

## Hunting of mammal species in protected areas of the southern Bahian Atlantic Forest, Brazil

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TABLE S1 Questionnaire used to investigate hunting of mammals by rural residents living in protected areas and a buffer zone in the southern Bahian Atlantic Forest, Brazil (Fig. 1).

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### Part I: Socio-economic information

Gender:                      Age:                      Duration of residence:  
Level of formal education:                      Number of people living at home:  
Income:                      Government assistance: Yes ( ) No ( )  
Livestock: Yes ( ) No ( )

### Part II: Respondents' perceptions regarding wildlife & hunting activities in the villages

In recent years, do you think that hunting has decreased or remained the same in the region?

Which animals are the most hunted by people in this region?

Do you think the abundance of wild animals has changed compared to 10 years ago?

Increased ( ) Decreased ( )

Which animals have decreased in number or disappeared? Which animals have increased in number?

Why do you think these decreases or increases have occurred?

Do you recognize the wild animals in the photographs? Do these animals occur in this region?

### Part III: Information about hunting

Do you hunt (actively) in this area? Why?

Which strategies do you use? Firearm ( ) Dog ( ) Trap ( ) Hunting platform ( )  
Other ( )

Do you capture a wild animal if you find it opportunistically?

Do you hunt for sport?

Do you kill a wild animal that causes damage to plantations or livestock?

Do you use wild animals for medicinal purposes?

Do you sell wild meat? How much does wild meat cost?

When was the last time that you ate wild meat? Which animal did you eat?

What is your favourite wild meat?

Do you eat monkeys, sloths or porcupines? Why not?

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TABLE S2 Previous research findings on the influence of socio-economic factors on hunting activities.

Socio-economic factor	Relation with hunting	Reference
Level of education	Active hunters characterized by lower education level	Nielsen & Meilby (2013)
Household size	Household size negatively related to consumption	Foerster et al. (2012)
Wealth/Income	Wealth positively associated with consumption	Foerster et al. (2012)
	People arrested for hunting activities (hunters & porters) & individual respondents who claimed to be hunters were typically poor adult males	Loibooki et al. (2002)
Livestock ownership	Respondents who admitted to being involved in hunting owned fewer livestock, on average	Loibooki et al. (2002)
Age	Admitted hunters were younger (mean age 36) than respondents who did not admit to hunting	Loibooki et al. (2002)
	Adults (20–59 years old) knew & used more mammals as zootherapeutics, & the elderly (>60 years old) used more mammals as a food resource	Melo et al. (2014)

TABLE S3 Socio-economic characteristics of rural residents in protected areas of southern Bahia, Brazil (Fig. 1), who participated in direct interviews and interviews using the randomized response technique.

	Direct interviews				Randomized response technique	
	Una Wildlife Refuge (n=74)	Una Biological Reserve (n=20)	Serra das Lontras National Park (n=11)	Buffer zone (n=64)	Una Wildlife Refuge (n=81)	Buffer zone (n=101)
Gender						
Male	57	15	11	45	52	54
Age, years (range)*	50.5 (16–84)	50.5 (26–82)	56 (50–72)	48 (20–81)	45 (18–90)	45 (18–89)
Duration of residence, years (range)*	20 (0.33–62)	7 (1.5–28)	26 (1–59)	15 (0.1–61)	20 (0.1–58)	11 (0.1–65)
No. of people living at home*	3 (0–10)	3 (1–21)	2 (1–6)	3.5 (1–12)	3 (1–17)	3 (1–7)
Level of formal education						
Illiterate (%)	47	60	27	27	22	20
Primary school (%)	27	25	55	40	35	40
Middle school (%)	12	10	9	16	20	22
High school/College (%)	14	5	9	16	23	18
Government assistance (%)						
Yes	57	45	18	44	31	36
Livestock (%)						
Yes	58	70	90	77		

\*Median value

TABLE S4 Percentage of respondents who were able to recognize the focal species from photographs, and the percentage who perceived positive occurrence of the species in each of the study areas.

	% positive recognition	% perceived positive occurrence			
		Una Wildlife Refuge	Una Biological Reserve	Serra das Lontras National Park	Buffer zone
Armadillo ( <i>Dasybus novemcinctus</i> , <i>Cabassous unicinctus</i> )	100	100	100	100	100
Paca <i>Cuniculus paca</i>	100	74	83	100	98
Collared peccary <i>Pecari tajacu</i>	100	80	94	100	98
Opossum <i>Didelphis aurita</i>	100	79	67	78	87
Deer <i>Mazama</i> sp.	100	60	76	33	81
Golden-headed lion tamarin <i>Leontopithecus chrysomelas</i>	99	77	94	78	60
Southern Bahian masked titi <i>Callicebus melanochir</i>	92	84	83	89	77
Yellow-breasted capuchin <i>Sapajus xanthosternos</i>	67	20	56	67	46
Northern brown howler monkey <i>Alouatta guariba guariba</i>	53	7	29	0	8
Maned sloth <i>Bradypus torquatus</i>	96	74	94	89	92
Thin-spined porcupine <i>Chaetomys subspinosus</i>	84	66	59	89	67
Painted tree-rat <i>Callistomys pictus</i>	56	13	18	11	17

TABLE S5 Prices of wild meat reported by respondents living in protected areas and a buffer zone in the southern Bahian Atlantic Forest, Brazil (Fig. 1).

Species	Prices (USD) <sup>1</sup>	
	Entire carcass	Per kg
Paca	20–129 <sup>2</sup>	6–10
Armadillo	5–21 <sup>2</sup>	6
Collared peccary		3
Coati <i>Nasua nasua</i>		4

<sup>1</sup>USD 1 = BRL 0.26

<sup>2</sup>The highest prices applied to sales of wild meat to people from bigger cities or to famous hotels in the region.

TABLE S6 Candidate models and the minimal adequate model associating socio-economic factors with hunting and Akaike information criterion (AIC) values.

Candidate models	AIC
Education + Location + Age + Duration of residence + People living at home + Government Assistance + Presence of livestock	232.35
Education + Location + Age + Duration of residence + People living at home + Presence of livestock	230.36
Education + Location + Duration of residence + People living at home + Presence of livestock	228.39
Education + Location + Duration of residence + Presence of livestock	226.77
Education + Location + Livestock	225.32
Education + Location	223.89
Education*	223.57

\* Minimal adequate model with the lowest AIC value

TABLE S7 Candidate models and the minimal adequate models associating socio-economic factors with consumption of species and Akaike information criterion (AIC) values.

Species	Candidate models <sup>1</sup>	AIC
Paca	AGE + LOC + GEN + RES + EDU + ASSI + PEO	250.68
	AGE + LOC + GEN + RES + EDU + ASSI	249.02
	AGE + LOC + GEN + RES + EDU	247.56
	AGE + LOC + GEN + RES	245.25
	AGE + LOC + RES	243.66
	AGE + LOC	243.3
	LOC <sup>2</sup>	242.17
Armadillo	AGE + LOC + GEN + RES + EDU + ASSI + PEO	250.63
	AGE + LOC + GEN + RES + EDU + PEO	248.76
	AGE + LOC + GEN + RES + EDU	247.14
	AGE + LOC + RES + EDU	245.17
	LOC + RES + EDU	244.06
	LOC + RES	240.37
	RES <sup>2</sup>	238.76
Collared peccary	AGE + PEO + RES + LOC + ASSI + EDU + GEN	236.64
	AGE + PEO + RES + LOC + ASSI + EDU	234.49
	AGE + RES + LOC + ASSI + EDU	233.09
	AGE + LOC + ASSI + EDU	232.36
	AGE + LOC + EDU	231.5
	AGE + EDU	230.8
	AGE <sup>2</sup>	228.9

<sup>1</sup>Model parameters: AGE, respondent's age; LOC, location; GEN, genre; RES, duration of residence; EDU, education; ASSI, government assistance; PEO, people living at home

<sup>2</sup>Minimal adequate model with the lowest AIC value