

National parks influence habitat use of lowland tapirs in adjacent private lands in the Southern Yungas of Argentina

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SUPPLEMENTARY TABLE 1 Correlation matrix showing Pearson correlation coefficient of variable pairs.

	Nearest distance to <i>puestos</i>	Nearest distance to roads	Nearest distance to agricultural lands	Nearest distance to cities
Nearest distance to roads	0.41			
Nearest distance to agricultural lands	0.15	0.67		
Nearest distance to cities	0.21	0.51	0.74	
Nearest distance to national parks	0.06	0.13	-0.01	-0.42

SUPPLEMENTARY TABLE 2 List of 30 a priori models, including a constant (null) and global set, to estimate the influence of the five variables on lowland tapir *Tapirus terrestris* habitat use probability (ψ) in the Southern Yungas of Argentina. The table shows the relative model weight (Akaike weight), the likelihood of each model of being the best-performing model, the number of model parameters (k) and the -2 log-likelihood output from the occupancy model.

Model	AIC	Δ AIC	Akaike weight	Model likelihood	k	-2 log-likelihood
ψ (NatParks, Puestos); p(Roads)	653.66	0.00	0.26	1.00	5	643.66
ψ (NatParks, Puestos); p(Roads, Puestos, Protection)	654.86	1.20	0.14	0.55	7	640.86
ψ (NatParks, Puestos); p(Roads, Protection)	655.07	1.41	0.13	0.49	6	643.07
ψ (NatParks, Puestos, Roads, Protection); p(Roads)	655.44	1.78	0.10	0.41	7	641.44
ψ (NatParks, Puestos, Roads); p(Roads)	655.65	1.99	0.09	0.37	6	643.65
ψ (NatParks, Puestos, Protection); p(Roads, Puestos, Protection)	655.94	2.28	0.08	0.32	8	639.94
ψ (NatParks); p(Roads)	656.55	2.89	0.06	0.23	4	648.55
ψ (NatParks, Puestos, Roads, Protection, Water); p Roads)	657.44	3.78	0.04	0.15	8	641.44
ψ (NatParks, Roads); p(Roads)	657.50	3.84	0.04	0.14	5	647.50
ψ (NatParks, Puestos); p(NatParks, Puestos)	659.99	6.33	0.01	0.04	6	647.99
ψ (NatParks, Puestos); p(Protection)	660.33	6.67	0.01	0.03	5	650.33
ψ (NatParks); p(Protection)	663.33	9.67	0.00	0.01	4	655.33
ψ (NatParks); p(Puestos)	663.39	9.73	0.00	0.01	4	655.39
ψ (NatParks, Protection); p(NatParks, Protection)	663.64	9.98	0.00	0.01	6	651.64
ψ (NatParks, Puestos); p(Water)	663.98	10.32	0.00	0.00	5	653.98
ψ (NatParks, Puestos); p(.)	665.82	12.16	0.00	0.00	4	657.82
ψ (NatParks); p(.)	667.59	13.93	0.00	0.00	3	661.59
ψ (Puestos); p(Roads)	667.74	14.08	0.00	0.00	4	659.74
ψ (NatParks); p(NatParks)	669.48	15.82	0.00	0.00	4	661.48
ψ (NatParks, Roads); p(.)	669.59	15.93	0.00	0.00	4	661.59
ψ (.); p(Roads)	672.78	19.12	0.00	0.00	3	666.78
ψ (Roads); p(Roads)	672.86	19.20	0.00	0.00	4	664.86
ψ (Protection); p(Roads)	673.21	19.55	0.00	0.00	4	665.21
ψ (Water); p(Roads)	674.48	20.82	0.00	0.00	4	666.48
ψ (.); p(Puestos)	677.22	23.56	0.00	0.00	3	671.22
ψ (Puestos); p(.)	679.32	25.66	0.00	0.00	3	673.32
ψ (.); p(NatParks)	680.25	26.59	0.00	0.00	3	674.25
ψ (.); p(.)	681.97	28.31	0.00	0.00	2	677.97
ψ (Protection); p(.)	683.15	29.49	0.00	0.00	3	677.15
ψ (Roads); p(.)	683.88	30.22	0.00	0.00	3	677.88

SUPPLEMENTARY TABLE 3 Original area of Tapir Conservation Units (TCU) in the Southern Yungas forests in north-western Argentina (Taber et al. 2008), area of TCU currently remaining with forest cover, non-forest area inside TCU, area of TCU privately owned, area of TCU within national park, and area of TCU with potential distribution for lowland tapir. Area shown in km², percentage of the area is shown in parenthesis. Habitat use ($\psi \pm SE$) and probability of detection ($p \pm SE$) of the lowland tapir calculated with ψ and p constant model (ψ (*), p (*)) for each TCU.

TCU	Original forest area (km ²)	Current forest area (km ²)	Non- forest area (km ²) (%)	Privately owned area (km ²) (%)	National park and area (km ²)	Potential distribution area (km ²)	$\psi \pm SE$	$p \pm SE$
TCU 37	2,276.4	2,276.4	0 (0)	1,552.0 (68.2)	Baritú 724.4	1,393.8 (61.2)	0.83 ± 0.09	0.43 ± 0.05
TCU 41	4,726.9	4,250.0	476.9 (10.1)	3,808.4 (89.6)	El Rey 441.6	3,407.7 (80.2)	0.80 ± 0.14	0.29 ± 0.06
TCU 38	4,795.5	4,676.9	118.5 (2.5)	3,913.8 (83.7)	Calilegua 763.1	2,113.9 (45.2)	0.84 ± 0.13	0.26 ± 0.05
TCU 33	1,674.0	1,670.1	3.8 (0.2)	1,670.1 (100)	0	1,385.9 (82.9)	0.46 ± 0.08	0.31 ± 0.05
<i>Total</i>	13,472.8	12,873.4	599.4 (4.4)	10,944.4 (85.0)	1,929.1	8,301.3 (64.5)		