

BORNEO

MULU & BAKO NATIONAL PARKS

20th August – 10th September 2016

13th September – 5th October 2017

Ben Macdonald



***The as-yet unbroken sub-montane rainforests of one of the world's oldest jungles – Mulu in Borneo.
Viewed from below the summit of Mount Mulu - home to several montane endemic birds.***

I. INTRODUCTION

Mulu National Park contains one of the most exciting, ancient and Jurassic jungles on the planet, with still large areas of pristine lowland and montane rainforest having laid here for millions of years. Our filming trips in 2016 and 2017 focused on the remarkable symbiotic relationships of pitcher plants, which will be revealed in the 2019 Netflix release *Our Planet: Jungles*. The filming took us to some truly remarkable rainforests, from the lush primary rainforests of the Mulu lowlands to the even stranger and little-seen montane shrub forests of Gunung Mulu, an extremely remote peak within the park.

The dense lowlands of Mulu are everything you grow to expect from a rainforest, with a constant chorus of insects and a dazzling array of passerines, particularly bulbuls, babblers and barbets. Each day, our journey to work from the Mulu Lodge, along the Sungai Tutoh river, provided 45 minutes to enjoy the bounty of these as-yet intact tropical rainforests. Following this, our helicopter ascent onto Mount Mulu offered an entirely different experience. Here, in moss-encrusted shrub forests filled with pitcher plants, we found an altogether different world, with highly specialized montane birds roving through the fruit-rich trees, and the constant chorus of gibbons. On one truly memorable day on Gunung Mulu, as I staked out a Mountain Treeshrew below the summit, almost every specialized or endemic bird of the mountain passed through in one feeding group, a sight I will never forget. On the last day of my 2016 trip, I was able to get out for half a day to Bako National Park, and appreciate the beauty of the peat-swamp forests, proboscis monkeys and a wide range of coastal mangrove birds.

In 2016, cameraman Alastair MacEwan and I were very fortunate to be accompanied by one of Borneo's most versatile and knowledgeable naturalists, Ch'ien C. Lee (<http://www.wildborneo.com.my/>), and later, on Gunung Mulu summit, by Mulu tour guide and camp manager Venno Enar. In 2017, I returned here with cameraman Ian Llewellyn and Venno Enar. The difference between the two trips in terms of birdlife was remarkable, with the 2016 trip providing a constant wealth of species in what was generally warm weather with intermittent downpours. The 2017 trip, by contrast, was dogged by incessant rains, very low temperatures and cloud cover, which reduced activity amongst almost all animal orders. El Nino was in full effect and it was believed this may have affected the weather to such a degree.

Overall the trips to Mulu were some of the most remarkable and memorable events of my travelling life, with the sum of seeing the full organism that is the Malaysian tropical rainforest even greater than the sum of its parts. Mulu National Park is also easy to reach, with an excellent tourism infrastructure. Flights are daily from Kuching and from here, a range of guiding operations exist within the primary rainforest and for more ambitious treks to Gunung Mulu and Gunung Api (both seriously hard-going climbs). We would however enormously recommend Venno Enar as a guide should he be available, and Ch'ien Lee is absolutely superb if he is guiding in the country at the time.

II. BIRD SPECIES NOTES

Lesser Whistling Duck *Dendrocygna javanica*

One female seen, active and alarming as if with small ducklings, in disturbed ground adjacent to trees beside the river, at the entry to Bako National Park, on 16th September 2016.

Storm's Stork *Ciconia stormi*

A spectacular species, seen at sunset on just one day in late September, on a calm evening following heavy rains, at the junction of the Sungai Totoh with the tributary leading to Mulu Park HQ (at 4.023153, 114.782358), in October 2017. A pair were seen atop a dead emergent beside the river, their very particular habitat, before taking flight deep into the forest. Possibly the rarest bird I have yet seen globally, with no more than 500 individuals remaining.

Striated Heron *Butorides striata*

One seen along the tributary river from Mulu Lodge on 25th August 2016 but commonly in flooded conditions in September 2017.

Pacific Reef Heron *Egretta sacra*

Pair of white-phase birds over Kuching Airport on 9th September 2016. In 2017, larger numbers of up to 10 birds along the Sungai Totoh river (4.007972, 114.782858) during heavy rains and swollen river in October 2017.

Oriental Darter *Anhinga melanogaster*

Excellent views of adult perched then flying, after heavy rains, in dead trees beside the Sungai Totoh river (4.007972, 114.782858) on 25 September 2016.

Crested Serpent Eagle *Spilornis cheela*

One heard only in mature secondary rainforest along the Sungai Totoh river, 100m inland of the river, on 24 August.

Mountain Serpent Eagle *Spilornis kinabaluensis* (Endemic)

Territorial pair first observed 100m below summit of Gunung Mulu on 28th September 2016. Seen several times over the following week. Sparse montane rainforest/shrub forest with some taller emergent trees.

Bat Hawk *Macheiramphus alcinus*

A resident pair, apparently attending a nest tree in an enormous 200ft foot emergent tree beside Mulu National Park Headquarters (4.042887, 114.812091) from 20 August. In 2017, an amazing spectacle unfolded on a clear day in early October, when Ian Llewellyn and I watched a pair hunting a huge emergence of bats from the Mulu caves overhead at sunset, with at least one bat seen taken in flight.

Black Eagle *Ictinaetus malaiensis*

One soaring over the summit of Gunung Mulu in misty conditions on 30th August 2016, and another subsequently heard in early October 2017, when climbing the mountain, around half way up in very tall primary rainforest, believed to be near an active nest, and seen twice briefly overhead.

Brahminy Kite *Haliastur indus*

Adult pair seen very well soaring over entrance to Bako National Park on 10th September 2016, in typical mangrove swamp habitat close to cultivation.

Lesser Fish Eagle *Haliaeetus humilis*

One seen rising from the river bank, on the tributary leading from Mulu NP to the Sungai Totoh river (c. 4.024294, 114.787127) on 22nd August 2016 only.

Malaysian Plover *Charadrius peronii*

Seen on the muddy coastal shore of Buntal village, near Bako National Park (1.708207, 110.365202) on 10th September 2016.

Black-naped Tern *Sterna sumatrana*

A common, delicate tern found hawking along the mangrove-coast edge around Buntal village, and the boat approach to Bako National Park, on 10th September 2016.

Spotted Dove *Spilopelia chinensis*

Seen commonly in and around Kuching from 9th September 2016 in developed habitats only.

Little Cuckoo-dove *Macropygia ruficeps*

One flew across the Mulu NP tributary leading to the Sungai Totoh river on 7th September 2016, and several pairs seen en-route to Bako National Park on 10th.

Mountain Imperial Pigeon *Ducula badia*

In September 2017, heard across Gunung Mulu in the higher areas of shrub forest canopy before the sub-montane scrub layer, c.800-500m below Gunung Mulu summit. Seen briefly in flight.

Common Emerald Dove *Chalcophaps indica*

Seen in flight crossing the tributary river from Mulu Lodge on 20th August 2016, and in secondary edge rainforest beside the Sungai Totoh river on 22nd August 2016.

Greater Coucal *Centropus sinensis*

Seen beside the Sungai Tutoh river in dense riverside tangled vegetation from 22nd August 2016, and seen also here in October 2017.

Lesser Coucal *Centropus bengalensis*

One seen drying wings beside tributary river to Mulu Lodge on 26th August 2016.

Chestnut-breasted Malkoha *Phaenicophaeus curvirostris*

Good views just below the summit of Gunung Mulu, in the shrub-zone belt, on 31st August 2016.

Chestnut-bellied Malkoha *Phaenicophaeus sumatranus*

Excellent views in mid-storey of primary peat swamp forest at Bako on 10th September 2016.

Black-bellied Malkoha *Phaenicophaeus diardi*

Pair flew across the tributary river from Mulu Lodge on 24th August 2016.

Violet Cuckoo *Chrysococcyx xanthorhynchus*

One heard on arrival at Mulu Lodge, calling in secondary rainforest tree at edge of palm plantation, on 20th August 2016.

Plaintive Cuckoo *Cacomantis merulinus*

One heard calling from primary rainforest edge, upper mid-layer (ID'ed by Ch'ien Lee) along the Mulu Lodge tributary river on 16th August 2016.

Square-tailed Drongo Cuckoo *Surniculus lugubris*

One male heard giving its accelerating call from primary emergent tree at riverside, on the tributary river from Mulu Lodge, on 22nd August.

Brown Wood Owl *Strix leptogrammica*

Excellent views of a bird in daylight, mobbed by other smaller birds, in secondary rainforest beside the Sungai Tutoh river in October 2017.

Grey-rumped Treeswift *Hemiprocne longipennis*

Seen high overhead in stormy overcast conditions, generally, above Mulu Lodge, from 25th August 2016.

Mossy-nest Swiftlet *Aerodramus salangana*

Large swiftlet hoards seen most evenings along the Sungai Tutoh river, with a few of this species identified by expert Ch'ien Lee from 20th August 2016.

Black-nest Swiftlet *Aerodramus maximus*

At least one of this species identified at close range by Ch'ien Lee on 20th August 2016 and a few further seen very well close to the boat, along Sungai Tutoh, across this trip.

Edible-nest Swiftlet *Aerodramus fuciphagus*

A handful confirmed over Mulu Lodge on 23rd August 2016 where pale under-parts seen well; along this stretch of jungle river, locally rarer than the other two similar swiftlet species.

Plume-toed Swiftlet *Collocalia affinis*

Common to abundant, especially along the Sungai Tutoh river but throughout Mulu's waterways, throughout August and September 2016, and October 2017.

Brown-backed Needletail *Hirundapus giganteus*

One seen well, flying low over the Sungai Tutoh river in the evening, on 23rd August 2016.

Pacific Swift *Apus pacificus*

One (wintering) bird seen overhead at Buntal village coast, near Bako National Park, on 10th September 2016.

House Swift *Apus nipalensis*

Seen over Kuching especially very urban areas with older houses, on 9th September 2016.

Stork-billed Kingfisher *Pelargopsis capensis*

Seen very well along the mid-sized tributary river leading to Mulu Lodge from 23rd August 2016, typically frequenting low dead trees beside the water; then throughout this trip, and in October 2017. A stunning species and truly impressive in the field.

Collared Kingfisher *Todiramphus chloris laubmannianus*

Several seen on wires beside lowland oil palm cultivation on the road from Kuching to Bako National Park on 10th September 2016, and seen very well fishing at Buntal village shore.

Blue-banded Kingfisher *Alcedo (euryzona) peninsulae*

Heard calling only in lofty secondary rainforest beside the Sungai Tutoh river on 21st August 2016.

Blue-eared Kingfisher *Alcedo meninting*

Seen well along the tributary river from Mulu Lodge from 25th August 2016, with two birds offering excellent views; less common in the intense rains of 2017 but a couple seen.

Chestnut-collared Kingfisher *Actenoides concretus*

Heard only in swampy lowland primary rainforest between Mulu Lodge and Camp 2 en-route to Gunung Mulu, in September 2017.

Red-bearded Bee-eater *Nyctornis amictus*

Seen in flight over the Sungai Tutoh river emerging from a stand of relict primary rainforest adjoining cultivation, on 21st August 2016.

Blue-throated Bee-eater *Merops viridis*

Heard only over secondary rainforest beside the Sungai Tutoh river on 22nd August 2016.

Black Hornbill *Anthracoceros malayanus*

Seen commonly in August 2016 along the tributary river from Mulu Lodge, and the main Sungai Tutoh river, generally in small groups in partially-dead primary rainforest trees next to the river. Largest party of 10 noted on 10 on 21st August 2016. Only small numbers in 2017.

Bushy-crested Hornbill *Anorrhinus galeritus*

Seen well in flight over the tributary river from Mulu Lodge in October 2017, apparently the commonest hornbill in these lowland forests but quite elusive.

Red-crowned Barbet *Psilopogon rafflesii*

Heard in secondary rainforest beside the Sungai Tutoh river from 21st August 2016.

Red-throated Barbet *Psilopogon mystacophanos*

Heard daily in primary rainforest surrounding Mulu Lodge from 21st August 2016; one of the charismatic sounds of the jungle, like a sound effect from a battle in space.

Mountain Barbet *Psilopogon monticola* (Endemic)

Heard in upland forest around Camp 4, c.750m below the Gunung Mulu summit, on 28th August 2016 but not seen. Apparently replaced at higher altitudes by Golden-naped Barbet.

Golden-naped Barbet *Psilopogon pulcherrimus* (Endemic)

Superb views of one with a host of other montane endemics around 250m below the summit of Gunung Mulu on 29th August 2016, feeding in low sub-montane trees.

Blue-eared Barbet *Psilopogon duvaucelii*

Heard daily in primary rainforest around Mulu Lodge from 21st August 2016.

Maroon Woodpecker *Blythipicus rubiginosus*

One heard in primary rainforest beside the tributary river from Mulu Lodge on 24th August 2016.

Blue-rumped Parrot *Psittinus cyanurus*

Heard along tributary from Mulu Lodge on 20th August 2016 (thanks as often to Ch'ien Lee for identifying the call). Seen flying over the river here in September 2017.

Blue-crowned Hanging Parrot *Loriculus galgulus*

Heard and also seen whizzing over Mulu Lodge in small groups from 21st August 2016.

Green Broadbill *Calyptomena viridis*

Seen flying across the tributary river from Mulu Lodge on 27th August 2016 only: brilliant flash of pure lime green.

Black-and-red Broadbill *Cymbirhynchus macrorhynchus*

Seen along the tributary river from Mulu Lodge, and several dilapidated nests seen here from 21st August, with good views of a pair on 25th August 2016.

Blue-banded Pitta *Erythropitta arquata* (Endemic)

Heard clearly in massive primary rainforest around 6km from Mulu Lodge on start of ascent towards Gunung Mulu, in September 2017.

Giant Pitta *Hydrornis caeruleus*

Heard clearly in massive primary rainforest around 5km from Mulu Lodge on start of ascent towards Gunung Mulu, in September 2017.

White-breasted Woodswallow *Artamus leucorhynchus*

Locally common at the boat entrance point to Bako National Park flying over the river, around the edges of primary and secondary mangrove swamp forest, on 10th September 2016.

Green Iora *Aegithina viridissima*

Heard along tributary river from Mulu Lodge and also glimpsed in flight on 24th August 2016.

Greater Racquet-tailed Drongo *Dicrurus paradiseus*

Heard regularly in primary rainforest, and seen flying overhead, around Mulu Lodge from 23rd August 2016 onwards.

White-throated Fantail *Rhipidura albicollis*

Seen very well on 29th August 2016 in the extraordinarily productive upper shrub-forest zone on Gunung Mulu, c.250m below the summit.

Spotted Fantail *Rhipidura perlata*

Good views of a pair in dense, ancient primary rainforest in the Mulu lowlands, c.5km from Mulu Lodge, in October 2017.

Malaysian Pied Fantail *Rhipidura javanica*

Birds seen from 21st August 2016 along the tributary river from Mulu Lodge, usually in riverside cultivations and bushes.

Blyth's Paradise Flycatcher *Terpsiphone affinis*

One superb male in the cultivated grounds of the Mulu Marriott on 9th September 2016.

Bornean Black Magpie *Platysmurus leucopterus aterrimus*

Pair flying across the Mulu Lodge tributary river on 20th August 2016 and a few dates thereafter.

Bornean Treepie *Dendrocitta cinerascens*

Excellent views of this extremely long-tailed endemic at Camp 4, Gunung Mulu, from 2nd September 2016; common in October 2017.

Slender-billed Crow *Corvus enca*

Vocal throughout our 2016 stay in Mulu Lowlands, 1 seen in flight across the Mulu Lodge tributary river on 20th August 2016.

Black-and-white Bulbul *Pycnonotus melanoleucos*

Pair seen flying across the Sungai Tutoh river into primary rainforest edge on 25th August 2016.

Black-headed Bulbul *Pycnonotus atriceps*

Seen flying into cultivated village palms along the Sungai Tutoh river on 20th August 2016.

Flavescent Bulbul *Pycnonotus flavescens*

One seen well in mature shrub vegetation 250m below Gunung Mulu summit on 29th August 2016.

Yellow-vented Bulbul *Pycnonotus goiavier*

Seen on wires in heavily cultivated village habitat at Buntal, near Bako NP, on 10th September 2016.

Asian Red-eyed Bulbul *Pycnonotus brunneus*

Seen around the buildings of the Mulu Marriott during a heat-wave, even by jungle standards, on 6th September 2016. Also 2017.

Hook-billed Bulbul *Setornis criniger*

Characteristic species of peat-swamp forest, and seen well in dense, shady cover at Bako National Park on 10th September 2016.

Pacific Swallow *Hirundo tahitica*

Very common throughout both trips, along the smaller tributaries and main Sungai Tutoh river and in villages and cultivated areas.

Asian House Martin *Delichon dasypus*

One seen at Buntal village over cultivated habitat and around house eaves on 10th September 2016.

Mountain Tailorbird *Phyllergates cuculatus*

One male seen in full song around 400m below the summit of Gunung Mulu in dense montane shrub vegetation on 29th August 2016.

Sunda Bush Warbler *Horornis vulcanius*

This smart warbler seen in the 'montane hotspot' c. 250m below the summit of Gunung Mulu on 29th August 2016, in tall shrubs with an open field layer.

Mountain Leaf Warbler *Phylloscopus trivirgatus*

Seen in the 'montane hotspot' c. 250m below the summit of Gunung Mulu on 29th August 2016, in tall shrubs with an open field layer, in company with the above species and several other endemic birds.

Yellow-bellied Prinia *Prinia flaviventris*

Heard calling in freshly-clearfelled area with shrubs and palms, beside Sungai Tutoh river on 23rd August 2016.

Rufous-tailed Tailorbird *Orthotomus sericeus*

Good views of male singing in mid-storey of primary rainforest edge at Mulu Lodge on 21st August 2016.

Ashy Tailorbird *Orthotomus ruficeps*

Excellent views of male singing in garden palms at Buntal village near Bako on 10th September 2016.

Grey-throated Babbler *Stachyris nigriceps*

An interesting encounter with this 'hopping' shrub-layer species, moving through right beside me at the montane shrub area 250m below Gunung Mulu summit, whilst uttering a king of purring call, on 29th August 2016.

Black-throated Babbler *Stachyris nigricollis*

A pair seen in the very dense, dark understorey about 50m into the primary rainforest at Mulu Lodge, shown to me by Ch'ien Lee, on 26th August 2016.

Bold-striped Tit-babbler *Macronus bornensis*

Heard only in dense primary rainforest, mid-storey, adjoining Mulu Lodge on 25th August 2016.

Fluffy-backed Tit-babbler *Macronus ptilosus*

Heard only in dense primary rainforest beside the tributary river from Mulu Lodge on 26th August 2016.

Sooty-capped Babbler *Malacopteron affine*

Heard only along the tributary river from Mulu Lodge, in primary rainforest trees, on 23-24th August 2016, with distinctive four-note whistle call.

Grey-breasted Babbler *Malacopteron albogulare*

Good views of a pair beside the tributary river from Mulu Lodge, in low riverside vegetation, on 23rd August 2016.

White-chested Babbler *Trichastoma rostratum*

Heard only in primary trees beside the tributary river from Mulu Lodge, on 21st August 2016.

Black-capped Babbler *Pellorneum capistratum*

Heard only in primary trees beside the tributary river from Mulu Lodge, on 21st August 2016.

Chestnut-hooded Laughingthrush *Garrulax treacheri* (Endemic)

Excellent views in tall trees, the very last in the high end of the shrub-layer, c.350m below Gunung Mulu, on 28th August 2016.

Chestnut-crested Yuhina *Yuhina everetti* (Endemic)

Lovely views of this charismatic endemic birds 'purring' in the shrub layer 250-400m below Gunung Mulu from 29th August 2016.

Mountain Blackeye *Chlorocharis emiliae* (Endemic)

Characteristic Bornean montane endemic, seen even drinking from pitcher plants (N.rajah) 250m below Gunung Mulu from 29th August 2016 onwards.

Asian Glossy Starling *Aplonis panayensis*

Seen around buildings close to cultivation, at Mulu Airport on 20th August 2016 and Buntal village near Bako on 10th September 2016.

Common Hill Myna *Gracula religiosa*

A wild myna at last, a pair seen well in a tall, dead emergent tree beside the Sungai Tutoh river on 25th August 2016.

Javan Myna *Acridotheres javanicus*

Common in Kuching, where seen on roadsides foraging and around many buildings throughout the city.

Oriental Magpie-robin *Copsychus saularis*

Male seen well in cultivated habitat beside tributary river from Mulu Lodge on 24th August 2016.

White-rumped Sharma *Copsychus malabaricus*

Excellent views of alarming male around wooden buildings at Mulu Lodge on 24th August 2016.

Malaysian Blue Flycatcher *Cyornis turcosus*

Vivid blue male shot across the boat, on the tributary river from Mulu Lodge on 25th August 2016.

Indigo Flycatcher *Eumyias indigo*

Good views of one hunting from characteristic dead tree (mid-storey) in montane rainforest around 500m below Gunung Mulu summit on 1st September 2016.

Pygmy Blue Flycatcher *Muscicapella hodgsoni*

A quality rare montane species. A pair seen foraging unobtrusively in the shrub layer (1.5m off ground), 250m below the summit of Gunung Mulu on 29th August 2016.

Bornean Leafbird *Chloropsis kinabaluensis* (Endemic)

One male seen briefly around 100m above Camp 4, Gunung Mulu, in the lower storey of sub-montane shrub forest, on 29th August 2016.

Orange-bellied Flowerpecker *Dicaeum trigonostigma*

Heard by Ch'ien Lee then flew across tributary river from Mulu Lodge (out of primary rainforest) on 24th August 2016.

Brown-throated Sunbird *Anthreptes malacensis*

Good views of a male in cultivated trees and open area beside Mulu Lodge on 23rd August 2016.

Olive-backed Sunbird *Cinnyris jugularis*

Good views of male in a clearing around the Bako National Park buildings, in palms, on 10th September 2016.

Plain Sunbird *Anthreptes simplex*

Heard by Venio Enar only in mature secondary rainforest beside the Sungai Tutoh river on 27th August 2016.

Little Spiderhunter *Arachnothera longirostra*

Heard and seen well hunting the dense lower storey of secondary-edge rainforest beside Mulu Lodge on 27th August 2016.

Dusky Munia *Lonchura fuscans*

One of the commoner Bornean endemics, a pair seen with a nest in palm, beside Mulu Lodge, from 23rd August 2016.

Chestnut Munia *Lonchura atricapilla*

Seen around the Mulu Marriott in open cultivated habitat with trees on 9th September 2016.

III. MAMMALS AND OTHER NOTABLE FLORA & FAUNA

Bornean White-bearded (Agile) Gibbon *Hylobates albibarbis*

A lovely bubbling chorus of these amazing primates each dawn, in the pristine sub-montane rainforests below Camp 4 on Gunung Mulu. They appeared to be present up to at least 300m below the summit of the mountain, but not in the shrub zone.

Proboscis Monkey *Nasalis larvatus*

Superb views of an adult male, as outlandish an animal as the books suggest, in primary peat-swamp forest within 200m of the visit centre at Bako National Park on 10th September 2016.

Crab-eating (Long-tailed) Macaque *Macaca fascicularis*

Amazing views of a pair squabbling over a Magnum ice-cream in the grounds of Bako National Park, would have made for the most amazing image on the one day my camera was left behind. Common here and provocative of tourists.

Bornean Bearded Pig *Sus barbatus*

For an incredibly shy animal, Bako proves the exception, with the species exceptionally used to people and not hunted here. A prehistoric looking male was seen rotting around on the beach, possibly searching for crabs, whilst two youngsters wandered unfazed through the restaurant area of the park.

Mountain Treeshrew *Tupaia montana*

Charismatic little fellows famous for their very close and unique symbiotic relationship with the pitcher plant *Nepenthes rajah*. Seen daily visiting the pitchers on Gunung Mulu, around 250m below the summit, and filmed as part of the series *Our Planet*.

Hardwicke's Woolly Bat *Kerivoula hardwickii*

Filmed visiting the pitcher plant *Nepenthes hemsleyana* in the lowlands along the Sungai Tutoh river; the bat uniquely detects the plant's sonar profile and selects it preferentially to use for roosting. The trade-off is that the bat, sleeping in the plant, deposits nitrates in the form of faeces.

Oriental Small-clawed Otter *Amblonyx cinereus*

Seen one evening along the edge of the Mulu Lodge tributary river with Ch'ien Lee, around 25th August 2016.

Giant Voodoo Lily *Amorphophalus hewitii*

A superb specimen of this plant filmed in the grounds of Mulu Lodge on 24th September 2016, the flower being almost a metre in height. The stench was overpowering, with a number of carrion flies being drawn to the scent from perhaps miles around.

Rajah Brooke's Birdwing *Trogonoptera brookiana*

A spectacular butterfly seen soaring often over Mulu Lodge and the surrounding rainforest edges.

Borneo Birdwing *Troides andromache*

Another giant seen soaring often over Mulu Lodge and the surrounding rainforest edges.

Mudskipper sp.

Several, probably Giant Mudskippers, seen popping out comically from wet mud at the boat entrance point to Bako National Park on 10th September.