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# Attitudes of Homeowners in the Greater Chicago Metropolitan Region Toward Nuisance Wildlife



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## Summary

We conducted a mail survey to determine homeowners' attitudes toward wildlife around their home, extent and types of wildlife damages experienced, and preferences for management actions. A random sample of homeowners in the Greater Chicago Metropolitan Area, stratified by county of residence, was selected for this study. A total of 2,562 questionnaires (54%) were received. Approximately half (51%) of residents responded they fed wildlife on their property in the 12 months prior to the survey and 42% spent \$10 to \$49 on wildlife feed. Of those who fed wildlife 62% reported feeding wildlife year-round and 35% of respondents also planted flowers, shrubs, or provided water for wildlife. Seeing wildlife on a daily basis was important to 47% of respondents.

Problems with wildlife were experienced by 58% of respondents, with digging or burrowing being the most frequent problem reported (48%). Most residents (71%) took action themselves to correct the problem; 29% used household chemicals and 28% closed cracks and crevices to remedy the problem. Most residents (65%) reported spending less than \$50 to correct the problem. Of those residents who hired professional services (8%), most (62%) rated the services provided as "Good" or "Excellent". A minority of residents (9%) received information about preventing wildlife damage. A majority of residents (73%) reported providing information was their preferred role for the Illinois Department of Natural Resources and 63% were opposed to IDNR requiring a homeowner to secure a permit before removing wildlife themselves. When asked if there should be a law requiring animal control personnel to humanely destroy captured wild animals under certain conditions, 86% agreed if there was a risk of spreading disease to people.

Respondents (16%) reported coyotes as the most severe threat to human health and safety, whereas raccoons were the species most frequently mentioned as posing a moderate threat and birds as the least. Raccoons were viewed as the greatest threat to property damage, followed by skunks, squirrels, and Canada geese. Only 3% of respondents felt wildlife posed a severe threat to property, and 3% indicated wildlife to be a severe threat to human health and safety. Conversely, 31% believed wildlife posed no threat of property damage and 40% saw no threat to human health or safety. Homeowners supported removing nests or dens containing young for most species, but were marginally so for bats and foxes and evenly divided on deer.

Respondents favored destroying adult animals of all species in situations where there was a threat to human health or safety. When asked about threat to pets, most homeowners responded that destruction of the animal was acceptable in some or all cases. The majority of respondents supported trapping and transferring problem wildlife for all species in question.

Homeowners favored no change in populations for most species except Canada geese, raccoons, and skunks. A majority (53%) of respondents reported an encounter with wildlife in a public area in the 12 months prior to the study; most encounters were viewed as positive, except geese on golf courses and raccoons in picnic areas. Overall, people are unaware of the role public agencies play in controlling wildlife. When presented with a list of species, homeowners stated Canada geese presented the most problems, followed by raccoons, squirrels, and rabbits.

## **METHODS**

We selected a stratified random sample of 5,000 homeowners in 5 counties constituting the Greater Chicago Metropolitan Region (GCMR): Cook, Lake, Du Page, Kane, and Will. A 12-page questionnaire was developed in cooperation with IDNR management staff to investigate homeowners' attitudes toward wildlife around their home, type and extent of wildlife problems experienced, and preferences for management actions. A sub-sample of 100 homeowners was randomly selected to serve as our pilot population for a test of the survey questionnaire. The pilot study was conducted during early June 2000 and returns analyzed for misunderstood or misinterpreted items.

The study was conducted beginning in mid-July and ending in late October. Each survey participant received an initial mailing of a cover letter, questionnaire, and stamped return envelope. Nonrespondents were mailed a postcard reminder 14 days following the initial mailing. A second cover letter, questionnaire, and return envelope was mailed 14 days after the postcard reminder to nonrespondents, followed 14 days later by a second postcard reminder. Individuals who did not respond to the first 2 mailings were sent a third cover letter, questionnaire, and return envelope 14 days after the second postcard reminder. Participants who did not respond to the third questionnaire mailing were mailed a postcard reminder 14 days later.

Returned questionnaires were coded for identification. Data were entered into dBase IV and transferred to SPSS 10.0 for analysis.

## RESULTS

We received 2,562 (54%) returned questionnaires from the 4,900 selected in the sample. A total of 125 homeowners were deleted from the sample due to incorrect addresses, deceased, or mailing address unknown.

### *Attracting Wildlife*

Slightly more than half of the homeowners in the GCMR reported they fed wildlife in the 12 months prior to the study (Table 1). Of the homeowners who fed wildlife, 77% stated they currently fed wildlife (Table 2) and 62% fed wildlife all year long (Table 3, Figure1).

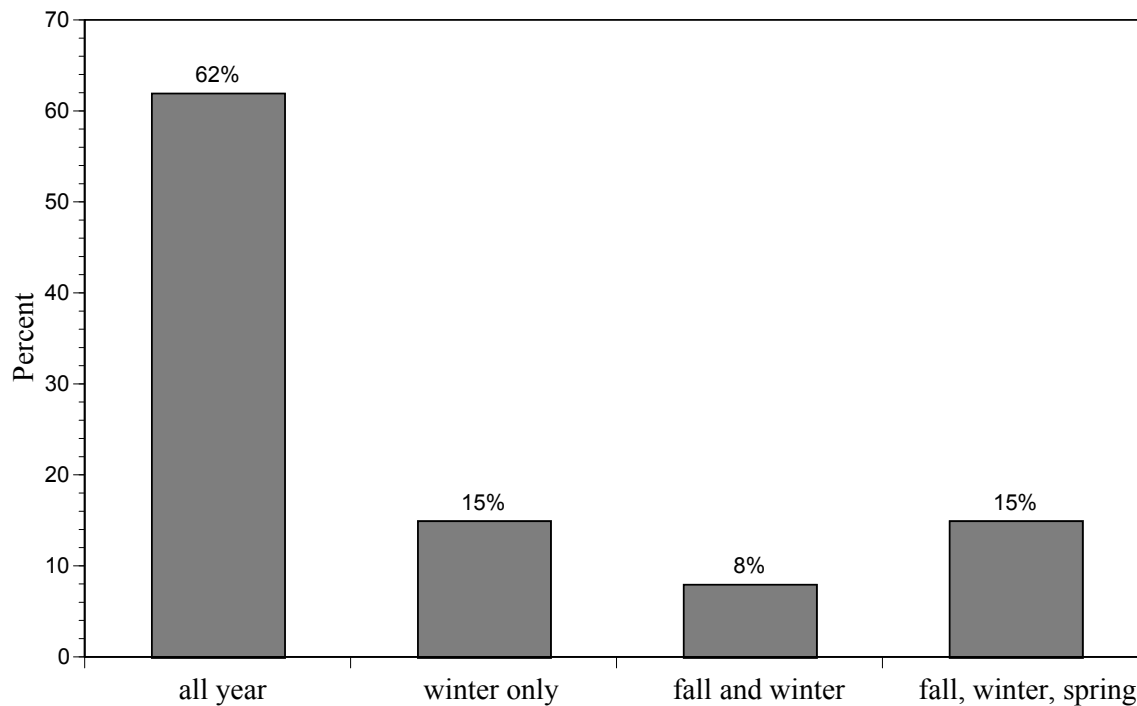


Figure 1. Frequency of feeding wildlife

Average homeowner expenditures on wildlife food was \$10 to \$49 (Table 4, Figure 2). Slightly more than one-third of homeowners (35%) provide plantings or water for wildlife (Table 5). A majority of homeowners (55%) reported their neighbors fed wildlife, with 78% doing so all year long (Table 6). Almost half (47%) of homeowners stated that seeing wildlife on a daily basis was important or very important to them (Table 7).

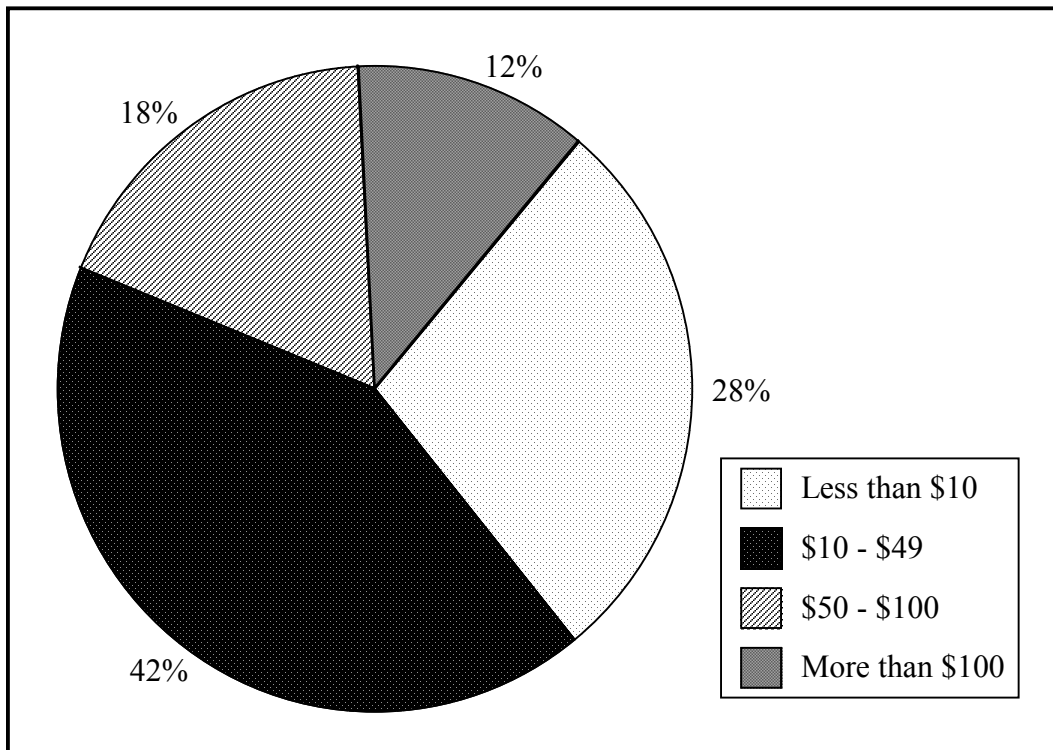


Figure 2. Estimated annual expenditure for feeding wildlife

### ***Problem Wildlife***

A majority of residents responded that they experienced problems with wildlife around their home in the 12 months prior to this study. Digging or burrowing was the most frequently mentioned problem (48%), followed by damage to shrubs or landscaping (40%), and scattering garbage (40%) (Table 8).

Most homeowners (71%) took corrective action against problem wildlife around their home. Actions included use of household chemicals (29%), closing cracks in buildings (28%), and installing exclusionary devices (27%). Calling municipal animal control services was used by 14% of homeowners, and private removal services by 12% (Table 9).

Homeowners estimated they spent an average of less than \$50 dollars (response mode) to control problem wildlife around their home in the 12 month period prior to the study (Table 10, Figure 3). Of those homeowners who used professional services, 62% rated the services as “Good” to “Excellent” (Table 11, Figure 4).

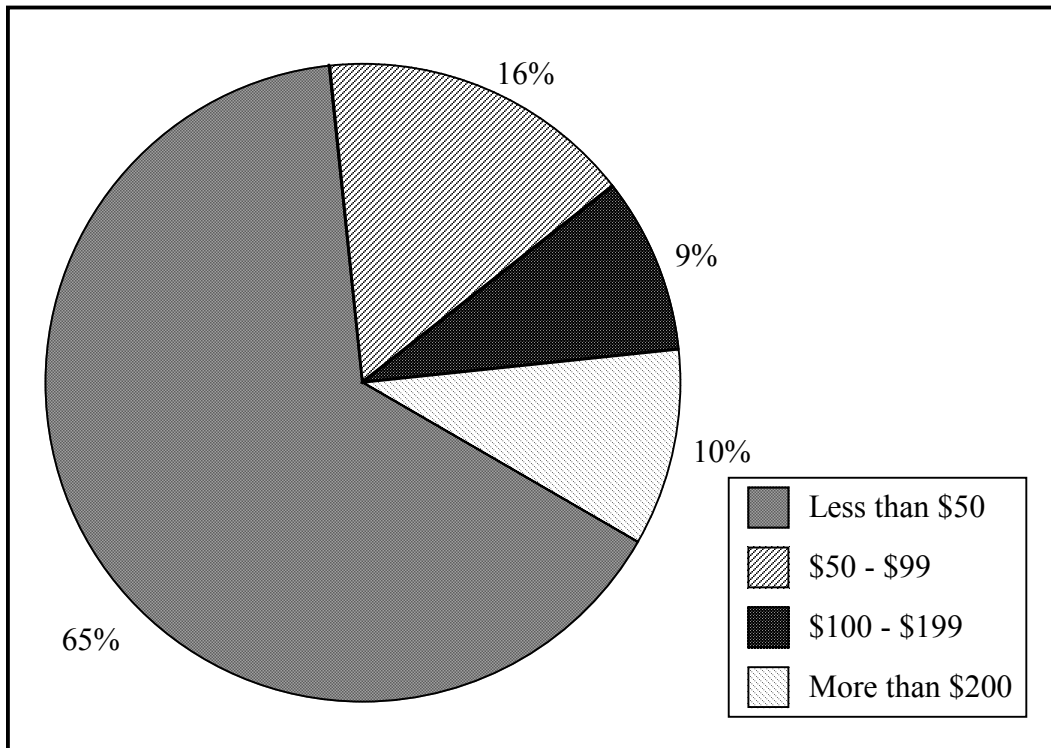


Figure 3. Estimated expenditures spent on wildlife problems in the past year

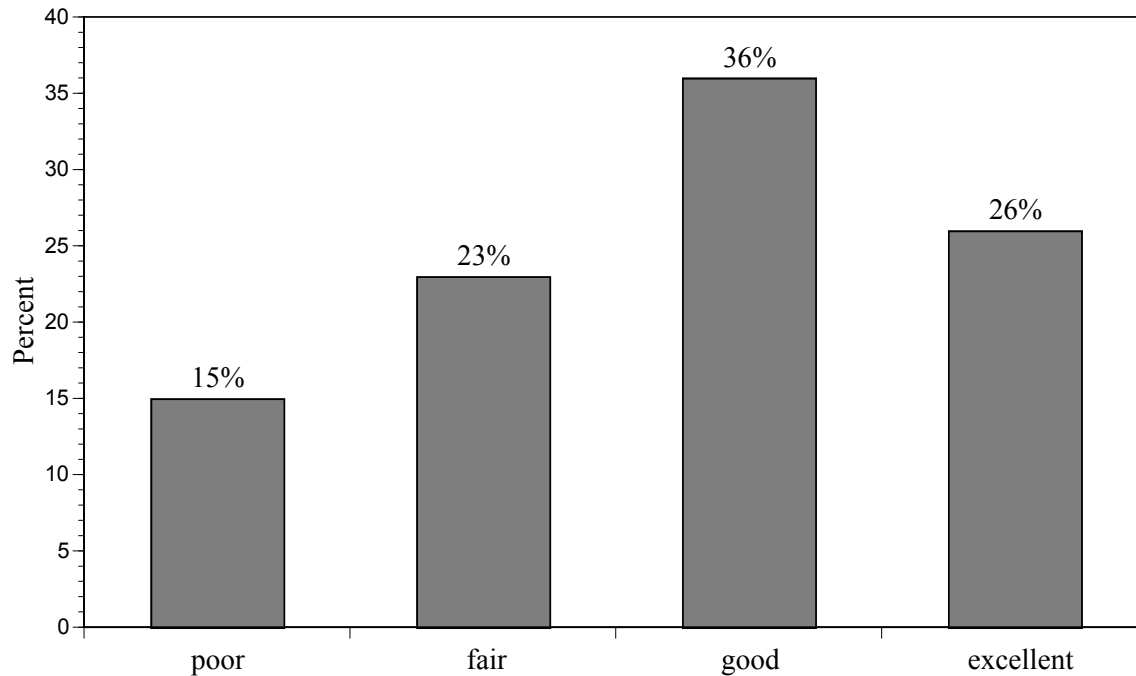


Figure 4. Homeowner ratings of professional animal control services

When asked which species caused the most problems where they lived, homeowners rated Canada geese highest (32%), followed by raccoons (26%), and squirrels (18%) (Table 12). Homeowners favored reductions in populations for Canada geese, raccoons, and skunks, but indicated a desire to see other species' populations remain at the current levels as the time of the study (Table 13, Figure 5).



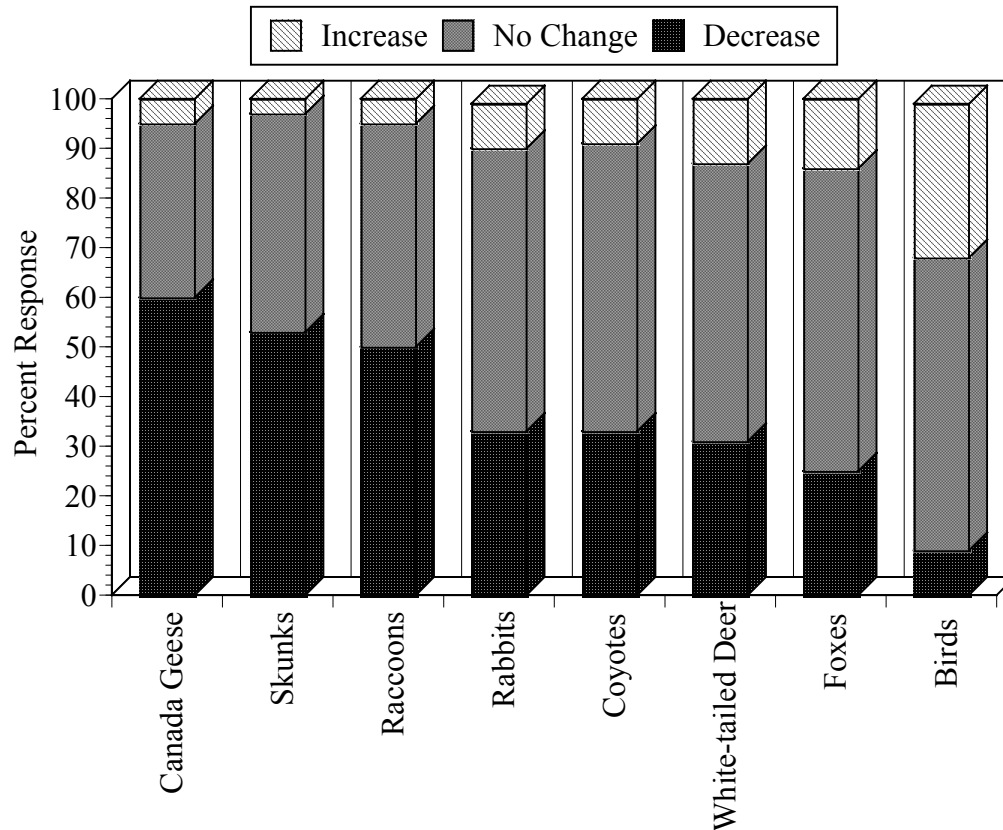


Figure 5. Preferences for population changes of wildlife species in the GCMR

### ***Information About Urban Wildlife***

A small percentage of residents (9%) reported they received information about preventing or treating wildlife problems. City or county agencies were cited as the most frequent (45%) source of information, whereas the IDNR was cited by 13% of respondents (Table 14). Few people (3%) stated they requested information about wildlife from IDNR (Table 15).

A majority of homeowners (73%) felt providing information should be IDNR’s role in helping people deal with problem wildlife, followed by providing direct assistance (52%), and establishing animal welfare standards (37%) (Table 16). When asked if IDNR should require homeowners to secure a permit before removing problem wildlife, 63% said “no” (Table 17).

### *Attitudes Toward Management Actions*

Homeowners were asked to respond to several items regarding acceptance of management actions for a list of species under various conditions. Most homeowners felt there should be a law requiring animal control personnel to destroy captured animals under a variety of conditions (Table 18, Figure 6).

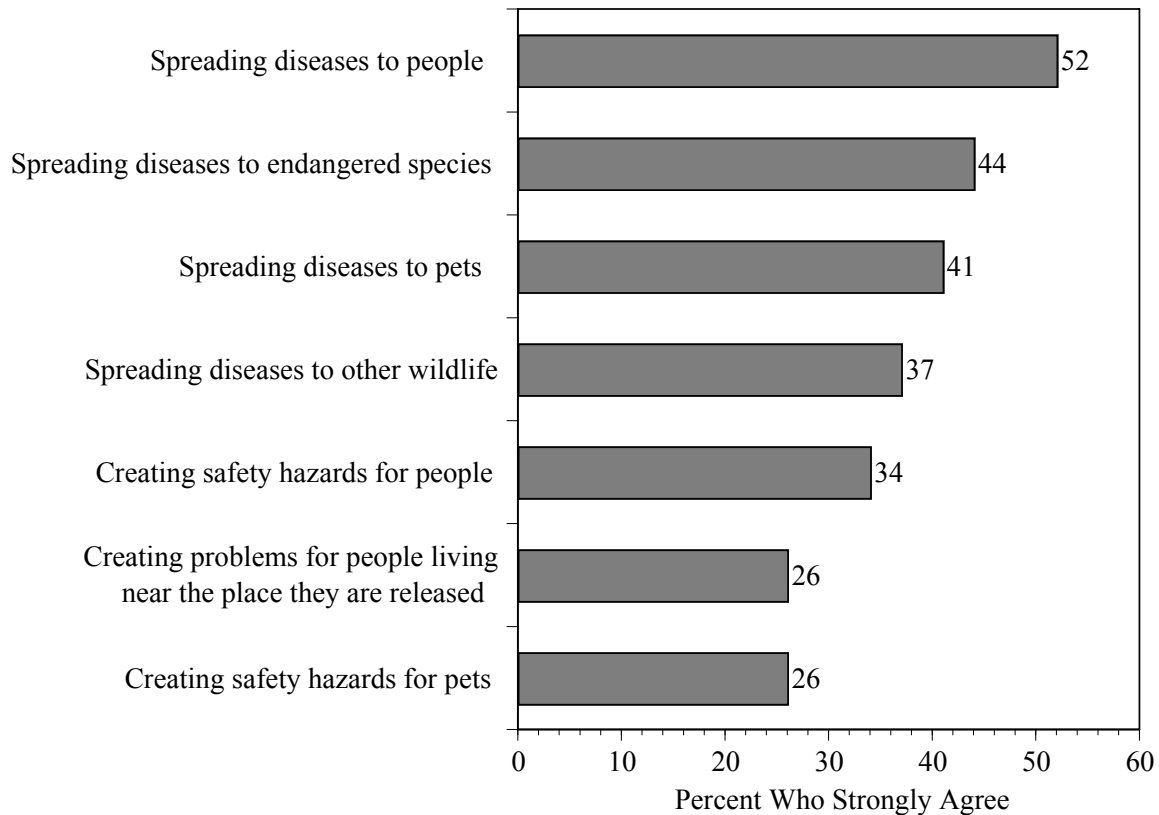


Figure 6. Support for laws requiring wild animals to be humanely destroyed if there is a risk of the animals...

Coyotes, skunks, and Canada geese were the species perceived to pose the greatest threats to human health and safety (Table 19, Figure 7). Raccoons, skunks, and squirrels were identified as the greatest threat for property damage (Table 20, Figure 8). More homeowners perceived threats to property as either non-existent (31%) or slight (48%) than moderate (17%) or severe (3%) (Table 21, Figure 9). Wildlife threats to human health and safety were likewise rated as none (40%) to slight (45%) (Table 22, Figure 9).

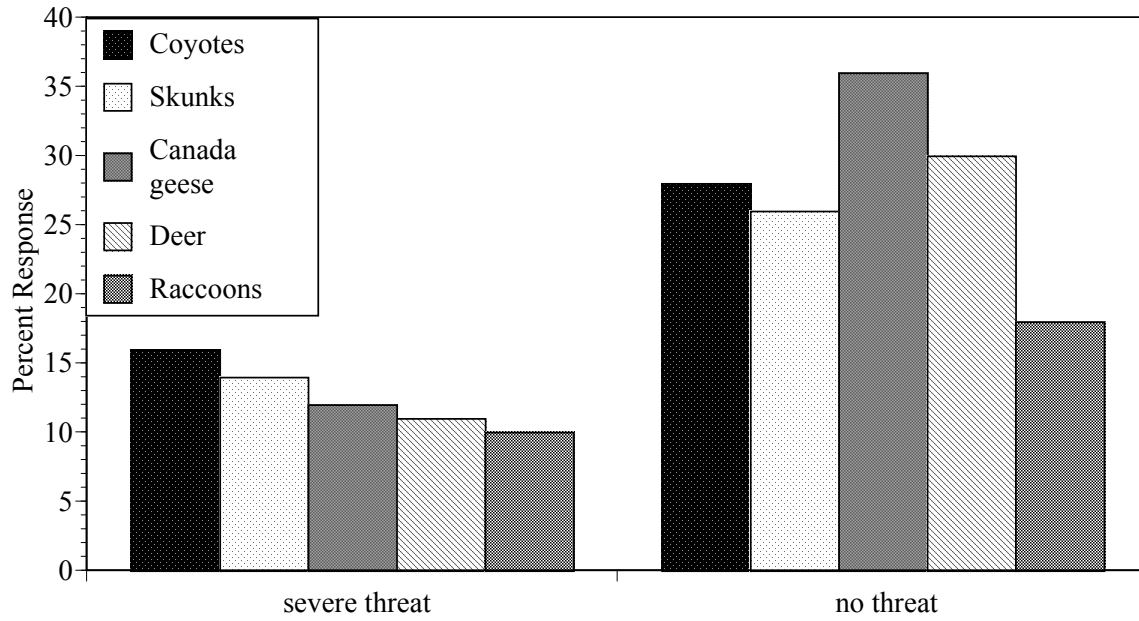


Figure 7. Perceived threat of nuisance animals to human health.

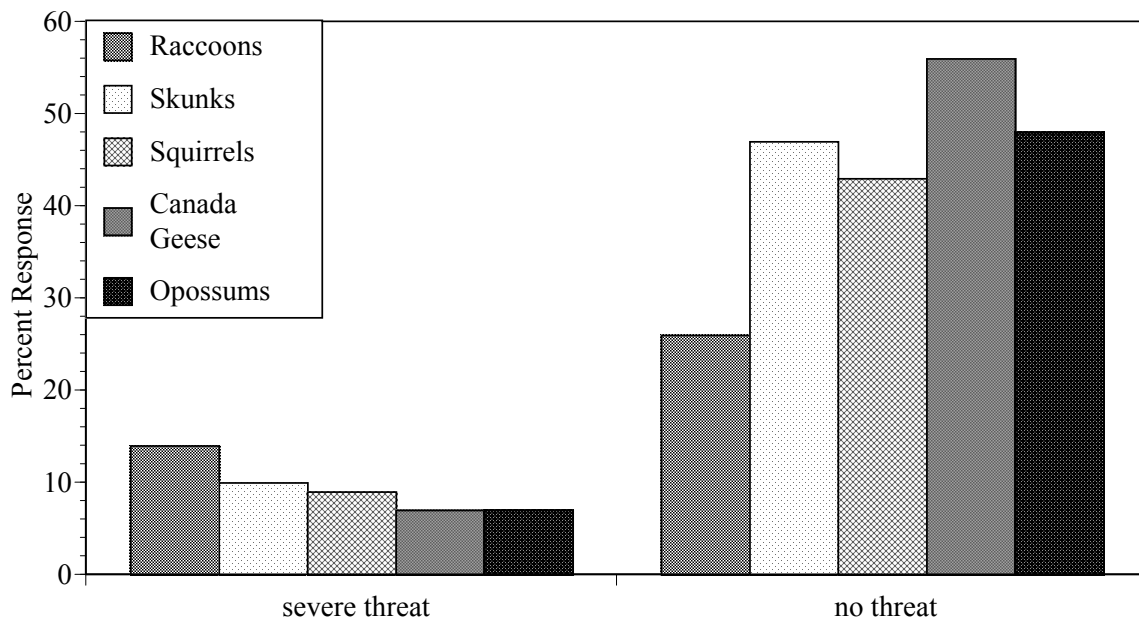


Figure 8. Perceived threat to property.

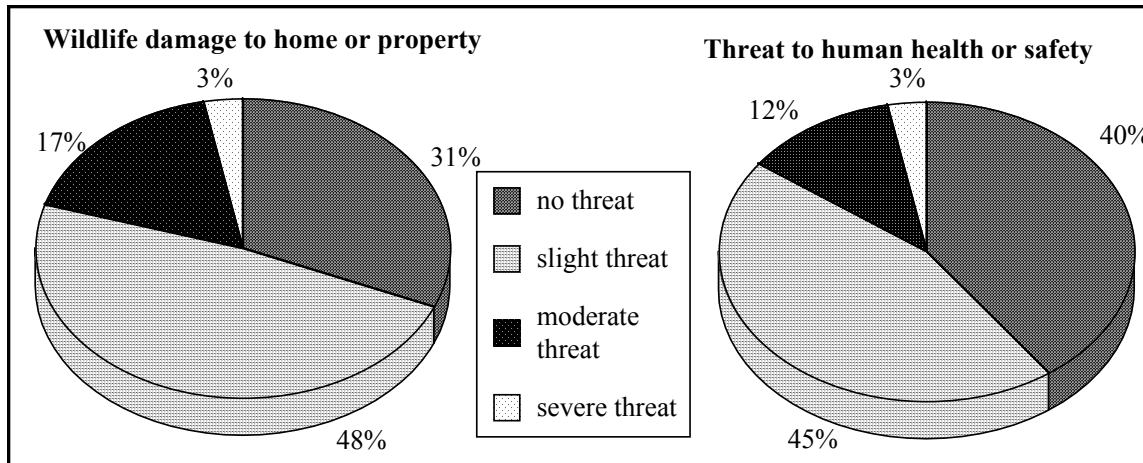


Figure 9. Ratings of wildlife threat to human health and property

Support for removal of nests or dens containing young was mixed and dependent on the species in question. Homeowners supported this action for raccoons to a greater extent than other species and were less supportive for deer or foxes (Table 23). Respondents were generally acceptable of destroying adults of all species in question when faced with threats to human health or safety, with greater support for action against raccoons than other species (Table 24). Support was also high for destroying adult animals when threatened with attacks on pets, although support was lower than that expressed in cases of human health or safety (Table 25).

Homeowners were very supportive of trap and transfer as a management action for all species (Table 26). When presented with a list of possible management actions, feeding bans for Canada geese received the most frequent responses (Table 27). Respondents were unaware of problem wildlife management efforts undertaken by city, county, state, or federal agencies (Table 28).

### ***Wildlife in Public Areas***

A majority of respondents stated they encountered wildlife in public areas in the 12 months prior to this study. Most encounters took place during summer and were viewed as positive. Raccoons looking for food at picnic areas and Canada geese on golf courses or beaches were viewed as negative encounters (Table 29). Although homeowners agreed that seeing wildlife was a main reason for visiting parks and preserves, they did not favor feeding ducks and

geese and felt the number of geese in public areas was a health hazard (Table 30). When attitudes toward deer and geese were compared more homeowners felt that goose populations were too large and needed to be brought under control than deer (Table 30, Figure 10).

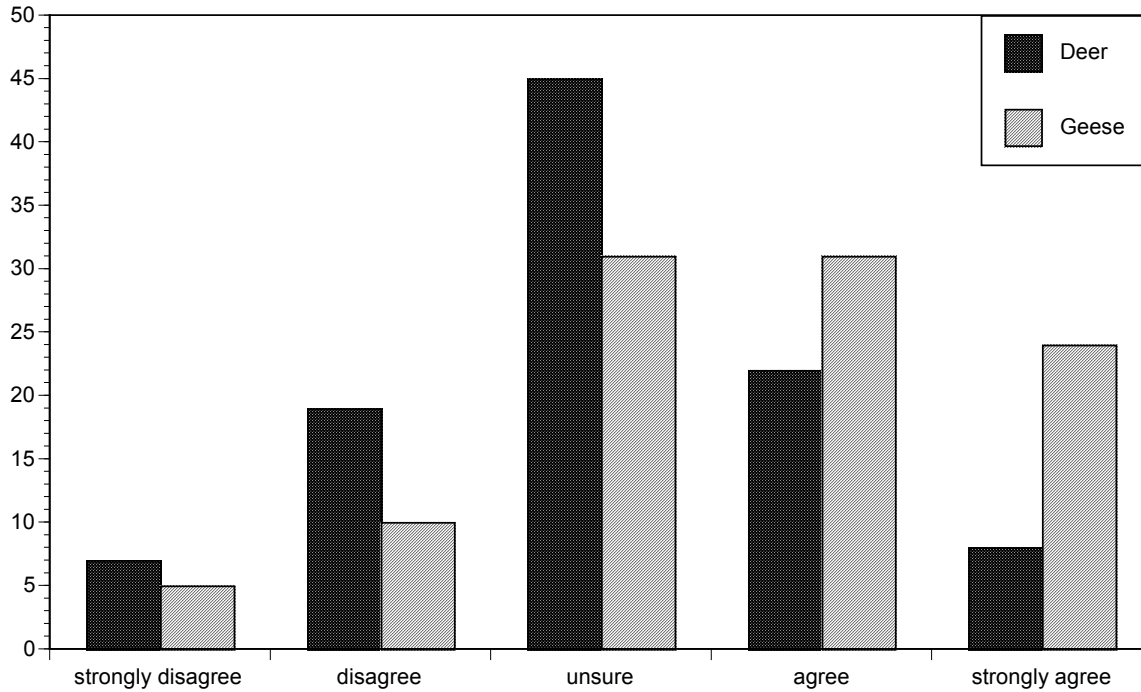


Figure 10. Attitudes towards the statement deer and goose “population(s) are too large and needs to be brought under control”

## DISCUSSION

Homeowners indicated seeing wildlife was important to them, and many support this importance by feeding wildlife around their homes. Wildlife created problems for a small majority of homeowners, and when problems arose homeowners addressed those problems themselves. Professional services were used in a small percentage of cases. Of those homeowners who used professional services, most were satisfied with the services provided.

Respondents in this study suggest problems exist in either the amount of information available about problem wildlife or distribution of such information. Very few homeowners had

used information about wildlife and fewer still were aware of information available from the Illinois Department of Natural Resources.

Species that appeared to cause most problems were Canada geese, raccoons, and skunks. Perceived threats from these species, both in terms of property damage and human health and safety, were moderate to high, but ranked higher than most other species. Coyotes and deer were also perceived as moderate to high threats to human health and safety. Homeowner attitudes toward management actions were dependent on the species involved, whether the animals were adults or young, and the threats posed by each species. Wildlife encounters in public areas were viewed as positive, with the exception of raccoons in picnic grounds and geese on beaches and golf courses.

Raccoons and Canada geese stood out as species causing problems for homeowners, and homeowners were supportive of most management actions aimed at removing problem individuals. Homeowners also favored reducing populations of these two species in the Greater Chicago Metropolitan Region.

Table 1. Percent of homeowners who fed wildlife on their property in 12 month period prior to study.

	Percent Response (%)
Yes	51
No	49

Table 2. Percent of homeowners actively feeding wildlife at time of study.

	Percent Response (%)
Yes	77
No	23

Table 3. Duration of wildlife feeding.

	Percent Response (%)
All year long	62
During the winter only	15
Fall and winter	8
Fall, winter, and spring	15

Table 4. Estimated annual expenditures for feeding wildlife in 12-month period.

Amount Spent Feeding Wildlife	Percent Response (%)
Less than \$10	28
\$10 - \$49	42
\$50 - \$100	18
More than \$100	12

Table 5. Percent of homeowners who plant flowers, shrubs or provide water specifically to benefit wildlife.

	Percent Response (%)
Yes	35
No	65

Table 6. Percent of homeowners who have neighbors feeding wildlife.

	Percent Response (%)
Yes	55
No	45

If “Yes,” duration of wildlife feeding

All year long	78
During the winter only	8
Fall and winter	5
Fall, winter, and spring	9

Table 7. Importance of seeing wildlife on a regular basis during day-to-day activities.

Level of Importance	Percent Response (%)
Not important	22
Somewhat important	31
Important	28
Very important	19



Table 8. Homeowners who experienced problems with wildlife around their home in the past 12 months.

	Percent Response (%)
Yes	58
No	42
<u>If “Yes,” type of problems:</u>	
Digging or burrowing on property	48
Damage to shrubs, yard or landscaping	40
Scattering garbage	40
Droppings	34
Nesting on property	27
Living in attic, chimney, or other parts of house	20
Living in garage, shed, or other outbuilding on property	18
Damage to house or other buildings	15
Noise	9
Harm or disturbance to pets	7
Other	8

Table 9. Actions taken to correct wildlife problems.

	Percent Response (%)
Yes	71
No	29
<u>If “Yes,” what steps did you take:</u>	
Used household chemicals such as mothballs or ammonia to drive animals away	29
Closed up cracks and crevices	28
Installed devices on house (such as chimney caps, wire mesh, etc.)	27
Built devices to keep animals out (such as frames around trash cans, fences, etc.)	20
Removed animals myself	19
Used commercial repellents (Hot Sauce, Ro-Pel, etc) to drive animals away	18
Called city or county animal control agent to remove animal	14
Called private animal removal service to remove animal	12
Removed food sources such as pet food, bird food, etc.	12
Changed landscaping to make property less attractive to wildlife	5
Reported problem to homeowner/neighborhood association	3
Other	9

Table 10. Estimated expenditures spent on wildlife problems in the past 12 months.

	Percent Response (%)
Less than \$50	65
\$50 - \$99	16
\$100 - \$199	9
More than \$200	10

Table 11. Homeowner ratings of professional animal control services (8% of total).

	Percent Response (%)
Poor	15
Fair	23
Good	36
Excellent	26

Table 12. Wildlife species causing greatest problems in area of residence.

Species	Percent Response (%)
Canada Geese	32
Raccoons	26
Squirrels	18
Rabbits	12
Skunks	11
Opossums	10
Deer	6
Birds	6
Coyotes	2
Beavers	1
Bats	1
Muskrats	1
Foxes	<1
Other	3

Table 13. Preferences for population changes of wildlife species in the GCMR.

	Great Decrease (%)	Slight Decrease (%)	No Change (%)	Slight Increase (%)	Great Increase (%)
Canada Geese	33	27	35	3	2
White-tailed Deer	8	23	56	10	3
Raccoons	21	29	45	3	2
Skunks	27	26	44	2	1
Birds	3	6	59	18	13
Coyotes	16	17	58	7	2
Foxes	11	14	61	11	3
Rabbits	13	20	57	7	2

Table 14. Percent of homeowners who received information about removing or preventing damage from wildlife.

	Percent Response (%)
Yes	9
No	91
If “Yes,” source of information:	
City or County Animal Control Agency	45
Illinois Department of Natural Resources	13
Humane Society	11
Wildlife Rehabilitator	9
University of Illinois Extension Office	6
U.S. Department of Agriculture	4
U.S. Fish and Wildlife Service	3
Other	24

Table 15. Homeowners who requested information about wildlife from the Illinois Department of Natural Resources.

	Percent Response (%)
Yes	3
No	64
Didn't know about IDNR information	33
<u>If "Yes," rate the quality of the information you received:</u>	
Poor	3
Fair	7
Good	58
Excellent	32

Table 16. Preferred roles the Illinois Department of Natural Resources should play in solving problems with wildlife.

	Percent Response (%)
Provide information about preventing or controlling unwanted wildlife	73
Provide direct assistance to property owners (such as removing animals)	52
Establish animal welfare standards for methods to remove animals	37
Require private animal removal services to have permits or licenses	33
Establish animal welfare standards for methods to destroy animals	32
Refer property owners to private animal removal services licensed to deal with unwanted wildlife	30
Limit types of equipment and methods that can be used legally	29
Require animal removal services to provide proof of insurance	27

Table 17. Homeowner support for IDNR permit before removing wildlife.

	Percent Response (%)
Yes	7
No	63
Not sure	30

Table 18. Attitudes toward a law requiring commercial, city, or county animal control personnel to humanely destroy wild animals they capture if there is a risk of the animals...

	Strongly Disagree (%)	Disagree (%)	Unsure (%)	Agree (%)	Strongly Agree (%)
Spreading diseases to people.	5	3	7	34	52
Spreading diseases to endangered species.	5	4	13	35	44
Spreading diseases to pets.	5	4	12	38	41
Spreading diseases to other wildlife.	5	5	16	37	37
Creating safety hazards for people.	6	8	16	36	34
Creating problems for people living near the place they are released.	8	13	23	30	26
Creating safety hazards for pets.	7	11	21	35	26

Table 19. Perceived threats to human health and safety (by species).

Wildlife Species	No Threat (%)	Slight Threat (%)	Moderate Threat (%)	Severe Threat (%)
Coyotes	28	30	26	16
Skunks	26	36	24	14
Canada Geese	36	29	22	12
Deer	30	31	27	11
Raccoons	18	36	36	10
Bats	45	29	16	9
Opossums	31	36	25	9
Foxes	40	34	17	8
Squirrels	47	33	13	7
Muskrats	48	31	15	6
Beavers	53	31	12	4
Birds (Other than geese)	72	21	6	2

Table 20. Perceived threats to property damage around home.

Wildlife Species	No Threat (%)	Slight Threat (%)	Moderate Threat (%)	Severe Threat (%)
Raccoons	26	30	30	14
Skunks	47	27	16	10
Squirrels	43	32	17	9
Canada Geese	56	24	12	7
Opossums	48	29	16	7
Coyotes	69	18	8	5
Deer	63	22	11	4
Muskrats	72	17	8	4
Bats	72	18	7	3
Foxes	72	18	7	3
Beavers	75	15	7	3
Birds (Other than geese)	71	21	6	2

Table 21. Ratings for threat of wildlife damage to home or property.

	Percent Response (%)
No Threat	31
Slight Threat	48
Moderate Threat	17
Severe Threat	3

Table 22. Ratings for threat of wildlife to human health or safety.

	Percent Response (%)
No Threat	40
Slight Threat	45
Moderate Threat	12
Severe Threat	3

Table 23. Support for removal of nests or dens containing young.

Wildlife Species	Unacceptable in all cases (%)	Unacceptable in some cases (%)	Unsure (%)	Acceptable in some cases (%)	Acceptable in all cases (%)
Raccoons	17	11	12	35	25
Bats	22	13	19	23	23
Coyotes	19	12	17	26	26
Canada Geese	20	12	16	28	23
Deer	25	15	18	27	15
Foxes	23	14	19	24	20



Table 24. Support for destroying adults if the animal was a threat to humans.

Wildlife Species	Unacceptable in all cases (%)	Unacceptable in some cases (%)	Unsure (%)	Acceptable in some cases (%)	Acceptable in all cases (%)
Raccoons	8	5	7	31	49
Bats	9	5	10	27	49
Coyotes	8	6	9	29	47
Canada Geese	9	7	10	29	45
Deer	11	8	11	29	40
Foxes	10	8	10	29	43

Table 25. Support for destroying adults if the animal was a threat to pets.

Wildlife Species	Unacceptable in all cases (%)	Unacceptable in some cases (%)	Unsure (%)	Acceptable in some cases (%)	Acceptable in all cases (%)
Raccoons	10	8	12	36	33
Bats	12	9	15	31	33
Coyotes	10	9	13	35	33
Canada Geese	13	9	16	32	30
Deer	14	11	17	32	25
Foxes	12	10	15	34	29

Table 26. Support trapping and transferring animal to another location if it was a threat to property.

Wildlife Species	Unacceptable in all cases (%)	Unacceptable in some cases (%)	Unsure (%)	Acceptable in some cases (%)	Acceptable in all cases (%)
Raccoons	5	3	4	26	62
Bats	7	4	7	24	59
Coyotes	5	3	5	26	61
Canada Geese	6	3	6	26	60
Deer	6	4	6	27	58
Foxes	5	3	6	26	59

Table 27. Support for control measures for GCMR homeowners (by species).

Action	Canada Geese (%)	Deer (%)	Beaver (%)	Raccoons (%)	Squirrels (%)
Feeding Bans	48	29	26	36	34
Taste Repellents	29	24	20	29	24
Birth Control	38	35	23	32	28
Egg/Nest/Den Destruction	24	6	10	17	14
Special Purpose Kill Permits (parks, airports, golf courses, etc.)	32	22	12	19	14
Kill for Food Bank	32	30	Not Applicable	Not Applicable	Not Applicable

Table 28. Satisfaction with city, county, state, and federal agencies in controlling wildlife problems.

	Poor (%)	Fair (%)	Good (%)	Excellent (%)	Don't Know (%)
City Officials	10	14	24	4	48
County Officials	8	12	23	4	53
State Officials	7	11	21	4	57
Federal Officials	8	11	18	3	60

Table 29. Encounters with wildlife in parks or other public areas in the GCMR in the 12 months prior to study.

	Percent Response (%)		
Yes	53		
No	47		
If “Yes,” what time of year?			
Spring	39		
Summer	55		
Fall	37		
Winter	25		
<u>Type of Encounter</u>	<u>Positive</u>	<u>Negative</u>	
Geese looking for food at lakes, ponds, or picnic areas	60	40	
Deer along the road while driving	68	32	
Raccoons looking for food at picnic areas	41	59	
Geese on golf courses or beaches	36	64	
Deer in parks or forest preserves	96	4	

Table 30. Attitudes toward wildlife in the GCMR.

	Strongly Disagree (%)	Disagree (%)	Unsure (%)	Agree (%)	Strongly Agree (%)
Seeing wildlife is one of the main reasons I visit parks and preserves.	4	24	14	42	16
I feel the number of geese in the parks pose a health hazard.	5	17	31	28	19
I enjoy feeding geese and ducks at the parks.	20	35	16	25	5
The deer population is too high and needs to be brought under control.	7	19	45	22	8
I feel the mess from wildlife is a small price to pay for the enjoyment they give me.	6	18	23	39	14
The goose population is too large and needs to be brought under control.	5	10	31	31	24
Problems with wildlife in public areas has increased in recent years.	3	13	47	27	10
Sometimes the wildlife makes it hard to enjoy my visit to public areas.	17	41	17	18	7