

ANNUAL REPORT 2020
**ULU KALUMPANG-WULLERSDORF SUSTAINABLE FOREST MANAGEMENT
PROJECT**

1. INTRODUCTION

The Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project (UKW SFM) is about 64,953.74 Ha and covers several protected areas (**Table 1, Figure 1**). The purpose of forest rehabilitation activities is to restore forest ecosystem in areas within this project which had been previously encroached by illegal oil palm plantation dan agricultural crops as well as illegal logging/*bantalan*. Essentially, forest rehabilitation is planting activities done in encroached areas of the Forest reserves with indigenous species to rehabilitate the forest area. Ulu Kalumpang-Wullersdorf Sustainable Forest Management (UKW-SFM) Project area consisting of six (06) forest reserves including Class I (Protection Forest) and Class VI (Virgin Jungle Reserve) as the following name list below:

Table 1. List of forest reserves under the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah.

	Forest Reserve	Area (Ha)
1.	Ulu Kalumpang FR (Class I)	50,736
2.	Mount Wullersdorf FR (Class I)	8,137
3.	Kalumpang VJR107C (Forbes & Sangster) FR (Class VI)	950
4.	Kalumpang VJR10D (Sapang) FR - (Class VI)	1,950
5.	Kalumpang VJR107E (Bt. Mangkok) FR - (Class VI)	868
6.	Kalumpang VJR107F (Binuang) - (Class VI)	2,312.74

Year 2020 was the 14th year of implementation on Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project (UKW-SFM). Activities that were carried-out is based on the 10-year Conservation Area Management Plan (CAMP) started from 1st January 2011 until 31st December 2020 and for implementation in 2020 is based on the Annual Work Plan 2020 approved by the Chief Conservator of Forest. The project has successfully certified under the Forest Stewardship Council® (FSC-C135456)(SCS-FM/COC-005816) since May 2017.

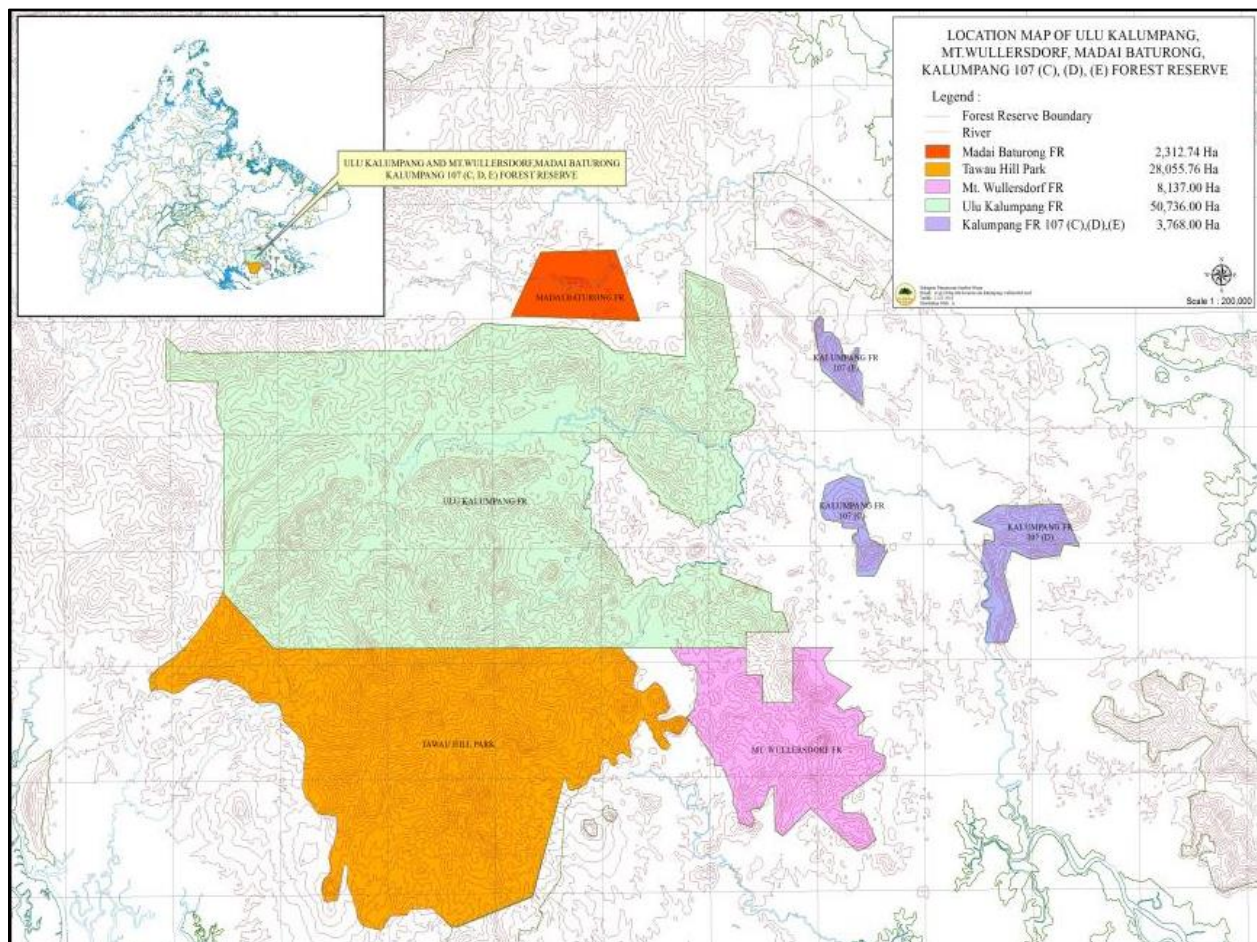


Figure 1. Map showing the distribution of forest reserves under the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah (Inset figure indicates the location of Project Area in Sabah).

2. PROTECTION FOREST ECOSYSTEM

2.1 Forest protection and enforcement

Surveillance and patrolling

Routine aerial surveillance and patrolling were carried out to detect illegal encroachment and poaching activities in the Project Area. This also includes routine patrolling together with other agencies and NGO's (**Pic 1A-2A**). In 2020, two (2) aerial surveillance was conducted over the project area as well as areas within Kunak Forestry District (**Pic 2A-2B**). There were several activities of anti-poaching strategy / operations, which include strategic patrolling and gate enforcements that conducted spot-checks on vehicles suspected to be poachers and carrying hunted wild animals. In one of those anti-poaching operations, the Sabah Forestry Team (consisting teams from UKW SFM Project staffs and Tawau Forestry Region Taskforce) had successfully arrested poachers (**Pic 3A-3B**). In addition, other protection activities that involved placing and maintaining several warning signs at strategic areas along access road.

1A



1B



Picture 1.A. Surveillance and ground patrolling with Sabah Wildlife Department in the Project Area. ;
1.B. Surveillance and patrolling with the PROTECT Team, Sabah Forestry Department in the Project Area.

2A



2B

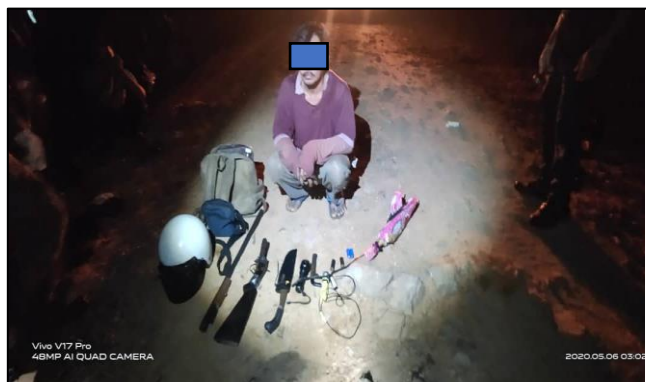


Picture 2A. Surveillance and patrolling through aerial survey in the Project Area; **2B.** Aerial view of Forest Checking Station Sg. Mantri during one of the aerial surveillances conducted in the year 2020.

3A



3B



Picture 3A. & 3B Two illegal poachers were arrested during one of the joint surveillances and patrolling by the Project's staffs (FCS Landau) with PROTECT Team SFD.

Boundary demarcation

To avoid encroachment, re-brushing of demarcated boundary was conducted in 2020. A total of 10,000 meters of the boundaries in Ulu Kalumpang FR Class I, Mount Wullersdorf FR Class 1, Kalumpang VJR 107C (Forbes & Sangster) FR Class VI and Kalumpang VJR107E (Bukit Mangkok) FR Class VI (**Pic 4A-4B**).

4A



4B



Picture 4A & 4B. Maintenance of forest reserve boundary in Kalumpang FR VJR107C (Forbes & Sangster) and 107E (Bt. Mangkok) as well as Ulu Kampung FR and Mt Wullersdorf FR Class 1 in Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah

3. MAINTAINING BIOLOGICAL DIVERSITY

Forest health

Under the forest health monitoring programme, fourteen permanent sample plots (PSPs) were established in October and December 2015. A monitoring of forest changes was conducted by Forest Research Centre in 2018. The findings indicated that the previously disturbed forests of Ulu Kalumpang-Wullersdorf Project Area are categorized as various regenerative and successional stages. These advance growth forests are recuperating as the forests demonstrated positive overall tree growths, favourable recruitment rate of diverse species and positive change of above ground biomass. Further monitoring of forest change is required. During the year 2020, all 14 of the Permanent Sample Plots were maintained by inspecting any natural damage occurring within the plots and fading tree labels on monitored trees. Any faded tree labels were re-numbered using appropriate paint (**Pic 5A-5B**).

5A



5B



Picture 5A & 5B. Maintenance of trees within the permanent sample plots in the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah

Forest rehabilitation

i. Silviculture

Under the state and federal funding, the department had appointed two contractors (Disamodra Enterprise and Perusahaan Panglima 1) to carry out the 2,396 Ha of silvicultural treatment at Mount Wullersdorf FR Class 1 (529 Ha of area treated) and Madai Baturong VJR107F (Binuang) FR (1,867 Ha of area treated).

Fig.2A

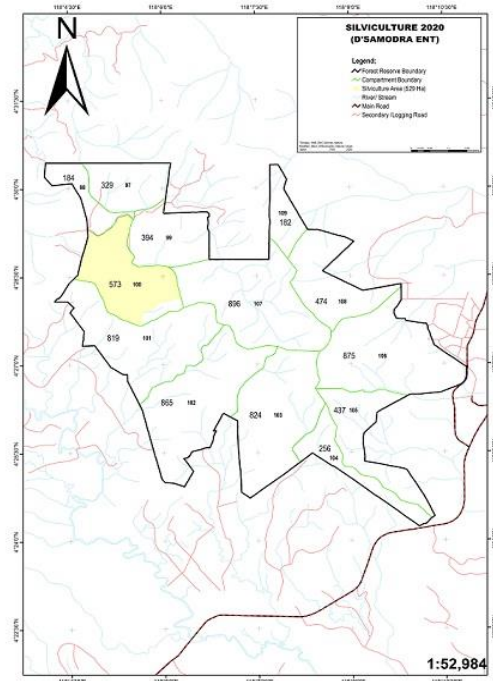


Fig.2B

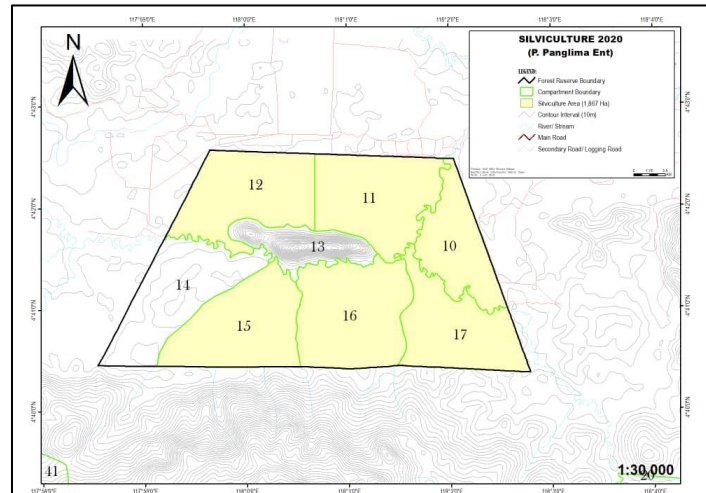


Figure 2A. Map showing the completed silviculturally treated area in Mt Wullersdorf FR Class 1 and; **2B** Map showing the completed silviculturally treated area in Madai Baturong FR VJR107F Class VI within the UKW SFM Project, Sabah

6A



6B



6C



6D

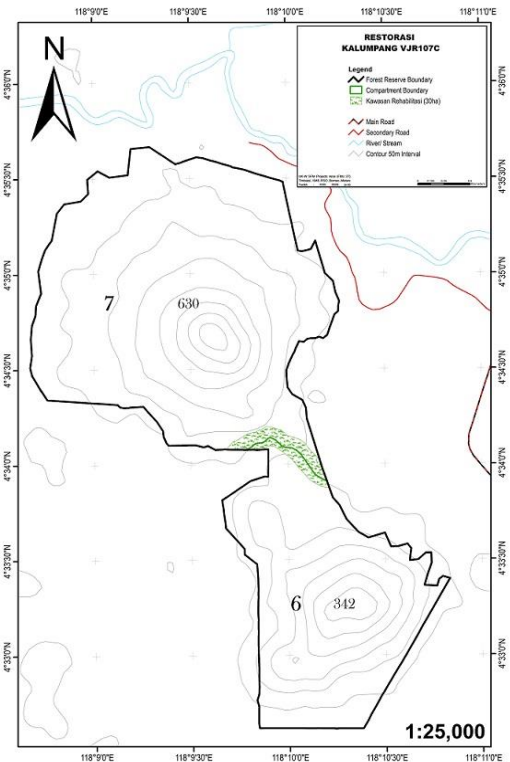


Picture 6A-6C. Ground inspection of the silviculture treatment works at Mt. Wullersdorf FR Class 1 and Madai Baturong VJR107 (Binuang) within Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah

ii. Planting

In 2020, the department had appointed two contractors (SR Construction and SHA Construction) to rehabilitate degraded forest area and to conduct maintenance works of previously planted area within UKW SFM Project area. A total of 30 Ha of Kalumpang VJR107C (Forbes & Sangster) FR was rehabilitated, and 30 Ha maintenance works of previously planted area at Mount Wullersdorf FR Class 1 (20 Ha maintained) and Ulu Kalumpang FR Class 1 (10 Ha maintained).

Figure 3A. Map showing the completed rehabilitation planting at Kalumpang VJR107C (Forbes Sangster) Class VI within the UKW SFM Project, Sabah



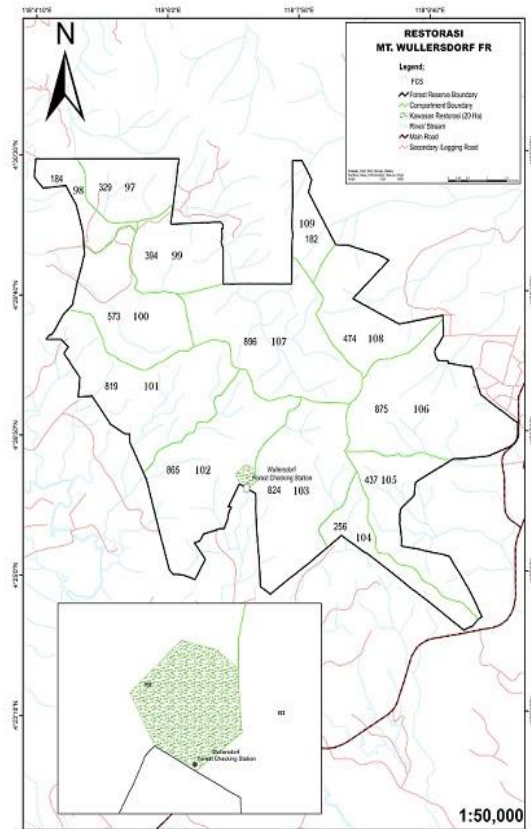
7A



7B



Picture 7A-7B. Rehabilitation works at Kalumpang VJR107C (Forbes & Sangster) within the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah



8A



8B



Picture 8A-8B. Maintenance works of previously planted area at Kalumpang VJR107C (Forbes & Sansgter) at Ulu Kalumpang FR Class and 1 Mt. Wullersdorf FR Class 1 within the UKW SFM Project, Sabah

Wildlife monitoring

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 pygmaeus*), 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)	IUC N
					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	Lutrineae	<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	Hystriidae	<i>Hystrix brachyura</i>	Malayan/Common Porcupine	-	14	-	14		LC
18	Omnivore	Hystriidae	<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 Barbatus</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 zangluna</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		

4. Forest management certification – Audit surveillance

During the year 2020, our country and state were hit by the COVID-19 pandemic. During that period, the government had imposed a series of lockdowns as in Movement Control Order (MCO), Conditional Movement Control Order (CMCO), Recovery Movement Control Order (RMCO) as well as Enhanced Movement Control Order (EMCO). Due to the pandemic and the Movement Control order, no forest management certification annual surveillance monitoring or audit surveillance was conducted.

5. Infrastructure & support facilities

Ulu Kalumpang-Wullersdorf's Field Outpost & Forest Checking Station

There are six Forestry Checking Stations (FCS) / Field Outposts, each function as stations for monitoring routine activities i.e., boundary inspections and patrolling at hotspot area, silviculture and rehabilitation planting activities, enforcement/ checking gates going in or out of forest reserve, monitoring of eco-tourism activity, and to routinely monitor and curb illegal activities (e.g., poaching, encroachment, illegal felling, forest fire etc.) from going rampant.

11A



11B



11C



11D



11E



11F



Picture 11A. Forest Checking Station – Landau; **11B.** Forest Checking Station – Sg Mantri; **11C.** Forest Checking Station – Tingkayu in Ulu Kalumpang FR Class 1; **11D** Forest Checking Station – Wullersdorf in Mt Wullersdorf FR Class 1; **11E** Forest Checking Station – Sapang in the Kalumpang FR (VJR107D-Sapang); **11F.** HoB Field Outpost – Binuang in Madai Baturong FR (VJR107F-Binuang); all within the Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah.

Several upgrading and maintenance activities were done in Forest Checking Station Sg. Mantri, Landau, and Sapang (**Pic 12A-12D**). **Table 4** summarizes the upgrade and maintenance works done in 2020:

Table 4. List of upgrading and maintenance work at various Forest Checking Stations within Ulu Kalumpang-Wullersdorf SFM Project

No	Upgrade and Maintenance Works	Locality
1.	Upgrading of solar-powered street/ spotlights, repairing of control gate, installing of electric fencing, upgarding of oil trap,	Forest Checking Station – Sg. Mantri
2.	General Building Maintenance	Forest Checking Station – Landau
3.	Upgrading of street/ spotlight, external and internal paint, repair roofing and maintenance of water supply system	Forest Checking Station – Sapang

12A**12B****12C****12D**

Picture 9A. The upgrading and maintenance of Forest Checking Station Sg. Mantri control gate **9B.** Upgrading of oil trap; **9C.** Installing of electric fencing; **9D.** Upgrading of solar-powered street/ spotlights.

Road Maintenance

Maintenance and repair of two culverts going into Forest Checking Station Sapang (Kalumpang FR) and Landau (Ulu Kalumpang FR) was carried out to ensure better access to these Forest Checking Stations. **(Pic 13A-13B).**

13A**13B**

Picture 13A-13B. Two culverts were maintained and repaired going into Forest Checking Station Sapang and Landau in Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah.

Safety practices & Personal Protective Equipment

For safety of the staff and office, several safety equipment was made available. The site management team were provided with Personal Protective Equipment (PPE), especially during the pandemic. Personal Protective Equipment such as facemasks (**Pic14A**), and hand sanitizers (**Pic14B**) were made available to all the staffs and forest workers. First Aid kits (**Pic.14C**) were also made available at each Forest Checking Stations. Regular checkups by the Ministry of Health (MOH) personnel were conducted at the forest workers camp to ensure the compliance of Safety & Health precautions and SOP's during pandemic (**Pic 14D**).



Picture 14. The management team has provided safety equipment for the field staff in Northern Gunung Rara Sustainable Forest Management Project, Sabah: **A.** Facemasks; **B.** Hand sanitizer. **C.** First Aid Kits; **Pic 14D.** Checkups by Ministry of Health personnel at forest worker's camp.

6. Training and capacity building

Several training and capacity building were made available for the field staff and awarded contractors that involved in the management of the project area. This is to ensure that the staff and contractors are kept abreast with updated rules and regulations and new procedures for the management and monitoring purposes of the Project Area. List of training and capacity building throughout 2020 are as follows:

Table 5. List of trainings conducted during the year 2020 for Ulu Kalumpang-Wullersdorf Sustainable Forest Management Project, Sabah.

No.	Training	Date & Location
1.	<i>Latihan Silvikultur Untuk Kontraktor & Kakitangan, Pengenalan Pensijilan Hutan, FSC dan NFSS</i>	18-20 Feb 2020, PPD Kunak
2.	<i>Latihan Simulasi Mengawal dan Memadam Kebakaran Hutan</i>	20-24 Julai 2020, Sook
3.	<i>Latihan Fire Drill & Kebakaran hutan UKWSFM – (Internal Refresher Course)</i>	17 Ogos 2020, Kunak
4.	<i>Latihan FSC & NFSS Projek UKWSFM – (Internal Refresher Course)</i>	18 Ogos 2020, Kunak
5.	National Stakeholder Consultation on Draft 2 of MYNI of the Common Guidance for Management and Monitoring HCV	8th – 10th December 2020 via Zoom App
6.	Introduction and Refresher Course on FSC Forest Management Certification	14 Ogos 2020 via Microsoft Meet
7.	SFD Webinar 01/2020	30 Jun 2020 via Zoom App
8.	SFD Webinar 03/2020	16 Okt 2020 via Zoom App
9.	SFD Webinar on Selected International Research & SFD Collaboration 05/2020	25 Nov 2020 via Zoom App

15A



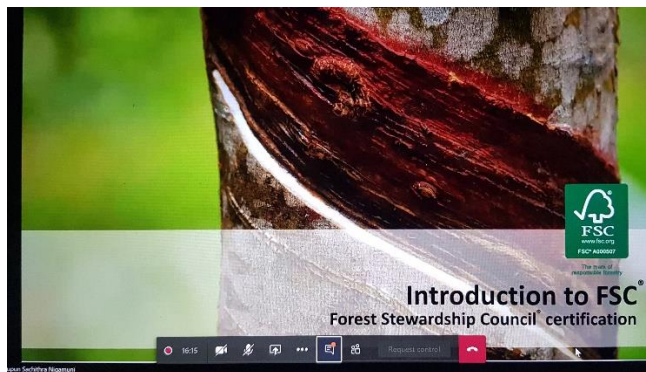
15B



15C



15D



Picture 15A. Silviculture training. **15B.** Fire Drill Internal Refresher Course **15C.** Online National Stakeholder Consultation on Draft 2 of MYNI of the Common Guidance for Management and Monitoring HCV **15D.** Online Course - Introduction and Refresher Course on FSC Forest Management Certification