

## Which is worse for the red-billed curassow: habitat loss or hunting pressure?

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SUPPLEMENTARY TABLE 1 Variables related to habitat quality and hunting pressure obtained for the 14 forest patches within the range of the red-billed curassow *Crax blumenbachii* in the Atlantic Forest of southern Bahia, Brazil. Values are shown for a 2-km buffer radius around the focal forest patch, which was the best spatial scale for data analysis (see Methods).

Forest patch ID <sup>1</sup>	Location	Native forest cover (%)	Length of rivers (km)	Distance from nearest river (m)	Density (forest patches/ha)	Distance from nearest patch (m)	Cacao & farmland cover (%)	Length of roads (km)	Distance from nearest road (m)	Area of settlements (ha)	Distance from settlements (m)
1	Michelin Ecological Reserve	54.2	35.7	1.13	0.07	1049.2	31.1	116.0	85.65	200.6	907.9
2	Vale do Juliana	59.7	10.5		0.12	785.5	28.7	25.6	2.77	20.9	1050.3
3	Capitão <sup>2</sup>	61.3	14.7	433.11	0.16	1482.1	34.7	29	792.77	26.3	1180.3
4	Barra do Tijuípe	56.3	15.1	312.82	0.79	1209.1	21.6	14.6	1.26	23.0	957.2
5	Southern area of Conduru State Park <sup>2</sup>	52.8	18.8	16.5	0.16	907.3	37.5	42.5	1.83	11.4	1213.7
6	Central area of Conduru State Park <sup>2</sup>	52.5	14.4	1.58	0.21	897.2	38.3	50.9	377.69	5.6	754.8
7	Una Biological Reserve <sup>2</sup>	65.9	82.5	352.18	0.11	799.2	27.8	196.1	1.62	11.3	694.8
8	Camacan	57.8	4.3		0.38	760.4	41.5	10.4	9.92	6.7	799.7
9	Serra Bonita <sup>2</sup>	47.2	18.3	479.04	0.09	780.7	52.2	22.4	1.77	13.8	896.0
10	Nossa Senhora Auxiliadora	53.9	9.2	995.62	0.25	914.6	43.6	31.3	63.33	9.9	825.8
11	Estação Veracel/Veracruz <sup>2</sup>	55.1	41.0	79.54	0.13	1246.6	15.3	63.2	14.49	64.9	1031.4

*SUPPLEMENTARY TABLE 1, continued.*

Forest patch ID <sup>1</sup>	Location	Native forest cover (%)	Length of rivers (km)	Distance from rivers (m)	Density (forest patches/ha)	Distance from nearest patch (m)	Cacao & farmland (%)	Length of roads (km)	Distance from roads (m)	Settlements (ha)	Distance from settlements (m)
12	Pau Brasil National Park <sup>2</sup>	64.9	89.8	273.50	0.13	1197.4	17.4	163.3	844.64	74.6	970.5
13	Monte Pascoal National Park <sup>2</sup>	66.5	92.2	177.49	0.20	990.7	20.3	199.5	7.39	163.2	483.8
14	Descobrimento National Park <sup>2</sup>	69.3	103.8	276.32	0.16	1036.1	18.0	211.5		25.5	603.2

<sup>1</sup>ID, identification of focal forest patch in Fig. 1.

<sup>2</sup>Strictly protected area (only conservation-related use permitted).

SUPPLEMENTARY TABLE 2 Determination coefficients ( $R^2$ ) of hunting pressure and habitat quality variables as a function of native forest cover, considering 500 m, 1000 m and 2000 m buffer radii around each forest remnant. The highest values of  $R^2$  are highlighted in bold.

Independent variables	Within focal forest patch <sup>1</sup>	500 m buffer radius	1 km buffer radius	2 km buffer radius
<b>Hunting pressure</b>				
Total length of roads	0.400*	0.531*	0.488*	<b>0.594*</b>
Distance from the nearest road to the focal forest patch	NA <sup>1</sup>	0.121	<b>0.384*</b>	0.193
Per cent of cacao agroforests and farmlands	0.064	0.031	0.213	<b>0.430*</b>
Mean distance from the edge of the focal patch to settlements	NA <sup>1</sup>	0.006	0.193	<b>0.198</b>
Total area occupied by settlements	0.054	<b>0.118</b>	0.036	0.023
<b>Habitat quality</b>				
Total length of rivers	0.355*	0.491*	0.473*	<b>0.651*</b>
Distance from the nearest river to the focal forest patch	NA <sup>1</sup>	0.020	0.077	<b>0.079</b>
Density of forest remnants	NA <sup>1</sup>	0.005	0.006	<b>0.006</b>
Distance from the nearest forest patch to the focal forest patch	NA <sup>1</sup>	0.093	<b>0.126</b>	0.045

<sup>1</sup>NA, not applicable

\*p < 0.01

SUPPLEMENTARY TABLE 3 Best models for habitat quality and hunting pressure, based on values of the Akaike information criterion (AIC).  $R^2$  is the determination coefficient.

Combination of variables	AIC	$R^2$	p-value	Best models (based on $\Delta AIC < 2$ )
<b>Hunting pressure submodels</b>				
Distance from roads	33.80	0.20	0.09	
Distance from settlements + Length of roads	34.16	0.30	0.10	
Distance from settlements + Area occupied by settlements + Length of roads	31.41	0.54	0.02	x
Distance from settlements + Area occupied by settlements + Length of roads + Proportion of cacao agroforest and farmlands	32.84	0.56	0.04	x
Distance from settlements + Area occupied by settlements + Length of roads + Proportion of cacao agroforest and farmlands + distance from roads	34.56	0.57	0.07	
<b>Habitat quality submodels</b>				
Proportion of forest cover	33.56	0.22	0.08	x
Proportion of forest cover + Distance from forest patches	34.93	0.26	0.15	x
Proportion of forest cover + Distance from forest patches+ patch density	36.34	0.29	0.23	
Proportion of forest cover + patch density + length of rivers + distance from rivers	36.79	0.38	0.21	
Proportion of forest cover + patch density + length of rivers + distance from rivers + Distance from forest patches	38.37	0.40	0.28	

*SUPPLEMENTARY TABLE 3, continued.*

Combination of variables	AIC	$R^2$	p-value	Best models (based on $\Delta AIC < 2$ )
<b>Final models (hunting pressure + habitat quality variables)</b>				
Proportion of forest cover	33.56	0.22	0.08	
Proportion of forest cover + Distance from settlements	33.11	0.36	0.06	x
Distance from settlements + Area occupied by settlements + Length of roads	31.41	0.54	0.02	x
Distance from settlements + Area occupied by settlements + Length of roads + Proportion of cacao agroforest and farmlands	32.84	0.56	0.04	x
Distance from settlements + Area occupied by settlements + Length of roads + Proportion of cacao agroforest and farmlands + Distance from forest patches	32.95	0.63	0.03	x
Distance from settlements + Area occupied by settlements + Length of roads + Proportion of cacao agroforest and farmlands + Distance from forest patches + Proportion of forest cover	34.46	0.65	0.05	