

Field Guides Tour Report

Borneo I 2014

Mar 16, 2014 to Apr 2, 2014 Rose Ann Rowlett (with Adrian, Hazwan, & Paul)

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

It was another exciting trip to Borneo. Before the tour even started, we saw vagrant Pheasant-tailed Jacanas near Tuaran and watched a pair of Tabon Scrubfowl energetically kicking sand into their nest mound on Gaya Island. But then we were off to the montane forest, where highlights were many and varied. Looking back, it's hard to determine what was the foremost highlight. Was it those three giant Whitehead's Broadbills calling and chasing each other around at what must have been a territory boundary below majestic Gg. Kinabalu? Or our encountering that bigbird flock along the trail with all three laughingthrushes, Checker-throated Woodpeckers, and those electric Bornean Green-Magpies? What of that surprise Mountain Serpent-Eagle circling overhead and calling just outside the Liwagu? Or the Red-breasted Partridges right at our feet, the energetic Bornean Stubtail with its high-pitched whistles, or that elusive male Whitehead's Trogon in the fog?

It would be hard to match the excitement of our first morning in the lowlands--along the trail at the Sepilok Rainforest Discovery Center, seeing our first Rednaped and Diard's trogons, Red-bearded Bee-eater, Black-and-red Broadbill, and Crested Jays before we even got to the tower. Or our extraordinary views of that Black Flying Squirrel that climbed up the trunk, leapt, and sailed directly overhead that evening! In the RDC canopy walkway, we saw our first Orangutan and



Watching this handsome male Black-headed Pitta was one of the highlights of the trip! (photo by participant Phyllis Stark)

fell in love with Black-and-yellow Broadbills and Violet Cuckoos.

Sukau brought not only Storm's Storks, White-fronted Falconets, Buffy Fish-Owls, that Oriental Bay-Owl, Wrinkled and White-crowned hornbills, and Proboscis Monkeys, but that exceptionally cooperative pair of Bornean Ground-Cuckoos! Surely THAT was the foremost highlight! But what of that stunning Black-headed Pitta singing from an open perch as we watched at Gomantong? Or the Bat Hawks diving into the clouds of bats emerging from the caves? There was that responsive Helmeted Hornbill that several times uttered its maniacal call and then flew right overhead.

But then there was Borneo Rainforest Lodge--with that male Great Argus calling and clearing his court; the spiffy Blue-headed Pitta that came right out on the trail; our incredible chance encounter with the strange, terrestrial Bornean Wren-Babbler; the covey of Crested Firebacks that walked quietly across the road; and that amazing male Giant Pitta that Paul whistled in for all to see! There were the Orange-backed and Gray-and-buff woodpeckers below the canopy walkway; that dramatic Black Eagle that circled low over the forest; that handsome Brown Wood-Owl on the soccer goal post; that marvelous pair of Rufous-backed Dwarf-Kingfishers we scoped along the Jacuzzi Trail. Oh, and we mustn't forget the unique Bornean Bristleheads that we twice encountered, including once not far from an active nest under construction--which might be only the second nest ever found! Plus there were all the "other critters," many seen on night excursions, from Wallace's Flying Frog and sleeping lizards to Greater Mouse Deer, Leopard Cat, and

Our visit was during a fairly rainy period after an exceptionally long dry spell. It was fascinating to observe which species were stimulated by the rains and which were suppressed. We did well overall, seeing almost 300 species of birds, as well as some fabulous mammals, herps, invertebrates, and plants--many of them endemic to island. It's been fun reliving the trip while sorting through photos and annotating the list. Hopefully, the annotations (and photos in the online version) will enliven your memories, as well as identify a few of the "other critters" we saw and photographed.

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. Many of these Sundaland birds have taxa which are endemic to Borneo, as noted in the Myers field guide. I have indicated these taxa on the triplist with their trinomial, in part to demonstrate how many special forms are present, many within an already restricted range of Sundaland; but also to call attention to the possibility that some/many of these insular taxa may be elevated to species status, since that is the trend of scientific thinking today as witnessed by Frank Gill's paper, "Species taxonomy of birds: Which null hypothesis?" that appears in the current AUK (Vol. 131, no. 2, April 2014). I quote the abstract below because it summarizes the thinking behind this trend and is especially pertinent to Borneo.

"The polytypic species concept unites populations that theoretically could and would interbreed were the opportunity to arise. This concept places the burden of proof of reproductive incapability and species status on those claiming species or higher rank. Advances in our understanding of the nature of reproductive isolation, the genetics of speciation, the limited role of gene flow, the power of directional selection, and the dynamics of hybridization support a different null hypothesis for taxonomic decisions, one that places the burden of proof on lumping' rather than on 'splitting' taxa at the species level. Switching the burden of proof provides an improved conceptual basis for the recognition of many allopatric island taxa and subspecies groups that merit species status. Taxonomic revisions based on these advances predictably confirm that distinct sister populations once lumped as polytypic species are independent evolutionary lineages that exhibit essential reproductive isolation. Release from the concerns about hybridization also positions proposed species for timely taxonomic decisions. The stage is set to proactively redefine polytypic species to separate component species for the 21st century. The improved species classification will better reflect phylogeny and evolutionary status, characterize biodiversity more accurately, guide improved sampling patterns of bird populations for systematic studies, and enable informed conservation decisions."

Taxonomy follows the Clements checklist with online updates, including the most recent (version 6.8: August 2013); so it contains the most current treatment at the species level, thus elevating a couple of Borneo taxa to species status since the checklist we were using was printed. That means a few more Bornean endemics! I wouldn't be surprised to see some of the trinomials on this triplist become binomials over the next few years. To access or download the updated Clements checklist online, simply google "Clements checklist." The next revision is scheduled to be online in August of this 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 longterm preservation.

We thank our keen local guides (Adrian, Hazwan, and Paul), our captains, boatmen, and the staffs of our wonderful lodgings throughout the tour. Thanks, too, to Charlie and Dennis for their help with our pre-tour excursions. Special thanks to those of you who contributed photos for both the cover and the online version of the list: Susan Schermerhorn, Phyllis Stark, Linda Verbeek, and Mike Anderberg; plus thanks to my Sweetie Richard Webster for some great photos from a prior trip. Cover credits go to Susan for the Black-headed Pitta; to Mike for the Orangutan; to Linda for the rhododendron; and to Richard for the Bornean Stubtail, the Temminck's Sunbird, and the Black-and-yellow Broadbill. The rest were mine.

Again, thanks to all of you for joining me in the "land below the wind." It was a wonderful trip!

--Rose Ann

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) – We scoped this species, which occurs in Australia & the Philippines in addition to the Greater Sundas, at our first marshy pond near Tuaran on our first pre-tour excursion. More were at our nearby petrol stop. Breeding records for Sabah are relatively recent.

Megapodiidae (Megapodes)

TABON SCRUBFOWL (Megapodius cumingii) – A.k.a. Philippine Megapode. By far the highlight of our second pre-tour excursion was watching a pair of these megapodes (= "large foot") building their mound in the sand at the forest edge of Gaya Island. All members of the family lay their eggs under mounds of sand and decaying vegetation on forested islands without ground predators like civets. The heat from the sand and decomposition serves to incubate the eggs. Once the chicks hatch, they dig out and fend for themselves! We had great studies of their kicking sand up and toward the nest site--sometimes splashing each other with flying sand. [N]

Phasianidae (Pheasants, Grouse, and Allies)

- **RED-BREASTED PARTRIDGE** (Arborophila hyperythra) We called this one in, to right at our feet, along the road below the Timpohon Gate. At times it was too close to focus! [E]
- **CHESTNUT-NECKLACED PARTRIDGE** (Arborophila charltonii) We worked on a pair that was vocalizing along a trail at BRL. They responded, but not nearly as well as the Red-breasted, and only Mikell and Lynda got on one. We all heard them well!
- CRIMSON-HEADED PARTRIDGE (Haematortyx sanguiniceps) We heard their loud duetting regularly, but only Susan got bins on one, one we were trying to call in along the upper Kinabalu road on our final morning there. [E]
- **CRESTED FIREBACK** (Lophura ignita nobilis) On our first morning at BRL, we walked out the entrance road and lucked into a group of at least 2 males and 2 females that quietly crossed the road behind us. This race, with the cinnamon-buff tail feathers, is endemic to Borneo.
- GREAT ARGUS (Argusianus argus) Fortunately for us, despite the increased amount of rain, a territorial male was still active, at least intermittently, along the Hornbill Trail at BRL. We heard it calling and climbed the trail, to watch a full-tailed male alternately clearing sticks from his court and

then issuing his far-carrying, fabulous call. What a treat! A Sundaland specialty, this species is said to be inedible, but trapped exclusively for its feathers (according to Phillipps).

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, having seen birds well in the Kinabatangan and then also glimpsed one over the Gomantong road. With increased fragmentation of their habitat, the species has declined throughout its limited range, mostly in Borneo and Sumatra.
- **LESSER ADJUTANT** (Leptoptilos javanicus) We had a distant view of one bird that was circling quite high over the Kinabatangan opposite Sukau Rainforest Lodge as we were returning from our first morning cruise. 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 put on a show when it came up and the submerged right beside our boats on the Menanggul.

Ardeidae (Herons, Egrets, and Bitterns)

- YELLOW BITTERN (Ixobrychus sinensis) This species has become a fairly common resident in Borneo, where it used to be mainly a winter visitor, probably owing to the increase in rice padis. We saw it well at the marshy lake near Tuaran on our first pre-tour excursion.
- **CINNAMON BITTERN** (Ixobrychus cinnamomeus) At the same Tuaran marsh, we had scope views of this handsome small bittern.
- **GRAY HERON** (Ardea cinerea) Similar to our Great Blue Heron, this Old World breeder is a migrant to Borneo, where it winters in small numbers. It too was seen near Tuaran on our pre-tour excursion. [b]
- 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 great scope views of one hunting in a shoal of the Danum River at BRL.
- **PURPLE HERON** (Ardea purpurea) Small numbers at Tuaran and in the Kinabatangan.
- GREAT EGRET (Ardea alba) Fairly common and widespread.
- **INTERMEDIATE EGRET** (Mesophoyx intermedia) We had good views of a bird in the Kinabatangan.
- LITTLE EGRET (Egretta garzetta) Small numbers were widespread in the KK, Tuaran, and Kinabatangan areas.
- PACIFIC REEF-HERON (Egretta sacra) Seen along the shore of the South China Sea in KK.
- CATTLE EGRET (ASIAN) (Bubulcus ibis coromandus) This fairly common nonbreeding 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. cormandus is sometimes considered a separate species. [b]
- STRIATED HERON (Butorides striata) Individuals were seen near Gomantong, in the Kinabatangan, and at BRL.
- **BLACK-CROWNED NIGHT-HERON** (Nycticorax nycticorax) Some of us saw this one flying past our KK dining table overlooking the South China Sea.

Accipitridae (Hawks, Eagles, and Kites)

- MOUNTAIN SERPENT-EAGLE (Spilornis kinabaluensis) We had great views of this beauty as it circled right over the Liwagu Restaurant in Kinabalu Park! This endemic, with the lovely flight pattern, replaces the next species in the mountains of Sabah. [E]
- **CRESTED SERPENT-EAGLE** (Spilornis cheela) Seen on at least 5 different days, this is the most common forest-edge raptor in Sabah, and its call can be heard throughout. The very tame bird at the Gomantong parking lot refused to fly even as we walked right below it!
- **BAT HAWK** (Macheiramphus alcinus) After scoping a perched bird at a day roost, we watched this big-eyed specialist diving through clouds of bats emerging from Gomantong Caves--and usually coming up with dinner. Though small billed, they have enormous gapes, enabling them to swallow most of their 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 cirrhatus) ID of "changeable" and mimicking raptors in Borneo is difficult. We identified this species, based on Hazwan's experience, near Sukau, and some folks with Paul saw one at BRL.
- WALLACE'S HAWK-EAGLE (Nisaetus nanus) We identified sibling juveniles at RDC and adults at Gomantong and in the Kinabatangan.
- RUFOUS-BELLIED EAGLE (Lophotriorchis kienerii) Seen on two different days circling over Gomantong, but both times it was fairly high.
- **BLACK EAGLE** (Ictinaetus malayensis) We had this a very close look at this big raptor with the fingered primaries at BRL, especially the second time.
- **CRESTED GOSHAWK** (Accipiter trivirgatus) This species was seen perched in the Kinabatangan. It was the only Accipiter we encountered.
- **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 KK area, from the RDC canopy walkway, and in the Kinabatangan.
- LESSER FISH-EAGLE (Ichthyophaga humilis) Unfortunately, the only one encountered this trip, a single bird flying up the Danum River at BRL, was seen by RAR alone.

Rallidae (Rails, Gallinules, and Coots)

- WHITE-BREASTED WATERHEN (Amaurornis phoenicurus) Seen nicely, first at the Tuaran marsh (where a bird ran toward us along the edge of the lake), then at Sepilok Nature Resort, and then along the road edge en route to Gomantong.
- WHITE-BROWED CRAKE (Porzana cinerea) What a treat! On our first pre-tour excursion, to marshy lakes near Tuaran, we called in a pair of these skulkers that eventually came as close to us as they possibly could and still be in the dense vegetation. The species occurs from SE Asia to Polynesia and is considered monotypic.
- **EURASIAN MOORHEN** (Gallinula chloropus) Seen pre-tour near Tuaran.

Charadriidae (Plovers and Lapwings)

PACIFIC GOLDEN-PLOVER (Pluvialis fulva) – Two birds were scoped at the marshy lakes near Tuaran on our first pre-tour excursion out of KK. [b]

ORIENTAL PLOVER (Charadrius veredus) – What a nice way to end the tour! It was indeed our final new bird--a beautiful breeding-plumaged migrant--probably put down by the rain, on the Lahad Datu airstrip. The species breeds in China and Mongolia and winters in n and c Australia. It's a rare migrant through Borneo. [b]

<u>Jacanidae (Jacanas)</u>

PHEASANT-TAILED JACANA (Hydrophasianus chirurgus) – Considered a Vagrant in Borneo, this species was probably the rarest bird we saw on the trip; it was new for my Borneo list. On our first pre-tour excursion to Tuaran, our local guide Dennis took us to a marshy lake where this species had turned up recently, and we saw 3 of them! We had a basic-plumaged bird in the scopes, but one bird in flight was molting into breeding plumage, showing considerable black on the underparts and a long tail. The species breeds from Pakistan to China and SE Asia, with some northern populations moving south. Nice!

Scolopacidae (Sandpipers and Allies)

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

COMMON GREENSHANK (Tringa nebularia) – In the Tuaran marshes. [b]

MARSH SANDPIPER (Tringa stagnatilis) – In the Tuaran marshes. [b]

WOOD SANDPIPER (Tringa glareola) – Ditto. [b]

TEMMINCK'S STINT (Calidris temminckii) – Ditto. [b]

Laridae (Gulls, Terns, and Skimmers)

WHISKERED TERN (Chlidonias hybrida) – Some wintering individuals were seen in the Kinabatangan. [b]

Columbidae (Pigeons and Doves)

ROCK PIGEON (Columba livia) - KK and Lahad Datu. [I]

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

LITTLE CUCKOO-DOVE (Macropygia ruficeps) – Fairly common, especially in the montane forest, and we had good looks, starting near the Tambunan Rafflesia Center and then at Kinabalu Park.

ZEBRA DOVE (Geopelia striata) – Seen at Tuaran, in the rice fields en route to Gomantong, and at Sepilok (near the nesting Baya Weavers). [I]

LITTLE GREEN-PIGEON (Treron olax) – We had good looks at these handsome green-pigeons in the Kinabatangan and saw them again at Gomantong. [N]

PINK-NECKED PIGEON (Treron vernans) – Seen well at Tuaran on our first pre-tour excursion, then at RDC and in the Kinabatangan.

THICK-BILLED PIGEON (Treron curvirostra) - One female was studied carefully near Sukau.

GREEN IMPERIAL-PIGEON (Ducula aenea) – This was the common big pigeon of the lowlands, and we had many good views, from Gaya Island and the RDC canopy walkway through the Kinabatangan to BRL.

MOUNTAIN IMPERIAL-PIGEON (Ducula badia) – Probably the best looks we've had on this tour were of the pair with the roadside nest just above our lodgings at Kinabalu Park (see photo). We watched as one bird rather awkwardly delivered a long stick to the other bird on the nest. The recipient, presumably the female, then positioned the stick into the nest. [N]

Cuculidae (Cuckoos)

LARGE HAWK-CUCKOO (DARK) (Hierococcyx sparverioides bocki) — We had heard it calling near the Rafflesia Center on the tour immediately preceding this one, but it didn't respond during that dry period. Then, on our first morning of birding in the Crocker Range (after rains had been falling), this species was uttering its incredibly loud song throughout the area and proved quite responsive. We called one bird in for great scope views. The race bocki is restricted to Sundaland and considered a distinct species, Dark Hawk-Cuckoo, by some.

MOUSTACHED HAWK-CUCKOO (Hierococcyx vagans) [*]

INDIAN CUCKOO (Cuculus micropterus) – Though we had seen a distant perched bird from the RDC canopy walkway, we had superior views of the bird that came into our tree in the BRL canopy tower, where we got great scope (and binocular!) views as it perched just above us.

BANDED BAY CUCKOO (Cacomantis sonneratii) – This canopy specialist was heard from the RDC canopy walkway, but one group saw it from the boat in the Kinabatangan.

PLAINTIVE CUCKOO (Cacomantis merulinus) – Heard daily in the lowlands, where it is a common and widespread Sundaland specialty. We saw it well from the RDC canopy walkway, when it came in fairly close below the Trogon Tower.

VIOLET CUCKOO (Chrysococcyx xanthorhynchus) – This colorful little cuckoo was seen beautifully from the RDC canopy tower, where it was doing its flight display and responded well to playback. It was heard displaying 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 in the Kinabatangan and from the RDC canopy walkway, where some of us watched it wing-lifting while swinging its tail side to side. It was singing throughout the lowlands.

ASIAN KOEL (Eudynamys scolopaceus) – Two distant birds flew past the second marshy lake we visited on our pre-tour excursion to Tuaran. We heard it again on Gaya Island.

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

RED-BILLED MALKOHA (Phaenicophaeus javanicus) – Another Sundaland specialty, this one was seen only once, from the RDC canopy tower, where we had nice views.

CHESTNUT-BREASTED MALKOHA (Phaenicophaeus curvirostris) – Fairly common in the lowlands, this Sundaland specialty was seen well from the RDC walkway, from the boats in the Kinabatangan, at Gomantong, and at BRL.

BORNEAN GROUND-CUCKOO (Carpococcyx radiatus) – One of the foremost highlights of the trip was watching a pair of these rarely seen ground dwellers walking along the banks of the Menanggul, one of them hopping up onto an exposed limb and calling as we watched. It was likely the rain

(and fog) that stimulated the ground-cuckoos to start calling and responding. Yip! Yip! Yip! [E]

GREATER COUCAL (Centropus sinensis) – Heard almost daily in the lowlands, it was seen beautifully along the Menanggul as it sat with its wings spread, drying in the sun. Others were seen at BRL.

Tytonidae (Barn-Owls)

ORIENTAL BAY-OWL (Phodilus badius) — We had heard one, at close range, behind our bungalows at Sepilok Nature Resort, but it wouldn't come out of the bamboo. Then, on our first night cruise up the Menanggul, a bird responded to playback by calling repeatedly. But it took Hazwan's crawling out of the boat onto some roots to locate it; then he got us all on it! A persistent singer, it typically perches on a vertical trunk for long periods, so tame and intent that one could walk very close to it--should the habitat allow (but it usually doesn't!). It took some persistence, but we were lucky to see this strange, rarely seen, forest representative of the Tytonidae.

Strigidae (Owls)

MOUNTAIN SCOPS-OWL (Otus spilocephalus) – Its two-note call was heard in the wee hours of the starlit morning from our lodgings in Kinabalu Park. Since it is widespread and seen more easily elsewhere, we didn't make a special effort for it. [*]

SUNDA SCOPS-OWL (Otus lempiji) – On the grounds of the Sepilok Nature Resort. [*]

BARRED EAGLE-OWL (Bubo sumatranus) – Heard from the boats by night on the Menanggul and then at dawn from our Hill Lodge verandas, but distant both times. [*]

BUFFY FISH-OWL (Ketupa ketupu) – We had marvelous views of this yellow-eyed fisherman in the Kinabatangan, on our night cruises; with 3 individuals one night!

COLLARED OWLET (Glaucidium brodiei) – Heard by Lynda, Nico, & RAR along the Bukit Ular trail one late afternoon at Kinabalu, where it's a generally scarce diurnal owl. [*]

BROWN WOOD-OWL (Strix leptogrammica) – This big beauty was seen wonderfully on the goal post near the staff quarters on our first night drive at BRL.

BROWN BOOBOOK (Ninox scutulata borneensis) – Heard from the RDC canopy walkway and at the Sepilok Nature Resort. [*]

Apodidae (Swifts)

- SILVER-RUMPED NEEDLETAIL (Rhaphidura leucopygialis) Seen below us from the RDC walkway, then drinking on the wing at the Sepilok NR lake, and later at BRL.
- 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, comparing them to those of the Cave Swiftlet (none of which were occupied when we checked); it would be hard to ID them based on their (rather variable but similar) nest structures. [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 several 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. 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 ago) white nests in a niche of the vertical walls. Constructed entirely of the birds' saliva, they are the most highly prized for the Chinese delicacy, bird's-nest soup, as illustrated by the price asked for the packages of 6-8 nests that we examined in the KK international airport: 590RM, or about \$185 U.S.! Despite the nest harvesting--once or twice just after they're built (when the birds will surely renest), 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. [N]
- **HOUSE SWIFT** (Apus nipalensis) This species was nesting on the tall building beside the dock where we boarded the boat to Gaya Island on our second pre-tour excursion. [N]

Hemiprocnidae (Treeswifts)

GRAY-RUMPED TREESWIFT (Hemiprocne longipennis) – Seen at Sepilok Nature Resort, where they flew low over the lake in the early morning. **WHISKERED TREESWIFT** (Hemiprocne comata) – Surprisingly, we never saw this beauty perched! But we did watch a couple of birds circling over the Danum River floodplain one morning at BRL.

Trogonidae (Trogons)

- **RED-NAPED TROGON** (Harpactes kasumba impavidus) Considered Near Threatened, this big Sundaland beauty (a male) was scoped along the trail to the Hornbill Tower our first morning at RDC. We heard them in the Kinabatangan and later at Gomantong and saw a female at BRL. The race is endemic to Borneo.
- **DIARD'S TROGON** (Harpactes diardii diardii) Another handsome Sundaland specialty, it too was seen well along the trail to the Hornbill Tower at RDC, when we tracked down a calling male. Later seen as well at 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 spotted by Adrian along the lower Bukit Ular trail. It disappeared but was re-spotted by Phyllis, this time staying for scope views. It was lovely despite the fog. 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, a stunning male of this Sundaland specialty was seen first at very close range along the Gomantong boardwalk; a female was seen from one boat along the Menanggul, and then others

Alcedinidae (Kingfishers)

- BLUE-EARED KINGFISHER (Alcedo meninting) Another small beauty, it was common and seen repeatedly in the Kinabatangan area.
- COMMON KINGFISHER (Alcedo atthis) Two of these non-breeding visitors to Borneo were scoped at the pre-tour marshy lake near Tuaran. [b]
- **BLUE-BANDED KINGFISHER** (Alcedo euryzona) This one was seen only by Lorna, when she and Mike were waiting along the BRL canopy walkway that spans the stream flowing below (in hopes of Forktail). It flew past under the bridge, its blue rump and lower back gleaming.
- **RUFOUS-BACKED DWARF-KINGFISHER** (Ceyx rufidorsa) Note the new official English name, according to Cornell's Clements updates. Though first seen in the Kinabatangan and then at BRL, our best views were of a fabulous pair Phyllis spotted en route to the Jacuzzi Pool at BRL. They were hanging out, probably nesting, and we had great scope views of these jewels.
- BANDED KINGFISHER (Lacedo pulchella) Heard from the trail and the walkway at BRL, but it was too far away to respond. [*]
- STORK-BILLED KINGFISHER (Pelargopsis capensis) This big, noisy, colorful guy, though fairly common throughout the lowland waterways, was always a joy to encounter.
- **RUDDY KINGFISHER** (Halcyon coromanda) This one was startlingly beautiful as it flew back and forth across the Menanggul, its turquoise rump contrasting with its purplish-pink upperparts!
- **COLLARED KINGFISHER** (Todiramphus chloris) This widespread kingfisher was seen briefly on our pre-tour excursion to Tuaran and then by some on the wires near Lahad Datu.
- RUFOUS-COLLARED KINGFISHER (Actenoides concretus) Heard from the trail at RDC, where it didn't respond to playback. [*]

Meropidae (Bee-eaters)

- **RED-BEARDED BEE-EATER** (Nyctyornis amictus) This Sundaland beauty was heard, seen nicely, and scoped along the trail to the Hornbill Tower at RDC.
- **BLUE-THROATED BEE-EATER** (Merops viridis) Fairly common throughout the lowlands, these 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 along the rivers in the Kinabatangan.

Bucerotidae (Hornbills)

- **ORIENTAL PIED-HORNBILL** (Anthracoceros albirostris) First seen on our pre-tour excursion to Gaya Island, 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 was seen first at RDC, then in the Kinabatangan, and also in small numbers at Gomantong and BRL. We saw at least one male variant (with the white brow).
- RHINOCEROS HORNBILL (Buceros rhinoceros) Also considered Near Threatened, this dramatic Sundaland hornbill may be the handsomest of them all. We had breathtaking views of them in the Kinabatangan and at BRL, where a group daily called at dawn and then flew across the river and overhead in the early morning. The subspecies borneoensis is a Bornean endemic.
- **HELMETED HORNBILL** (Buceros vigil) We had marvelous luck with this one along the Gomantong road, where we first heard its maniacal calls and then managed to entice one to fly right overhead! They were often heard at BRL as well, but usually from a great distance. Another terrific Sundaland specialty!
- **BUSHY-CRESTED HORNBILL** (Anorrhinus galeritus) The commonest of the hornbills in the lowland rainforest; we saw family groups of this social species from the RDC canopy, from the Sukau boats, and at BRL.
- WHITE-CROWNED HORNBILL (Aceros comatus) The scarcest of the hornbills in Borneo, this fabulous Sundaland specialty was seen nicely when we called in a female along the Menanggul. It has a call to match it crest, and we giggled each time we heard it.
- WRINKLED HORNBILL (Aceros corrugatus) We saw a fabulous pair of this handsome, Near Threatened, Sundaland specialty in lovely, late-afternoon light along the Kinabatangan.

Megalaimidae (Asian Barbets)

- **BROWN BARBET** (Calorhamphus fuliginosus) This aberrant, monotypic barbet is another Sundaland specialty, the Bornean birds (subspecies tertius) having red legs and feet. We saw them well on various occasions, first at the Rafflesia Center, then along the Gomantong road, and finally at BRL.
- **GOLD-WHISKERED BARBET** (Megalaima chrysopogon) We all saw this big Sundaland specialty well repeatedly through our scopes as it called near the fruiting fig at Poring. The race we saw, chrysopsis, is endemic to Borneo.
- **RED-THROATED BARBET** (Megalaima mystacophanos) Another Sundaland specialty, this one was seen first at Gomantong (a female), then along the Menanggul (where a singing male flew back and forth across the river), and then at BRL.
- MOUNTAIN BARBET (Megalaima monticola) We had nice looks at this lower-montane endemic along the road above Masakob Waterfall, where we watched it calling and foraging. This was the one that stops to take a breath after delivering a long series of notes. [E]
- YELLOW-CROWNED BARBET (Megalaima henricii) The toughest barbet to see, it too is a Sundaland specialty, our bird of the endemic race brachyrhyncha. We had exceptionally good views of this species through the scope at Poring, where they were calling spontaneously and very responsive!
- GOLDEN-NAPED BARBET (Megalaima pulcherrima) A Kinabalu/Crocker Range endemic, it was seen beautifully from the new vista point along the road to the Timpohon gate at Kinabalu Park. We had another encounter with a bird in a fruiting tree near "the Hole." This species was vocal but fairly inconspicuous during our visit. [E]
- **BLUE-EARED BARBET** (Megalaima australis) A more widespread species, this one was also seen at Poring and then heard throughout the lowlands.
- **BORNEAN BARBET** (Megalaima eximia) A generally tough endemic; we struggled to locate the one or two individuals that were singing during our visit to the Rafflesia Center. But we couldn't see them and couldn't get them to move. This was the one that sings continuously, seemingly never stopping to take a breath! (They had been singing a LOT one week before our visit.) [E*]

Picidae (Woodpeckers)

- **RUFOUS PICULET** (Sasia abnormis) Our first was along the RDC walkway, but we saw it well several times in the lowlands, and I think everyone caught up with it. It's another Sundaland specialty--and a real cutie.
- **GRAY-CAPPED WOODPECKER** (Dendrocopos canicapillus) Seen by some from the RDC canopy tower.
- **RUFOUS WOODPECKER** (Celeus brachyurus badiosus) A pair of this widespread species, of a subspecies found only in Borneo, was seen along the trail right below the RDC Hornbill Tower as we were leaving.
- WHITE-BELLIED WOODPECKER (Dryocopus javensis) We saw this dramatic woodpecker from the boats along the Menanggul, when one responded to playback.
- **BANDED WOODPECKER** (Picus miniaceus) This handsome Sundaland specialty was seen near Sukau and then at BRL (though never as well as we would have liked).
- CHECKER-THROATED WOODPECKER (Picus mentalis) We had good looks at a pair of this terrific Sundaland specialty with the big-bird flock along the Mempening trail at Kinabalu.
- MAROON WOODPECKER (Blythipicus rubiginosus) This Sundaland woodpecker was seen first along the road near the Rafflesia Center, then in Kinabalu Park, but probably best at BRL (where two birds responded to playback near the beginning of the Jacuzzi Trail).
- BUFF-RUMPED WOODPECKER (Meiglyptes tristis) Also seen from the BRL canopy walkway. It too is restricted to Sundaland.
- **BUFF-NECKED WOODPECKER** (Meiglyptes tukki) Also a Sundaland specialty, this one is considered Near Threatened. The group with Paul on our final morning at BRL saw this one well out the entrance road.
- **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 had a family group of e from the boats along the Menanggul and then a marvelous look at a male from the BRL canopy platform.
- **ORANGE-BACKED WOODPECKER** (Reinwardtipicus validus) We had fabulous views of this handsome Sundaland specialty from the BRL canopy platform, where a bird responded very well.

Falconidae (Falcons and Caracaras)

WHITE-FRONTED FALCONET (Microhierax latifrons) – We saw our first pair atop distant trees from the oxbow lake near Sukau, but we greatly improved the views the following morning along the Menanggul, where we saw 3 birds perched at much closer range. These tiny raptors are endemic to Borneo and considered Near Threatened. [E]

Psittacidae (Parrots)

LONG-TAILED PARAKEET (Psittacula longicauda) – Seen mostly in flight along the Menanggul; another Sundaland specialty.

BLUE-CROWNED HANGING-PARROT (Loriculus galgulus) – Often heard (and sometimes then glimpsed as a midget flyby) in the lowlands, this tiny parrot is tough to see well. Scope views of a pair of these beauties foraging in the treetops comprised the foremost highlight for those with RAR on the canopy walkway our final morning at BRL. Another Sundaland specialty.

Calyptomenidae (African and Green Broadbills)

GREEN BROADBILL (Calyptomena viridis) – Heard in the distance from the trail at BRL. [*]

WHITEHEAD'S BROADBILL (Calyptomena whiteheadi) – This fancy BIG endemic was singing during our visit and could be heard right from our porches at the Hill Lodge! Just up the road, along the upper Silau-Silau, three birds responded to playback, chasing each other but landing occasionally long enough for some great views. We may have triggered a territory boundary dispute, but watching them interact was one of the highlights of the trip. 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. [E]

Eurylaimidae (Asian and Grauer's Broadbills)

- **BLACK-AND-RED BROADBILL** (Cymbirhynchus macrorhynchos) The typical Asian broadbills are exquisite, too! This primarily Sundaland specialty was seen quite well, starting at the RDC, then from our boats in the Kinabatangan, where we saw several at active nests, and at Gomantong, where a pair was nesting near the end of the road. [N]
- **LONG-TAILED BROADBILL** (Psarisomus dalhousiae borneensis) What a bird! We saw them near nests and along the road at the Rafflesia Center. Fairly widespread as a species, but the race we saw is endemic to Borneo. [N]
- BANDED BROADBILL (Eurylaimus javanicus brookei) This one was nesting as well during our visit. We saw them with nests along the Menanggul, at Gomantong, and along the BRL entrance road, where a pair was actively nest building. A striking specialty of SE Asia and Sundaland, the race endemic to Borneo. [N]
- **BLACK-AND-YELLOW BROADBILL** (Eurylaimus ochromalus) Could this extraordinary and confiding small broadbill be the fairest of them all? Certainly, the soft pink is a rare color in passerines. Commonly heard and seen throughout the lowlands, it too is restricted to Sundaland. We saw it with a nest near the Rafflesia Center and along the Menanggul. [N]
- **DUSKY BROADBILL** (Corydon sumatranus brunnescens) But this one has the biggest bill of all! In fact, it has what is proportionately the broadest bill of all the passerines. Most of us saw it on our final morning afield at BRL. It's restricted to SE Asia, Sumatra, and Borneo, the taxon endemic to Borneo.

Pittidae (Pittas)

- **GIANT PITTA** (Pitta caerulea) This rain-loving Sundaland specialty was vocal during our visit to BRL, and we all had fabulous looks at a subadult male of one of the toughest of the pittas to see, thanks to Paul. The race that breeds in Borneo is hosei, found only in n. Borneo.
- **BLUE-HEADED PITTA** (Pitta baudii) These pittas too, were more responsive during our visit than during my previous visit (after an unusually dry month). We had wonderful looks at an adult male on our first attempt along the trail at BRL. It came in close and even crossed the trail! This beauty is classified as Vulnerable, mostly owing to habitat destruction. [E]
- **BLACK-HEADED PITTA** (Pitta ussheri) We had exceptional studies of this spectacular endemic along the boardwalk to the Gomantong Caves, where an exposed male sang for us (see my video) as we watched! [E]
- **HOODED PITTA** (Pitta sordida mulleri) This colorful pitta was also heard on our first afternoon at Gomantong. A bit of playback brought one bird flying in above us. It landed in a tangle high in a tree, and Lynda managed to spot it, getting us all on it for brief scope views. We later saw two more

birds flying across the Menanggul, exposing their "silver dollar" wing patches. 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).

Vangidae (Vangas, Helmetshrikes, and Allies)

- LARGE WOODSHRIKE (Tephrodornis gularis frenatus) Seen from the RDC canopy walkway, the subspecies endemic to Borneo.
- **BLACK-WINGED FLYCATCHER-SHRIKE** (Hemipus hirundinaceus) This Sundaland specialty was seen well from the RDC Hornbill Tower, where a pair performed nicely.
- **RUFOUS-WINGED PHILENTOMA** (Philentoma pyrhoptera) We saw this species best (typical morph) as we walked out the entrance road on our first morning 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 best from the BRL canopy walkway, where a pair was gathering nesting material; note that, according to the Myers guide, the nest has not been described in Borneo (beyond the location of one nest in the fork of a rotting tree). [N]

Artamidae (Woodswallows)

WHITE-BREASTED WOODSWALLOW (Artamus leucorynchus) – A common and widespread resident of open country, it is the only woodswallow in Borneo. We saw it at Tuaran, in KK, near Sandakan, and near Lahad Datu.

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 the RDC canopy walkway/towers, where it is sometimes seen, and by the time we left Sukau, we were pinning our hopes on BRL. Upon our arrival, Paul told us (to our delight!) about a pair actively building a nest along the entrance road; he and James Eaton had observed multiple trips from the nest to the source of what appeared to be green moss, which the birds were adding to the nest the morning before our arrival. So, on our first morning at BRL, we walked out the entrance road to the nest area. We scoped out the nest--a distant ball of 6" or more in diameter and covered with green; it was placed high in the subcanopy of a canopy emergent. But there was no sign of the birds themselves. We checked the area repeatedly, but we never saw activity nearby. It wasn't until the next day that we found a pair of Bornean Bristleheads in the area and got some scope views as they moved through the canopy. Later the same day, we improved on our views (considerably!) when we ran into a vocal foraging flock along the Hornbill Trail. This group had 4-5 birds. As far as I know, the first nest ever found of this fascinating endemic was just a year or two ago at the RDC, and its description may not have been published. [EN]

Aegithinidae (Ioras)

COMMON IORA (Aegithina tiphia) - Seen very well at Tuaran and on Gaya Island, and then heard in the Kinabatangan.

GREEN IORA (Aegithina viridissima) – Considered Near Threatened owing to habitat pressure, 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 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 cinereigula) The highland minivet, it was seen with foraging flocks in Kinabalu Park, usually traveling in pairs or family groups. As with so many island breeders, the subspecies we saw is endemic to Borneo.
- **SCARLET MINIVET (SCARLET)** (Pericrocotus speciosus insulanus) Another endemic taxon, it was seen by Paul's group out the entrance road on our final morning at BRL.
- **LESSER CUCKOOSHRIKE** (Lalage fimbriata) Another Sundaland specialty, this one was seen from the RDC canopy walkway and then by Paul's group out the BRL entrance road on our final morning of birding.
- **PIED TRILLER** (Lalage nigra) A bird of rather open coastal areas, where we don't usually spend much time, this species was seen only on our pretour excursion to Tuaran.

Pachycephalidae (Whistlers and Allies)

- BORNEAN WHISTLER (Pachycephala hypoxantha) This montane endemic, with the strong song, was seen with the mixed flocks, first near the Rafflesia Center and then at Kinabalu Park. [E]
- MANGROVE WHISTLER (Pachycephala cinerea) This widely occurring coastal forest specialist was mostly heard on our pre-tour excursion to Gaya Island. But I don't have it marked as "heard only" on my list; so maybe some folks saw it..?

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)

- **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 near the Tambunan Rafflesia Center, we finally called in a singing male for scope views along the road at Kinabalu.
- WHITE-BELLIED ERPORNIS (Erpornis zantholeuca brunnescens) This widespread Asian species has only recently been reassigned to the vireo family, based on genetic evidence. We saw one with a flock near the Rafflesia Center. The taxon is a Bornean endemic.

Oriolidae (Old World Orioles)

- **DARK-THROATED ORIOLE** (Oriolus xanthonotus consobrinus) Another Sundaland specialty that's considered Near Threatened, this handsome oriole was heard more often than seen. But we finally called in a responsive male along the Gomantong road and then saw it again at BRL. The taxon is endemic to n. Borneo.
- **BLACK-AND-CRIMSON ORIOLE** (Oriolus cruentus vulneratus) Even more restricted than the last species, this chunky highland oriole is found only on the Malay Peninsula, Sumatra, and Borneo. We all had good looks at adults near Masakob Waterfall and again at Kinabalu Park. Of the endemic subspecies vulneratus.

Dicruridae (Drongos)

- **ASHY DRONGO (BORNEAN)** (Dicrurus leucophaeus stigmatops) Of the endemic race stigmatops, this handsome gray drongo with the red iris was fairly common throughout the highlands. It's another candidate for a split.
- **BRONZED DRONGO** (Dicrurus aeneus) Seen first near the Rafflesia Center, this small drongo was later seen by some at BRL.
- **HAIR-CRESTED DRONGO** (Dicrurus hottentottus borneensis) Heard with the big flock along the road paralleling the upper Silau-Silau at Kinabalu, but we never laid eyes on it. [*]
- **GREATER RACKET-TAILED DRONGO** (Dicrurus paradiseus brachyphorus) Fanciest of the drongos, this one was seen well at the RDC, on the Gomantong road, and at BRL; brachyphorus is endemic to Borneo.

Rhipiduridae (Fantails)

- **SPOTTED FANTAIL** (Rhipidura perlata) This spiffy Sundaland specialty is scarce; our only encounter as a group was on our first morning at BRL when we walked out the entrance road and a pair came through quickly, right along the road. But the group with Paul on our final day out the entrance road saw this species again.
- MALAYSIAN PIED-FANTAIL (Rhipidura javanica) The common and confiding fantail of the lowlands; we saw its tiny nest along the Menanggul and again right below the BRL dining room. [N]
- WHITE-THROATED FANTAIL (Rhipidura albicollis kinabalu) The highland fantail; we had it near the Rafflesia Center and a few times at Kinabalu Park. The taxon is another endemic.

Monarchidae (Monarch Flycatchers)

- **BLACK-NAPED MONARCH** (Hypothymis azurea) This handsome monarch was seen nicely in the lowlands, from the Sukau to BRL, and we had evidence of breeding/nesting at some point. [N]
- **ASIAN PARADISE-FLYCATCHER** (Terpsiphone paradisi borneensis) We saw some knockout males of this long-tailed monarch (and some females as well), beginning with that along the Gomantong road, then followed by birds crossing the Menanggul and 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) This secretive Sundaland specialty was seen well along the trail to the Hornbill Tower at RDC and heard again at BRL. The taxon 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 one bird was quite responsive.
- BORNEAN GREEN-MAGPIE (Cissa jefferyi) This stunning montane corvid was a real favorite at Kinabalu, where we watched several at close range with the mixed big-bird flock along the Mempening Trail. It was recently split from its sister taxon (now Javan Green-Magpie), the two formerly called Short-tailed Green-Magpie. The epithet jeffereyi 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 well at Kinabalu. [E]
- SLENDER-BILLED CROW (Corvus enca) Encountered daily in the lowlands, where it is widespread; we watched them wing-lifting at Sukau Rainforest Lodge.

Hirundinidae (Swallows)

- BARN SWALLOW (Hirundo rustica) At least one of these migrants was seen flying over the Kinabatangan. [b]
- PACIFIC SWALLOW (Hirundo tahitica) Common throughout and seen nesting in various places, especially at BRL, where they were gathering mud from the parking lot to add to their nests under the eaves. [N]

Stenostiridae (Fairy Flycatchers)

GRAY-HEADED CANARY-FLYCATCHER (Culicicapa ceylonensis) – Seen nicely at BRL.

Sittidae (Nuthatches)

VELVET-FRONTED NUTHATCH (Sitta frontalis corralipes) – A pair of this widespread, but delightful, nuthatch was seen well along the BRL entrance road. The taxon is endemic to Borneo.

Pycnonotidae (Bulbuls)

- **BLACK-HEADED BULBUL** (Pycnonotus atriceps) A pretty bulbul of widespread distribution; it was seen first at Poring, then from the RDC walkway, and then at Sukau in the Kinabatangan.
- STRAW-HEADED BULBUL (Pycnonotus zeylanicus) Spontaneously singing pairs were heard across the Danum River at BRL, but we couldn't lure them into view. [*]
- **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 saw several groups of them along the road near the Rafflesia Center. [E]
- **SCALY-BREASTED BULBUL** (Pycnonotus squamatus borneensis) One of the handsomest of the bulbuls, this species was scoped nicely at Poring. Though found elsewhere in Sundaland, the subspecies is endemic to Borneo.
- 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, which would make another Bornean endemic. We had good views of a pair along the road into the Crocker Range Park on Gunung Alab just before lunch.
- YELLOW-VENTED BULBUL (Pycnonotus goiavier gourdini) Common and widespread in disturbed habitats throughout the lowlands and lower highlands. Gourdini is endemic.
- OLIVE-WINGED BULBUL (Pycnonotus plumosus hutzi) Seen well at Tuaran, Gaya Island, and RDC, and by some at BRL. Hutzi is endemic to northern and eastern Borneo.
- **RED-EYED BULBUL** (Pycnonotus brunneus) This Sundaland bulbul was seen almost daily at Poring and throughout the lowlands; we noted its orange-red iris and its consistently flesh- or pinkish-colored (as opposed to dark gray) legs. One pair was feeding a begging fledgling right in the parking lot at Gomantong. [N]
- SPECTACLED BULBUL (Pycnonotus erythropthalmos) Another Sundaland specialty, this one was seen well only at BRL, where we could see the red iris and yellow eyering.
- FINSCH'S BULBUL (Alophoixus finschii) We had great looks at this scarce Sundaland specialty, considered Near Threatened, along the BRL entrance road, where a pair was nesting. According to Myers, nesting is undescribed in Borneo. [N]
- OCHRACEOUS BULBUL (Alophoixus ochraceus ruficrissus) This big, puff-throated, montane bulbul was seen well at Kinabalu along the lower Silau-Silau, where we called in a responsive pair. The Kinabalu birds are of the endemic subspecies ruficrissus.
- **GRAY-CHEEKED BULBUL** (Alophoixus bres gutturalis) The lowland counterpart of the previous species, this big, puff-throated bulbul was seen first along the Gomantong road and then again at BRL. The taxon is endemic.
- YELLOW-BELLIED BULBUL (Alophoixus phaeocephalus connectens) We saw this pretty bulbul along the Menanggul, then at BRL. The taxon we saw is endemic to northeastern Borneo.
- **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.
- ASHY BULBUL (CINEREOUS) (Hemixos flavala connectens) The Bornean race connectens is split by some from birds of Sumatra and the Malay Peninsula, and those birds are sometimes split from flavala, of the Himalayas to Thailand. It's one to watch, as connectens could be elevated to full species. One proposed English name for connectens is Sociable Bulbul. We saw several of these birds well near the Rafflesia Center, their white throats puffed out.

Cettiidae (Bush-Warblers and Allies)

- BORNEAN STUBTAIL (Urosphena whiteheadi) What a cutie! This scarce, montane endemic--yet another named for John Whitehead--exposes its extensive yellow mouth lining ias it opens its mouth widely to sing. And its song competes with that of a Blackpoll Warbler to test a birder's hearing! Our good looks were near the lower Silau-Silau, where one bird flew rapidly back and forth across the trail as if gathering nesting material to a nest site; our playback interrupted it briefly, and we never saw a nest. [E]
- YELLOW-BELLIED WARBLER (Abroscopus superciliaris schwaneri) This was the bamboo specialist with the sweet song that we saw well along the road near the Rafflesia Center. Schwaneri is endemic to Borneo.
- **MOUNTAIN TAILORBIRD** (Phyllergates cucullatus) Another real cutie, but not actually a tailorbird; this bird is now placed in Cettidae. On this trip it was seen only in Kinabalu Park.
- **SUNDA BUSH-WARBLER** (Horornis vulcanius oreophilus) 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 taxon oreophilus, meaning mountain lover, is endemic to Borneo.

Phylloscopidae (Leaf-Warblers)

- **ARCTIC WARBLER** (Phylloscopus borealis) This boreal migrant was seen by some with Paul at BRL. [b]
- **MOUNTAIN WARBLER (MOUNTAIN)** (Phylloscopus trivirgatus kinabaluensis) A.k.a. Mountain Leaf-Warbler, this one was seen well near "the Hole" at Kinabalu; of the two taxa found in Borneo, ours was the endemic kinabaluensis, the more modestly colored.
- YELLOW-BREASTED WARBLER (Seicercus montis 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. This taxon is endemic to Borneo.

Locustellidae (Grassbirds and Allies)

STRIATED GRASSBIRD (Megalurus palustris) – Seen well on our pre-tour excursion to the wetlands near Tuaran and later in the palm plantations between Sukau and Gomantong, where it sang from the wires.

Cisticolidae (Cisticolas and Allies)

- **ASHY TAILORBIRD** (Orthotomus ruficeps borneoensis) This endearing Sundaland specialty was seen first at Tuaran and then seen or heard daily throughout the lowlands. The taxon is endemic. We marveled at their noisy face-off's, where two birds sang loudly as they faced each other at close range, first at the Gomantong parking lot and then our rooms at BRL.
- **RUFOUS-TAILED TAILORBIRD** (Orthotomus sericeus) Equally endearing, this loud songster was also seen engaged in similar "face-offs" at BRL. Our first ones though were at Sepilok. The species occurs in Sundaland and the Philippines.
- YELLOW-BELLIED PRINIA (Prinia flaviventris latrunculus) Widespread in the more open areas of the lowlands, where it was heard regularly; we saw it at Sepilok, Sukau, and BRL. Latrunculus is endemic to Borneo.

Zosteropidae (Yuhinas, White-eyes, 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. [E]
- **PYGMY WHITE-EYE** (Oculocincta squamifrons) Seeing a flock of these small white-eyes along the road near Tambunan was a nice surprise; but active as they are, they moved quickly away. 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 and in a monotypic genus. [E]

- MOUNTAIN BLACK-EYE (Chlorocharis emiliae) Of a monotypic genus, quite different from other white-eyes, this striking endemic was seen well along the antennas road at Gg. Alab. Emilie Hose was the wife of Charles Hose, for whom Hose's Broadbill is named, and kharis refers to "grace" or "loveliness"; Emilie may have loved green birds, or she may have looked lovely in green! [E]
- **BLACK-CAPPED WHITE-EYE** (Zosterops atricapilla) This Sundaland specialty is a common species in montane Borneo, where we saw them repeatedly at Tambunan and Kinabalu.

<u>Timaliidae (Tree-Babblers, Scimitar-Babblers, and Allies)</u>

- BOLD-STRIPED TIT-BABBLER (Mixornis bornensis) These noisy endemics were seen well at the forest edge en route to the Hornbill Tower; more were heard at Gomantong and BRL. A recent split, resulting in Striped Tit-Babbler being renamed, the Borneo taxa becoming Bold-striped Tit-Babbler and the southeast Asia taxa becoming Pin-striped Tit-Babbler. It is widespread in the lowlands, its "chonk-chonk-chonk" being heard even from our dining table at BRL. [E]
- **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 Gomantong entrance road, but we had to work to see it well as it skulked in the close bushes.
- CHESTNUT-WINGED BABBLER (Cyanoderma erythropterum bicolor) Fairly common throughout the lowlands, it is also a Sundaland specialty that performed mellow duets from RDC and Sukau to Gomantong and BRL. Bicolor is endemic to northern Borneo.
- RUFOUS-FRONTED BABBLER (Cyanoderma rufifrons) Heard from the BRL canopy walkway, but it wouldn't play. [*]
- CHESTNUT-BACKED SCIMITAR-BABBLER (Pomatorhinus montanus bornensis) We has nice looks at a pair of these Sundaland beauties along the BRL entrance road. Bornensis is endemic.
- **BLACK-THROATED BABBLER** (Stachyris nigricollis) Another Sundaland specialty regarded as Near Threatened, this one was seen well along the trail at the RDC. It's another striking babbler that makes one fall in love with babblers.
- CHESTNUT-RUMPED BABBLER (Stachyris maculata) This babbler was the bigger one with the streaks below and pale iridi that flew back and forth across the BRL entrance road our first morning there. It's another Sundaland specialty considered Near Threatened.
- **GRAY-THROATED BABBLER** (Stachyris nigriceps borneensis) This Sundaland specialty was seen at Tambunan and in Kinabalu Park, where we watched it carrying food for young; the taxon borneensis is endemic. [N]

Pellorneidae (Ground Babblers and Allies)

- MOUSTACHED BABBLER (Malacopteron magnirostre cinereocapilla) This Sundaland specialty with the lovely whistles was seen at BRL. The taxon is endemic to Borneo.
- **SOOTY-CAPPED BABBLER** (Malacopteron affine phoeniceum) Seen with understory flocks at BRL. It occurs only in Sundaland and is another one considered Near Threatened; phoeniceum is a Bornean endemic.
- **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.
- RUFOUS-CROWNED BABBLER (Malacopteron magnum saba) This is the larger—magnum—of these two look-alikes, with gray legs and no scaling on the crown. We encountered it both along the BRL canopy walkway and out the entrance road on our final morning at BRL. Like most of these remarkable babblers, it's found only in Sundaland and is considered Near Threatened. M. m. saba is endemic to Sabah and Brunei.
- **BLACK-CAPPED BABBLER** (Pellorneum capistratum morrelli) This charming babbler performed nicely for us along the Kingfisher Trail en route to the Hornbill Tower at RDC. Like most of the babblers we saw, it's another Sundaland specialty, morrelli a Sabah endemic.
- **TEMMINCK'S BABBLER** (Pellorneum pyrrogenys canicapillus) Yet another babbler confined to Sundaland, this one is a highlander. Skulker that it is, it never did show for us at Kinabalu. P. p. canicapillus is a montane Sabah endemic. [*]
- **SHORT-TAILED BABBLER** (Pellorneum malaccense poliogenys) Surprise—another Sundaland specialty, the taxon P. m. poliogenys endemic to Borneo. We saw it well along the BRL entrance road when one came repeatedly onto a nearby mossy log in response to playback.
- WHITE-CHESTED BABBLER (Pellorneum rostratum macropterum) Foraging in pairs near the water's edge, this Sundaland specialty, Near Threatened, was seen well first in the flooded forest near the beach on Gaya Island and then repeatedly along the Menanggul. The Bornean taxon, macropterum, is endemic.
- **FERRUGINOUS BABBLER** (Pellorneum bicolor) Bright orange-rust above and white below, this distinctive babbler was seen nicely along the BRL entrance road on a couple of days. It's another Sundaland specialty.
- STRIPED WREN-BABBLER (Kenopia striata) Another Sundaland specialty, this scarce babbler was seen nicely on the Jacuzzi loop trail, 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 at the edge of the trail while we were stalking Chestnut-necklaced Partridges! It was exceptionally cooperative for all there (sorry, Lorna). A.k.a. Bornean Ground-Babbler, it's considered Vulnerable. [E]
- HORSFIELD'S BABBLER (Turdinus sepiarius harterti) This Sundaland specialty was seen along the Jacuzzi trail at BRL; T. s. harterti is endemic to northern Borneo.
- **BLACK-THROATED WREN-BABBLER** (Turdinus atrigularis) This endemic skulker was not singing much during our visit. We managed to hear one on our afternoon well out the BRL entrance road, but we couldn't get close to it and it wouldn't come in. Considered Near Threatened. [E*]
- MOUNTAIN WREN-BABBLER (Turdinus crassus) Another sparsely distributed endemic, this one showed nicely inside the forest along the Mempening trail. [E]

Leiothrichidae (Laughingthrushes and Allies)

- **BROWN FULVETTA** (Alcippe brunneicauda) Yet another Sundaland specialty that is considered Near Threatened; it was seen quite nicely at BRL, where it came in close in response to playback. Its charm is in its personality, not its looks. The fulvettas, once placed with the Ground Babblers, are now grouped with the Laughingthrushes.
- SUNDA LAUGHINGTHRUSH (Garrulax palliatus schistochlamys) Found only on Sumatra and Borneo, this is one of the montane specialties of the trip. We saw our first ones near the Rafflesia Center and then encountered them almost daily with big-bird flocks at Kinabalu. Schistochlamys is the taxon endemic to Borneo.
- BARE-HEADED LAUGHINGTHRUSH (Garrulax calvus) A split from Black Laughingthrush, this weirdly wonderful laughingthrush has become

another Bornean endemic. Most were lucky to have had good looks at several responsive birds (with the prominent red bills) with a big-bird flock on the Mempening Trail at Kinabalu. [E]

CHESTNUT-HOODED LAUGHINGTHRUSH (Ianthocincla treacheri treacheri) – Cornell has now split treacheri from Chestnut-capped Laughingthrush, producing another Bornean endemic of the north-central mountain ranges. 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. But we had beautiful looks at stunning males near the fruiting fig at Poring.

Muscicapidae (Old World Flycatchers)

- BROWN-STREAKED FLYCATCHER (Muscicapa williamsoni umbrosa) 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). Dauurica, 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.
- ORIENTAL MAGPIE-ROBIN (Copsychus saularis adamsi) Fairly common in edge habitats throughout the lowlands and foothills. We had many nice looks, the first coming on Gaya Island. C. s. adamsi, visually distinct from two other taxa occurring in Borneo, is black below with a white crissum and white outer tail feathers. Confusion about the taxa is in part owing to intergrades between adamsi and C. s. pluto, and in part because the 2nd edition of Phillipps & Phillipps seems to have reversed captions. Adamsi, pluto, and problematicus are all endemic to Borneo. [N]
- RUFOUS-TAILED SHAMA (Copsychus pyrropygus) A generally shy and uncommon resident of lowland rainforest, this Sundaland specialty was singing spontaneously along the BRL entrance road, and Paul whistled it in for great views. Near Threatened.
- 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 on Gaya Island but perhaps best at BRL, where we also had one nesting. The taxon stricklandii, endemic to Sabah and northeastern Kalimantan, is elevated to species status by some (including Myers & Phillipps), but it is still treated as a subspecies of White-rumped by the Cornell Clements checklist. [N]
- PALE BLUE-FLYCATCHER (Cyornis unicolor) A singing male was heard by all (and seen in silhouette) from the BRL canopy walkway our first afternoon there. But the light was poor; so it was basically heard only. Some of us saw it then on our final morning at BRL.
- **LONG-BILLED BLUE-FLYCATCHER** (Cyornis caerulatus caerulatus) This Sundaland blue-flycatcher, sometimes called Large-billed, was seen well by all along the Jacuzzi trail, BRL. Considered Vulnerable as a species, nominate caerulatus is endemic to Borneo.
- MALAYSIAN BLUE-FLYCATCHER (Cyornis turcosus turcosus) We had lovely views of both sexes of this Near Threatened Sundaland blue-flycatcher along the Menanggul. Nominate turcosus is endemic to Borneo.
- BORNEAN BLUE-FLYCATCHER (Cyornis superbus) We had great views of two different males of this endemic at BRL. [E]
- MANGROVE BLUE-FLYCATCHER (Cyornis rufigastra) A singing male was seen nicely by all in the coastal woodland on Gaya Island on our pre-tour excursion. The species is widespread in mangroves, but it's not to be seen on our regular tour route. The Sundaland bird is of the nominate race.
- **GRAY-CHESTED JUNGLE-FLYCATCHER** (Cyornis umbratilis) Another Near Threatened Sundaland specialty, this one was seen nicely along the Segama River trail at BRL.
- **PYGMY BLUE-FLYCATCHER** (Muscicapella hodgsoni) This little beauty breeds at Kinabalu but it is scarce; we had fairly quick looks at a male along the road below the Timpohon Gate, where it was foraging in the same fruiting trees as all the Little Cuckoo-Doves.
- **BLUE-AND-WHITE FLYCATCHER** (Cyanoptila cyanomelana) An Asian breeder that is an uncommon passage migrant in Borneo, this beauty (a male) was seen well near the Rafflesia Center. [b]
- **INDIGO FLYCATCHER** (Eumyias indigo cerviniventris) A common montane breeder, this flycatcher with the sweet dawn song was seen well several times at Kinabalu. Cerviniventris is endemic to Borneo.
- **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 and then (for some) from the BLR canopy platform on our final morning there. It's an unusual shade of blue.
- **EYEBROWED JUNGLE-FLYCATCHER** (Vauriella gularis) This distinctive, unobtrusive endemic was seen beautifully along the Silau-Silau trail in Kinabalu Park. [E]
- WHITE-BROWED SHORTWING (Brachypteryx montana erythrogyna) This sexually dimorphic, montane species lives along streams at Kinabalu; Mikell found our first one, but it proved elusive. I think most folks caught up with it though along the Silau-Silau. Erythrogyna is endemic to Borneo.
- **BORNEAN WHISTLING-THRUSH** (Myophonus borneensis) Perhaps the plainest of the whistling-thrushes, this chunky endemic was seen on several occasions at Kinabalu, perhaps nowhere better than right around our Hill Lodge. [E]
- WHITE-CROWNED FORKTAIL (Enicurus leschenaulti frontalis) Seen at BRL, but mostly by Nico, who spotted one through a tiny hole to a stream where it was bathing, along the far section of the BRL entrance road. We could all hear it and some folks got on it briefly, at least in flight. Nico and Linda and I also fllushed one off the road as we originally drove into BRL. This taxon is a lowlander and may well be split from its montane congener, borneensis, which both Myers and Phillipps (following Moyle et al., 2005) split. For that reason we have entered both taxa here.
- WHITE-CROWNED FORKTAIL (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. Our first ones were a surprise: They flushed from a roadside ditch below Masakob Waterfall, where I've not seen them previously. We later saw it beautifully along the lower Silau-Silau at Kinabalu.
- CHESTNUT-NAPED FORKTAIL (Enicurus ruficapillus) This fancy Sundaland specialty was seen by the group with Paul on our final morning at BRL--right where the rest of us had been watching for it: from the BRL canopy walkway where it crosses the stream. Phyllis even got a photo, looking straight down! (My group must have been off on the "pheasant trail" at the time.
- RUFOUS-CHESTED FLYCATCHER (Ficedula dumetoria) This Near Threatened Sundaland flycatcher was seen nicely in the forest understory at

- BRL, when a lovely male responded well to playback.
- LITTLE PIED FLYCATCHER (Ficedula westermanni) We encountered this widespread species, a little beauty in black and white, carrying nesting material to a nest site at Kinabalu Park. [N]
- MUGIMAKI FLYCATCHER (Ficedula mugimaki) We had several sightings of these pretty Asian migrants along the road near the Tambunan Rafflesia Center and at Kinabalu. [b]
- **SNOWY-BROWED FLYCATCHER** (Ficedula hyperythra) We had a nice pair of these widespread montane flycatchers at Kinabalu Park. The subspecies that breeds in Sabah is sumatrana.

Turdidae (Thrushes and Allies)

- **ORANGE-HEADED THRUSH** (Geokichla citrina) Nico got us on this lovely thrush, scarce in Borneo, at the Tambunan Rafflesia Center. The race that breeds in the mountains of northern Borneo is aurata, an endemic taxon. But during migration there could be other migratory taxa moving through.
- **EYEBROWED THRUSH** (Turdus obscurus) Our "hot" fruiting fig at Poring was attracting a few of these boreal migrants, which we scoped. Then an exciting flock of ca. 30 birds flew overhead in the late afternoon--evidence of migration in action! [b]

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, starting pre-tour at Tuaran and KK.
- **COMMON HILL MYNA** (Gracula religiosa) The only native myna in Borneo, this one is also the handsomest. We saw it several times, from the RDC walkway, in the Kinabatangan, and at BRL.
- JAVAN MYNA (Acridotheres javanicus) This was the one at Sepilok, where introduced birds have become 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 Sukau and BRL. Both leafbirds are Sundaland specialties.
- **LESSER GREEN LEAFBIRD** (Chloropsis cyanopogon) The more common of the two leafbirds, this one was seen first at Poring, then from the RDC canopy towers, then almost daily at BRL. 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 saw them along the roadside near the Rafflesia Center. [E]

Dicaeidae (Flowerpeckers)

- YELLOW-BREASTED FLOWERPECKER (Prionochilus maculatus) This Sundaland specialty was seen well on our first full day at BRL.
- YELLOW-RUMPED FLOWERPECKER (Prionochilus xanthopygius) This handsome endemic was seen from Poring through BRL, perhaps best from the RDC walkway and along the road edge at BRL. [E]
- YELLOW-VENTED FLOWERPECKER (Dicaeum chrysorrheum) Seen very nicely in the fruiting fig at Poring Hot Springs, where a number of birds were feeding at close range.
- **THICK-BILLED FLOWERPECKER** (Dicaeum agile) A widespread species that is quite uncommon in Borneo; we were lucky to see it well through the scope in the fruiting fig at Poring Hot Springs. We could see its red iris and distinctly streaked underparts.
- **BROWN-BACKED FLOWERPECKER** (Dicaeum everetti) Our "hot" fruiting fig at Poring offered up this scarcer flowerpecker as well: We examined its whitish iris and obscure streaking in the scope! The species is restricted to the Malay Peninsula and Borneo, and we saw the nominate subspecies.
- **BLACK-SIDED FLOWERPECKER** (Dicaeum monticolum) After our first male near the Rafflesia Center, we had great views of this handsome montane endemic right outside our Hill Lodge at Kinabalu. [E]
- **ORANGE-BELLIED FLOWERPECKER** (Dicaeum trigonostigma dayakanum) Common and widespread, the males of this endemic taxon are quite striking! Their song is one of the most frequently heard throughout the lowlands. We had numerous great studies, from the fruiting fig at Poring to RDC to BRL.
- **SCARLET-BACKED FLOWERPECKER** (Dicaeum cruentatum nigrimentum) This striking flowerpecker was seen nicely at Sepilok, where it was common; the subspecies is endemic to Borneo.

Nectariniidae (Sunbirds and Spiderhunters)

- **RUBY-CHEEKED SUNBIRD** (Chalcoparia singalensis borneana) Several were seen well from the RDC canopy towers, a nice pair in the Kinabatangan, and several at BRL. This taxon is endemic to Borneo.
- PLAIN SUNBIRD (Anthreptes simplex) Rather aptly named, this sunbird was seen well only at BRL; another Sundaland specialty.
- **PLAIN-THROATED SUNBIRD (BROWN-THROATED)** (Anthreptes malacensis borneensis) Seen well on Gaya Island pre-tour; and then we saw a nicely lit male at the RDC. This taxon, which belongs to the brown-throated rather than the gray-throated group, is endemic to Borneo.
- VAN HASSELT'S SUNBIRD (Leptocoma brasiliana) Formerly known as Purple-throated, this small sunbird is electric in good light! We had nice looks at a male at eye level from the Bristlehead Tower at RDC. In case you're wondering about the rather incongruous epithet, "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). This probably accounts for the moniker "brasiliana," considering 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 flowering Ixora, just outside the entrance to the RDC, where we saw a male nicely (even though the tree was past its prime).
- **OLIVE-BACKED SUNBIRD** (Cinnyris jugularis) Common in disturbed habitats, this widespread species was seen at Tuaran, Gaya Island, Sepilok, and at the Lahad Datu airport.

- **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 near Tambunan, and then both outside our rooms, and sometimes during lunch, at Kinabalu.
- **CRIMSON SUNBIRD** (Aethopyga siparaja) This beauty, the epithet "Eastern" now dropped, was seen wonderfully at RDC and at BRL. The lowland counterpart of the previous species (but with a dark blue tail).
- LITTLE SPIDERHUNTER (Arachnothera longirostra buettikoferi) The commonest of the spiderhunters, this one was seen repeatedly—and heard unremittingly! The repetitive song is highly suggestive of that of a Chiffchaff. We recorded them at Poring, RDC, Sukau, and BRL, where we saw one carrying nesting material and enjoyed them as they visited the blooming gingers and cannas along the boardwalk beyond our chalets. Endemic to Borneo, this taxon was named for Johann Büttikofer, a Swiss botanist and zoologist. [N]
- **PURPLE-NAPED SPIDERHUNTER** (Arachnothera hypogrammicum) Note that this understory "sunbird," with the distinctive habit of fanning and flicking its tail, has been transferred from Hypogramma into the spiderhunter genus Arachnothera by Cornell. We saw a very responsive pair along the Gomantong Road and also saw them at BRL.
- WHITEHEAD'S SPIDERHUNTER (Arachnothera juliae) We had no luck with this distinctive endemic near the Rafflesia Center, where we often see it, but then we heard one giving its distinctive burry calls from way up the hill above us along the upper Silau-Silau at Kinabalu. Sorry. [E*]
- YELLOW-EARED SPIDERHUNTER (Arachnothera chrysogenys) This Sundaland specialty was seen from the RDC tower, at Gomantong, and at BRL. [N]
- **SPECTACLED SPIDERHUNTER** (Arachnothera flavigaster) This big spiderhunter with the prominent yellow eye-ring is an uncommon Sundaland specialty; it was seen along the Menanggul.
- BORNEAN SPIDERHUNTER (Arachnothera everetti) Formerly "Streaky-breasted" Spiderhunter, the taxon everetti that occurs in Sabah was recently elevated to species status by Cornell, thus becoming another full Bornean endemic. After hearing it at Tambunan and Kinabalu, most folks had a good look at it along the boardwalk at BRL. [E]

Motacillidae (Wagtails and Pipits)

- **EASTERN YELLOW WAGTAIL (EASTERN)** (Motacilla tschutschensis tschutschensis) Several were heard flying over some fields near Tuaran pre-tour. [b*]
- **GRAY WAGTAIL** (Motacilla cinerea) A regular winter visitor to Borneo, this pretty wagtail was first flushed from the wet road edges near the Rafflesia Center; but we had dynamite views of it foraging in the lawn outside our Hill Lodge at Kinabalu. [b]
- ORIENTAL PIPIT (Anthus rufulus malayensis) Also known as Paddyfield Pipit, this one was striding along the runway at the Lahad Datu airstrip.

Passeridae (Old World Sparrows)

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

Ploceidae (Weavers and Allies)

BAYA WEAVER (Ploceus philippinus) – Not even included in the Myers field guide, 2009, this colonial Asian weaver with the yellow head has become established near Sandakan in recent years, apparently from a feral population. They were busy nest-building along the road outside the Sepilok Nature Resort. We also saw a few in the plantation country between Sepilok and Sukau. [IN]

Estrildidae (Waxbills and Allies)

- **DUSKY MUNIA** (Lonchura fuscans) The most ubiquitous of all the Bornean endemics, this one was best seen at its nest at Poring; but our best looks were at BRL, where they were feeding in the grass just outside the dining room. [EN]
- 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 Tuaran and Gaya Island, but it was also seen at Poring, Sepilok, and en route to Lahad Datu.
- **NUTMEG MANNIKIN** (Lonchura punctulata cabanisi) Also known as Scaly-breasted Munia, this taxon is arecent colonist from the Philippines. We saw small numbers pre-tour in the fields near Tuaran and on Gaya Island.

MAMMALS

- MOON RAT (Echinosorex gymnurus) A few lucky folks got on this white, possum-like Insectivore along the banks of the Menanggul on a night cruise.
- **COLUGO** (Cynocephalus variegatus) We had a wonderful view of one of these "flying lemurs" on our final night drive at BRL. Yip! Yip! Belonging to the order Dermoptera, the Colugo has recently been shown to be our closest living relative outside of primates.
- 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 Bat Hawks 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.
- **CRAB-EATING MACAQUE** (Macaca fascigularis) A.k.a. Long-tailed Macaque; it was first seen on Gaya Island pre-tour and then common along the Kinabatangan and its tributaries.
- **PIGTAIL MACAQUE** (Macaca nemestrina) Less common than the last species, it was first seen near the Rafflesia Center and then at the Gomantong road edge. But our most enjoyable sightings were from the boats in the Kinabatangan.
- 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. We saw it along the Kinabatangan.
- RED LEAF MONKEY (Presbytis rubicunda) This handsome endemic was seen nicely at Gomantong and later 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 treat. [E]
- **GRAY GIBBON** (Hylobates muelleri) A.k.a. Bornean Gibbon. What a remarkable sound they make! We heard them from the RDC towers, from the Gomantong road, and at BRL; but they were always distant, and we never caught sight of them. [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 8 years old, along the RDC canopy walkway. It performed for us and

- permitted close photos. We later had them at Gomantong, where we saw a female with a baby, and some saw one at BRL. 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) Generally considered a Sundaland specialty of Near Threatened status, this big, long-tailed squirrel was seen well from the RDC canopy walkway.
- 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.
- KINABALU SQUIRREL (Callosciurus baluensis) Adrian pointed out this scarce montane endemic as it hurried across the road through the forest canopy along the upper Silau-Silau at Kinabalu. [E]
- PLANTAIN SQUIRREL (Callosciurus notatus) Fairly common in the lowlands, where we saw it at Sukau and Gomantong.
- **BORNEAN BLACK-BANDED SQUIRREL** (Callosciurus orestes) We saw this squirrel best on the railing of the platform at the Timpohon gate. It was the one with the small, round white patch behind the ear, the striped sides, and a whitish belly. [E]
- PLAIN PYGMY SQUIRREL (Exilisciurus exilis) The endearing pygmy of the lowlands; first seen at Gomantong, but Mikell kept finding them--in the Kinabatangan and at BRL, where it was tearing around the tree limbs and even the bannisters. It sometimes foraged on mosses or lichens at very close range. [E]
- WHITEHEAD'S PYGMY SQUIRREL (Exilisciurus whiteheadi) The fanciest of the little squirrels, this one too is a montane Bornean endemic. We saw this one with the distinctive ear tufts at Kinabalu. [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. But what we saw instead was the next species. Later, Hazwan put the scope on the head of one poking out of its cavity high in a tree above the Gomantong parking lot; it played hide and seek with us, but some folks saw it before it withdrew. Though widespread in southeast Asia as a species, this taxon, rajah, is endemic to Borneo.
- **BLACK FLYING SQUIRREL** (Aeromys tephromelas) A fabulous view of this Sundaland specialty was our reward for waiting until dark in the RDC canopy walkway. Instead of the expected Red Giant, this, the scarcer, species emerged and sailed right over our heads in the spotlights! It was one of the mammalian highlights of the whole trip.
- NORWAY (BROWN) RAT (Rattus norvegicus) One of these introduced rats was seen right in (don't tell anyone) the open-air dining room at BRL.
- **COMMON PALM CIVET** (Viverra zibetha) This was the civet with the blackish, raccoon-like face that we saw on our final night drive at BRL.
- **LEOPARD CAT** (Felis bengalensis) Another of the mammalian highlights of the trip was seeing this beautiful little spotted cat right beside the road on our second night drive at BRL. Though the species is widespread from India through Asia and Sundaland, the taxon we saw, borneoensis, is endemic to Borneo.
- **BEARDED PIG** (Sus barbatus) We spotlighted two of these big pigs along the Menanggul and then saw one at BRL. The species is restricted to Sundaland and the Philippines.
- **GREATER MOUSE DEER** (Tragulus napu) Another of the mammalian highlights was our terrific views of this cutie, the relatively larger of the two mouse deer, by night at BRL. It was yet another example of Paul's terrific spotlighting!
- **SAMBAR** (Cervus unicolor) A few does of this heavy-bodied deer, widespread in Asia, were spotlighted by night at BRL.

ADDITIONAL COMMENTS

Among the joys of birding Borneo are the many delightful non-avian distractions that come in an array of extraordinary forms from a variety of other fauna and flora. In addition to the birds, our triplist database contains most of the mammals, but even there we saw one distinctive rodent not included: The large rat with the long, white-tipped tail that we spotlighted along the BRL Nature Trail turns out to be the Gray Tree Rat, Lenothrix canus, its white tail unique among Bornean rats.

We had a long list of additional write-ins, including a few plant species of exceptional interest. To mention a very few, emphasizing those that we were able to identify:

Among the plants:

- Rafflesia keithii We traveled 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 and impressive 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 one bud that was just beginning to open and another flower on its third day open. 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 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, according to Adrian, Nepenthes of stenophylla, an insect-eater.

Notes on a few other critters encountered on the tour:

- —The nocturnal flat, lime green land snail with the translucent shell (Rhinocochlis nasuta) was seen by some at BRL.
- —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, devouring spiders, stick insects, and beetle larvae.
- —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 stolli) 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 fairly common from the lowlands to lower Kinabalu; the big, green Rajah Brooke's Birdwings (Trogonoptera brookiana) at Kinabalu; the big, long-tailed, brown and white Lyssa moth (L. menoetcus) and the huge Atlas moth (Atticus atlas)--with the largest surface area and wingspan of any moth--on the wall of our lodge at Kinabalu. (See the following website to help ID some of your other butterfly photos: http://www.learnaboutbutterflies.com/Malaysia%20thumbs.htm.)
- --Of a number of interesting beetles, I was able to identify the big staghorn beetle we saw at Kinabalu (a male Eurytrachellulus reichei); and the big longhorn beetle that interrupted our breakfast in the BRL dining room (Xixuthrus microcercus).
- --I haven't found a name for the wasps that build the geometrical nests under the picnic shelters at Kinabalu, but they are certainly worth remembering!
- —Oh, and the leeches. It had recently started raining before our tour, and we "experienced" both Brown Leeches (Haemadipsa zeylanica) and Tiger Leeches (H. picta). They informed our fashion and left some of us with a "battle scar" to show off back home. But not all of us managed to join the donors club.

Fish, amphibians, and reptiles of particular note:

- --Garfish, a.k.a. sea needle (Belone sp.), was the long, slender fish with the elongated snout that we saw so nicely in the saltwater from the Gaya Island pier just before leaving.
- —Wallace's Flying Frog (Rhacophorus nigropalmatus, family Rhacophoridae) Paul spotlighted this beauty on a night drive at BRL, over a pool right beside the road! 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.
- —Harlequin Flying Treefrog (Rhacophorus pardalis) Another canopy inhabitant that sails to the forest floor to breed. We saw this one at the BRL "frog pond," which had filled with water over the last two weeks.
- —Jade Treefrog (Rhacophorus dulitensis), Black-eared Treefrog (Polypedates macrotis), & Cricket Frog (Hylorana nicobariensis), the latter the noisy one, were all seen nicely at the same BRL "frog pond."
- —Smith's Giant Gecko, or Giant Forest Gecko (Gekko smithii) As split from Tokay Gecko (G. gecko), this is the one that we heard so frequently throughout the lowlands. We saw it at Sukau Rainforest Lodge, where it played hide-and-seek along the covered section of the boardwalk to the dining area.
- —Water Monitor (Varanus salvator) We saw some big ones, especially in the Kinabatangan, where we had them along the sandy waterway in the sun. Also swimming across the lake at the Sepilok Nature Resort.
- —Green Fence Lizard, or Green Crested Agamid (Bronchocela cristatella) This was the bright green lizard with the long thing tail that we saw so well just outside Gomantong Caves.
- --Blue-eyed Angle-headed Lizard (Gonocephalus) The sleeping lizard we photographed along the BRL Nature Trail, twice the same night, was this species. The first was a male, the second a female.
- --"Flying" lizards (Draco spp.) Our first ones were sailing and chasing each other near our "hot" fruiting fig at Poring, and we saw others at Sepilok and BRL, probably of more than one species. The male we watched displaying--by extending its pointed yellow throat patch--at BRL was likely D. fimbriatus.
- --"Common sun skink" (Eutropis multifasciatus) The most common skink we encountered (the bronzy-brown one in the leaf litter throughout the lowlands) was probably this species, formerly in the genus Mabuya. It occurs throughout the region.
- —Saltwater or Estuarine Crocodile (Crocodylus porosus) We saw a 4-foot croc in the Kinabatangan. 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; nocturnal, near water, feeding primarily on homeotherms; kills prey by constriction. We saw a beautiful example along the Menanggul on a night cruise.
- --Mangrove Cat Snake (Boiga dendrophila) A.k.a. Yellow-banded Cat Snake, this pretty black and yellow snake is nocturnal, eating birds (especially their nestlings & eggs), amphibians, lizards, & other snakes. It's even known to take mouse deer! It's usually seen coiled on a branch over water during the day, as where we saw it along the Tenangang one afternoon.

Like Kinabalu itself, that's just the "tip of the batholith." There are LOTS of fabulous plants and critters out there, and we encountered a wonderful sampling of them. We need another lifetime for all the rest!

Totals for the tour: 296 bird taxa and 25 mammal taxa