



Field Guides Tour Report

Borneo I 2015

Mar 17, 2015 to Apr 3, 2015

Rose Ann Rowlett (with Hamit, Paul, & Adrian)

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



A pair of Rhinoceros Hornbills was feeding palm fruits to a begging fledgling right behind our lodgings at Sepilok Nature Resort. And that was before the tour even started! (photo by participant John Kricher)

Once again, to my delight, everyone came at least a day early and joined me for pre-tour birding around Sepilok. Before the tour even started, we had some great "goodies" under our belts--from eye-to-eye Violet Cuckoos and Copper-throated Sunbirds to a family of striking Rhinoceros Hornbills foraging on palm fruits right behind our lodgings; from some of Borneo's fanciest babblers (Black-throated, Black-capped, and Fluffy-backed Tit-Babblers) to our first wild Orangutan and the world's largest flying squirrels in "flight" right overhead!

Our first morning of official tour birding--now with Hamit--took us to the Rainforest Discovery Center (RDC), where we started with a fruiting fig full of barbets, pigeons, and hornbills. The sturdy canopy walkway and towers produced such jewels as a glowing male Black-naped Monarch, handsome Black-and-yellow Broadbills, the tiny Gray-and-buff Woodpecker (with the huge crest!), and a close pair of Pale Giant Squirrels. Along trails below the walkway we had great encounters with Rufous Piculet, Buff-necked, Banded, & Rufous woodpeckers, and a fabulous Rufous-backed Dwarf-Kingfisher.

After lunch we were off to Gomantong Caves, where we toured the Black-nest Cave to see all the echo-locating swiftlets on their distinctive nests. En route to the cave, we encountered a big female Orangutan with a young one and watched our first Plain Pygmy-Squirrel running along the banister. While perched on a hillside to await the emergence of bats from the caves, we scoped a perched Rufous-bellied Eagle, calling pairs of White-crowned Hornbills, and our first Red Leaf Monkey. The Bat Hawks had a good evening, gathering dinner from among the thousands of bats that poured out and drifted off in the sunset.

Based at Sukau Rainforest Lodge, we birded by boat on the big Kinabatangan River and poked quietly up its tributaries in electric-engined boats, by day and by night. Beyond the iconic Proboscis Monkeys, our prizes included: Storm's Storks, White-fronted Falconet, Wrinkled Hornbills, a great comparison of Lesser and Gray-headed fish-eagles, Buffy Fish-Owls, a BIG Saltwater Crocodile, Reticulated Python, and best-ever studies of a Leopard Cat hunting along the river floodplain. We had good looks at a stunning Ruddy Kingfisher and such eye candy as Diard's and Scarlet-rumped trogons right along the boardwalk behind our lodge.

Additional birding in the Gomantong area produced highlight encounters with Hooded and Black-headed pittas, Gray Gibbons brachiating through the

trees, terrific views of a Moustached Hawk-Cuckoo, and best-ever (scope) studies of a Short-toed Coucal singing in duet from a roadside tangle.

We fell in love with Whiskered Treeswifts at a rest stop along the old logging road to Borneo Rainforest Lodge (BRL), our home for four nights and days in the heart of Borneo's primary rainforest. From our first night drive with Paul, which featured a sleeping Black-headed Pitta and a rarely encountered Long-tailed Porcupine, we had some terrific birding and "other-critter" experiences. I'll admit it was with relief that we spotted our first Bornean Bristleheads on our first morning afield at BRL; we would see them much better from the canopy walkway later on. But we could now relax and just enjoy the fabulous Chestnut-necklaced Partridge, Bornean Wren-Babbler, Banded Kingfisher, Straw-headed Bulbul, and Crested Firebacks along the way. Additional BRL highlights over the next three days would include a cooperative Chestnut-naped Forktail, a pair of Helmeted Hornbills that sat for scope views, a displaying Dark-throated Oriole and a responsive Red-bearded Bee-eater in the canopy, prolonged scope views of a calling Barred Eagle-Owl, adult and juvenile Brown Wood-Owls, a close study of a male Ruby-cheeked Sunbird repeatedly foraging on clusters of ants, and (for some) a Blue-banded Pitta in full view!

After a night in KK, we were off to the Crocker Range and a morning packed with new birds, many of them Bornean montane endemics. With Adrian we birded near the Tambunan Rafflesia Center and Gunung Alab, seeing specialties ranging from Pygmy White-eyes and Mountain Black-eyes to such handsome species as Bornean Barbet, Bornean Leafbird, and Long-tailed Broadbill. We detoured by Poring for a blooming Rafflesia keithii, the second-largest flower in the world, on its second day open, and then it was on to Kinabalu Park, our base for our last four days of birding.

We did very well on the Kinabalu endemics, with highlights ranging from a tiny, singing Bornean Stubtail (named for Whitehead) to the spectacular BIG Whitehead's Broadbill, stunning male Whitehead's Trogons (perhaps the world's most beautiful trogon), and the tuft-eared Whitehead's Pygmy Squirrel. Alas, Whitehead's Spiderhunter would remain a heard-only, no longer responding to playback where it had two weeks earlier. But we would have lovely views of such additional endemic beauties as Crimson-headed Partridge, Golden-naped Barbet, Fruithunter, Black-sided Flowerpecker, and Bornean Green-Magpie. Plus, we had a fabulous daytime view of a Masked Palm Civet!

After some folks viewed the largest pitcher plant in the world--Nepenthes rajah--above Mesilau, we headed for KK, making a final birding stop at a lowland marsh near Tuaran. There we enjoyed the contrast of open-country birding in the gorgeous late-afternoon sunlight. We sorted through rafts of Wandering Whistling-Ducks, finding a striking male Garganey and a rare female Cotton Pygmy-Goose among them. There were herons and bitterns (including a Cinnamon), and the scene was enhanced by cooperative White-browed Crakes and a lovely pair of White-breasted Woodswallows foraging above the marsh. It was a nice way to end a wonderful trip with some wonderful participants.

It's been fun reliving the trip while sorting through photos and annotating the list. Hopefully, the comments below--and the media embedded in the online version--will enliven your memories, as well as identify a few of the "other critters" we enjoyed in the field.

Throughout this triplist, I've used the following abbreviations:

RDC = Rainforest Discovery Center (at Sepilok)

BRL = Borneo Rainforest Lodge (in Danum Valley)

"Sundaland specialty" refers to a species whose range is generally limited to (and sometimes restricted within) the Thai-Malay Peninsula, Borneo, Sumatra, Java, and surrounding islands, all of which were connected during the last ice age. The eastern boundary of Sundaland is Wallace's Line, a deepwater trench between Borneo and Sulawesi and between Bali and Lombok, east of which is Wallacea/Australasia. Many of the birds of Borneo, marked with an S on the checklist, are Sundaland specialties, and many of these Sundaland birds have taxa which are endemic to Borneo, as noted in the Myers field guide. I have indicated some of those on the triplist with the trinomial, emphasizing the taxa for which there is a good possibility of elevation to species status in the near future (as is the current trend in thinking about polytypic species).

Taxonomy in the current triplist follows the Clements checklist with online updates, including the most recent version (6.9: August 2014). To access or download the updated Clements checklist online, simply google "Clements checklist." Online publication of taxonomic revisions is usually scheduled for August each year.

Conservation status is drawn from the publications of Birdlife International and the IUCN Red List. It's sobering to realize how many of the species we saw are considered Near Threatened, Vulnerable, or even Endangered. We'll hope that our visit will contribute a bit toward their preservation.

We thank our keen local guides (Hamit, Paul, and Adrian), our captains, boatmen, and the staffs of our wonderful lodgings throughout the tour, as well as our tour managers in Austin and KK. Special thanks to Becky, Bruce, and John for contributing so many great photos to the online triplist. And thanks to all of you for all the laughs and all the fun during our exciting exploration of "the land below the wind."

--Rose Ann (Grebe)

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*) – What a wonderful spectacle in the late-afternoon sun at the marsh at Tuaran! There were some 200+ of these social ducks, flying at times and whistling and standing before us in the marsh. The species occurs in Australia & the Philippines in addition to the Greater Sundas, but breeding records for Sabah are relatively recent. Our first encounter with them was at a lake on a short detour en route to Gomantong Cave.

COTTON PYGMY-GOOSE (*Nettapus coromandelianus*) – A.k.a. Cotton Teal; a female of this species, which occurs from India to e Australia and is a scarce winter visitor to Borneo, was wintering at the Tuaran marsh. [b]

GARGANEY (*Anas querquedula*) – Though the commonest migrant duck to winter in Borneo, the Garganey is still scarce. We were lucky to see a stunning male (along with a couple of females) at the Tuaran marsh. [b]

Phasianidae (Pheasants, Grouse, and Allies)

RED-BREASTED PARTRIDGE (*Arborophila hyperythra*) – Heard repeatedly at Kinabalu, but always in the distance. [E*]

CHESTNUT-NECKLACED PARTRIDGE (*Arborophila charltonii*) – Most of us had terrific views of this beauty, which Becky spotted when it came running toward us in response to playback near the canopy walkway at BRL; it eventually crossed the road!

CRIMSON-HEADED PARTRIDGE (*Haematortyx sanguiniceps*) – The handsomest of the partridges, this lovely endemic was seen well by all, and repeatedly by some, at Kinabalu. Their loud duetting on the slope behind our rooms was like an alarm clock for some. [E]

CRESTED FIREBACK (*Lophura ignita nobilis*) – Our first encounter was with three birds that burst across the Menanggul River while we were creeping upstream by boat. But once we reached BRL, a group of 3 males and 3 females was seen extremely well, repeatedly by some. This race, with the cinnamon-buff tail feathers, is endemic to northern Borneo.

GREAT ARGUS (*Argusianus argus*) – Alas, this species didn't start calling at BRL until our final morning there, when our chase up the Hornbill Trail was too late to be productive. [*]

Ciconiidae (Storks)

STORM'S STORK (*Ciconia stormi*) – Classified as Endangered (with a population of fewer than 500 birds) by the IUCN, this small stork is one of the real specialties of the Kinabatangan, which is considered its world stronghold. We were lucky this trip, seeing birds well in the Kinabatangan and then at Gomantong, where three birds circled low over the road. With increased fragmentation of their habitat, the species has declined throughout its limited range, mostly in Borneo and Sumatra.

LESSER ADJUTANT (*Leptoptilos javanicus*) – Our first was flying high over the Menanggul, but we later had excellent views of 4 birds up the big Kinabatangan. This species is more common well downriver, closer to the coast, as well as in peninsular SE Asia and on the Indian subcontinent.

Anhingidae (Anhingas)

ORIENTAL DARTER (*Anhinga melanogaster*) – Fairly common and widespread, this species was seen well repeatedly in the Kinabatangan region, and it was recorded as well at Gomantong, BRL, and Lahad Datu.

Ardeidae (Herons, Egrets, and Bitterns)

YELLOW BITTERN (*Ixobrychus sinensis*) – We had a couple of encounters in the Kinabatangan, including an incredible spot by Hamit of a bird creeping through grass bases at close range (en route to the oxbox lake). But we had great scope views of birds in full late-afternoon sunlight at the Tuaran marsh. [b]

CINNAMON BITTERN (*Ixobrychus cinnamomeus*) – We had scope views of this striking small bittern at the Tuaran marsh on our final afternoon of birding.

BLACK BITTERN (*Ixobrychus flavicollis*) – This is a real rarity in the Danum Valley, as illustrated by the fact that it was a lifer for Paul. Unfortunately, the species is by its nature quite secretive, and once Paul flushed it, those of us who saw it saw only a shape disappearing into the forest. The species is widespread from India to New Guinea, where it is more often seen.

GREAT-BILLED HERON (*Ardea sumatrana*) – Occurring from SE Asia to n Australia, this big heron is mostly associated with mangroves along the coasts. But it occurs inland along rivers as far as the Danum Valley, where it is rare. We had scope views of a distant bird from the Segama River bridge on our drive into BRL.

PURPLE HERON (*Ardea purpurea*) – Fairly common and widespread; our best views were at the Tuaran marsh.

GREAT EGRET (*Ardea alba*) – Also fairly common and widespread; of the subspecies *modesta* (Australasian).

INTERMEDIATE EGRET (*Mesophoyx intermedia*) – We had good views of birds in the Kinabatangan and at the Lahad Datu airstrip.

LITTLE EGRET (*Egretta garzetta*) – Widespread in small numbers.

CATTLE EGRET (ASIAN) (*Bubulcus ibis coromandus*) – This fairly common non-breeding visitor occurs throughout the lowlands, and a few may be starting to breed in Borneo. We did see many in striking nuptial plumage, with their orange plume patches, quite different from the western races. *B. i. coromandus* is sometimes considered a separate species.

JAVAN POND-HERON (*Ardeola speciosa*) – The pond-heron we saw at Tuaran was still in basic plumage and thus inseparable from Chinese Pond-Heron. I list it under Javan only because Javan is by far the more common species in Borneo. But it should be regarded as a pond-heron sp.

STRIATED HERON (*Butorides striata*) – Singles were seen in the Kinabatangan and along the Danum River at BRL.

BLACK-CROWNED NIGHT-HERON (*Nycticorax nycticorax*) – Night-foraging individuals were seen along the Menanggul and the Kinabatangan on our night cruises.

RUFIOUS NIGHT-HERON (*Nycticorax caledonicus*) – An immature bird along the Danum River was seen nicely, thanks to Rob Hutchinson (of Birdtour Asia). It's rarely seen at BRL.

Accipitridae (Hawks, Eagles, and Kites)

ORIENTAL HONEY-BUZZARD (*Pernis ptilorhynchus*) – Seen out the BRL entrance road by Paul, Bill, & Becky on our final morning there.

MOUNTAIN SERPENT-EAGLE (*Spilornis kinabaluensis*) – One bird was flying over, screaming, near the Tambunan Rafflesia Center. This species replaces the next in the mountains of Sabah. [E]

CRESTED SERPENT-EAGLE (*Spilornis cheela*) – Seen on at least 9 different days, this is the most common forest-edge raptor in Sabah, and its call can be heard throughout.

BAT HAWK (*Macheiramphus alcinus*) – We watched this big-eyed specialist diving through clouds of bats emerging from Gomantong Caves, and it usually came up with dinner. Though small-billed, it has an enormous gape, enabling it to swallow most of its prey whole on the wing. The species is widespread but local, occurring in Africa, Australasia, and SE Asia. The Borneo birds belong to the nominate race.

CHANGEABLE HAWK-EAGLE (*Nisaetus limnaeetus*) – ID of "changeable" and mimicking raptors in Borneo is difficult. We identified this species at the RDC canopy walkway, and then a juvenile at Gomantong, based primarily on Hamit's familiarity with the species.

WALLACE'S HAWK-EAGLE (*Nisaetus nanus*) – This species was still nesting and roosting in a great *Koompassia excelsa* tree along the RDC canopy walkway. They were later seen widely throughout the lowlands. [N]

RUFIOUS-BELLIED EAGLE (*Lophotriorchis kienerii*) – Hamit found a perched adult on the slope above Gomantong Cave, and we all had nice scope views of it.

BLACK EAGLE (*Ictinaetus malaiensis*) – It was a nice surprise to see a subadult circling around Kinabalu Park on a calm, sunny morning there. An

adult was seen by some on our final morning--at Mesilau.

CRESTED GOSHAWK (*Accipiter trivirgatus*) – We saw this *Accipiter* on several occasions, including engaged in its aerial courtship display a couple of times.

BESRA (*Accipiter virgatus*) – This small montane *Accipiter*, a scarce inhabitant of montane Borneo, was seen in flight along the road at Kinabalu by Bill and RAR.

BRAHMINY KITE (*Haliastur indus*) – Fairly common and widespread, especially in secondary habitats.

WHITE-BELLIED SEA-EAGLE (*Haliaeetus leucogaster*) – We saw these distinctively shaped raptors in the Sepilok-RDC area and in the Kinabatangan.

LESSER FISH-EAGLE (*Ichthyophaga humilis*) – What a great comparison! We had good views of both this and the following species within minutes of each other along the Tenangang River, tributary to the Kinabatangan. This one was also seen by some along the river at BRL.

GRAY-HEADED FISH-EAGLE (*Ichthyophaga ichthyaetus*) – The less common of the two fish-eagles in Borneo; great views both perched and in flight.

Rallidae (Rails, Gallinules, and Coots)

WHITE-BREASTED WATERHEN (*Amaurornis phoenicurus*) – Common in edge habitats, it was seen first at Sepilok and then in the Kinabatangan, en route to Gomantong, and at Tuaran.

WHITE-BROWED CRAKE (*Porzana cinerea*) – We saw this species well at the Tuaran marsh, where a responsive adult appeared to be feeding a full-sized juvenile. The species occurs from SE Asia to Polynesia and is considered monotypic. [N]

PURPLE SWAMPHEN (BLACK-BACKED) (*Porphyrio porphyrio indicus*) – Also seen nicely at the Tuaran marsh; the Purple Swamphen has been split by some into various species based on genetic studies. It's one to keep track of, as the Cornell/Clements checklist is likely to accept the splits.

EURASIAN MOORHEN (*Gallinula chloropus*) – Fairly common at the Tuaran marsh.

Charadriidae (Plovers and Lapwings)

PACIFIC GOLDEN-PLOVER (*Pluvialis fulva*) – Three birds--one with considerable breeding plumage--were scoped at the Tuaran marsh. [b]

Scolopacidae (Sandpipers and Allies)

COMMON SANDPIPER (*Actitis hypoleucos*) – In small numbers throughout the lowlands. [b]

WOOD SANDPIPER (*Tringa glareola*) – The distant sandpipers we scoped at the Tuaran marsh were most likely of this species, the most common winterer in this habitat. [b]

Columbidae (Pigeons and Doves)

ROCK PIGEON (*Columba livia*) [I]

SPOTTED DOVE (*Streptopelia chinensis*) – Common and widespread in non-forested areas.

LITTLE CUCKOO-DOVE (*Macropygia ruficeps*) – We had good looks at this montane species at Kinabalu Park.

EMERALD DOVE (*Chalcophaps indica*) – Fairly common but heard more often than seen; various folks had fly-by (but distinctive) views from RDC to Gomantong to Tuaran.

ZEBRA DOVE (*Geopelia striata*) – Seen at RDC, en route to Gomantong, and in KK. [I]

LITTLE GREEN-PIGEON (*Treron olax*) – Heard at Gomantong, but only females were seen--along the Menanggul.

PINK-NECKED PIGEON (*Treron vernans*) – Seen well at the RDC and in the Kinabatangan.

THICK-BILLED PIGEON (*Treron curvirostra*) – There was a big flock of this species in the fruiting fig with the Helmeted Hornbills at BRL, but we saw them mainly in flight.

GREEN IMPERIAL-PIGEON (*Ducula aenea*) – This was the common big pigeon of the lowlands, and we had many good views throughout the lowlands.

MOUNTAIN IMPERIAL-PIGEON (*Ducula badia*) – We had multiple good views of this montane species, including a bird repeatedly gathering nesting material from near the Balsam Cafe. They were regulars too just behind the Hill Lodge. [N]

Cuculidae (Cuckoos)

LARGE HAWK-CUCKOO (DARK) (*Hierococcyx sparverioides bocki*) – Heard singing at Mesilau, but they were unresponsive to playback. [*]

MOUSTACHED HAWK-CUCKOO (*Hierococcyx vagans*) – We lucked into an easy one that flew in and landed in a visible spot along the Gomantong entrance road, where we had lovely views.

MALAYSIAN HAWK-CUCKOO (*Hierococcyx fugax*) – This one was responsive to playback along the trail at BRL, but our views were mainly of a bird in flight dashing back and forth overhead.

INDIAN CUCKOO (*Cuculus micropterus*) – After working on many a calling bird, we ultimately saw a silent bird that flew in and landed along the Kinabatangan upriver from our Sukau Rainforest Lodge.

SUNDA CUCKOO (*Cuculus lepidus*) – Another bit of luck was seeing a lovely hepatic-morph female of this species land and stay for long scope views along the road at Kinabalu, despite a blowing wind. Its song was heard regularly in the montane forest.

BANDED BAY CUCKOO (*Cacomantis sonneratii*) – Though they were singing throughout the lowlands, this canopy specialist was seen well only once--that was along the Tenangang River, where it responded repeatedly to playback.

PLAINTIVE CUCKOO (*Cacomantis merulinus*) – Heard almost every day in the lowlands, but seen well only along the Gomantong road (and at BRL by some).

VIOLET CUCKOO (*Chrysococcyx xanthorhynchus*) – This colorful little cuckoo was seen beautifully from the RDC canopy towers, where it was doing its flight display and responded well to playback on two different days. It was heard displaying (and sometimes seen in flight) throughout the lowlands during our visit.

SQUARE-TAILED DRONGO-CUCKOO (*Surniculus lugubris*) – One of a four-way split of Asian Drongo-Cuckoo. This is the one that counts to 6 or so. It was seen nicely along the Menanggul and again by some from the BRL canopy walkway. It was singing throughout the lowlands.

BLACK-BELLIED MALKOHA (*Phaenicophaeus diardi*) – A pair was seen nicely from the BRL canopy walkway on our final morning there, and the group out the entrance road the same morning also saw it.

RAFFLES'S MALKOHA (*Phaenicophaeus chlorophaeus*) – Reminiscent of the Squirrel Cuckoo of the Neotropics, this handsome Sundaland specialty was seen from the RDC canopy, along the Gomantong road, and at BRL.

- RED-BILLED MALKOHA** (*Phaenicophaeus javanicus*) – Another Sundaland specialty, this one was seen only briefly, from the RDC walkway and along the Gomantong road.
- CHESTNUT-BREASTED MALKOHA** (*Phaenicophaeus curvirostris*) – First seen at Sukau, this colorful big Sundaland cuckoo was also seen at BRL and at Poring Hot Springs.
- BORNEAN GROUND-CUCKOO** (*Carpococcyx radiceus*) – Well, hearing it singing spontaneously along the Tenangang River gave us hope. But the long spell of dry weather probably contributed to its lack of response to playback. [E*]
- SHORT-TOED COUCAL** (*Centropus rectunguis*) – One of the highlights of the trip for "the Grebe" was watching through the scope (and recording its song) as this species--one bird of a singing pair--sang repeatedly from the viny thickets along the Gomantong entrance road. It's a scarce and local Sundaland specialty restricted to the Malay Peninsula, Sumatra, and Borneo. We've never had a good look at one on our Borneo tour before.
- GREATER COUCAL** (*Centropus sinensis*) – Its haunting calls were heard regularly in the lowlands, with birds being seen along the road to Gomantong (amid the palm plantations) and along the road into BRL (by one or two vehicles).

Strigidae (Owls)

- MOUNTAIN SCOPS-OWL** (*Otus spilocephalus*) – Its two-note whistle was heard in the middle of the night and pre-dawn at Kinabalu Park. [*]
- SUNDA SCOPS-OWL** (*Otus lempiji*) – We had terrific views of this usually difficult-to-see Sundaland specialty at the Sepilok Forest Edge just before dawn.
- BARRED EAGLE-OWL** (*Bubo sumatranus*) – Heard from the RDC canopy walkway at dusk, but seen beautifully in the Danum Valley, where Paul took us to his stakeout at dusk. Two birds appeared there, one of them repeatedly calling with a vocalization (which I recorded) not generally known for the species. Another Sundaland specialty.
- BUFFY FISH-OWL** (*Ketupa ketupu*) – Once again, we had marvelous views of this yellow-eyed fisherman in the Kinabatangan, on our night cruises; with as many as 3-4 individuals one night!
- COLLARED OWLET** (*Glaucidium brodiei borneense*) – Heard by Bill, Becky, and RAR pre-dawn just up the road from our Hill Lodge. Its call is different from that of the birds on the peninsula/mainland. [*]
- BROWN WOOD-OWL** (*Strix leptogrammica*) – A lovely owl! We saw an adult and a whitish-plumed juvenile near the BRL staff quarters, as well as an adult (of the same pair?) on our night walk.
- BROWN BOOBOOK** (*Ninox scutulata borneensis*) – Heard distantly at the Sepilok Forest Edge. [*]

Podargidae (Frogmouths)

- LARGE FROGMOUTH** (*Batrachostomus auritus*) – Heard distantly along the big Kinabatangan shortly before seeing the Leopard Cat. [*]
- SUNDA FROGMOUTH** (*Batrachostomus cornutus*) – Heard and responsive vocally at a spot along the BRL entrance road, but it wouldn't move and we couldn't see it. [*]

Apodidae (Swifts)

- SILVER-RUMPED NEEDLETAIL** (*Rhaphidura leucopygialis*) – First seen below us from the RDC walkway, then drinking on the wing at the Sepilok NR lake, and later at Gomantong, BRL, and Poring.
- GLOSSY SWIFTLET** (*Collocalia esculenta*) – Seen throughout the trip, this commonest swiftlet was nesting under the eaves of various structures. Unlike the echo-locating swiftlets of the genus *Aerodramus*, this species needs some light for nesting, thus building under eaves or near the mouth of caves. We examined their nests at the Fairy Garden and what are presumably this species at the restaurant near the turnoff to Gungung Alab. It would be very hard to ID them based on their (rather variable but similar) nest structures or the bluish vs. greenish gloss to their feathers. [N]
- CAVE SWIFTLET (BORNEAN)** (*Collocalia linchi dodgei*) – We were lucky to see (good spotting, John!) that this species had rebuilt several nests on a cliff where researchers had indeed mist-netted them and checked their hind toes to determine that they were indeed featherless (unlike those of Glossy Swiftlets)! The taxon is elevated to full-species status by most authors and considered a rare endemic to the mountains of Borneo. [N]
- MOSSY-NEST SWIFTLET** (*Aerodramus salangana*) – One of the three similar, echo-locating swiftlets that nest inside the Gomantong Caves; they're so similar, in fact, that they are not reliably separated unless seen on their distinctive nests. This species builds a cup nest of sticks glued together with saliva and covered with moss, often placed on a small ledge, sometimes at low elevation. Their nests contain too much foreign material to be edible and hence are not harvested. We saw various birds sitting on their nests when we toured the Black-nest Cave at Gomantong. No telling how many we saw flying about! [N]
- BLACK-NEST SWIFTLET** (*Aerodramus maximus*) – The Black-nest Cave at Gomantong was named for this species, as it is generally the most abundant nester. Their nests, harvested there three times a year, are shallow cups of their own dark feathers glued with their own saliva. Their nests, blackish in appearance, were clustered high on the ceiling of the cave, where birds were sitting incubating. Teams of workers clean these nests up for the market, and we saw their nests for sale in the KK airport. [N]
- WHITE-NEST SWIFTLET** (*Aerodramus fuciphagus*) – A.k.a. Edible-nest Swiftlet. The beautiful little white nests of this species, composed almost entirely of the birds' saliva, are the most distinctive in the cave. There was a fresh little cluster of new (since 2 weeks earlier) white nests that Hamit located in a niche of the vertical walls. These are the most highly prized for the Chinese delicacy, bird's-nest soup, as illustrated by the prices asked for the packages of 4-6 nests that we examined in the KK international airport: 600RM, or about \$170 U.S.! Despite the nest harvesting--once or twice just after they're built (when the birds will surely re-nest), and then after the nestlings have fledged--the Gomantong Caves are said to have supported a healthy population of swiftlets for centuries, traced to the times of the Chinese Emperor. Today the caves are administered by Sabah's Wildlife Department, who licenses contractors who hire the locals to harvest the nests by hand, using rattan ladders, ropes, and poles, as well as great skill and caution. But, according to Phillipps & Phillipps, the populations are declining severely, especially in the caves less well managed--where nests are harvested up to 5 times a year and eggs are abandoned on the floor of the caves. Some research is desperately needed to learn how to control these harvests. [N]

Hemiprocnidae (Treeswifts)

- GRAY-RUMPED TREESWIFT** (*Hemiprogne longipennis*) – I think I've not ever seen so many Gray-rumped Treeswifts as we saw this dry year in the Sepilok area. We saw numbers each time we were in the RDC canopy and drinking from the Sepilok lakes.
- WHISKERED TREESWIFT** (*Hemiprogne comata*) – A real favorite! This confiding treeswift, which hunts by aerial forays and then returns to the same perch, was seen well--and much photographed!--along the road to BRL, after which it was with us for lunch almost daily.

Trogonidae (Trogons)

- RED-NAPED TROGON** (*Harpactes kasumba*) – Considered Near Threatened, this big Sundaland beauty (a male) was seen along the road at BRL.
- DIARD'S TROGON** (*Harpactes diardii*) – Another handsome Sundaland specialty, it was seen along the Sukau boardwalk and heard at RDC and BRL.

The nominate race diardii is endemic to Borneo.

WHITEHEAD'S TROGON (*Harpactes whiteheadi*) – Perhaps the most beautiful of the Bornean endemics, a striking male of this species was seen well several times--first along the upper Silau-Silau, later in good light downstream from there (the one Adrian spotted from the moving vehicle!), and finally along the Mempening Trail, where Betsy helped us refind it. One of the toughest of the Kinabalu endemics, this one takes both persistence and some luck! [E]

SCARLET-RUMPED TROGON (*Harpactes duvaucelii*) – Like a miniature version of the Red-naped Trogon, this Sundaland specialty was seen first from the boat along the Menanggal, then by Becky et al. along the Sukau boardwalk (during an afternoon walk), and then at BRL.

Alcedinidae (Kingfishers)

COMMON KINGFISHER (*Alcedo atthis*) – Seen nicely in beautiful late-afternoon light along the Tenangang River, where it sat for photos. [b]

BLUE-EARED KINGFISHER (*Alcedo meninting*) – Another small beauty, it was common and seen repeatedly in the Kinabatangan area (including sleeping by night) and along the Danum River at BRL.

BLUE-BANDED KINGFISHER (*Alcedo euryzona*) – Another Sundaland specialty--and the scarcest of the Borneo kingfishers--this one (a male) was scoped as it perched on a fallen dead branch in the Danum River at BRL, visible from our dining table!

RUFIOUS-BACKED DWARF-KINGFISHER (*Ceyx rufidorsa*) – Note the new official English name, according to Cornell's Clements updates. This spectacular little kingfisher was first seen perched along the Kingfisher Trail at the RDC, but then also at Gomantong and BRL. Hard to top!

BANDED KINGFISHER (*Lacedo pulchella*) – A stunning male, its crest pulsating, was seen well by all along the Hornbill Trail at BRL.

STORK-BILLED KINGFISHER (*Pelargopsis capensis*) – This big beauty, fairly common throughout the lowland waterways, was seen well--by day and by night!

RUDDY KINGFISHER (*Halcyon coromanda*) – Another rare treat was getting scope views of this responsive beauty, along the forested Sukau boardwalk.

COLLARED KINGFISHER (*Todiramphus chloris*) – This widespread, edge kingfisher was seen repeatedly in the more open country, especially along the oil-palm plantations en route to Gomantong and Lahad Datu.

Meropidae (Bee-eaters)

RED-BEARDED BEE-EATER (*Nyctornis amictus*) – Wow! We heard one calling from the BRL canopy walkway, played a bit of playback, and in it came, landing on one of the guywires of the walkway! What a bird! It's another Sundaland specialty.

BLUE-THROATED BEE-EATER (*Merops viridis*) – This beauty was seen every single day in the lowlands of Borneo. They were our constant companions at BRL, where they were nesting in holes in the small sandy mounds along the Danum River floodplain. Dazzling! [N]

Coraciidae (Rollers)

DOLLARBIRD (*Eurystomus orientalis*) – Seen perching atop sentinels from the RDC forest to the rivers in the Kinabatangan.

Bucerotidae (Hornbills)

ORIENTAL PIED-HORNBILL (*Anthracoceros albirostris*) – First seen at Gomantong, this was the commonest hornbill along the rivers in the Kinabatangan. But it was absent from the primary forest at BRL.

BLACK HORNBILL (*Anthracoceros malayanus*) – Considered Near Threatened, this noisy Sundaland specialty with the raspy calls was our first hornbill--seen first at the RDC, where a fruiting fig was teeming with them our first morning afield! There were many more to come, throughout the lowlands, where we also saw a number of male variants (with the white brow).

RHINOCEROS HORNBILL (*Buceros rhinoceros*) – Also considered Near Threatened, this noisy Sundaland specialty was surely our favorite of all the hornbills, with our best experiences coming our first evening at the Sepilok Nature Resort, where a family of 3 came in to feed and roost, and then watching one bird fly past dramatically in the late-afternoon light from the BRL canopy tower. They were fairly numerous at BRL.

HELMETED HORNBILL (*Buceros vigil*) – Surely the most bizarre of the hornbills, both for its looks and its maniacal call! We cut through the forest to reach a fruiting fig off the Segama Trail at BRL where we ultimately managed extended scope views of a pair. (A few leech bites were a small price to pay for such views!) Another Sundaland specialty and the toughest to see.

BUSHY-CRESTED HORNBILL (*Anorrhinus galeritus*) – The commonest small hornbill inside lowland rainforest; we saw family groups of this social species from the RDC canopy, along the Kinabatangan, and at BRL. Another Sundaland specialty.

WHITE-CROWNED HORNBILL (*Aceros comatus*) – Normally the scarcest of the hornbills in Borneo, this fabulous Sundaland specialty was seen beautifully (through the scopes) when we called in a couple of pairs while awaiting the bat emergence at Gomantong. With its bizarre crest and its laughing call, this one was John's favorite.

WRINKLED HORNBILL (*Aceros corrugatus*) – We saw some fabulous pairs of this handsome, Near Threatened, Sundaland specialty in lovely, late-afternoon light along the Kinabatangan, and some of us saw one fly through the canopy from the BRL walkway (where it is less common) on our final morning there.

Megalaimidae (Asian Barbets)

BROWN BARBET (*Calorhamphus fuliginosus*) – This aberrant, monotypic barbet (with red legs and feet) has been split from the birds of peninsular Myanmar, Thailand, Malaysia & Sumatra (those now called Sooty Barbet, *C. hayii*). We saw the race tertius on various occasions, first at the RDC, then in the Kinabatangan, and finally at BRL. [E]

BLUE-EARED BARBET (*Psilopogon duvaucelii duvaucelii*) – Heard and/or seen on every day of the tour in the forested lowlands. We struggled a bit to get great looks, but we ended up seeing various birds well. More common and widespread than the other Bornean barbets.

BORNEAN BARBET (*Psilopogon eximius*) – A generally tough endemic restricted to the submontane zone. They weren't calling as much this trip as just two weeks earlier, but we managed to see a striking bird well in a nearby fruiting/flowering tree along the road below the Tambunan Rafflesia Center. This was the one that sings continuously, seemingly never stopping to take a breath! [E]

RED-THROATED BARBET (*Psilopogon mystacophanos*) – Another Sundaland specialty, this one was seen well along the Gomantong road, where we called in a singing male. After that it was heard almost daily in the lowlands. What a huge bill!

GOLDEN-NAPED BARBET (*Psilopogon pulcherrimus*) – A Kinabalu/Crocker Range endemic, it was seen nicely from the road near the Kiau View pullout, where John spotted the persistently singing bird and then we scoped another across the road. They were vocal at Kinabalu this visit, and a few other individuals were seen as well. [E]

YELLOW-CROWNED BARBET (*Psilopogon henricii*) – The toughest barbet to see, it too is a Sundaland specialty, our bird of the endemic race brachyrhyncha. After having scoped a very distant bird near the BRL staff quarters, we ultimately called in a persistently singing bird for good scope

views (at least for some) in the canopy above the BRL walkway.

MOUNTAIN BARBET (*Psilopogon monticola*) – We had nice scope views of what appeared to be a young bird of this lower-montane endemic along the road above Masakob Waterfall, where we watched it calling and foraging. A bit later, it was seen being fed by an adult. We heard various others; this was the one that stops to take a breath after delivering a long series of notes. [EN]

GOLD-FACED BARBET (*Psilopogon chrysopsis*) – We all had good scope views of this handsome, big-billed endemic (a recent split from Gold-whiskered Barbet of the mainland and Sumatra) as it sang from atop a tree adjacent to the highest tower in the BRL canopy walkway. [E]

Picidae (Woodpeckers)

RUFOUS PICULET (*Sasia abnormis*) – We had super looks at our first one--near the platform below the Hornbill Tower at RDC. It's another Sundaland specialty, and a real cutie!

WHITE-BELLIED WOODPECKER (*Dryocopus javensis*) – After hearing it in the distance at RDC, we encountered a drumming male beside the oxbow lake along the Kinabatangan, where we managed good views of this fabulous big woodpecker.

BANDED WOODPECKER (*Picus miniaceus*) – This handsome Sundaland specialty was seen well along the Kingfisher/Pitta Trails at RDC.

CRIMSON-WINGED WOODPECKER (*Picus puniceus*) – BRL [*]

RUFOUS WOODPECKER (*Micropternus brachyurus*) – A responsive bird of this widespread species, though of a subspecies found only in Borneo, was seen along the the same side trail as the last species, and about the same time. This is the one with the drum that slows at the end.

BUFF-RUMPED WOODPECKER (*Meiglyptes tristis*) – We had quite a woodpecker morning at the RDC. We had good looks at this species from the canopy walkway, where it flew back and forth below us and then landed nearby. It was seen later at BRL as well. It, too, is restricted to Sundaland.

BUFF-NECKED WOODPECKER (*Meiglyptes tukki*) – We called in a lovely pair as we walked from the RDC canopy walkway toward the Hornbill Tower. It too was seen well again along the trail at BRL. Also a Sundaland specialty, this one is considered Near Threatened.

MAROON WOODPECKER (*Blythipicus rubiginosus*) – This Sundaland specialty was first seen at the RDC as well, and then a pair flew back and forth across the Gomantong road in response to playback; it was seen again near the Tambunan Rafflesia Center and heard at Kinabalu Park.

ORANGE-BACKED WOODPECKER (*Reinwardtipicus validus*) – We had to work at it to get into position, but we all managed to see a male (and some persistent folks saw the female as well) working on what must have been a nest hole in a trunk along the road at Kinabalu. Another Sundaland specialty. [N]

GRAY-AND-BUFF WOODPECKER (*Hemicircus concretus*) – What a fabulous little woodpecker! It's one of Asia's smallest woodpeckers and a Sundaland specialty to boot. We first saw a family group from the Trogon Tower at RDC; then one male along the Sukau boardwalk; then a couple on different days in the BRL canopy.

Falconidae (Falcons and Caracaras)

WHITE-FRONTED FALCONET (*Microhierax latifrons*) – Hamit spotted one of these tiny raptors, endemic to Borneo and considered Near Threatened, along the Menanggul, where we managed maneuver the boats such that everyone got a look as it perched atop a dead tree. [E]

PEREGRINE FALCON (*Falco peregrinus*) – We saw one bird perched along the big Kinabatangan River. [b]

Psittaculidae (Old World Parrots)

LONG-TAILED PARAKEET (*Psittacula longicauda*) – Another Sundaland specialty, this one was seen mostly in flight, first near Sepilok, and then along the Menanggul.

BLUE-CROWNED HANGING-PARROT (*Loriculus galgulus*) – We heard them almost daily in the lowlands, but most of our sightings were fly-by's. I know Ella got a great view of a male, seeing its red breast and yellow back. Others saw them to varying degrees of satisfaction, but never as well as we had hoped. Yet another Sundaland specialty.

Calyptomenidae (African and Green Broadbills)

WHITEHEAD'S BROADBILL (*Calyptomena whiteheadi*) – This is a BIG, fancy montane endemic! Although it wasn't singing as much--or as responsive--as it had been two weeks earlier, we had some dynamite (if brief) views along the road above our lodgings at Kinabalu. One of the researchers showed us an active nest above the upper Silau-Silau; it was a big mossy blob. We were told the female was inside incubating. Note that this species, along with Green, Hose's, & the African broadbills, is now placed into a family distinct from that of the other Asian broadbills. [EN]

Eurylaimidae (Asian and Grauer's Broadbills)

BLACK-AND-RED BROADBILL (*Cymbirhynchus macrorhynchos*) – The typical Asian broadbills are exquisite, too. This primarily Sundaland specialty, with its shaggy nests hanging over the water, was seen well at Sepilok, Gomantong, and repeatedly in the Kinabatangan. What a bill! [N]

LONG-TAILED BROADBILL (*Psarisomus dalhousiae*) – Another exquisite broadbill! We saw this beauty along the road above the Masakob waterfall, where we also found a fresh nest. Fairly widespread as a species, but the race we saw is endemic to Borneo. [N]

BANDED BROADBILL (*Eurylaimus javanicus*) – This one was seen best at BRL, both from the ground and from the canopy walkway. Another striking specialty of SE Asia and Sundaland, the race endemic to Borneo.

BLACK-AND-YELLOW BROADBILL (*Eurylaimus ochromalus*) – Commonly heard and seen throughout the lowlands, this lovely broadbill--with the pink breast so rare among birds--is also restricted to Sundaland. We saw it first from the RDC canopy walkway and then along the Menanggul and at BRL.

DUSKY BROADBILL (*Corydon sumatranus*) – This species has the broadest bill of them all! In fact, it has what is proportionately the broadest bill of all the passerines. We called in responsive birds along the Tenangang River on our afternoon boat trip there. Dusky Broadbill is restricted to SE Asia, Sumatra, and Borneo, the taxon endemic to Borneo.

Pittidae (Pittas)

BLACK-HEADED PITTA (*Erythropitta ussheri*) – We put in our time on this one! But, in the end, we had terrific views of a singing bird that Hamit finally located--sitting some 20-25' up in a tree off the Gomantong road. Its whole body puffed and deflated as it whistled its difficult-to-locate song. A real treat! Then, on a night drive with Paul at BRL, we spotlighted a sleeping bird--a round ball of colorful feathers, its head tucked! [E]

BLUE-BANDED PITTA (*Erythropitta arquata*) – Wow! Bill and Becky went after this one with Paul on our final morning at BRL (while the rest of us headed for the canopy walkway). They put their time into this one too, but ultimately had a great view of what is usually the most difficult-to-see of the Bornean endemic pittas. Congratulations to Bill & Becky! And many thanks to Paul. [E]

GIANT PITTA (*Hydromis caeruleus*) – We heard only one distant bird at BRL. It was extremely dry for pittas while we were there. [*]

BLUE-HEADED PITTA (*Hydromis baudii*) – It may have been too dry for this species too; they certainly were not singing during our visit. Or they

may have already been incubating and past their territorial prime. Our only responses were a couple of alarm calls along the trails at BRL. Sorry. [E*]

HOODED PITTA (*Pitta sordida*) – We had spectacular views of this colorful pitta along the Gomantong boardwalk. It was a young male that responded wonderfully to my fishing playback, flying in and landing where we could admire it. The species is widespread, occurring from India to New Guinea, but the race that breeds in Borneo has an entirely black hood (with no brown cap).

Acanthizidae (Thornbills and Allies)

GOLDEN-BELLIED GERYGONE (*Gerygone sulphurea*) – This mite with the distinctive song is a canopy specialist (as opposed to a mangrove specialist) in the parts of Borneo we visit. But they are also common in the mangroves along the edge of the island. We called one in for views in the canopy trees along the Gomantong Road and then saw one again in the red-flowering legume along the road above the Masakob waterfall, where it was feeding with Pygmy White-eyes.

Vangidae (Vangas, Helmetshrikes, and Allies)

LARGE WOODSHRIKE (*Tephrodornis gularis*) – Seen nicely from the far section of the BRL entrance road, the subspecies endemic to Borneo.

BLACK-WINGED FLYCATCHER-SHRIKE (*Hemipus hirundinaceus*) – A pair of this Sundaland specialty was scoped near the RDC lake as we watched birds come and go to the fruiting fig in our first official birding of the tour.

RUFOUS-WINGED PHILENTOMA (*Philentoma pyrhoptera*) – This species was seen nicely on our first morning afield at BRL. "Philentoma" names this genus as a "lover of insects," "entoma" sharing the same root as entomology.

MAROON-BREASTED PHILENTOMA (*Philentoma velata*) – Another Sundaland specialty, this one is a fancier cousin of the last species. We saw it first shortly after having seen the Rufous-winged, along the BRL entrance road as we walked out on our first morning. We later saw it well from the platforms along the BRL canopy walkway.

Artamidae (Woodswallows)

WHITE-BREASTED WOODSWALLOW (*Artamus leucorhynchus*) – A common and widespread resident of open country, it is the only woodswallow in Borneo. We had our best views at Tuaran--at a pair that was foraging from dead sticks above the marsh, in glorious late-afternoon light.

Pityriaseidae (Bristlehead)

BORNEAN BRISTLEHEAD (*Pityriasis gymnocephala*) – One of the most distinctive birds of Borneo, it is now placed in its own family, the only bird family endemic to Borneo. Its generic name derives from the Greek word for "suffering from dandruff," its specific moniker meaning "bald-headed." The bright yellow-orange "bristles" on its crown are actually a dense carpet of filaments indicative of the most basic developmental level of feather growth. Its closest relatives are thought to be the bushshrikes and vangas. Fascinating and still poorly understood, this weirdly wonderful bird is considered Near Threatened and is easily missed. On this tour we had no luck with it at Sepilok or in the Kinabatangan, where it is sometimes seen; we were depending on seeing it at BRL. Fortunately, on our very first morning out the road at BRL, Paul found a pair in the canopy and we managed to get scope views. The pressure was off! But our best views came later--when we got to watch a family group moving through the canopy adjacent to us in the canopy walkway! They uttered their strange growls and whistles off and on as they moved through. Yip! Yip! Yip! [E]

Aegithinidae (Ioras)

COMMON IORA (*Aegithina tiphia*) – Some had great views at the Sepilok Forest Edge, but the rest caught up right in the yard at the Sukau Rainforest Lodge, where a responsive bird came in very close.

GREEN IORA (*Aegithina viridissima*) – Considered Near Threatened owing to habitat destruction, this Sundaland canopy specialist was seen well from the RDC & BRL towers and walkways.

Campephagidae (Cuckooshrikes)

FIERY MINIVET (*Pericrocotus igneus*) – Another Near Threatened Sundaland specialty, this small beauty was first seen from the RDC canopy walkway. Its generic name, "very saffron colored," refers to the female; its specific epithet, "fiery," refers to the male. Few scientific names of dimorphic species refer to both sexes. We saw both well.

GRAY-CHINNED MINIVET (*Pericrocotus solaris*) – The highland minivet, it was seen with foraging flocks in Kinabalu Park, usually traveling in pairs or family groups. Our best views may have been right from the breakfast tables at the Balsam Cafe. As with so many island breeders, the subspecies we saw is endemic to Borneo.

SUNDA CUCKOOSHRIKE (*Coracina larvata*) – April 1 was the day of the Sunda Cuckooshrike! A stop in the Liwagu parking lot produced our first one--a BIG cuckooshrike that is a Sundaland specialty. We were to see several others that day, at almost each stop along the Kinabalu Park road. It was our first clear, sunny morning at Kinabalu. Was it the weather?!

LESSER CUCKOOSHRIKE (*Lalage fimbriata schierbrandi*) – Another Sundaland specialty, this one--quite small by comparison--was seen first just across the Danum River bridge en route to the Jacuzzi Trail at BRL. It was seen again later from the canopy walkway.

Pachycephalidae (Whistlers and Allies)

BORNEAN WHISTLER (*Pachycephala hypoxantha*) – This montane endemic, with the strong song, was seen with the mixed flocks, first up the Gg. Alab side road and then at Kinabalu Park, where it is fairly common. [E]

Laniidae (Shrikes)

LONG-TAILED SHRIKE (*Lanius schach bentet*) – This race, a Sundaland inhabitant of open country, has been expanding its range in Borneo; though this taxon is a common resident of se. Borneo, it was not known to breed in Sabah until recently. We saw it along the utility wires between Sukau and Gomantong.

Vireonidae (Vireos, Shrike-Babblers, and Erpornis)

BLYTH'S SHRIKE-BABBLER (BLYTH'S) (*Pteruthius aeralatus robinsoni*) – Formerly classified as subspecies of White-browed Shrike-Babbler, the aeralatus group (including robinsoni, of the highlands of Borneo) has been elevated to species status, as Blyth's Shrike-Babbler. Recent genetic studies show that the shrike-babblers are more closely related to vireos than to the babblers (Timaliidae) and that the whole group needed reassessment; hence the changes. The aeralatus group occurs from N Pakistan to S China and through Sundaland. After hearing it above Masakob waterfall, we saw several birds at Kinabalu Park.

WHITE-BELLIED ERPORNIS (*Erpornis zantholeuca*) – This widespread Asian species has only recently been reassigned to the vireo family, based on genetic evidence. We saw two birds at BRL on our way back to the lodge from the Danum River bridge. The species was formerly considered a

yuhina.

Oriolidae (Old World Orioles)

DARK-THROATED ORIOLE (*Oriolus xanthonotus*) – Another Sundaland specialty that's considered Near Threatened, this handsome oriole was heard more often than seen. But we enjoyed one of the behavioral highlights of the tour when we got to watch a spiffy male doing its spectacular courtship display to a female--below eye level from the BRL canopy walkway! A second female looked on. The taxon is endemic to n. Borneo.

Dicruridae (Drongos)

ASHY DRONGO (BORNEAN) (*Dicrurus leucophaeus stigmatops*) – Of the endemic race stigmatops, this handsome gray drongo with the red iris, first seen near the Tambunan Rafflesia Center, was fairly common throughout the highlands. It's another candidate for a split.

HAIR-CRESTED DRONGO (*Dicrurus hottentottus borneensis*) – We could hear it calling way up above the Hill Lodge on our final morning, but it was too far. [*]

GREATER RACKET-TAILED DRONGO (*Dicrurus paradiseus brachyphorus*) – Fanciest of the drongos, this one was seen well repeatedly in the lowlands, beginning at the RDC; brachyphorus is endemic to Borneo.

Rhipiduridae (Fantails)

SPOTTED FANTAIL (*Rhipidura perlata*) – We had a couple of brief encounters with this spiffy fantail, but, unfortunately, in both cases the birds were unresponsive; they seemed to be on a mission, perhaps feeding young in a nest? [*]

MALAYSIAN PIED-FANTAIL (*Rhipidura javanica*) – The common and confiding fantail of the lowlands, this cutie was enjoyed every day, Sepilok through BRL (where it was often our companion during meals).

WHITE-THROATED FANTAIL (*Rhipidura albicollis kinabalu*) – The highland fantail; we had it first along the Gg. Alab side road and then several times at Kinabalu. The taxon is another endemic.

Monarchidae (Monarch Flycatchers)

BLACK-NAPED MONARCH (*Hypothymis azurea*) – This handsome monarch was seen beautifully in the lowlands, from the RDC walkway through BRL. The male is a real knockout!

ASIAN PARADISE-FLYCATCHER (*Terpsiphone paradisi*) – The male of this species is dynamite! We saw both males and females, starting along the Gomantong road and then at BRL. Most of the adult males in Borneo, of the endemic subspecies borneensis, are white morphs.

Corvidae (Crows, Jays, and Magpies)

CRESTED JAY (*Platylophus galericulatus coronatus*) – Only heard by most (at too great a distance), but Bill managed to see one on our final day at BRL, when he, Becky, and Paul went well out the entrance road. The subspecies coronatus, brown instead of blue-black, is restricted to Borneo and Sumatra. The call is thought by some to forecast rain.

BLACK MAGPIE (*Platysmurus leucopterus aterrimus*) – The all-black taxon, endemic to Borneo, is a good candidate for a split from birds of the Malay Peninsula and Sumatra. On this trip it was seen nicely along the Menanggul, where a pair was quite responsive, calling and raising their crests as they flew back and forth overhead.

BORNEAN GREEN-MAGPIE (*Cissa jefferyi*) – This stunning montane corvid was a real favorite at Kinabalu, where our best looks were of several at close range with the mixed big-bird flock at the corner of "our yard." Our first were at the Tambunan Rafflesia Center, and some of us had multiple views at Kinabalu. Recently split from its sister taxon (now Javan Green-Magpie), the two formerly called Short-tailed Green-Magpie. The epithet jefferyi is in honor of Jeffery Whitehead, John's father, who outlived his famous explorer son. [E]

BORNEAN TREEPIE (*Dendrocitta cinerascens*) – Another distinctive montane corvid, this noisy specialty was seen first near the Tambunan Rafflesia Center, but best at Kinabalu. [E]

SLENDER-BILLED CROW (SLENDER-BILLED) (*Corvus enca compilorator*) – Encountered almost daily in the lowlands, where it is widespread; we watched them calling and wing-lifting in the Kinabatangan.

Hirundinidae (Swallows)

BARN SWALLOW (*Hirundo rustica*) – There were still quite a few of these migrants around in the lowlands. [b]

PACIFIC SWALLOW (*Hirundo tahitica*) – Seen almost daily in the lowlands and on occasion near our lodgings or the HQ of Kinabalu Park. They were nesting under the eaves at BRL. [N]

Sittidae (Nuthatches)

VELVET-FRONTED NUTHATCH (*Sitta frontalis corralipes*) – These pretty nuthatches were first seen at BRL, but our best looks came at a pair near the Kiau View trailhead at Kinabalu. The species is widespread, the race endemic to Borneo.

Pycnonotidae (Bulbuls)

PUFF-BACKED BULBUL (*Pycnonotus eutilotus*) – This crested bulbul, restricted to Sundaland, was seen poorly along the Gomantong road and then much better at BRL.

BLACK-HEADED BULBUL (*Pycnonotus atriceps*) – A pretty bulbul of widespread distribution; it was seen first at Sukau Rainforest Lodge and then also along the Gomantong road.

STRAW-HEADED BULBUL (*Pycnonotus zeylanicus*) – Largest of the bulbuls, this handsome species is a popular cagebird and is traded commonly in Java; the pressure has caused the species to become considered Vulnerable, with protected areas its main refuge now. A spontaneously singing bird along the Danum River at BRL was spotted by Paul and scoped by all.

BORNEAN BULBUL (*Pycnonotus montis*) – A split from Black-crested Bulbul, this yellow-throated, dark-eyed bulbul is endemic to the lower montane forests of north-central Borneo. We had terrific views of several groups of them along the road near the Tambunan Rafflesia Center. [E]

FLAVESCENT BULBUL (*Pycnonotus flavescens leucops*) – The pale-faced race leucops, elevated to full-species status by some, is restricted to the mountains of north-central Borneo and looks quite distinctive. Myers and Phillipps call it Pale-faced Bulbul; it's a likely candidate for a split by Cornell Clements as well, which would make another Bornean endemic. We first had good views of several birds along the Gunung Alab side road into the Crocker Range Park, and then Adrian's group birding up Bukit Ular saw additional birds in Kinabalu Park.

YELLOW-VENTED BULBUL (*Pycnonotus goiavier*) – Common and widespread in disturbed habitats throughout the lowlands and lower highlands.

OLIVE-WINGED BULBUL (*Pycnonotus plumosus*) – This relatively dull bulbul was seen in small numbers in edge habitats throughout the lowlands.

CREAM-VENTED BULBUL (*Pycnonotus simplex*) – We had good studies of this one at the "Birder's Rest" at the Sepilok RDC, and it was later seen by some well out the BRL entrance road. It's a Sundaland specialty that we don't always see.

- RED-EYED BULBUL** (*Pycnonotus brunneus*) – By contrast, this Sundaland specialty is common and widespread in the lowlands; it was seen daily, and we noted its consistently flesh- or pinkish-colored (as opposed to dark gray) legs.
- SPECTACLED BULBUL** (*Pycnonotus erythrophthalmos*) – Another Sundaland specialty, this one was seen well only at the RDC and Sukau, where we could see the red iris and yellow eyering.
- HAIRY-BACKED BULBUL** (*Tricholestes criniger*) – A very distinctive Sundaland specialty, this was the one with the big yellow eyering. We saw it well first at RDC, then on the Sukau boardwalk, and then also a couple of times at BRL.
- OCHRACEOUS BULBUL** (*Alophoixus ochraceus*) – This big, puff-throated, montane bulbul was seen well several times--first, down the road from the Tambunan Rafflesia Center, and then several times at Kinabalu.
- GRAY-CHEEKED BULBUL** (*Alophoixus bres*) – The lowland counterpart of the previous species, this big, puff-throated bulbul was seen first along the Kinabatangan, then at Gomantong, and then again at BRL.
- YELLOW-BELLIED BULBUL** (*Alophoixus phaeocephalus*) – Another distinctive bulbul restricted to Sundaland, this pretty bulbul was first seen along the Gomantong road; it was also seen at BRL.
- BUFF-VENTED BULBUL** (*Iole olivacea*) – This was the big one with the pale iris, seen well several times from the RDC canopy walkway. It's another Sundaland bulbul that is considered Near Threatened. Iole, in Greek myth, was promised in marriage to Hercules.
- STREAKED BULBUL** (*Ixos malaccensis*) – This distinctive Sundaland bulbul was seen only on Mar 19 at the RDC.

Cettiidae (Bush-Warblers and Allies)

- BORNEAN STUBTAIL** (*Urosphena whiteheadi*) – We all saw this tiny endemic with the high-pitched song at very close range along the upper Silau-Silau at Kinabalu. Adrian spotted it by following at a distance as I fished with playback along the trail. It puts its whole body into its song, exposing its extensive yellow mouth lining as it opens its mouth widely to sing. And its song competes with that of a Blackpoll Warbler to test a birder's hearing! Yet another species named for Whitehead. [E]
- YELLOW-BELLIED WARBLER** (*Abroscopus superciliaris*) – This was the bamboo specialist with the sweet song that we saw well in the tall bamboo outside the Balsam Cafe at Kinabalu.
- MOUNTAIN TAILORBIRD** (*Phyllergates cucullatus*) – Another real cutie, but not actually a tailorbird; this bird is now placed in Cettiidae. We saw it quite well, first below the Tambunan Rafflesia Center, and then repeatedly at Kinabalu.
- SUNDA BUSH-WARBLER** (*Horornis vulcanius*) – We saw this one quite well at the Gg. Alab road edge, and then we heard it repeatedly at Kinabalu as well. As implied by its English name, this is yet another Sundaland specialty. The subspecies *oreophilus*, meaning mountain lover, is endemic to Borneo. It was the "friendly" bush-warbler on this trip!

Phylloscopidae (Leaf-Warblers)

- MOUNTAIN WARBLER** (*Phylloscopus trivirgatus*) – A.k.a. Mountain Leaf-Warbler, this one was seen well first on Gg. Alab (a good-sized flock), and then daily at Kinabalu. We saw one bird approaching its nest (a hole in a small bank along the trail) along the Mempening Trail. [N]
- YELLOW-BREASTED WARBLER** (*Seicercus montis*) – This charming Sundaland specialty, with the high-pitched, sweet song, was fairly common with the small-bird parties at Kinabalu. *Seicercus* refers to its habit of shaking the tail, a trait characteristic of all 11 species belonging to the genus.

Locustellidae (Grassbirds and Allies)

- STRIATED GRASSBIRD** (*Megalurus palustris*) – Seen well in the palm plantations between Sukau and Gomantong, where it sang from the wires, and then at the Tuaran marsh.

Cisticolidae (Cisticolas and Allies)

- DARK-NECKED TAILORBIRD** (*Orthotomus atrogularis*) – Our first one we called in overhead along the Sukau boardwalk, but it was hard to see it well as it flew back and forth. We later had good looks along the Gomantong road, and we heard it at BRL.
- ASHY TAILORBIRD** (*Orthotomus ruficeps*) – We saw this common Sundaland specialty almost daily in the lowlands, including adults feeding fledglings. [N]
- RUFUS-TAILED TAILORBIRD** (*Orthotomus sericeus*) – Another endearing tailorbird, with an equally loud song, this one was seen well at the RDC, in the Kinabatangan (including right at Sukau), and at BRL, where they were regulars around our chalets. They too were feeding begging fledglings. [N]
- YELLOW-BELLIED PRINIA** (*Prinia flaviventris*) – Widespread in the more open areas of the lowlands, where it was heard regularly; we saw it along the road near Sepilok, along the road to Gomantong, at BRL, and sleeping in the grass along the Kinabatangan!

Zosteropidae (White-eyes, Yuhinas, and Allies)

- CHESTNUT-CRESTED YUHINA** (*Yuhina everetti*) – Common and captivating, tight flocks of these little Zosteropids, endemic to the submontane and montane forests of Borneo, were regular in the forest edge at Tambunan and Kinabalu. Their habit of moving rapidly and in tandem is a trait shared with the white-eyes, which often flock with them. [E]
- PYGMY WHITE-EYE** (*Oculocincta squamifrons*) – Also known as Bornean Ibon; "ibon" is Tagalog for "bird," a name that was given to some white-eyes found in the Philippines, the country where Tagalog is the basis for the standardized national language. Yet this ibon is endemic to Borneo and in a monotypic genus. Strange.... We heard them at BRL, but we had good looks at birds foraging in the flowering tree above Masakob waterfall. A dull little ibon! [E]
- MOUNTAIN BLACK-EYE** (*Chlorocharis emiliae*) – Of a monotypic genus, quite different from other white-eyes, this striking endemic was seen well by all at the upper end of the Gg. Alab side road, even as the fog rolled in. Bill, Becky, and I saw additional birds on our hike up the Summit Trail from Mesilau on our final morning afield. [E]
- BLACK-CAPPED WHITE-EYE** (*Zosterops atricapilla*) – This Sundaland specialty is a common species in montane Borneo, where we saw them repeatedly at Kinabalu (including one being taken from a mistnet!).

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

- BOLD-STRIPED TIT-BABBLER** (*Mixornis bornensis*) – These noisy near-endemics (also found in Java) were seen well by most at the forest edge at Sukau Rainforest Lodge; everyone caught up with them at BRL, where they were regulars around our chalets and off the dining room. A recent split, resulting in Striped Tit-Babbler being renamed, the Borneo taxa (along with the Java birds) becoming Bold-striped Tit-Babbler and the southeast Asia taxa becoming Pin-striped Tit-Babbler. Their "chonk-chonk-chonk" can be heard throughout the lowlands.
- FLUFFY-BACKED TIT-BABBLER** (*Macronus ptilosus*) – This Near Threatened Sundaland specialty is one of the coolest babblers with its electric blue eyering and neck patches. It was quite responsive to playback along the Kingfisher Trail at RDC, where we watched it calling, its blue gular

pouches inflated.

CHESTNUT-WINGED BABBLER (*Cyanoderma erythropterum*) – Fairly common throughout the lowlands, this one is also a Sundaland specialty that performed mellow duets from RDC and Sukau to Gomantong and BRL. Folks watched a pair feeding fledglings along the Kingfisher Trail at RDC. [N]

CHESTNUT-BACKED SCIMITAR-BABBLER (*Pomatorhinus montanus*) – We had nice looks at a pair of these Sundaland beauties well out the BRL entrance road.

BLACK-THROATED BABBLER (*Stachyris nigricollis*) – Another Sundaland specialty regarded as Near Threatened, this one was also seen well along the Kingfisher Trail at RDC, where we watched it singing. It's another striking babbler that seduces one into loving babblers.

CHESTNUT-RUMPED BABBLER (*Stachyris maculata*) – This babbler was the bigger one with the streaks below and pale iris that was hard to see well along the Gomantong road, but which we saw better at BRL. It's another Sundaland specialty considered Near Threatened.

GRAY-THROATED BABBLER (*Stachyris nigriceps*) – This Sundaland specialty was seen well, first along the Gg. Alab side road; then on various days at Kinabalu, where it is common.

GRAY-HEADED BABBLER (*Stachyris poliocephala*) – A pair was seen in roadside shrubbery well out the BRL entrance road in the late afternoon (and fading light!) on Mar 27. Yet another Sundaland specialty.

Pellorneidae (Ground Babblers and Allies)

MOUSTACHED BABBLER (*Malacopteron magirostre*) – This Sundaland specialty with the lovely whistles was seen at BRL, especially on our final morn when we could see the moustache marks well on a low bird along the Hornbill Trail.

SOOTY-CAPPED BABBLER (*Malacopteron affine*) – Seen with understory flocks at BRL. It occurs only in Sundaland and is another one considered Near Threatened.

SCALY-CROWNED BABBLER (*Malacopteron cinereum*) – Very similar to Rufous-crowned, this babbler is the smaller one with the pinkish legs that we saw well with mixed flocks in the understory at BRL. The scales on the crown are difficult to see.

RUFIOUS-CROWNED BABBLER (*Malacopteron magnum*) – This is the larger—magnum—of these two look-alikes, with gray legs and no scaling on the crown. We encountered it eye to eye from the tallest tower along the BRL canopy walkway. Like most of these remarkable babblers, it's found only in Sundaland and is considered Near Threatened.

BLACK-CAPPED BABBLER (*Pellorneum capistratum*) – This charming babbler performed nicely for us--walking on the ground nearby--along the Kingfisher Trail en route to the Hornbill Tower at RDC. Yet another Sundaland specialty.

TEMMINCK'S BABBLER (*Pellorneum pyrogenys*) – Yet another babbler confined to Sundaland, this one is a highlander. Skulker that it is, it never did show for us at Kinabalu. [*]

WHITE-CHESTED BABBLER (*Pellorneum rostratum*) – Foraging in pairs near the water's edge, this Sundaland specialty, Near Threatened, was seen well first at the stream edge along the RDC Kingfisher Trail, but then repeatedly along the Kinabatangan tributaries and even at BRL.

STRIPED WREN-BABBLER (*Kenopia striata*) – Another Sundaland specialty, this scarce babbler was heard singing along the Jacuzzi loop trail, BRL, but it was seen only by Becky & Bill on their final morn at BRL.

BORNEAN WREN-BABBLER (*Ptilocichla leucogrammica*) – Generally one of the toughest babblers to see on the tour, this scarce terrestrial endemic made a surprise appearance right beside the road on our first morning at BRL. Singing spontaneously, it was exceptionally cooperative, offering good looks for all. A.k.a. Bornean Ground-Babbler, it's considered Vulnerable. [E]

HORSFIELD'S BABBLER (*Turdinus sepiarius*) – This Sundaland specialty was seen en route to the Jacuzzi trail at BRL.

BLACK-THROATED WREN-BABBLER (*Turdinus atrigularis*) – This endemic skulker was not singing much during our visit. We managed to get one to respond and come close on our afternoon well out the BRL entrance road. But it stuck to the dark tangles, and most folks couldn't see it well enough to count it; thus, I've listed it as Heard only. Considered Near Threatened. [E*]

MOUNTAIN WREN-BABBLER (*Turdinus crassus*) – Another sparsely distributed montane endemic, this one proved tough along Bukit Ular, where it wouldn't come close. Then some of us had very close interactions with a family group along the trail across from our lodgings, but the following morning what were probably the same birds were too far away and wouldn't come in. Fortunately, we finally nailed one along the Mempening trail, where it performed very well. On our final morn Bill and Becky and I saw another responsive group along the Summit Trail above Mesilau.

Leiothrichidae (Laughingthrushes and Allies)

BROWN FULVETTA (*Alcippe brunneicauda*) – Yet another Sundaland specialty that is considered Near Threatened; it was seen quite nicely from the BRL canopy tower, where it came in close in response to playback. Its charm is in its personality, not its looks. The fulvetas, once placed with the Ground Babblers, are now grouped with the Laughingthrushes.

SUNDA LAUGHINGTHRUSH (*Garrulax palliatus*) – Found only on Sumatra and Borneo, this is one of the montane specialties of the trip. We saw our first ones near the Masakob waterfall and then encountered them almost daily with big-bird flocks at Kinabalu, ultimately getting really good views.

BARE-HEADED LAUGHINGTHRUSH (*Garrulax calvus*) – A split from Black Laughingthrush, this weirdly wonderful laughingthrush has become another Bornean endemic. Some of us hiked up to the ridgetop to see a pair that came in overhead and called for us, but for others the sound of their hooting high above our Hill Lodge on our final morn at Kinabalu was the only evidence of this species. [E]

CHESTNUT-HOODED LAUGHINGTHRUSH (*Ianthocincla treacheri treacheri*) – A recent split (by Cornell at least) from Chestnut-capped Laughingthrush, this species is endemic to the mountains of north-central Borneo. It is common within its range and seems a major component of big-bird flocks in the highlands. We had multiple great encounters. Nominate *treacheri* is endemic to Sabah. [E]

Irenidae (Fairy-bluebirds)

ASIAN FAIRY-BLUEBIRD (*Irena puella*) – Now representing a family of just two closely related species, the fairy-bluebird is uncommon on our route. We had a female at RDC, a pair at Gomantong, and then a few males at BRL and even Kinabalu, but never as long a look as I'd like.

Muscicapidae (Old World Flycatchers)

DARK-SIDED FLYCATCHER (*Muscicapa sibirica*) – Cornell Clements now follows the recent revision of Asian Brown and Brown-streaked flycatchers (Rheindt and Eaton, 2012) in eliminating Asian Brown from Borneo and merging endemic taxon *umbrosa* (formerly placed under Asian Brown) with Brown-streaked, thereby creating a breeding Brown-streaked (*M. w. umbrosa*) restricted to Sabah, and not permitting nominate *williamsoni* to occur in Borneo at all (although it does get to Sumatra and may well reach Borneo as a winter visitor). *Daurica*, evidently now but a synonym, has completely disappeared! So, what we've been calling Asian Brown Flycatcher is now considered this species. Ornithologists, though poring over skins and recently supported by genetics, have, or so it would appear, shared our confusion! The birds we saw were at RDC and BRL,

and most of them appeared to be classic Dark-sided, with strong streaking. But one bird, which we called an Asian Brown at BRL, had little or no streaking on the sides. Hmm....

ORIENTAL MAGPIE-ROBIN (*Copsychus saularis*) – Fairly common in edge habitats throughout the lowlands and foothills. We had many nice looks throughout the lowlands.

WHITE-RUMPED SHAMA (WHITE-CROWNED) (*Copsychus malabaricus stricklandii*) – Common (by its lovely song) throughout the lowlands, but not always easily seen. We saw it first and perhaps best at Gomantong. The taxon *stricklandii*, endemic to Sabah and northeastern Kalimantan, is elevated to species status by some (including Myers and Phillipps), but it is still treated as a subspecies of White-rumped by the Cornell Clements checklist.

PALE BLUE-FLYCATCHER (*Cyornis unicolor*) – A sweet-singing male drew our attention, even in the fog, our morning atop the BRL canopy tower, and we called it over for pretty good looks.

LONG-BILLED BLUE-FLYCATCHER (*Cyornis caerulatus*) – This Sundaland blue-flycatcher, a.k.a. Large-billed Blue-Flycatcher, was seen well by all along the Jacuzzi loop trail at BRL. Considered Vulnerable as a species.

MALAYSIAN BLUE-FLYCATCHER (*Cyornis turcosus*) – We had lovely views of both sexes of this Near Threatened Sundaland blue-flycatcher along the Menanggul.

BORNEAN BLUE-FLYCATCHER (*Cyornis superbus*) – We had great views of a singing male along the Segama River Trail at BRL. [E]

INDIGO FLYCATCHER (*Eumyias indigo*) – A common montane breeder, this flycatcher with the sweet song was seen first near Gg. Alab and then daily at Kinabalu.

VERDITER FLYCATCHER (*Eumyias thalassinus*) – Of widespread distribution, this species is not very common on our route. We were happy to see it from the RDC canopy walkway on our first afternoon afield. It's an unusual shade of blue.

EYEBROWED JUNGLE-FLYCATCHER (*Vauriella gularis*) – This distinctive, unobtrusive endemic was seen beautifully by all along the Mempening Trail in Kinabalu Park. [E]

WHITE-BROWED SHORTWING (*Brachypteryx montana erythrogyna*) – This sexually dimorphic, montane species lives along streams at Kinabalu; some folks got a view of a pair that responded to playback along the Silau-Silau but refused to continue "to play."

BORNEAN WHISTLING-THRUSH (*Myophonus borneensis*) – Perhaps the plainest of the whistling-thrushes, this chunky endemic was seen repeatedly at Kinabalu, perhaps nowhere better than right around our Hill Lodge, where it came each morning at dawn to take large moths under our porch lights. [E]

WHITE-CROWNED FORKTAIL (WHITE-CROWNED) (*Enicurus leschenaulti frontalis*) – Surprisingly, a bird flashed past along the stream that follows the Kingfisher Trail at RDC, on the morning of Mar 19. We were somewhat spread out, but John at least got a glimpse of it in passing, as it delivered its distinctive call. It was the only lowland representative we saw.

WHITE-CROWNED FORKTAIL (BORNEAN) (*Enicurus leschenaulti borneensis*) – A.k.a. Bornean Forktail, this is the endemic, montane taxon--the one at Kinabalu. It has a longer tail and more white on the crown than the lowland birds, and recent molecular studies suggest that *borneensis* should be a distinct species, in which case it would become another Bornean endemic. It is already treated as such in our two field guides. Various folks had views of varying quality at Kinabalu, and it was AWOL from Mesilau, where I've usually counted on seeing it well. Our first encounter was with a bird that flew under us and was seen by a few folks (first out of the vehicle) at a platform overlooking the lower Silau-Silau, where we stopped en route to breakfast. Later two birds were seen foraging on mossy boulders by Bill, Becky, and RAR from the Silau-Silau bridge across from the Hill Lodge. Yet another was glimpsed by some as it dashed across the road in front of our vehicle as we were leaving for Mesilau.

CHESTNUT-NAPED FORKTAIL (*Enicurus ruficapillus*) – But we were lucky with this one, the fanciest of the family and another Sundaland specialty. A bird was seen by the entire group at the mouth of the Jacuzzi stream into the Danum River, where it foraged on big logs and called a lot, pumping its tail all the while.

LITTLE PIED FLYCATCHER (*Ficedula westermanni*) – This little beauty in black and white is fairly common in the highlands, but we hadn't seen it until Bruce spotted one along the road to the Timphon gate. The next morning at breakfast we saw a pair carrying nesting material. [N]

NARCISSUS FLYCATCHER (*Ficedula narcissina*) – A scarce migrant to Borneo; one male was seen near the Danum River bridge at BRL on Mar 26. Remember its yellow rump? [b]

MUGIMAKI FLYCATCHER (*Ficedula mugimaki*) – We had multiple sightings of these pretty Asian migrants along the road below the Tambunan Rafflesia Center and at Kinabalu. [b]

SNOWY-BROWED FLYCATCHER (*Ficedula hyperythra*) – We had a fantastic experience with a very confiding male (which was banded) that came close to check us (and maybe the scold playback I was playing) out along the Mempening Trail. It's a widespread montane flycatcher, the race occurring in Sabah being *sumatrana*.

Turdidae (Thrushes and Allies)

EYEBROWED THRUSH (*Turdus obscurus*) – Montane thrushes were not much in evidence this dry period, and our only encounters with this migrant from Siberia were of a flock flying over near the Tambunan Rafflesia Center. [b]

FRUIT-HUNTER (*Chlamydochaera jefferyi*) – This species, which is always tough to locate, was generally quiet during our trip. Thanks to a tip from Bob & Marsha Rodrigues, those of us who climbed the steep Pandanus Trail one afternoon (Betsy, Becky, Bill, & RAR) got to see a lovely foraging male that was vocalizing and responded to playback. Bruce also had a chance encounter with a bird along the road above the upper Silau-Silau trailhead, but we couldn't relocate that one. [E]

Sturnidae (Starlings)

ASIAN GLOSSY STARLING (*Aplonis panayensis*) – A regular resident in disturbed habitats, from towns and gardens to palm plantations, this one was seen widely, perhaps best right from our lunch table at the Sepilok Forest Edge, where birds were coming in close--to a papaya feeder.

COMMON HILL MYNA (*Gracula religiosa*) – The only native myna in Borneo, this one is also the handsomest. We saw it several times, probably best at the RDC, where some were attracted to the fruiting fig by the lake.

JAVAN MYNA (*Acridotheres javanicus*) – This was the widespread myna, from Sepilok to Lahad Datu. Birds introduced near Sepilok became established locally and expanded along roads through the palm plantations to the coast at Lahad Datu. [I]

Chloropseidae (Leafbirds)

GREATER GREEN LEAFBIRD (*Chloropsis sonnerati*) – The females are more easily distinguished than the males in the two look-alike green leafbirds, but when the two species are together, the size difference is notable as well. Both sexes were seen at RDC and BRL. Both leafbirds are Sundaland specialties.

LESSER GREEN LEAFBIRD (*Chloropsis cyanopogon*) – The more common of the two leafbirds, this one was seen often in the lowland forests. It's considered Near Threatened.

BORNEAN LEAFBIRD (*Chloropsis kinabaluensis*) – Another Bornean endemic, as split from Blue-winged Leafbird; the females have black masks/throats (like the males), which Blue-winged females lack. We had exceptionally good views of small groups along the roadside below the Tambunan Rafflesia Center. [E]

Dicaeidae (Flowerpeckers)

YELLOW-BREASTED FLOWERPECKER (*Prionochilus maculatus*) – This Sundaland specialty was seen well daily at BRL, where they were feeding amid the flowering and fruiting shrubs right below our dining table.

YELLOW-RUMPED FLOWERPECKER (*Prionochilus xanthopygius*) – Our first ones were seen from the RDC canopy, but by far our best looks were right from the BRL dining area, where they too foraged in the shrubs right below. [E]

BROWN-BACKED FLOWERPECKER (*Dicaeum everetti*) – This one was feeding in the big fruiting fig on the RDC lakeside, but it was identifiable only through the scopes (given the distance and its small size). So I'm not sure whether anyone counted it or not. Certainly a better view would be desired.

YELLOW-VENTED FLOWERPECKER (*Dicaeum chrysorrheum*) – Ella spotted this one from our dining table at the Sepilok Forest Edge, where it fed in a nearby flowering tree. We had great looks--which was good, since we never encountered it again.

ORANGE-BELLIED FLOWERPECKER (*Dicaeum trigonostigma*) – Common and widespread, but quite spiffy (at least the males). Their song is one of the most frequently heard throughout the lowlands. We had numerous great studies, none topping the birds coming to eat papaya at the feeder at the Sepilok Forest Edge.

BLACK-SIDED FLOWERPECKER (*Dicaeum monticolum*) – After our first male (for some) near the Tambunan Rafflesia Center, we saw this handsome montane endemic right outside our Hill Lodge at Kinabalu and, perhaps best, in the melastome hedge along the steps to the Balsam Cafe on our final morning at Kinabalu. [E]

SCARLET-BACKED FLOWERPECKER (*Dicaeum cruentatum*) – This striking flowerpecker was seen nicely at Sepilok, where it was fairly common in the mistletoe down the road from the Sepilok Nature Resort.

Nectariniidae (Sunbirds and Spiderhunters)

RUBY-CHEEKED SUNBIRD (*Chalcopteryx singalensis*) – First seen from the RDC walkway, then along the Menanggul, and at Gomantong. But it was our final views--of a male eating what appeared to be clusters of ants on a branch just below our tower in the BRL canopy walkway--that offered us the very best views, not to mention the most fascinating behavior.

PLAIN SUNBIRD (*Anthreptes simplex*) – Another Sundaland specialty, this one is rather aptly named. Though first seen at RDC, our best views came at BRL, where it fed on flowers outside our dining area and where we watched it at extremely close range feeding in a flowering tree at arm's length from the canopy walkway tower on our final morning there.

PLAIN-THROATED SUNBIRD (BROWN-THROATED) (*Anthreptes malacensis borneensis*) – Seen well at Sepilok pre-tour and then at Gomantong and Sukau. The subspecies, which belongs to the brown-throated rather than the gray-throated group, is endemic to Borneo.

RED-THROATED SUNBIRD (*Anthreptes rhodolaemus*) – A male of this forest-inhabiting Sundaland specialty was seen well our first morning at BRL, where it fed on flowering vines right beside our gathering point in the driveway. It was later seen feeding there again.

VAN HASSELT'S SUNBIRD (*Leptocoma brasiliana*) – Formerly known as Purple-throated, this small sunbird is electric in good light! We had dynamite views at a male at eye level in the flowers near the RDC parking lot. The rather incongruous moniker "brasiliana" could possibly be explained by the following: "Brasil," "pau-brasil," or "brasilwood," is the name given to a dyewood long imported from the East that produces a purplish-red dye (Brazil took its name from this tree since a similar, native tree was referred to as "pau-brasil" by Portuguese explorers). It's probably a reference to the deep-purplish color of the sunbird's underparts.

COPPER-THROATED SUNBIRD (*Leptocoma calcostetha*) – This large, long-tailed sunbird, another Sundaland specialty, is locally common in mangroves and coastal forests and gardens but is very scarce inland. We made a stop at a row of flowering trees and shrubs, just outside the entrance to the RDC, and had beautiful views of a male our first afternoon at the RDC.

OLIVE-BACKED SUNBIRD (*Cinnyris jugularis*) – Common in disturbed habitats, this widespread species was seen at Sepilok and amid the palm plantations en route to Gomantong. (We don't spend much time in its habitat.)

TEMMINCK'S SUNBIRD (*Aethopyga temminckii*) – This Sundaland specialty is a lower montane bird, strikingly brilliant (with a fancy, red tail). We saw it well, first below the Tambunan Rafflesia Center, and then repeatedly at Kinabalu.

CRIMSON SUNBIRD (*Aethopyga siparaja*) – This beauty, the epithet "Eastern" now dropped, was seen wonderfully around Sepilok and the RDC and at BRL. It's the lowland counterpart of the previous species (but with a dark blue tail).

LONG-BILLED SPIDERHUNTER (*Arachnothera robusta*) – This Sundaland specialty, with the streaked, yellowish breast, was seen through the scopes as it foraged in a flowering vine visible from the Hornbill Tower at RDC.

LITTLE SPIDERHUNTER (*Arachnothera longirostra*) – The commonest of the spiderhunters, this one was seen repeatedly, its repetitive song heard widely. Our best views were probably at BRL, where they visited the blooming gingers and cannas along the boardwalk to and beyond our chalets.

PURPLE-NAPED SPIDERHUNTER (*Arachnothera hypogrammicum*) – Formerly considered an understory "sunbird," this species has been transferred from Hypogramma into the spiderhunter genus *Arachnothera*. We saw it first at RDC, but our best looks were along the Sukau boardwalk (for some) and along the Gomantong road (for others). The male is stunning!

WHITEHEAD'S SPIDERHUNTER (*Arachnothera juliae*) – Alas, this distinctive endemic will go down as heard only. We were close to it a couple of times, first when it flew overhead calling at Masakob Waterfall (but didn't stop!) and, second, when it called from a perch just out of sight along the Timponon road at Kinabalu. Neither would respond to playback by coming in. Sorry! [E*]

YELLOW-EARED SPIDERHUNTER (*Arachnothera chrysogenys*) – This Sundaland specialty--the one with the big ear patch and the small eyering--was seen from the RDC tower on our first afternoon there.

SPECTACLED SPIDERHUNTER (*Arachnothera flavigaster*) – Simikar to the last, this Sundaland specialty was the one with the relatively small ear patch and prominent eyering. It was seen at Sepilok, RDC, and along the Menanggul.

BORNEAN SPIDERHUNTER (*Arachnothera everetti*) – Formerly called "Streaky-breasted" Spiderhunter, the taxon everetti that occurs in Sabah was recently elevated to species status by Cornell, thus becoming another full Bornean endemic on the Clements checklist. It was conspicuous this year in the gardens around our lodgings and dining area at BRL. [E]

Motacillidae (Wagtails and Pipits)

ORIENTAL PIPIT (*Anthus rufulus malayensis*) – Also known as Paddyfield Pipit, this widespread species was striding along the edge of the runway at the Lahad Datu airstrip. It's the only pipit there.

Passeridae (Old World Sparrows)

EURASIAN TREE SPARROW (*Passer montanus*) – Introduced in Borneo, but apparently doing quite well near human habitations throughout. [I]

Estrildidae (Waxbills and Allies)

DUSKY MUNIA (*Lonchura fuscans*) – The most ubiquitous of all the Bornean endemics, this one was best seen in the grass near our lodgings at BRL. [E]

CHESTNUT MUNIA (*Lonchura atricapilla*) – A common resident in open areas throughout; the male is a sharp-looking munia. We saw it first pre tour at Sepilok, but then also at BRL and Poring.

MAMMALS

MOON RAT (*Echinosorex gymnurus*) – A few lucky folks got on this white, possum-like Insectivore that surprised us by running right under the Sukau Rainforest Lodge boardwalk just as we started our night walk there on our final evening at SRL.

LARGE FLYING FOX (*Pteropus vampyrus*) – We had nice views of these huge bats, foraging in fruiting trees (very unlike vampires!), on two different nights in the Kinabatangan. They are the largest bat in Borneo.

WRINKLE-LIPPED FREE-TAILED BAT (*Chaerephon plicatus*) – The vast majority of the bats pouring out of the Gomantong Caves were of this species, which clearly provides ample prey for the raptors that gather each evening to dine on the wing. On our evening at the caves this trip, the bats were pouring out early, in discrete clouds that drifted off in the same general direction. It was fun to watch Bat Hawks diving into the glut of protein and then eating on the wing.

MOUNTAIN TREESHREW (*Tupaia montana*) – This endemic was seen by those with Adrian on Apr 1 (the Bukit Ular up group) near the trash bins below the Timpohon gate at Kinabalu. [E]

SLENDER TREESHREW (*Tupaia gracilis*) – We saw this one together at Gomantong. [E]

CRAB-EATING MACAQUE (*Macaca fascicularis*) – A.k.a. Long-tailed Macaque; it was common along the Kinabatangan and its tributaries and was seen as well at Gomantong and along the river at BRL. It's widespread in peninsular Myanmar, Sundaland, and s Indochina.

PIGTAIL MACAQUE (*Macaca nemestrina*) – We had multiple encounters with this macaque--less common than the last--in the Kinabatangan, especially along the tributary downriver. It was also seen at BRL by some.

SILVERED LEAF MONKEY (*Presbytis cristata*) – A.k.a. Silvered Langur. This species is a bit more widespread than the next, being found in peninsular Myanmar, Thailand, and Malaysia, as well as the Greater Sundas. A troop of them roosted in the tall river-edge trees at Sukau Rainforest Lodge, where we saw them most every morning.

RED LEAF MONKEY (*Presbytis rubicunda*) – This beautiful endemic was seen first at Gomantong, climbing high into the trees at sunset. But our best encounter was with a group near the riverview platform on our way back from the Hornbill Trail at BRL. [E]

PROBOSCIS MONKEY (*Nasalis larvatus*) – These bizarre monkeys with the great noses, fat bellies, and long, straight, white tails are among the foremost natural history attractions of Borneo. Seeing numbers of them along the banks of the Kinabatangan and its tributaries, where they gather to feed, socialize, and roost each evening, was a special treat. Young ones entertained us by walking the tightrope across the mouth of the Tenangang River. [E]

GRAY GIBBON (*Hylobates muelleri*) – A.k.a. Bornean Gibbon, this pimate is heard often giving its remarkable, far-carrying calls, but it's rarely seen. We were lucky to have seen a family brachiating through the trees in the primary forest at Gomantong. [E]

ORANGUTAN (*Pongo pygmaeus*) – Now usually called Bornean Orangutan, having been split from the larger Sumatran Orangutan. Our first encounter with this Endangered primate was with an individual, maybe 9 years old, along the RDC canopy walkway (Hamit had a name for it). Having been mothered by an animal from the Sepilok Rehab Center, it came close and was rather confiding, given the size of the crowd it had attracted. Along the Gomantong boardwalk, we watched a very wild female with a baby on two different occasions. We saw another from the boat in the Kinabatangan and yet others at BRL. They were fascinating to watch, and their night roosts were conspicuous throughout. Orangutans average 73-180 lbs, with big males weighing 250 lbs or more! [E]

PALE GIANT SQUIRREL (*Ratufa affinis*) – We had eye-to-eye views of a pair of these giant squirrels along the RDC walkway. The species is considered a Sundaland specialty of Near Threatened status.

PREVOST'S SQUIRREL (*Callosciurus prevostii*) – The common, good-sized squirrel of the lowland rainforest, where it was seen almost daily. The Bornean taxon we saw is blackish with a chestnut belly.

PLANTAIN SQUIRREL (*Callosciurus notatus*) – Fairly common in the lowlands, where we saw it at RDC, in the Kinabatangan, and at Gomantong.

EAR-SPOT SQUIRREL (*Callosciurus adamsi*) – This montane endemic was the one at Kinabalu with the stripes on the side and the white edge to the back of the ear. [E]

BORNEAN BLACK-BANDED SQUIRREL (*Callosciurus orestes*) – This montane endemic was the one at Kinabalu with the stripes on the side and the white spot on the neck behind the ear. It came for nuts at the Timpohon gate platform. [E]

JENTINK'S SQUIRREL (*Sundasciurus jentinki*) – This one, yet another endemic, was the one with white underparts (no stripes on the sides), a whitish eyering, and a long, thin tail. Adrian pointed it out near the Tambunan Rafflesia Center and then we saw it in the lower part of Kinabalu as well. [E]

BORNEAN MOUNTAIN GROUND-SQUIRREL (*Dremomys everetti*) – Another endemic, this was the squirrel with the elongated nose (reminiscent of a treeshrew's) that we saw at Mesilau. [E]

PLAIN PYGMY SQUIRREL (*Exilisciurus exilis*) – The endearing pygmy of the lowlands; first seen at the RDC, and then throughout the lowlands, where it would rush around the tree limbs and even the bannisters. It forages on mosses and lichens, and it may have been our favorite of all the squirrels. (And that's saying a lot!) [E]

WHITEHEAD'S PYGMY SQUIRREL (*Exilisciurus whiteheadi*) – On the other hand, this one was a real competitor for favorite squirrel: It was the one in the highlands with the fuzzy white ear tuft. Another Whitehead's endemic to Borneo. [E]

RED GIANT FLYING SQUIRREL (*Petaurista petaurista*) – We waited at dusk for this extraordinary "flying" squirrel to emerge from its cavity and sail over the canopy walkway at RDC. And we were not disappointed, seeing two different animals take "flight." We later saw them in the spotlight at BRL, where their colors showed nicely. Though widespread in southeast Asia as a species, the taxon we saw, rajah, is endemic to Borneo.

THOMAS'S FLYING SQUIRREL (*Aeromys thomasi*) – We had a nice look at this endemic on a BRL night drive. It was darker chestnut than the

Red Giant, a bit smaller, and it lacked the black tip to the tail. [E]

BLACK RAT (*Rattus rattus*) – BRL [I]

LONG-TAILED PORCUPINE (*Trichys fasciculata*) – Paul spotlighted this aberrant, rat-like porcupine on our BRL night drive on Mar 25. It's not only aberrant-looking, but it ran fast, across the road and up a bank, disappearing into the forest, its long tail trailing; very unlike any other porcupine! It's a Sundaland specialty and was my only lifer of the tour.

SMALL-CLAWED (INDIAN SMOOTH) OTTER (*Aonyx cinerea*) – Widespread in Asia, this is the common otter of Borneo as well. But we rarely encounter it on our tour. This trip we encountered it twice--first when we heard it calling across the Danum River from BRL (at the mouth of the Jacuzzi stream), but it wouldn't show. The second encounter was with an otter that ran rapidly across the road in front of our vehicles as we departed BRL through the Danum Valley Conservation Area; it was seen by folks in the first two vehicles.

MASKED PALM CIVET (*Paguma larvata*) – The mammalian highlight of Kinabalu was getting a great look at this fabulous civet, thanks to Becky's good spotting. It was high in the trees above the Silau-Silau while we were searching for Whitehead's Trogons. It's normally nocturnal, sleeping in trees during the day. It's widespread in Asia, but we've only seen it on this tour a few times before (and usually by night).

LEOPARD CAT (*Felis bengalensis*) – Despite our having seen so many fabulous primates, the views we had of the first Leopard Cat, hunting along the edge of the big Kinabatangan River, may have been the mammal highlight of the entire trip! We had prolonged studies as it foraged back from the water's edge amid the grasses and shrubs of the floodplain. Though the species is widespread from India through Asia and Sundaland, the taxon we saw, *borneensis*, is endemic to Borneo. It was the best look I've ever had.

BEARDED PIG (*Sus barbatus*) – Some folks had a view of a female with a piglet on our drive into BRL. But everyone caught up with this big, blond native on our drive from BRL back to Lahad Datu, when several groups were seen crossing the road. The species is restricted to Sundaland and the Philippines.

GREATER MOUSE DEER (*Tragulus napu*) – We saw this miniature deer, the larger of the two mouse deer, along the BRL nature trail on our night walks.

SAMBAR (*Cervus unicolor*) – A few does of this heavy-bodied deer, widespread in Asia, were seen in the Danum Valley, the first two by daylight near a stream we overlooked along the logging road in, and the others spotlighted on BRL night drives. The very close doe showed a hairless, blood-red spot on her chest. According to Wikipedia, this is common in adult males and pregnant or lactating females and is apparently glandular in nature.

ADDITIONAL COMMENTS

In addition to the mammals listed above, Hamit showed us some roosting "Dwarf Fruit-Bats" under the roof of a building at the Gomantong parking lot. I couldn't figure out its scientific name.

Beyond the birds and mammals, we encountered an extraordinary array of fascinating plants and animals unique to Borneo. I'll list a few of particular interest, with emphasis on those we could identify.

Among the plants:

—*Rafflesia keithii* - We detoured to Poring to see the flower of this fascinating Bornean endemic, the largest of its genus in Borneo and the second largest flower in the world. An endoparasite, it has no stems, leaves, or true roots, deriving its energy entirely from its host, a woody grapevine in the genus *Tetrastigma* (Vitaceae). We discussed how scientists and the Kinabalu Park staff work with locals to enhance the environmental conditions favorable to this rare flower, namely by making its host vine available for distribution on nearby private lands and encouraging a thriving ecotourism business among locals and travelers alike. It has worked well, increasing the probability of our encountering an ephemeral *Rafflesia* flower somewhere near Poring on our tour. This March we saw a perfect flower on its second day open, thanks to a tip from Adrian, who had seen it the day before. We could see buds and old, decaying flowers as well. A recent study on its congener, *Rafflesia cantleyi*, determined that the parasite was not only absorbing nutrients from its host, but was actually stealing genes! For details on this horizontal gene transfer, a rare phenomenon among organisms more complex than bacteria, go to: <http://www.biomedcentral.com/presscenter/pressreleases/20120608>.

—Carnivorous *Nepenthes* pitcher plants - The pitcher plant center of Borneo (and the world!) is upper-elevation Mt. Kinabalu. Recent research has revealed the "evolutionary incentive" for high-elevation pitcher plants (like *N. rajah*, the largest in the world) to have evolved bigger and bigger pitchers: It's to serve as a toilet for treeshrews! Mountain Treeshrews, which are common at these high elevations (where insects become increasingly scarce), are attracted by the sweet secretion on the underside of the pitcher's lid. To reach it, they climb onto the pitcher's sturdy rim, which fits them perfectly, and sip away, meanwhile defecating into the pitcher to mark their feeding territory--thus supplying all the nitrogen critical to these normally carnivorous plants. (See the following link for a full explanation, with photos: http://news.bbc.co.uk/earth/hi/earth_news/newsid_8552000/8552157.stm.) The pitcher plant we saw near Poring was *Nepenthes stenophylla*, an insect-eater. The four species on the *Nepenthes* Trail at Mesilau were *N. burbidgeae*, *N. fusca*, *N. rajah*, and *N. tentaculata*.

Among the many other critters encountered:

—Bornean Pill Millipedes (*Glomeris connexa*, family Zephronidae) at BRL. They feed on dead leaves and wood in the leaf litter, contributing to decomposition of organic matter and releasing nutrients back into the soil. They curl into a protective ball like a pillbug when disturbed. There were other, more traditional millipedes as well.

—Long-legged centipedes (*Scutigera* spp.), on the Gomantong cave walls, are generally nocturnal. They devour spiders, stick insects, and beetle larvae. We also saw a giant scorpion inside its burrow along the BRL nature trail.

--Among the many spiders, outstanding were the tiny "horned spider" at BRL, the big orb spiders at BRL, and the big hole-living tarantula in its den in the bank of the road to the BRL staff quarters. That's overlooking the hundreds of tiny spider eyes reflected in the spotlights on our nocturnal forays.

--Lantern bugs (*Pyrops candelaria*, family Fulgoridae, order Hemiptera) were seen well on trunks along the Sukau Rainforest Lodge boardwalk. This species, with the blue snout, orange collar, and orange-spotted green wings, is the commonest of the Bornean lantern bugs. Contrary to the belief of Linnaeus, who described several species, the inflated head process does not light up at night. Lantern bugs are in fact sap suckers, their slender proboscis (below the head process) probing into the sap of certain trees. They excrete excess sugars as droplets that certain ants have become specialized to collect!

--Giant Forest Ants (*Camponotus gigas*) at BRL are among the largest ants worldwide. They are primarily nocturnal, nest underground mostly (though sometimes in the canopy), and feed on dead insects and plant material. They are similar to Neotropical "bullet ants."

--Of the many butterflies & moths, perhaps most memorable would be the common Wood Nymph or Tree Nymph (*Idea stollii*) butterflies that float tissue paper-like throughout the lowlands (and are replaced by a montane counterpart in the highlands); the big, striking black-and-yellow Common Birdwings (*Trioides helena*) that were especially common at the bright-orange flowers at Gomantong; and the many moths attracted to the lighted walls of our lodgings at Kinabalu Park, including the long-tailed, brown-and-white Lyssa moth (*L. zampa*), the huge Atlas or "snakehead moth" (*Atticus atlas*, a saturniid moth that competes with the Hercules Moth of New Guinea for the largest surface area and wingspan of any moth), and the incredible Malaysian Moon Moth (*Actias maenas*). (See the following website to help ID some of your other butterfly photos: <http://www.learnaboutbutterflies.com/Malaysia%20thumbs.htm>.)

--Among the many fascinating insects I haven't identified were big green praying mantids, huge spiny stick insects, bright green katydids, big green cicadas, big longhorn beetles, and iridescent green beetles. And there were the wasps that build the geometrical, horseshoe-shaped nests under the picnic shelters at Kinabalu.

--Oh yes, the leeches. It had recently started showering at BRL before our tour, and we "experienced" both Brown Leeches (*Haemadipsa zeylanica*) and Tiger Leeches (*H. picta*), which are probably the most talked about of Borneo's diverse fauna. They informed our fashion, robbed us of our privacy (I won't mention any names), and left some of us with "battle scars" to show off.

Additional vertebrates of particular interest:

--Harlequin Flying Frog (*Rhacophorus pardalis*) - A canopy inhabitant that sails to the forest floor to breed. We saw this one at the BRL "frog pond," one of very few forest pools we encountered during this dry period. Like other "flying frogs," it's able to "fly" by spreading its toes, which are connected by broad membranes that allow it to sail from branch to branch or across gaps in the forest canopy.

--File-eared Treefrog (*Polypedates otitophus*) - These yellowish frogs tend to congregate over water, where they lay their fertilized eggs into a foam mass that will harden on the outside while remaining liquid on the inside, providing the tadpoles a suitable environment until the mass falls into the water below. Ours were above the "frog pond" at BRL.

--Frisled Treefrog (*Kurixalus appendiculatus*) - The very well camouflaged gray treefrog we found on a gray trunk along the Sukau Rainforest Lodge boardwalk seems to have been of this species, which is common in lowland, swampy areas with bodies of standing or intermittent water. It varies its coloration to mimic the bark of the tree it's in.

--Giant River Frog (*Limnonectes leporinus*) - This was the big frog we saw (4) from our boat on our night cruise up the Kinabatangan. We later saw it on our night walk at BRL as well. Males of this species can grow quite large, the sexual dimorphism suggesting male-male territoriality. They are often harvested by local people.

--Smith's Giant Gecko, or Giant Forest Gecko (*Gekko smithii*) - As split from Tokay Gecko (*G. gekko*), this was the one that we heard so frequently uttering its surprisingly loud calls throughout the lowland forests. We saw it, green eyes and all, on the ceiling of the dining area at Sukau Rainforest Lodge, and some folks watched it play hide-and-seek along the covered section of the boardwalk back to the rooms. Of course, there were also oodles of common house geckos, gathering around any lighted area.

--Horned Flying Lizard (*Draco cornutus*) - This was the bright green lizard with spiny scales over the eyes and an orange-tipped, triangular dewlap erected in courtship. We watched several different individuals sail from one trunk to another, first at the RDC, and then elsewhere in the lowlands. They expand a winglike patagium of skin on their sides that allows them to glide between trees, sometimes as far as 60m!

--Crested Green Lizard (*Bronchocela cristatella*) - This was the brilliant green lizard with the extremely long, thin tail that we watched and photographed at the Gomantong parking lot. It's common and widespread throughout the lowlands of Borneo.

--Borneo Angle-headed Lizard (*Gonocephalus borneensis*) - This is what Paul called the sleeping lizard on our BRL night walk. I didn't get photos, but this one has a blue eye, which I remember commenting on (but so does *G. liogaster*). *G. borneensis* is a Bornean endemic.

--Water Monitor (*Varanus salvator*) - We saw some big ones, especially in the Kinabatangan, where we had them along the tributaries in the sun. Also swimming across the lake at the Sepilok Nature Resort.

--Saltwater or Estuarine Crocodile (*Crocodylus porosus*) - Though the little ones were more commonly spotlighted, we had a couple of big ones in the Kinabatangan, especially on the Rasang tributary downriver. Considered to be very intelligent and sophisticated animals, they communicate by barks and are thought to display four different calls. Widely distributed, Saltwater Crocs are the largest living reptiles, males reaching 6-7 m and weighing more than 2500 lbs. Females are much smaller.

--Reticulated Python (*Broghammerus reticulatus*) - Found in Sundaland and the Philippines, it's nocturnal and feeds primarily on homeotherms near water; it kills its prey by constriction. We saw a beautiful example on our night cruise up the big Kinabatangan.

And that's just a start! There are SO MANY fabulous critters out there. We really need another lifetime for all the rest!

Totals for the tour: 287 bird taxa and 31 mammal taxa