Human-Dog Relationships across Communities Surrounding Ranomafana and Andasibe-Mantadia National Parks, Madagascar

Akhil R. Kshirsagar, Jennifer W. Applebaum, Zoavina Randriana, Tsiky Rajaonarivelo, Radoniaina R. Rafaliarison, Zach J. Farris, and Kim Valenta

Table 1. Survey Responses of Dog Owners in communities surrounding Andasibe-Mantadia and RanomafanaNational Parks.

| Survey Questions and Responses | Frequency | | Percer | nt (%) |
|---|-------------------|---|--------|--------|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| 1) How many dogs do you currently own/feed? | - | - | | |
| | | | | |
| Number of Dogs/Household | 1064/329 | 320/206 | | |
| (HH) | = 3.23 | = 1.55 | | |
| Range (S.D.) | 11 (2.751) | 14 (1.214) | | |
| | 11 (2.7 51) | 14 (1.214) | | |
| 2) Why do you own your dog? | | | | |
| A. Companionship | 27 | 25 | 8.2 | 12.1 |
| B. Hunting | 4 | 2 | 1.2 | 1 |
| C. Protection | 212 | 107 | 64.4 | 52 |
| D. Other (Explain) | | | | |
| Companionship and Hunting | 3 | 4 | 1 | 2 |
| Companionship and Protection | 46 | 57 | 14 | 28 |
| Hunting and Protection | 26 | 6 | 8 | 3 |
| Companionship, Hunting and Protection | 11 | 5 | 3.3 | 2.4 |
| 3) How did you acquire your dog? | | | | |
| A. Purchase | 69 | 9 | 21 | 4.4 |
| B. Offspring from previously owned dog | 74 | 36 | 22.5 | 17.5 |

| Survey Questions and Responses | Frequency | | Percer | nt (%) |
|--|-------------------|---|--------|--------|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| C. Adopted stray | 13 | 42 | 4 | 20.4 |
| D. Adopted as puppy | 136 | 108 | 41.3 | 52.4 |
| E. Other (explain) | 6 | 22 | 2 | 11 |
| 1. Exchanged the puppy for chicken | 1 | - | 0.3 | - |
| 2. Received as a gift | 5 | 1 | 1.5 | 0.5 |
| 4) How much time during a day does the dog spend in the vi | llage? | | | |
| A. Less than 1 hour per day | 16 | 16 | 5 | 8 |
| B. 1 – 3 hours per day | 40 | 16 | 12.2 | 8 |
| C. 3 – 6 hours per day | 53 | 23 | 16.1 | 11.2 |
| D. 6 – 8 hours per day | 48 | 64 | 15 | 32 |
| E. All day | 170 | 87 | 52 | 42.2 |
| 5) How much time during a day does the dog spend away from | om you? | | | |
| A. Less than 1 hour per day | 66 | 72 | 20.1 | 35 |
| B. 1 – 3 hours per day | 68 | 54 | 21 | 26.2 |
| C. 3 – 6 hours per day | 98 | 33 | 30 | 16 |
| D. 6 – 8 hours per day | 72 | 28 | 22 | 14 |
| E. All day | 23 | 17 | 7 | 8.3 |
| 6) How many days a week do you travel with your dog into t | he forest? | | | |
| A. 0 | 156 | 119 | 47.4 | 58 |
| B. 1 | 36 | 39 | 11 | 19 |
| C. 2 | 30 | 19 | 9.1 | 9.2 |
| D. 3 | 17 | 13 | 5.2 | 6.3 |
| E. 4 | 8 | 5 | 2.4 | 2.4 |
| F. 5 | 17 | 2 | 5.2 | 1 |
| G. 6 | 19 | 3 | 6 | 1.5 |
| Н. 7 | 44 | 7 | 13.4 | 3.4 |
| 7) What do you feed your dog? | | | | |
| A. Left-over food or food scraps | 324 | 192 | 98.5 | 93.2 |
| B. I do not feed my dog (the dog finds food on its own) | 0 | 11 | 0 | 5.3 |

| Survey Questions and Responses | Frequency | Frequency | | |
|--|------------------------------|---|------|------|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| C. Other (explain) | 5 | 1 | 1.5 | 1 |
| Dog Food | 3 | 1 | 1 | 1 |
| 8) Has your dog ever killed any domestic animals? | ? | | | |
| A. Yes | 36 | 25 | 11 | 12.1 |
| B. No | 292 | 176 | 89 | 85.4 |
| 9) If answered "yes" to #8: What species? Please I | ist as many species as you | can recall | | |
| (Figure 4) | | | | |
| 10) If answered "yes" to #8: How often does your | dog kill domestic animals | ? | | |
| A. More than once per week | 1 | - | 3 | - |
| B. About once per week | 8 | 2 | 22.2 | 8 |
| C. About once per month | 12 | 7 | 33.3 | 28 |
| D. About once per year | 7 | 8 | 19.4 | 32 |
| E. Other (explain) | 8 | 10 | 22.2 | 40 |
| 1. Justonce | - | 3 | - | 12 |
| 2. Twice amonth | - | 1 | - | 4 |
| 3. Every twomonths | - | 1 | - | 4 |
| 11) Has your dog ever killed any wild animals? | | | | |
| A. Yes | 144 | 81 | 44 | 39.3 |
| B. No | 180 | 125 | 55 | 61 |
| 12) If answered "yes" to #11: What species? Pleas | e list as many species as yo | ou can recall | | |
| (Figure 5) | | | | |
| 13) If answered yes to #11: How often does your of | dog kill wild animals? | | | |
| A. More than once per week | 25 | 11 | 17.4 | 14 |
| B. About once per week | 37 | 18 | 26 | 22.2 |

C. About once per month

D. About once per year

E. Other (explain)

17

14

19

29.2

18.1

10

21

17.3

23.5

42

26

14

| Survey Questions and Responses | Frequency | Percer | ent (%) | |
|---|-------------------------|---|---------|------|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| | | | | |
| 1. Just once | 11 | - 1 | 79 | - |
| 2. Twice only | - 1 | - | 7.1 | 5.3 |
| 3. Twice a month | 1 | - | 7.1 | - |
| 4. Every two months | 1 | - | 7.1 | - |
| 5. Last kill was 3 years ago | | | - | - |
| 6. Sometimes | - | 3 | - | 16 |
| 14) How many dogs does your family need or want? | 2.02 | 1.74 | - | - |
| Range (S.D.) | (average) 10 (1.070) | (average) 6 (1.045) | | |
| 15) How many litters of puppies has your current dog(s) had | since it has live | d with you? | | |
| 1.0-5 | 172 | 94 | 81.1 | 78.3 |
| 2. 6 - 10 | 21 | 11 | 10 | 9.2 |
| 3. 11 - 15 | 13 | 5 | 6.1 | 4.2 |
| 4. 16 - 20 | 3 | 1 | 1.4 | 1 |
| 5. >20 | 3 | 9 | 1.4 | 7.5 |
| 16) What happened to those puppies? | | | | |
| A. Some or all died | 28 | 19 | 13.2 | 16 |
| B. Some or all are still alive | - | 3 | - | 2.5 |
| C. Given away or offered to someone | 52 | 15 | 24.5 | 12.5 |
| D. Exchanged for chicken | 1 | - | 0.5 | - |
| E. Some or all kept for breeding or taking care | 6 | 1 | 3 | 1 |
| F. Some or all sold | - | 8 | - | 7 |
| G. Lost them | - | 6 | - | 5 |
| H. Someone killed them | - | 1 | - | 1 |
| I. Mother ate her own puppies | - | 1 | - | 1 |
| J. Unknown | - | 2 | - | 2 |
| 17) About how many times per year does your dog have pupp | pies? | | | |
| A. Once a year | 47 | 27 | 22.2 | 22.5 |
| B. More than once a year | 20 | 17 | 9.4 | 14.2 |
| C. For the first time | 5 | 2 | 2.4 | 2 |
| D. Once every 2-3 years | 1 | 1 | 0.5 | 1 |

| Survey Questions and Responses | Frequency | Percer | ent (%) | |
|---|-------------------|---|---------|------|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| E. Unknown | - | 2 | - | 2 |
| 18) What do you/your family do with unwanted puppies? | | | | |
| A. Given away | 63 | 37 | 30 | 31 |
| B. Some or all sold | 1 | 1 | 0.5 | 1 |
| C. Kept some or all | 2 | 1 | 1 | 1 |
| D. Exchanged them for chicken | 2 | - | 1 | - |
| E. Killed some or all | - | 5 | - | 4.2 |
| 19) How do you/your family treat stray dogs? | | | | |
| A. Ignore them | 51 | 53 | 15.5 | 26 |
| B. Shoo them | 235 | 124 | 71.4 | 60.2 |
| C. Feed them | 29 | 36 | 9 | 17.5 |
| D. Kill them | 13 | 14 | 4 | 7 |
| E. Other (Explain) | - | 3 | - | 1.5 |
| 1. They are not a problem | 1 | 1 | 0.3 | 0.5 |
| 20) Do you recognize and know dogs that are "owned" by ye | our neighbours? | | | |
| A. Yes | 142 | 158 | 43.2 | 77 |
| B. No | 187 | 48 | 57 | 23.3 |
| 21) How do you feel about stray or feral dogs in your village | ? | | | |
| A. A nuisance or problem | 177 | 136 | 54 | 66 |
| B. A regular part of life | 109 | 45 | 33.1 | 22 |
| C. Ignore them | 41 | 26 | 12.5 | 13 |
| D. Other (Explain) | 2 | 3 | 1 | 1.5 |
| 1. Scared of them | 1 | 1 | 50 | 33.3 |
| 2. Neutral toward them | 1 | - | 50 | - |
| 22) Would your life be better if there were no stray or feral d | ogs in your villa | ıge? | | |
| A. Yes | 286 | 169 | 87 | 82 |
| B. No | 37 | 24 | 11.3 | 12 |
| C. Other (Explain) | 3 | 6 | 1 | 3 |
| 1. Would be same as everyday | - | - | - | - |
| 2. Don't care | 3 | - | 100 | - |

| Survey Questions and Responses | Frequency | | Percent (%) | |
|--|-------------------|---|-------------|-----|
| | AMNP (N = 329) | $\begin{array}{l} RNP \\ (N=206) \end{array}$ | AMNP | RNP |
| 3. We need them sometimes | - | 1 | - | 17 |
| 23) If you had free access to regular veterinary care for your | dog, would you | take it? | | |
| A. Yes | 309 | 181 | 94 | 88 |
| B. No | 7 | 7 | 2.1 | 3.4 |
| C. Unsure | 10 | 11 | 3 | 5.3 |
| D. Other | - | 3 | - | 1.5 |
| S.D. = Standard Deviation | | | | |

 Table 2. Survey Responses of Non-Dog Owners in communities surrounding Andasibe-Mantadia and Ranomafana National Parks.

| Survey Questions and Responses | Frequency | | Percer | nt (%) | |
|---|-------------|---------|--------|--------|--|
| | AMNP | RNP | AMNP | RNP | |
| Number of Non-dog owner respondents | N = 63 | N = 216 | | | |
| 24) How do you/your family treat stray dogs? | | | | | |
| F. Ignore them | 4 | 66 | 6.4 | 31 | |
| G. Shoo them | 43 | 109 | 68.3 | 50.5 | |
| H. Feed them | 9 | 36 | 14.3 | 17 | |
| I. Kill them | 1 | 9 | 2 | 4.2 | |
| J. Other (Explain) | - | 3 | - | 1.4 | |
| 25) How do you feel about stray or feral dogs in you | ur village? | | | | |
| E. A nuisance or problem | 35 | 119 | 56 | 55.1 | |
| F. A regular part of life | 19 | 58 | 30.2 | 27 | |
| G. Ignore them | 5 | 32 | 8 | 15 | |
| H. Other (Explain) | - | 12 | - | 6 | |
| 26) Would your life be better if there were no stray or feral dogs in your village? | | | | | |
| C. Yes | 46 | 136 | 73 | 63 | |
| D. No | 10 | 51 | 16 | 24 | |
| E. Other (Explain) | - | 26 | - | 12 | |