

Sunda clouded leopard *Neofelis diardi* densities and human encounters in the humid evergreen rainforests of Sumatra

IDING HAIDIR, DAVID W. MACDONALD and MATTHEW LINKIE

SUPPLEMENTARY TABLE 1 Survey details and characteristics of the study areas in Kerinci Seblat National Park, Sumatra.

	Study area			
	Bungo	Sipurak	Renah Kayu Embun	Ipuh
Survey period	June–Nov. 2014	Nov. 2014–Mar. 2015	Apr.–Aug. 2015	Sep.–Dec. 2015
No. of camera-trap nights	8,399	7,053	6,674	6,278
No. of camera-trap stations	76	76	65	75
Mean station spacing (m)	777	814	1,027	793
Minimum convex polygon (km ²)	63.9	62.5	63.2	60.6
Mean elevation (m) (range)	630 (310–1,120)	800 (370–1,070)	1,190 (490–2,000)	430 (230–670)
Main forest types	Hill–submontane	Hill–submontane	Hill–montane	Lowland–hill
Terrain characteristic	Hilly and undulating	Hilly and undulating	Undulating, steep terrain	Flat to undulating

SUPPLEMENTARY TABLE 2 Geweke diagnostic statistics and Bayes P-values generated in *SPACECAP* from the four study areas of Sunda clouded leopard *Neofelis diardi* ecological quantity parameters. Values of the test should be between -1.6 and 1.6 . For σ , λ_0 , $beta$, Ψ , and N : refer to Table 2. The Bayesian P-value should not be close to 0 or 1, and these models have values close to 0.5 which indicates model adequacy.

Study area	σ	λ_0	$beta$	Ψ	N	Bayesian P-value
Bungo	-0.190	0.122	0.307	-0.741	-0.664	0.592
Sipurak	0.729	-0.662	0.665	-0.993	-1.168	0.702
Renah Kayu Embun	1.094	-3.720	2.344	-1.527	-0.262	0.553
Ipuh	-3.450	1.608	-7.195	-1.210	-0.283	0.500

SUPPLEMENTARY TABLE 3 Comparison of clouded leopard density in Borneo and Sumatra.

Site	Habitat (forest type)	Density \pm SE (individuals/ 100 km ²)	Range	Method ¹	Source
Central Kalimantan, Indonesia					
Sebangau forest	Primary, swamp forest (lowland), blocks ^{1,2} , and ³	2.00 \pm 0.44 ¹ 3.00 \pm 0.53 ² 2.00 \pm 0.95 ³	0.72–4.41	Capture–Recapture	Cheyne et al. (2012)
Sabah, Malaysia					
Danum Valley	Primary, dipterocarp (lowland)	1.73 \pm 0.54	0.81–2.78	SECR	Hearn et al. (2017)
Tawau	Primary, dipterocarp (lowland-hill)	2.23 \pm 0.52	1.35–3.27	SECR	
Crocker Range	Primary, dipterocarp (hill)	1.39 \pm 0.41	0.77–2.21	SECR	
Ulu Segama	Selectively logged, dipterocarp (lowland)	3.10 \pm 1.11	1.26–5.32	SECR	
Tabin	Selectively logged, dipterocarp (lowland)	2.66 \pm 1.11	0.79–4.74	SECR	
Kinabatangan	Selectively logged, dipterocarp (mosaic forests: swamp, riparian, lowland)	1.54 \pm 0.70	0.41–2.90	SECR	
Tangkulap-Pinangah	Selectively logged forest	0.84 \pm 0.42	0.25–1.80	Bayesian SECR	Wilting et al. (2012)
Segaliud Lokan Forest	Selectively logged forest	1.04 \pm 0.58	0.29–2.55	Bayesian SECR	
Malinau Basin	Primary, Dipterocarp (lowland-hill)	1.90	0.70–5.40	SECR	Brodie et al. (2012)
Malinau conservation area	Mosaics primary and selectively logged forest (lowland-hill)	0.80	0.20–2.60	SECR	
Kerinci Seblat, Central Sumatra, Indonesia					
Bungo	Primary, dipterocarp (hill)	*2.38 **1.63	*1.11–2.46 **0.58–3.38	Bayesian SECR	*This study **Sollman et al., 2014
Sipurak	Primary, dipterocarp (hill)	*2.05 **0.77	*0.52–4.35 **0.15–2.10	Bayesian SECR	
Renah Kayu Embun	Primary, dipterocarp (sub-montane and mid-montane)	*0.81 **1.57	*0.66–1.33 **0.58–3.27	Bayesian SECR	
Ipuh	Primary, dipterocarp (lowland)	*0.75 **1.11	*0.73–0.88 **0.42–2.24	Bayesian SECR	

¹SECR, spatially explicit capture–recapture.

SUPPLEMENTARY TABLE 4 Records of people illegally entering the forest, by study area.

Category ¹	No. of independent photographs	Naïve occupancy (%)	Encounter rate \pm SD
Bungo	35	13.2	0.40 \pm 1.38
Bird poachers	10	5.3	0.11 \pm 0.57
Tiger/ungulate poachers	8	5.3	0.10 \pm 0.55
Fishers	0	0	0
Collectors of NTFP	17	9.2	0.19 \pm 0.74
Sipurak	27	22.08	0.58 \pm 1.67
Bird poachers	17	11.69	0.25 \pm 1.07
Tiger/ungulate poachers	7	7.79	0.23 \pm 1.24
Fishers	2	2.60	0.03 \pm 0.16
Collectors of NTFP	1	1.30	0.01 \pm 0.11
Renah Kayu Embun	5	4.6	0.14 \pm 0.79
Bird poachers	5	4.6	0.14 \pm 0.79
Tiger/ungulate poachers	0	0	0
Fishers	0	0	0
Collectors of NTFP	0	0	0
Ipuh	70	29.3	1.01 \pm 3.08
Bird poachers	67	28.0	1.08 \pm 3.07
Tiger/ungulate poachers	3	1.3	0.02 \pm 0.14
Fishers	0	0	0
Collectors of NTFP	0	0	0

¹NTFP, non-timber forest products.