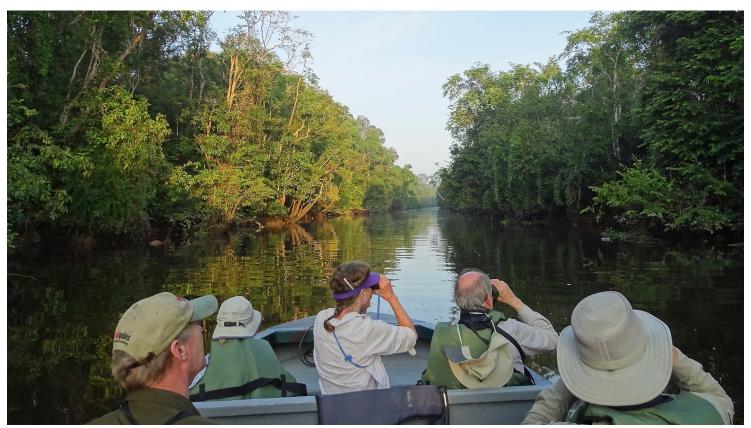


### Field Guides Tour Report

# Borneo II 2019

Jul 16, 2019 to Aug 2, 2019 Dave Stejskal with Hamit Suban

For our tour description, itinerary, past triplists, dates, fees, and more, please VISIT OUR TOUR PAGE.



This tour packs in a lot! From the canopy walkways at Borneo Rainforest Lodge (BRL) to the Gomantong Caves, to the highlands of Kinabalu, we saw it all, and had great fun along the way. One of the adventures we had was a boat trip along the Menanggol River in the Kinabatangan Wildlife Sanctuary. Photo by participant John Keith

After ten tours to Borneo, I never really know what to expect for weather at this season, or how the birds will respond to it. Borneo had gone through a fairly serious drought earlier in the year and I was unsure what it would be like for our trip. I was glad to see that things were back to 'normal' on that front. We had some rain during the trip, but the only times it adversely affected us was during our night drives at Borneo Rainforest Lodge (they were all cut short because of rain). Other than that, we managed pretty well with the weather and with the birds.

One of the aspects of this tour that's always really appealed to me is that we get to stay for four nights at all three of our major venues on this trip. It really makes it a lot more relaxed and the coverage of the areas is much more thorough than it would be with shorter stays, giving you the chance to catch up on birds and mammals that are giving you trouble. But there area always a few birds that you just never catch up with – hopefully that's tempered by a few noteworthy surprise finds!

Despite missing a few – including a few birds that I've never missed before – I thought that we did quite well. Personally, my excitement levels peaked for things like the Bornean Ground-Cuckoo pair that we tracked down at Sukau, that thrilling adult male Helmeted Hornbill flying across the Kinabatangan just in front of our boat, our big group of Bornean Bristleheads along the main road at Borneo Rainforest Lodge, that incredible Great Argus along the forest trails there, our quartet of 'Whitehead's' at Kinabalu Park (Trogon, Broadbill, Spiderhunter, and Pygmy Squirrel), and, of course, our Bornean Pygmy Elephants and our multiple encounters with Orangutan. There are plenty of others to crow about on the following list, so you can pick out your own favs.

Thanks to all of you joining me for my final advertised tour to Borneo. You all made it a joy to guide! I'm going to miss birding in Borneo every year after I retire, and I hope to occasionally go back there. It's such a rich and rewarding place! Thanks also to Hamit Suban for co-leading this one with me for 2/3 of the tour. We're all indebted to his marvelous eyes and ears and I, for one, will miss his good company. All the best in birding for the remainder of 2019 and the upcoming year! Dave

#### KEYS FOR THIS LIST

One of the following keys may be shown in brackets for individual species as appropriate: \* = heard only, I = introduced, E = endemic, N = nesting, a = austral migrant, b = boreal migrant

### **BIRDS**

Anatidae (Ducks, Geese, and Waterfowl)

WANDERING WHISTLING-DUCK (Dendrocygna arcuata) – A couple of pairs with young chicks in tow at the Telipok River bridge on our last day.

[N]

Phasianidae (Pheasants, Grouse, and Allies)

RED-BREASTED PARTRIDGE (Arborophila hyperythra) [E\*]

CHESTNUT-NECKLACED PARTRIDGE (SABAH) (Arborophila charltonii graydoni) [\*]

GREAT ARGUS (Argusianus argus) – YESSSS!!!!! It took a little sleuthing to find out where this male liked to hang out, but we found it! I hear this fantastic pheasant every trip, but it's generally a very difficult bird to track down unless it's actively displaying on its court in the forest.

CRIMSON-HEADED PARTRIDGE (Haematortyx sanguiniceps) [E\*]

**CRESTED FIREBACK (BORNEAN)** (Lophura ignita nobilis) – I've always been able to find this one around the buildings at Borneo Rainforest Lodge (BRL hereafter)

<u>Podicipedidae (Grebes)</u>

LITTLE GREBE (Tachybaptus ruficollis) – A real rarity anywhere on Borneo, this pair continued here at this small roadside pond from last year.

Columbidae (Pigeons and Doves)

ROCK PIGEON (Columba livia) [I]

**SPOTTED DOVE** (Streptopelia chinensis)

LITTLE CUCKOO-DOVE (Macropygia ruficeps) – We first encountered this one once we gained some elevation in the Crocker Range and had it every day at Kinabalu Park after that.

ASIAN EMERALD DOVE (Chalcophaps indica) – Lots of flybys. Now split from the birds in Australasia.

ZEBRA DOVE (Geopelia striata) [I]

LITTLE GREEN-PIGEON (Treron olax) – More common this year than last year, when we found just one bird on the entire trip!

PINK-NECKED PIGEON (Treron vernans) - Quite common on the Kinabatangan and its small tributaries.

CINNAMON-HEADED PIGEON (Treron fulvicollis) - Certainly not a bird that we see every year!

THICK-BILLED PIGEON (Treron curvirostra) - I'm not sure that we would have seen this one if that fig hadn't been fruiting at BRL.

GREEN IMPERIAL-PIGEON (Ducula aenea) – Pretty common in all of the lowland habitats.

MOUNTAIN IMPERIAL-PIGEON (Ducula badia) – This one replaces the above species in the highlands, but it's not nearly as common as that one.

Cuculidae (Cuckoos)

**BORNEAN GROUND-CUCKOO** (Carpococcyx radiceus) – We came up empty-handed on the two Kinabatangan tributaries where I've had this difficult endemic on previous tours, but we struck gold on that tiny stream downstream from Sukau Rainforest Lodge. [E]

SHORT-TOED COUCAL (Centropus rectunguis) [\*]

GREATER COUCAL (Centropus sinensis)

RAFFLES'S MALKOHA (Rhinortha chlorophaea) - The most common and widespread of the malkohas here.

RED-BILLED MALKOHA (Zanclostomus javanicus) - The bird in the Crocker Range was at a little higher elevation than I usually see it.

CHESTNUT-BREASTED MALKOHA (Phaenicophaeus curvirostris) – The largest of the Bornean malkohas and the only one that lacks white in the tail.

BLACK-BELLIED MALKOHA (Phaenicophaeus diardi) – We found a cooperative bird in the tropical garden at Poring Hot Springs.

VIOLET CUCKOO (Chrysococcyx xanthorhynchus) – We sure heard a lot of these...

BANDED BAY CUCKOO (Cacomantis sonneratii) – The bird that we saw at Masakob Waterfall didn't really give us a break.

PLAINTIVE CUCKOO (Cacomantis merulinus)

MOUSTACHED HAWK-CUCKOO (Hierococcyx vagans) – A quick flyby for most folks, but we never did see it perched. This is usually what happens with this one.

DARK HAWK-CUCKOO (Hierococcyx bocki) [\*]

Apodidae (Swifts)

SILVER-RUMPED NEEDLETAIL (Rhaphidura leucopygialis) – Maybe easiest at the pond in front of the restaurant at our Sepilok accommodations.

BORNEAN SWIFTLET (Collocalia dodgei) – The nests were empty during this trip, but I'm sure that most, if not all, of the swiftlets seen high on the Timpohon Gate road at Kinabalu Park were this species. Almost indistinguishable from the Plume-toed Swiftlet at lower elevations. Recently split from Cave Swiftlet. [E]

PLUME-TOED SWIFTLET (Collocalia affinis cyanoptila) – Everywhere in the lowlands. A recent split from Glossy Swiftlet. [N]

MOSSY-NEST SWIFTLET (Aerodramus salangana) – This species, along with the next two, were unidentifiable in the field until we got to Gomantong Cave and saw birds on their respective nests (all of which look very different from the others). [N]

BLACK-NEST SWIFTLET (Aerodramus maximus) [N]

WHITE-NEST SWIFTLET (Aerodramus fuciphagus) – Also called the Edible-nest Swiftlet and the one that they like to harvest for 'bird's nest soup' in China. [N]

HOUSE SWIFT (Apus nipalensis)

<u>Hemiprocnidae (Treeswifts)</u>

GRAY-RUMPED TREESWIFT (Hemiprocne longipennis) – Another one that's probably easiest to see at our Sepilok hotel.

WHISKERED TREESWIFT (Hemiprocne comata) – An elegant species.

Rallidae (Rails, Gallinules, and Coots)

WHITE-BREASTED WATERHEN (Amaurornis phoenicurus) – The easiest of the rallids to see on this tour.

Scolopacidae (Sandpipers and Allies)

COMMON SANDPIPER (Actitis hypoleucos) [b]

**GREEN SANDPIPER** (Tringa ochropus) – A single at the Telipok River bridge. [b]

GRAY-TAILED TATTLER (Tringa brevipes) - A nice adult at Likas Lagoon in Kota Kinabalu.

<u>Ciconiidae (Storks)</u>

**STORM'S STORK** (Ciconia stormi) – I had some of the best sightings of this endangered species that I've ever had on this tour! The pair feeding along the banks of the Menanggol R. near Sukau were pretty amazing!

LESSER ADJUTANT (Leptoptilos javanicus) – We had a couple of good looks at this widespread Asian stork in the Kinabatangan region.

<u>Anhingidae (Anhingas)</u>

**ORIENTAL DARTER** (Anhinga melanogaster) – Unusually scarce this year in the Sukau area.

Ardeidae (Herons, Egrets, and Bitterns)

PURPLE HERON (Ardea purpurea)

GREAT EGRET (AUSTRALASIAN) (Ardea alba modesta)

INTERMEDIATE EGRET (Ardea intermedia) – Quite a few of these were on the mudflats of Likas Lagoon in Kota Kinabalu. Most of them still had mostly black bills from the breeding season.

LITTLE EGRET (Egretta garzetta)

PACIFIC REEF-HERON (Egretta sacra) - A couple of adult birds on the mudflats of Likas Lagoon on our final day.

CATTLE EGRET (EASTERN) (Bubulcus ibis coromandus)

STRIATED HERON (Butorides striata)

BLACK-CROWNED NIGHT-HERON (Nycticorax nycticorax)

RUFOUS NIGHT-HERON (Nycticorax caledonicus) – Several breeding pairs were seen in trees at a distance on our final drive through Kota Kinabalu, and then we had a few birds right next to the bus on our way back to the hotel. This one seems to be increasing in the KK area. [N]

Pandionidae (Osprey)

**OSPREY** (Pandion haliaetus) – I'm not sure what to make of these July birds here, since they're not supposed to breed in Sabah.

Accipitridae (Hawks, Eagles, and Kites)

BLACK-WINGED KITE (Elanus caeruleus) – Now split from our White-tailed Kite in the New World.

ORIENTAL HONEY-BUZZARD (Pernis ptilorhynchus) - A single bird along the Gomantong Cave entrance road.

MOUNTAIN SERPENT-EAGLE (Spilornis kinabaluensis) – This is one of the endemics that I often miss on this tour, but we were very lucky this year with it, seeing three birds interacting in the air at once from the overlook on the Kinabalu Park road. [E]

CRESTED SERPENT-EAGLE (Spilornis cheela) – Seen every day in the lowlands.

BAT HAWK (Macheiramphus alcinus) – One fleeting look at a flying bird at Gomantong Cave.

CHANGEABLE HAWK-EAGLE (Nisaetus limnaeetus) – A couple of good looks, especially along the Tenegang R. near Sukau late one afternoon.

**BLYTH'S HAWK-EAGLE** (Nisaetus alboniger) – Our only sighting was a fairly close perched adult as we descended the Gunung Alab road in the Crocker Range.

WALLACE'S HAWK-EAGLE (Nisaetus nanus) - A few young birds in the Kinabatangan area and at BRL, where they're known to breed.

**CRESTED GOSHAWK** (Accipiter trivirgatus) – Easily the most common Accipiter in the lowlands at this season.

**BRAHMINY KITE** (Haliastur indus)

WHITE-BELLIED SEA-EAGLE (Haliaeetus leucogaster) – Several birds along the Kinabatangan.

**LESSER FISH-EAGLE** (Haliaeetus humilis) – The smaller cousin of the following species. This one usually outnumbers the Gray-headed Fish-Eagle here, but it wasn't true this year.

GRAY-HEADED FISH-EAGLE (Haliaeetus ichthyaetus) – A couple of birds upstream from Sukau Rainforest Lodge.

Tytonidae (Barn-Owls)

**ORIENTAL BAY-OWL** (Phodilus badius) – A surprise at the end of the BRL entrance road one night during our night drive! This was one of only a few times that I've actually seen this one without having to call it in.

Strigidae (Owls)

SUNDA SCOPS-OWL (Otus lempiji) – This one played 'hide-and-seek' with us at Sukau, and some folks were able to get on the bird through a tiny window through the foliage.

**BARRED EAGLE-OWL** (Bubo sumatranus) – UNBELIEVABLE!!! We were in the middle of our checklist session inside the Liwagu Restaurant at Kinabalu Park when this beautiful owl flew through the open front door, then right over my head, crash-landing behind another table a few feet away! I've never experienced anything like it before!

BUFFY FISH-OWL (Ketupa ketupu) – Multiple great looks at this one at Sukau.

**COLLARED OWLET (SUNDA)** (Glaucidium brodiei borneense) – This endemic race sounds very different than the birds I know from mainland S.E. Asia and I wouldn't be surprised if it is eventually split based on that.

BROWN WOOD-OWL (Strix leptogrammica) - Great views on one of our night boat rides at Sukau.

<u>Trogonidae (Trogons)</u>

**RED-NAPED TROGON** (Harpactes kasumba) – This one proved to be difficult this year, but most folks got some sort of a look along the Gomantong Cave entrance road.

**DIARD'S TROGON** (Harpactes diardii) – Excellent scope looks at Gomantong this year.

WHITEHEAD'S TROGON (Harpactes whiteheadi) – This one is always quiet and always a challenge to see, but we ended up encountering it three times during our stay at Kinabalu Park. Our third sighting was clearly the best of the three, but that first one was pretty exciting! Arguably the prettiest of all of the trogons. [E]

CINNAMON-RUMPED TROGON (Harpactes orrhophaeus) - A few of us got a brief look at a shy female along the Trogon Trail at BRL.

SCARLET-RUMPED TROGON (Harpactes duvaucelii) - The smallest of the Bornean trogons.

Bucerotidae (Hornbills)

WHITE-CROWNED HORNBILL (Berenicornis comatus) – The Sukau area again proved to be the best place to see this scarce and distinctive hornbill.

**HELMETED HORNBILL** (Buceros vigil) – Seeing an adult male flying across the Kinabatangan River one afternoon was a real shocker! This one is in serious trouble since it's being poached in the wild to harvest the 'red ivory' from the casque.

RHINOCEROS HORNBILL (Buceros rhinoceros) – We recorded this spectacular hornbill daily in the lowlands. [N]

BUSHY-CRESTED HORNBILL (Anorrhinus galeritus) – This species tends to flock more than the others here.

**BLACK HORNBILL** (Anthracoceros malayanus) – This one seemed to be a bit more scarce than usual this year for some reason. Plenty of good looks, though.

ORIENTAL PIED-HORNBILL (Anthracoceros albirostris) – The common small hornbill in the lowlands on this tour.

WREATHED HORNBILL (Rhyticeros undulatus) – A larger version of the next species.

WRINKLED HORNBILL (Rhabdotorrhinus corrugatus) - A few nice encounters in the Sukau area, as usual.

Alcedinidae (Kingfishers)

BLUE-EARED KINGFISHER (Alcedo meninting) - The most common of the small kingfishers on this tour.

**RUFOUS-BACKED DWARF-KINGFISHER** (Ceyx rufidorsa) – We had a fantastic look at this one in the scope that first morning at Rainforest Discovery Center (RDC).

**BANDED KINGFISHER (BLACK-FACED)** (Lacedo pulchella melanops) – It was a little too high in the trees and called too infrequently to be able to track it down for a look at BRL. [\*]

STORK-BILLED KINGFISHER (Pelargopsis capensis) - Easy to see on the Menanggol R. near Sukau.

**COLLARED KINGFISHER** (Todiramphus chloris) – Mostly on the wires next to the road in the oil palm plantations.

RUFOUS-COLLARED KINGFISHER (Actenoides concretus) [\*]

<u>Meropidae (Bee-eaters)</u>

RED-BEARDED BEE-EATER (Nyctyornis amictus) [\*]

**BLUE-THROATED BEE-EATER** (Merops viridis) – Recorded every day in the lowlands.

<u>Coraciidae (Rollers)</u>

**DOLLARBIRD** (Eurystomus orientalis)

Megalaimidae (Asian Barbets)

**BROWN BARBET** (Caloramphus fuliginosus tertius) – We had our best views that first morning at RDC. Now split from the birds on the mainland. [E]

**BLUE-EARED BARBET (BLACK-EARED)** (Psilopogon duvaucelii duvaucelii) – I think that it's pretty silly that the nominate race of this one here on Borneo doesn't even have blue ears!

BORNEAN BARBET (Psilopogon eximius) – It was a very good morning for barbets in the Crocker Range, with one of the best being this immature bird in the scope. Like most Asian barbets, it's much more easily heard than seen. [E]

RED-THROATED BARBET (Psilopogon mystacophanos) – Most got a look at a female above the Trogon Trail at BRL.

GOLDEN-NAPED BARBET (Psilopogon pulcherrimus) – This one was again in the tiny fruiting tree just outside the Balsam Restaurant at Kinabalu Park. [E]

YELLOW-CROWNED BARBET (Psilopogon henricii) [\*]

MOUNTAIN BARBET (Psilopogon monticola) – A terrific scope look at Masakob Waterfall in the Crocker Range en route to Kinabalu Park. [E]

GOLD-WHISKERED BARBET (Psilopogon chrysopogon) – This endemic form is now lumped with the Gold-whiskered Barbet, which seems like the sensible move to me.

Picidae (Woodpeckers)

RUFOUS PICULET (Sasia abnormis) - I think our best was along the Gomantong Cave entrance road. Another Sundaland specialty.

**GRAY-AND-BUFF WOODPECKER** (Hemicircus concretus) – We had a couple of responsive pairs along the Gomantong Cave road. That big crest and short tail make this one look pretty ridiculous!

SUNDA WOODPECKER (Yungipicus moluccensis moluccensis) – We tracked one down at the little park on the coast in Kota Kinabalu. Sometimes called the Sunda Pygmy Woodpecker.

MAROON WOODPECKER (Blythipicus rubiginosus) – A tough one to nail down for good looks.

**ORANGE-BACKED WOODPECKER** (Reinwardtipicus validus) – One of the few species here that ranges from the extreme lowlands up into the montane forest on Gunung Kinabalu. [N]

RUFOUS WOODPECKER (Micropternus brachyurus) – We got a look at this one from the Bristlehead Tower at RDC that first morning. One of the most widespread of all of the s. Asian woodpeckers.

BUFF-NECKED WOODPECKER (Meiglyptes tukki) - Pretty widespread, but rather retiring. They're usually very responsive when you find one.

BUFF-RUMPED WOODPECKER (Meiglyptes tristis) – Maybe the most common of the small woodpeckers that we saw on this tour.

**OLIVE-BACKED WOODPECKER** (Dinopium rafflesii) – I sometimes miss this one, and I don't think I ever get more than one sighting on this tour when I do find it. It's not at all intuitive, but the closest relatives of this one are the Bamboo Woodpecker and the Pale-headed Woodpecker.

BANDED WOODPECKER (Chrysophlegma miniaceum) - One of our best first sightings from the Bristlehead Tower at RDC that first morning.

WHITE-BELLIED WOODPECKER (Dryocopus javensis) – We called this one in on the Tenegang River near Sukau on our first afternoon there for some decent looks.

Falconidae (Falcons and Caracaras)

WHITE-FRONTED FALCONET (Microhierax latifrons) - I'm not sure if it was spotted by Hamit or our boatman, but what a spot! [E]

Psittaculidae (Old World Parrots)

**LONG-TAILED PARAKEET** (Psittacula longicauda) – A common voice overhead in the lowlands in the Kinabatangan region. We even saw a few! **BLUE-NAPED PARROT** (Tanygnathus lucionensis) – This Philippine species is doing very well along the immediate coast on the west coast of Sabah.

**BLUE-CROWNED HANGING-PARROT** (Loriculus galgulus) – We heard dozens and dozens of these fly by while we were in the lowlands on this tour, but saw very few – especially very few perched.

Calyptomenidae (African and Green Broadbills)

**GREEN BROADBILL** (Calyptomena viridis) – We were very lucky to find a very responsive bird along the Trogon Trail at BRL. Of the possible broadbills on this tour, this is one of the scarcest.

WHITEHEAD'S BROADBILL (Calyptomena whiteheadi) – YESSSS!!!!! These birds were very quiet during our visit this year, but then we heard one right in front of our rooms – and that was all we needed! He came in to the parking lot for us, giving all good looks at this fabulous endemic. [E]

Eurylaimidae (Asian and Grauer's Broadbills)

BLACK-AND-RED BROADBILL (Cymbirhynchus macrorhynchos) - A common sight along the Menanggol R. near Sukau. [N]

BANDED BROADBILL (Eurylaimus javanicus) – A few responsive birds were seen very well in the lowlands.

BLACK-AND-YELLOW BROADBILL (Eurylaimus ochromalus) - The most frequently detected broadbill species on this tour.

**DUSKY BROADBILL** (Corydon sumatranus) – Excellent studies right along the Gomantong Cave road one morning. Another infrequently seen broadbill species here.

Pittidae (Pittas)

**BLACK-CROWNED PITTA** (Erythropitta ussheri) – We used to call this one Black-headed Pitta and the field guide called it Black-and-crimson Pitta. This new name is confusing since the Graceful Pitta in Sumatra used to be called the Black-crowned Pitta. Good looks for most this year. [E]

**BLUE-BANDED PITTA** (Erythropitta arquata) [E\*]

**BORNEAN BANDED-PITTA** (Hydrornis schwaneri) – We worked this one around the group for a look at BRL, and most folks got some sort of a look at this beauty. [E]

**BLUE-HEADED PITTA** (Hydrornis baudii) – Nicely on the Trogon Trail this trip. Jim got really lucky with this one on the road outside his room at BRL! [E]

HOODED PITTA (Pitta sordida) – We got a pretty decent response from this one while we sat in the boat on the Menanggol R. near Sukau.

Acanthizidae (Thornbills and Allies)

GOLDEN-BELLIED GERYGONE (Gerygone sulphurea) [\*]

Vangidae (Vangas, Helmetshrikes, and Allies)

**BAR-WINGED FLYCATCHER-SHRIKE** (Hemipus picatus) – Briefly along the road near Masakob Waterfall. This one replaces the next species at higher elevations here.

BLACK-WINGED FLYCATCHER-SHRIKE (Hemipus hirundinaceus) – Our best encounter was along the Menanggol R. near Sukau.

RUFOUS-WINGED PHILENTOMA (Philentoma pyrhoptera) – We found a confiding male near the BRL buildings one morning.

Artamidae (Woodswallows)

WHITE-BREASTED WOODSWALLOW (Artamus leucorynchus)

<u>Pityriasidae (Bristlehead)</u>

BORNEAN BRISTLEHEAD (Pityriasis gymnocephala) – YESSS!!!! We didn't get a whiff of these at either Sepilok or Sukau, but we got very lucky with this one the first morning at BRL along the main entrance road there. Borneo has a lot of endemics, but none is more prized than this one. [E]

Aegithinidae (Ioras)

**COMMON IORA** (Aegithina tiphia)

GREEN IORA (Aegithina viridissima) – Nicely from the Bristlehead Tower at RDC that first morning.

<u>Campephagidae (Cuckooshrikes)</u>

FIERY MINIVET (Pericrocotus igneus) – A close relative of the Small Minivet on the mainland, and sounds very similar to it, but that one seems to prefer light woodland or disturbed habitats.

**GRAY-CHINNED MINIVET** (Pericrocotus solaris) – The throat (or chin) on the male of this endemic race often looks quite black at a distance, making confusion with Scarlet or even Fiery Minivet likely.

**BAR-BELLIED CUCKOOSHRIKE** (Coracina striata) – Not a bird that I see very frequently on this tour and this may have been my first ever sighting at Danum Valley.

SUNDA CUCKOOSHRIKE (Coracina larvata) – A pair called in over the Liwagu Trail at Kinabalu Park really performed well for us.

PIED TRILLER (Lalage nigra) – A quick walk through the small coastal park in Kota Kinabalu produced a good sighting of this one, as usual.

LESSER CUCKOOSHRIKE (Lalage fimbriata schierbrandi) – This race, found on both Sumatra and Borneo (really?) sounds and looks different than the birds I'm used to seeing and hearing on the Malay Peninsula.

Pachycephalidae (Whistlers and Allies)

BORNEAN WHISTLER (Pachycephala hypoxantha) – Recorded daily in the highlands, but not often seen by our group. [E]

Platylophidae (Crested Shrikejay)

CRESTED SHRIKEJAY (Platylophus galericulatus coronatus) [\*]

#### Laniidae (Shrikes)

LONG-TAILED SHRIKE (Lanius schach) – I have a little difficulty believing that all of the various races of this one from Iran to New Guinea are the same species.

<u>Vireonidae (Vireos, Shrike-Babblers, and Erpornis)</u>

**BLYTH'S SHRIKE-BABBLER (BLYTH'S)** (Pteruthius aeralatus robinsoni) – A few excellent studies of this one in the highlands, and formerly known as the White-browed Shrike-Babbler.

### Oriolidae (Old World Orioles)

DARK-THROATED ORIOLE (Oriolus xanthonotus) - Orioles, in general, were a little scarce this year for some unknown reason.

BLACK-AND-CRIMSON ORIOLE (Oriolus cruentus) – One brief sighting at Kinabalu Park one morning.

### Dicruridae (Drongos)

ASHY DRONGO (BORNEAN) (Dicrurus leucophaeus stigmatops) - Another species that's due for some taxonomic revision, I believe.

BRONZED DRONGO (Dicrurus aeneus) - Scarce in the forest gaps on this tour.

**HAIR-CRESTED DRONGO (BORNEAN)** (Dicrurus hottentottus borneensis) – Another drongo species that still needs some taxonomic work, in my opinion. Make sure that you keep track of your subspecies for this one (and others).

**GREATER RACKET-TAILED DRONGO** (Dicrurus paradiseus brachyphorus)

#### Rhipiduridae (Fantails)

**SPOTTED FANTAIL** (Rhipidura perlata) – Where this one occurs with the next species, this one is strictly a forest interior species, while the next is an edge and disturbed habitat species.

MALAYSIAN PIED-FANTAIL (Rhipidura javanica) [N]

WHITE-THROATED FANTAIL (Rhipidura albicollis) – This one replaces both of the above species at higher elevations.

#### Monarchidae (Monarch Flycatchers)

BLACK-NAPED MONARCH (Hypothymis azurea) – That active nest over the water on the Menanggol R. was great to see! [N]

**BLYTH'S PARADISE-FLYCATCHER** (Terpsiphone affinis) – The Asian Paradise-Flycatcher was split into three species a few years back, with this one residing throughout S.E. Asia throughout the year.

#### Corvidae (Crows, Jays, and Magpies)

**BLACK MAGPIE (BORNEAN)** (Platysmurus leucopterus aterrimus) – After a very brief look at this one earlier in the tour, we got this one in the scope for some good looks along the Hornbill Trail at BRL. Looks different and sounds different from the birds on the Malay Peninsula – another likely split...

**BORNEAN GREEN-MAGPIE** (Cissa jefferyi) – Eye-popping views of this fancy corvid right in the parking lot of our Kinabalu accommodations! Most of the other members of this genus are often quite shy and never afford you the looks that we got of this one. [E]

BORNEAN TREEPIE (Dendrocitta cinerascens) – Frequently encountered – or at least detected – in the canopy of the highland forests. [E]

SLENDER-BILLED CROW (SLENDER-BILLED) (Corvus enca compilator) - Restricted to the lowlands on this tour.

### <u>Hirundinidae (Swallows)</u>

BARN SWALLOW (Hirundo rustica) – An early migrant near Gomantong. [b]

PACIFIC SWALLOW (Hirundo tahitica) [N]

# Stenostiridae (Fairy Flycatchers)

GRAY-HEADED CANARY-FLYCATCHER (Culicicapa ceylonensis)

### Sittidae (Nuthatches)

VELVET-FRONTED NUTHATCH (Sitta frontalis) - After hearing several earlier in the tour, we finally tracked this one down on Gunung Kinabalu.

### Pycnonotidae (Bulbuls)

PUFF-BACKED BULBUL (Brachypodius eutilotus) - Fairly decent looks at this often shy species in the lowlands.

BLACK-HEADED BULBUL (Brachypodius atriceps)

**SPECTACLED BULBUL** (Rubigula erythropthalmos) – We heard far more of these than we saw.

SCALY-BREASTED BULBUL (Rubigula squamata) – Fleeting looks at a couple of birds at Poring Hot Springs.

BORNEAN BULBUL (Rubigula montis) - Easily seen in the Crocker Range this year. A recent split from the Black-crested Bulbul. [E]

STRAW-HEADED BULBUL (Pycnonotus zeylanicus) – I think that the couple of pairs at BRL are no longer responsive, so trying to get a decent look is only going to get more difficult.

**FLAVESCENT BULBUL (PALE-FACED)** (Pycnonotus flavescens leucops) – A split of this one from the very dissimilar Flavescent Bulbul on the mainland is in order, I believe.

YELLOW-VENTED BULBUL (Pycnonotus goiavier)

**OLIVE-WINGED BULBUL** (Pycnonotus plumosus)

**CREAM-VENTED BULBUL** (Pycnonotus simplex perplexus) – Birds on the mainland have white eyes, making them easy to separate from the similarly-plumaged Red-eyed Bulbul. Here, it's a different story.

RED-EYED BULBUL (Pycnonotus brunneus)

HAIRY-BACKED BULBUL (Tricholestes criniger) - Not really like any other bulbul here.

FINSCH'S BULBUL (Alophoixus finschii) - Great views right next to the entrance road at BRL. One of the scarcest of the possible bulbuls here.

OCHRACEOUS BULBUL (CHESTNUT-VENTED) (Alophoixus ochraceus ruficrissus) – This endemic race looks pretty different from mainland races and the vocalizations are noticeably different as well. Maybe a taxon to keep an eye on...

GRAY-CHEEKED BULBUL (Alophoixus bres) - We never really saw this one well as a group until we went to Poring Hot Springs.

YELLOW-BELLIED BULBUL (Alophoixus phaeocephalus) – Actually pretty shy for a bulbul.

CHARLOTTE'S BULBUL (Iole charlottae) - A recent split from Buff-vented Bulbul, which went through a major revision a few years ago. [E]

**ASHY BULBUL (GREEN-WINGED)** (Hemixos flavala connectens) – Fairly easy to see this year at Masakob Waterfall. This subspecies group was split from Ashy Bulbul since the end of the tour and is called Cinereous Bulbul (H. cinereus). These birds on Borneo are notably different in appearance from the birds on the Malay Peninsula, but I've never heard those birds.

Scotocercidae (Bush Warblers and Allies)

BORNEAN STUBTAIL (Urosphena whiteheadi) [E\*]

YELLOW-BELLIED WARBLER (Abroscopus superciliaris) - Almost always associated with bamboo stands.

MOUNTAIN TAILORBIRD (Phyllergates cucullatus) – We found a very cooperative individual along the Mempening Trail at Kinabalu Park.

SUNDA BUSH WARBLER (Horornis vulcanius) – Speaking of cooperative...

Phylloscopidae (Leaf Warblers)

YELLOW-BREASTED WARBLER (Phylloscopus montis) – Based on voice alone, this one has to be one of the most common forest birds in the hill forest at Kinabalu Park.

MOUNTAIN LEAF WARBLER (MOUNTAIN) (Phylloscopus trivirgatus kinabaluensis)

Cisticolidae (Cisticolas and Allies)

DARK-NECKED TAILORBIRD (Orthotomus atrogularis)

ASHY TAILORBIRD (Orthotomus ruficeps)

**RUFOUS-TAILED TAILORBIRD** (Orthotomus sericeus) – We heard all of these Orthotomus tailorbirds daily in the lowlands – we even saw a few of each!

YELLOW-BELLIED PRINIA (Prinia flaviventris)

Zosteropidae (White-eyes, Yuhinas, and Allies)

CHESTNUT-CRESTED YUHINA (Yuhina everetti) – These were always close by when we were in the highlands at the end of the tour. [E]

**PYGMY WHITE-EYE** (Oculocincta squamifrons) – A couple of birds were with one of the mixed flocks that we saw in the Crocker Range, but only a few folks got on them. [E]

MOUNTAIN BLACK-EYE (Chlorocharis emiliae) – Our best looks at this one were at Gunung Alab in the Crocker Range. [E]

BLACK-CAPPED WHITE-EYE (Zosterops atricapilla) – The only white-eye on the trip that sort of looks like a 'typical' white-eye.

Timaliidae (Tree-Babblers, Scimitar-Babblers, and Allies)

**BOLD-STRIPED TIT-BABBLER** (Mixornis bornensis) – We had some decent looks at this one at the Gomantong Cave parking lot. Striped Tit-Babbler was split into two species a while back, and this one is a Bornean near-endemic.

FLUFFY-BACKED TIT-BABBLER (Macronus ptilosus) - Nicely along the main entrance road at BRL on our first morning there.

CHESTNUT-WINGED BABBLER (Cyanoderma erythropterum) – Recorded daily in the lowlands, mostly by voice – but we did have a couple of exceptional sightings.

RUFOUS-FRONTED BABBLER (Cyanoderma rufifrons) [\*]

**BLACK-THROATED BABBLER** (Stachyris nigricollis) – We worked on a few of these shy babblers at Gomantong, and everyone got some sort of look in the end, I believe.

CHESTNUT-RUMPED BABBLER (Stachyris maculata) – Excellent, close studies along the Gomantong Cave boardwalk.

**GRAY-THROATED BABBLER** (Stachyris nigriceps) – Not very vocal and not very evident this year at Kinabalu Park. I suspect most were busy with nesting/feeding duties.

GRAY-HEADED BABBLER (Stachyris poliocephala) - Fleeting looks at BRL near our Great Argus spot.

Pellorneidae (Ground Babblers and Allies)

MOUSTACHED BABBLER (Malacopteron magnirostre) - This one often seems to be the toughest of the Malacopterons to see with a group.

SOOTY-CAPPED BABBLER (Malacopteron affine) – Perhaps the most common member of this group.

SCALY-CROWNED BABBLER (Malacopteron cinereum) – Good looks at those pink legs at BRL.

RUFOUS-CROWNED BABBLER (Malacopteron magnum) - Great views below eye-level up on the canopy walkway at BRL.

BLACK-CAPPED BABBLER (Pellorneum capistratum) – We found a very cooperative pair of these one morning at BRL.

**TEMMINCK'S BABBLER** (Pellorneum pyrrogenys) – The briefest of looks for some. Very quiet this year at Kinabalu Park.

SHORT-TAILED BABBLER (Pellorneum malaccense) – We knocked this one off early on the first morning at RDC.

WHITE-CHESTED BABBLER (Pellorneum rostratum) – Abundant along the Menanggol R. near Sukau.

FERRUGINOUS BABBLER (Pellorneum bicolor) – Quick looks along the Trogon Trail at BRL.

STRIPED WREN-BABBLER (Kenopia striata) – I often miss this scarce forest species, but we had great luck with it this year.

BORNEAN WREN-BABBLER (Ptilocichla leucogrammica) – I think Jim was the only one to get a good look at this shy endemic on the Hornbill Trail at BRL. [E]

HORSFIELD'S BABBLER (Turdinus sepiarius) - Great views of this drab forest babbler right after we had our Great Argus in the scope at BRL.

**BLACK-THROATED WREN-BABBLER** (Turdinus atrigularis) – We all heard this shy endemic at BRL, but only a handful of us got a look through the dense roadside vegetation. [E]

MOUNTAIN WREN-BABBLER (Turdinus crassus) – We were running out of time to see this one at Kinabalu Park, but we finally found a calling bird near the top of the road on the final morning. [E]

Leiothrichidae (Laughingthrushes and Allies)

**BROWN FULVETTA** (Alcippe brunneicauda) – To me, this one seems to be in the wrong genus, as it is not similar at all to the many Alcippe fulvettas that I know from elsewhere in Asia.

SUNDA LAUGHINGTHRUSH (Garrulax palliatus) – Incredible looks up at the Timpohon Gate at the top of the Kinabalu Park road.

CHESTNUT-HOODED LAUGHINGTHRUSH (Ianthocincla treacheri treacheri) – Easily the most common laughingthrush at Kinabalu Park. Split from the Chestnut-capped Laughingthrush on the Malay Peninsula. [E]

### Muscicapidae (Old World Flycatchers)

**ORIENTAL MAGPIE-ROBIN (BLACK)** (Copsychus saularis adamsi) – The race here is almost entirely black below – except for those white undertail coverts.

RUFOUS-TAILED SHAMA (Copsychus pyrropygus) [\*]

WHITE-RUMPED SHAMA (WHITE-CROWNED) (Copsychus malabaricus stricklandii) – It wasn't too long ago that this white-crowned taxon was lumped with the 'typical' White-rumped Shama to the west of Sabah.

**PALE BLUE FLYCATCHER** (Cyornis unicolor) – We found a close male next to one of the canopy towers at BRL. Unlike all of the other Cyornis that I know, this one dwells in the canopy, not the understory of forest interior.

SUNDA BLUE FLYCATCHER (Cyornis caerulatus) – A couple of years ago, we were calling this one the Long-billed Blue-Flycatcher.

MALAYSIAN BLUE FLYCATCHER (Cyornis turcosus) – This one always seems to be around water.

**BORNEAN BLUE FLYCATCHER** (Cyornis superbus) – I don't often get this one at Gomantong, but that's where we saw our first one on the first day of the tour. [E]

FULVOUS-CHESTED JUNGLE-FLYCATCHER (Cyornis olivaceus) – We tracked down a couple of these drab flycatchers at Poring Hot Springs, where they seem to be pretty reliable.

INDIGO FLYCATCHER (Eumyias indigo) – Our best look at this beauty came on the final morning of the tour at Kinabalu Park.

VERDITER FLYCATCHER (Eumyias thalassinus) - Seemingly not a very common bird in lowland Sabah.

**EYEBROWED JUNGLE-FLYCATCHER** (Vauriella gularis) – We ended up seeing a few birds, including a juvenile that was still probably being fed by adults, along the roadside while we searched for Everett's Thrush pre-dawn. [EN]

WHITE-BROWED SHORTWING (BORNEAN) (Brachypteryx montana erythrogyna) – The birds from the Philippines through the Greater Sundas are now split from Himalayan Shortwing to the north of here on Mainland s. Asia. I think that this is a good start, but there's probably some more splitting necessary.

BORNEAN WHISTLING-THRUSH (Myophonus borneensis) – Typically a very confiding species here at Kinabalu Park. [E]

WHITE-CROWNED FORKTAIL (WHITE-CROWNED) (Enicurus leschenaulti frontalis) [\*]

**SNOWY-BROWED FLYCATCHER** (Ficedula hyperythra sumatrana) [\*]

**PYGMY FLYCATCHER** (Ficedula hodgsoni) – We worked on getting this one into view, and he finally obliged us just above our accommodations in Kinabalu Park.

LITTLE PIED FLYCATCHER (Ficedula westermanni) - More often heard than seen in the upper elevation forest.

RUFOUS-CHESTED FLYCATCHER (Ficedula dumetoria) – This handsome little flycatcher was a little shy, but we all eventually got a smashing look at him along the Trogon Trail at BRL.

### Turdidae (Thrushes and Allies)

FRUIT-HUNTER (Chlamydochaera jefferyi) – WOWWW!!! This is usually one of the birds that has us searching up until the final day of the tour, but we got incredibly lucky this year up at Gunung Alab! It was that high-pitched call that gave them away. [E]

**ORANGE-HEADED THRUSH (ORANGE-HEADED)** (Geokichla citrina aurata) – Our first look at this one was about what I expected, but the second time the bird just sat and let us enjoy him!

# <u>Sturnidae (Starlings)</u>

ASIAN GLOSSY STARLING (Aplonis panayensis) – Very common in the lowlands, especially around Sepilok.

COMMON HILL MYNA (Gracula religiosa) - A little more common this year than it has been in the past.

JAVAN MYNA (Acridotheres javanicus) – A common sight along the roadsides in the lowlands. [I]

### Chloropseidae (Leafbirds)

GREATER GREEN LEAFBIRD (Chloropsis sonnerati) - Not as common as the next species appeared to be.

**LESSER GREEN LEAFBIRD** (Chloropsis cyanopogon) – The 'mini-me' of the above species.

BORNEAN LEAFBIRD (Chloropsis kinabaluensis) – A fairly recent split from Blue-winged Leafbird, which occurs just outside of Sabah in Kalimantan and Sarawak. [E]

#### Dicaeidae (Flowerpeckers)

YELLOW-BREASTED FLOWERPECKER (Prionochilus maculatus) – This one typically works quite low at the forest edge and at light gaps inside the forest.

YELLOW-RUMPED FLOWERPECKER (Prionochilus xanthopygius) – We only found one of these endemic flowerpeckers in the lowlands. I don't think that I've ever come that close to missing it before! [E]

**ORANGE-BELLIED FLOWERPECKER** (Dicaeum trigonostigma) – Very often the most common flowerpecker in the lowland forest habitats.

BLACK-SIDED FLOWERPECKER (Dicaeum monticolum) – Only in the highland forests and often quite confiding. [E]

SCARLET-BACKED FLOWERPECKER (Dicaeum cruentatum) – The endemic race here, D.c. nigrimentum, is quite a bit darker below than the birds that you see in mainland S.E. Asia.

#### Nectariniidae (Sunbirds and Spiderhunters)

RUBY-CHEEKED SUNBIRD (Chalcoparia singalensis) - This gorgeous little sunbird was seen on several occasions in the lowlands on this tour.

**PLAIN-THROATED SUNBIRD** (Anthreptes malacensis) — We were calling this one the Plain-throated Sunbird on the tour, but it has since been split. The new name for the widespread member of the split is Brown-throated Sunbird (Gray-throated Sunbird, the other member, is a Philippine endemic).

**RED-THROATED SUNBIRD** (Anthreptes rhodolaemus) – We had a couple of sightings, including a pair feeding fledglings along the trails at RDC the first morning. [N]

VAN HASSELT'S SUNBIRD (Leptocoma brasiliana) – That dark sunbird at Sukau that we couldn't see any color or pattern on was this species. A split from the Purple-throated Sunbird.

COPPER-THROATED SUNBIRD (Leptocoma calcostetha) – A pair of these was spotted working the ornamental flowers in the parking lot at RDC that first morning.

OLIVE-BACKED SUNBIRD (Cinnyris jugularis) - Most of these were spotted while driving.

**TEMMINCK'S SUNBIRD** (Aethopyga temminckii) – Mostly restricted to the highlands on this tour, though I've seen it now a couple of times at BRL. Similar to the next species, but with a bright red tail.

CRIMSON SUNBIRD (Aethopyga siparaja) – Several stunning males were spotted in the lowlands this year.

**LONG-BILLED SPIDERHUNTER** (Arachnothera robusta) – A few of us saw this one at a nearby resort in Sepilok before we all convened at Sepilok Nature Resort. We were able to find yet another along the Gomantong Cave road one morning to catch everyone else up on this one. This is one that I often miss.

LITTLE SPIDERHUNTER (Arachnothera longirostra) – Very common by voice (a little different than the mainland voice...), and we did see several of these before all was said and done.

PURPLE-NAPED SPIDERHUNTER (Arachnothera hypogrammicum) – If you know the call of this one, you soon realize that it's an incredibly common and widespread species in the lowland forest.

WHITEHEAD'S SPIDERHUNTER (Arachnothera juliae) – YESSSS!!!!! Surely one of the great highlights of this tour (and there were a lot of highlights!) was seeing this one singing away in the top of a tree in the parking lot of our Kinabalu accommodations! Even in the scope, for crying out loud!! Only my second sighting in 10 tours here! [E]

YELLOW-EARED SPIDERHUNTER (Arachnothera chrysogenys)

SPECTACLED SPIDERHUNTER (Arachnothera flavigaster)

BORNEAN SPIDERHUNTER (Arachnothera everetti) [E]

Motacillidae (Wagtails and Pipits)

PADDYFIELD PIPIT (Anthus rufulus malayensis) – Several birds working the short grass at the Lahad Datu airport. Sometimes called the Oriental Pipit.

Passeridae (Old World Sparrows)

EURASIAN TREE SPARROW (Passer montanus) [I]

<u>Ploceidae (Weavers and Allies)</u>

BAYA WEAVER (Ploceus philippinus) [I]

Estrildidae (Waxbills and Allies)

**DUSKY MUNIA** (Lonchura fuscans) – One of the easiest of the endemics to track down. [E]

SCALY-BREASTED MUNIA (Lonchura punctulata)

CHESTNUT MUNIA (Lonchura atricapilla)

### **MAMMALS**

MOON RAT (Echinosorex gymnurus) – We didn't get very long mammal lists on any of our BRL night drives, but we did get some goodies, like this strange, primitive mammal.

**COLUGO** (Cynocephalus variegatus) – Another highlight from one of our BRL night drives was not only seeing this one, but seeing it fly! Sometimes referred to as the Flying Lemur (it's not a lemur).

WRINKLE-LIPPED FREE-TAILED BAT (Chaerephon plicatus) – The overwhelming majority of the bats roosting in the Gomantong Cave, and the ones producing those piles of guano, is this species – which never emerged for the evening while we were there :-(

MOUNTAIN TREESHREW (Tupaia montana) – We had several of these endemic treeshrews up in Kinabalu Park during our stay. [E]

LESSER TREESHREW (Tupaia minor) - These were a nice unexpected find during our walk through the tropical garden at Poring Hot Springs.

LARGE TREESHREW (Tupaia tana) - The largest of the Bornean treeshrews, we saw this one from the Gomantong Cave boardwalk.

HORSFIELD'S TARSIER (Tarsius bancanus) – I can't decide which I enjoyed on our night drive at BRL more – this one or the Oriental Bay Owl! Both were spectacular and complete surprises!

**CRAB-EATING MACAQUE** (Macaca fascigularis) – Also called the Long-tailed Macaque.

**PIGTAIL MACAQUE** (Macaca nemestrina) – Often a bit more aggressive than the above species.

SILVERED LEAF MONKEY (Presbytis cristata) – I'd never seen those pale brownish individuals before this year on the Kinabatangan.

RED LEAF MONKEY (Presbytis rubicunda) – That troop at Gomantong was so much more confiding than they usually are! [E]

PROBOSCIS MONKEY (Nasalis larvatus) – As usual, we had more Proboscis Monkeys than we could possibly enjoy. [E]

**GRAY GIBBON** (Hylobates muelleri) – A lucky few folks got to see this one across the river and behind the restaurant at BRL. That morning chorus was fantastic! [E]

**ORANGUTAN** (Pongo pygmaeus) – It was heartening to see this wonderful primate as frequently as we did, but sobering to travel a very short distance from those sightings to see the wholesale destruction of lowland forest habitat. [E]

PALE GIANT SQUIRREL (Ratufa affinis) – We all caught up with this monster of a squirrel at Poring Hot Springs.

**PREVOST'S SQUIRREL** (Callosciurus prevostii) – Probably the most frequently seen species of squirrel on this tour. Very distinctive with its jet black upperpart pelage and rusty belly.

PLANTAIN SQUIRREL (Callosciurus notatus) – A widespread species found throughout S.E. Asia.

BORNEAN BLACK-BANDED SQUIRREL (Callosciurus orestes) – These were the cheeky squirrels at the end of the road in Kinabalu Park. [E]

HORSE-TAILED SQUIRREL (Sundasciurus hippurus) – A big squirrel with a wildly bushy tail seen quite well next to the Menanggol R. near Sukau.

JENTINK'S SQUIRREL (Sundasciurus jentincki) – Remarkably quick in the canopy of the highland forests. [E]

**BORNEAN MOUNTAIN GROUND-SQUIRREL** (Dremomys everetti) – A couple of these crossed the road during our stay at Kinabalu Park. All-dark with a short snout and short, bushy tail separate this from the similarly-sized and patterned Mountain Treeshrew. [E]

PLAIN PYGMY SQUIRREL (Exilisciurus exilis) – Hard to believe that a squirrel can be so incredibly small! [E]

WHITEHEAD'S PYGMY SQUIRREL (Exilisciurus whiteheadi) – Our 4th 'Whitehead's' of the tour! Not much bigger than the above Plain Pygmy Squirrel, but with long ear tufts (unlike that species). Only in the highland forests. [E]

MALAY CIVET (Viverra tangalunga) – A brief look for some on one of our night drives at BRL.

**BORNEAN PYGMY ELEPHANT** (Elephas maximus borneensis) – Certainly one of the mammalian highlights of the tour was tracking down several of these small (that's relative!) elephants upstream from Sukau along the Kinabatangan R. one afternoon.

BEARDED PIG (Sus barbatus) - A few folks got on this one crossing the road in front of the vehicles on our way to BRL from Lahad Datu.

MUNTJAC (BARKING DEER) (Muntiacus muntjak) – A nice surprise in the road on our way to BRL from Lahad Datu.

SAMBAR (Cervus unicolor) – These were seen just off of the road in the rain as we wound up our first night drive at BRL.

Herps

BORNEAN HORNED FROG (Megophrys nasuta (Megophryidae)) – Spotted by our BRL guides perched up on a bank next to the road on one of our night drives. [E]

**SALTWATER CROCODILE** (Crocodylus porosus) – These range quite a ways up the Kinabatangan R.

**CRESTED GREEN LIZARD** (Bronchocela cristatella) – Seen by some folks at BRL.

**FLYING LIZARD SP.** (Draco sp.) – Some folks got to see this one 'fly' from one tree trunk to another.

**BORNEO ANGLE-HEADED LIZARD** (Gonocephalus borneensis) – A fine individual was spotted in the tropical garden at Poring Hot Springs. [E] **SMITH'S GIANT GECKO** (Gekko smithii ) – Often heard in the lowlands, but only a few folks got a look at it at BRL.

**OLIVE TREE SKINK** (Dasia olivacea) – At RDC on our first morning together.

**COMMON SUN SKINK** (Eutropis multifasciata) – The small lizard that we often saw in the leaf litter next to the road or along trails in the lowlands.

WATER MONITOR (Varanus salvator) – Quite a few along the Menanggol R. near Sukau.

Other Creatures of Interest

**GIANT HONEY BEE** (Apis dorsata)

**GREAT MORMON** (Papilio memnon) – We found a couple of these large, dark papilionids in the lowlands.

**RAFFLESIA (PORING)** (Rafflesia keithii) – One of the highlights of our trip down to Poring Hot Springs was seeing this huge flower on the land of a local family. Quite a few locals participate in the conservation of this rare plant and they can make a little money by showing it off to tourists like us – a 'win-win'. [E]

PITCHER PLANT SP. (Nepenthes fusca) – We saw these two species of pitcher plants up at the administration buildings at Gunung Alab in the Crocker Range. [E]

**PITCHER PLANT SP.** (Nepenthes mirabilis)

BROWN LEECH (Haemadipsa zyelanica) – The smaller and duller of the two leech species that everyone got to know on this tour!

TIGER LEECH (Haemadipsa picta) – Quite pretty if you stop long enough to look at it...

BORNEAN PILL MILLIPEDE (Glomeris connexa) - Along the path at RDC that first morning.

LONG-LEGGED CENTIPEDES (Scutigera spp.) – These were all over the walls of the cave at Gomantong.

**COMMON LANTERN BUG** (Pyrops candelaria (Flatidae, Hemiptera)) – Seen on the grounds of Sukau Rainforest Lodge by some folks.

WHITE LANTERN BUG (Pyrops sultana (Flatidae, Hemiptera)) – This one got our attention as we were walking back on the trail near the hot spring pools at Poring Hot Springs.

GIANT FOREST ANT (Camponotus gigas)

**TRILOBITE BEETLE** (Platerodrilus cf. paradoxus (Lycidae) ) – A few folks saw this one on the Liwagu Trail at Kinabalu Park late one morning. The adults of this species retain the larval form.

**COMMON BIRDWING** (Tioides helena (Papilionidae)) – This was the big, black butterfly with bright yellow hindwings. Almost daily in the lowlands.

**COMMON TREE NYMPH (WOOD NYMPH)** (Idea stolli (Nymphalidae)) – This was the 'tissue paper' butterfly that we saw so commonly in the lowlands.

# **ADDITIONAL COMMENTS**

Thanks to John Keith for the following short essay on the plants of Borneo.

BORNEO VEGETATION, by participant John Keith

The immense diversity of Borneo plants, estimated at over 15,000 species, makes it difficult to characterize the vegetation in a short space. However, as several of our Field Guides group were very interested in the plants, I will try to describe highlights of what we saw.

Borneo is bisected by the equator, so the climate of the island is tropical. Temperatures are rather uniform throughout the year, with 80s to upper 90s F in the lowlands and 60s to 70s F in the higher altitudes. Annual rainfall is 200-300 inches, depending on location, with Mt. Kinabalu National Park having 150-200 inches. The rain is more or less evenly distributed throughout the year, so the rainforests are uniformly moist, with no wet and dry seasons as there are in African or South American rainforests. Natural vegetation types include mangrove tidal forests, peat swamp forests, limestone vegetation, lowland rainforests, and montane rainforests. Extensive lowland areas have been cleared for massive plantations of oil palms, rice farming, and pastures for cattle. Plant families with large numbers of representatives in Borneo are the orchids with about 1700 species, most of which are epiphytes; the dipterocarp trees with about 160; the palm family with more than 200; the myrtle family with 150; the ginger family with more than 150; and the ferns with about 500 species. Although a small family of pitcher plants world-wide, the Nepenthaceae has 50 of its total species in Borneo, and these are some of the most unusual plants there.

In addition to the enormous numbers of plant species found on the island, the diversity in a small space is phenomenal: in a forest plot of 2 to 3 acres (one hectare), there can be as many as 200 species of trees. A comparable plot in temperate eastern North America would have 10 to 15 species. The forests are quite dense, and there are several layers, starting with mosses, lichens, and ferns on the forest floor. As there is little sunlight reaching the lowest level, very limited productivity occurs there, so most birds and other animals are found in the canopy, where there is the most leaf and fruit production. Many trees, especially in the lowlands, are shallow rooted and have massive buttresses to support their great height. There are many introduced trees in Borneo, a number of which are invasive; it was a bit strange to see Norway Spruces, for example, growing along the roads in Mt. Kinabalu Park.

The canopy of the lowland rainforest is typically 100 to 150 feet high. However, the trees that are really spectacular are the emergents, such as the dipterocarps, with long straight trunks that reach far above the canopy. These trees, in the *Dipterocarpus* or *Shorea* genera, commonly are 200 or more feet tall, with all the leaves in a large cluster at the top. Until recently, the record emergent tree was 290 feet. But Tommy, our guide at Borneo Rainforest Lodge, mentioned that a new record tree was discovered that is 330 feet tall. Competing with the dipterocarps is *Koompassia*, a legume, another extremely tall tree. There are several species of durians, genus *Artocarpus*, in the fig family, with large fruits that are a favorite with both native primates and humans. Other fig genera, such as *Morus*, supply a large amount of the fruit eaten by birds. Two other common and colorful native trees are *Dillenia*, Dillenia family, with large yellow flowers, and *Medinilla*, Melostoma family, with pink flowers; both these trees are widely planted as ornamentals.

The forests also contain a large number of vines in different families; two with very striking flowers were Basket Vine, *Aeschynanthus speciosa*, in the African Violet family, and *Callerya nieuwenhuisii*, a legume. The single most unusual plant group in Borneo is the genus *Rafflesia*, which has the world's largest flowers. These plants are parasitic on roots of the *Tetrastigma* vine and have no leaves, just enormous flowers about two to three feet in diameter. As the plants bloom sporadically, we were lucky that one was in bloom and accessible to us near Poring Hot Springs Park.

In summary, the extraordinary diversity of plant life in Borneo is daunting for those trying to learn plants on a short visit, but on our trip, we were lucky to have the excellent help of knowledgeable guides to identify a lot of the plants.

Totals for the tour: 277 bird taxa and 28 mammal taxa