

Sabah, Borneo March 2016 report

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This brief, mostly “just the facts” report is primarily an annotated checklist of the mammals we encountered, designed to be useful for Mammal Watchers considering a trip to Sabah, and especially the “recently discovered” Deramakot Forest Reserve. First, a bit of background; since our marriage in 1990 Aram Calhoun and I have organized much of our travel around finding new vertebrate families. This goal first took us to Borneo in 1998 and we wandered about for two weeks, just the two of us, finding mouse deer, colugos, gibbons, broadbills, shrimp fish, rabbitfish, and more. Last year, with only 4 of 243 bird families remaining, we decided to return to Borneo for the endemic Bornean bristlehead, which had been designated a distinct family after our previous trip. While planning this trip I discovered the Deramakot reports and was very enticed by the possibility of seeing a clouded leopard and other elusive carnivores, notably the banded linsang, another recently split off family.

Working with Tom Hewitt at Adventure Alternative Borneo, which seems to have cornered the market on trips to Deramakot, we designed the following itinerary: two nights at Sepilok with an evening flying squirrel walk; one night on the Kinabatangan River with dusk and dawn boat rides and a mid-day visit to Gomatong Cave; five nights at Danum Valley, split 3 at the Field Center (DVFC; 2 night walks; 1 night drive) and 2 at Borneo Rainforest Lodge (BRL; 1 night walk; 1 night drive); four nights at Deramakot (DFR) with drives every night and two long night walks; and two nights near Mt Kinabalu with walks around Lupa Masa and along the main park road. With this itinerary in hand I recruited two biologist friends, Ron Joseph and Larry Master, and later Larry invited three of his friends, Kass, Tammy, and Paul, who are more casual naturalists. Seven people made a large group but it meant we had two guides, and often two vehicles, and thus lots of flexibility. One of our guides, Mike Gordon, is already well known to readers of Deramakot reports; his coleader was the very charming and capable Zahari bin Zainal. So without further ado:

Borneo Mammal list March 5 -19, 2016. [including two species Aram and I missed but others saw] following taxonomy of Phillipps and Phillipps 2015 (a fabulous new book on Bornean mammals and ecology.)

Creagh’s horseshoe bat - *Rhinolophus creaghi* Most common bat in the photos from Gomatong but we would like confirmation of identification. See photo in postscript below.

Bicolored roundleaf bat - *Hipposideros bicolor* A single photo from Gomatong appears to be of this species, but we are only confident about the genus id.

Little bent-winged bat - *Miniopterus australis* Several apparent *Miniopterus* appear in one photo from Gomatong, but these also could be *M. magnater*.

Asian whiskered myotis - *Myotis muricola* Small group in garden of BRL identified by their guides.

Mountain tree shrew *Tupaia montana* Two at Mt Kinabalu

Sunda pangolin - *Manis javanica* One at DFR gave us a few minutes of close viewing. Measured by our excitement and the fact that Mike had only seen one before, this was the highlight of the trip.

Bornean colugo - *Galeopterus borneanus* Highlight was a trio (male-female-young) on one branch at DFR

Western tarsier - *Cephalopachus bancanus* Two at DFR and one at DVFC

Philippine slow loris - *Nycticebus mengensis* Close, long views with one at DVFC, and three at DFR

Red langur - *Presbytis rubicunda* Groups at DVFC,DFR,Gomatong

Silvered langur - *Trachypithecus cristatus* Nice views of groups at Kinabatangan

Proboscis monkey - *Nasalis larvatus* Great views of multiple, large groups at Kinabatangan

Long-tailed macaque - *Macaca fascicularis* Sepilok,DVFC,DFR

Pig-tailed macaque - *Macaca nemestrina* One small group at Gomatong

North Bornean gibbon - *Hylobates funereus* We heard them daily at DVFC & BRL and had superb views of five groups at DFR, but just on one morning.

Orangutan - *Pongo pygmaeus* Our first wild ones were in a loose group of five at Gomatong, but the best views were at BRL: close views of a large male and a mother interacting with her baby; one each at DVFC and DFR.

Prevost's squirrel - *Callosciurus prevostii*. Our most ubiquitous mammal

Plantain squirrel - *Callosciurus notatus*. Seen at Sepilok & DFR

Bornean pygmy squirrel - *Exilisciurus exilis* Brief view of one at BRL

Whitehead's pygmy squirrel - *Exilisciurus whiteheadi* One at Mt Kinabalu

Giant squirrel - *Ratufa affinis*. One each at DFR, DVFC, Sepilok

Bornean mountain ground squirrel - *Dremomys everetti* Some at Mt Kinabalu

Black flying squirrel - *Aeromys tephromelas* One each at BRL and DFR

Thomas's flying squirrel - *Aeromys thomasi* Almost as numerous as "reds" at DVFC and DFR

Spotted Giant Flying Squirrel -- *Petaurista elegans* One on night walk at Mt Kinabalu

Red giant flying squirrel - *Petaurista petaurista* Most common species on night walks and drives at DVFC,DFR, & Sepilok. Best gliding views from walkway at Sepilok.

Sabah giant rat - *Leopoldamys sabanus* One near Mt Kinabalu

Malayan porcupine - *Hystrix brachyura* One during night walk at DFR

[Sunda skunk] (teludu) - *Mydaus javanensis* Mike saw one on a solo walk at Kinabatangan

Bornean striped palm civet (Small-toothed palm civet) - *Arctogalidia stigmatica* By far the most commonly encountered carnivore at DFR and DVFC

Island palm civet (Common palm civet) - *Paradoxurus phillipinensis*. One each at DFR and DVFC

Malay civet - *Viverra zibetha* Four at DFR; 2 at DVFC

Masked palm civet - *Paguma larvata* One at BRL

Binturong - *Arctictis binturong* Two foraging in a tree at DVFC

Banded civet - *Hemigalus derbyanus* Two at DFR; although they were gray morphs they were easy to distinguish from a linsang.

Bornean clouded leopard - *Neofelis diardi borneensis* A close range, prolonged watch of a large male walking down the road at DFR

[Marbled cat] - *Pardofelis marmorata* Tammy and Paul saw one at BRL

Leopard cat - *Prionailurus bengalensis* 1-3 on most night drives at DVFC and DFR

Bornean pygmy elephant - *Elephas maximus borneensis* On the access road to DVFC we found ourselves surrounded by a trumpeting group and had brief, close looks at 5 including 2 calves.

Bearded pig - *Sus barbatus* Glimpses at DVFC, DFR

Greater mouse deer - *Tragulus napu* Seen most nights at DVFC, BRL, DFR

Sambar deer - *Cervus unicolor* Few seen repeatedly on lawns at DVFC, DFR

Notable Dips:

Hose's langur To score all ten possible primates we waited two hours for these at a fairly reliable site near DFR, but no luck.

Spotted Linsang This representative of a newly split family was arguably our most desired species because it is so rarely seen—and we confirmed that pattern. In particular a 3-hour night walk at Lupa Masa near Poring Spring was unsuccessful.

Pencil-tailed tree shrew This newly recognized, monotypic family was also a target and Mike has a site at DFR, but a 3-hour night walk there did not produce one. Our luck went 180 degrees on the drive home with the pangolin encounter. *Any suggestions on how to find this species or either Asian linsang are most welcome. Please email: mhunter@maine.edu*

Postscript A: In hindsight, I am very glad we allocated significant time to both DV and DFR, but I expect some people will be evaluating our list to choose one over the other. That is problematic for three reasons:

- 1) “unpredictability” For example, on our first morning at DFR we encountered five groups of gibbons and enjoyed the best acrobat watching ever; same road, next morning, no gibbons at all; next morning, one sedentary loner.
- 2) “the denominator effect” We saw far more at DFR in significant part because we were out 3-5 hours per night versus 1-2 at DV. The species seen per hour would not be as different. At BRL your hours out at night are constrained. At DVFC you can walk as long as you want; at DFR there are no restrictions on walking or driving.
- 3) “relative probabilities” I am not sure it makes sense to choose site A over B if it increases your chance of seeing a rare species from 0.01 to 0.02, even though you have doubled your relative probabilities. That is less true if you are highly focused on one rare species.

Perhaps the main consideration is the distribution of one particular *Homo sapiens*, Mike Gordon. Long before we arrived at DFR we were referring to it as “Mike’s Kingdom.” Throughout our trip he was passionate and driven, but he really hit his stride in DFR, showing his consummate skills as a mammal finder and his familiarity with that site.

Postscript B: Knowing that we are not alone among Jon’s disciples in having divided loyalties, let me mention that we did find the Bornean bristlehead, but only after 6 days of focused searching. We also scored six other new families: three of freshwater fishes, two of frogs, and a turtle. Stay tuned for a blog site that I plan to develop about all this.

Postscript C: Larry Master took 4900 photographs during our trip and a selection will appear at Masterimages.org in due course. For now, we would love to hear any opinions about our tentative bat identifications based on these three photos.

We think the first photo is of *R. creaghi* based on comparing it (and other photos) to the illustrations in Phillipps and Phillipps (which has the same core plates as Payne, Francis, & Phillipps)



We are quite sure the second photo is a *Hipposideros* and the best match seems to be with *H. bicolor* but it is hard to see the face clearly.



For photo 3 the P&P illustrations definitely suggest *Miniopterus* and we lean toward *M. australis* because these appear in the same photo as *R. creaghi* and are distinctly smaller, whereas *M. magnater* would be about the same size as *R. creaghi*.

