A REPORT ON THE RAPID WILDLIFE ASSESSMENT VIA CAMERA-TRAPPING INSIDE THE PROPOSED MUJAN-JULAN NATIONAL PARK, MIRI.

WWF-Malaysia

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SUMMARY

In conjunction with the HCV training workshop that was held at Gerenai Forest Management Unit (FMU), a rapid assessment on wildlife was carried out. Ten camera-trap stations were established inside the proposed Mujan-Julan National Park (NP) from May through June 2019. The main objectives were to 1) train timber concession staff on camera-trap survey techniques; and 2) collect biodiversity data of terrestrial species inside the proposed Mujan-Julan NP. Two cameras were set up at each station. Habitat surveys were carried out, by recording microhabitat covariates to describe the vegetation characteristics surrounding each station. On average, camera-trap stations were spaced about 1-km apart and deployed for about 28 days before collection. During this period, staff from Samling Timber Gerenai Sdn. Bhd. assisted WWF-Malaysia researchers with the station setup and habitat surveys.

The total sampling effort was 572 camera-trap days, with over 3,180 "independent" images collected and 24 species of wildlife positively identified. The most frequently photographed species was the pig-tailed macaque, followed by the muntjacs, bearded pig, and the Malayan porcupine. Also recorded were threatened species such as the Sunda pangolin, and Bornean endemics such as the Hose's langur and the Bulwer's pheasant. The occupancy probabilities of some species were considerably high in relation with the sites' elevation and canopy cover. In addition, the detection probabilities for some species were poor due to the lack of detection.

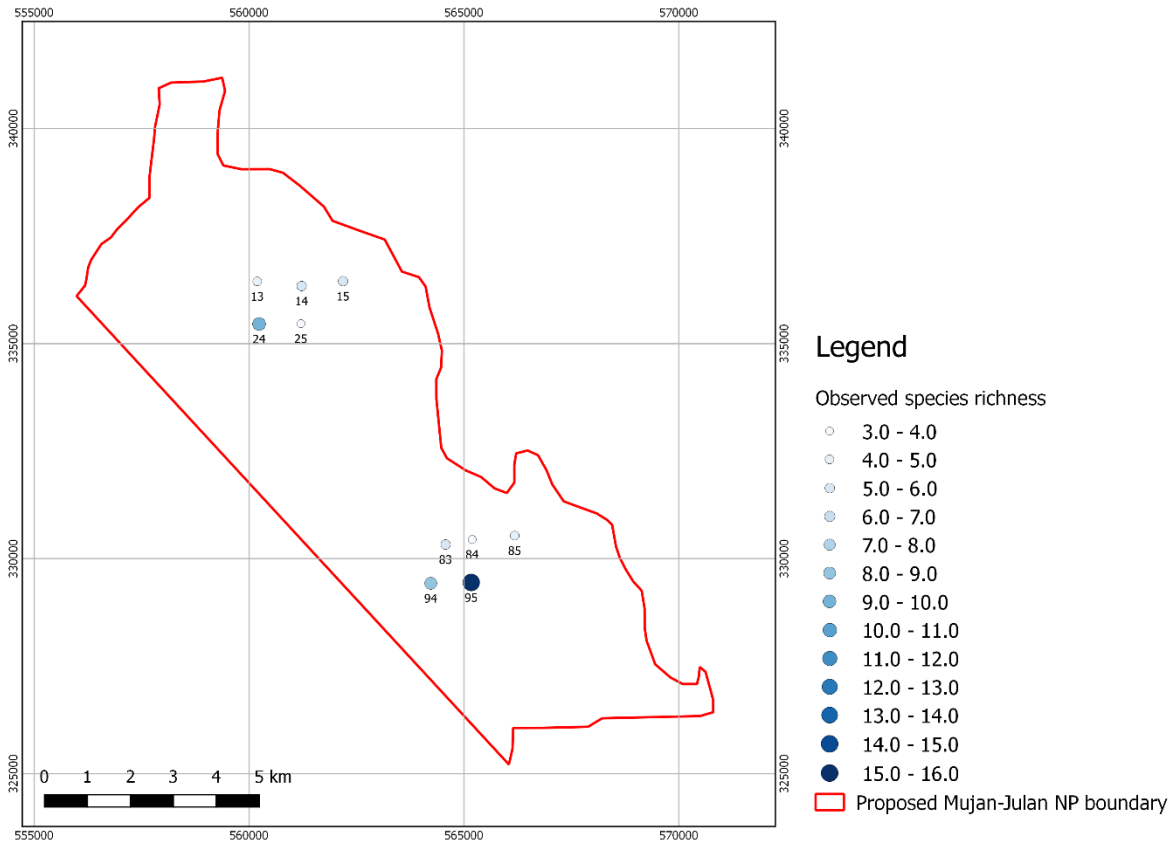

Figure 1. Location of the camera-trap stations (indicated by number identity below point of each station) with the observed species richness (refer Table 1 for the detailed breakdown)

Table 1. Camera coordinates, trap efforts, and observed species richness.

No.	Station	X-coordinate	Y-coordinate	Trap effort	Observed species richness
1	13	560187	336447	16 days	5
2	14	561219	336339	16 days	6
3	15	562182	336452	17 days	6
4	24	560230	335456	16 days	10
5	25	561203	335464	16 days	3
6	83	564569	330330	41 days	6
7	84	565187	330447	41 days	4
8	85	566177	330536	41 days	5
9	94	564225	329427	41 days	9
10	95	565165	329446	41 days	16

Note: Projection is in Borneo RSO with Timbalai 1948 coordinates system

Table 2. The species observed with the number of incidence.

No.	Species	Type	No. of events	No. of stations
1	Bulwer's pheasant	Bird	2	1
2	Crested fireback	Bird	2	1
3	Coucal sp.	Bird	1	1
4	Roulroul	Bird	2	1
5	Crested serpent eagle	Bird	1	1
6	Great argus pheasant	Bird	3	2
7	Banded palm civet	Carnivore	2	2
8	Dog	Carnivore	1	1
9	Leopard cat	Carnivore	3	1
10	Malayan civet	Carnivore	2	1
11	Mongoose sp.	Carnivore	2	2
12	Treeshrew sp.	Insectivore	3	3
13	Pangolin	Pangolin	1	1
14	Hose's langur	Primate	6	1
15	Long-tailed macaque	Primate	1	1
16	Pig-tailed macaque	Primate	62	8
17	Giant squirrel	Rodent	1	1
18	Long-tailed porcupine	Rodent	4	4
19	Malayan porcupine	Rodent	27	4
20	Rat sp.	Rodent	15	5
21	Squirrel sp.	Rodent	6	3
22	Thick-spined porcupine	Rodent	5	2
23	Bearded pig	Ungulate	29	9
24	Muntjac sp.	Ungulate	57	8
25	Sambar deer	Ungulate	7	4

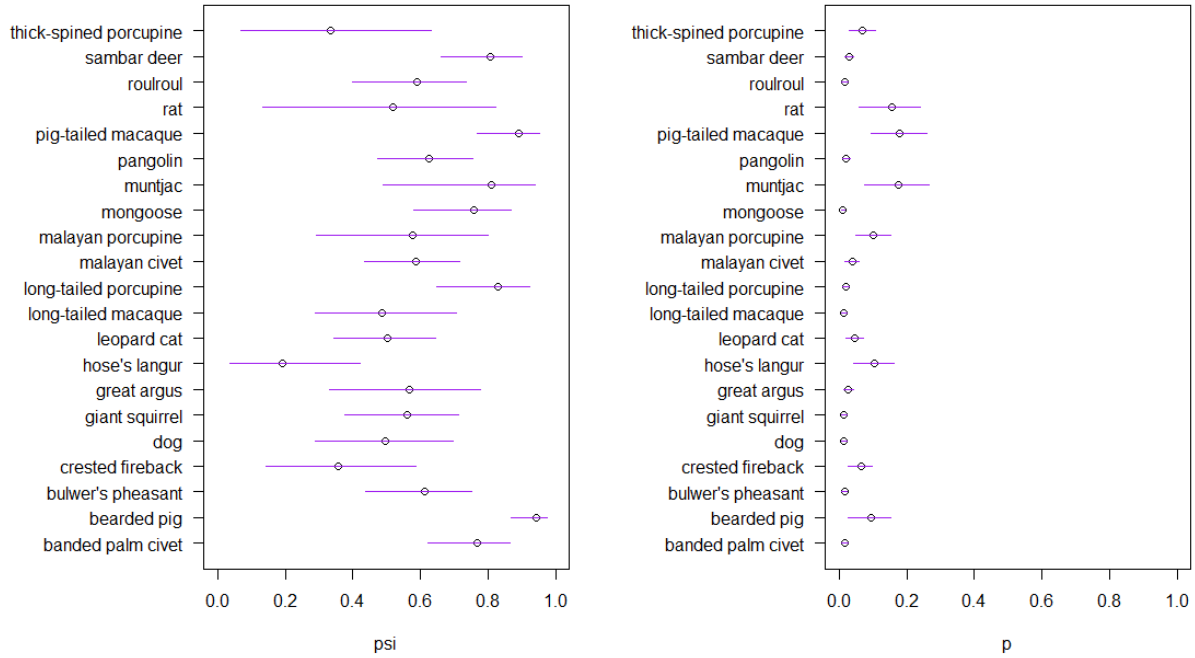

Figure 2. Occupancy probabilities (psi) and detection probabilities (p) of some of the species in relation to the sites' elevation and canopy cover.

PHOTOS

Roulroul

Mongoose sp.

Leopard cat

Pangolin

Giant squirrel

Bornean crested fireback

Great argus pheasant

Hose's langur

Crested serpent eagle