

Ecology, occurrence and distribution of wild felids in Sarawak, Malaysian Borneo

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SUPPLEMENTARY TABLE 1 The 31 study areas in Sarawak, with survey periods, forest types, area size, sampling effort (total camera-trap days) and protection status.

No.	Study area	Survey periods	Forest types	Area (ha)	Effort (days)	Protected
1	Tanjung Datu National Park	July 2013–Feb. 2015	Lowland; beach	1,379	2,490	Yes
2	Samunsam Wildlife Sanctuary	July 2013–Sep. 2014 Aug.–Nov. 2019	Mangrove; peat swamp; tropical heath; lowland	22,798	2,102	Yes
3	Gunung Pueh National Park	June 2016–Mar. 2017	Lowland; lower montane	5,831	3,132	Yes
4	Gunung Gading National Park	June 2015–Oct. 2016	Lowland; lower montane	5,430	3,579	Yes
5	Kubah National Park	Sep. 2015–Apr. 2017	Tropical heath; lowland; lower montane	2,230	6,901	Yes
6	Kuching Wetland National Park	June 2013–Apr. 2015	Mangrove	6,610	1,901	Yes
7	Santubong National Park	Nov. 2014–Sep. 2016	Beach; lowland; tropical heath	1,410	6,269	Yes
8	Bako National Park	Mar. 2011–Nov. 2013 May 2016–Mar. 2017	Beach; tropical heath; lowland; mangrove	2,727	3,658	Yes
9	Sama Jaya Nature Reserve	Dec. 2015–Mar. 2016	Peat swamp	38	280	Yes
10	Dered Krian National Park	Sep. 2016–Mar. 2017	Limestone	1,339	334	Yes
11	Bungoh Range National Park	Dec. 2017–Mar. 2018	Lowland	8,096	926	Yes
12	Gunung Penrissen	Apr. 2015–Mar. 2017	Lowland; lower montane	2,000	7,382	No
13	Ulu Sebuyau National Park	Oct. 2015–Mar. 2017	Beach; limestone; lowland; peat; tropical heath	18,287	2,789	Yes
14	Gunung Lesung National Park	June 2016–Jan. 2017	Lowland	595	696	Yes
15	Maludam National Park	June–Oct. 2004	Peat swamp	53,568	493	Yes
16	Batang Ai National Park	Oct. 2017–Nov. 2018	Lowland	24,040	904	Yes
17	Lanjak Entimau Wildlife Sanctuary	May–Nov. 2003 June–Aug. 2006	Riverine; lowland	168,758	1,945	Yes
18	Ulu Kapit Management Unit	July 2017–Aug. 2018	Lowland	149,756	14,857	No
19	Pelagus National Park	May 2014–Feb. 2016	Lowland	2,041	5,456	Yes
20	Hose Mountain	Feb.–May 2012	Lowland; lower montane	25,600	1,498	No
21	Ulu Baleh	Mar.–June 2012	Lowland; lower montane	12,162	1,776	No
22	Baleh National Park	Nov. 2015–May 2016	Lowland	66,721	1,753	Yes
23	Similajau National Park	May 2016–Mar. 2017	Beach; lowland; tropical heath	8,996*	1,481	Yes
24	Sungai Meluang National Park	May–Sep. 2016	Lowland; tropical heath	2,770	917	Yes
25	Oil Palm Plantation matrix	Sep. 2013–Apr. 2015; Nov. 2018–Feb. 2020	Lowland; oil palm plantation	26,512	14,258	No
26	Loagan Bunut National Park	Mar–July 2004; Sep. 2015–Dec. 2016	Lowland; peat swamp	10,736	4,658	Yes
27	Lambir Hills National Park	Feb.–Aug. 2004	Lowland; tropical heath	6,949	1,096	Yes
28	Gunung Mulu National Park	May–Dec. 2010	Limestone; lowland; lower montane; peat swamp; riverine; tropical heath	85,671	2,314	Yes
29	Ulu Trusan	Jan.–Apr. 2012		25,765	1,173	No
30	Pulong Tau National Park	June–Dec. 2010	Lowland; lower montane	69,817	3,054	Yes
31	Baram	Mar.–June 2012; May 2015–Apr. 2016	Lowland; lower montane	64,464	4,565	No

*Terrestrial area only.

SUPPLEMENTARY TABLE 2 Number of independent detections (ID), occurrence probabilities (psi) and detection probabilities (p) of five felid species in Sarawak (only study sites where at least one felid species was detected are included).

	Marbled cat			Leopard cat			Flat-headed cat			Clouded leopard			Bay cat		
	ID	psi	p	ID	psi	p	ID	psi	p	ID	psi	p	ID	psi	p
Protected Areas (PA)															
Lambir Hills National Park										3	0.683	0.019			
Lanjak Entimau Wildlife Sanctuary	1	0.529	0.016										1	0.530	0.016
Bako National Park				6	0.284	0.126									
Baleh National Park	2	0.262	0.065	1	0.367	0.032							1	0.362	0.032
Batang Ai National Park										11	0.904	0.089	1	0.691	0.022
Bungoh Range National Park															
Dered Krian National Park				1	0.584	0.021									
Gunung Gading National Park	2	0.564	0.017	18	0.773	0.047									
Gunung Lesung National Park	1	0.591	0.030	2	0.545	0.047				1	0.550	0.045			
Gunung Mulu National Park	4	0.595	0.014							7	0.872	0.025			
Gunung Pueh National Park	4	0.447	0.030	7	0.484	0.041				4	0.451	0.029			
Kubah National Park				64	0.547	0.074							2	0.488	0.007
Loagan Bunut National Park	4	0.414	0.025				4	0.254	0.041						
Pelagus National Park	3	0.555	0.013	41	0.633	0.086							1	0.455	0.014
Pulong Tau National Park	10	0.255	0.105							19	0.373	0.115	2	0.378	0.028
Santubong National Park				32	0.573	0.095									
Sungai Meluang National Park	10	0.432	0.110												
Tanjung Datu National Park				1	0.338	0.005									
Ulu Sebuyau National Park	5	0.631	0.025	1	0.450	0.020	7	0.621	0.029						
<i>Total (protected areas)</i>	46			174			11			45			8		
Unprotected Areas															
Baleh	9	0.140	0.197	12	0.274	0.110							1	0.236	0.045
Baram	25	0.601	0.036	31	0.601	0.071				1	0.422	0.055	1	0.468	0.030
Gunung Penrissen	5	0.419	0.024	39	0.797	0.049									
Hose Mountain				13	0.646	0.104				8	0.788	0.055			
Ulu Kapit Management Unit	11	0.433	0.013	56	0.215	0.129				2	0.322	0.008	11	0.461	0.015
Ulu Trusan				1	0.368	0.006									
Oil Palm Plantation matrix	1	0.321	0.040	355	0.658	0.125									
<i>Total (unprotected areas)</i>	51			507						11			13		
<i>Total (overall)</i>	97			681			11			56			21		