

Sabah & Sarawak 4. July - 18. August 2009

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Overview

Sabah is among the world's finest and easiest accessible birdwatching destinations. In addition to the many excellent trip reports available on the internet, we want to add some useful information for the less-frequently birded areas Crocker Range NP and Sarawak's Gunung Mulu NP. And we give some recommendations for the self-guided / budget Borneo birdwatcher. We covered most of Sabah in four weeks and extended to Gunung Mulu NP in Sarawak finding 323 bird species (Clements 2007 taxonomy v6.4), including most of Borneo's endemics. Highlights include an excellent Bornean Ground-Cuckoo observation, the Whitehead's trinity, Hose's Broadbill, good views of six Pitta species, three observations of Bornean Bristleheads, Mountain Serpent-Eagle, a good selection of mammals great insects and reptiles and breathtaking forests and landscapes. The only lowlight was the last-minute cancellation of our planned Kinabatangan tour by Robert Chong, destroying the best chances to see Giant Pitta.

Itinerary

- 04.07.2009 Singapore, travel to Kota Kinabalu (KK)
- 05.07.2009 KK travel to Crocker Range NP, birding around Gg. Alab resort
- 06.07.2009 Crocker Range NP (CR), Rafflesia center area
- 07.07.2009 CR, Gg. Alab resort to Gg. Emas resort
- 08.07.2009 CR, Rafflesia center area
- 09.07.2009 CR, birding around Gg. Alab resort, air travel to Sandakan, birding in Sepilok (SE)
- 10.07.2009 SE, Rainforest Discovery Center
- 11.07.2009 SE, Rainforest Discovery Center and Orangutan Rehabilitation Center
- 12.07.2009 SE, Rainforest Discovery Center
- 13.07.2009 SE, Rainforest Discovery Center and Orangutan Rehabilitation Center
- 14.07.2009 SE, travel to Gomantong Caves and onwards to Sukau, Sungai Kinabatangan (SK)
- 15.07.2009 SK, two boat rides
- 16.07.2009 SK, two boat rides including one night ride
- 17.07.2009 SK, one boat ride, journey to Danum Valley Field Center (DV)
- 18.07.2009 DV, Nature trail, Waterfall trail, grid trails
- 19.07.2009 DV, grid trails, Nature trail
- 20.07.2009 DV, entrance road
- 21.07.2009 DV, Nature trail, Waterfall trail
- 22.07.2009 DV, grid trails, night drive
- 23.07.2009 DV, entrance road, Waterfall trail, night drive
- 24.07.2009 DV, travel to Lahad Datu and KK
- 25.07.2009 KK travel to CR, around Gg. Alab resort
- 26.07.2009 CR, around Rafflesia center
- 27.07.2009 CR, morning at Rafflesia center and journey to Poring Hot Springs (PH)
- 28.07.2009 PH, Waterfall trail
- 29.07.2009 PH, partial Waterfall trail
- 30.07.2009 PH, canopy walkway, travel to Gunung Kinabalu NP headquarters (GK), power station road
- 31.07.2009 GK, Bukit Ular trail, power station road, Silau-Silau trail, Mempening trail
- 01.08.2009 GK, Bukit Ular trail, power station road, Mempening trail, summit trail to Layang-Layang

02.08.2009 GK, Bukit Ular trail, power station road, Liwagu trail, Silau-Silau trail
03.08.2009 GK, Bukit Ular trail, power station road, summit trail up to Layang-Layang
04.08.2009 GK, Bukit Ular trail, power station road, travel to KK, Kota Kinabalu Wetland Center
05.08.2009 KK travel to Pulau Tiga (PT)
06.08.2009 PT, mud volcano trail, snake island trip
07.08.2009 PT, resort relaxing, travel to KK
08.08.2009 KK flight to Miri
09.08.2009 Miri flight to Gunung Mulu NP (GM), Moonmilk cave
10.08.2009 GM, travel to camp 5
11.08.2009 GM, pinnacles trail
12.08.2009 GM, headhunter trail, Melinau trail
13.08.2009 GM, Melinau trail, headhunter trail
14.08.2009 GM, Melinau trail and travel to HQ
15.08.2009 GM, Paku Waterfall trail, Moonmilk cave trail, Deer cave trail
16.08.2009 GM, HQ area, travel to KK
17.08.2009 KK city
18.08.2009 KK, Likas Bay, travel to Jakarta

Birding site-by-site

Kota Kinabalu

Many common birds were seen in and around KK, including Zebra Dove and Asian Glossy Starling. A single, introduced Javan Sparrow was seen in the agglomeration east of the city center. At the Tanjung Aru beach west of the city, we were able to find introduced Crested Mynas and conspicuous Blue-naped Parrots of one of the few local feral populations.

Sepilok

The Rainforest Discovery Center is an excellent place to get into the lowland avifauna of Borneo. The leech-free trails through slightly logged forest with huge canopy towers and a great canopy walkway are a great opportunity for birders and photographers. Apart from a high diversity of Bulbuls, Babblers and Pigeons, we encountered a very tame Black-headed Pitta, though not tape-responsive, and two Bornean Bristlehead groups – the species for which Sepilok is famous and rather reliable. The Orangutan rehabilitation center was visited on two afternoons, but was rather disappointing due to the degraded forest and the zoo-like orangutan feedings. Permits for hikes to the Sepilok lagoon from the rehabilitation center have to be organized with the Sandakan forestry office in advance – a hike that may reveal good mangrove and coast birds.

Highlights: Bornean Bristlehead (1 male and a group of four), Black-headed Pitta (1-2 birds on 5 days), Little Green Pigeon (on two days), Cinnamon-headed Pigeon (at least 3 males), White-bellied Munia (2 on Kingfisher trail), Colugo and Red Giant Flying Squirrels, no leeches.

Lowlights: Semi-wild, hand-fed orangutans at the rehabilitation center.

Gomantong Caves

Due to time constraints, our 1.5 h afternoon visit was dedicated to the three x-nest Swiftlets. We entered the 'lower cave' close to the park entrance, where all Swiftlets were found on their nests, Edible-nest Swiftlet being the scarcest of all and Moss-nest Swiftlet the most common. After successfully twitching all Swiftlets, we were delighted to leave this horribly smelling cave with its continuous shit-rain from the ceiling and billions of cockroaches, other insects, dead birds and bats on the meters high guano-stack. Wear a raincoat or at least a hat and close your mouth while looking up to the birds.

Highlights: Edible-nest (around 50), Black-nest (around 500) and Moss-nest Swiftlet (around 1000).

Lowlights: Smell, bugs and droplets in the cave and on our clothes.

Sungei Kinabatangan

We did five boat cruises mostly along the Menanggal tributary and another tributary further south-east. One cruise was extended to nighttime (in the SE) and brought us many Buffy Fish-owls, Malay Civets and sleeping Blue-eared Kingfishers after loads of flying Black-crowned Night-Herons at dusk. During day cruises, it was possible to leave the boat from time to time and to walk a few steps into the forest, which was useful for Hooded Pittas, Striped Wren-Babblers and a few other skulkers (leeches were rather abundant, by the way...). Most activity was between dawn and around 9 am, when the sun started to burn and the birds went quiet. The Bornean Ground-Cuckoo was seen on a perch at the riverbank, warning, tail-pumping and upon our arrival, he silently disappeared into the forest. A guide like Robert Chong who knows much more special sites for species as Giant Pitta and others would certainly have improved our success (see logistics section).

Highlights: Bornean Ground-Cuckoo (1 adult), Hooded Pitta (twice seen, very tape-responsive), Storm's Stork (often seen), Buffy Fish-owl, Proboscis Monkey, Silvered Langur, Bornean Gibbons.

Lowlights: The last-minute cancellation by Robert Chong. We missed Dusky Broadbill, Helmeted Hornbill and Giant Pitta.

Danum Valley

We spent 6.5 days at the Danum Valley Field Center, where we found the most diverse fauna and the most beautiful forest of our trip. We spent much time in the forest interior and neglected a little bit the easier and very productive birding along the entrance road. One full-day excursion led us to the waterfall via nature and Waterfall trail/waterfall trails – those trails are nice to walk and lead through a slightly higher area (good for Blue-banded and Banded Pitta). The grid trails are hard to explore, slippery and steep as they are, and we lost our way once in the north. We did not proceed to Rhino or Elephant ridge trails as they take an awful lot of time and – according to rumors – an overnight stay on one of the ridges could increase the probability to meet a Bulwer's Pheasant. Apart from two night-drives along the entrance road, we did not do any other night excursions, because we were terribly tired in the evenings – however, this was simply stupid! I am sure many owls and frogmouths would have waited for us on the nature or grid trails.

Highlights: Blue-headed Pitta (quite common, on waterfall, nature and grid trails), Banded Pitta (one seen, Waterfall trail at highest plateau before the trail descends down to the waterfall), Black-headed Pitta (often heard, seen twice W10N5 and Waterfall trail), Great Argus, Bornean Wren-Babbler (seen W3N0, almost daily heard, also in cleared forest along the entrance road), Black-throated Wren-Babbler (heard once on the W0N0 to W5S5 connection along the river), Great-billed Heron, White-bellied Woodpecker, Straw-headed Bulbul (daily concert along the Segama river), Black-and-white Bulbul, Little Bronze-Cuckoo, Red-billed Malkoha, Red-bearded Bee-eater, Bornean Bristlehead (one group in the canopy above W5S3), Chestnut-capped Thrush (one sitting in the river bed of the Segama river, seen from the bridge to the Nature trail), Slow Loris, Leopard Cat, Small-toothed Palm Civet, Smooth Otter (Segama river below Nature trail).

Lowlights: No Blue-banded Pitta and no sign of Giant Pitta either. No Firebacks, despite two night drives and many early morning walks. Almost no cuckoos recorded, neither acoustically nor visually. Helmeted Hornbill missed again. Not to mention the highest tiger leach-density we have ever seen in our lives...

Crocker Range NP

We spent quite some time in the CR, in contrast to most drive-by visitors. The most productive birding area around the Rafflesia center (from KK along the road 2 km before and 4 km after the center) was explored for 3.5 days.

Black-breasted Fruithunters were common, Bornean and Mountain Barbets very common, Whitehead's Broadbills seen twice and Whitehead's Spiderhunter once. The morning activity was great, declining after 9 am. We did the forest trail down to the Rafflesia flowers once. Although chances to see one of the partridges were better there, the low activity inside the forest brought us quickly back to the road. Three half-days were spent around the Gunung Alab resort and one day on the road between the latter and Gunung Emas resort. The good view over the hills around Gg. Alab resort got us a Mountain Serpent-Eagle and many Blyth's Hawk-Eagles. A road leading to a power station brought higher-altitude species like Flavescent Bulbul and Sunda Bush-warbler and breathtaking views of canopy-dwelling Whitehead's Spiderhunters and Golden-naped Barbet. Mountain Black-eye was only seen around the Gunung Emas resort, but the Barred Eagle-owl was not found there.

Highlights: Mountain Serpent-Eagle, Whitehead's Spiderhunter (one and two around Gg. Alab, three at the Rafflesia center), Whitehead's Broadbill (1 male and a group of six, not tape-responsive), Black-breasted Fruithunter (common), Golden-naped Barbet (common around Gg. Alab), Mountain and Bornean Barbet (common around Rafflesia center), Bornean Leafbird, Flavescent Bulbul.

Lowlights: No sign of Pygmy White-eye. 'Rufous' Cuckoo-Doves and a silent Cuckoo caused some ID problems. No sign of the rare Short-tailed Frogmouth (ssp. *mixtus*, Bornean Frogmouth) despite recent rumors of its occurrence close to the Gg. Alab resort.

Poring Hot Springs

There is only one trail at PH, the trail to the Langanan waterfall, which took us a full day at slow birding pace. On the second day, we did only half of it, concentrating on fruiting trees. A very well and quickly responding Blue-banded Pitta was found near the bat cave entrance and gave us great views on short range for 10 minutes. At the same spot, a female Rufous-collared Kingfisher was seen on both days. The Waterfall trail was quite productive, giving a good view over the canopy from a clearing/bamboo zone at 1.5 to 2 km. Unfortunately, we did not play the tape for the White-necked Babbler at 2.1 km, where it is usually and quite reliably seen. A night walk to the 'small' first waterfall on the trail did not reveal any birds, but a diverse set of frogs and spiders. The canopy walk was totally useless for bird watching as it was frequented by many tourists even in the early morning and the view over the forest is very limited.

Highlights: Blue-banded Pitta (one male at bat cave entrance), Hill Blue-Flycatcher (100 m before the Langanan waterfall).

Lowlights: No Hose's Broadbill despite searching of fruiting trees. No sign of White-tailed Blue-Flycatcher and White-necked Babbler.

Gunung Kinabalu NP, headquarters

We followed the Everett's Thrush strategy of other birdwatchers, driving up to the Timpohon gate / power station at dawn, walking up and down along the power station road until daylight allowed us to do the Bukit-Ular trail and then walking down for breakfast. Nevertheless, our five attempts remained unsuccessful. We climbed the summit trail up to Layang-Layang twice to find Friendly Bush-warbler, Island Thrush and Pygmy Blue-Flycatcher and succeeded with all except the Thrush. From Layang-Layang we hiked once a bit into the direction of Mesilau, which almost ended in a disaster. Our 1-day permits turned out not to be sufficient for this and only our confused faces and a quick explanation halted the furious ranger from calling the police. For a secured Island Thrush, organize an overnight stay in Laban Rata or a single-day climbing permit, insurance and guide for return a trek to Laban Rata; either has to be done with Sutera Sanctuary Lodges (see Logistics). Due to strong winds, the Bukit-Ular, the Kiau View and the Mempoening trails were not very productive. The wind protected Silau-Silau and Liwagu trails were at their best. The power station road was another excellent option as we easily encountered good mixed-species flocks. We did not find both Whitehead's Spiderhunter and Broadbill, for which the Crocker Range NP was the better place.

Highlights: Whitehead's Trogon (1 pair Silau-Silau trail below Liwagu restaurant; 1 female Liwagu trail), Friendly Bush-Warbler (Summit trail: heard at 1.7 km, seen at 3 km and 50 m below Layang-Layang, very tame and tape-responsive), Mountain Wren-Babbler (families along Bukit-Ular, Silau-Silau, Liwagu, Summit trail and power station road; no tape-response), Red-breasted Partridge (1 group seen below Timpohon gate, another group seen at dawn while descending the first 200m of the Liwagu trail, daily heard), Crimson-headed Partridge (1 female seen along Silau-Silau trail, heard daily), Black Laughingthrush (Silau-Silau and Kiau View trail starts, always in mixed flocks), Black-breasted Fruithunter (several around 3 km on the summit trail), Pygmy Blue-Flycatcher (male and female between 2 and 3 km along summit trail), Bornean Stubtail (often heard above the Silau-Silau trail, seen once in the Liwagu valley), White-browed Shortwing (cracking views after descending the Liwagu trail to the closest river valley, heard daily), Kinabalu Squirrel.

Lowlights: Everett's Thrush missed on five mornings. Island Thrush, Whitehead's Broadbill and Spiderhunter dipped too. Nasty weather, strong winds, falling branches, and shaking understorey made birding tough and dangerous.

Kota Kinabalu Wetland Center

This education center to the south-east of the Likas Lagoon has nice boardwalks through healthy and regenerating mangroves. An observation tower offers good views of Pigeons in treetops and wetland birds. On our evening visit, Pied Trillers, Zebra Doves and a Common Kingfisher were seen. One or two hours are enough to explore the area, presumably better in the morning hours.

Highlights: Common birds like Zebra Dove, Striated Heron, Pied Triller. One Common Kingfisher and many funny crabs.

Lowlights: No signs of Mangrove Whistler and Jambu Fruit-dove. A presumed Island Collared Dove flying across a swamp was seen only briefly and is best left unidentified (only 3 records in Sabah, Mann 2008).

Likas Lagoon & Bay

The shoreline north of KK can be good for shorebirds at low tide, but contained only Little Terns and a single adult Lesser Sand Plover at our visit. The small wetland across the road called Likas Lagoon held many Purple Herons, Intermediate, Cattle and Great Egrets, Black-crowned Night Herons and one Cinnamon Bittern, many Purple Gallinules, Moorhens, two White-browed Crakes and a number of roosting Wood and Common Sandpipers as well as a Little Ringed Plover. Yellow-bellied Prinias and Striated Grassbirds were found in the reedbeds and Brahminy Kites and two Darters were sitting on poles. Collared and Stork-billed Kingfishers as well as many Zebra Doves, Spotted Doves and Pink-necked Pigeons were sitting in the surroundings.

Highlights: Cinnamon Bittern (1 beautiful fly-by male), White-browed Crake (1 ad & 1 juv).

Pulau Tiga

We did three treks across Pulau Tiga to the north coast following several of the excellent trails. Tabon Scrubfowls were heard and seen at many places in the forest, also very close to the Pulau Tiga resort. Mangrove Whistlers were commonly heard, as well as Mangrove Blue-Flycatchers, and both were seen close to the central mud volcano and along the trail west of the resort. A Hooded Pitta about 100 m inside the forest was a nice surprise and later heard from the resort bungalows. The open resort area was very productive for Pigeons and shorebirds, not to mention the more than 20 Water Monitor Lizards. The swampy lagoon behind the park headquarters was home to two Chinese Egrets. The sky over the island sometimes held hundreds of predominantly Lesser Frigatebirds. On a boat trip to the adjacent 'snake island', we had views of a small offshore breeding colony of Bridled and Black-naped Terns. And on the way back, a 40 minute stop at the 'sand spit' gave us excellent views of roosting shorebirds and terns.

Highlights: Tabon Scrubfowl (commonly seen, often heard calling and heard scratching on the ground), Mangrove Blue-Flycatcher (tape-responsive), Mangrove Whistler (often heard, once seen, not responsive), Chinese Egret, Christmas Island Frigatebird (one huge juvenile together with Lesser F.), Lesser Frigatebird (very common), Grey-tailed Tattler, Lesser and Greater Sandplover, Malaysian Plovers, Greater Crested Tern, Bridled and Black-naped Tern (colony on a rock close to snake island), Pied Imperial-Pigeon (rather common high-up in the canopy).

Lowlights: No sign of Nicobar Pigeon. A suspected 'White-faced Plover' turned out to be a worn Malaysian Plover. A Dutch birdwatcher couple claimed two observations of 1-4 Silvery Woodpeckers, which were probably Pied Imperial-Pigeons, given its current status (Mann 2008) and the observers' lack of a spotting scope.

Gunung Mulu NP

After seeing much of Sabah's parks, we decided to spend a week in Mulu to catch up with the western Garnet Pitta and to increase our chances for Hose's Broadbill and other missed lowland species. Although Black Oriole was reported from the Deer cave area, we found it to be probably too low-lying for a real chance of this supposedly montane and sub-montane species. It would be wise to organize a 4d/3n trip to the summit of Gg. Mulu or some birding around camp 1 to camp 4 in search of this rare Borneo endemic. We spent most time around camp 5 in great lowland riverine and kerangas forest. The forest around the park headquarters (HQ) is rather degraded except for some parts close to Deer cave and to the Paku waterfall. From camp 5, we explored the Headhunter trail for about 4 km, the Kerangas trail branching off from it and the Melinau trail leading to the HQ. Headhunter and Melinau trails were equally productive, the Kerangas trail was less interesting except for holding a small pond with a tame Chestnut-naped Forktail and having a Great Argus' dancing ground at about 1.5 km (unfortunately without the bird). Although hunting of locals was reported to be a problem, we heard many Great Arguses calling throughout the day and we bumped into two groups of Crested Partridges; however we did not encounter Firebacks. The pinnacles trail was done once in a tourist group of eight people: Although altitude is quickly gained, the terrain is too steep for much birding. The trails around the HQ consist of boardwalks except for the Paku Waterfall trail. The best birding areas were the connecting loop between the Moonmilk cave trail and the trail to the Deer cave / Paku waterfall as well as the Paku Waterfall trail. However, it was not worth to spend more than one day at the HQ as most forest is degraded and trails leading to other parts are only accessible through standard tourist tours.

Highlights: Hose's Broadbill (brief encounter at 2.5 km from camp 5 on the Melinau trail; male carrying nesting material to some other part of the forest), Garnet Pitta (ssp. *granatina*, very commonly seen and heard around camp 5 and twice at HQ), Black-throated Wren-Babbler (three family groups along the Headhunter trail and the Melinau trail; a strange non-territorial group-song was sung, but they reacted aggressively to the taping of the repetitive 'eeu-eeu-eeu-eeu...' territorial song), Bornean, Large-billed and Hill Blue-Flycatcher (seen around camp 5), Crested Partridge (common around camp 5), Banded Kingfisher (1 male on the Paku Waterfall trail), Jambu Fruit-dove (one in secondary forest at HQ), Western Tarsier (during a night-walk on the 'loop' connecting the Moonmilk cave and the Paku Waterfall trail), 30-cm Walking stick insect and Pinnacles.

Lowlights: No signs of Helmeted Hornbill, Giant Pitta and Firebacks.

Airline transport

We took Air Asia flights from KK to Sandakan and back from Lahad Datu to KK. A MASwings flight brought us from KK to Mulu. All flights were relatively cheap, the latter slightly more expensive. It is often recommended to book flights to Mulu as early as possible, especially during tourist high-seasons.

Ground transport

As a group of six with a lot of luggage, we hired minibus taxis for the drives Sandakan-Sepilok, Sepilok-Sukau and Sukau-Lahad Datu. Transport between Lahad Datu and DVFC was organized by the DV field center administration

and included in our accommodation booking. Around KK, we mainly used minibus taxis and regular minibuses. To the Gunung Alab Resort, we got by minibus from KK. About 2 minibuses drive daily to Tambunan, leaving from the Merdeka field bus station/old bus station, take about 1.5h and cost 13 RM pp. The Gunung Alab Resort owner kindly drove us to the Rafflesia Center and back every morning at 6am without charging anything. A minibus taxi and taxis were used to the onward journey to Poring HS, later to Kinabalu HQ, and back to KK. Alternatively, at higher costs and better flexibility, you can hire a car for the KK/Crocker Range/Kinabalu area, which should be more or less easy to drive (except some stretches on the road Tambunan/Ranau after rain).

Accommodation

Crocker Range NP: Gunung Alab resort, km 55, Tambunan Road, P.O. Box 261, 89507 Penampang, Sabah, East Malaysia, tel. 0168345718 and 0165867190 – This roadside-restaurant and hotel is situated at the highest point of the KK to Tambunan road. A 10 minutes car ride brings you to the Rafflesia center. A nice place to stay, the owning family is very lovely, the food is cheap and good and the rooms are clean at 50 RM per night for a twin room. The nearby Gunung Emas resort closed recently for renovation (the treetop cabins looked horrible), leaving Gg. Alab resort the only place to stay near the Rafflesia center. We did not book in advance; you can try to call one of the mentioned numbers to do so. However, as cell phone reception is sparse in the mountains, no success is guaranteed.

Gunung Kinabalu National Park: Serendit hostel in Poring and Rock hostel at headquarters, Sutera Sanctuary Lodges, www.suterasanctuarylodges.com.my – Accommodation was booked well in advance through Sutera Sanctuary Lodges, which has currently the monopoly on within national park accommodation. They charged us an incredible 130 RM pp/n for an 8-bed dorm including buffet breakfast and dinner in Poring and for a 4-bed room including only buffet breakfast at headquarters. The Serendit room was nice but small, the Rock hostel was very uncomfortable under our exceptionally stormy conditions: The wind blew straight through our room despite closed windows. Other trip reports recommend staying outside the park at headquarters, which would be a cheaper and nicer option (Lonely Planet 2008). However, in Poring there are only a few alternatives which probably cannot be organized in advance and own transport would be needed at headquarters.

Sepilok, Sepilok B&B, www.sepilokbednbreakfast.com – This hostel is the cheapest and closest option to reach the Rainforest Discovery center (10 min walk). We booked online in advance, paid 23 RM pp/n for staying in a decent dorm and the food was good.

Sungei Kinabatangan: Sukau B&B, tel. 089230269 (Lonely Planet2008), telephone did not work. – Initially, we booked and confirmed a 3d/3n tour including transport with Robert Chong at his Kinabatangan Jungle Camp three months in advance at 1'280 RM. While sending an SMS two days prior to pick-up, we received the answer that we had not confirmed the trip and that his accommodation is full. After a 2-hour discussion with his wife Annie in Sepilok without solution (we were offered one night with two half-days birding possibly accompanied by Robert), we decided to look for our own accommodation and found a decent solution at Sukau B&B. The Sukau B&B charged about 50 RM per hour for boat trips and evening/night cruises were possible as well. Our guide Shu (spoken 'Sue') found a Bornean Ground-Cuckoo on the first day. Nevertheless, if you want to have the best chances for Giant Pitta and many other good species, you should book a tour with Robert Chong who is reputedly the best guide there (Robert Chong, labukbb@yahoo.com, tel. 0198047756, Kinabatangan Jungle Camp, www.kinabatangan-jungle-camp.com). And please double-confirm your tour...

Danum Valley: Danum Valley Field Center, www.borneoforestheritage.org.my/Danum/contact.htm – The place to stay for budget Danum visitors, but nevertheless not cheap with dorms for 66 RM pp/n and another 60 RM for an excellent full-board buffet. There are no lockers in the dorm and it can be very crowded.

Nevertheless it is a nice place to stay and the restaurant is great and offered views of orangutans and Bornean Gibbons from the balcony while having breakfast. Everything was booked through the field center administration, including transport from and to DVFC – those things seem to have changed a bit now, as the organization is done directly through the Sabah foundation (see link above).

Pulau Tiga: Pulau Tiga resort, <http://pulau-tiga.com/index.html> – Accommodation and transport was booked in advance through the resort. This was certainly the most expensive part of the trip as we paid 202 USD pp for a 3d/2n full-board package including a snake island boat trip, boat transfer from Kuala Penyu and road transfer from KK to Kuala Penyu. Snorkeling gear can be hired for 30 RM and diving trips can be arranged on the spot. Additional snake island boat tours cost 60 RM pp. If you walk trails other than the mud volcano trail, you are asked to inform the reception.

Kota Kinabalu: Many backpacker places are found around Jalan Gaya and Akinabalu Youth Hostel (www.akinabaluyh.com) is reputedly the most comfortable and most calm of them, if not the cheapest.

Gunung Mulu NP: Park administration, www.mulupark.com – Bookings were made with the park administration for 3 nights at the HQ dorm (37 RM pp/n) and 4 nights at camp 5 (25 RM pp/n). Good space and lockers are available at the HQ dorm, but the camp 5 dorm is very basic and cramped (Swiss-alps-hut-feeling). While the food at HQ is horrible (often burnt) and overpriced, you have to bring and cook your own food at camp 5, resulting in 5 days Nasi Goreng and Maggi noodles in our case.

National parks & visitor centers logistics

Crocker Range NP, Rafflesia center – The Rafflesia center is officially opened Mo-Sa, 8 am to 4.30 pm. If Rafflesia flowers are not in blossom, they will not let you into the forest. A friendly discussion can help to get a forest entry permit (5 RM) with or without a guiding-fee (50 RM per group of 5 pp), not including a guide. If you do not intend to see Rafflesia flowers, you should probably stay on the road for birding where the activity was considerably higher.

Gunung Kinabalu National Park, Poring hot springs and headquarters – To enter the area, you have to pay an entrance fee of 15 RM pp, which is valid for 3 days if you sleep in the park. This permit stays valid when you go from Poring to the headquarters. The canopy walkway at Poring costs 5 RM pp and was not worth its money due to loud hordes of tourists and only few good views.

Sepilok, Rainforest Discovery Center, P.O. Box 1407, 90715 Sandakan, Sabah, Malaysia, rdcsepilok@yahoo.com, www.forest.sabah.gov.my/rdc – Entrance was 10 RM. Despite opening hours from 8 am to 5 pm, you can enter the facilities at any time; just buy the entrance ticket once a day. The canopy towers and walkways are excellent for both photography and birdwatching, even using a scope.

Danum Valley Conservation Area – Officially, you are only allowed to enter the self-guided Nature trail on your own and you have to hire a guide/ranger for other trails. In practice, nobody cared and we never hired a guide while entering the grid trails or the Waterfall trail. As researchers do, you can write your plans on a board close to the restaurant and must erase your name again before 5 pm; they will search for you, if you have not returned.

Gunung Mulu NP – Arrangements for the pinnacles trek, boat tours and walks were made on the spot at the headquarters, resulting in the most expensive part of the Mulu extension (see for example Lonely Planet). Unfortunately, you are only allowed to walk on your own to the Moonmilk cave and to the Paku waterfall; everything else has to be booked with usual tourist groups at the HQ. At camp 5 we could bird along the headhunter trail and the Melinau trail on our own, but the Pinnacles trail could only be walked in a guided tour. As an alternative, you may book your Mulu stay with a ground agent and a park-licensed private guide who can organize overnight stays at camp 1-5 for you and accompanies you to the

field without being bound to tourist groups. However, I do not know who offers this and how expensive it would be.

Weather

Thanks to El Niño, we saw more Bornean Bristleheads than rainy days! A side effect of a severe hurricane over the Philippines brought very strong winds over the North coast of Sabah, made birding at Mount Kinabalu HQ very difficult and snorkeling and diving on Pulau Tiga impossible. The typical lowland climate was hot and humid, worst in Danum Valley where a dry shirt was a rare sight for some of our group. Hill climate in Poring HS was slightly cooler and therefore very nice. The montane climate was rather chilly and uncomfortable due to the strong winds. Good jackets and a sleeping bag were worth bringing.

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Recommended trip reports

- http://www.travellingbirder.com/tripreports/reports/malaysia_borneo_sabah_birding_trip_report_mar-09.pdf
- http://www.lpo.fr/voyages/docs/Borneo_Erard_2008_1.pdf
- <http://users.ugent.be/~hmatheve/hm/BORNEO08.html>
- http://www.travellingbirder.com/tripreports/reports/malaysia_sabah_borneo_birding_trip_report_apr-07.pdf
- http://www.club300.se/Files/TravelReports/Borneo2007_BA.pdf
- http://www.club300.se/Files/TravelReports/Borneo2007_BA.pdf

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Abbreviations

- RM = Malaysian Ringgit (1 RM = ca. 0.30 USD, exchange rate 30. December 2009)
- KK = Kota Kinabalu
- CR = Crocker Range NP
- SE = Sepilok, Rainforest Discovery Center and Orangutan Rehabilitation Center
- GC = Gomantong Caves
- SK = Sungai Kinabatangan
- DV = Danum Valley Field Center
- PH = Poring Hot Springs, Gunung Kinabalu NP
- GK = Gunung Kinabalu NP headquarters
- PT = Pulau Tiga
- GM = Gunung Mulu NP
- Species (bold)** = Bird species endemic to Borneo

Annotated Species list

Birds (taxonomy Clements 2007, v6.4)

Tabon Scrubfowl, *Megapodius cumingii cumingii* – PT, commonly seen, often heard calling and heard scratching on the ground in the forest interior, also very close to the resort. Slight response on tape-playback, however a huge distance was maintained.

Red-breasted Partridge, *Arborophila hyperythra hyperythra & erythrophrys* – Two groups seen GK, one a few meters below the Timpohon gate and another at dawn on the Liwagu trail, heard on one more day at GK and on another day below the Rafflesia center at CR. No response to tape-playback.

Chestnut-necklaced Partridge, *Arborophila charltonii graydoni* – Seen once SK, along the river 100 m east of the Sukau B&B, heard on three more days in DV.

Crimson-headed Partridge, *Haematortyx sanguiniceps* – Heard daily below the Rafflesia center and the Gg. Alab resort in CR, heard daily in montane forest of GK and one female seen along the Silau-Silau trail. No response on tape-playback.

Crested Partridge, *Rollulus rouloul* – GM, two groups flushed on the Melinau trail, no reaction on tape-playback.

Great Argus, *Argusianus argus grayi* – DV, one female seen along the Nature trail at dawn, several males heard on three days, in GM heard daily from camp 5 and one dancing ground without bird was found on the Kerangas trail.

Darter, *Anhinga melanogaster melanogaster* – Several birds along rivers or ponds in SK, KK and DV.

Christmas Island Frigatebird, *Fregata andrewsi* – PT, one huge juvenile in a group of Lesser Frigatebirds.

Lesser Frigatebird, *Fregata ariel ariel* – PT, huge groups of more than 20 and more than 130 birds were seen soaring over the island on two days.

Cinnamon Bittern, *Ixobrychus cinnamomeus* – KK, Likas lagoon, one male flying over the lagoon.

Great-billed Heron, *Ardea sumatrana sumatrana* – DV, single birds flying along the Segama river on two days.

Purple Heron, *Ardea purpurea manilensis* – SK, singles flying in the evening, KK, Likas lagoon harbors a large breeding colony.

Great Egret, *Ardea alba modesta* – SK, one bird seen from the boat.

Intermediate Egret, *Mesophoyx intermedia intermedia* – SK, several seen during boat rides, including a large evening roost of more than 60 individuals, KK, several birds in Likas lagoon and wetland center.

Chinese Egret, *Egretta eulophotes* – PT, two individuals in non-breeding plumage feeding in a lagoon north-east of the park headquarters.

Little Egret, *Egretta garzetta garzetta* – KK, several yellow-footed Little Egrets of the nominate taxon were seen in the Likas lagoon and in the wetland center as well as in roadside paddyfields.

Pacific Reef-Heron, *Egretta sacra sacra* – PT, up to 15 birds daily on the beach and in the colony on snake island.

Cattle Egret, *Bubulcus ibis coromandus* (Eastern Cattle Egret, *B. coromandus*) – KK, many in roadside paddyfields and in Likas lagoon.

Striated Heron, *Butorides striata javanica* – KK, several in mangroves in the wetland center and others at the shore.

Black-crowned Night-Heron, *Nycticorax nycticorax nycticorax* – Two in KK and more than 50 flying at dusk over the Kinabatangan (SK).

Storm's Stork, *Ciconia stormi* – SK, two, five and ten birds on three days along the Kinabatangan, one bird overhead
Lesser Adjutant, *Leptoptilos javanicus* – SK, one bird flying overhead.

Jerdon's Baza, *Aviceda jerdoni borneensis* – One and three individuals along the Menanggol tributary SK, one bird circling over camp 5 at GM.

Oriental Honey-buzzard, *Pernis ptilorhynchus torquatus* – Six observations of singles in SE, DV and PH.

Bat Hawk, *Macheiramphus alcinus alcinus* – SE, daily from the 'Hornbill' canopy tower, resting on an adjacent tree.

Black-shouldered Kite, *Elanus caeruleus hypoleucus* – Twice along the road from Sandakan to Lahad Datu.

Brahminy Kite, *Haliastur indus intermedius* – Common in lowland coastal and cultivation area.

White-bellied Sea-Eagle, *Haliaeetus leucogaster* – Single observations in SE, KK wetland center and SK, commonly seen around PT with a breeding pair on snake island, an obvious fact due to many snake skeletons on the island.

Lesser Fish-Eagle, *Ichthyophaga humilis humilis* – One bird along the DV Segama river and one bird resting in the Menanggol tributary at SK.

Fish-Eagle sp., *Ichthyophaga* sp. – Two unidentified, distant birds at SE and SK

Mountain Serpent-Eagle, *Spilornis kinabaluensis* – One adult bird crossing the pass over the Gg. Alab resort, calling, maybe a territorial male.

Crested Serpent-Eagle, *Spilornis cheela pallidus* – Rather commonly heard and seen in lowland forests of SE, DV, SK and GM.

Crested Goshawk, *Accipiter trivirgatus microstictus* – SK, twice crossing the river.

Besra, *Accipiter virgatus rufotibialis* – GM, two observations on the river to camp 5 and on the Melinau trail.

Rufous-bellied Eagle, *Lophotrioichis kienerii formosus* – Six birds in DV, SE and GM over the pinnacles.

Changeable Hawk-Eagle, *Nisaetus cirrhatus limnaeetus* – One bird in DV and one in SE.

Blyth's Hawk-Eagle, *Nisaetus alboniger* – Quite common in CR, once seen GK, maybe rarely seen there due to strong winds.

Wallace's Hawk-Eagle, *Nisaetus nanus nanus* – One bird crossing the Kinabatangan at SK, five birds in DV, well seen along the entrance road.

Hawk-Eagle sp., *Nisaetus* sp. – The only juvenile Wallace's / Blyth's we saw was a juvenile at SE and was left unidentified.

White-fronted Falconet, *Microhierax latifrons* – SK, four birds along the Menanggol tributary, two birds along the road from GC to SK.

Peregrine Falcon, *Falco peregrines ernesti* – One flying over SK, one chasing bats at the Deer cave in GM.

Red-legged Crake, *Rallina fasciata* – SE, one bird along the forest stream leading to the Kingfisher trail.

White-breasted Waterhen, *Amaurornis phoenicurus phoenicurus* – Rather common lowland wetland and paddy field bird.

White-browed Crake, *Porzana cinerea* – KK, adult and juvenile inside Likas lagoon.

Purple Swamphen, *Porphyrio porphyrio indicus* – KK, at least six inside Likas lagoon.

Common Moorhen, *Gallinula chloropus orientalis* – KK, at least 15 inside Likas lagoon.

Lesser Sand-Plover, *Charadrius mongolus atrifrons/schaeferi* – One non-breeding / 1st summer bird among Greater Sand-Plovers on the 'sand spit' at PT, one adult with retained breeding plumage in Likas bay.

Greater Sand-Plover, *Charadrius leschenaultii leschenaultia* – PT, nine non-breeding / 1st summer birds on 'sand spit'.

Malaysian Plover, *Charadrius peronii* – PT, one at beach in the resort, three more on 'sand spit'.

Snowy Plover, *Charadrius alexandrinus alexandrinus/dealbatus* – PT, four birds on 'sand spit'.

Little Ringed Plover, *Charadrius dubius curonicus* – KK, one inside Likas lagoon.

Common Sandpiper, *Actitis hypoleucos* – Many PT, KK Likas lagoon and along river at GM.

Gray-tailed Tattler, *Tringa brevipes* – PT, eleven birds on 'sand spit'.

Wood Sandpiper, *Tringa glareola* – KK, 16 birds in Likas lagoon.

Whimbrel, *Numenius phaeopus phaeopus* – PT, seven birds on 'sand spit'.

Ruddy Turnstone, *Arenaria interpres interpres* – PT, two birds on 'sand spit'.

Bridled Tern, *Onychoprion anaethetus anaethetus* – PT, breeding colony on rock off snake island, where 40 individuals were counted and a few more were seen offshore from the main island.

Little Tern, *Sternula albifrons pusilla/sinensis* – Common along the shore of KK and two on PT 'sand spit'.

Whiskered Tern, *Chlidonias hybridus javanicus* – KK, adults at waterfront and more over rice paddies.

Black-naped Tern, *Sterna sumatrana sumatrana* – PT, breeding colony on rock off snake island, where 20 adult and freshly fledged juvenile birds were counted, more offshore the main island.

Great Crested Tern, *Thalasseus bergii cristatus* – PT, ten birds on the 'sand spit'.

Rock Pigeon, *Columba livia dom.* – Common in KK and other cities.

Spotted Dove, *Streptopelia chinensis tigrina* – Common in human settlements.

Little Cuckoo-Dove, *Macropygia ruficeps nana* – Very common in CR and GK.

Cuckoo-Dove sp., *Macropygia* sp. – CR, a few 'rufous' individuals could not be successfully identified.

Emerald Dove, *Chalcophaps indica indica* – Commonly seen and heard in lowland forests of DV, GM, SK, SE and PH.

Zebra Dove, *Geopelia striata* – Common KK, in human settlements, close to towns and roads.

Green-Pigeon sp., *Treron* sp. – Many unidentified fly-by groups in SK, SE, GM, DV and PT.

Little Green-Pigeon, *Treron olax* – Seen twice in SE and in front of the GC park entry.

Pink-necked Pigeon, *Treron vernans* – Common in KK, SE, SK and PT.

Cinnamon-headed Pigeon, *Treron fulvicollis baramensis* – SE, at least 3 males in a bigger group.

Thick-billed Pigeon, *Treron curvirostra* – SE, five birds in a hotel plantation.

Large Green-Pigeon, *Treron capellei* – SK, one bird crossing the river.

Jambu Fruit-Dove, *Ptilinopus jambu* – GM, one male in secondary forest at the headquarter.

Green Imperial-Pigeon, *Ducula aenea aenea* – Common in lowland areas, except PT.

Mountain Imperial-Pigeon, *Ducula badia badia* – Common in montane and hill areas of CR, GK and PH.

Pied Imperial-Pigeon, *Ducula bicolor bicolor* – PT, a group of 15 birds behind the resort and four crossing from snake island to the main island.

Blue-rumped Parrot, *Psittinus cyanurus cyanurus* – DV, two birds flying overhead.

Blue-naped Parrot, *Tanygnathus lucionensis salvadorii* – KK, ten birds at Tanjung Aru beach, two birds on PT.

Long-tailed Parakeet, *Psittacula longicauda longicauda* – Very common at SK, where maximal 80 birds were seen, also a group of ten at the orangutan rehabilitation center in SE.

Blue-crowned Hanging-Parrot, *Loriculus galgulus* – Commonly heard flying overhead in all lowland areas, including PT.

Sunda/Indian Cuckoo, *Cuculus* sp. – CR, we saw one perched and silent bird which we couldn't identify, likely Sunda.

Large Hawk-Cuckoo, *Cuculus sparverioides bocki* (Dark Hawk-Cuckoo, *C. bocki*) – CR, one bird seen around Rafflesia center and another heard.

Brush Cuckoo, *Cacomantis variolosus sepulcralis* (Rusty-breasted Cuckoo, *C. sepulcralis*) – GM, five birds heard and seen.

Little Bronze-Cuckoo, *Chrysococcyx minutillus cleis* – DV, one bird perched in front of the restaurant.

Violet Cuckoo, *Chrysococcyx xanthorhynchus xanthorhynchus* – One bird flying overhead and calling SK, two birds seen along the entrance road at DV.

Black-bellied Malkoha, *Phaenicophaeus diardi borneensis* – SE, one bird from canopy tower.

Raffles's Malkoha, *Phaenicophaeus chlorophaeus chlorophaeus* – Common bird of lowland and hill forest.

Red-billed Malkoha, *Phaenicophaeus javanicus* – DV, one bird along the entrance road.

Chestnut-breasted Malkoha, *Phaenicophaeus curvirostris microrhinus* – Rather common in lowland forests

Bornean Ground-Cuckoo, *Carpococcyx radiatus* – Stunning views of a alarm-calling and tail-pumping adult at the river bank in the Menanggal tributary who disappeared silently in the forest after displaying for half a minute. One bird was heard calling again the next day.

Greater / Short-toed Coucal, *Centropus* sp. – Calling coucals in the forest interior of DV and GM were not found and we did not record them to confirm Short-toed. They did not react on tape recordings.

Greater Coucal, *Centropus sinensis bubutus* – Often seen in overgrown forest edge and wetland habitat.

Reddish Scops-Owl, *Otus rufescens rufescens* – Heard at four locations: One calling along the entrance road at DV, another at PH, two birds at GM camp 5 / Melinau trail and three birds on the loop connecting Moonmilk and Deer cave trails.

Mountain Scops-Owl, *Otus spilocephalus luciae* – Three and two birds on the road up Gg. Alab.

Buffy Fish-Owl, *Ketupa ketupu ketupu* – Six birds on a night boat ride at SK, two in SE and one daily on the badminton court in DV.

Brown Wood-Owl, *Strix leptogrammica vaga* – Three birds seen at DV, SK and GK.

Silver-rumped Needletail, *Rhaphidura leucopygialis* – Common over lowland forests.

Brown-backed Needletail, *Hirundapus giganteus giganteus* – Groups seen overhead at DV, SE and PT.

Glossy Swiftlet, *Collocalia esculenta cyanoptila* – Common bird in proximity to humans.

Glossy / **Bornean Swiftlet**, *Collocalia esculenta/dodgei* – Green-backed swiftlets breeding at the CR Gg. Alab resort and at the GK park administration office; I do not know the current state-of-the-art regarding the taxonomy of those birds.

Mossy-nest Swiftlet, *Aerodramus salangana natunae* – More than 1000 nests and birds in GC, at least 20 nests with breeding birds in the Lang's cave at GM.

Black-nest Swiftlet, *Aerodramus maximus lowi* – GC, more than 500 nests with breeding birds.

Edible-nest Swiftlet, *Aerodramus fuciphagus vestitus* – GC, around 50 nests with breeding birds.

x-nest Swiftlet sp., *Aerodramus* sp. – Swiftlets outside their breeding caves were not identified, but were commonly seen especially in lowland areas.

House Swift, *Apus nipalensis subfurcatus* – Many in cities and close to human buildings in KK, Sandakan, SE and GM.

Asian Palm-Swift, *Cypsiurus balasienis infumatus* – Singles in SE and on the road.

Gray-rumped Treeswift, *Hemiprocne longipennis harterti* – Small groups regularly seen in SE, DV, SK, PH and on the road.

Whiskered Treeswift, *Hemiprocne comata comata* – DV, on three days along the Segama river and along the entrance road.

Red-naped Trogon, *Harpactes kasumba impavidus* – Seen on five days in DV and SE.

Diard's Trogon, *Harpactes diardii diardii* – Seen on eight days in DV, GM, PH and SE.

Whitehead's Trogon, *Harpactes whiteheadi* – Seen twice at GK, once a pair along the lower Silau-Silau trail and once a female along the Liwagu trail.

Scarlet-rumped Trogon, *Harpactes duvaucelii* – Common SK and GM, also DV and GC.

Orange-breasted Trogon, *Harpactes oreskios dulitensis* – CR, one male in the Rafflesia center vicinity.

Common Kingfisher, *Alcedo atthis bengalensis* – One early bird in the KK wetland center mangrove area.

Blue-eared Kingfisher, *Alcedo meninting verreauxii* – Common in GM, SK and SE along rivers and ponds.

Black-backed Kingfisher, *Ceyx erithaca motley* (Rufous-backed / Oriental Dwarf Kingfisher) – Seen on eleven days in SE, DV, GM, SK, PH and PT, always the dark-winged motley 'hybrid' phenotype.

Banded Kingfisher, *Lacedo pulchella melanops* – GM, one male on the Paku Waterfall trail and another heard by other birdwatchers in SE.

Stork-billed Kingfisher, *Pelargopsis capensis inominata* – Often seen along rivers or ponds in SK, DV and KK.

Collared Kingfisher, *Todiramphus chloris laubmannianus* – Common roadside and wetland bird in lowlands, also on PT.

Rufous-collared Kingfisher, *Actenoides concretus borneanus* – A male close to the 'Pitta trail' in SE, a female above the entrance of the bat cave at PH, both very tame and easy to approach for photographs.

Red-bearded Bee-eater, *Nyctornis amictus* – On three days in DV, mainly along the entrance road, once rather high up close to the Rafflesia center in CR.

Blue-throated Bee-eater, *Merops viridis viridis* – Common sight at SE and SK.

Dollarbird, *Eurystomus orientalis orientalis* – Several along the Kinabatangan at SK, a group of ten on PT and a few more along the roads.

Oriental Pied-Hornbill, *Anthracoceros albirostris convexus* – Common SK, DV and PT, also seen at SE.

Black Hornbill, *Anthracoceros malayanus* – Rather commonly seen at DV and SE, also at SK and GM.

Rhinoceros Hornbill, *Buceros rhinoceros borneoensis* – Singles or pairs seen on seven days in SE, SK, DV and GM.

Bushy-crested Hornbill, *Anorrhinus galeritus* – Common bird always in large family groups in SK and DV, also seen at GM, PH and SE.

White-crowned Hornbill, *Aceros comatus* – Heard at SK without tapping success, four seen DV and three seen GM.

Wrinkled Hornbill, *Aceros corrugates* – DV, a pair along the entrance road.

Wreathed Hornbill, *Aceros undulates* – Pairs and small groups rather often seen in lowland and up to lower montane forest in CR.

Brown Barbet, *Calorhamphus fuliginosus tertius* – Twice seen in lowland forest in SE and once in lower montane forest in CR.

Gold-whiskered Barbet, *Megalaima chrysopogon chrysopsis* – Rather commonly heard in hill and lowland forests in CR, PH, DV and GM, seen a dozen times.

Red-crowned Barbet, *Megalaima rafflesii* – Heard once in DV and commonly in GM, but never seen.

Red-throated Barbet, *Megalaima mystacophanos mystacophanos* – Heard commonly in DV, PH and GM, once SK and CR, seen a few times.

Mountain Barbet, *Megalaima monticola* – Commonly heard and seen around Rafflesia center, very conspicuous.

Yellow-crowned Barbet, *Megalaima henricii brachyrhyncha* – Commonly heard DV, GM and PH, but never seen.

Golden-naped Barbet, *Megalaima pulcherrima* – Commonly heard and seen GK and CR, especially around Gg. Alab.

Blue-eared Barbet, *Megalaima australis duvaucelii* – Commonly heard in lowland and hill forests, seen a dozen times.

Bornean Barbet, *Megalaima eximia eximia* – CR, rather commonly heard and seen on four days around Rafflesia center, once heard near the end of the Waterfall trail at PH.

Rufous Piculet, *Sasia abnormis abnormis* – Not uncommon in lowland and hill forest of SE, PH, GM and DV.

Brown-capped Woodpecker, *Dendrocopos moluccensis moluccensis* (Sunda Woodpecker *D. moluccensis*) – Two observations in SE, in human settlement and cultivation area.

Gray-capped Woodpecker, *Dendrocopos canicapillus aurantiiventris* – Two observations in SK and DV.

Rufous Woodpecker, *Celeus brachyurus badius* – Three times seen in DV and SE.

White-bellied Woodpecker, *Dryocopus javensis javensis* – DV, one stunning female along the entrance road.

Banded Woodpecker, *Picus miniaceus malaccensis* – Seen three times in lowland forest of DV and GM.

Crimson-winged Woodpecker, *Picus puniceus observandus* – Seen on four days in hill (DV) and montane forest (CR).

Checker-throated Woodpecker, *Picus mentalis humii* – Seen on five days in lowland (GM camp 5), hill (PH, DV) and montane forest (GK).

Maroon Woodpecker, *Blythipicus rubiginosus* – Commonly heard and seen in montane forest, down to lowland forests of DV and SK.

Orange-backed Woodpecker, *Reinwardtipicus validus xanthopygius* – Three times in lowland forests of SE and DV and once in montane forest of GK.

Buff-rumped Woodpecker, *Meiglyptes tristis grammithorax* – Common in lowland and hill forests

Buff-necked Woodpecker, *Meiglyptes tukki tukki* – Common in lowland and hill forests.

Gray-and-buff Woodpecker, *Hemicircus concretus sordidus* – Once in Sukau (SK) and once along the DV entrance road.

Green Broadbill, *Calyptomena viridis viridis* – Commonly heard and seen in lowland forest of GM and DV, also in SK and PH, reacts very well on tape recordings of its song.

Hose's Broadbill, *Calyptomena hosii* – GM, one brief encounter with a nest-material carrying male at 2.5 km from camp 5 on the Melinau trail, he disappeared into the hilly area, no reaction at all to a tape of its song.

Whitehead's Broadbill, *Calyptomena whiteheadi* – CR, one male and a family group of six birds directly behind the Rafflesia center.

Black-and-red Broadbill, *Cymbirhynchus macrorhynchus macrorhynchus* – Common in lowland forests, especially along forest edge and rivers, GM, SK and SE.

Long-tailed Broadbill, *Psarisomus dalhousiae borneensis* – CR, one big group at the Rafflesia center.

Banded Broadbill, *Eurylaimus javanicus brookei* – Common in hill forests of PH and DV, less common in lowland forests of SK and GM.

Black-and-yellow Broadbill, *Eurylaimus ochromalus* – Commonly heard and seen in lowland and hill forests, up to 1800 m a. s. l.

Banded Pitta, *Pitta guajana schwaneri* – DV, one seen along the Waterfall trail, at the highest plateau before the trail descends down to the waterfall, it was singing directly on the trail and disappeared afterwards.

Blue-headed Pitta, *Pitta baudii* – DV, rather commonly heard, seen on waterfall, nature and grid trails, did not respond at all to tapes of calls and song.

Blue-banded Pitta, *Pitta arquata* – PH, one stunning male just at the entrance of the bat cave along the Waterfall trail, responded very well to a song playback.

Garnet Pitta, *Pitta granatina granatina* – Daily in GM, especially around camp 5, very conspicuous and not very shy, seldom in dense cover, walking rather openly on the forest floor. While trekking the full 8.8 km Melinau trail, we saw seven birds by chance without using tapes.

Black-headed Pitta, *Pitta ussheri* (Black-and-crimson Pitta) – Up to two heard and seen in SE on the Kingfisher trail, often heard at DV and seen twice W10N5 and on Waterfall trail, usually approaching while playing tape recordings, but stayed always in dense cover and was very hard to find.

Hooded Pitta, *Pitta sordid mulleri* – Heard daily in SK and PT and seen twice in SK and PT, very well responding to tape recordings.

Golden-bellied Gerygone, *Gerygone sulphurea sulphurea* – Three times in lowland (DV) and montane forest (CR).

Large Woodshrike, *Tephrodornis gularis frenatus* – Twice in the canopy at DV and SE.

Rufous-winged Philentoma, *Philentoma pyrhoptera pyrhoptera* – On six days in lowland forests of SE, DV and GM.

Maroon-breasted Philentoma, *Philentoma velata caesia* – On three days in lowland forests of DV and GM.

White-breasted Woodswallow, *Artamus leucorhynchus leucorhynchus* – Rather common in lowland to montane areas, mostly sallying in human settlement and cultivation areas.

Bornean Bristlehead, *Pityriasis gymnocephala* – One male and one family group in SE, both seen from canopy towers with stunning views of up to 8 meters! One distant group in the canopy above W5S3 at DV. Tape recordings helped to attract them into the direction of the canopy tower.

Common lora, *Aegithina tiphia aequanimis* – Rather common in mangrove, garden and human settlement habitats.

Green lora, *Aegithina viridissima viridissima* – Rather common in lowland and hill forest canopies.

Sunda Cuckoo-shrike, *Coracina larvata normani* – Two groups each in CR and GK.

Pied Triller, *Lalage nigra chilensis* – KK on old bus station, Likas lagoon and KK wetland center.

Fiery Minivet, *Pericrocotus igneus igneus* – Occasionally in lowland forests of SE, DV and SK.

Gray-chinned Minivet, *Pericrocotus solaris cinereigula* – Rather common in montane forest of GK and CR.

Minivet sp., *Pericrocotus* sp. – Three groups of unidentified minivets in PH and SK.

Bar-winged Flycatcher-shrike, *Hemipus picatus intermedius* – CR, several individuals on two days around Rafflesia center.

Black-winged Flycatcher-shrike, *Hemipus hirundinaceus* – Seen on six days in lowland forest of SE, DV and SK.

Mangrove Whistler, *Pachycephala grisola* – Once seen and commonly heard on PT, not responding to tape recordings.

Bornean Whistler, *Pachycephala hypoxantha hypoxantha* – Rather common in montane forests of CR and GK.

Dark-throated Oriole, *Oriolus xanthonotus consobrinus* – On five days in lowland forests of DV, GC and SK.

Black-and-crimson Oriole, *Oriolus cruentus vulneratus* – Rather common in mixed flocks in CR, less common in GK.

Ashy Drongo, *Dicrurus leucophaeus stigmatops* – Common in montane forests of GK and CR.

Bronzed Drongo, *Dicrurus aeneus malayensis* – Not uncommon in lowland and hill forests of SE, DV and CR.

Hair-crested Drongo, *Dicrurus hottentottus borneensis* – Common in hill and montane forests in CR, GK, PH and also DV.

Greater Racket-tailed Drongo, *Dicrurus paradiseus brachyphorus* – Rather common in lowland forests of DV, SE and GM.

Drongo sp., *Dicrurus* sp. – Two unidentified, moulting Drongos in SE.

White-throated Fantail, *Rhipidura albicollis kinabalu* – Commonly heard and seen GK and CR, very vocal with very variable song (seems to imitate Mountain Tailorbird), easy to attract with tape recordings.

Pied Fantail, *Rhipidura javanica longicauda* – Common in mangroves (except PT), close to open water and to human settlements.

Spotted Fantail, *Rhipidura perlata* – Uncommonly seen and heard in lowland forest of DV, SE and GM.

Black-naped Monarch, *Hypothymis azurea prophata* – Very common in lowland forests, including PT.

Asian Paradise-Flycatcher, *Terpsiphone paradise borneensis* – Rather common in lowland forests of SK, DV and GM.

Crested Jay, *Platylophus galericulatus coronatus* – Rather commonly heard and seen DV and GM, twice at PH and CR, they always flew while playing tape recordings (alarm call?).

Black Magpie, *Platysmurus leucopterus aterrimus* – Uncommonly found in DV and SE, more seen and heard in GM.

Short-tailed Magpie, *Cissa thalassina jeffreyi* – Common and very vocal in montane forest of GK.

Bornean Treepie, *Dendrocitta cinerascens* – Commonly heard and seen CR and GK.

House Crow, *Corvus splendens protegatus* – KK, Filipino market at the waterfront.

Slender-billed Crow, *Corvus enca compilator* – Occasional groups at DV, SE and SK.

Slender- / Large-billed Crow, *Corvus* sp. – Two groups of unidentified crows SK, supposedly Slender-billed.

Barn Swallow, *Hirundo rustica tytleri/gutturalis/mandschurica* – Migrants very obvious in PT and in other coastal and lowland areas as KK, SK, GM and once at CR.

Pacific Swallow, *Hirundo tahitica javanica* – Common everywhere.

Gray-headed Canary-Flycatcher, *Culicicapa ceylonensis ceylonensis* – Four times seen in hill forests of PH, GM, DV and CR.

Bornean Stubtail, *Urosphena whiteheadi* – GK, often heard above Silau-Silau trail start, seen once in Liwagu valley.

Sunda Bush-Warbler, *Cettia vulcania banksi & oreophila* – very common in higher areas of CR and GK.

Yellow-bellied Warbler, *Abroscopus superciliaris schwaneri* – Rather uncommonly heard and seen CR, GK and PH.

Mountain Tailorbird, *Phyllergates cuculatus cinereicollis* – Commonly heard and seen in CR and GK.

Velvet-fronted Nuthatch, *Sitta frontalis corralipes* – Not uncommon in lowland forest interiors of DV, SE and GM.

Straw-headed Bulbul, *Pycnonotus zeylanicus* – DV, very vocal groups daily along the Segama river between the dorms and the restaurant.

Black-and-white Bulbul, *Pycnonotus melanoleucus* – Twice at forest edge in DV and once in GM close to camp 5.

Black-headed Bulbul, *Pycnonotus atriceps atriceps* – Rather uncommonly seen in lowland forests, especially forest edges of DV, GM, SK and PH.

Black-crested Bulbul, *Pycnonotus melanicterus montis* (**Bornean Bulbul**, *P. montis*) – Two groups of four and five close to the Rafflesia center in CR.

Scaly-breasted Bulbul, *Pycnonotus squamatus borneensis* – On three days in hilly forest in GM and PH.

Gray-bellied Bulbul, *Pycnonotus cyaniventris paroticalis* – Once four birds along the entrance road in DV.

Puff-backed Bulbul, *Pycnonotus eutilotus* – On three days seen in SK, GM and PH.

Flavescent Bulbul, *Pycnonotus flavescens leucops* (**Pale-faced Bulbul**, *P. leucops*) – Once two birds close to Gg. Alab peak in CR, twice at GK with a big group along the summit trail just above Layang-Layang.

Yellow-vented Bulbul, *Pycnonotus goiavier gourdini* – Common everywhere, especially at forest edges and close to human settlements and cultivation.

Olive-winged Bulbul, *Pycnonotus plumosus hutzi* – Rather common in lowland to hill forests, including PT.

Cream-vented Bulbul, *Pycnonotus simplex perplexus* – Rather sure individuals were found in SE, DV and GM.

Red-eyed Bulbul, *Pycnonotus brunneus brunneus* – Rather sure individuals were identified in DV, SE, GM and SK.

Red-eyed / Cream-vented Bulbul, *Pycnonotus simplex/brunneus* – Identification often problematic and only a few individuals were identified. In general the 'red-eyed' bulbuls were rather common everywhere in lowland forests, including PT.

Spectacled Bulbul, *Pycnonotus erythroptalmos salvadorii* – Common in lowland and hill forests of DV, GM, PH and SE.

Finsch's Bulbul, *Alophoixus finschii* – Only once two birds in DV along the entrance road.

Ochraceous Bulbul, *Alophoixus ochraceus fowleri* & *ruficriccus* – Rather common in hill and montane forests of CR, GK and PH.

Gray-cheeked Bulbul, *Alophoixus bres gutturalis* – Rather common in lowland and hill forests of DV, GM, SK, PH and SE.

Yellow-bellied Bulbul, *Alophoixus phaeocephalus connectens* – Occasionally seen in lowland and hill forests of PH, SK, DV and GM.

Hairy-backed Bulbul, *Tricholestes criniger viridis* – Rather common in SE, DV, PH and GM, often seen in pairs.

Buff-vented Bulbul, *Iole olivacea* – Occasionally seen in DV, SE and GM.

Streaked Bulbul, *Ixos malaccensis* – On three days seen in SE and once in PH.

Ashy Bulbul, *Hemixos flavala connectens* (Cinereous Bulbul, *H. cinereus*) – Commonly seen and heard CR, GK and PH.

Mountain Warbler, *Phylloscopus trivirgatus kinabaluensis* – Common CR and GK, in GK occur many integrades between the yellow and the totally gray morphs.

Leaf-Warbler sp., *Phylloscopus* sp. – CR, one worn Yellow-browed-ish Warbler at Gg. Emas resort, unfortunately not calling.

Yellow-breasted Warbler, *Seicercus montis montis* – Common CR and GK, once at PH.

Friendly Bush-Warbler, *Bradypterus accentor* – GK, summit trail, heard at 1.7 km, seen at 3 km and 50 m below Layang-Layang, responded very well to tape.

Striated Grassbird, *Megalurus palustris palustris* – Seen two times between KK and Kuala Penyu, two birds at KK Likas lagoon.

Dark-necked Tailorbird, *Orthotomus atrogularis atrogularis* – Not uncommon GM, DV and SE.

Rufous-tailed Tailorbird, *Orthotomus sericeus sericeus* – Common lowland bird, except PT.

Ashy Tailorbird, *Orthotomus ruficeps borneoensis* – Common lowland bird, except PT.

Yellow-bellied Prinia, *Prinia flaviventris latrunculus* – Common bird of grassy patches, often close to human settlements.

Asian Fairy-bluebird, *Irena puella crinigera* – Uncommon in lowland areas of SE, DV, GM and PH.

Gray-chested Jungle-Flycatcher, *Rhinomyias umbratilis* – Once seen PH and three times seen in DV.

Fulvous-chested Jungle-Flycatcher, *Rhinomyias olivaceus olivaceus* – One singing male seen at PH.

Eyebrowed Jungle-Flycatcher, *Rhinomyias gularis* – Commonly seen and heard in montane forest at GK.

Snowy-browed Flycatcher, *Ficedula hyperythra sumatrana* – Very common GK and CR.

Rufous-chested Flycatcher, *Ficedula dumetoria muelleri* – Two brief sightings of males at SK and GM.

Little Pied Flycatcher, *Ficedula westermanni westermanni* – Very common GK and CR.

Flycatcher sp., *Ficedula* sp. – One unidentified female flycatcher feeding a young at the GM headquarters. The female was plain reddish-brown without facial markings, fusing into a whitish belly, size and stature reminded of a Little Pied Flycatcher.

Verditer Flycatcher, *Eumyias thalassinus thalassoides* – Once PH and three times along the entrance road in DV.

Indigo Flycatcher, *Eumyias indigo cerviniventris* – Rather commonly seen and heard GK and CR.

Pale Blue-Flycatcher, *Cyornis unicolor harterti* – One male along kingfisher trail in SE.

Hill Blue-Flycatcher, *Cyornis banyumas coeruleaetus* – One male PH and one singing male GM along the headhunter trail, song recorded.

Long-billed Blue-Flycatcher, *Cyornis caerulatus caerulatus* – Two males and one female on two days around camp 5, song recorded.

Malaysian Blue-Flycatcher, *Cyornis turcosus turcosus* – Rather common close to water in lowland forests, DV, GM and SK.

Bornean Blue-Flycatcher, *Cyornis superbus* – Two males and one female on two days around camp 5, song recorded.

Mangrove Blue-Flycatcher, *Cyornis rufigastra rufigastra* – Several individuals seen and heard at two days inside the forest on PT.

Pygmy Blue-Flycatcher, *Muscicapella hodgsoni sondaica* – GK, a pair between 2 and 3 km along the summit trail.

Oriental Magpie-Robin, *Copsychus saularis adamsi* – Common in all lowland areas up to 1800 m a. s. l., including PT.

White-rumped Shama, *Copsychus malabaricus suavis* & *stricklandii* (**White-crowned Shama** *C. stricklandii*) – In GM, only taxon *suavis* commonly seen, in all parks of Sabah, only *stricklandii* commonly seen and heard, except in PT.

Rufous-tailed Shama, *Trichixos pyrropygus* – Three observations in DV and one in GM.

Chestnut-naped Forktail, *Enicurus ruficapillus* – Heard or seen on two days in GM and on three days in DV.

White-crowned Forktail, *Enicurus leschenaultia frontalis* & *borneensis* (**Bornean Forktail**, *E. borneensis*) – Taxon *frontalis* twice seen in DV, *borneensis* on three days in GK and on two days in PH.

Bornean Whistling-Thrush, *Myophonus borneensis* – GK, common along roads and streams, in GM one individual at very low altitude in the Deer cave.

Chestnut-capped Thrush, *Zoothera interpres* – DV, once seen in a river bed from the bridge to the Nature trail.

Orange-headed Thrush, *Zoothera citrina aurata* – CR, singles on three days, once in forest interior and twice below a fruiting tree at the Rafflesia center.

Fruit-hunter, *Chlamydochaera jefferyi* – CR, rather commonly seen and heard in fruiting trees with small fruits around Rafflesia center, twice seen along the summit trail in GK.

White-browed Shortwing, *Brachypteryx montana erythrogyna* – GK, heard daily along Bukit Ular, upper Liwagu and lower summit trail, seen very well in Liwagu valley, song very and female plumage completely different from Javan/Sumatran taxa.

Sunda Laughingthrush, *Garrulax palliates schistochlamys* – Rather common CR and GK, often in mixed flocks and mostly feeding closer to the ground than Chestnut-capped Laughingthrush.

Black Laughingthrush, *Garrulax lugubris calvus* (**Bare-headed Laughingthrush**, *Melanocichla calva*) – Two groups in larger mixed-species flocks at the Silau-Silau and the Kiau View trail starts, reacts well on tape playback.

Chestnut-capped Laughingthrush, *Garrulax mitratus treacheri* (**Chestnut-hooded Laughingthrush**, *G. treacheri*) – Very common CR and GK, often in mixed flocks with Sunda, Black Laughingthrushes and other large birds.

White-chested Babbler, *Trichastoma rostratum macropterum* – Common in most lowland forests along all kinds forest streams and rivers, SK, DV, GM and SE.

Ferruginous Babbler, *Trichastoma bicolor* – Not uncommonly seen and heard in lowland forest interiors of SE, GM and DV.

Horsfield's Babbler, *Malacocincla sepiaria harterti* – Not uncommonly seen and heard in lowland forest interiors of DV, GC, SK and PH, slightly more common in GM.

Short-tailed Babbler, *Malacocincla malaccensis poliogenys* – Rather commonly heard and seen in lowland forest interiors of DV, GM, SK, PH and SE.

Temminck's Babbler, *Pellorneum pyrrogenys canicapillus* – On two days each in CR and GK, sometimes in mixed flocks with Gray-throated Babblers.

Black-capped Babbler, *Pellorneum capistratum morrelli* – Commonly heard and seen in DV, GM, SK and PH, responds very well to tape.

Moustached Babbler, *Malacopteron magnirostre cinereocapilla* – Rather commonly heard and seen in DV, GM and PH.

Sooty-capped Babbler, *Malacopteron affine phoeniceum* – Commonly heard and seen in DV and GM.

Scaly-crowned Babbler, *Malacopteron cinereum cinereum* – Common in DV, GM, SK and PH, always in groups.

Rufous-crowned Babbler, *Malacopteron magnum saba* – Rather scarce, seen once at DV and at GM and heard on 3 resp. 1 other days, this northern taxon looks very similar to Scaly-crowned Babbler, Kalimantan birds are much more distinct.

Chestnut-backed Scimitar-Babbler, *Pomatorhinus montanus bornensis* – Several groups at DV, PH and GM.

Bornean Wren-Babbler, *Ptilocichla leucogrammica* – DV, heard on two days from entrance road, heard once on grid trails and seen once at W3N0, well responding to tape, however very shy and keeps distance.

Striped Wren-Babbler, *Kenopia striata* – Once seen at SK and once at DV (W3N0), in forest interior, well responding to tape.

Black-throated Wren-Babbler, *Napothera atrigularis* – Once heard singing at DV between W0N0 and W5S5 following the river trail, two family groups seen on two days on headhunter and Melinau trails in GM, responding to territorial song tape.

Mountain Wren-Babbler, *Napothera crassa* – Several family groups seen along Bukit Ular, summit, Silau-Silau, Liwagu trails and power station road, not responding to tape.

Gray-throated Babbler, *Stachyris nigriceps borneensis* – Common in montane forest of GK and CR, once heard on the pinnacles trek in GM.

Gray-headed Babbler, *Stachyris poliocephala* – Rather common on Waterfall trail in PH, once close to camp 5 in GM.

Black-throated Babbler, *Stachyris nigricollis* – Common GM and SE, also seen at SK, very well responding to tape.

Chestnut-rumped Babbler, *Stachyris maculata maculata* – Several groups in forest interior and edge at SE, GM and DV, responding to tape.

Chestnut-winged Babbler, *Stachyris erythroptera bicolor* – Common in all lowland areas, except PT, very well responding to tape.

Striped Tit-Babbler, *Macronous gularis bornensis* (Bold-striped Tit-Babbler, *M. bornensis*) – Common in forest edge and overgrown logged habitats of DV, SE and SK, well responding to tape.

Fluffy-backed Tit-Babbler, *Macronous ptilosus reclusus* – Rather common in lowland forest interior, SE, DV, GM and PH, very well responding to tape.

White-browed Shrike-Babbler, *Pteruthius flaviscapis robinsoni* – Few individuals at CR, GK and PH.

Brown Fulvetta, *Alcippe brunneicauda eriphaea* – Several flocks in DV, GM and PH, responding to tape.

Chestnut-crested Yuhina, *Yuhina everetti* – Very common flock bird in CR and GK, occurring as low as PH.

White-bellied Yuhina, *Yuhina zantholeuca brunnescens* – Big groups seen at CR, few individuals at DV, GM, GK, PH and SE.

Black-capped White-eye, *Zosterops atricapilla atricapilla* – GK, CR, commonly seen in huge feeding groups, joined mixed-species groups.

Mountain Black-eye, *Chlorocharis emiliae emiliae* & *trinittae* – GK, CR, four at Gg. Emas resort and once around Gg. Alab, commonly seen around Timpohon gate at GK.

Asian Glossy Starling, *Aplonis panayensis eustathis* – Common in KK and other human settlements in SE, CR, GM, SK and PT.

Common Hill Myna, *Gracula religiosa religiosa* – Commonly heard and seen overhead in SE, DV and SK.

Crested Myna, *Acridotheres cristatellus cristatellus* – KK, at least four individuals at Tanjung Aru beach.

Javan Myna, *Acridotheres javanicus* – Daily at SE.

Common Myna, *Acridotheres tristis tristis* – Once on the road between SE and GC.

Bornean Leafbird, *Chloropsis kinabaluensis* – CR, on three days in mixed flocks around Rafflesia center and Gg. Alab.

Greater Green Leafbird, *Chloropsis sonnerati zosterops* – Only one safe female at DV.

Lesser Green Leafbird, *Chloropsis cyanopogon cyanopogon* – Common SE and DV, singles also at PH and GM.

Greater/Lesser Leafbird, *Chloropsis* sp. – Several males remained unidentified in SE and GM, as no females were around to facilitate the ID.

Yellow-breasted Flowerpecker, *Prionochilus maculatus maculatus* – Not uncommon in GM, singles seen in SK, SE and DV.

Yellow-rumped Flowerpecker, *Prionochilus xanthopygius* – Rather common in lowland habitats, except PT.

Thick-billed Flowerpecker, *Dicaeum agile modestum* – Once SE in garden habitat.

Yellow-vented Flowerpecker, *Dicaeum chrysorrheum chrysorrheum* – Once PH, once SE.

Orange-bellied Flowerpecker, *Dicaeum trigonostigma dayakanum* – Common in all lowland habitats, except PT.

Black-sided Flowerpecker, *Dicaeum monticulum* – Rather common in CR and GK montane habitats, there the only Flowerpecker.

Scarlet-backed Flowerpecker, *Dicaeum cruentatum nigrimentum* – On five days in SE, seen in gardens only.

Ruby-cheeked Sunbird, *Chalcoparia singalensis borneana* – Common in all lowland habitats, except PT.

Plain Sunbird, *Anthreptes simplex* – Once PH, on two days at DV, very common along the entrance road.

Plain-throated Sunbird, *Anthreptes malacensis borneensis* (Brown-throated Sunbird) – Common in gardens and human settlements, KK, PT, SE, PH, SK.

Red-throated Sunbird, *Anthreptes rhodolaemus* – Once from canopy tower in SE, once from entrance road in DV.

Purple-naped Sunbird, *Hypogramma hypogrammicum hypogrammaticum* – Quite common in forest interior in DV, GM, PH, SE and SK, always close to the ground in mostly primary forest.

Purple-throated Sunbird, *Leptocoma sperata brasiliana* (Van Hasselt's Sunbird, *L. brasiliana*) – Once seen at forest edge in SE and twice in DV.

Olive-backed Sunbird, *Cinnyris jugularis ornatus* – Common around human settlements KK and PT, also GM, CR, PH.

Eastern Crimson Sunbird, *Aethopyga siparaja siparaja* (Crimson Sunbird) – Rather common in gardens at SE, several times seen DV, PT, GM, PH.

Temminck's Sunbird, *Aethopyga temminckii* – Common at CR and rather common GK.

Little Spiderhunter, *Arachnothera longirostra buettikoferi* – Common in lowlands, seen up to 1800 m a.s.l.

Thick-billed Spiderhunter, *Arachnothera crassirostris* – One individual at SE.

Long-billed Spiderhunter, *Arachnothera robusta robusta* – One individual at SE.

Spectacled Spiderhunter, *Arachnothera flavigaster* – Singles at SE, DV and PH.

Yellow-eared Spiderhunter, *Arachnothera chrysogenys harissoni* – Twice at DV, twice at SE.

Streaky-breasted Spiderhunter, *Arachnothera affinis everetti* – Common at DV, twice at CR, once at PH.

Whitehead's Spiderhunter, *Arachnothera juliae* – CR, three at Rafflesia center, one and two above Gg. Alab.

Oriental Pipit, *Anthus rufulus malayensis/lugubris* – At airports in Lahad Datu and Mulu.

Eurasian Tree Sparrow, *Passer montanus malaccensis* – Common everywhere around human settlements.

Dusky Munia, *Lonchura fuscans* – Common everywhere, close to human settlements and in grassy habitat.

Nutmeg Mannikin, *Lonchura punctulata cabanisi/fretensis* – CR, huge flocks along KK-Tambunan road in cleared, grassy habitat.

White-bellied Munia, *Lonchura leucogastra smythiesi* – SE, one pair along Kingfisher trail

Chestnut Munia, *Lonchura atricapilla jagori* – Not uncommon in lowland habitats in grassy habitat and human settlements, CR, GM, SK, KK, PT and SE.

Java Sparrow, *Padda oryzivora* – KK, once in the northern suburb of KK.

Mammals (taxonomy Payne et al. 1985)

Common Treeshrew, *Tupaia glis* – DV, CR, seen a few times in DV and CR.

Mountain Treeshrew, *Tupaia montana* – GK, GM, common around Timpohon gate at GK, seen at pinnacles in GM.

Painted Treeshrew, *Tupaia picta* – GM, one on Melinau trail.

Ruddy Treeshrew, *Tupaia splendidula* – GM, one on headhunter trail.

Wrinkle-lipped Bat, *Tadarida plicata* – GM, millions leaving the Deer cave, chased by Peregrines.

Colugo, *Cynocephalus variegates* – SE, one at night walk in Rainforest Discovery Center.

Slow Loris, *Nycticebus coucang* – DV, one in ravines in front of the dorm.

Western Tarsier, *Tarsius bancanus* – GM, one on loop between Moonmilk and Deer cave trails.

Maroon Langur, *Presbytis rubicund* – GC, SK, DV, tree rather short observations.

Silvered Langur, *Presbytis cristata* – SK, one group on boat ride.

Proboscis Monkey, *Nasalis larvatus* – SK, commonly seen along Kinabatangan.

Long-tailed Macaque, *Macaca fascicularis* – CR, SE, SK, PT, GM, common everywhere, up to 1800 m a. s. l.

Pig-tailed Macaque, *Macaca nemestrina* – SE, SK, seen once at SE, commonly at boat rides on the Kinabatangan.

Bornean Gibbon, *Hylobates muelleri funerus* – SK, DV, commonly heard and sometimes seen.

Bornean Orang-utan, *Pongo pygmaeus morio* – SE, DV, captive ones at SE and at least 3 different individuals around the DV facilities, once heard long-calling in the forest.

Giant Squirrel, *Ratufa affinis* – DV, PH, GK seen four times.

Kinabalu Squirrel, *Callosciurus baluensis* – GK, once on Silau-Silau trail.

Prevost's Squirrel, *Callosciurus prevostii pluto & caroli* – SE, DV, GM, common in lowland areas, local race in GM did not fit the description of the pictured subspecies in Payne *et al.* (1985).

Plantain Squirrel, *Callosciurus notatus* – PT, DV, SE, common in lowland areas.

Three-striped Ground Squirrel, *Lariscus insignis* – GM, once headhunter trail.

Whitehead's Pigmy Squirrel, *Exilisciurus whiteheadi* – GK, CR, PH, seen often in this hill/montane areas.

Plain Pigmy Squirrel, *Exilisciurus exilis* – SE, DV, common in lowland areas.

Red Giant Flying Squirrel, *Petaurista petaurista* – SE, breathtaking views of several individuals from the canopy walk at the start of dusk.

Thomas's Flying Squirrel, *Aeromys thomasi* – DV, once on night drive.

Malay Weasel, *Mustela nudipes* – CR, GK, once seen near Rafflesia center, once Silau-Silau trail.

Malay Badger, *Mydaus javanensis* – DV, one 'smelled' on night drive. A real stinker...

Smooth Otter, *Lutra perspicillata* – DV, one calling from Segama river, north of Nature trail.

Malay Civet, *Viverra zangalunga* – SK, many on night boat ride.

Small-toothed Palm Civet, *Arctogalidia trivirgata* – DV, one during night drive.

Leopard Cat, *Felis bengalensis* – DV, one at football field below dorm.

Bearded Pig, *Sus barbatus* – SK, DV, seen around Sukau B&B and daily around DV dorm / restaurant.

Muntjac sp., *Muntiacus* sp. – DV, one brief view on Nature trail.

Sambar Deer, *Cervus unicolor* – DV, daily between dorm and restaurant.