

HumanDimensions
Research Program

Illinois Homeowners and Wildlife Report

Illinois Natural History Survey
Prairie Research Institute
University of Illinois at
Urbana-Champaign

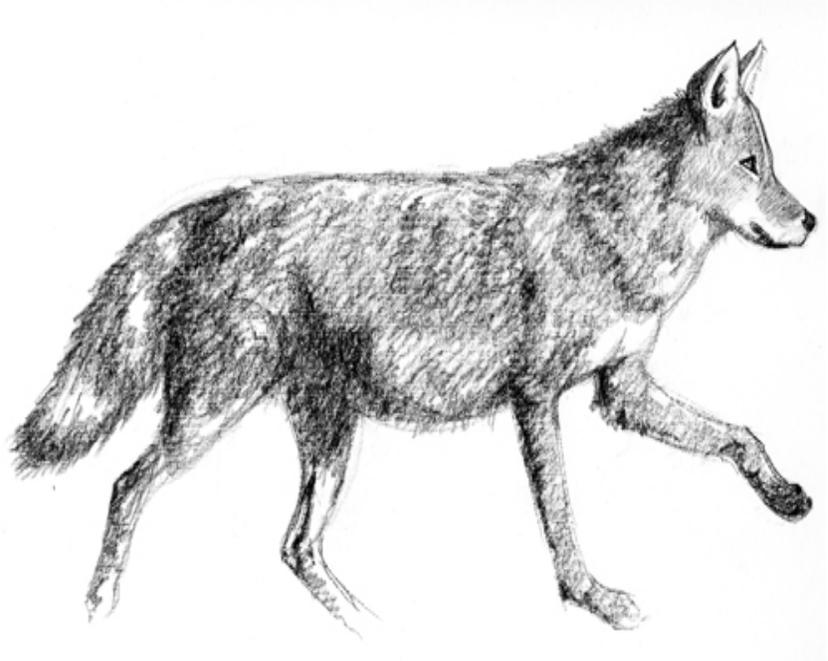


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SUMMARY

We conducted a mail survey designed to replicate the 2000 study “Attitudes of Homeowners in the Greater Chicago Metropolitan Region (GCMR) Toward Nuisance Wildlife.” The purpose of this study was to determine homeowners’ attitudes toward wildlife around their home, extent and types of wildlife damages experienced, and interactions with and preferences for management actions related to coyotes. A stratified random sample of 5,000 homeowners in the Greater Chicago Metropolitan Region was selected for this study. A total of 1,624 questionnaires (34%) were received. Forty percent of residents responded they fed wildlife on their property during the 12 months prior to the study, and 71% of those respondents were actively feeding wildlife at the time of the survey. Most wildlife feeding was done all year (56%), whereas fewer respondents fed wildlife during winter (22%), spring, summer, and fall (16% for each, respectively) only. Respondents (45%) were not sure if their neighbors were feeding wildlife. Approximately one-third (35%) of homeowners planted flowers, shrubs, provided water or nest boxes on property to specifically benefit wildlife. About 80% of homeowners enjoyed most or all wildlife species around their home, and the same proportion felt wildlife was not a threat or was only a slight threat to their home or property. Seeing wildlife on a daily basis was important for 80% of respondents.

Problems with wildlife were experienced by 54% of survey respondents, with digging or burrowing being the most frequent problem reported (52%), and 45% of respondents had damage to shrubs, yard, or landscaping. Raccoons, skunk, and squirrels were the wildlife species identified to cause the greatest problems to residents. Half (50%) of respondents took action themselves to correct the problem, and a majority (51%) spent less than \$50 on the problem during the 12 months prior to this study. Of the residents who hired private professional services

(14%), most (65%) rated the services provided as “Good” or “Excellent.” A minority of residents (9%) received information about preventing wildlife damage, or requested information (5%) about wildlife from the Illinois Department of Natural Resources. Of those who did request information from the IDNR, a majority (72%) rated the information provided as “Good” or “Excellent.” Most (69%) survey respondents had not visited the University of Illinois Extension website “Living with Wildlife in Illinois.”

A majority (68%) of survey respondents were aware of coyotes in their current community; 62% of respondents or their family members observed a coyote in their current community and 55% saw one in a forest preserve. There was no or slight concern for homeowners’ perceived risks of coyotes in their community. When given the options to let the coyote live or to “trap and destroy,” most survey respondents preferred to let coyotes live regardless of frequency or location of coyote situation. Only when a coyote made a den on one’s property did 49% of respondents favor the “trap and destroy” option.

METHODS

The sample for this study was comprised of 5,000 single-family homeowners stratified by residence in Cook, Lake, Du Page, Kane, Will, and McHenry Counties (referred to as the GCMR) (Figure 1). Name, address and telephone number of survey participants were provided by Survey Sampling, Inc. from property tax databases.

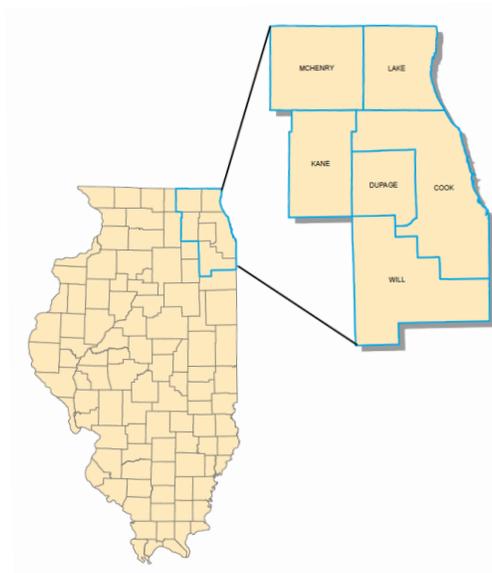


Figure 1. Map of GCMR counties

Participants were mailed a self-administered questionnaire (Appendix A), cover letter, and stamped return envelope (Appendices B, C, & D) (Vaske 2008, Dillman et al. 2009). The questionnaire was developed in cooperation with program managers from the Wildlife Resources Division of the Illinois Department of Natural Resources (IDNR) to assess GCMR homeowners' attitudes towards suburban/urban wildlife, wildlife interactions and conflicts, and perceived risks from coyotes; it also addressed (a) wildlife value orientations among residents of the Greater Chicago Metropolitan Region; (b) beliefs about coyotes in the GCMR; (c) perceptions of risks from coyotes in the GCMR.

Questionnaires were stamped with a code number to provide anonymity in responses. In compliance with University of Illinois Institutional Review Board requirements, survey participants were informed that participation was voluntary and all answers would remain confidential.

Mailings

Questionnaire mailings began during July 2012 and continued through October 2012. Beginning in late July a survey packet (questionnaire, cover letter and #9 postage-paid return envelope) was mailed to each participant, followed approximately 2 weeks later by a reminder/thank you postcard (Appendix E) to non-respondents. A second mailing of the survey packet was sent approximately 1 month following the postcards due to the beginning of a new local school year (K-12), as it was deemed inefficient to mail it during the first 2 weeks of school. As with the first mailing, non-respondents were sent a reminder postcard 2 weeks following the second packet. A third mailing of the survey packet was sent approximately 10 days following the second non-response postcard, followed 14 days later by a third postcard reminder.

Telephone Survey

In order to infer results to the population as a whole, statistics must represent the population of interest. Non-response error occurs when survey non-respondents differ significantly from respondents for key variables. Increased response rate is recommended to guard against bias; however, achieving high response does not necessarily guarantee non-response error has been reduced (Dillman, 2009). Some researchers argue that checking for non-response bias is more important than obtaining a high response rate for the original survey (see, for example, Vaske, 2008). Two ways of mitigating non-response bias is to (a) decrease non-response; or (b) perform a non-response bias check to see if non-respondents differ from respondents (Dillman, 2009; Vaske, 2008). We performed a test for non-response bias following our 3 waves of questionnaires.

Dillman (2009) recommends that non-response bias checks utilize a different mode and appearance than past attempts. As complete contact information (i.e., telephone numbers and email addresses) were not available for all non-respondents and mail contact was already utilized, we used a subsample of non-respondents who had available phone numbers. Our sample contained 3,152 non-respondents, of those 1,465 (46.5%) phone numbers were available. A one-page questionnaire was developed using key questions from the mail survey. Using systematic sampling with a random start, we selected a subsample of 600 non-respondents with available phone numbers and conducted a nonresponse bias test via telephone interviewers (Appendix F).

We attempt to contact individuals selected for the non-response bias test up to 5 times if we received no answer or busy signals. Efforts were made to contact each survey participant between 6:00 and 8:00pm Mondays through Fridays, between 2:00-4:00pm Saturdays, and Sundays between 6:00-8:00pm Central Standard Time.

Of the 5,000 survey questionnaires mailed to homeowners in the GCMR, a total of 205 homeowners were deleted from the sample due to incorrect mailing addresses or death. We received 1,644 (34%) questionnaires, 1,624 of which were usable. The non-response telephone survey detected no significant statistical difference between respondents and non-respondents; 102 phone surveys were completed.

RESULTS

Attracting Wildlife

Approximately 40% of homeowners in the GCMR reported they had fed wildlife within the 12 months prior to the study (Figure 2). Of the homeowners who fed wildlife, 71% stated they currently fed wildlife, and 56% typically did so year-round (Figures 3 & 4). Slightly less

than half (45%) of survey respondents were not sure if their neighbors fed wildlife, whereas 33% believed their neighbors fed wildlife (Figure 5). A minority of survey respondents (35%) planted flowers, shrubs, provide water or nest boxes on their property to specially benefit wildlife (Figure 6).

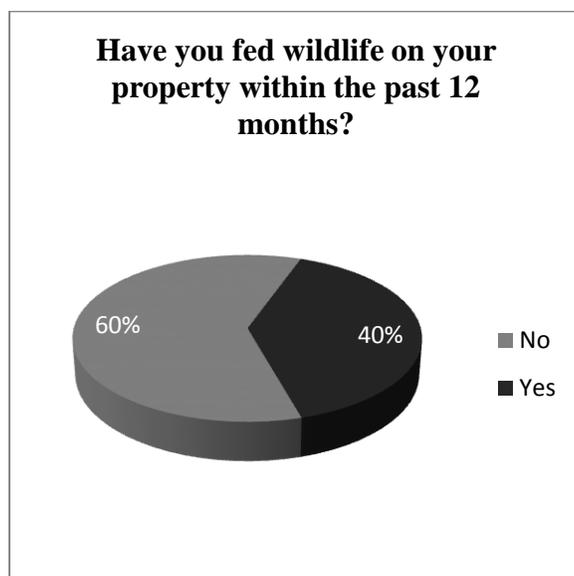


Figure 2. Percent of homeowners who fed wildlife on their property in 12 month period prior to study ($n=1606$).

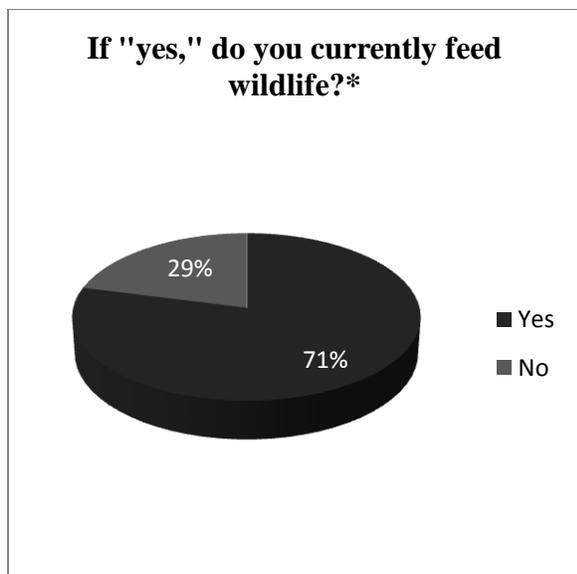


Figure 3. Current wildlife feeding activities ($n=616$).

*Cases selected for those who indicated they had fed wildlife on their property in the past 12 months.

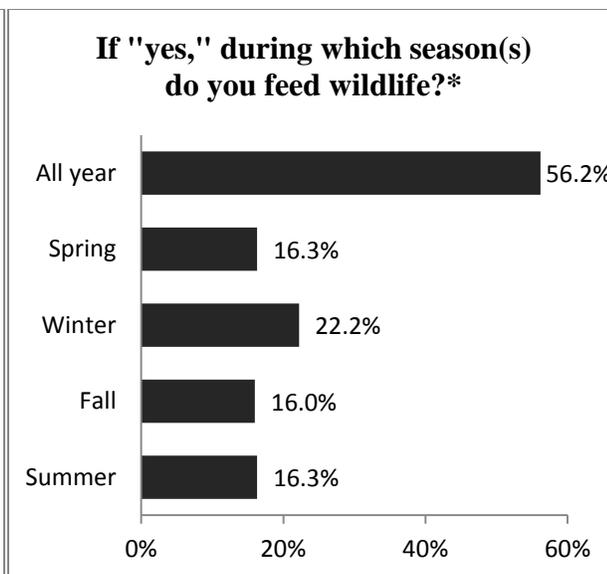


Figure 4. Season in which homeowners typically fed wildlife ($n=639$).

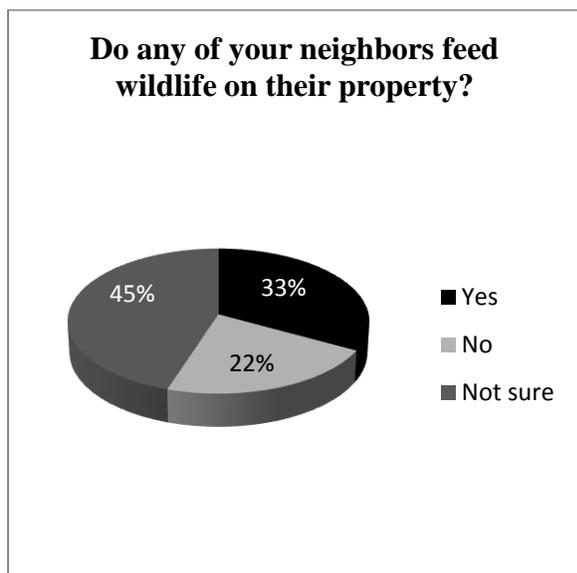


Figure 5. Percent of homeowners who had neighbors feeding wildlife ($n=1603$).

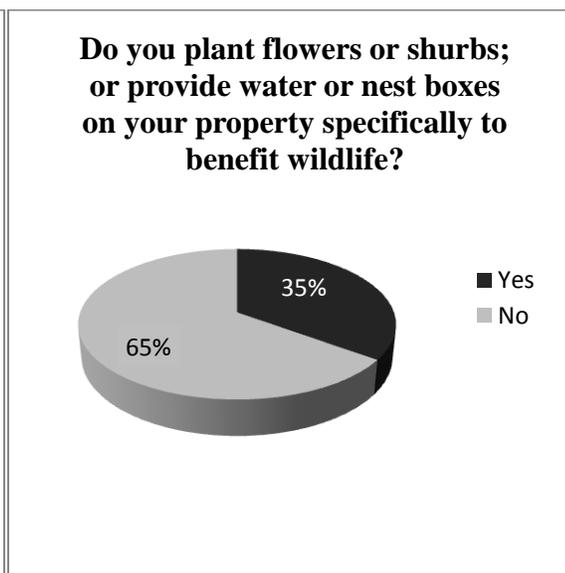


Figure 6. Percent of homeowners who plant flowers, shrubs, provide water or nest boxes on property to specially benefit wildlife ($n=1608$).

A majority (80%) of homeowners stated that seeing wildlife on a daily basis was important to them (Figure 7). Most homeowners (80%) enjoyed most or all wildlife species around their home (Figure 8). Most surveyed homeowners (80%) felt wildlife was no threat, or only a slight threat to damage on their home or property (Figure 9).

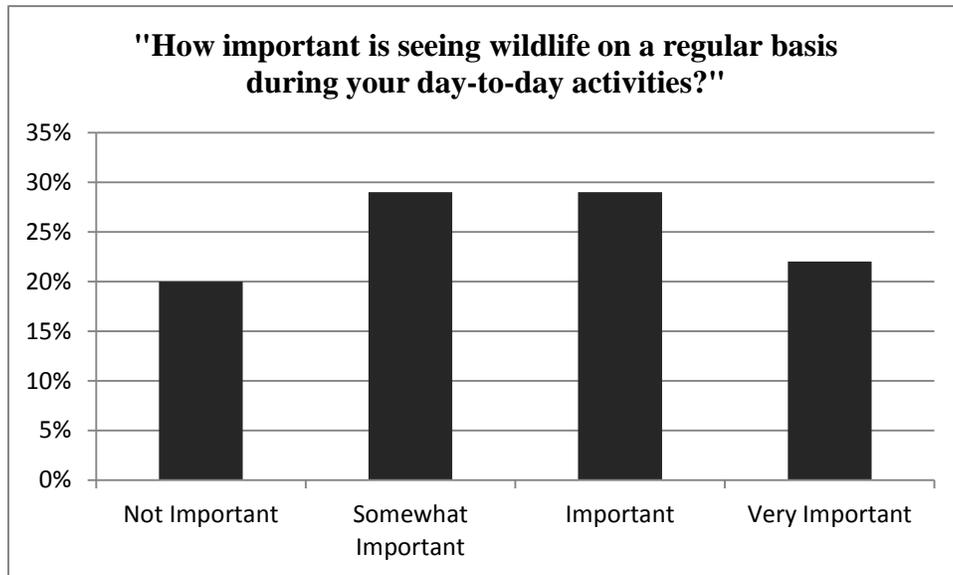


Figure 7. Perceived level of importance toward seeing wildlife on a regular basis during your day-to-day activities ($n=1575$).

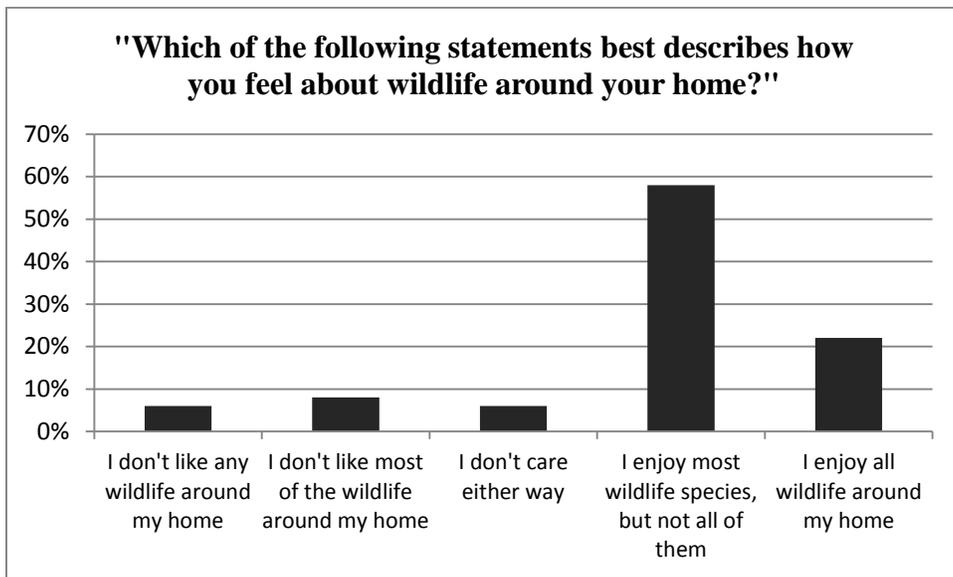


Figure 8. Homeowner's attitudes toward wildlife around their home ($n=1602$).

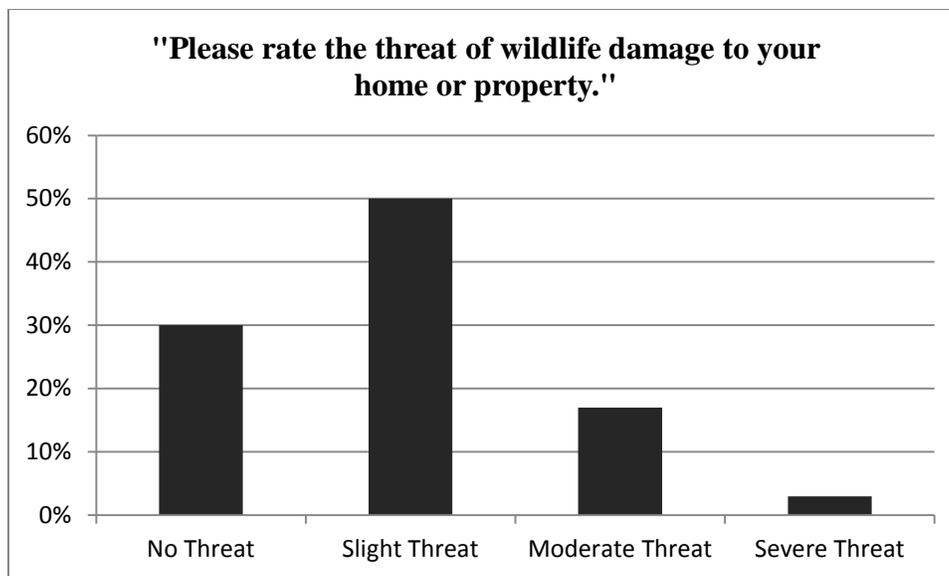


Figure 9. Homeowner's opinion of threat of wildlife damage to their home or property ($n=1601$).

Problem Wildlife

A majority (54%) of residents responded that they experienced problems with wildlife around their home in the 12 months prior to the study (Figure 10). Digging or burrowing was the most frequently reported problem (52%), followed by damage to shrubs or landscaping (45%), and animal droppings (34%; Figure 11).

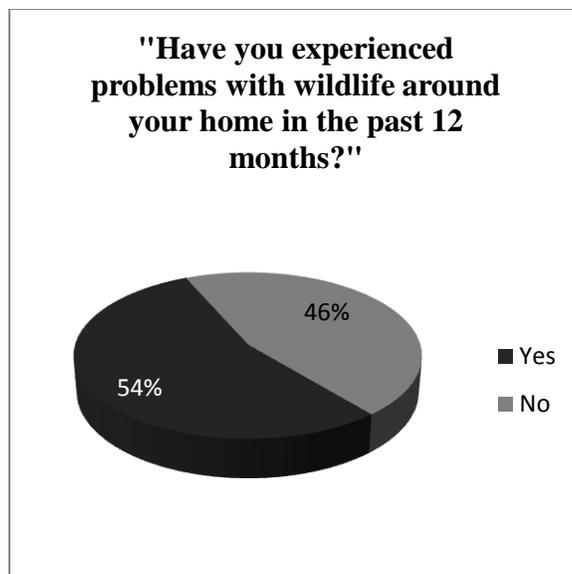


Figure 10. Homeowners' experience with problem wildlife around their home in the past 12 months ($n=1576$).

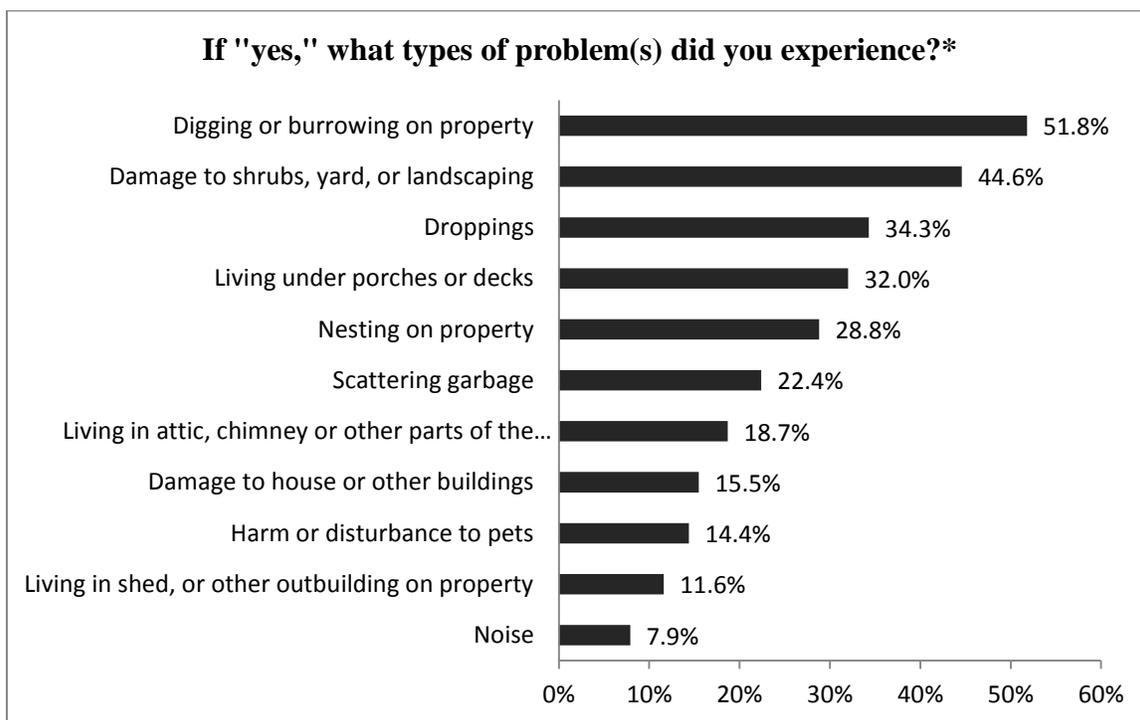


Figure 11. Types of problems homeowners have experienced with wildlife ($n=859$).
*Cases selected for those who have experienced damage in the past 12 months.

Over half (62%) of homeowners took corrective action against problem wildlife around their home, with 51% of those individuals incurring an estimated expenditure of less than \$50 (Figures 12 & 13). Actions included installing devices to keep animals out (43%), use of commercial repellents (40%), and closing up cracks and crevices (38%) (Table 1). Less than 10% called city or county animal control (9.8%), and 13.7% called private animal control; among those who sought private professional services, raccoons, skunks, and squirrels were most frequently removed (Figure 14). Of those survey respondents who used private professional services, 78% rated the services as “Good” or “Excellent” (Figure 15).

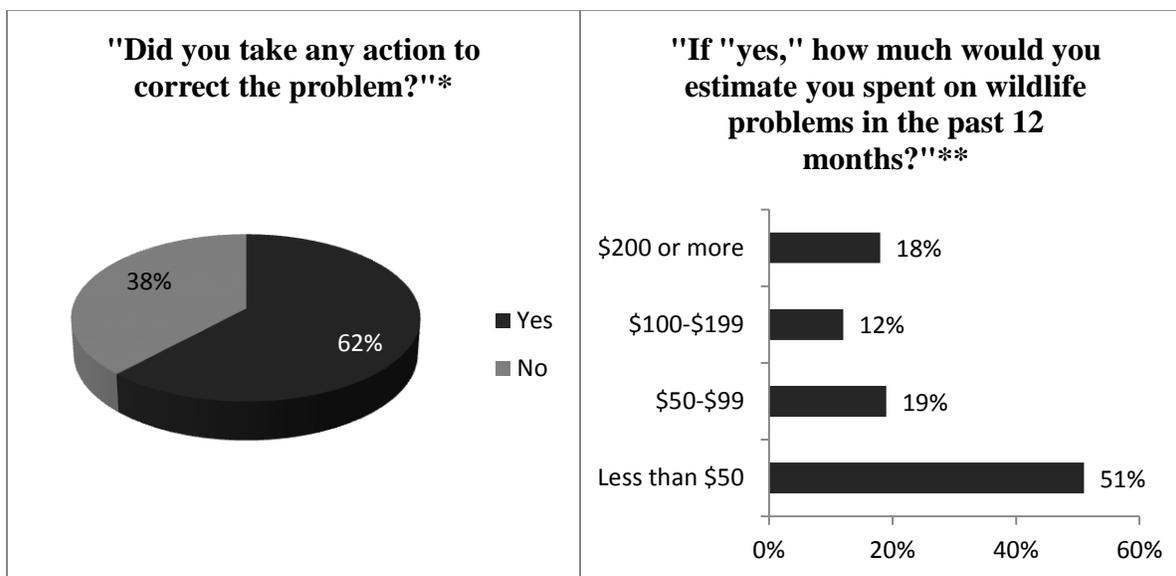


Figure 12. Homeowner action taken to correct wildlife problems ($n=830$).

Figure 13. Amount of money spent to correct problems with wildlife ($n=506$).

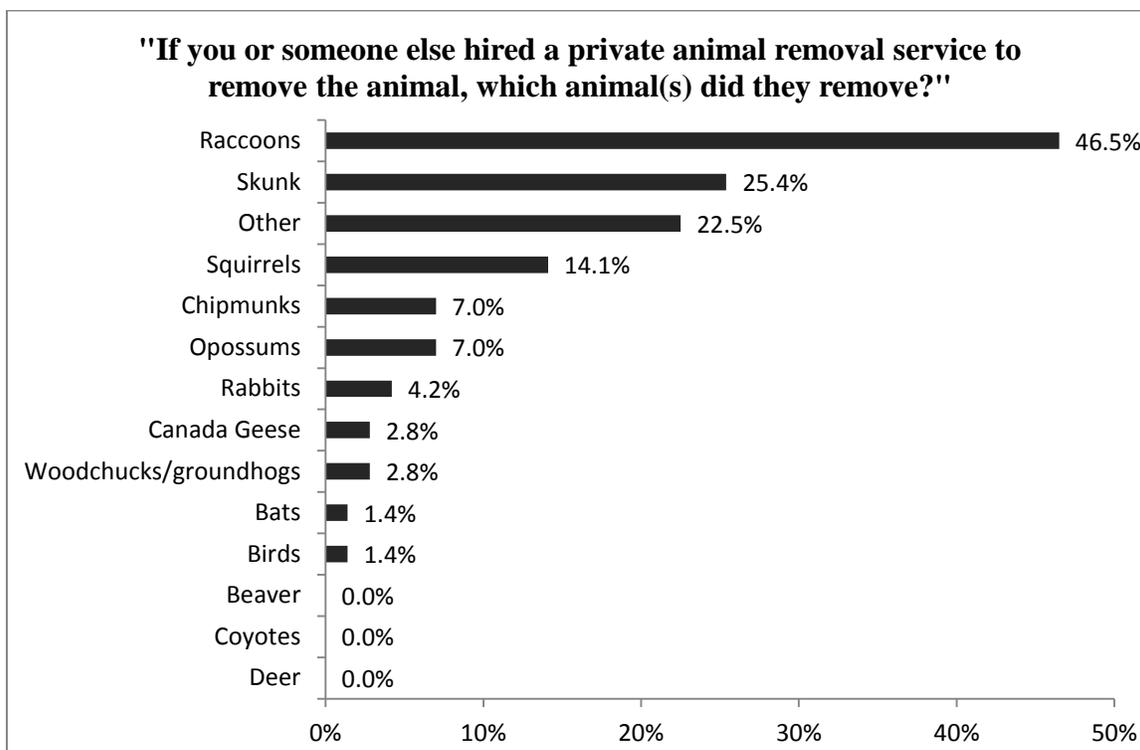
*Cases selected for those who have experienced damage in the past 12 months.

**Cases selected for those who have experienced damage in the past 12 months and took action to correct the problem.

Table 1. Homeowner steps taken to correct wildlife problem ($n=518$).

*Cases selected for those who have experienced damage in the past 12 months and took action to correct the problem.

	Percent Response (%)
Installed devices to keep animals out (frames around trash cans, fences, chimney caps, wire mesh, etc.)	43.4
Commercial repellents (Hot Sauce, Ro-Pel, etc.)	40.0
Closed up cracks and crevices	38.0
Used household chemicals (mothballs, ammonia, etc.)	26.3
Removed animal myself	21.4
Called private animal removal control	13.7
Called city or county animal control	9.8
Removed food sources (pet food, bird food, etc.)	9.7
Changed landscaping	9.1
Reported problem to neighborhood association	6.0
Other	4.6

Figure 14. Wildlife species removed by professional removal services ($n=71$).

*Cases selected for those who have experienced damage in the past 12 months and hired a private animal removal service.

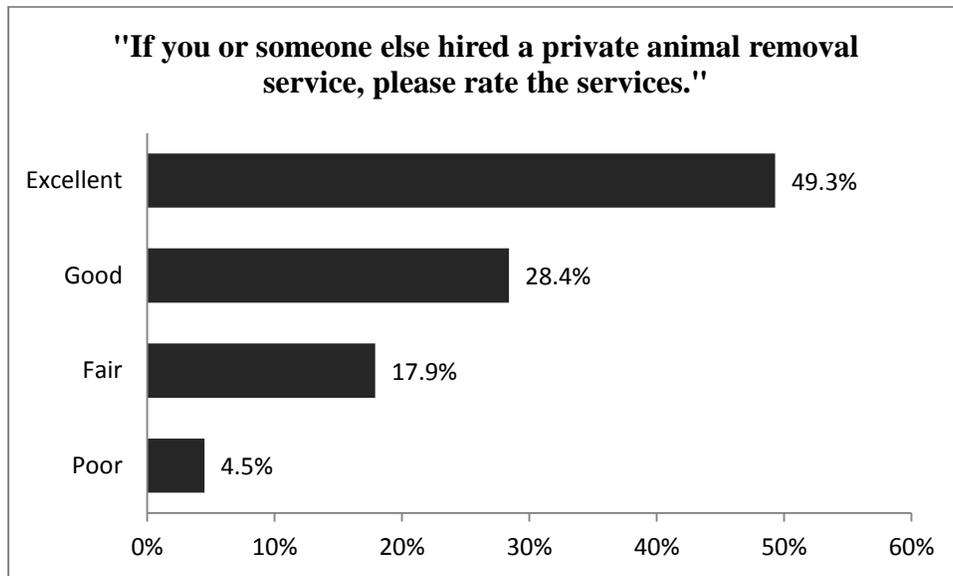


Figure 15. Homeowner ratings of professional removal services ($n=71$).
 *Cases selected for those who have experienced damage in the past 12 months and hired a private animal removal service.

Information about Urban Wildlife

A minority (9%) of residents reported they received information about preventing or treating wildlife damage (Table 2). City or county agencies were cited as the most frequent source of information, while the U.S. Department of Agriculture was cited the least. A minority (5%) of respondents stated they requested information about wildlife from IDNR, and of those who did a majority (83%) rated quality of the information as “Good” or “Excellent” (Table 3).

Table 2. Percent of homeowners who received information about removing or preventing damage from wildlife ($n=1192$).

	Percent Response (%)
Yes	8.7
No	77.5
I'm not sure	13.8
<u>If "Yes," source of information ($n=104$):</u>	
City or County Animal Control Agency	44.2
Other	32.7
Illinois Department of Natural Resources	25.0
University of Illinois Extension	16.3
U.S. Fish and Wildlife Service	6.7
U.S. Department of Agriculture	1.0

Table 3. Requests for information about wildlife from the Illinois Department of Natural Resources ($n=1201$).

	Percent Response (%)
Yes	4.8
No	79.3
I did not know about IDNR information	15.9
<u>If "Yes," rate the quality of the information you received ($n=54$):</u>	
Poor	7.4
Fair	9.3
Good	55.6
Excellent	27.8

Most (69%) respondents had not visited the University of Illinois Extension website “Living with Wildlife in Illinois,” and 28% of homeowners did not know about the website (Figure 16).

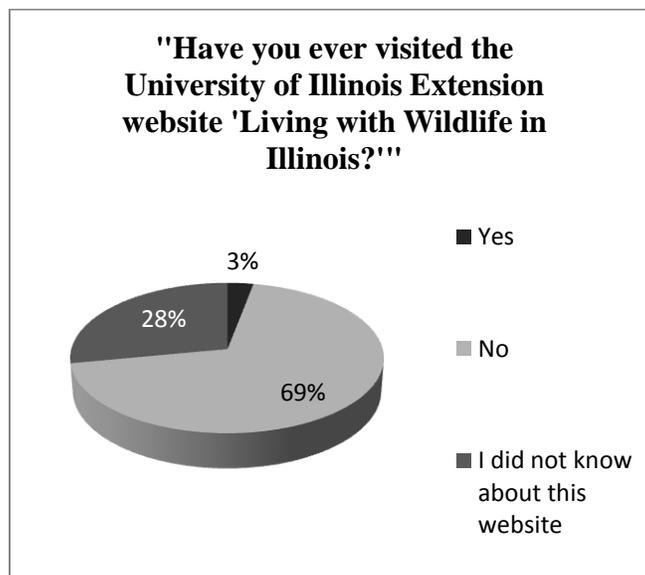


Figure 16. Homeowners who have visited the University of Illinois Extension’s website “Living with Wildlife in Illinois” ($n=1190$).

Coyotes in Greater Chicago Metropolitan Region (GCMR) Communities

Most homeowners (68%) were aware of coyotes in their community (Figure 17). Sixty-two percent of survey respondents or family members observed coyotes in their communities (Table 4), and few (8%) respondents were not sure they or a member of their household could correctly identify a coyote. More than half (55%) of respondents or family members observed coyotes in a forest preserve.

Sixty-three percent of respondents were not at all concerned about being attacked by a coyote or being injured by a coyote (Table 5). A majority (62%) of homeowners were not at all or slightly concerned about the safety of children because of coyotes in their current community. Sixty-eight percent of respondents were not at all concerned for property damage as a result of coyotes in their community. A majority of respondents (58%) were not at all or slightly

concerned for the safety of pets as a result of coyotes. A greater majority of homeowners (67%) were not at all or slightly concerned about contracting rabies from coyotes. Slightly fewer participants (64%) were not at all or slightly concerned about the potential for coyotes to transfer disease to pets.

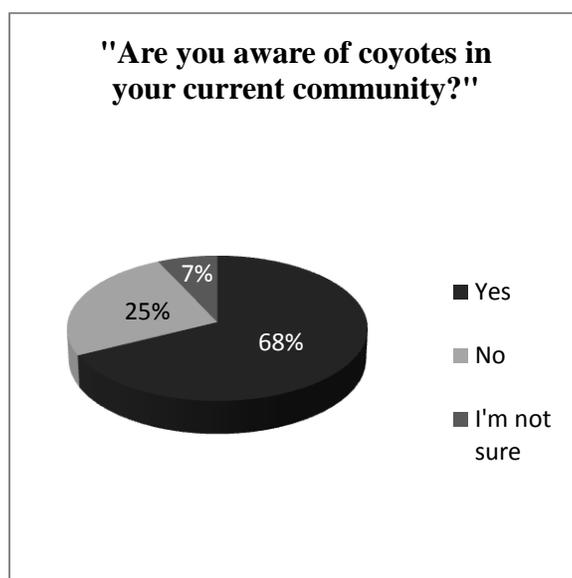


Figure 17. Percent of homeowners who are aware of coyotes in their current community ($n=1604$).

Table 4. Percent of homeowners who have seen or a family member have seen coyotes in their current community or forest preserve ($n=1558$).

	Percent Response (%)
<u>Current community</u>	
Yes	61.9
No	38.1
I'm not sure I can correctly identify a coyote ($n=1624$)	4
I'm not sure a member of my household can correctly identify a coyote ($n=1624$)	3.7
<u>Forest preserve ($n=1581$)</u>	
Yes	54.9
No	38
I'm not sure	7.1

Table 5. Homeowner's perceived risk of coyotes in their community.

Because of coyotes, how concerned are you about...	Not at all Concerned (%)	Slightly Concerned (%)	Moderately Concerned (%)	Extremely Concerned (%)
...being attacked by a coyote (<i>n</i> =1535).	62.6	21.8	8	7.6
...being injured by a coyote (<i>n</i> =1531).	63.2	20.5	8.1	8.1
...safety of children (<i>n</i> =1535).	35	26.2	17.2	21.7
...property damage caused by coyote (<i>n</i> =1517).	67.9	17.5	7.7	6.9
...safety of pets (<i>n</i> =1540).	34.8	22.7	18.2	24.4
...contracting rabies (<i>n</i> =1526).	49.2	17.9	12.8	20.1
... diseases transferred to pets (<i>n</i> =1524).	44.6	18.5	14.5	22.3

Half (53%) of respondents disagreed to some extent with the statement “I enjoy seeing coyotes in my current community” (Table 6). More than half (61%) of homeowners “slightly disagreed,” “disagreed,” or “strongly disagreed” with the statement “I worry about problems coyotes might cause to my property.” When asked if “coyotes are an important part of the ecosystem,” most respondents (62%) agreed at some level. When considering whether “the risk of being injured by a coyote is high,” 67% of respondents responded they “slightly disagreed,” “disagreed,” or “strongly disagreed.” Approximately half (55%) of survey respondents expressed some level of disagreement with the statement “I feel coyotes are a nuisance.” Half of homeowners (50%) “slightly agreed,” “agreed,” or “strongly agreed” that “people should learn to live with coyotes.” Less than half (48%) of homeowners agreed to the statement “seeing coyotes makes me feel connected to nature”.

Table 6. Homeowner's beliefs about coyotes in their community.

	Strongly Disagree (%)	Disagree (%)	Slightly Disagree (%)	Unsure (%)	Slightly Agree (%)	Agree (%)	Strongly Agree (%)
I enjoy seeing coyotes in my current community (<i>n</i> =1555).	26.3	18.5	8.0	14.6	13.9	12.5	6.1
I worry about problems coyotes might cause to my property (<i>n</i> =1547).	26.1	26.1	9.3	12.9	10.5	9.0	6.2
Coyotes are an important part of the ecosystem (<i>n</i> =1546).	6.0	5.2	3.0	23.9	14.5	31.3	16.1
The risk of being injured by a coyote is high (<i>n</i> =1552).	25.5	30.0	11.3	16.4	7.0	5.3	4.6
Coyotes are common around my home (<i>n</i> =1546).	19.1	22.1	9.2	16.7	15.1	12.1	5.6
I feel coyotes are a nuisance (<i>n</i> =1550).	19.7	23.3	12.0	17.7	12.6	8.8	5.9
People should learn to live with coyotes (<i>n</i> =1557).	12.7	11.1	7.6	18.3	16.9	22.2	11.3
Seeing coyotes makes me feel connected to nature (<i>n</i> =1557).	14.8	15.1	8.3	13.5	20.2	18.3	9.8

Preferences for Coyote Management in GCMR

Homeowners were asked to respond to several hypothetical situations in which a coyote was encountered. Seven options for managerial response were presented, 6 options involved nonlethal responses and the seventh option “(trap and destroy)” constituted the lethal response. Majorities of homeowners preferred nonlethal responses regardless of type, frequency, or location of encounter. For example, “a coyote walks through your property one time” had the same nonlethal management preference as the scenario “a coyote walks through your property more than one time.” Moreover, regardless of whether the encounter happened on one’s property or in one’s neighborhood the management preference was the same. For example, “a coyote comes on your property when children are present one time” elicited the same preference for nonlethal management action as “a coyote comes in your neighborhood when children are present one time.”

Highest preference for lethal response occurred for encounters given scenarios (a) “a coyote makes a den on your property” (49%); (b) “a coyote chases your pet more than one time” (35%); (c) “a coyote comes in your neighborhood when children are present more than one time” (30%) (Table 7).

Table 7. Homeowner management preferences for coyotes in the GCMR.

Which action would you prefer wildlife managers take in the following situations?							
I would call officials to report a coyote, and prefer officials...	I would not call and report %	Say call back if coyote stays >1 hour %	Monitor situation but take no action %	Post notice in area %	Scare coyote away %	Say supervise children and pets when outdoors %	Trap and destroy coyote %
A coyote walks through your property one time (<i>n</i> =1527).	64.2	5.8	11.2	4.1	4.3	6.7	3.7
A coyote walks through your property more than one time (<i>n</i> =1509).	32.7	11.3	20.5	8.2	8.2	11.9	7.3
You see more than one coyote on your property one time (<i>n</i> =1497).	26.7	11.4	19.0	9.8	10.4	13.2	9.6
You see more than one coyote on your property more than one time (<i>n</i> =1501).	16.0	10.7	16.6	11.5	12.8	16.7	15.7
A coyote comes on your property when children are present one time (<i>n</i> =1494).	13.6	6.4	9.5	5.0	23.4	27.0	15.0
A coyote comes on your property when children are present more than one time (<i>n</i> =1488).	7.7	7.5	6.1	5.2	18.7	27.4	27.4
A coyote chases your pet one time (<i>n</i> =1455).	11.8	6.9	8.2	4.3	22.3	22.2	24.2
A coyote chases your pet more than one time (<i>n</i> =1452).	8.9	6.5	5.2	4.7	18.8	21.3	34.6
A coyote comes in your neighborhood when children are present one time (<i>n</i> =1491).	15.9	6.8	11.3	6.0	16.6	27.2	16.3
A coyote comes in your neighborhood when children are present more than one time (<i>n</i> =1481).	8.9	7.5	6.3	6.9	15.1	25.5	29.8
A coyote makes a den on your property (<i>n</i> =1462).	6.5	7.2	4.3	3.3	23.1	7.0	48.6

Telephone Survey results

Non-response telephone survey participants were similar demographically to mail survey respondents, and therefore the data were not weighted (Table 8). The most common responses for mail survey non-response were (a) respondent was too busy (35%); (b) the survey looked too long or too complicated (21%).

Table 8. Comparison of demographic results from mail and telephone survey.

	Mail Survey Percent Response (%)	Telephone Survey Percent Response (%)
<u>Gender</u>	(n=1578)	(n=95)
Male	52.5	45.1
Female	47.5	54.9
<u>Marital Status</u>	(n=1572)	(n=101)
Married	70.7	66.3
Divorced/Separated/Widowed	16.3	15.8
Single	12.5	13.9
<u>Children under 18 living at home</u>	(n=1580)	(n=101)
Yes	31.7	36.1
No	68.3	63.9

DISCUSSION

Wildlife constituted an important part of daily lives of many residents of the Greater Chicago Metropolitan Region. Whether seeing wildlife or feeding them at home, people reported enjoyment in having wildlife in their daily lives. This role becomes especially impressive when we consider that, in terms of human populations, the Greater Chicago Metropolitan Region is one of the most densely populated regions in the United States.

We noted many similarities when we compared results of this study with those from the 2001 study. In both years approximately half of residents fed wildlife around the home, and most did so throughout the year. Similar percentages of residents reported problems with wildlife for both studies, with digging/burrowing and damaging landscaping being the most prevalent problems for both groups. A higher percentage (71%) of respondents in the 2001 study took action themselves to remedy the problems, however fewer (62%) of 2012 respondents attempted to address the problems themselves. More (14%) 2012 respondents hired professional services compared to those in the 2001 study (8%), and satisfaction ratings for these services were higher among 2012 homeowners (80% “Good” to “Excellent”) than those from the 2001 study (62% “Good” to “Excellent”). The proportions of homeowners who received information on nuisance wildlife from a municipal, state or federal agency remained the same across both studies.

We noted a shift in problems from some species in the 2 studies. Respondents from the 2001 study rated raccoons, skunks, squirrels, and Canada geese as the species causing most problems around their homes; in the 2012 study raccoons, skunks and squirrels were still listed in the same order, however Canada geese were rated at 11 on the list of species. Further research is needed to determine if this shift is due to population decrease as a results of control efforts or if public acceptance and social carrying capacity for Canada geese has increased among residents of the GCMR.

Coyotes rated highest among homeowners in 2001 as a threat to human health and safety. The 2012 study asked more extensive questions regarding urban coyotes, and respondents who were “Extremely concerned” about threats coyotes posed to themselves, children, and pets ranged from 8-24%. A majority of respondents were aware of coyotes and most had personally observed coyotes or a family member had done so, either in their community or local forest preserve. Although coyotes were perceived as a potential threat in certain situations by some residents, few preferred lethal control as a means of controlling coyotes in their communities. These results are similar to those found by Agee and Miller (2009) in a study of public preference for managing black bears in Middle Georgia and those of Loyd and Miller (2010) for lethal control of feral cats among residents of the GCMR.

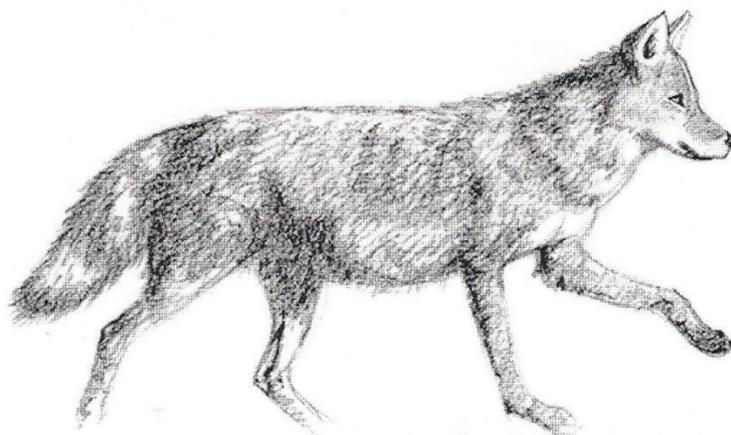
Although the Greater Chicago Metropolitan Region is among the largest in the U.S., and Cook County in particular rates among the most densely populated (human population), residents continue to report that wildlife plays an important part of their lives. Seeing wildlife, feeding wildlife, and supporting nonlethal management alternatives were essential to many residents of the GCMR in 2001 and over a decade later. Urban wildlife plays an increasingly central role in the lives of many residents of our urban regions. As urbanization continues in both the U.S. and globally, it is important to consider the role and management of these species as they affect and influence the daily lives of people sharing their habitat.

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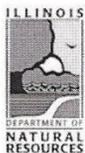
APPENDIX A. Questionnaire

Illinois Homeowners and Wildlife



ALL RESPONSES ARE CONFIDENTIAL
THANK YOU FOR YOUR COOPERATION

Please return this survey in the postage-paid return envelope provided.



Illinois Department of Natural Resources

Division of Wildlife Resources
 and the
 Illinois Natural History Survey



The Department of Natural Resources is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under the Illinois Compiled Statutes, The Wildlife Code, Chapter 520. Disclosure of information is voluntary.

The Illinois Department of Natural Resources receives federal assistance and therefore must comply with federal anti-discrimination laws. In compliance with the Illinois Human Rights Act, the Illinois Constitution, Title VI of the 1964 Civil Rights Act, Section 504 of the Rehabilitation Act as amended, and the U.S. Constitution, the Illinois Department of Natural Resources does not discriminate on the basis of race, color, sex, national origin, age, or disability. If you believe you have been discriminated against in any program, activity, or facility, please contact the Equal Employment Opportunity Officer, Department of Natural Resources, 524 S. Second St., Springfield, IL 62701-1787, (217) 782-7616 or the officer of Human Resources, U.S. Fish and Wildlife Service, Washington, D.C. 20240.

(Original graphite drawing by Susan Fox)

The Illinois Department of Natural Resources is conducting a study of homeowners and wildlife. By wildlife, we mean coyotes, deer, geese, and other wild animals. Please take 15 minutes of your time to complete this questionnaire. Your responses will tell us more about wildlife in Illinois neighborhoods.

Section 1. Living With Wildlife. Please give your responses to the following questions about your interaction with wildlife.

1. Have you fed wildlife (birds, deer, squirrels, etc.) on your property within the past 12 months?

Yes No (Please go to **Question 2**)

1a. If "Yes," do you currently feed wildlife?

Yes No

1b. During which season(s) do you feed wildlife? Please check all that apply.

summer fall winter spring I feed wildlife all year

2. Do any of your neighbors feed wildlife on their property?

Yes No Not sure

3. Do you plant flowers, shrubs, provide water, or nest boxes on your property specifically to benefit wildlife?

Yes No

4. How important is seeing wildlife on a regular basis during your day-to-day activities?

Please circle the number that matches your response.

Not Important	Somewhat Important	Important	Very Important
1	2	3	4

5. Which of the following statements best describes how you feel about wildlife around your home? Please choose one response.

I enjoy most wildlife species, but not all of them I enjoy all wildlife around my home
 I don't like most of the wildlife around my home I don't like any wildlife around my home
 I don't care either way

6. Please rate the threat of wildlife damage to your home or property by circling the number that matches your response.

No Threat	Slight Threat	Moderate Threat	Severe Threat
1	2	3	4

Section 2. Problems With Wildlife. Please answer the following questions about wildlife damage on *your* property.

1. Have you experienced problems with wildlife around your home in the past 12 months?

Yes No (please go to **Section 3**)

2. If "Yes," what type of problems did you experience? Please check all that apply.

Living in attic, chimney, or other parts of house Nesting on property
 Living in shed, or other outbuildings on property Scattering garbage
 Living under porches or decks Droppings
 Damage to shrubs, yard, or landscaping Digging or burrowing on property
 Harm or disturbance to pets Noise
 Damage to house or other buildings Other (Please identify): _____

3. Did you take any action to correct the problem?

Yes No (Please go to **Question 6**)

3a. If "Yes," how much money would you estimate you spent on wildlife problems in the past 12 months?

less than \$50 \$50 – \$99 \$100 – \$199 \$200 or more

3b. If "Yes," what steps did you take? Please check all that apply.

Used commercial repellents (Hot Sauce, Ro-Pel, etc.) Closed up cracks and crevices
 Used household chemicals (mothballs, ammonia, etc.) Removed animal(s) myself
 Reported problem to neighborhood association Changed landscaping
 Removed food sources (pet food, bird food, etc.) Called city or county animal control
 Installed devices to keep animals out (frames around trash cans, fences, chimney caps, wire mesh, etc.) Called private animal removal service
 Other (Please identify): _____

4. If you or someone else hired a private animal removal service to remove the animal, which of the following animal(s) did they remove? Please check all that apply.

Raccoons Bats Squirrels Foxes Skunk
 Chipmunks Birds Muskrat Beaver Opossums
 Rabbits Coyotes Deer Canada geese
 Woodchucks/groundhogs Other (Please identify): _____

5. If you or someone else hired a private animal removal service to remove the animal, please rate the services they provided. Please circle the number that matches your response.

Poor	Fair	Good	Excellent
1	2	3	4

6. Have you ever received information about removing or preventing damage from wildlife?

Yes No I'm not sure

6a. If "Yes," from which of the following did you receive information?

Illinois Department of Natural Resources U.S. Department of Agriculture
 City or County Animal Control Agency University of Illinois Extension Office
 U.S. Fish and Wildlife Service Other (Please identify): _____

7. Have you ever requested information about wildlife from the Illinois Department of Natural Resources (IDNR)?

Yes No I did not know about IDNR information

7a. If you received information from the IDNR, please rate the quality of the information you received.

Poor	Fair	Good	Excellent
1	2	3	4

8. Have you ever visited the University of Illinois Extension website "Living with Wildlife in Illinois?"

Yes No I did not know about this website

Section 3. Coyotes and Coyote Management. Coyotes are found in certain areas of the Greater Chicago Metropolitan Region. Please tell us about your opinions of coyotes in the region.

1. Are you aware of coyotes in your current community?

Yes No I'm not sure

2. Have you or a member of your household ever seen a coyote in your current community? Please check all that apply.

Yes No I'm not sure I can correctly identify a coyote
 I'm not sure a member of my household can correctly identify a coyote

3. Have you or a member of your household ever seen a coyote in a county forest preserve or park near your home?

Yes No I'm not sure

4. How concerned are you about the following in your current community? For each statement, circle the number that best represents your response.

<i>Because of coyotes, how concerned are you about...</i>	Not at all Concerned		Slightly Concerned		Moderately Concerned		Extremely Concerned	
...being attacked by a coyote.	1	2	3	4	5	6	7	8
...being injured by a coyote.	1	2	3	4	5	6	7	8
...safety of children.	1	2	3	4	5	6	7	8
...property damage caused by coyote.	1	2	3	4	5	6	7	8
...safety of pets.	1	2	3	4	5	6	7	8
...contracting rabies.	1	2	3	4	5	6	7	8
...diseases transferred to pets.	1	2	3	4	5	6	7	8

5. Please give your opinion of coyotes in the following scenarios. Circle the number that matches your response.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
I enjoy seeing coyotes in my current community.	1	2	3	4	5	6	7
I worry about problems coyotes might cause to my property.	1	2	3	4	5	6	7
Coyotes are an important part of the ecosystem.	1	2	3	4	5	6	7
The risk of being injured by a coyote is high.	1	2	3	4	5	6	7
Coyotes are common around my home.	1	2	3	4	5	6	7
I feel coyotes are a nuisance.	1	2	3	4	5	6	7
People should learn to live with coyotes.	1	2	3	4	5	6	7
Seeing coyotes makes me feel connected to nature.	1	2	3	4	5	6	7

6. Which action would you prefer wildlife managers take in the following situations. Please circle one response for each statement.

	I would not call and report	I would call officials to report a coyote, and prefer officials...					
		say call back if coyote stays >1 hour	monitor situation but take no action	post notice in area	scare coyote away	say supervise children and pets when outdoors	trap and destroy coyote
A coyote walks through your property <u>one</u> time.	1	2	3	4	5	6	7
A coyote walks through your property <u>more than one</u> time.	1	2	3	4	5	6	7
You see more than one coyote on your property <u>one</u> time.	1	2	3	4	5	6	7
You see more than one coyote on your property <u>more than one</u> time.	1	2	3	4	5	6	7
A coyote comes on your property when children are present <u>one</u> time.	1	2	3	4	5	6	7
A coyote comes on your property when children are present <u>more than one</u> time.	1	2	3	4	5	6	7
A coyote chases your pet <u>one</u> time.	1	2	3	4	5	6	7
A coyote chases your pet <u>more than one</u> time.	1	2	3	4	5	6	7
A coyote comes in your neighborhood when children are present <u>one</u> time	1	2	3	4	5	6	7
A coyote comes in your neighborhood when children are present <u>more than one</u> time.	1	2	3	4	5	6	7
A coyote makes a den on your property.	1	2	3	4	5	6	7

Section 4. Wildlife in Parks and Other Public Areas. Please answer the following questions about your experiences with wildlife in parks, forest preserves, beaches, and other public areas.

1. In your opinion, which one of the following wildlife species causes the most problems in the area where you live? Please check one.

- Raccoons Bats Squirrels Foxes Skunk
 Chipmunks Birds Muskrat Beaver Opossums
 Rabbits Coyotes Deer Canada geese
 Woodchucks/groundhogs Other (Please identify): _____

2. How much do you disagree or agree with each of the following statements? Please circle one response for each statement.

	Strongly Disagree	Disagree	Slightly Disagree	Unsure	Slightly Agree	Agree	Strongly Agree
Wildlife populations should be managed to benefit humans.	1	2	3	4	5	6	7
Wildlife should have the same rights as humans.	1	2	3	4	5	6	7
It is important for me to know there are healthy populations of wildlife.	1	2	3	4	5	6	7
We should be sure that future generations have an abundance of wildlife.	1	2	3	4	5	6	7
The needs of humans should take priority over wildlife protection.	1	2	3	4	5	6	7
I care about wildlife as much as I do about people.	1	2	3	4	5	6	7
Wildlife are on earth primarily for people to use.	1	2	3	4	5	6	7
Benefits from seeing wildlife are outweighed by the damage they cause.	1	2	3	4	5	6	7
Wildlife should have the same rights as pets, but not humans.	1	2	3	4	5	6	7
When needs of wildlife conflict with those of humans, the wildlife should be removed.	1	2	3	4	5	6	7
Wildlife populations need to be strictly controlled.	1	2	3	4	5	6	7
People need to adapt to wildlife living near them.	1	2	3	4	5	6	7
The rights for wildlife to exist are more important than human uses of wildlife.	1	2	3	4	5	6	7
Wildlife have as much right to live in my neighborhood as I do.	1	2	3	4	5	6	7
Seeing wildlife in my day-to-day routine gives me a positive feeling.	1	2	3	4	5	6	7
There is a place for wildlife, but not where people live.	1	2	3	4	5	6	7

APPENDIX B. Cover letter #1



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

July 27, 2012

Dear Illinois Resident,

Wildlife around the home has become an issue of interest recently to residents of the Greater Chicago Metropolitan Region. Understanding how Chicago area residents feel about wildlife in their neighborhoods will help state and local officials better manage these species.

You have been randomly selected from all residents of the Greater Chicago Metropolitan Region to participate in this study. Please take 10 minutes of your time to complete the enclosed questionnaire, **even if you are unaware of wildlife in your area**. The time you take to complete the enclosed questionnaire is essential to the success of urban wildlife management in the Chicago region.

Your decision to participate in this study is voluntary, and the information you provide us will be kept confidential. Successfully managing wildlife in your area depends on Chicago residents' input.

You may access the results of this study at <http://www.inhs.illinois.edu/programs/hd/>. You may also find information about Illinois Department of Natural Resources wildlife management programs and wildlife in Illinois at <http://dnr.state.il.us/orc/wildliferesources/>.

Sincerely,


Craig A. Miller
Human Dimensions Research Program

APPENDIX C. Cover letter #2



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

Aug 24, 2012

Dear Illinois Resident,

You are a member of a group of randomly selected residents from northern Illinois that were selected for this study regarding wildlife around your home. We recently mailed you a survey regarding your experiences with and attitudes toward wildlife in your area. We have yet to receive your completed questionnaire. If this letter was sent before we received your responses, we apologize and thank you for your time.

If your questionnaire has not yet been completed, please do so at your earliest convenience. **In the case you misplaced your questionnaire a duplicate copy is enclosed.** The findings of this study will help wildlife managers make decisions that benefit wildlife while addressing residents' concerns.

The enclosed questionnaire will take you approximately 10 minutes to complete. **Even if you are not aware of wildlife in your area, please complete the survey.** A postage-paid envelope is provided for your convenience.

Thank you for helping with this important study.

Sincerely,


Craig A. Miller
Human Dimensions Research Program

APPENDIX D. Cover Letter #3



ILLINOIS NATURAL HISTORY SURVEY

Prairie Research Institute
University of Illinois at Urbana-Champaign

October 5, 2012

Dear Illinois Resident,

You are a member of a group of randomly selected residents from northern Illinois that were selected for this study regarding wildlife around your home. We recently mailed you a survey regarding your experiences with and attitudes toward wildlife in your area. We have yet to receive your completed questionnaire. If this letter was sent before we received your responses, we apologize and thank you for your time.

If your questionnaire has not yet been completed, please do so at your earliest convenience. **In the case you misplaced your questionnaire a duplicate copy is enclosed.** The findings of this study will help wildlife managers make decisions that benefit wildlife while addressing residents' concerns.

The enclosed questionnaire will take you approximately 10 minutes to complete. **Even if you are not aware of wildlife in your area, please complete the survey.** A postage-paid envelope is provided for your convenience.

Thank you for helping with this important study.

Sincerely,

Craig A. Miller
Human Dimensions Research Program

APPENDIX E. Thank you/Reminder post card

Dear Illinois Resident,

You were recently mailed a questionnaire about wildlife around your home and in the greater Chicago area. We have not yet received your completed questionnaire. If this postcard and your questionnaire crossed in the mail, thank you for your response! If you have not had a chance to complete the questionnaire, please do so at your earliest convenience. Your input is very important!

Your name will be removed from our mailing list once your questionnaire is received. Thank you for your input and cooperation.

APPENDIX F. Non-response telephone survey questionnaire

Illinois Homeowners and Wildlife Telephone Survey

Calls	Date	Time	Code
First			
Second			
Third			
Fourth			
Fifth			

Call Codes:

AM Answering Machine **NA** No Answer **WN** Wrong Number
B Busy signal **R** Refusal **NT** Not Tonight

Hello, my name is _____ and I'm a student [or work] at the University of Illinois and work with the Illinois Natural History Survey. We're conducting a survey of homeowner's feelings about wildlife in their neighborhoods. Is _____ able to please take 5 minutes of his/her time to answer a few short questions?

1. Did you or a member of your household receive an Illinois Homeowners and Wildlife questionnaire during 2012?

Yes No (Please go to **Question 3**) I'm not sure (Please go to **Question 3**)

2. Out of the following five options, which best describes why you did not respond to our survey about wildlife in Illinois? (Interviewer, please check one.)

I do not like answering surveys I was not interested in the issues covered in the survey
 The survey looked too long and/or complicated Other (Please identify): _____
 I prefer to be contacted by phone _____

3. Are you aware of wildlife around your home?

Yes No

4. What is your gender?

Male Female Refusal

5. What is your marital status?

Single Married Divorced/Separated/Widowed Refusal

6. Do you have children under 18 living at home with you?

Yes No Refusal

7. Please give your age.

_____ years Refusal

8. What is your county of residence?

_____ County Refusal

Thank you for your time.