with the dollar has not changed very much over the past 8 years and is close to Rs.10,000 per 1 US\$.

Meter-taxi's are available from the airport. We stayed in the Minahasa hotel in the center of town (a double room can be had for Rs 300,000 and includes breakfast).

We met the first evening with Mr. Wiro of Liwayne Adventure Tour & Travel in Manado (<u>info@sulawesi-lw-adventures.com</u>) and settled the car rental arrangements (a small van with driver Jevon) and flight bookings. Car rental was Rs.500,000/day plus fuel and accommodation and food for the driver. These prices had been negotiated before arrival. The Lion Air flight from Manado to Ternate and back was Rs.1,540,000 per person.

When organizing a trip oneself, it is important to negotiate ('tawar') and agree on prices of transport, food & accommodation, guiding fees, etc. before making use of them.

#### **SULAWESI**

# Dumoga-Bone NP.

We visited Tambun and Toraut (both in the Dumoga-Bone NP), but stayed at Tante Mien's homestay in Dolodua (tel. 081523833505). It proved that Tante Mien provided us with the

richest food (e.g. tuna steak!) we experienced during the trip. Dolodua is situated between Tambun and Toraut and is not far from the Molibagu road. After some 'tawar', we agreed on a price of Rs. 400,000 per day for food and lodging for the two of us (and our driver Jeff).

We were guided by Max Weela (Rs.200,000/day), who works for the park. Max speaks English well and knows his birds. We also paid the park fees (Rs.21,000/day/person against receipt). However, in Toraut we had to pay an additional Rs.100,000/person/day for a ranger to accompany us and in Tambun Rs.50,000/day for the guard.

# **Gunung Ambang**

We stayed in the house of Julius Runtunuwu (tel.081340095080), who is ranger of the Gunung Ambang Nature Reserve. The house is situated in Singsingon and about an hour's walk from the start of the G.A. trail. Room rate was Rs.100,000/night and food was Rs.25,000/meal/person. The food was good and ample. The guiding fee was Rs.200,000 per day. Pak Julius does not speak English and knows only a few bird names, but is helpful in finding the key species.

The altitude is between 1000-1400m and hence it is a bit cooler (and more pleasant) than at sea level. As in Tangkoko, there are mites on the forest paths and vegetation. They cause long-itching red bites on the legs and one can effectively protect oneself with Deet.

# **Tangkoko**

Batu Putih is the village near the Tangkoko NP entrance. We stayed in the Tangkoko Ranger Homestay, where we had stayed in 2001 as well. We paid Rs.250,000 per night for a new room with 2 beds and food for 2 persons. We asked Pak Yunus, the park ranger, to accompany us as he had done in 2001. We were told the fee for birdwatchers is now Rs.250,000/full day/person and 150,000 for a half day, but includes the entrance fee - we did not receive a receipt though.

We rented a palm boat one day for Rs.250,000. Transport back to Manado is easily arranged and costed Rs.250,000.

### HALMAHERA & TERNATE

Our guide for these two islands, Abdullah Iskandar (kamu\_is@yahoo.com), lives in Ternate and runs his own environmental NGO. He was not available during Idul Fitri at the end of the Ramadan. His English is rather poor and he is not very good at locating birds for customers, but he knows the sites and is helpful in organizing the logistics. We paid him Rs.250,000/day plus food and accommodation.

In Sidangoli we rented a car with driver Walee for Rs. 500,000/day, fuel included.

# Sidangoli, Kali Batu Putih, Gunung Mamin and the Transmigration settlement

We stayed in the Sidangoli Indah hotel and managed to get the only air-conditioned room available. The rate was Rs.160,000, which is double that of the other rooms, but was well worth the extra money, as it was hot and sticky even at night.

The main tarmac road from Sidangoli to Tobelo runs through the Kali Batu Putih (KBP) hills. The logging road and km 12 path are side roads of the main road. From Sidangoli to the start of the logging road is about 8 km and the km 12 path is obviously 4 km further on.

The transmigration village Desa Binagara is on a partially paved side road of the Sidangoli-Tobelo road. Where the tarmac stops and the gravel starts, is Gunung Mamin. Here we saw the Purple Dollarbird high up on the slope near the road.

In KBP there is a Wallace's Standard-wing lek in a part of the forest that is owned by Anu. In order to visit the lek one has to depart from Anu's house by about 4 am, as it takes about 2 hours to walk to the lek through the forest and crossing some streams in the dark. The birds become active well before daylight at 6 am, but their activity decreases strongly after 7 am. Anu guided us that day (Rs.500,000) and charges an additional fee of Rs.250,000 for the privilege to visit the lek. It is possible to use another –cheaper – guide, a relative of Anu. It also is possible to spend the night at Anu's house.

One morning we rented a palm boat (Rs.150,000 for 2 hrs.) to take us to the seaside of the mangrove island in front of the Sidangoli harbor, where we found the Beach Kingfisher and also Grey-tailed Tattler.

# Daru and Foli

Daru lies on the Sidangoli-Tobelo road and has a small landing site from where one can cross a sea arm to Foli. The only accommodation available at Foli is the house of the village chief. It is best to check availability in advance. Upon request the headman will also send a palm boat (canoe with outriggers) across to pick you up from Daru (Rs.200,000). The crossing takes about 1.5 hours and if carried out later in the day, can be a wet experience. It is also advisable to wear earplugs, as the noise of the outboard is deafening.



The first days we stayed at the house, there was a Birdquest group occupying the guest sleeping quarters and we were given in a room in the main house. We paid Rs.100,000/night/person for accommodation and Rs.75,000/day/person for food. The main birding area, a logging road, starts 3 km from the house and runs for at least another 7 km

through partially logged forest. For transport motorcycles with driver can be hired for Rs.200,000/each for a full day.

# 4. Itinerary matrix

Day	Date	Itinerary
1	12 Sep	Nicolaas and Robert arrive in Manado. Stay in Minahasa hotel.
2	13 Sep	Drive to Dolodua. Overnight at Tante Mien's guesthouse.
3	14 Sep	Tambun (Maleo) in morning; Toraut for owls in evening.
4	15 Sep	Tambun early morning thereafter Molibagu road; Toraut end of afternoon.
5	16 Sep	Tambun & Molibagu in morning; drive to Singsingon & owling in evening.
6	17 Sep	Gunung Ambang all day, incl. owling in evening.
7	18 Sep	G. Ambang early morning; travel to Manado & change money, etc.
8	19 Sep	Flight Manado-Ternate; speedboat to Sidangoli on Halmahera.
9	20 Sep	Kali Batu Putih logging road & km 12 forest path; owling in evening.
10	21 Sep	KBP Standard-wing lek and logging road; owling in evening.
11	22 Sep	Transmigration desa & Gunung Mamin; logging road afternoon & evening
12	23 Sep	Travel to Lamee forest, Daru & Tobelo
13	24 Sep	Travel to Daru; palm boat to Foli; km 3-4 of logging road in afternoon.
14	25 Sep	Foli: km 3-5 of logging road morning and again afternoon.
15	26 Sep	Foli: km 7-9 of logging road morning and again afternoon + evening.
16	27 Sep	Foli: km8-10 of logging road in morning. Km 3 in afternoon.
17	28 Sep	Palm boat to Daru; drive via Lamee forest to Sidangoli. owling in evening.
18	29 Sep	Early morning KBP km 12; boat trip along mangroves; owling in evening.
19	30 Sep	Ferry from Sidangoli to Ternate; to Danau Tolire in afternoon.
20	1 Oct	Flight Ternate-Manado; drive to Tangkoko; walk to Benteng resort.
21	2 Oct	Tangkoko morning visit.
22	3 Oct	Sea trip by palm boat to mangrove areas.
23	4 Oct	Tangkoko morning visit; afternoon drive to Manado.
24	5 Oct	Departure Nicolaas Manado-Singapore-Amsterdam. Robert to Bunaken.
25	6 Oct	Diving in Bunaken.
26	7 Oct	Diving in Bunaken.
27	8 Oct	Travel to Manado. Flight to Kuala Lumpur.
28	9 Oct	Flight to Phnom Penh.

# 5. Birding log

A complete breakdown of species by site is given in the attached spreadsheet table.

# **SULAWESI**

# **Dumoga-Bone NP.**

The main reason for visiting Tambun is to see the Maleo. The Wildlife Conservation Society (WCS) has set up a breeding enclosure here. Since the birds are well protected, numbers have been increasing. The site is not near a beach, but the soil in a small flat area is warm due to some volcanic activity. This relative open area is surrounded by forest. For extra protection the eggs are dug up and placed in the soil of a locked cage. When the chicks hatch, they are fully fledged and are released (often by visitors). There are quite a few other interesting species to be seen, such as e.g. Maroon-chinned Fruit-Dove.



We visited the park's HQ at Toraut mainly to see some owls and managed to find Ochrebellied Boobook, Sulawesi Scops Owl and Speckled Boobook (the latter in an abandoned house in the main compound). Along the river behind the HQ Pied Cuckoo-shrikes are easy to find in the evening.

The Molibagu road intersects the Dumoga-Bone park and climbs over a pass through forest on both sides. There is quite a bit of traffic. It is good for raptors, but our most interesting finds were a Sulawesi Dwarf Kingfisher and a tree full of Knobbed Hornbills.

# **Gunung Ambang**

The species to see at GA is the Matinan Flycatcher, (which was described from this site), as well as Scaly Kingfisher and Cinnabar Boobook (Ninox ios), a recently described species. Unfortunately, we missed the latter one, despite trying the two evenings we were there, as well as one early morning. In retrospect, we should have spent more time in Gunung Ambang and less in Dumoga-Bone.

The fields between Singsingon and the GA mountain are patrolled by Spotted Harriers. Red-eared Fruit-Dove, Red-backed Thrush, Chestnut-backed Warbler, and Spot-tailed Goshawk (\$\pa\$ and \$\sigma\$) were highlights in the forest.

#### Tangkoko

To our surprise we discovered an Elegant Pitta in the woodland near the entrance. Its status on Sulawesi is not clear, but it



is likely a migrant here. Actually, we were looking for the resident Red-bellied Pitta, which we eventually found too.

The Ruddy Kingfisher can still be seen somewhere along the park border stream. Green-backed and Lilac-cheeked Kingfishers are easily seen at this time of the year at least in comparison to April 2001, when we had difficulties finding them. In addition, we found a Sulawesi Goshawk, Red-backed Thrush and Isabelline Bush-hen, as well as many other species. We encountered roving groups of Crested Black Macaques (*Macaca nigra*) and at night one can see Spectral Tarsier (*Tarsius spectrum*).

We rented a palm boat to go to the mangroves areas outside the park to look for Great-billed Kingfisher, where we managed to get glimpses of one. On a nearby mud bank was an Oriental Plover. On another afternoon we walked over to the Benteng resort, where we saw a Sulawesi Goshawk.

Robert later saw a Great-billed Kingfisher again on Bunaken Island, on the seaward side of mangroves in front of the Bunaken Seagarden Beach Resort at low tide.

#### **HALMAHERA**

# Kali Batu Putih

As we had rented a car with driver, we birded the area on our own, except for the day we visited the Standard-wing lek guided by Anu (tel. 081356343793), who says he owns the area in which the lek is located and thereby can prevent logging. Walking through the forest in the dark produced some interesting encounters. First there was Spectacled Monarch sitting at eyelevel on a branch above the path, that did not stir while we shone our torches on it. Later we saw two Ivory-breasted Pittas sleeping in a small tree next to the path. At the lek the Standard-wing males started to perform well before it became light at 6 am and they stopped more or less at 7 am, probably because no female showed up. Some days later we found some Standard-wing males at the km 12 path as well.

# Logging road:

When coming from Sidangoli the logging road is to the left, but going instead to the right proved rewarding. The path does not go very far, but goes up a bit after crossing the stream and reaches forest. We saw there our first Ivory-breasted Pitta, as well as Eclectus and Redcheeked parrots, Blyth Hornbills, White Cockatoo, Brush Cuckoo, etc. and soaring above the forest a Gurney's Eagle.

Along the logging road proper and its side tracks, we found Sombre Kingfisher, Goliath Coucal, etc. and after dark Moluccan Scops Owl and Moluccan Owlet-Nightjar.



Km 12:

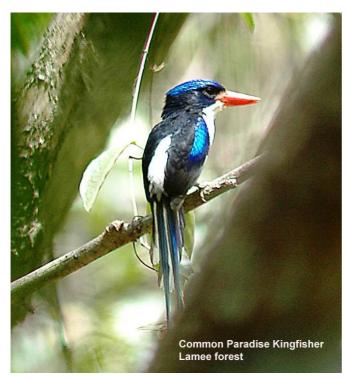
A small logging path higher up in the hills. Among others we found Paradise Crow, Dusky Scrubfowl, Chattering Lories, Wallace's Standard-wing, White-Streaked Friarbird, Scarlet-breasted Fruit-Dove, Moluccan Goshawk, Cream-throated White-eye.

# Transmigration settlement and Gunung Mamin:

We made this trip to find the Purple Dollarbird, which we eventually did on the way back, when we decided to stop at – what is called - Gunung Mamin (see also above) and scan the

hillside more or less from the road. By then it was already late (11am) and hot. There were also some Long-billed Crows. Just past the Transmigation settlement (Desa Binagara) we saw among others Greyheaded Fruit-Dove and Cinnamon-bellied **Imperial** Pigeon. Common Dollarbirds were plentiful here.





# **Lamee forest**

This rather degraded forest is on the road from Sidangoli to Tobelo. It is still worthwhile to stop there and walk a bit inside: Slaty Flycatcher, Blue-and-White Kingfisher, Violet-necked Lories, etc. More significant we saw here our only Common Paradise Kingfisher. Heard it KBP and Foli, but did not see it.

# **Tobelo and Daru**

We had heard that for Moluccan Scrubfowl there is an alternative site to the Galela one. A Mr. Robert of Desa Woisia (part of Tobelo) is the owner(?). We contacted him and he explained that due to the dry spell no birds had been seen for a while. This turned out to be also the case for Galela, as we heard

later from a group of birders that went there two days before we were in Tobelo. From what we heard it appears that the numbers of Moluccan Scrubfowl are very low and that habitat destruction and egg collection still continue. A protection scheme like the one set up for the Maleo in Tambun is urgently needed.

In Daru we took a palm boat to cross to Foli. Before departure a group of Whiskered Treeswifts passed through the village and in the neighborhood we saw a Sugar Glider (*Petaurus breviceps papuanus*), a pretty marsupial squirrel.

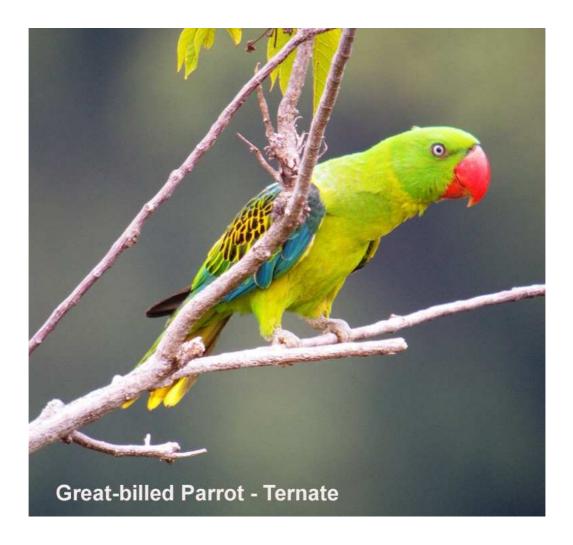
During the crossing not much was identified, as the boat is not stable, but we saw Bridled Terns, a Brown Booby and Red-necked Phalaropes.

#### Foli

The logging road is the main venue for birding. It starts at km 3 from the village of Foli and runs for at least 20-30 km. However, the motorcycles will take you as far as km 7 or 8. The degraded forest along the road is rich in bird life. Red-flanked Lorikeets are particularly common. A Pacific Baza gave great views, as did White-naped and Spectacled Monarchs. At km 8.5 there is a forest pond, where we found Spotted Whistling-Ducks and at km 9 was a Flame-breasted Flowerpecker. This area is good for Fruit-Doves and Pigeons as well. In general Parrots, Pigeons and Cuckooshrikes were more readily observed at Foli than in Kali Batu Putih, but a telescope is essential. At the time of our visit a Drummer Rail was seen by a group of birders. Unfortunately, they did not tell us.

#### Ternate

We had one afternoon in Ternate and visited the impressive volcanic lake Danau Tolire at the foot of Ternate's active volcano. We took photographs of Great-billed Parrot and Blue-capped Fruit-Dove and saw among others Torresian Crow



#### 6. References

# **Guide-books**

- A guide to the Birds of Wallacea by B.J. Coates, K.D. Bishop & D. Gardner. Dove Publications, 1997 (535 p.).
- A pocket Guide to Tangkoko-Duasudara Nature Reserve by Rob Lee, Jon Riley and Lefrandy Pesik. Wildlife Conservation Society (WCS), KOFFAS and the Department of Forestry. 61p.
- North Sulawesi: a natural history guide by Dr. Margaret Kinnaird of Wildlife Conservation Society (WCS) for the Wallacea Development Institute in Jakarta, 1995, 83p.

#### **Forktail**

- Birdwatching Areas: Gunung Ambang Nature Reserve, North Sulawesi by Jon Riley. OBC Bulletin 32, p.56-58.

# **Trip reports**

- Trip Report Marcus Lagerqvist Wallacea aug-sep2006
- Trip Report Collaerts sulawesi\_halmahera\_aug-08
- Trip report Mark Sutton Sulawesi and Halmahera
- Trip report Paul Pearson Surfbirds Sulawesi and Halmahera, Aug-Sep04
- Trip Report Teus Luijendijk Sulawesi & Halmahera
- Trip Report Wim Heylen Wallacea, Indonesia

# 7. Acknowledgements

Our thanks go to Mr. Wiro Mokili and Theo Enoch of Liwayne Adventure Tour & Travel in Manado (<u>info@sulawesi-lw-adventures.com</u>), who were helpful in organizing the Sulawesi part of our trip. We are also grateful to the contributors of the website <u>www.xeno-canto.org</u>, where many of the calls from the region can be found and to Matthias Fehlow and several other birders, who provided us with useful information.

# 8. Full species list matrix (birds and other animals)

- see spreadsheet in attached PDF file.



List of Bird species @ location seen by Robert & Nicolaas van Zalinge during a trip to Sulawesi & Halmahera in Sep-Oct 2009. (Nomenclature generally follows Coates & Bishop, Birds of Wallacea, 1997).

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Red-throated Little Grebe Tachybaptus ruficollis			Ternate-Tolire			
	Great Frigatebird Fregata minor			at sea	at sea		ad + juv.
	Lesser Frigatebird Fregata ariel			Sidangoli mangroves	at sea		
	Brown Booby Sula leucogaster				at sea		
	Great Egret Egretta alba			Transmigr.			
	Great-billed Heron Ardea sumatrana					estuary	
	Purple Heron Ardea purpurea	Toraut	Lake Moat				
	Little Egret Egretta garzetta	fields		Sidangoli mangroves			
	Pacific Reef-Heron Egretta sacra					estuary	dark phase
	Javan Pond-Heron Ardeola speciosa	fields					
	Cattle Egret Bubulcus ibis	fields					
	Little/Striated Heron Butorides striata			Sidangoli mangroves		mangroves	
	Black-crowned Night-heron Nycticorax nycticorax					mangroves	
	Rufous Night-heron Nycticorax caledonicus			Transmigr.			
	Yellow Bittern Ixobrychus sinensis		Lake Moat				
	Cinnamon Bittern Ixobrychus cinnamomeus	Tambun					

		Sulawesi 13-16 sep	Sulawesi 16-18 sep Gunung	Halmahera 19-23 sep, 28-30 sep Kali Batu Putih	Halmahera 24-29 sep Foli	Sulawesi 1-7 oct Tangkoko &	Remarks
Endemic status	Species	Dumoga- Bone	Ambang	Kali Batu Putin	logging rd.	Bunaken	
	Spotted Whistling-Duck Dendrocygna guttata				pond @ km 8.5		pair
	Wandering Whistling-Duck Dendrocygna arcuata	Doloduo wetland					200x
	Sunda Teal Anas gibberifrons	Toraut					on river
	Pacific Baza Aviceda subcristata				km 4		
	Black Kite Milvus migrans		Lake Moat				
	Brahminy Kite Haliastur indus	fields		main road	km 3-5	Benteng	
	White-bellied Sea-Eagle Haliaeetus leucogaster					Benteng	
	Spotted Harrier Circus assimilis		fields				2x
s	Sulawesi Goshawk Accipiter griseiceps					Benteng, also Bunaken	
	Chinese Goshawk Accipiter soloensis					Bunaken	A migrant, completely exhausted. Did not fly.
s	Spot-tailed Goshawk Accipiter trinotatus		forest				
	Variable Goshawk Accipiter novaehollandiae griseogularis			logging rd			
h	Moluccan Goshawk Accipiter henicogrammus			km 12	km 3-5		
	Black Eagle Ictinaetus malayensis	Molibagu					
	Gurney's Eagle Aquila gurneyi			logging rd			
	Spotted Kestrel Falco moluccensis			path to lek; also Ternate	km 3-5		
s	Maleo Macrocephalon maleo	Tambun					2x pair
	Philippine/Tabon Scrubfowl Megapodius cumingii					forest	
	Dusky Scrubfowl Megapodius freycinet			logging rd	km 3-6		

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Red Junglefowl Gallus gallus	Tambun					with 5 chicks
	Buff-banded Rail Gallirallus philippensis	Tambun	forest edge				
	Barred Rail Gallirallus torquatus	Tambun				woodland	
	White-browed Crake Poliolimnas cinerea	Tambun					
s	Isabelline Bush-hen Amaurornis isabellina		forest edge (heard only)			woodland	
	White-breasted Waterhen Amaurornis phoenicurus	Tambun					
	Common Moorhen Gallinula chloropus	fields					
	Pacific Golden plover Pluvialis fulva			Transmigr.			
	Oriental Plover Charadrius veredus					estuary	1x
	Common Sandpiper Actitis hypoleucos			Sidangoli mangroves	Daru beach	estuary	
	Gray-tailed Tattler Tringa brevipes			Sidangoli mangroves			
	Common Greenshank Tringa nebularia	rice fields					1x
	Wood Sandpiper Tringa glareola	rice fields					common
	Common Redshank Tringa totanus					estuary	
	Red-necked Phalarope Phalaropus lobatus			at sea	at sea		
	Whimbrel Numenius phaeopus				Daru beach	estuary	
	Little Tern Sternula albifrons				at sea		
	Common Tern Sterna hirundo				at sea	estuary	
	Bridled Tern Sterna anaethetus				at sea		

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Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Spotted Dove Streptopelia chinensis	fields				woodland	
	Brown Cuckoo-Dove Macropygia amboinensis	Tambun	forest	logging rd	km 3-5	woodland	
	Great Cuckoo-Dove Reinwardtoena reinwardtii				km 3-5		
s	Sulawesi Black Pigeon Turacoena manadensis					woodland	
	Emerald Dove Chalcophaps indica			logging rd		Bunaken	
	Stephan's Dove Chalcophaps stephani	Tambun				forest	
	Grey-cheeked Green Pigeon Treron griseicauda	Tambun					
	Pink-necked Green Pigeon Treron vernans	fields				woodland	
s	Red-eared Fruit-Dove Ptilinopus fischeri		forest				
s	Maroon-chinned Fruit-Dove Ptilinopus subgularis	Tambun					2x
h	Scarlet-breasted Fruit-Dove Ptilinopus bernsteinii			km 12	km 9		
	Superb Fruit-Dove Ptilinopus superbus		forest edge	km 12	km 7-9		
h	Blue-capped Fruit-Dove Ptilinopus monacha			Ternate-Tolire	km 7-9		
h	Grey-headed Fruit-Dove Ptilinopus hyogastrus			Transmigr.	km 3		
	Black-naped Fruit-Dove Ptilinopus melanospilus	Tambun				woodland	
s	White-bellied Imperial-Pigeon Ducula forsteni		forest edge				
s	Grey-headed Imperial-Pigeon Ducula radiata	Tambun					
	Green Imperial-Pigeon Ducula aenea	Tambun					
	Spectacled/White-eyed Imperial-Pigeon Ducula				km 3-5		
h	nersnicillata Cinnamon-bellied Imperial-Pigeon Ducula basilica			Transmigr.	km 3-9		
	Pied Imperial-Pigeon Ducula bicolor	Toraut		Transmigr.		Bunaken	

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
h	White Cockatoo Cacatua alba			logging rd	km 3-5		
h	Violet-necked Lory Eos squamata			Lamee	km 5-6		
s	Ornate Lorikeet Trichoglossus ornatus					forest	
s	Yellow-and-green Lorikeet Trichoglossus flavoviridis		forest edge				
h	Chattering Lory Lorius garrulus			km 12	km 7-9		
h	Red-flanked Lorikeet Charmosyna placentis				km 3-6		very common
	Red-cheeked Parrot Geoffroyus geoffroyi			logging rd	km 4		
s	Yellow-breasted Racquet-tail Prioniturus flavicans	Toraut				forest	
	Great-billed Parrot Tanygnathus megalorynchos			Ternate-Tolire	km 4		
	Blue-backed Parrot Tanygnathus sumatranus	Toraut					
	Eclectus Parrot Eclectus roratus			logging rd	km 4		pairs
s	Large Sulawesi Hanging-Parrot Loriculus stigmatus	Tambun	forest edge				
h	Moluccan Hanging-Parrot Loriculus amabilis				km 4		
s	Small Sulawesi Hanging-Parrot Loriculus exilis		forest edge				
	Rusty-breasted Cuckoo Cacomantis sepulcralis	Tambun					
	Brush Cuckoo Cacomantis variolosus			logging rd	km 4		
s	Black-billed Koel Eudynamys melanorhynchus	Tambun					
s	Yellow-billed Malkoha Zanclostomus calyorhynchus	Tambun	forest			forest	
s	Bay Coucal Centropus celebensis	Tambun	forest			Benteng	
h	Goliath Coucal Centropus goliath			logging rd	km 4-6		
	Lesser Coucal Centropus bengalensis		Lake Moat		km 4-6		

		Sulawesi 13-16 sep Dumoga-	Sulawesi 16-18 sep Gunung	Halmahera 19-23 sep, 28-30 sep Kali Batu Putih	Halmahera 24-29 sep Foli	Sulawesi 1-7 oct Tangkoko &	Remarks
Endemic status	Species	Bone	Ambang	Kan Bata i utin	logging rd.	Bunaken	
	Moluccan Scops-Owl Otus magicus			logging rd			
s	Sulawesi Scops-Owl Otus manadensis	Toraut				village (heard only)	
s	Ochre-bellied Boobook Ninox ochracea	Toraut				- ,,	
s	Speckled Boobook Ninox punctulata	Toraut					in HQ building
h	Moluccan Owlet-Nightjar Aegotheles crinifrons			logging rd			
	Great Eared-Nightjar Eurostopodus macrotis	Tambun, Toraut					
	Large-tailed Nightjar Caprimulgus macrurus			logging rd	km 7-9		
	Savanna Nightjar Caprimulgus affinis					village	
	Glossy Swiftlet Collocalia esculenta		Lake Moat		km 3-5		
h	Moluccan Swiftlet Aerodramus infuscatus			logging rd	km 3-5		
	Asian Palm Swift Cypsiurus balasiensis	Toraut					
	Purple Needletail Hirundapus celebensis		forest edge				
	Grey-rumped Treeswift Hemiprocne longipennis	Molibagu					
	Moustached Treeswift Hemiprocne mystacea				Daru/ km 3-5		
	Common Kingfisher Alcedo atthis	Molibagu				mangroves	
	Blue-eared Kingfisher Alcedo meninting	Molibagu					
s	Sulawesi Dwarf Kingfisher Ceyx fallax	Molibagu					
s	Lilac-cheeked Kingfisher Cittura cyanotis					forest	

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
s	Great-billed Kingfisher Halcyon melanorhyncha					mangroves, Bunaken	
	Ruddy Kingfisher Halcyon coromanda	Molibagu				stream	
h	Blue-and-white Kingfisher Todiramphus diops			path to lek/ Lamee forest	km 3-6		
	Collared Kingfisher Todiramphus chloris	Toraut	Lake Moat	Sidangoli mangroves		woodland, Bunaken	
h	Sombre Kingfisher Todiramphus funebris			logging rd.			♀ near possible nest
	Beach Kingfisher Todiramphus saurophagus			Sidangoli mangroves			
	Sacred Kingfisher Todiramphus sanctus			Transmigr.		village, also Bunaken	
s	Green-backed Kingfisher Actenoides monachus	Tambun				forest	
s	Scaly-breasted Kingfisher Actenoides princeps		forest				3x @ ca. 1300m
	Common Paradise-Kingfisher Tanysiptera galatea			Lamee			heard in KBP
	Rainbow Bee-eater Merops ornatus			km 12			
	Common Dollarbird Eurystomus orientalis			main road			
h	Purple Dollarbird Eurystomus azureus			Gn.Mamin			
s	Sulawesi Dwarf Hornbill Penelopides exarhatus						
s	Knobbed Hornbill Aceros cassidix	Tambun				forest	
	Blyth's Hornbill Aceros plicatus			logging rd/ Lamee forest	km 4		
s	Sulawesi Pygmy Woodpecker Dendrocopos temminckii		forest edge				
s	Ashy Woodpecker Mulleripicus fulvus	Tambun				forest	

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Blue-breasted/Red-bellied Pitta Pitta erythrogaster					forest	1x
	Elegant Pitta Pitta elegans					forest	
h	Ivory-breasted Pitta Pitta maxima			logging rd			Later 2 sleeping in tree along standard wing lek trail
	Barn Swallow Hirundo rustica	rice fields					WINDERNAN
	Pacific Swallow Hirundo tahitica	rice fields					
	Yellow Wagtail Motacilla flava	rice fields			Daru beach		
	Grey wagtail Motacilla cinerea	Molibagu				river	
s	Pied Cuckoo-shrike Coracina bicolor	Toraut					pair
h	Moluccan Cuckoo-shrike Coracina atriceps				km 3-5		
s	Caerulean Cuckoo-shrike Coracina temminckii		forest				
s	White-rumped Cuckoo-shrike Coracina leucopygia					forest, Bunaken	
	White-bellied Cuckoo-shrike Coracina papuensis			Transmigr.		Duriakeri	
h	Halmahera Cuckoo-shrike Coracina parvula				km 6.5		
	Common Cicadabird Coracina tenuirostris		forest edge	Transmigr.	km 3-5		
s	Sulawesi/White-rumped Triller Lalage leucopygialis	Tambun					
h	Rufous-bellied Triller Lalage aurea			logging rd	km 3-9		
	Sooty-headed Bulbul Pycnonotus aurigaster	Tambun				Benteng	
h	Golden Bulbul Alophoixus affinis			logging rd	km 3-9		
h	Dusky-brown/Halmahera Oriole Oriolus phaeochromus			path to lek	km 4		
	Black-naped Oriole Oriolus chinensis	Tambun				woodland	

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Hair-crested Drongo Dicrurus hottentottus	Tambun				Benteng	
s	Sulawesi Drongo Dicrurus montanus		forest edge				
	Spangled Drongo Dicrurus bracteatus			logging rd	km 3-9		
h	Paradise-crow Lycocorax pyrrhopterus			logging rd	km 7-9		
h	Standardwing Bird of Paradise Semioptera wallacii			Anu's lek & km 12			Burung bidadari
	Torresian Crow Corvus orru			Ternate-Tolire			
	Slender-billed Crow Corvus enca	Tambun				Benteng	
h	Long-billed Crow Corvus validus			Gn.Mamin	km 3-5		
s	Sulawesi Babbler Trichastoma celebense	Tambun	forest			forest	
s	Red-backed Thrush Zoothera erythronota		forest path			forest	
	Blue Rock Thrush Monticola solitarius					Benteng	
	Golden-bellied Flyeater Gerygone sulphurea	Doloduo wetland					
s	Chestnut-backed Bush-Warbler Bradypterus castaneus	Would la	forest floor				
	Mountain Tailorbird Orthotomus cuculatus		forest				
s	Sulawesi Leaf-Warbler Phylloscopus sarasinorum		forest				
	Golden-headed Cisticola Cisticola exilis		fields				
	Grey-streaked Flycatcher Muscicapa griseisticta			Ternate-Tolire	km 3-5	mangroves	
	Snowy-browed Flycatcher Ficedula hyperythra		forest				
	Island Verditer Flycatcher Eumyias panayensis		forest				
s	Matinan Flycatcher Cyornis sanfordi		forest near saddle				several birds

		Sulawesi 13-16 sep	Sulawesi 16-18 sep	Halmahera 19-23 sep, 28-30 sep	Halmahera 24-29 sep	Sulawesi 1-7 oct	Remarks
Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Black-naped Monarch Hypothymis azurea	Tambun				mangroves	
h	White-naped Monarch Monarcha pileatus			path to lek	km 3-5		
	Spectacled Monarch Monarcha trivirgatus			logging rd	km 3-5		ad + juv.
h	Slaty/Moluccan Flycatcher Myiagra galeata			logging rd/ Lamee forest			
	Shining Flycatcher Myiagra alecto			km 12			
s	Rusty-bellied Fantail Rhipidura teysmanni		forest				
	Willie-wagtail Rhipidura leucophrys			main road			
	Citrine Flycatcher Culicicapa helianthea		forest				
s	Yellow-vented Whistler Pachycephala sulfuriventer		forest				
	Black-chinned Golden Whistler Pachycephala pectoralis			km 12			
h	Drab Whistler Pachycephala griseonota			km 12			
s	Ivory-backed Woodswallow Artamus monachus	Molibagu					
	White-breasted Woodswallow Artamus leucorynchus	Toraut				mangroves, Bunaken	
	Metallic Starling Aplonis metallica			logging rd	km 3-5		communal nests in Lamee
	Asian Glossy Starling Aplonis panayensis	fields				Bunaken	
	Moluccan Starling Aplonis mysolensis			Transmigr. desa			
s	Sulawesi Crested Myna Basilornis celebensis	Tambun					
s	White-necked Myna Streptocitta albicollis	Tambun					
s	Fiery-browed Myna Enodes erythrophris		forest edge				
s	Finch-billed Myna Scissirostrum dubium	Tambun				woodland	

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Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
h	White-streaked Friarbird Melitograis gilolensis			km 12			
h	Dusky Friarbird Philemon fuscicapillus			path to lek			
	Dusky Honeyeater Myzomela obscura				km 3-5		
	Crimson Sunbird Aethopyga siparaja	Molibagu					
	Black Sunbird Leptocoma sericea	Molibagu		logging rd/ Lamee forest	km 4		
	Olive-backed Sunbird Cinnyris jugularis	Tambun	fields	logging rd	km 3-5	woodland, Bunaken	
	Brown-throated Sunbird Anthreptes malacensis					Bunaken mangroves	
	Yellow-sided Flowerpecker Dicaeum aureolimbatum	Tambun	forest edge			forest	
s	Crimson-crowned Flowerpecker Dicaeum nehrkorni		forest				
h	Flame-breasted Flowerpecker Dicaeum erythrothorax				km 9		
s	Grey-sided Flowerpecker Dicaeum celebicum	Doloduo wetland					
	Mountain White-eye Zosterops montanus		forest				
	Black-fronted White-eye Zosterops atrifrons	Tambun	forest			forest	
h	Cream-throated White-eye Zosterops atriceps			Transmigr./ Lamee forest			
s	Streak-headed Dark-eye Lophozosterops squamiceps		forest				
	Tree Sparrow Passer montanus	Doloduo	Singsingon	Sidangoli		village	
	Chestnut Munia Lonchura malacca	fields	fields	Sidangoli			
	Black-faced Munia Lonchura molucca	fields	fields	logging rd			
49	Sulawesi endemics						
32	Halmahera endemics						
81	Total endemics						
210	Total number species						

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Endemic status	Species	Dumoga- Bone	Gunung Ambang	Kali Batu Putih	Foli logging rd.	Tangkoko & Bunaken	
	Mammals						
	Crested Black Macaque Macaca nigra					Forest	
	Dumoga-Bone Macaque Macaca nigriscens	Molibagu					
	Northern Dwarf Squirrel Prosciurus murinus					Forest	Blunt-tailed
	Pale Dwarf Squirrel Prosciurus leucomus					Forest	White spots behind ears
	Sugar Glider Petaurus breviceps papuanus				Daru		Flying marsupial squirrel, Tupaj kelapa