

WILDLIFE MONITORING JAN – DEC 2020

Wildlife monitoring is an important forest management activity in the UKW SFM project area. The monitoring results shall provide information on the existence and the population of wildlife. There are currently three methods of monitoring used to monitor wildlife in the forest management unit, which is camera trapping technique, Transect Line/ recce walk survey, and opportunistic sighting. The importance of the project area towards the wellbeing of wildlife is captured in wildlife monitoring. The camera traps were set-up at several random locations within the project area. As for the transect lines, four fixed trails with 2,000 meters each were established in Ulu Kalumpang FR Class 1, Mt Wullersdorf FR Class 1, Madai Baturong VJR107F(Binuang) Class VI, and Kalumpang VJR107D (Sapang) Class VI. Opportunistic sightings of wildlife during regular patrolling and surveillance were also recorded.

i. Mammals

In 2020, a total of 3,840 sightings were recorded with 84.24% derived alone from camera trapping method, while 10.23% for Line Transect and 5.52% from Opportunistic Sightings (**Table 2**). Of this figure, 25 species of mammals derived from 15 families were observed. The omnivores (13 species) are the most speciose mammals sighted, followed by the herbivores (8 species), and carnivores (4 species). From this data, the Project Area is one of the most significant forest landscapes that protect the well-being of wide habitat ranging for wildlife. The most individual sighted are the omnivorous mammals with 3,826 sightings and followed by the herbivorous with 534 sightings and the least is carnivores with 20 sightings. Throughout the survey, only six (6) endemic species of mammal were recorded. A total of 10 species are known to be threatened under the IUCN Redlist of which 1 species are categorized as Critically Endangered (CR), 2 species as Endangered (EN) and 7 species as Vulnerable (VU). Among all the mammals recorded in 2020, four of them which is Orang Utan (*Pongo pygmeus*), Bornean Pygmy Elephant (*Elephas maximus borneensis*) [**Pic 9A**], Bornean Gibbon (*Hylobates funereus*), and Bornean Sun Bear (*Helarctos malayanus*) [**Pic 9B**], known to be the most outstanding conservation value in Sabah, both endemic and threatened species. The most sighted wildlife in the project area is the Pig-Tailed Macaque with a total record of 1,873 sightings, followed by the Bearded Pig (9,51 sightings), Long-Tailed Macaque (387 sightings), Bornean Pygmy Elephant (238 sightings), and Sambar Deer (152 sightings).

Table 2. List of mammals recorded under various survey method in Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah. [Note of survey method: Line transect (LT); Camera trap (CT) & Opportunistic sighting (OS)]

No	Group	Family	Scientific Name	Vernacular Name	Survey Method			Total	Endemic (Borneo)	IUCN
					LT	CT	OS			
1	Carnivore	Felidae	<i>Neofelis diardi</i>	Bornean Clouded leopard	-	2	-	2		VU
2	Carnivore	Felidae	<i>Prionailurus bengalensis</i>	Leopard Cat	-	2	12	14		LC
3	Carnivore	Lutrinea	<i>Aonyx cinerea</i>	Small-clawed Otter	-	-	2	2		VU
4	Carnivore	Mustelidae	<i>Martes flavigula</i>	Yellow-throated Marten	-	1	1	2		LC
5	Herbivore	Cervidae	<i>Cervus unicolor</i>	Sambar Deer	59	83	10	152		VU
6	Herbivore	Cervidae	<i>Muntiacus atherodes</i>	Bornean-yellow Muntjac	1	14	1	16	Endemic	NT
7	Herbivore	Cervidae	<i>Muntiacus muntjak</i>	Red Muntjac or Barking Deer	-	20	1	21		LC

8	Herbivore	Elephantidae	<i>Elephas maximus borneensis</i>	Bornean Pygmy Elephant	7	175	56	238	Endemic	EN
9	Herbivore	Hylobatidae	<i>Hylobates funereus</i>	Bornean Gibbon	8	-	6	14	Endemic	EN
10	Herbivore	Sciuridae	<i>Ratufa affinis</i>	Giant Squirrel	-	3	-	3		DD
11	Herbivore	Tragulidae	<i>Tragulus kanchil</i>	Lesser Mouse-deer	4	32	5	41		LC
12	Herbivore	Tragulidae	<i>Tragulus napu</i>	Greater Mouse-deer	1	46	2	49		LC
13	Omnivore	Cercopithecidae	<i>Macaca fascicularis</i>	Long-tailed Macaque	8	315	64	387		LC
14	Omnivore	Cercopithecidae	<i>Macaca nemestrina</i>	Pig-tailed Macaque	10	1,846	17	1,873		VU
15	Omnivore	Cercopithecidae	<i>Presbytis rubicanda</i>	Red Langur	-	1	1	2	Endemic	DD
16	Omnivore	Hominidae	<i>Pongo pygmaeus</i>	Bornean Orangutan	-	-	3	3	Endemic	CR
17	Omnivore	Hystricidae	<i>Hystrix brachyura</i>	Malayan/Common Porcupine	-	14	-	14		LC
18	Omnivore	Hystricidae	<i>Trichys fasciculata</i>	Long-tailed Pocupine	-	4	-	4		LC
19	Omnivore	Mephitidae	<i>Mydaus javanensis</i>	Sunda Skunk/Teludu	7	2	-	9		LC
20	Omnivore	Suidae	<i>Sus Barbatatus</i>	Bearded Pig	287	636	28	951		VU
21	Omnivore	Ursidae	<i>Helarctos malayanus</i>	Bornean Sun bear	1	5	1	7	Endemic	VU
22	Omnivore	Viverridae	<i>Viverra zangalunga</i>	Malay Civet	-	22	2	24		LC
23	Omnivore	Viverridae	<i>Arctictis binturong</i>	Binturong	-	2	-	2		VU
24	Omnivore	Viverridae	<i>Hemigalus dermianus</i>	Banded Palm Civet	-	5	-	5		NT
25	Omnivore	Viverridae	<i>Paradoxurus philippinensis</i>	Common Palm Civet	-	5	-	5		LC
Total					393	3,235	212	3,840		

9A



9B



Picture 9A & 9B. Outstanding conservation value mammals capture using camera traps and digital camera during the wildlife survey activities: 9A. Bornean Pygmy Elephant; 9B. Bornean Sun Bear.

10A

10B



Picture 10A. Wildlife monitoring by Line Transect; **10B.** Wildlife monitoring by Camera Trapping in the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah

ii. Birds

In 2020, there were 98 sightings of birds during the wildlife survey (Table 3). Of this figure, 6 species of birds that derived from 3 families were recorded. The most speciose group of birds are the omnivores with a total of 5 species, and 1 carnivorous species. Throughout the survey, the omnivorous birds are the most sighted (97 sightings). As for the outstanding conservation value species of birds, one are known to be endemic, namely the Bornean Crested Fireback, and three threatened species under the IUCN Redlist which is the Storm Stork and White Crowned Hornbill categorized as Endangered (EN) and one species categorized as Vulnerable (VU) which is Rhinoceros Hornbill.

Table 3. List of birds recorded under various survey method in Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah. [Note of survey method: Line transect (LT); Camera trap (CT); & Opportunistic sighting (OS)]

NO	Group	Family	Scientific Name	Vernacular Name	Survey Method			Total	Endemic (Borneo)	IUCN
					LT	CT	OS			
1	Omnivore	Bucerotidae	<i>Buceros rhinoceros</i>	Rhinoceros Hornbill	2	-	2	4		VU
2	Omnivore	Phasianidae	<i>Argusianus argus</i>	Great Argus	5	6	-	11		NT
3	Omnivore	Phasianidae	<i>Gallus gallus</i>	Red Junglefowl	-	5	-	5		LC
4	Omnivore	Phasianidae	<i>Lophura ignita</i>	Bornean Crested Fireback	1	73	2	76	Endemic	NT
5	Carnivore	Ciconiidae	<i>Ciconia stormi</i>	Storm Stork	-	-	1	1		EN
6	Omnivore	Bucerotidae	<i>Aceros cornatus</i>	White Crowned Hornbill	-	-	1	1		EN
Total					4	84	6	98		