

Human perceptions and interactions with wild canids on cattle ranches in Central Brazil

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SUPPLEMENTARY MATERIAL 1 Interview survey.

Section 1: Demographics

1. Sex
2. Age
3. Education level
4. How large is the property?
5. What is your position on the ranch?
6. Are the chickens sold?
7. Are the eggs sold?

Section 2: Knowledge

Part 1: Knowledge of carnivores

8. What is the name of the animal in the photograph? (Show photographs)

Part 2: Knowledge of Cerrado canids

9. From the list of food items, indicate what this animal eats. If you are unsure say, "I don't know." (Show pictures of food items)
10. Are there any other items that this animal eats that are not in the list?
11. From the list of social structures, indicate the family unit of the animal. If you are unsure say, "I don't know."
12. From the list of time periods, indicate when the animal is active. If you are unsure say, "I don't know." (Show pictures of times)

Section 3: Domestic fowl management practices

Part 1: Current practices

13. How many chickens do you have?
14. Describe how you take care of your chickens?

Follow-up questions if not mentioned in the response:

- a. Where do you keep the chickens during the day and night?
- b. Do you use lights in the chicken coop?
- c. Do you place barbed wire around the outside of the chicken coop?
- d. Do you use a noisemaker?
- e. Do you use a scarecrow?
- f. Do you have a watchdog?
- g. Do you put out poison?
- h. Do you tie flags to the fence?

Part 2: Perception of management practices

15. From the list of ways to protect your chickens, please indicate which is the
 - a. Most expensive
 - b. Cheapest
 - c. Most effective
 - d. Least effective

Part 3: Experience with Cerrado canids

16. Has this animal killed any of your chickens in the past year? If yes, how many?
17. When do you lose your chickens?
18. Has any other wildlife harmed your chickens? If yes, which wildlife?

Section 4: Attitudes towards Cerrado canids

19. State whether you agree, disagree or are unsure about the statement.
 - a. This animal eats the rodents that are on the ranch.
 - b. This animal eats the insects that are on the ranch.
 - c. I like having this animal on my ranch.
 - d. This animal needs to be protected.
 - e. This animal is valuable.
 - f. This animal harms chickens.
 - g. This animal harms cattle.
 - h. This animal attacks humans.

20. If this animal kills a chicken, the response is to
- a. Kill it
 - b. Have it removed from the property by the authorities
 - c. Change management
 - d. Do nothing

SUPPLEMENTARY TABLE 1 Summary of the number of ranches (of 50) in the Limoeiro region, Goiás state, Brazil, that reported experiencing chicken predation events during 2013–2014, the species they identified as being responsible, and the type of prey taken.

| Species* | No. of ranches | Prey type |
|---|----------------|--------------|
| Cerrado canids | | |
| Hoary fox <i>Lycalopex vetulus</i> | 12 | Chickens |
| Maned wolf <i>Chrysocyon brachyurus</i> | 11 | Chickens |
| Crab-eating fox <i>Cerdocyon thous</i> | 9 | Chickens |
| Other species | | |
| Unknown | 10 | Chickens |
| Hawks/owls | 7 | Chicks |
| Striped hog-nosed skunk <i>Conepatus semistriatus</i> | 6 | Chicks, eggs |
| Jaguarundi <i>Puma yagouaroundi</i> | 4 | Chickens |
| Domestic dog <i>Canis lupus familiaris</i> | 4 | Chickens |
| Snakes | 3 | Chicks, eggs |
| People (theft) | 3 | Chickens |
| Bearded capuchin <i>Sapajus libidinosus</i> | 2 | Eggs |
| Common opossum <i>Didelphis albiventris</i> | 2 | Chicks, eggs |
| Puma <i>Puma concolor</i> | 2 | Chicks |
| River otter <i>Lontra longicaudis</i> | 2 | Chickens |
| Giant otter <i>Pteronura brasiliensis</i> | 1 | Chicks |
| Argentine giant tegu <i>Salvator merianae</i> | 1 | Eggs |
| Ocelot <i>Leopardus pardalis</i> | 1 | Chickens |
| Raccoon <i>Procyon cancrivorus</i> | 1 | Chicks |
| Seriema <i>Cariama cristata</i> | 1 | Eggs |
| Tayra <i>Eira barbara</i> | 1 | Chickens |

* Some ranches identified more than one species taking domestic fowl.