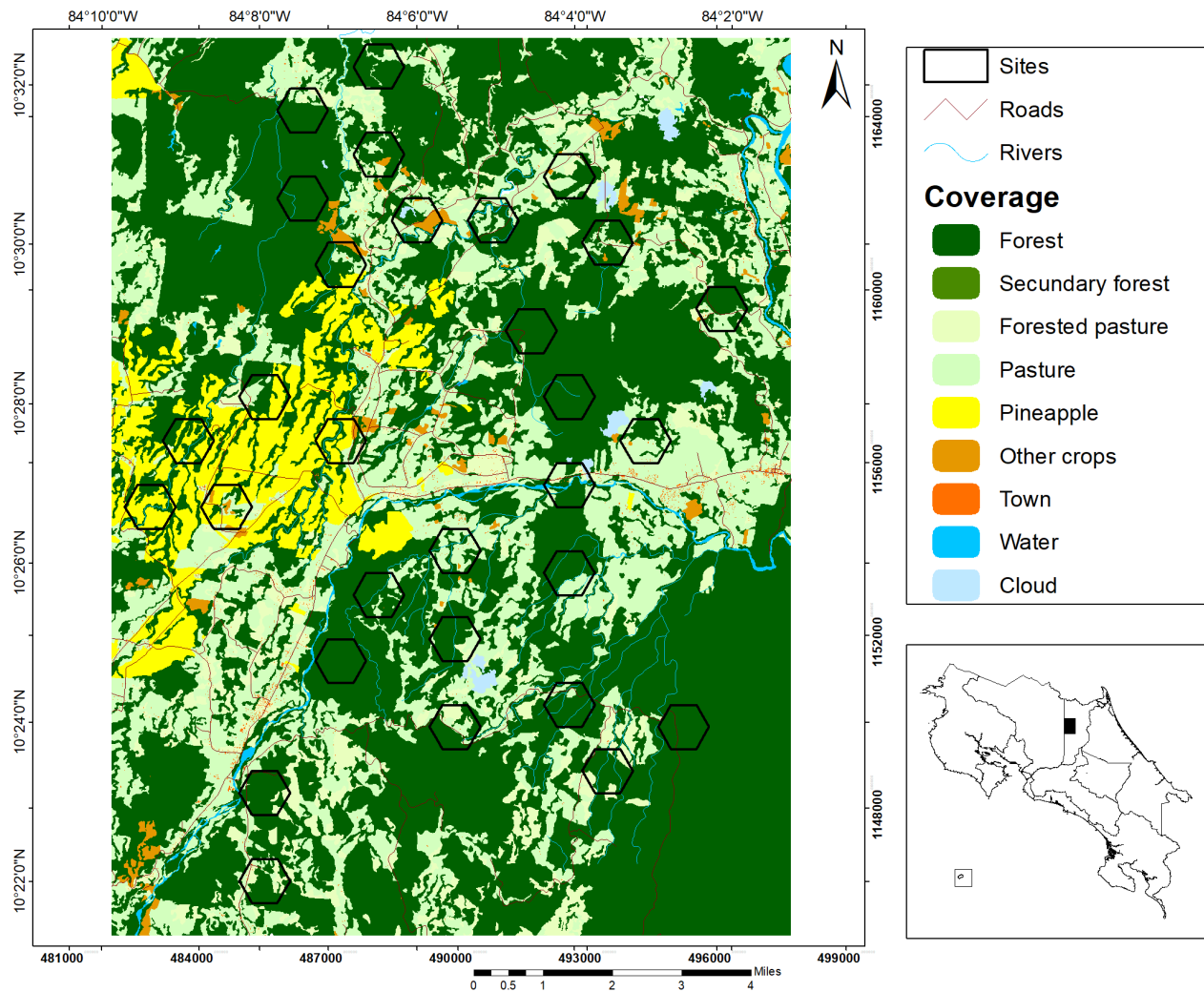


Appendix 1. Study area (327.16 Km²) and sites selected for surveys of medium and large-sized mammals using camera traps in Sarapiquí, Heredia, Costa Rica during 2013-2014.



^aElaborated by M. Runnebaum

^bImage sources: Mosaic generated in SIG OTS from aerial photographs issued by the Costa Rica Airborne Research and Technology Applications (CARTA 2005), Centro Nacional de Alta Tecnología (CENAT) and Nasa Johnson Space Center (2014).

Appendix 2. Information of each location surveyed in the Sarapiquí region, Heredia, Costa Rica during 2013-2014. Sites with ~ indicate more than 75% of forest, sites with ~ indicate more than 30% of pineapple, and sites with * indicate more than 30% pastures

Site	Owner's name	Abbreviation	UTM Coordinates		#carnivores in site	# Species Found	Distance (m)	Land cover			
								Forest	Pineapple	Pasture	Other
1	Finca Corsicana	FC1~	4837	1156	1	6	2415.70	0.57	0.41	0.02	0.00
2	Finca Corsicana	FC2~	4855	1157	1	10	1655.93	0.45	0.32	0.23	0.00
3	Finca Corsicana	FC3~	4846	1154	1	7	2881.75	0.19	0.46	0.26	0.09
4	Finca Corsicana	FC4~	4872	1156	1	8	2053.61	0.31	0.50	0.14	0.06
5	Finca Corsicana	FC5~	4828	1154	2	9	4134.01	0.34	0.66	0.00	0.00
6	Selva Verde S.A.	SV	4925	1155	2	8	240.00	0.60	0.00	0.30	0.09
7	Hacienda Agroindustrial Pozo Azul S.A.	PA*	4855	1148	2	6	2437.42	0.88	0.00	0.12	0.00
8	Reserva Biologica La Tirimbina Ltda	RT*	4872	1151	2	9	0.00	1.00	0.00	0.00	0.00
9	Spring Farm de Sarapiquí S.A.	SF*	4855	1146	1	4	2836.48	0.60	0.00	0.39	0.00
10	Zoila Rosa Mora Bustamante	ZB*	4925	1150	1	4	1115.17	0.89	0.00	0.11	0.00
11	Familia Oviafa S.A.	FO*	4934	1148	1	5	58	0.78	0.00	0.22	0.00
12	Magsasay Miguel Oconitrillo	MG*	4952	1149	2	9	23	0.00	1.00	0.00	0.00
13	Madrigal	MO1*	4925	1153	1	5	1406.67	0.74	0.00	0.26	0.00

	Eida Molina y Edgar		4899	1153			317.8					
14	Umana	EM*	14	960	1	4	0	0.40	0.00	0.59	0.01	
			4899	1151			541.4					
15	Teresa Acuna y Jose Munoz	TA*	27	903	2	7	8	0.77	0.00	0.23	0.00	
	Emilia Carmona y Rosibel		4881	1152								
16	Rodriguez	EC*	64	932	1	8	0.00	0.85	0.00	0.15	0.00	
			4908	1161			777.8					
17	Ganadera Rio Peje S.A.	GP*	12	594	1	8	2	0.59	0.00	0.39	0.02	
	Miguel Oconitrillo		4925	1162			1412.					
18	Madrigal	MO2*	81	617	1	3	83	0.44	0.00	0.54	0.01	
			4943	1156			512.6					
19	Ecovida Inmobiliaria S.A.	EV1*	46	512	2	16	4	0.41	0.00	0.58	0.01	
			4916	1159								
20	Ecovida Inmobiliaria S.A.	EV2*	99	053	1	8	0.00	0.97	0.00	0.03	0.00	
			4925	1157								
21	Ecovida Inmobiliaria S.A.	EV3*	84	531	1	7	0.00	1.00	0.00	0.00	0.00	
			4872	1160								
22	Alfa Industrias Forestales	AI1*	83	579	2	10	0.00	0.65	0.11	0.17	0.06	
			4864	1162								
23	Alfa Industrias Forestales	AI2*	03	105	2	10	0.00	1.00	0.00	0.00	0.00	
			4863	1164								
24	Forestal Santa Ines de Sarapiquí S.A.	SI*	96	158	2	8	0.00	0.79	0.00	0.21	0.00	
			4881	1165								
25	Juan Luis Quiros Huertas	LQ*	68	170	2	6	0.00	0.84	0.00	0.16	0.00	
	Jesus Eduardo Zuniga		4881	1163			196.9					
26	Brenes	JZ*	60	135	1	7	8	0.69	0.00	0.26	0.05	
			4890	1161			785.4					
27	Rosa Picado Chacon	RP*	46	594	2	5	9	0.36	0.00	0.38	0.26	
			4934	1161								
28	Vanilla Export Company	VE*	66	097	2	10	44.72	0.70	0.00	0.28	0.02	
			4961	1159			403.1					
29	Ecosistemas El Pilon	EP*	25	560	2	7	1	0.70	0.00	0.30	0.00	
			4899	1149								
30	Trovador	TV*	25	877	1	3	72.11	0.64	0.00	0.36	0.00	

Appendix 3. Terrestrial and semi-terrestrial medium and large sized mammals registered in Sarapiquí and Braulio Carrillo National Park

Order	Common name	Functional group ¹	Size ²	Forest dependence ³	Rarity/Hunted ⁴	IUCN Red list status ⁵
Species						
ORDER DIDELPHIMORPHIA						
<i>Didelphis marsupialis</i> (Linnaeus, 1758)*	Common Opossum	omnivore	M	low	C	LC
<i>Philander melanurus</i> (Linnaeus, 1758) *	Grey Four-eyed Opossum	omnivore	M	medium	C	LC
ORDEN PILOSA						
<i>Myrmecophaga tridactyla</i> (Linnaeus, 1758)	Giant anteater	insectivore	L	low	HU	VU
<i>Tamandua mexicana</i> (Saussure, 1860) *	Northern Tamandua	insectivore	M	low	U	LC
ORDEN CINGULATA						
<i>Dasypus novemcinctus</i> (Linnaeus, 1758) *	Nine-banded Armadillo	omnivore	M	low	C	LC
<i>Cabassous centralis</i> (Miller, 1899)	Northern Naked Tailed Armadillo	omnivore	M	low	HU	DD
ORDEN RODENTIA						
<i>Coendou mexicanus</i> (Kerr, 1792) *	Mexican Hairy Dwarf Porcupine	herbivore	M	medium	C	LC
<i>Dasyprocta punctata</i> Gray, 1842 *	Central American Agouti	herbivore	M	low	C/H	LC
<i>Cuniculus paca</i> (Linnaeus, 1766) *	Spotted Paca	herbivore	M	medium	U/H	LC

ORDEN LAGOMORPHA

<i>Sylvilagus gabbi</i> (J. A. Allen, 1877) *	Forest rabbit	herbivore	M	medium	C/H	LC
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ORDEN CARNIVORA

<i>Canis latrans</i> (Say, 1823) *	Coyote	omnivore	L	low	C	LC
<i>Panthera onca</i> (Linnaeus, 1758)	Jaguar	carnivore	L	medium	U/H	NT
<i>Leopardus pardalis</i> (Linnaeus, 1758) *	Ocelot	carnivore	L	low	U	LC
<i>Leopardus tigrinus</i> (Schreber, 1775) *	Oncilla	carnivore	M	high	HU	VU
<i>Leopardus wiedii</i> (Schinz, 1821) *	Margay	carnivore	M	high	HU	NT
<i>Puma concolor</i> (Linnaeus, 1771)	Puma	carnivore	L	medium	U/H	LC
<i>Herpailurus yagouaroundi</i> (E. Geoffroy, 1803) *	Jaguarundi	carnivore	M	medium	C	LC
<i>Nasua narica</i> (Linnaeus, 1766) *	White-nosed Coati	omnivore	M	low	C	LC
<i>Procyon lotor</i> (Linnaeus, 1758) *	Northern raccoon	omnivore	M	low	C	LC
<i>Eira barbara</i> (Linnaeus, 1758) *	Tayra	omnivore	M	medium	U	LC
<i>Galictis vittata</i> (Schreber, 1776) *	Lesser Grison	carnivore	M	medium	HU	LC
<i>Lontra longicaudis</i> (Olfers, 1818)	Neotropical River otter	carnivore	M	high	U	NT
<i>Conepatus semistriatus</i> (Boddaert, 1785) *	Striped Hog-nosed Skunk	omnivore	M	medium	U	LC

ORDEN PERISSODACTYLA

<i>Tapirus bairdii</i> (Gill, 1865) *	Baird's Tapir	herbivore	L	medium	U	E
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ORDEN ARTIODACTYLA

<i>Tayassu pecari</i> (Link, 1795)	White-lipped Peccary	omnivore	L	high	HU/H	VU
<i>Dicotyles tajacu</i> (Linnaeus, 1758) *	Collared Peccary	omnivore	L	medium	C/H	LC
<i>Mazama temama</i> (Kerr, 1792) *	Central American Red Brocket	herbivore	L	medium	C	DD
<i>Odocoileus virginianus</i> (Zimmermann 1780) *	White-tailed Deer	herbivore	L	low	C	LC

* Species found in this study

¹Functional group

²Size: M=Medium, L=Large

³Forest dependance: H=High, M=Medium, L=low

⁴Rarity/Hunted: C=Common, U=Uncommon, HU=Highly Uncommon, H=Hunted

⁵IUCN Red list status: DD=Data deficient, E=Endangered, VU=Vulnerable, NT=Near threatened, LC=Least concerned