

**S6 Table. Jaguar density estimation with non-spatial and spatially-explicit models.**

	Site			
	Lorocachi	Tiputini	Keweriono	Maxus Road
$\hat{N}/ETA$				
Capture probability, $\hat{p}$	0.05	0.04	0.05	0.08
Closure test, $P$	0.92	0.07	0.31	0.75
$\hat{N} \pm SE$	19 $\pm$ 5.3	7 $\pm$ 2.9	10 $\pm$ 4.7	3 $\pm$ 1.2
$ETA$ (km <sup>2</sup> )	486	467	458	463
$D_{\hat{N}/ETA}$ (n/100 km <sup>2</sup> ) $\pm$ SE	3.91 $\pm$ 1.11	1.50 $\pm$ 0.63	2.18 $\pm$ 1.04	0.65 $\pm$ 0.26
$CV$ (%) of $D$	28.4	42.0	47.8	40.0
<b>Bayesian-SECR</b>				
$S$	1681	1663	1557	1671
$M$	260	240	320	120
$N_{super}$	92.04 $\pm$ 34.56	22.39 $\pm$ 23.39	12.45 $\pm$ 4.35	4.73 $\pm$ 4.12
$D_{SECR}$ (n/100 km <sup>2</sup> ) $\pm$ SD	5.44 $\pm$ 2.04	1.49 $\pm$ 1.55	0.89 $\pm$ 0.31	0.29 $\pm$ 0.26
$CV$ (%) of $D$	37.5	104.0	35.2	86.2

$\hat{N}$  = population size estimated with program CAPTURE (Model  $M_h$ );  $ETA$  = effective trapping area;  $D$  = density;  $S$  = state-space, including pixels with non-suitable habitat for jaguar;  $M$  = number of individuals used for data augmentation;  $N_{super}$  = estimated population in  $S$ ;  $CV$  = coefficient of variation.