

BORNEAN MAMMAL TOUR 2017

- A Quest For The Elusive Mammals of The Bornean Rainforest



Marbled Cat- © Jo Dale

Jo Dale, Margarita Steinhardt, Jens Hauser, Steve Morgan
February- March 2017

Bornean Mammal Tour 2017

1 Background

The tour was the brainchild of Jo Dale and was aimed at finding a number of the most difficult and elusive mammals of Borneo. Cats were to be a major objective, in particular Clouded Leopard, Marbled Cat and Leopard Cat, though other desirable species such as Binturong, Sunbear and Orangutan were also very much on the agenda.

Jens Hauser and Margarita Steinhardt signed up to join Jo and, at the last minute, this trio were joined by Steve Morgan. The logistics on the ground were run by Adventure Alternative Borneo who supplied the guide, Mike Gordon, and drivers.

The main tour ran from 16/2/17 to 3/3/17. The tour took in Danum Valley, the Kinabatangan River, and Deramakot Forest Reserve. Steve only joined the main group for the Deramakot leg, joining the group on 22/2/17 at Telupid.

Jo arrived the night of 12/2/17 and stayed at Hotel Eden 54 in Kota Kinabalu for the first four nights- pre-tour notes for Jo are in Annex 4.

Steve arrived early and spent the time at Poring and Jens also spent a couple of weeks independently of the group, and at the end of the tour, went on independently to visit Sepilok.

2 Results

The group saw 47 species of mammal. We failed to find Clouded Leopard but took the best possible consolation prize in Marbled Cat, which we watched for over thirty minutes at quite close range. Other notable sightings included Otter Civet, Small-clawed Otter, Banded Palm Civet, Malay Stink Badger, Ear-spot and Horse-tailed Squirrel, Orangutan, two species of Porcupine (Long Tailed and Malay) and Bornean Pygmy Elephant. (See Annex 1 for full list of species).

Jo, the only genuine birder among us, found the birding to be more challenging than her previous trip and saw only a singular species of pitta- Black-crowned Pitta, but obtained closer than previous views of several Malkohas. Hornbills were also well-represented this time- a reward for tramping along muddy, sweaty, leechy forest trails at ungodly hours of the early morning when the rest of us were more inclined to sleep. Bird records can be found in Annex 2.

A few snakes were seen, including a group of four Grey-tailed Racers on the Kinabatangan and a Green Vine Snake in Deramakot which posed very co-operatively in the lower branches of a tree. There were plenty of frogs, (notably Harlequin Flying Frog) and reptiles, most of which we didn't stop to identify.

Among the many spectacular moths and butterflies the most striking was the Malaysian Moon Moth, a multi-coloured monster with outlandish streamers- Annex 3 covers notable records of other fauna. Finally, we found the carnivorous Pitcher Plant which attracts insects to their doom in its "pitcher" shaped body.

3 Danum Valley

Jo, Jens and Margarita had four nights at the DanumValley Field Centre (DVFC) from 16/2 to 19/2.

3.1 The night drives & walks

Night drives were conducted by Mike with Jonas as our driver, rather than using the field centre's organised drives. This was mainly a benefit, as we could set our own schedule, but occasionally the field centre vehicle had an advantage. We would drive out, at least as far as the gate and sometimes beyond, but we had to be back inside the gate before 9pm, when it is meant to be locked. The driving was therefore quite limited here.

The following species were seen most nights whilst at DVFC:

Thomas's Flying Squirrel, Red Giant Flying Squirrel, Lesser and Greater Mouse Deer, Sambar, Bearded Pig, Fruit Bat sp.

Small-toothed Palm Civet:



Small-toothed Palm Civet (Three-striped Palm Civet) © Jo Dale

Malay Civet:



Malay Civet © Jens Hauser

Common (Island) Palm Civet



Common (Island) Palm Civet © Jo Dale

Rarer animals of note: Banded Palm Civet, seen a couple of times on different nights, including on a night walk.



Banded Palm Civet © Jo Dale

16/2 Leopard Cat (one very brief sighting- seen better later in the trip).

16/2 Philippine Slow Loris- distant, seen much better at next site. There have been some recent studies that have proposed splitting Slow Loris on Borneo into four different species. At the moment this has been on the basis of pelage and other morphological characteristics. Mike advised us that the lorises we saw were of this species. However of the four proposed splits, the Kayan species also occurs in Sabah and overlaps with the range of this one. So it's not entirely clear which we saw.

17/2 Colugo- one individual seen quite well.



Colugo © Jo Dale



17/2 Malay Porcupine x 2 beyond the gate, Jonas misinterpreted Mike's intentions to get closer to the porcupines and they ran off before we could get close enough to photograph them. A better opportunity presented itself on our final night in Deramakot.

17/2 Black Flying Squirrel one individual seen.
Left, Black Flying Squirrel © Jo Dale

18/2 Pen-tailed Treeshrew- one individual seen on a night walk, too frantic to photograph.

19/2 Bornean Pygmy Elephants – A frustrating sighting! After dinner we drove to the road that goes up to the tower. We walked part way up and then Jonas came up behind us in the truck. After a quick

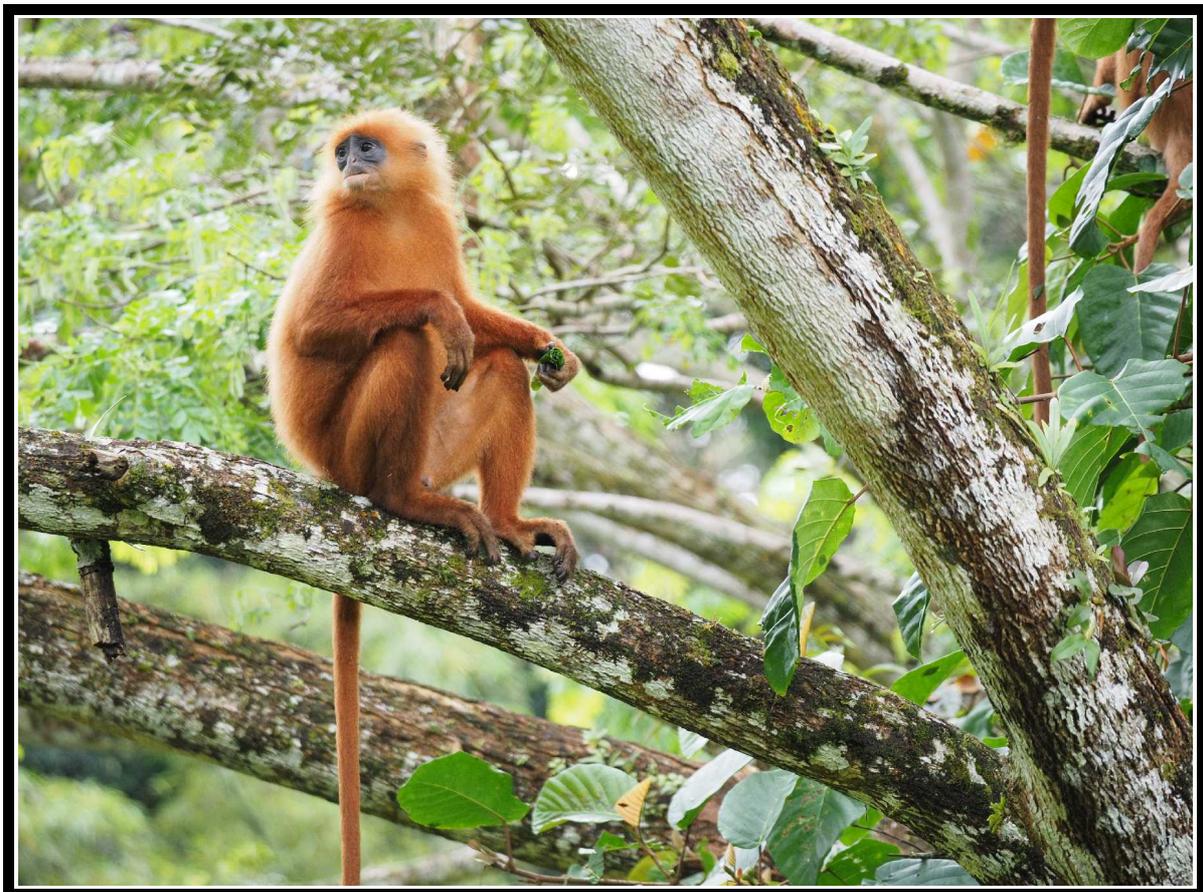
discussion, Mike asked if we wanted to continue with this walk or go and see some elephants. Jo in particular was very keen to see them (having only seen a single individual on her last trip and wanting to get some decent pictures). So we raced back down the hill and out beyond the gate. The further from the gate we went the more Mike became increasingly concerned we'd get locked out. So we literally spent just seconds with the elephants who predictably were uncooperative by turning tail and sticking their heads in the bushes. We got back just as the guys were locking the gate. Then it got more frustrating as we passed the field centre vehicle with guests on a night drive who were able to drive out of the gate to see the elephants- so on this occasion we missed out.

3.2 Daytime sightings of note:

Lots of heavy rain made many of the trails treacherous to hike. Generally during the daytime Mike either led the group on walks, or people were resting and/or doing their own thing.

16/2: Bornean Pygmy Elephants, a herd seen on the way in as they crossed the ungraded road and disappeared into the vegetation as they fed, so a very brief sighting- no pics as no-one had thought to unpack their camera. Other animals of note, **Bearded Pigs** (including one called "Mary") and **Yellow Muntjac**. On entering DVFC, we saw **Sambar**, more bearded pigs and a troupe of **Long-tailed Macaques**.

17/2: Maroon Langurs were the stars of the show, with a troupe feeding close by to the chalets in the afternoon (after having given us the run-around in the morning). **Low's** and **Prevost's Squirrel** also seen. Below: Maroon Langur © Jo Dale



18/2: In the morning we drove at 0500 to take photos of the sunrise from the watchtower. But due to weather we got misty ambience instead. On the way we saw several nocturnal mammals including **Common Palm Civet**, **Banded Palm Civet**, **Small-toothed Palm Civet**, **Mouse Deer sp.** and a **Malay Civet** was seen from the watchtower. After breakfast, a pair of **Bornean Gibbons** were seen by the river, but offered only poor views. Frustratingly, more were seen close to the restaurant, which we missed.

19/2 A **Tree Shrew** species and a **Squirrel** species were seen by Jo whilst birding, but not well enough to ID.

20/2 We left Danum at 8 am. The same herd of **Elephants** were seen again briefly on the way out- still no good pics as they were too quick to cross the road and disappeared into the forest.

4 The Kinabangan Valley

Jo, Jens and Margarita had two nights here at Osman Homestay, a very friendly little establishment that has a reputation for finding Flat-headed Cats. Unfortunately the high water level scuppered our best efforts to locate this species as they need exposed riverbank to hunt.



20/2 We stopped off at Gomantong Caves on the way to the homestay. During the afternoon we saw, **Pig-tailed Macaques** outside the cave, a **Cave Racer Snake** that had recently swallowed a rat, another more fortunate **rat (Norway Rat perhaps?)** were noted inside the cave. **Plain Pygmy Squirrel** and some more **Maroon Langurs** were also seen outside the cave whilst waiting for the bats to emerge. A few presumed **Philippine Horseshoe Bats** were also seen inside the cave.

We stayed to watch the exodus of the colony of **Wrinkle-lipped Free-tailed Bats** at dusk, with the ensemble of avian predators that the swarm brings. The amazing spectacle of hundreds of thousands of bats streaming from the cave openings in the top of the cliff as well as out of the main entrance was well worth the wait. The main predators

capitalising on this nightly feast were Brahminy Kites and Bat Hawks.

That night we took a boat trip from 8pm to 2 am with the focus on looking for flat-headed cats which we sadly failed to see. We did see some other good mammals including **common palm civet, long-tailed macaques, proboscis monkeys, pig-tailed macaques** and **Malay civet**. But the mammal of the night goes to the **Philippine Slow Loris** that our guide somehow managed to spot and that we managed to get amazing close and prolonged views of. Previous page, Philippine Slow Loris © Jo Dale.

21/2 We had a boat trip from 06:00 to 09:30. It was a very misty start. **Proboscis Monkeys** were the only mammals seen, but we did see quite a few birds- refer to bird list at annex.

Our afternoon boat trip was from 1530-1800 reptiles and primates were the main stars with **Crocodile, water monitor** and a group of four **Grey tailed racer snakes** together in a grove of trees overhanging the river.

We also enjoyed watching a large group of **pig-tailed macaques**- babies proved very entertaining. **Proboscis monkeys** were also in evidence though the lighting conditions failed to enable any decent action shots from being taken. At the end of the afternoon we observed two **Orangutans** making nest, sadly the views were very poor as they were mainly obscured by foliage two thirds of the way up a mature tree.



Proboscis Monkey © Jo Dale

Our evening boat trip ran from 2015 – 0000. We first saw a **Small-toothed Palm Civet** feeding on fruit, and a few **Large Flying Foxes** showed very well as they fed, one clearly bit off more than it could chew and ended up dropping a large fruit.

We had two very frustrating experiences with elusive mammals on the bank in thick vegetation. The first time, Osman spotted something and drove the boat to the bank. Mike, with his spotlight, jumped off the boat and ran off to search for whatever it was. We did not receive any guidance from either Mike or Osman as to whether it was appropriate to wait until called or to follow immediately.

Eventually Margarita led the charge to try and catch up with Mike. We were unable to locate the animal. There seemed to be some disagreement between Mike and Osman as to what it was. Clearly Osman thought it was our target flat-headed cat. But Mike thought it was most likely a civet.



The second frustration came with another eyeshine and similar activity of driving the boat to the bank. This time we all followed Mike on foot through the sticky mud bank creeping through mangroves as we tried to follow Mike who was slithering on his belly through some quite dense scrub ahead of us. Just as we were closing in, Mike stood up in frustration and strode back towards us muttering “Malay Civet”.

Above, Large Flying Fox © Jo Dale.

After the effort we put in to see the animal it was quite annoying not to even look at it, even though it was a “common” species.

Our next star mammal came in the form of a confiding **Western Tarsier** which again our guide managed to spot from a massive distance away towards the end of the boat trip at 2340. This tarsier was so cooperative as we all filled our memory cards with snaps. A **Thomas's Flying Squirrel** ended the night at close to midnight.

Right: Western Tarsier
© Margarita Steinhardt



22/2/17 Jo and Jens took a morning boat trip. Margarita slept in. Again it was a very misty start. We focused on waiting for the two **Orangutans** to wake up, but the poor light conditions again scuppered any chance of decent shots. Whilst waiting, we saw a presumed **Large Tree Shrew**.

5 Poring

Steve did one night at Lupa Masa prior to joining the rest of the group on the 22nd, largely to break the long road journey from Kota Kinabalu to Deramakot but also to have a look at an area which has produced some notable mammal sightings in the recent past.

Lupa Masa is a jungle camp set in secondary forest in Mount Kinabalu National Park. The facilities are basic but the staff are welcoming and the visitor's book tells of Sunbear, Malay Weasel, Long-tailed Porcupine and other highly desirable species. It also seems to be a herpetologist's dream with a long list of cobras, kraits and so on listed in the book. Unfortunately, recent encroachment from nearby villages and illicit hunting has virtually wiped out the population of larger mammals.

Today, there are still a few Long-tailed Porcupines, (which we couldn't find on our night walk), and some Squirrels. A **Plain Pygmy Squirrel** appeared while we were eating breakfast the next morning and, on the walk back to Poring, Steve saw a plain brown Squirrel with a long, slender tail which was identified as **Brookes' Squirrel**, (restricted to mid or lower altitudes in Kinabalu). Otherwise, the night at Lupa Masa produced little of note.

6 Deramakot

Deramakot is quite a large Forest Reserve stretching some 70 kilometres from the main gate near Telupid in the west to the Kinabatangan River in the east. A fairly rough logging road runs laterally across the Reserve linking these two extremes and the HQ and Base Camp, (where we stayed), lies about half way along it in the centre of the forest. There are various side roads along the way which are narrower (and even rougher) which offer interesting walking possibilities. Near the Base Camp are several official trails for walking, including the short (but steep and muddy) Domingo's Management Trail.

6.1 Scheme of Attack

Our main plan of attack would be to drive the main track at night as far in both directions as time would reasonably allow. Mike told us that there were two or three areas where Clouded Leopard sightings were most frequent and that the bulk of recent sightings were of two big males that he had dubbed "Trump" and "Obama". Appropriately, Trump's territory was to the right and Obama's to the left of the Camp. Mike shared our view that the more time we could spend in the best areas and the greater the distance we could cover the better our chances would be. It wasn't really any more scientific than that - we would find our Leopard (or not!) through sheer force of time and effort over the nine nights we had available.

We also tried one early morning drive, (which was fruitless) and any number of crepuscular drives (also uneventful). In fact, the forest seemed to wake up quite a bit after it had got dark, an unusual pattern as in most places dawn and dusk are particularly productive times.

6.2 The vehicle and notes on group size

We used Lang's truck throughout our stay in Deramakot. The high clearance of the vehicle was definitely needed when plugging the deeply pitted logging roads.



When night-driving, the four guests were positioned in the flat-bed, with Mike perched with spotlight on top of the roof on the spare tyre. We established a regular rotation system with two people standing and two sitting on the narrow bench seat (with cushions). This worked as well as possible but on occasions when animals were spotted in the road ahead, those in the back had a very restricted view. During downpours, it was a squeeze to accommodate all the guests in the vehicle. Mike would stay outside and weather the storm. On our final night we had a group of three and that was a much better number in terms of fit for the vehicle.

6.3 The Weather

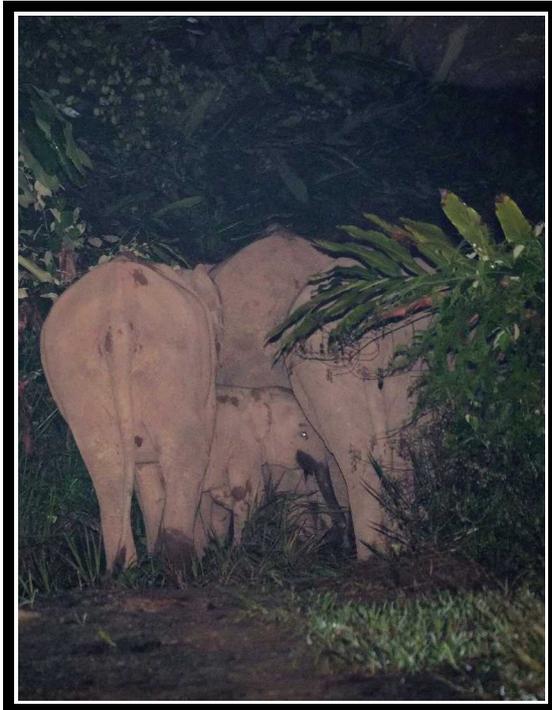
The poor weather played a significant part in our ability to conduct effective night drives and was in stark contrast to the same time last year, where it had been exceptionally dry. Heavy rain occurred most afternoons and at least one or two downpours most nights. On several occasions we couldn't start a drive until around 9pm due to heavy rain late afternoon into the earlier part of the night. Other times we'd have to sit out a heavy downpour either at a convenient residence or inside the cab of the vehicle. In addition, we'd frequently put up with more persistent, but lighter rain, whilst trying to keep our camera gear dry. The downpours made the forest roads treacherous, and Lang excelled himself with his expert driving skills.

6.4 The Night Drives

Despite the weather, we were on the road spotlighting for at least six or seven hours each night, often returning a few hours before dawn. On a couple of occasions we set out in the late afternoon and took our dinner with us. On others we took dinner at the Camp and set off afterwards when the rain eased off. Some species were seen every night - or at least on most nights. These included **Red Giant Flying Squirrel** and **Thomas' Flying Squirrel**, which Mike soon gave up stopping for. It soon became obvious that bright orange eye-shine high in

the canopy was likely to be one or other of these species. Also very common were **Malay Civet**, (usually scuttling around at the edge of the road) and **Small-toothed Palm Civet**, (a forager in the mid-canopy). **Sambar Deer** were seen every night, as were **Greater** and/or **Lesser Mouse Deer**.

The latter has very bright yellow eye-shine and a disconcerting habit of staring back at the spotlight in a distinctly cat-like manner. Several times we found Deer in the Camp itself. We presumed that they did this to seek sanctuary from Leopards but Mike assured us that



Leopard had been seen on more than one occasion walking brazenly through Camp!

A bit less common were **Slow Loris**, and **Common (Island) Palm Civet**.

The general pattern of the night drives was that we would find some or all of the common species mentioned above plus perhaps one or two "specials" if the stars and planets were in alignment and the Gods favoured us.

On two nights we encountered **Bornean Pygmy Elephant**, a shy species that quickly runs from approaching vehicles- pictured left in a typical pose © Jo Dale.

We found four or five **Leopard Cats**, most of which were quite obliging. Indeed, one posed for photographs in the middle of the road and gave us a very feline exhibition of stretching and grooming. To our surprise we found one Leopard Cat near to the chalets at the Camp. Below, Leopard Cat © Jens Hauser.



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6.5 26/2 The Night of the Marbled Cat

The first four nights produced only common species and we were starting to get a bit twitchy. It was definitely time for something a bit special to materialise, preferably a Leopard. Steve flippantly suggested that a ritual sacrifice was in order and, accordingly, Jens sacrificed his beard! The Gods were obviously impressed because our luck was to turn immediately and in dramatic fashion.

On night five we took the road heading east towards the river. At first it followed the usual pattern of Flying Squirrels and Civets but, after a couple of hours, we finally struck gold. Mike suddenly signalled our driver, Lang, to stop and pointed excitedly to the roadside on the left. A group of three or four dark, slender animals were weaving their way sinuously through the wet grass. Their white throats were visible as they turned and shuffled off into the undergrowth. **Oriental Small-clawed Otters!**

Then, scarcely, five minutes later, Mike urgently signalled Lang to stop once more. "**Marbled Cat**" he hissed under his breath. For a moment we didn't know if he was serious or not but, as the vehicle slewed to an abrupt halt, there it was on a horizontal branch about forty metres away. At first it just sat on its haunches gazing back at us. Its eye-shine was surprisingly weak, (as Mike had previously said it would be), and it had been a hellishly good spot. Then, tiring of the light, it turned its back on us and sat still, staring intently into the forest beyond. (We suspected that we had interrupted it hunting Flying Squirrels).



Marbled Cat © Jo Dale

By giving it a rest from the light, we eventually got it to turn round and, as it stood up to stretch, all its marbled cloud markings, leg spots and head stripes became visible. What a glorious sight! We watched it for over thirty minutes before eventually it decided to go about its business and descended the tree tail-first by hugging the trunk and carefully lowering itself down.

Both Clouded Leopard and Marbled Cat have the ability to descend head-first but this one apparently hadn't read the field guide. Then, it was lost in the under-storey and the show was over. But what a show!

More was to follow. Doubling back and heading towards Camp we found a **Banded Palm Civet**, a splendidly marked creature which slouched across the road twenty metres ahead of us giving superb views.

Then, having passed back through Camp and out onto the road the other side, we finished off the evening with a **Bornean Bay Owl** which perched obligingly not too far away. No, it wasn't a mammal but it was a species that serious birders crave and a notable sighting in its own right.

6.6 27/2 The Stink Badger

Nothing could stop us now it seemed! The following night was predictably quiet though and turning into a bit of an anti-climax. However, a late foray along the gate road rescued the drive from ignominy. Turning a blind corner we found eye-shine in front of us in the road. We could see straight away what it was - a **Malay Stink Badger**, (or **Sunda Skunk**, as it is apparently called now). It trotted from one side of the road to the other and back again, seemingly unsure of what to do.

Malay Stink Badger (Sunda Skunk) © Jens Hauser



We stopped and everyone got out to take pictures, the animal passing in front of the assembled photographers at ridiculously close range. (Mike told us afterwards that he was half expecting it to squirt us with its malodorous scent!). Then it finally disappeared into the undergrowth to our right. But it hadn't quite finished its performance and re-appeared on the road behind us. It could scarcely have been more obliging!

6.7 28/2 The Otter Civets

After a slow start it seemed that things were picking up. The next evening (night 7) got off to a good start with a **Long-tailed Porcupine** at very close range beside the road. It even had its full tail - many of its kind having often deliberately lost them in last ditch escapes from predators.



Long-tailed Porcupine © Jens Hauser; Below, Otter Civet © Jens Hauser



There had been torrential rain the previous night and all through the day and so everything was very wet and there were big roadside pools everywhere. It was at one of these pools that Mike again brought us to an abrupt halt. A few metres to our left we just had time to see two, possibly three, compact dark bundles of fur disappearing into the long grass.

They squeaked as if they were juveniles and Mike called out "Civet", then "Otter".

Well, they didn't look much like either to us. What Civet is all dark with a short compact body? What Otter has a short tail? But we had misheard him. He was telling us that they were baby **Otter Civets**. Two of the animals briefly re-appeared a short distance away in the open revealing (very briefly) what seemed to be a flash of white around the mouth. Then they doubled back and hid behind a stand of grass only four metres from the vehicle.

We decided to wait them out. Surely they would either bolt or their mother would come to rescue them? We got out of the vehicle and stood in silence to await events. Mike crept around their starboard side and confirmed they were still present.

Then, a pair of orange eyes appeared ten metres away on the edge of the really thick stuff. The mother *was* returning. But she was nervous and wouldn't come closer.

Still we waited but when we later checked to see if the babies were still hidden they were missing. They'd obviously slipped away to re-join their mum without us noticing.

Jens and Margarita had some photographs, snatched in the seconds when the animals were slipping through the grass. None of them will win prizes but they were enough to confirm our identification. We had had a glimpse of two baby **Otter Civets**!

6.8 25/2 Colugo

We had another good sighting of a **Colugo**. This one was a female ginger morph with a cute regular coloured baby clinging to her belly.



Colugo with baby © Jo Dale

6.9 Bats

We had no capability (or permission) to net bats and so our various bat sightings were incidental rather than planned.

Several nights saw **Large Flying Foxes** soaring overhead, their enormous size putting their identification beyond question. Jens tried to photograph them in flight but, even though Mike captured them in the spotlight beam for three or four seconds at a time, that wasn't long enough to focus and frame the shot.



One evening, as we took dinner in the field at dusk, we had small to medium-sized Bats with distinctly orange fur flying round us. They had long slender wings and flew in a fairly slow, deliberate fashion at head height. We thought they might be **Woolly Bats** (genus *Kerivoula*) though we were unable to identify them to species level.

On another evening, as we sat down to eat dinner in Camp, we found a bat hanging from the ceiling. This was a plain and very dark bat with a clearly evident free tail. The ears were quite large and rounded and the face plain with a dog-like profile. It appeared to be a **Sheathtail Bat** (genus *Emballonura*) - but whether it was Lesser or Greater was impossible to tell.

Left Sheathtail Bat © Jo Dale

6.10 Diurnal Primates

Primates were generally rather scarce at Deramakot though we did get a couple of sightings of **Pig-tailed Macaque** and one of **Long-tailed Macaque**, the latter being a raiding party intent on looting a house next to Camp.



Above, Orangutan © Jo Dale.

We also found **Maroon Langur** twice, on both occasions the sightings being very brief. Jens and Jo, in the habit of pounding the Domingo's Management Trail early in the morning, were rewarded for their diligence by a group of **Sabah Grey Langurs**, a rare species which Mike hasn't seen in this area before.

Of course, we could scarcely go to Deramakot without seeing **Orangutan** and a big male obliged us by parking himself in a tree next to the generator on the east side of Camp several days running.

6.11 Rodents

We saw various Squirrels, the best of which was undoubtedly the somewhat rare **Ear-spot Squirrel**. This little gem appeared outside the kitchen one afternoon as we were all lazing about in the restaurant. Below: Ear-spot Squirrel © Jo Dale.



Mike came in and announced that there was a "Plantain Squirrel" outside. On closer inspection however it had the diagnostic white spot behind the ear. We then spent a very happy ten or fifteen minutes photographing it from every conceivable angle.

Jens found a **Giant Squirrel** one morning on a walk around Camp and we all got a glimpse of a **Horse-tailed Squirrel** on another morning foray into the forest to set camera traps.

Apart from the innumerable **Giant Red** and **Thomas' Flying Squirrels** we found one example of the smaller and rarer Flying Squirrels. On night 4 Mike found a tiny speck of greenish-blue eye-shine high in a tree which provoked a long debate as to its identity. Some of us thought it was a spider, others a Tree Mouse. Eventually, from Jens' photographs, we realised that we were looking at a rodent's head sticking out of a hole in the trunk.

After a long wait it duly climbed out of its hole and revealed itself to be a Flying Squirrel and from photographs, which showed a clear demarcation between the grey top half of the head and the white lower part (with no orange tints in between) we realised it was **Temminck's Flying Squirrel**.

Quite a few times small rodents scampered across the road in front of us. Most of these were too brief to allow a satisfactory identification. One paused briefly beside the road and sat up on its haunches. It had a chunky, rat-like appearance with a clearly demarcated reddish back and white belly. The fur looked thick and coarse and the tail was about the same length as the body. We surmised it might be a **Red Spiny Rat**, apparently a common species in Deramakot.

We had a decent look at one other rodent - a very small mouse with a white belly and brownish-red back. It sat momentarily on a thick grass stem (like a Harvest Mouse) before scampering down and away into the undergrowth. The most obvious other characteristic was its exceptionally long slender tail. After examining our field guides we couldn't see that it

could be anything other than **Ranee Mouse** (supposedly rare) but whether it was Common Ranee or Lesser Ranee was impossible to tell.

6.12 Porcupines

In addition to the Long-tailed Porcupine already mentioned, we found a pair of **Malay Porcupines** on the River Road on the last night, a nice way to finish the trip, although sadly Margarita missed them having departed that morning.



Malay Porcupine © Jens Hauser

7 Stuff We Missed

Well, plenty of clouded skies but no Clouded Leopard unfortunately. Considering how frequently sightings have been coming out of Deramakot (and to a lesser extent Danum Valley) one could be easily fooled into thinking that a trip of this length with extensive night drives is almost guaranteed to deliver a Clouded Leopard. Indeed, there were sightings only two weeks before we arrived and further sightings about a week or two after we returned. Mike was very confident at the start of the trip that we'd get the leopard early on, but sadly this trip has proven that it is by no means easy or guaranteed!!

It wasn't for lack of trying. Mike and Lang couldn't have worked harder and there were several evenings when we finished at gone 03.00am with everyone completely exhausted. Our luck was out. According to Mike there is no particular pattern or "good" time of year. The Leopards come and go.

Sometimes they seem to disappear for weeks on end. Then they re-appear with a rash of sightings, though not always in the spots they were being seen previously. It really does seem to be a lottery and all you can do is keep plugging away, hoping your number eventually comes up.

A birding group were lucky enough to see both Marbled Cat and daytime sighting of Binturong the day before we arrived at Deramakot. We heard the news on our arrival at Base Camp and didn't know whether to laugh or cry. We put the Marbled Cat to bed a few days later but sadly couldn't find a Binturong, as the figs on the particular tree had just gone over.

We live in hope of one day seeing a Sun Bear but it wasn't to be this time. Apparently it was the wrong time of year, August through October being the key time. And, one day, some of us might see a Moonrat. Other "specials" that eluded us include Banded Linsang, Malay Weasel (both of which Jo saw in Danum on her first trip), Yellow-throated Marten and Thick-spined Porcupine. Their day will come (we hope!).

A complete set of Jo's photos from this trip can be found [here](#).

Annex 1 List of Mammals Recorded

The following is a list of all mammals recorded. (Note that not every species was seen by every member of the group).

Key: DV=Danum Valley, K=Kinabatangan, P=Poring, D=Deramakot.

Species	Latin Name	DV	K	P	D
Western Tarsier	<i>Tarsius Bancanus</i>		x		
Philippine Slow Loris	<i>Nycticebus menagensis</i>	x	x		x
Colugo	<i>Cynocephalus variegatus</i>	x			x
Maroon Langur	<i>Presbytis rubicunda</i>	x			X
Sabah Grey Langur	<i>Presbytis sabana</i>				X
Pig-tailed Macaque	<i>Macaca nemestrina</i>		x		X
Long-tailed Macaque	<i>Macaca fascicularis</i>	x	x		X
Proboscis Monkey	<i>Nasalis Larvatus</i>		x		
Orangutan	<i>Pongo pygmeus</i>		x		x
Bornean Gibbon	<i>Hylobates Muelleri</i>	x			H
Giant Squirrel	<i>Ratufa affinis</i>				X
Brookes' Squirrel	<i>Sundasciurus brookei</i>			x	
Plain Pygmy Squirrel	<i>Exilisciurus exilis</i>		x	x	
Low's Squirrel	<i>Sundasciurus lowi</i>	x			
Prevost's Squirrel	<i>Callosciurus Prevostii</i>	x			x
Ear-spot Squirrel	<i>Callosciurus adamsi</i>				X
Horse-tailed Squirrel	<i>Sundasciurus hippurus</i>				X
Black flying squirrel	<i>Aeromys tephromelas</i>	x			
Red Giant Flying Squirrel	<i>Petaurista petaurista</i>	x			X
Thomas' Flying Squirrel	<i>Aeromys thomasi</i>	x			X
Temminck's Flying Squirrel	<i>Petinomys setosus</i>				X
Red Spiny Rat	<i>Maxomys surifer</i>				X
Ranee Mouse Spp	<i>Haeromys spp</i>				X
Malay Porcupine	<i>Hystrix brachyura</i>	x			X
Long-tailed Porcupine	<i>Trichys fasciculata</i>				x
Malay Stink Badger (Sunda Skunk)	<i>Mydaus javanensis</i>				X
Oriental Small-clawed Otter	<i>Aonyx cinerea</i>				X
Malay Civet	<i>Viverra zangalunga</i>	x			X
Otter Civet	<i>Cynogale bennetti</i>				X
Banded Palm Civet	<i>Hemigalus derbyanus</i>	x			X
Common (Island) Palm Civet	<i>Paradoxurus phillippensis</i>	x	x		X
Small-toothed Palm Civet	<i>Arctogalidia trivirgata</i>	x			X
Marbled Cat	<i>Felis marmorata</i>				X
Leopard Cat	<i>Felis bengalensis</i>	x			x

Bornean Pygmy Elephant	<i>Elephas maximus</i>	x			X
Bearded Pig	<i>Sus barbatus</i>	x			X
Lesser Mouse Deer	<i>Tragulus javanicus</i>	x			X
Greater Mouse Deer	<i>Tragulus napo</i>	x			X
Sambar Deer	<i>Cervus unicolor</i>	x			X
Pen-tailed Tree-shrew	<i>Ptilocercus lowii</i>	x			x
Large Tree-shrew	<i>Tupaia Picta</i>	x			
Large Flying Fox	<i>Pteropus vampyrus</i>		x		X
Sheath-tail Bat Spp	<i>Emballonura spp</i>				X
Woolly Bat Spp	<i>Kerivoula spp</i>				X
Fruit bat Spp		x			
Wrinkle-lipped free-tailed bat	<i>Tadarida plicata</i>		x		
Large-eared (Philippine) horseshoe bat	<i>Rhinolophus philippinensis</i>		x		
Total Species Recorded	47				

Taxonomic Notes

(1) Mike advised that the Slow Loris seen in Danum and Kinabatangan were Phillipine Slow Loris (*menagensis*), but *kayan* is also a possibility.

(2) The Common Palm Civet of south-east Asia (*Paradoxurus hermaphroditus*) is presumed here to be the recently split "Island Palm Civet" (*Paradoxurus phillippensis*).

For further details see "Mammals of Borneo" by Quentin and Karen Phillipps.

Annex 2 Birds Recorded

The following is a list of birds recorded (seen and recorded mostly by Jo Dale).

Species	Latin Name
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>
Spotted-necked Dove	<i>Streptopelia chinensis</i>
Zebra Dove	<i>Geopelia striata</i>
Green Imperial Pigeon	<i>Ducula aenea</i>
Whiskered Treeswift	<i>Hemiprocne comata</i>
Silver-rumped Spinetailed Swift	<i>Rhaphidura leucopygialis</i>
Glossy Swiftlet	<i>Collocalia esculenta</i>
Black-nest Swiftlet	<i>Aerodramus maximus</i>
Edible-nest Swiftlet	<i>Aerodramus fuciphagus</i>
Lesser Coucal	<i>Centropus bengalensis</i>
Raffles's Malkoha	<i>Rhinorhiza chlorophaea</i>
Red-billed Malkoha	<i>Zanclostomus javanicus</i>
Chestnut-breasted Malkoha	<i>Phaenicophaeus curvirostris</i>
Plaintive Cuckoo	<i>Cacomantis merulinus</i>
Storm's Stork	<i>Ciconia stormi</i>
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>
Cattle Egret	<i>Bubulcus ibis</i>
Great Egret	<i>Ardea alba</i>
Pacific Reef Egret	<i>Egretta sacra</i>
Oriental Darter	<i>Anhinga melanogaster</i>
Greater Crested Tern	<i>Thalasseus bergii</i>
Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i>
Crested Serpent Eagle	<i>Spilornis cheela</i>
Bat Hawk	<i>Macheiramphus alcinus</i>
Wallace's Hawk Eagle	<i>Nisaetus nanus</i>
Changeable Hawk Eagle	<i>Nisaetus cirrhatus</i>
White-bellied Sea Eagle	<i>Haliaeetus leucogaster</i>
Lesser Fish Eagle	<i>Ichthyophaga humilis</i>
Brahminy Kite	<i>Haliastur indus</i>
Bay Owl	<i>Phodilus badius</i>
Brown Wood Owl	<i>Strix leptogrammica</i>
Barred Eagle Owl	<i>Bubo sumatranus</i>
Buffy Fish Owl	<i>Ketupa ketupu</i>
Scarlet-rumped Trogon	<i>Harpactes duvaucelii</i>
Helmeted Hornbill	<i>Rhinoplax vigil</i>
Rhinoceros Hornbill	<i>Buceros rhinoceros</i>
Oriental Pied Hornbill	<i>Anthracoceros albirostris</i>
Black Hornbill	<i>Anthracoceros malayanus</i>
Bushy-crested Hornbill	<i>Anorrhinus galeritus</i>
Wrinkled Hornbill	<i>Rhyticeros corrugatus</i>
Rufous Piculet	<i>Sasia abnormis</i>
Red-bearded Bee-eater	<i>Nyctornis amictus</i>

Blue-throated Bee-eater	<i>Merops viridis</i>
Dollarbird	<i>Eurystomus orientalis</i>
Blue-eared Kingfisher	<i>Alcedo meninting</i>
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>
White-fronted Falconet	<i>Microhierax latifrons</i>
Long-tailed Parakeet	<i>Psittacula longicauda</i>
Blue-crowned Hanging Parrot	<i>Loriculus galgulus</i>
Black-crowned Pitta	<i>Pitta ussheri</i>
Dusky Broadbill	<i>Corydon sumatranus</i>
Black-and-red Broadbill	<i>Cymbirhynchus macrorhynchus</i>
Black-and-yellow Broadbill	<i>Eurylaimus ochromalus</i>
Scarlet Minivet	<i>Pericrocotus flammeus</i>
Dark-throated Oriole	<i>Oriolus xanthonotus</i>
Black-winged Flycatcher-shrike	<i>Hemipus hirundinaceus</i>
Large Woodshrike	<i>Tephrodornis virgatus</i>
Green Iora	<i>Aegithina viridissima</i>
Black Drongo	<i>Dicrurus macrocercus</i>
Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i>
Pied Fantail	<i>Rhipidura javanica</i>
Black Magpie	<i>Platysmurus leucopterus</i>
Large-billed Crow	<i>Corvus macrorhynchus</i>
Black-naped Monarch	<i>Hypothymis azurea</i>
Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>
Yellow-rumped Flowerpecker	<i>Prionochilus xanthopygius</i>
Orange-bellied Flowerpecker	<i>Dicaeum trigonostigma</i>
Little Spiderhunter	<i>Arachnothera longirostra</i>
Spectacled Spiderhunter	<i>Arachnothera flavigaster</i>
Red-throated Sunbird	<i>Anthreptes rhodolaemus</i>
Purple-throated Sunbird	<i>Leptocoma sperata</i>
Temminck's Sunbird	<i>Aethopyga temminckii</i>
Asian Fairy-bluebird	<i>Irena puella</i>
Lesser Green Leafbird	<i>Chloropsis cyanopogon</i>
Dusky Munia	<i>Lonchura fuscans</i>
Eurasian Tree Sparrow	<i>Passer montanus</i>
Yellow Wagtail	<i>Motacilla flava</i>
Yellow-bellied Prinia	<i>Prinia flaviventris</i>
Ashy Tailorbird	<i>Orthotomus ruficeps</i>
Pacific Swallow	<i>Hirundo tahitica</i>
Barn Swallow	<i>Hirundo rustica</i>
Yellow-bellied Bulbul	<i>Alophoixus phaeocephalus</i>
Yellow-vented Bulbul	<i>Pycnonotus goiavier</i>
Cream-vented Bulbul	<i>Pycnonotus simplex</i>
Red-eyed Bulbul	<i>Pycnonotus brunneus</i>
Chestnut-backed Scimitar Babbler	<i>Pomatorhinus montanus</i>
Chestnut-rumped Babbler	<i>Stachyris maculata</i>
Ferruginous Babbler	<i>Trichastoma bicolor</i>
Asian Glossy Starling	<i>Aplonis panayensis</i>
Oriental Magpie Robin	<i>Copsychus saularis</i>

White-crowned Shama	<i>Kittacincla stricklandii</i>
Chestnut-naped Forktail	<i>Enicurus ruficapillus</i>
White-crowned Forktail	<i>Enicurus leschenaulti</i>
Total Species recorded	93

Annex 3 Reptiles, Amphibians and Invertebrates (mainly Butterflies and Moths)

The following is a non-comprehensive list of interesting miscellaneous sightings.

Species	Latin Name	Notes
Reptiles		
Grey-tailed Racer Snake	<i>Gonyosoma oxycephalum</i>	Four seen together
Green Vine Snake	<i>Ahaetulla nasuta</i>	
Cave Racer Snake	<i>Orthriophis taeniurus</i>	One rather full individual seen in Gomantong Cave.
Rough-necked Monitor	<i>Varanus rudicollis</i>	
Malayan Water Monitor	<i>Varanus salvator</i>	
Esturine crocodile	<i>Crocodylus porosus</i>	
Horned Flying Lizard	<i>Draco Cornutus</i>	
Amphibians		
Harlequin Flying Frog	<i>Rhacophorus pardalis</i>	
Invertebrates		
Moths		
Malaysian Moon Moth	<i>Actias maenas</i>	
Tropical Swallowtail Moth	<i>Lyssa zampa</i>	
Atlas Moth	<i>Attacus atlas</i>	
Butterflies		
Borneo Birdwing	<i>Troides andromache</i>	
Paris Peacock	<i>Papilio paris</i>	
Malay Red Harlequin butterfly	<i>Paralaxita damajan</i>	
Tree-nymph	<i>Idea lynceus</i>	
Clipper butterfly	<i>Parthenos Sylvia</i>	
Others		
Praying mantis (various)		
Whip scorpion		
Giant pill bug		
Golden Orb-web Spider	<i>Nephila pilipes</i>	

Annex 4 Notes on diving and snorkeling

Jo spent the first day recovering from jetlag with a late morning sojourn to Sapi Island in TARP to spend the day snorkelling. There were quite a few reef fish, including clownfish, a large trigger fish, needlefish, scorpionfish and a small peppered moray eel. but the reef itself has sadly been trampled into oblivion in the area cordoned off for snorkeling.

Her second day was spent undertaking a refresher dive, 20 mins long on Sapi house reef, next to the snorkelling area. Very little seen of note, including a single lionfish and blue spotted ray. Visibility was hampered by an algal bloom. The second of her three dives was longer, 46 mins, around the island away from the crowds. Visibility sadly not improved, therefore diving was still very poor, some butterfly fish, batfish, large clownfish etc. seen.

The third, and best dive of the day was at Pontoon reef, Gaya Island. This consisted of a wall dive and swim out still in very poor vis to a pontoon, under which was a massive school of fish. Quite a disorienting and eerie experience!

Given the poor vis, Jo decided against a further day of diving and spend the last day visiting the markets in Kota Kinabalu.