

SURVEY BY RECCE WALK/TRANSECT LINE 2017 (JAN-DEC)

Recce walk/transect line is one of the method used by wildlife survey team for wildlife monitoring activities. There are four (04) permanent transect line based on each forest reserve in Ulu Kalumpang-Wullersdorf SFM Project area (Ulu Kalumpang Forest Reserve, Wullersdorf Forest Reserve, Kalumpang Forest Reserve and Madai Baturong Forest Reserve) for data collection by identifying wildlife trace including footprints, sound, direct sightings and scratching marks.

1. ULU KALUMPANG FOREST RESERVE

NO.	SPECIES	SCIENTIFIC NAME	QUARTER 1 (JAN-MARCH) 2017	QUARTER 2 (APR-JUNE) 2017	QUARTER 3 (JULY-SEPT) 2017	QUARTER 4 (OCT-DEC) 2017	SUB TOTAL (N)	TOTAL TRANSECT DISTANCE SURVEY FOR YEAR 2017	Index = N/DISTANCE	INDEX (%) = N/TOTAL DETECTION OF ALL SPECIES
1	Wild Pig/Bearded Pig	<i>Sus barbatus</i>	12	16	12	12	52	8	6.50	71.2
2	Lesser Mouse Deer	<i>Tragululus javanicus</i>	1	1	0	0	2	8	0.25	2.7
3	Bornean Gibbon	<i>Hylobates muelleri</i>	1	0	1	0	2	8	0.25	2.7
4	Sambar Deer	<i>Cervus unicolor</i>	2	6	1	3	12	8	1.50	16.4
5	Sun Bear	<i>Helarctos malayanus</i>	1	0	0	0	1	8	0.13	1.4
6	Malay badger	<i>Mydaus javanensis</i>	0	2	0	0	2	8	0.25	2.7

7	Black Squirrel	<i>Sciurus spp.</i>	0	1	0	0	1	8	0.13	1.4
8	Yellow Throated Marten	<i>Martes flavigula</i>	0	0	0	1	1	8	0.13	1.4
TOTAL			17	26	14	16	73	8	9.13	100

Table 1. Wildlife index percentages recorded through “Recce Walk” research method in Ulu Kalumpang FR for the year of 2017 (Jan-Dec)

Table 1. shows frequency number of wildlife recorded in Ulu Kalumpang Forest Reserve area from January - December 2017 where total of wildlife found is 73. Summary of the analysis from our survey data are as follows:

(a) Wildlife Index (Index = N (Number of wildlife detected)

Distance survey

(b) Wildlife Index (Index (%) = N (Number of wildlife detected X 100)

Total detection of all species

In the calculation, distance survey used for the complete year of 2017 (January-December) is 8km while the total detection of all species is 73.

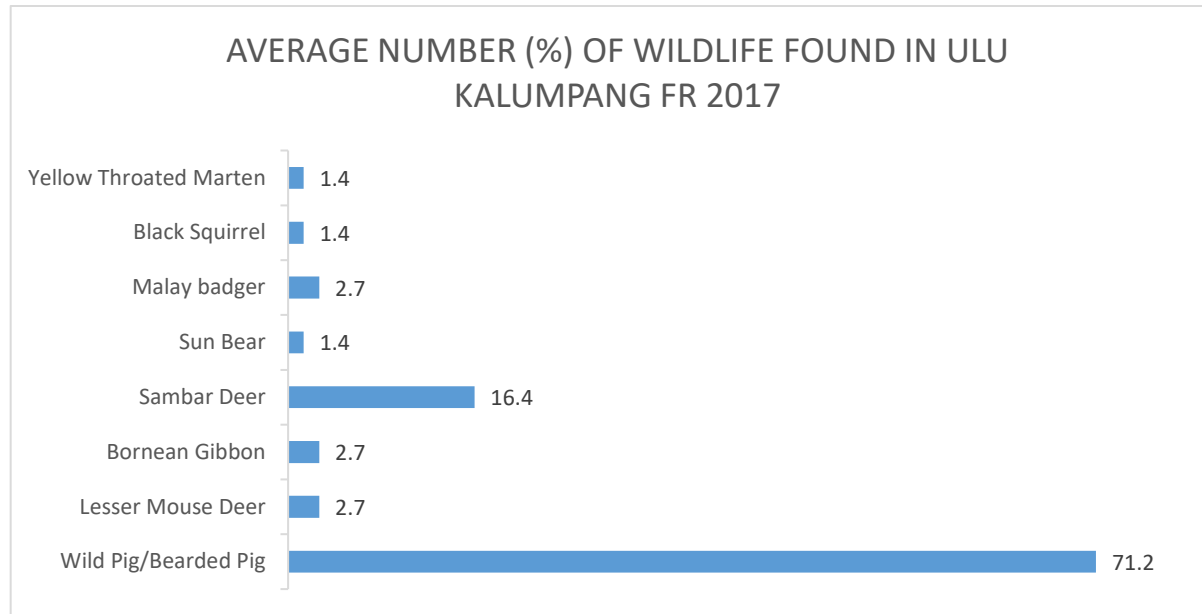


Figure 1. Chart shown Wildlife Index percentage recorded through “Recce Walk” in Ulu Kalumpang FR for year of 2017 (Jan-Dec)

Figure 1. shows wildlife index percentage for average number of wildlife found in Ulu Kalumpang Forest Reserve were recorded for total of a year 2017 (January-December). The most active wildlife species that found in that period recorded is Wild Pig (*Sus barbatus*) where the index of percentage is 71.2%.

Based on the figure shown, there is one endemic species that can only be found in Borneo; Bornean Gibbon (IUCN Red List: Endangered) and another three species listed under IUCN Red List; Bearded Pig (IUCN Red List: Vulnerable), Sambar Deer (IUCN Red List: Vulnerable) and Sun Bear (IUCN Red List: Vulnerable).

2. MT. WULLERSDORF FOREST RESERVE

NO.	SPECIES	SCIENTIFIC NAME	QUARTER 1 (JAN-MARCH) 2017	QUARTER 2 (APR-JUNE) 2017	QUARTER 3 (JULY-SEPT) 2017	QUARTER 4 (OCT-DEC) 2017	SUB TOTAL (N)	TOTAL TRANSECT DISTANCE SURVEY FOR YEAR 2017	Index = N/DISTANCE	INDEX (%) = N/TOTAL DETECTION OF ALL SPECIES
01.	Wild Pig/Bearded Pig	<i>Sus barbatus</i>	3	6	7	5	21	8	2.63	61.76
02.	Bornean Gibbon	<i>Hylobates muelleri</i>	2	3	0	0	5	8	0.63	14.71
03.	Bornean Yellow Muntjac	<i>Muntiacus atherodes</i>	1	0	0	0	1	8	0.13	2.94
04.	Lesser Mouse Deer	<i>Tragulus javanicus</i>	0	1	0	0	1	8	0.13	2.94
05.	Sambar Deer	<i>Cervus unicolor</i>	0	2	1	1	4	8	0.5	11.76
06.	Malay Badger	<i>Mydaus javanensis</i>	0	0	1	1	2	8	0.25	5.88
TOTAL:			6	12	9	7	34	8	4.25	100

Table 2. Wildlife index percentages recorded through “Recce Walk” research method in Mt. Wullersdorf FR for the year of 2017(Jan-Dec)

Table 2. shows frequency number of wildlife recorded in Mt. Wullersdorf Forest Reserve area from January - December 2017 where total of wildlife found is 34. Summary of the analysis from our survey data are as follows:

a) Wildlife Index (Index = N (Number of wildlife detected)

Distance survey

(b) Wildlife Index (Index (%) = $\frac{N \text{ (Number of wildlife detected)}}{\text{Total detection of all species}} \times 100$)

Total detection of all species

In the calculation, distance survey used for the year of 2017 (January-December) is 8km while the total detection of all species is 34.

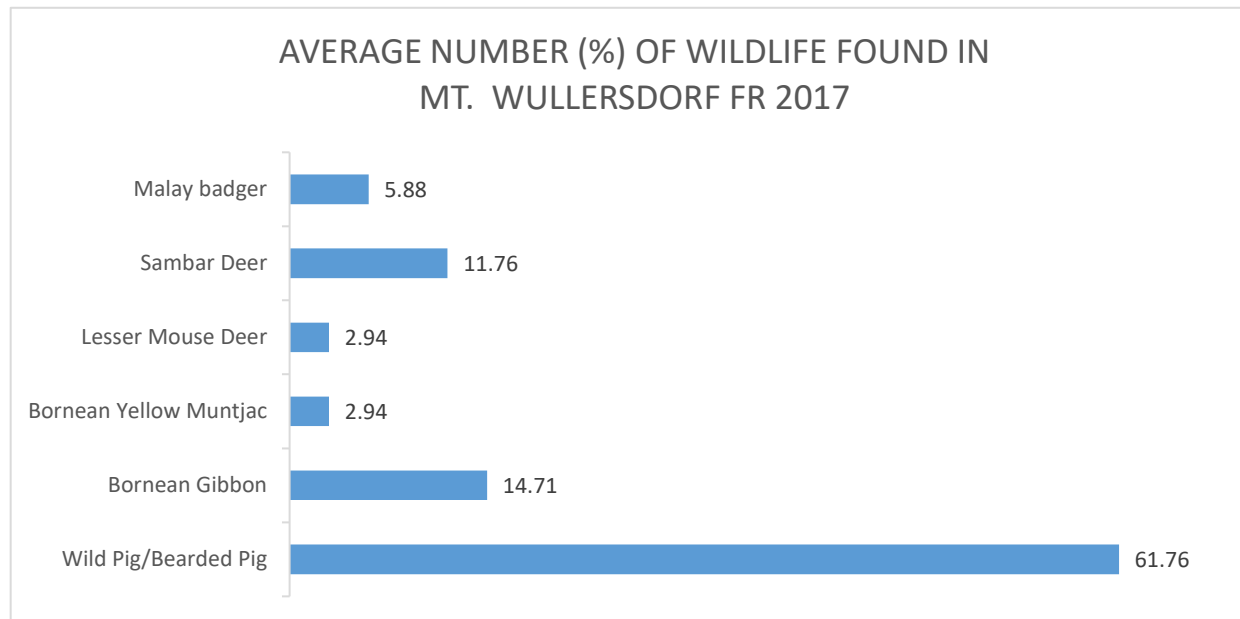


Figure 2. Wildlife Index percentage recorded through "Recce Walk" in Mt. Wullersdorf FR for year 2017(Jan-Dec)

Figure 2. shows wildlife index percentage for average number of wildlife found in Mt. Wullersdorf Forest Reserve were recorded for the total of year 2017 (January-December). The most active wildlife species that found in that period recorded is Wild Pig/Bearded Pig (*Sus barbatus*) where the index of percentage is 61.76% compared to other species in the forest reserve area.

Updated : 14 March 2018

Based on the figure shown above, there are two endemic species in Borneo found within Mt. Wullersdorf Forest Reserve; Bornean Yellow Muntjac (IUCN Red List: Near Threatened) and Bornean Gibbon (IUCN Red List: Endangered) and another two species listed under IUCN Red List; Bearded Pig (IUCN Red List: Vulnerable), and Sambar Deer (IUCN Red List: Vulnerable)

3. KALUMPANG VJR107D FOREST RESERVE

NO.	SPECIES	SCIENTIFIC NAME	QUARTER 1 (JAN-MARCH) 2017	QUARTER 2 (APR-JUNE) 2017	QUARTER 3 (JULY-SEPT) 2017	QUARTER 4 (OCT-DEC) 2017	SUB TOTAL (N)	TOTAL TRANSECT DISTANCE SURVEY FOR YEAR 2017	Index = N/DISTANCE	INDEX (%) = N/TOTAL DETECTION OF ALL SPECIES
01.	Wild Pig/Bearded Pig	<i>Sus barbatus</i>	13	12	11	11	47	8	5.88	74.60
02.	Greater Mousedeer	<i>Tragulus napu</i>	1	0	0	0	1	8	0.13	1.59
03.	Sambar Deer	<i>Cervus unicolor</i>	3	1	0	2	6	8	0.75	9.52
04.	Pig-tailed Macaque	<i>Macaca nemestrina</i>	2	0	0	0	2	8	0.25	3.17
05.	Malay badger	<i>Mydaus javanensis</i>	1	1	0	0	2	8	0.25	3.17
06.	Bornean Gibbon	<i>Hylobates muelleri</i>	0	1	1	1	3	8	0.38	4.76
07.	Lesser Mouse Deer	<i>Tragulus javanicus</i>	0	0	1	0	1	8	0.13	1.59
08.	Long-tailed Macaque	<i>Macaca fascicularis</i>	0	0	0	1	1	8	0.13	1.59
TOTAL:			20	15	13	15	63	8	7.88	100

Table 3. Wildlife index percentages recorded through “Recce Walk” research method in Kalumpang VJR107D FR for the year of 2017(Jan-Dec)

Table 3. show frequency number of wildlife recorded in Kalumpang VJR107 Forest Reserve area from January - December 2017 where total of wildlife found is 63. Summary of the analysis from our survey data are as follows:

a) Wildlife Index (Index = N (Number of wildlife detected)

Distance survey

(b) Wildlife Index (Index (%) = N (Number of wildlife detected) $\times 100$)

Total detection of all species

In the calculation, distance survey used for the year of 2017 (January-December) is 8km while the total detection of all species is 63.

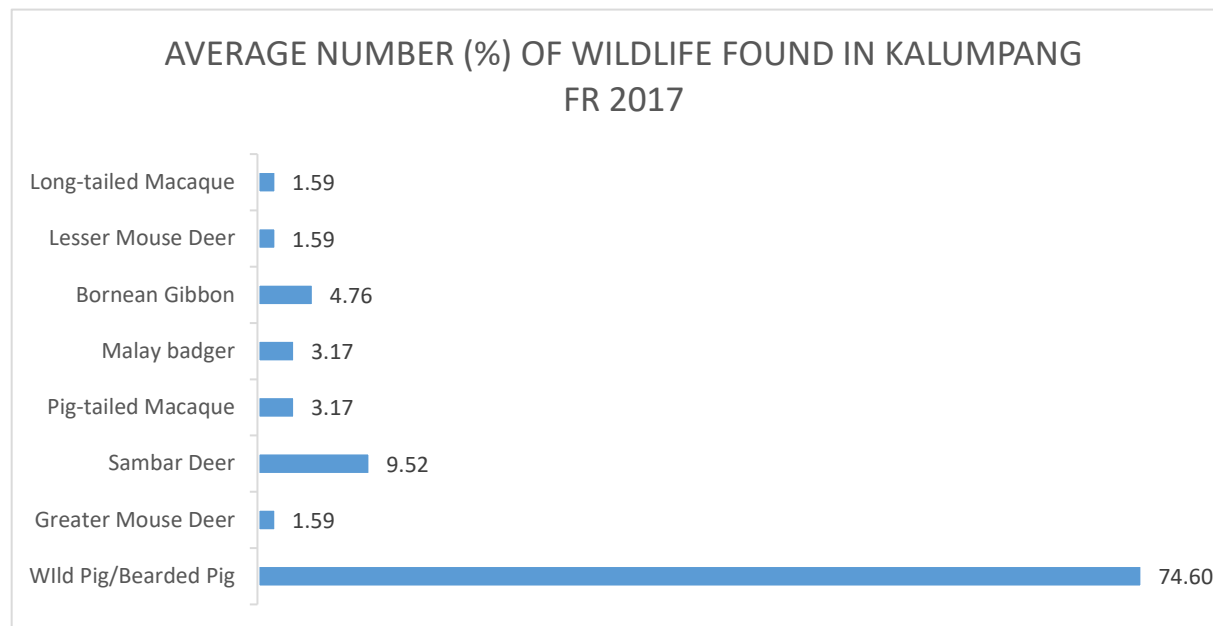


Figure 3. Wildlife Index percentage recorded through “Recce Walk” in Kalumpang VJR107 FR for year 2017 (Jan-Dec)

Figure 3. shows wildlife index percentage for average number of wildlife found in Kalumpang VJR107D Forest Reserve were recorded for total of the year 2017 (January-December). The most active wildlife species that found in that period recorded is Bearded Pig (*Sus barbatus*) where the index of percentage is 74.60% which is higher compare to other species in the forest reserve area.

Based on the figure above, there is one endemic species in Borneo found within Kalumpang VJR107D Forest Reserve; Bornean Gibbon (IUCN Red List: Endangered) and three other species that listed under IUCN Red List; Pig-tailed Macaque (IUCN Red List: Vulnerable), Bearded Pig (IUCN Red List: Vulnerable), and Sambar Deer (IUCN Red List: Vulnerable).

4. MADAI BATURONG VJR107F (BINUANG) FOREST RESERVE

NO.	SPECIES	SCIENTIFIC NAME	QUARTER 1 (JAN-MARCH) 2017	QUARTER 2 (APR-JUNE) 2017	QUARTER 3 (JULY-SEPT) 2017	QUARTER 4 (OCT-DEC) 2017	SUB TOTAL	TOTAL TRANSECT DISTANCE SURVEY FOR YEAR 2017	Index = N/DISTANCE	INDEX (%) = N/TOTAL DETECTION OF ALL SPECIES
01.	Wild Pig/Bearded Pig	<i>Sus barbatus</i>	12	15	16	13	56	8	7.00	83.58
02.	Pig-tailed Macaque	<i>Macaca nemestrina</i>	1	0	1	2	4	8	0.50	5.97
03.	Bornean Gibbon	<i>Hylobates muelleri</i>	1	0	0	0	1	8	0.13	1.49
04.	Sambar Deer	<i>Cervus unicolor</i>	0	2	1	0	3	8	0.38	4.48
05.	Malay Badger	<i>Mydaus javanensis</i>	0	1	0	0	1	8	0.13	1.49
06.	Long-tailed Macaque	<i>Macaca fascicularis</i>	0	0	0	1	1	8	0.13	1.49
07.	Great Argus	<i>Argusianus argus</i>	0	0	0	1	1	8	0.13	1.49
TOTAL:			14	18	18	17	67	8	8.38	100

Table 4. Wildlife index percentages recorded through “Recce Walk” research method in Madai Baturong FR for the year of 2017 (Jan-Dec)

Table 4. shows frequency number of wildlife recorded in Madai Baturong VJR107F (Binuang) Forest Reserve area from January - December 2017 where total of wildlife found is 67. Summary of the analysis from our survey data are as follows:

- a) Wildlife Index (Index = N (Number of wildlife detected))

Distance survey

b) Wildlife Index (Index (%)) = $\frac{N \text{ (Number of wildlife detected)}}{\text{Total detection of all species}} \times 100$

Total detection of all species

In the calculation, distance survey used for the year of 2017 (January-December) is 8km while the total detection of all species is 67.

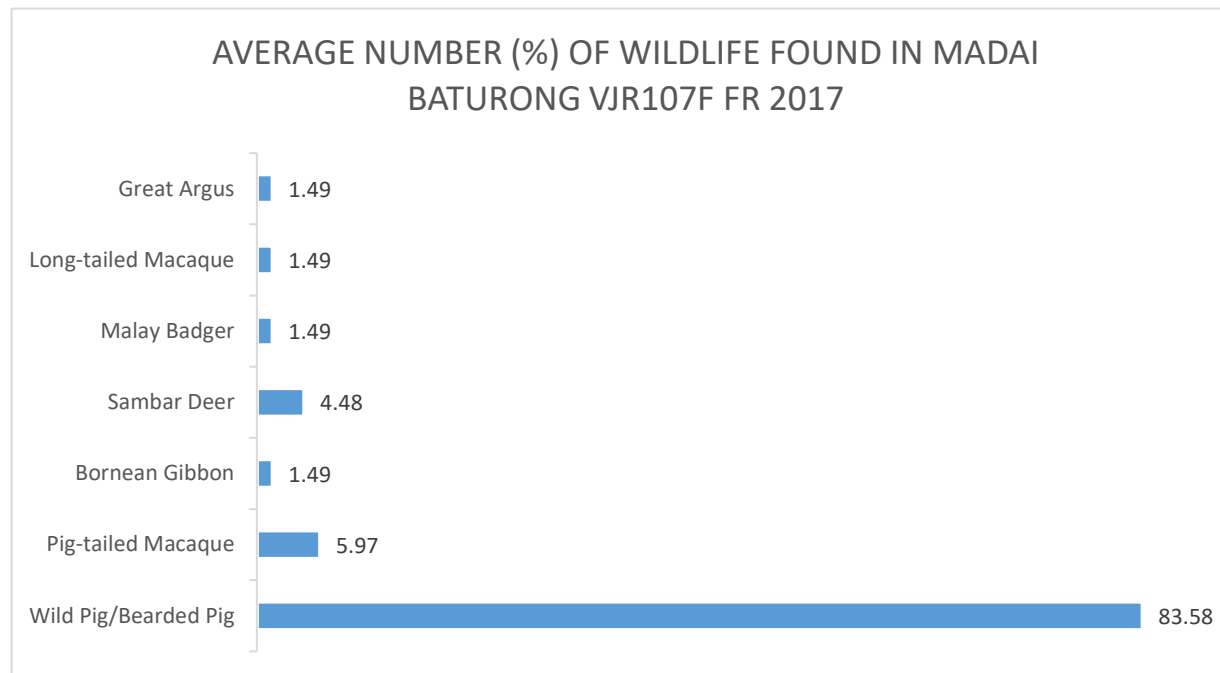


Figure 4. Wildlife Index percentage recorded through “Recce Walk” in Madai Baturong FR for the year 2017 (Jan-Dec)

Figure 4. shows wildlife index percentage for average number of wildlife found in Madai Baturong VJR107F (Binuang) Forest Reserve were recorded for total of a year 2017 (January-December). The most active wildlife species that found in that period recorded is Wild Pig (*Sus barbatus*) where the index of percentage is 83.58% which is higher compare to other species in the forest reserve area.

Based on the figure above, there is one endemic species in Borneo found in Madai Baturong VJR 107F; Bornean Gibbon (IUCN Red List: Endangered) and another four species of wildlife listed under IUCN Red List; Bearded Pig (IUCN Red List: Vulnerable), Pig-tailed Macaque (IUCN Red List: Vulnerable), Sambar Deer (IUCN Red List: Vulnerable) and Great Argus (IUCN Red List: Near Threatened).