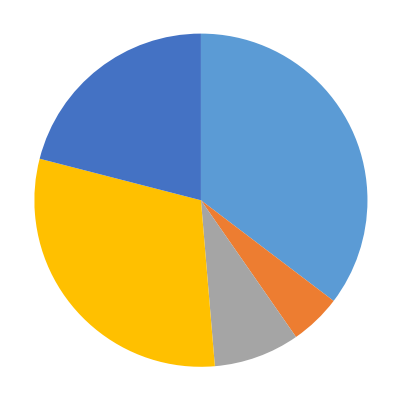




**REDUCING THE
IMPACT OF CATS ON
BIRDS AND WILDLIFE**

Results of a Public
Opinion Poll &
Telephone Survey
in British Columbia



STEWARDSHIP CENTRE
FOR BRITISH COLUMBIA

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The logo for the Government of Canada, featuring the word "Canada" in a serif font with a small Canadian flag above the letter "a".

**The report was produced by the
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The Stewardship Centre for BC

The Stewardship Centre for BC (SCBC) was created to assist governments, businesses, conservation and environmental organizations, and citizens to carry out stewardship activities in the most efficient, effective, and rewarding ways.

A leader in promoting stewardship values as the foundation for sustainability, the SCBC wants to help make “shared stewardship” – the voluntary adoption of environmentally

sustainable practices by all sectors of society – a reality in British Columbia.

SCBC provides tools and educational programs for community residents and land-use decision-makers.

This includes both introductory and detailed information on species at risk.

For our Cats and Birds project, we provide stewardship practices guidelines and resources aimed at reducing the impacts of cats on vulnerable birds and other wildlife.

For more information about the Stewardship Centre and our projects:

Tel. 1.866.456.7222
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SUMMARY

While cats provide an important source of companionship for many Canadians, they are also estimated to be one of the single largest sources of human-related bird mortality.

Domestic cats are a threat to wild birds due to the common practice of allowing cats to roam outside unsupervised and the increase in feral cat populations in urban and rural areas. Behavioural change among pet owners has the potential to mitigate this human-related wildlife impact.

The Stewardship Centre for British Columbia (SCBC) worked with University of British Columbia (UBC) Environmental Science students to develop a public online survey and a targeted telephone survey to better understand perceptions of British Columbians regarding domestic cats that are allowed to roam freely. The results will help inform the design of an educational program the SCBC will be implementing.

The project objectives were:

1. To assess the knowledge and attitudes of a British Columbians on allowing cats to roam;
2. To rank potential solutions based on how favorably they are perceived by pet owners;
3. To interview animal welfare and municipal staff/elected officials in a sample of communities to evaluate attitudes to no-roam bylaws;
4. To gauge whether there is interest amongst those interviewed to utilize tools to limit cat predation of birds.

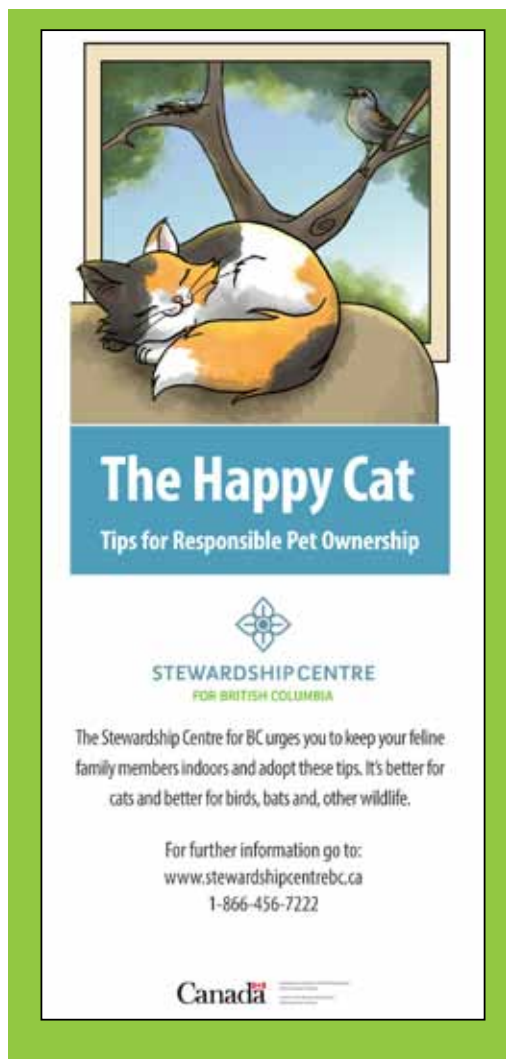
The survey is part of a larger three-year project led by SCBC to encourage British Columbians to adopt Stewardship Practices -- actions taken to reduce the impact of roaming cats on bird populations.

While the impact of domestic and feral cats on bird mortality has been documented, there are few studies examining public attitudes towards roaming cats. To our knowledge, this is the first such study in British Columbia.

Of cat owners surveyed, less than half (48%) keep their cats indoors (see Figure 2). Amongst pet owners, 45% strongly agree or agree that cats are a significant cause of bird mortality (see Figure 7).

The survey of local governments and cat welfare organizations reveals that few municipalities have or enforce no-roam bylaws. All community interview respondents would consider offering their support to a public education campaign.

Local governments representatives interviewed in communities that enforce no-roam or sterilization/ID bylaws, consider the bylaws a success and see a favorable public response.



In addition to this survey, SCBC has developed educational resources, like the popular Happy Cat brochure, to help people and local governments take action to reduce the impact of roaming cats on birds and other wildlife.

Visit: www.stewardshipcentrebc.ca/cats-and-birds.

BACKGROUND

The Impact of Roaming Cats on Wild Birds

There are over 10.2 million pet cats and an estimated 1.4-4.2 million feral cats in Canada that are responsible for killing millions of birds annually (Blancher, 2013).

Approximately 12% of Canada's total wild bird population has declined over the past 40 years (Calvert et al., 2013) due to multiple causes.

However, with an estimated 75% of all human-related bird deaths caused by domestic cats, the impact of cats far overshadow other sources of human-related bird mortality (Blancher, 2013).

A four-year study conducted by Environment Canada (2012) found that while marine oil activities kill approximately 1000 birds per year and collisions with buildings and other structures kill an estimate of 16-42 million of birds per year, cats kill more birds per year than all other sources of human-related activities combined, an estimated 100-350 million birds per year (Calvert, 2013).

Even using conservative estimates, 2-7% of all birds in southern Canada are killed by cats each year (Blancher, 2013).

Given their ability to overwhelm and prey on existing native species, cats are classified as an invasive species capable of causing significant destruction to the local ecology (Dauphiné and Cooper 2009).

Cats kept strictly indoors or supervised while outdoors pose no threat to birds and other wildlife.

While they are far less numerous than domestic cats, feral cats (cats without an owner) are estimated to be responsible for nearly 60% of the estimate of cat predation of birds (Blancher, 2013).

Given the opportunity to roam, domestic house cats are also well-equipped to hunt and kill birds (Calvert et al., 2013).

Even healthy, well-fed, and domesticated cats have their predatory instincts well-intact, and will not hesitate to prey on birds and small mammals when



Species at risk are especially vulnerable to cat predation. A cat in the Okanagan was reported to have killed a bird with a leg band. It was a Yellow-breasted Chat, one of the rarest species in Canada and part of a small, struggling local population. M. Holm (pers comm.)

given the chance (Blancher, 2013). Hunting wildlife appears to be intrinsic and genetically imprinted in cats, as efforts to feed, and even overfeed, outdoor cats have had no success in stopping their inherent instinct to hunt (Adamec, 1976).

Reducing the number of feral cats and keeping domestic cats from roaming will help curb the number of bird deaths due to cat predation.

Cats and Birds in British Columbia

British Columbia is especially vulnerable to this wildlife conservation issue. Over 300 bird species, the highest of any province, breed in British Columbia (Campbell 1990).

While no data are available on how many of these species are threatened by cat predation, a few studies detailing the vulnerability of bird populations in British Columbia have been published.

Feral and domestic cats were responsible for 22% of all predation events of Song Sparrow nesting in a conservation area in British Columbia (Rithet's Bog Conservation Society, 2011).



Cats kill an estimated 100-350 million birds per year in Canada, more than all other sources of human-related activities combined (Blancher, 2013).

Pearson and Blair (2013) noted that birds residing in urban regions where cat ownership is high, such as the Fraser Valley and Southern Vancouver Island, can face a heightened risk of cat predation, especially during the spring and summer months when fledgling birds are the most numerous.

Cats are a threat to grass and scrub-nesting bird species in British Columbia, which face a heightened risk for cat predation due to the increased time spent on the ground where cats have more access to them (Blancher 2013).

Cases of widespread declines in island-nesting bird population due to feral cats have been documented in British Columbia.

As well, rare and threatened bird species native to British Columbia, such as the Band-tailed Pigeon and Yellow-breasted Chat, are vulnerable to cat predation (SCBC, 2016).

While these cases demonstrate that cat predation has an adverse effect on the bird populations of British Columbia, more comprehensive investigation should be conducted to understand the scope and magnitude of this problem within the province.

Pet Cat Owners' Perceptions on Roaming Cats

While no research has targeted British Columbian pet owners specifically, multiple studies across North America found that cat owners are against restricting the roaming of cats (Gramza et al., 2016; Lord, 2008; McDonald et al., 2015; and Slater et al., 2008).

Lord (2008) found that the percentage of cat owners who perceived the roaming of cats to be positive (62.1%) was much higher than that of non-cat owners (42.5%). No discernable difference in response was detected among urban, suburban, and rural respondents (Lord, 2008).

A recent study by McDonald et al. (2015) lends support to these findings, and suggests that cat owners are generally willing to allow their cats to roam because they do not view their pets as being harmful to wildlife.

Moreover, 68% of cat owners from that study felt that cats had either no or little influence on bird populations.

To ascertain attitudes to roaming cats amongst British Columbians, SCBC commissioned a public opinion survey and targeted telephone interviews of which are summarized in this report.

METHODS

Online Survey

Students in a UBC Environmental Science course used the Google Surveys tool to design an online survey (see Appendix A), consisting of nine multiple-choice questions.

Google Surveys is a business product that facilitates customized market research of internet and cell phone users. Census information and internal Google data are used to obtain a representative sample by comparing respondent demographics (based on gender, age, and geography) to the demographics of the general population. Only people over 19 years of age who completed all the survey questions were selected.

Participants were asked nine questions to determine knowledge and attitudes to allowing cats to roam, and perceptions on solutions to cat predation on birds. Google Surveys collected answers from 300 people, 134 cat owners and 166 non-cat owners living in urban and rural regions of British Columbia.

Telephone Interviews

The researchers also contacted a short list of local governments and animal welfare organizations by email and followed up with phone interviews, to determine if there were local bylaws on the roaming of cats, future actions planned to address this issue, and interest or capacity to take additional steps.

Each interview lasted approximately 30 minutes and the data collected were organized and summarized as qualitative data.

A total of seven interviews were completed with representatives from four local governments and three animal welfare organizations in six BC communities (Appendix B).

The research methodologies for the online survey and telephone interviews were reviewed and approved by the Behavioural Research Ethics Board at the University of British Columbia.



ONLINE SURVEY RESULTS

CAT OWNERSHIP

Cats per Household

Of those surveyed, over 42% of respondents (134) had cats as pets while 57% (166) did not (Figure 1).

This is higher than a survey of 1000 Canadians commissioned by Nature Canada (2016) where only 35% of households had cats.

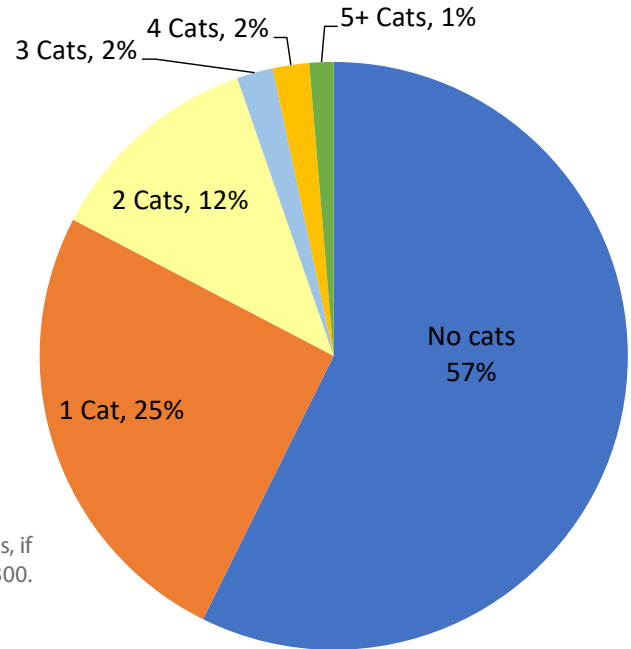


Figure 1: Survey responses to "How many cats, if any, does your household have as pets." N=300.

ATTITUDES TO CATS ROAMING

Supervision of Cats

Out of the 134 cat owners (Fig.2), 48% keep all their cats strictly indoors or supervise them if they're outdoors, while 53% allow cats outside unsupervised.

A chi-square test of independence showed no significant correlation between the number of cats owned and how likely cat owners were to keep cats indoors.¹

The results are similar to the Nature Canada survey (2016) where 57% of respondents in British Columbia allowed cats outside unsupervised. It should be noted that the nation-wide average from the Nature Canada survey was 41%.

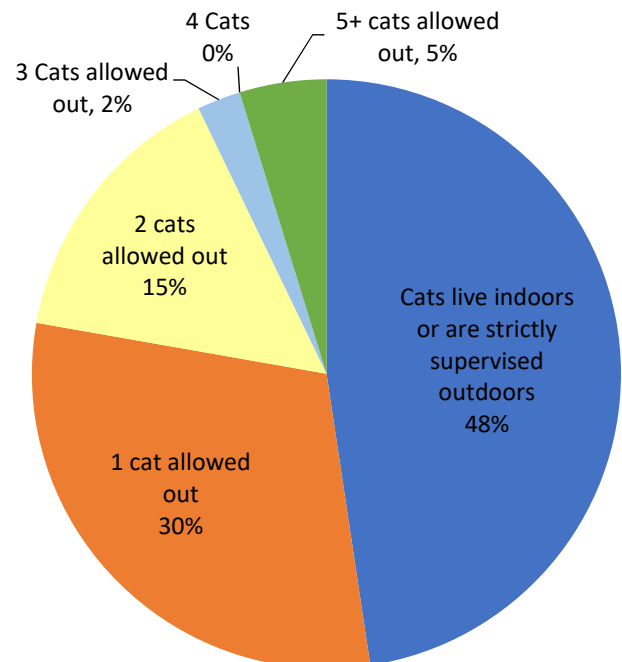


Figure 2. Cat owners survey response to question, "How many of those cats spend time outside unsupervised?" N=134.

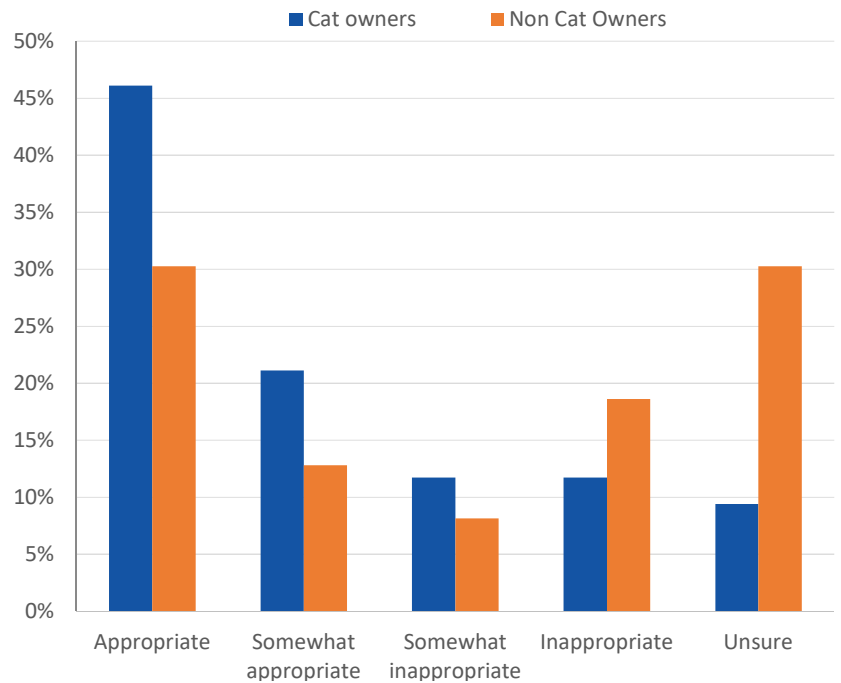
1. $\chi^2 (d.f.=4) = 4.15, p > 0.05$. Therefore the number of cats owned does not affect the likelihood of cat owners keeping their cats from roaming.

Attitudes to allowing cats to roam

A major finding of the survey is that two-thirds of British Columbian cat-owners feel it is appropriate or somewhat appropriate to allow cats to be outside unsupervised.

Non-cat owners support for this practice is 43%, and 30% are unsure about this issue. The same Nature Canada (2016) survey question showed a similar response from BC participants.

Figure 3. Survey response to the question “How appropriate is it for cat owners to allow their cats to be outside unsupervised?” (Cat owners n=128; non cat-owners n=172. Total=300).

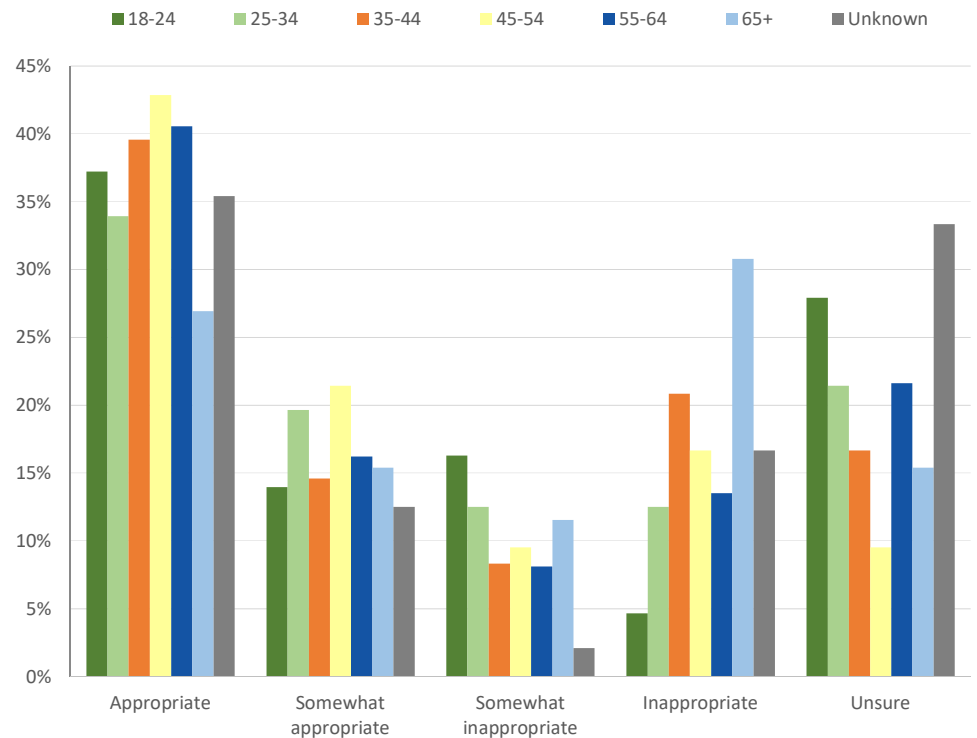


Attitudes by age to allowing cats to roam

Attitudes to allowing cats to roam varied somewhat amongst age groups, with greatest acceptance among those aged 45-54 (65%), and least approval among respondents over 65 (42%).

Results contrast with the Nature Canada survey showing cat owners aged 18-29 most likely to keep their cats from roaming (70%) and those aged 30-39 least likely to keep their cats supervised (49%).

Figure 4. “How appropriate is it for cat-owners to allow their cats to be outside unsupervised?” N=300.



Reasons for allowing cats outside

Reasons given for allowing cats to be outside unsupervised appear to be linked to the cats' perceived needs and preferences to be outdoors.

Over one third of cat owners chose "none of the above" suggesting that the options given in the survey were insufficient to determine all the reasons for allowing cats outside.

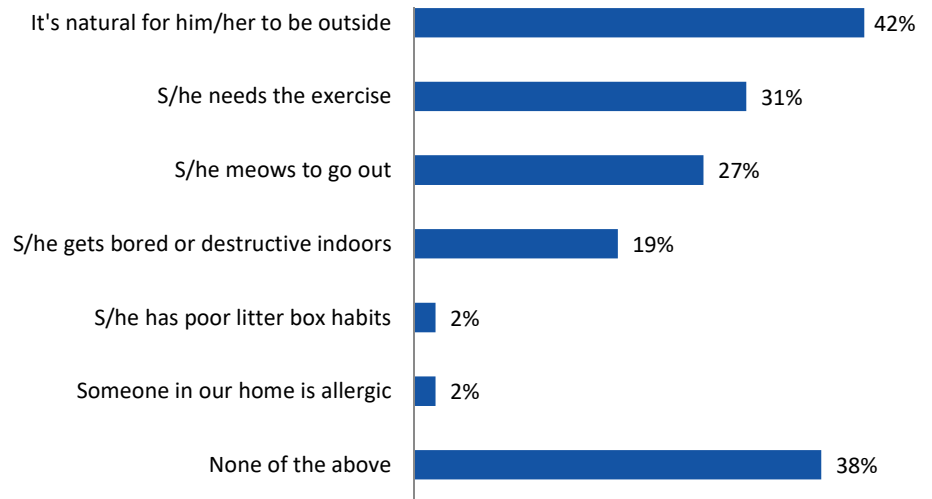


Figure 5. Cat owners answers to, "If you let cat(s) outdoors, what are your reasons? Check all that apply." N=134.

Cat care practices

Ninety-two percent of cat owners practice at least one activity listed. Since few local governments require cat licensing, it is not surprising that low numbers of those surveyed license cats.

With few municipalities enforcing no-roam bylaws, the fact that 48% of cat owners do keep their indoors or supervised (see Figure 2) is evidence that people have reasons other than following bylaws for keeping cats indoors.

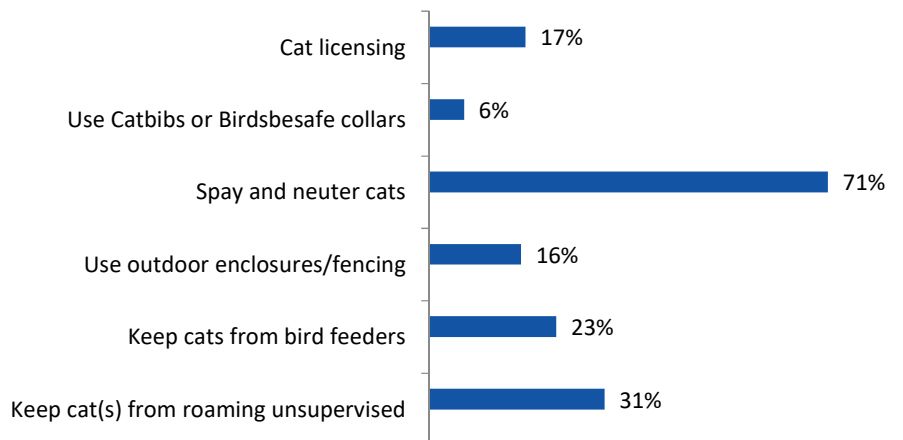


Figure 6. Cat owner's answers to, "Which of the following do you currently do? Check all that apply." N=134.

Attitudes to cats as a cause of bird mortality

The opinion among cat owners, where 45% agree or somewhat agree that cats are the most significant cause of bird deaths, corresponds with Figure 2, that shows 48% of cat owners indicating that they keep their cats supervised or indoors.

This suggests that awareness of the impact of cats on wildlife helps determine the stewardship actions adopted of pet owners. Among non-cat owners, opinion is divided between agreeing/somewhat agreeing (33%) and disagreeing with the statement (33%). Both groups have a sizable percentage of respondents that are neutral (34% non-cat owners and 27% cat owners).

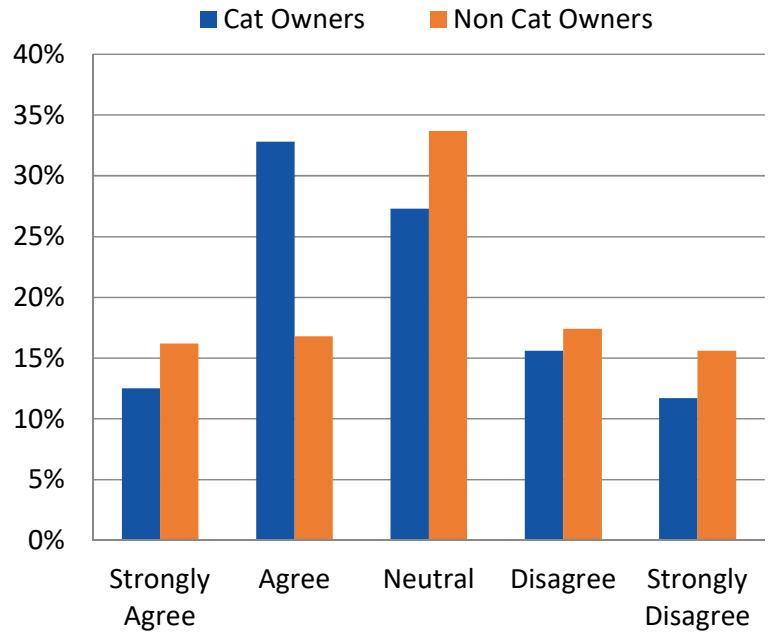


Figure 7. Level of agreement, "Cats are estimated to be one of the most significant causes of wildlife and bird deaths in Canada." N=300.

Perceived threats to unsupervised cats

Being hit by a vehicle is seen as the biggest threat to roaming cats followed by interacting with wildlife (Figure 8). Disease transmission from wildlife is not a significant concern.

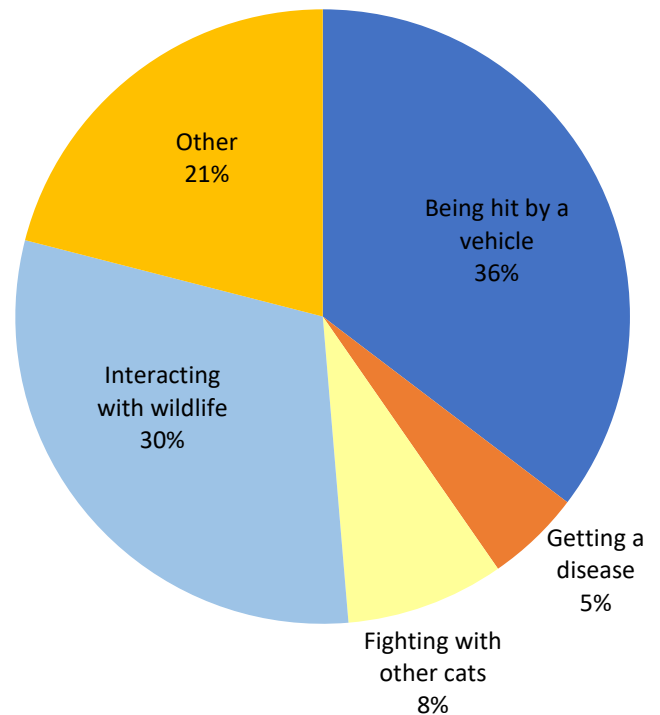


Figure 8: "What do you think is the biggest threat to unsupervised cats in your community?" N=300.

Support for control of cat roaming

Figure 9 shows the attitudes of a select group within the survey, cat owners who allow their cats to roam.

These sixty-four individuals were asked which actions they would consider adopting. More than 20% indicate a lack of support for any action listed. A no-roam bylaw is unpopular as is cat licensing, keeping cats indoors or using outdoor enclosures. Education is also not a popular option for this group.

Although almost 60% support pet sterilization, the chief benefit of this practice is to prevent unwanted pregnancies rather than prevent wildlife mortality.

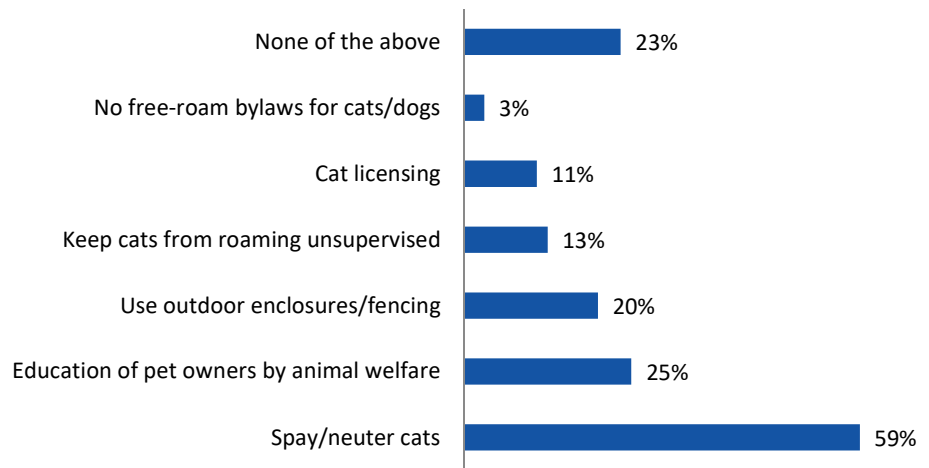


Fig. 9: Cat owners who let their cats out, responses to the survey question, "Thinking about ways to reduce cat impacts on birds and wildlife and to improve cat health and safety, which of the following practices would you support or adopt". N=64.

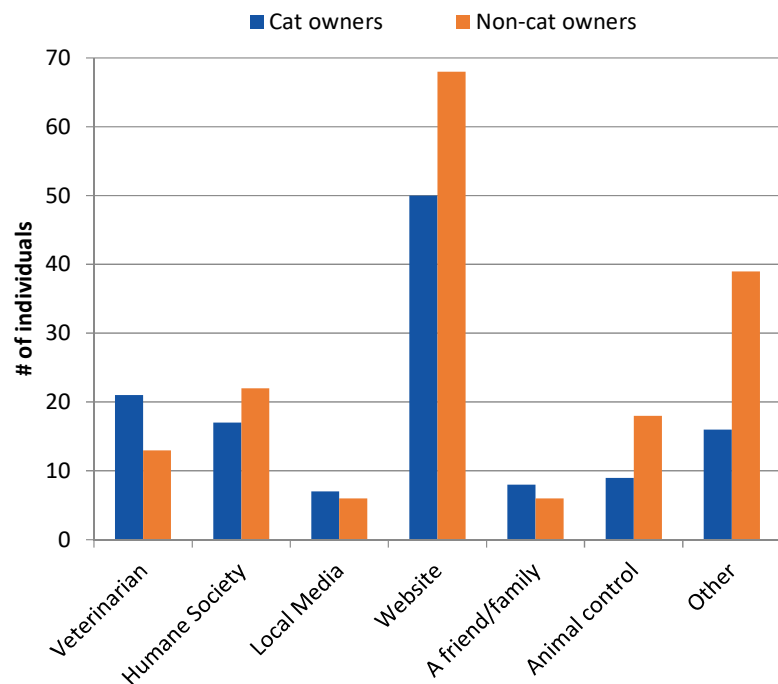
INFORMATION SOURCES

Preferred information sources

The majority of both cat owners and non-owners prefer to get their information from a website, with cat owners also viewing veterinarians and humane societies as a trusted choice.

The preference for an internet source for information above animal care professionals has important implications for stewardship outreach.

Figure 10. "Where would you first turn to for information about keeping cats and wild birds safe?"
N= 134 cat owners, N= 166 non-cat owners.



TELEPHONE INTERVIEW RESULTS

A total of seven respondents from six municipalities participated in telephone interviews. The respondents included two elected officials, representatives from three animal welfare organizations, and municipal and animal control staff. One animal welfare representative and a government official were from the same city.

One question assessed current cat bylaws in the municipality. Five questions sought qualitative opinions on the perceived success and level of public compliance with bylaws, and the motivation and barriers to establishing bylaws. The last question explored a list of stewardship practices the municipality might consider adopting. The

survey questions, and the answers to the survey are summarized in Appendix B.

Table 1 (below) summarizes current cat bylaws and stewardship practices that municipal officials and animal welfare organizations in six municipalities have adopted or would consider adopting.

Three municipalities out of the six sampled have cat no-roam bylaws. One municipality does not enforce the bylaw, one allows roaming of sterilized and microchip-identified cats. Therefore only one community in the survey enforces a bylaw that protects birds and other wildlife from unsupervised cats.

Table 1: Attitudes to Cat Bylaws and Stewardship Practices

Community (population)	NW BC (4500)	Vanc. Island (9000)	Vanc. Island (84,000)	NE BC (12,000)	NW BC (8000)	Vanc. Island (110,000)
Existing “no roam” cat bylaw	X	✓ (not enforced)	X	✓	✓ (Fertile cats only)	X
Would consider mandatory cat licensing	✓	X	X	✓	X	-
Would consider trap-euthanasia program	X	X	X	X	Last resort	-
Would consider mandatory spay-neuter bylaw	X	X	✓	✓ In place	✓ In place	-
Would consider trap- neuter-release program	✓	X	✓ in place	X	✓	-
Would consider trap-neuter-adopt program	✓	X	✓ in place	✓	✓	-
Would consider low-cost spay-neuter program	X	X	✓	✓ In place	✓	-
Would consider education campaign	✓	✓	✓	✓ In place	✓ In place	-
Appropriate to allow cats to roam (1 appropriate to 4 inappropriate)	2	3	3	3	3	-

In response to the question about which options are preferred to limit cat predation, all those interviewed would consider or have already adopted the “soft options” that do not require bylaw enforcement such as pet-ownership education and trap-neuter-adopt programs. Representatives from only two communities would consider licensing cats. Five respondents stated that it was somewhat appropriate for cats to be allowed to roam (see Appendix B).

Stated barriers to establishing bylaws were costs, the difficulty of enforcement, and the lack of awareness among the public and government about the impact of roaming cats. An animal welfare advocate asserted that it is first necessary for a municipal government to acknowledge that there is an issue for a bylaw to pass. Others mentioned that residents’ compliance and understanding were important for both passing and maintaining a bylaw.

In the communities with cat bylaws and cat management practices, interview respondents noted that local animal welfare organizations were instrumental in lobbying for their adoption. Three respondents mentioned complaints from residents about roaming cats being important factors. Concerns about birds and other wildlife were only mentioned by one respondent.

Where there are no bylaws, respondents stated that new bylaws might be met with a mixed public response, but where bylaws are in place, there was a high-level of public acceptance. The respondent for the only local government with a comprehensive no-roam bylaw reported overall benefits such as residents voluntarily bringing in cats to be sterilized, the increase in return rates of rescued cats with mandatory identification programs, and a drop in cat complaints.

Cat predation threatens many species at risk in BC, such as some populations of the Western Bluebird.



KEY FINDINGS

The following is a summary of findings for each objective in the 2017 survey and interview project undertaken for SCBC.

OBJECTIVE 1: Assess the knowledge and attitudes of British Columbians on allowing cats to roam freely.

Two-thirds of cat owners think it is appropriate or somewhat appropriate for cats to be outside without being supervised while 48% of owners do keep cats indoors.

In this representative survey of British Columbians, 45 percent of the 300 respondents have cats as pets. Over half of cat owners allow their cats outdoors while 48% do keep them strictly indoors. A second question assessing attitudes to cats roaming outdoors unsupervised shows an even higher proportion (66% of cat owners and 43% of non-cat owners) think it is appropriate or some-what appropriate to leave cats outdoors unsupervised. The age of respondents did not significantly affect attitudes on this question.

The high number of people of all ages in British Columbia that state that it is acceptable for cats to be outside unsupervised is surprising since many cat welfare organizations now stipulate that cats offered for adoption must be indoor cats.

Cat owners allow their pets outside because of the pet's perceived needs and preferences.

The most common reasons given for letting cats outside are that it is natural, provides needed exercise, and cats prefer it.

To change this attitude, it will be necessary to present evidence that domestic cats can lead happy lives indoors and in supervised settings outdoors (similar to small dogs). Keeping cats indoors or supervised out of doors can involve greater effort for pet owners therefore low-cost solutions for creating safe, stimulating indoor and outdoor environments will need to be promoted.

A significant percentage of pet owners are aware of the impact of roaming cats on wildlife.

About the same percentage of people with cats who keep them indoors or strictly supervised (48%), agree or somewhat agree that cats are a significant cause of wildlife and bird mortality (45%). This is a higher percentage than seen in a recent study by McDonald (2015) where only 32% of cat owners viewed cats as being harmful to wildlife.

The similar percentage of cat owners who acknowledge that cats cause wildlife mortality and cat owners who keep their cats indoors may indicate that education may have influenced their choice to control their pet's access to the outdoors.

Among non-cat owners, opinion is divided between agreeing/somewhat agreeing (33%) and disagreeing (33%) that cats have a substantial impact on wildlife. Almost one-third of all respondents were neutral on this topic indicating a significant group who are not well informed on the issue of cats preying on birds.

A public education campaign may help address the lack of awareness British Columbians have on the impact of cat predation on bird mortality. Forty percent of all survey respondents would prefer to get information about cat/bird safety from web sites, with veterinarians and humane societies as choices for less than 20% of respondents.

OBJECTIVE 2: Rank potential solutions based on how favorability they are perceived.

Even though few municipalities have passed or enforce no-roam bylaws, 48% of cat owners surveyed keep their cats indoors, suggesting that education and awareness rather than fear of penalties may have influenced cat management practices.

Amongst cat owners who allow their cats to be outside unsupervised, there is low support (Figure 9)

for any measure that would restrict a cat's ability to roam. Even education campaigns are rejected by three-quarters of this group. Education alone may not have a significant impact on attitudes or behaviour of cat owners who allow their cats to roam.

Over half of cat owners who let their cats roam support spaying and neutering cats, suggesting that a bylaw restricting fertile cats from roaming may have more support than a strictly no-roam bylaw. Such a bylaw would reduce feral cat populations but not solve cat nuisance complaints or predation by house cats.

OBJECTIVE 3: Document existing cat bylaws in a sample of communities

Of the seven interviews with municipal and animal welfare representatives only one local government enforced a no-roam bylaw for all cats.

It is not surprising therefore that those surveyed showed little support for this management option.

OBJECTIVE 4: Assess whether there is interest among animal welfare organizations and municipalities to take action to limit cat predation of birds.

Local governments are worried about the staff costs and resources needed for cat bylaws. Municipal staff and elected officials anticipate greater costs and a mixed public response to cat bylaw enforcement. Soft options that do not require enforcement, such as pet ownership education programs and trap-neuter-adopt programs, are preferred.

It is important to note that the two communities with no-roam or sterilization/identification bylaws report favorable outcomes and positive public responses to the bylaws. A public education campaign was part of the roll-out of the bylaw.



CONCLUSION

The study results indicate that although two-thirds of cat owners think it is appropriate or somewhat appropriate to allow cats outdoors, a sizable percentage (48%) of British Columbia cat owners are already keeping cats indoors or supervised.

This practice has been adopted despite very few communities requiring it. The finding suggests that responsible pet ownership education has changed attitudes and future investment in pet owner education is worthwhile. Education should emphasize the benefits of keeping cats indoors to both cats and wildlife.

Since over 40% of pet owners allow cats to roam, stricter laws and penalties by local governments may be required along with education.

Owners who think cats prefer or require the outdoors, may benefit from education focused on threats to cats allowed outdoors and the benefits of stimulating indoor environments.

Although the telephone interview of municipal representatives was small, respondents identified cost, human resources and public attitudes as barriers to adopting cat bylaws.

An important objective of an education campaign would be to publicize the positive results experienced by communities that have adopted cat management practices. Something to note is that Dawson Creek, with only 12,000 residents, has found the resources to enforce a strict no-roam bylaw.

Figure 11 summarizes the educational topics, attitudes changes and management practices needed to mitigate human-related bird deaths caused by domestic cats.

Pet owners, municipal officials and animal welfare staff are important audiences for future education programs to be undertaken by SCBC.

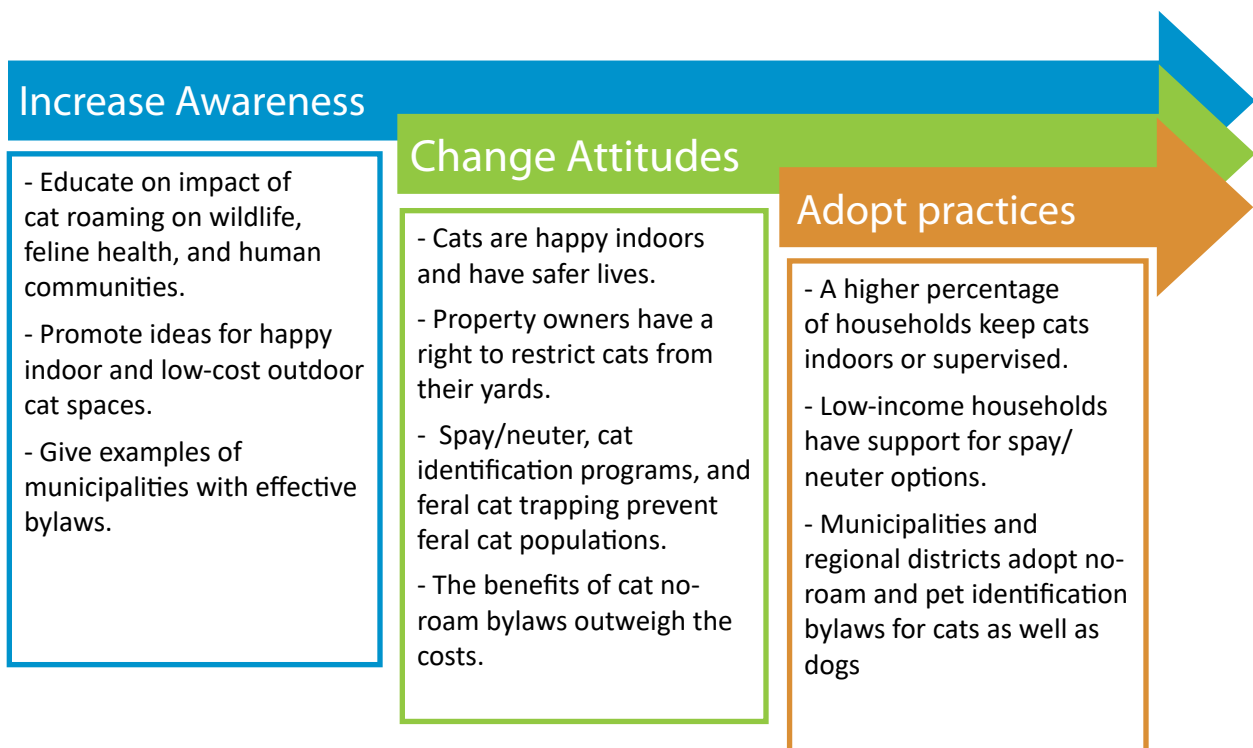


Figure 11. Knowledge and attitudes necessary to encourage practices that mitigate cat predation on birds and wildlife.

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Web Resources

Stewardship Centre for BC: www.stewardshipcentrebc.ca/cats-and-birds

Nature Canada's Cats and Birds: www.catsandbirds.ca

APPENDIX A: GOOGLE SURVEY QUESTIONS

1. I am 19 years of age or older and consent to participating in this research project. *

- Yes
- No
- I prefer not to say

2. How many cats, if any, does your household have as pets?

- 1 Cat
- 2 Cats
- 3 Cats
- 4 Cats
- 5+ Cats
- My household does not have cats

3. How many of those cats spend time outside unsupervised?

- All my cat(s) are kept strictly indoors
- 1 Cat
- 2 Cats
- 3 Cats
- 4 Cats+
- 5 Cats
- My household doesn't have any cats

4. Which of the following do you currently do? Check all that apply.

- Keep cat(s) from roaming unsupervised
- Keep cats from birdfeeders
- Use outdoor enclosures/fencing
- Spay and neuter cats
- Use Catbibs or Birdsbesafe collars
- Cat licensing
- None of the above

5. How appropriate is it for cat owners to allow their cats to be outside unsupervised?

- Appropriate
- Somewhat appropriate
- Somewhat inappropriate
- Inappropriate
- Unsure

6. What do you think is the biggest threat to unsupervised cats in your community?

- Being hit by a vehicle
- Getting a disease
- Fighting with other cats
- Interacting with wildlife
- Other

7. Please indicate your level of agreement with the following statement: Cats are estimated to be one of the most significant causes of wildlife and bird deaths in Canada.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

8. Where would you first turn to for information about keeping cats and wild birds safe?

- Veterinarian
- Humane Society
- Local Media
- Website
- A friend/family
- Animal control
- Other

9. If you let your cat(s) outdoors, what are your reasons? (check all that apply)

- S/he meows to go out
- It's natural for him/her to be outside
- S/he gets bored or destructive indoors
- S/he has poor litter box habits
- S/he needs the exercise
- Someone in our home is allergic
- None of the above

10. Thinking about ways to reduce cat impacts on birds and wildlife and to improve cat health and safety, which of the following practices would you support or adopt?

- Keep cat(s) from roaming unsupervised
- Education of pet owners by animal welfare
- Use outdoor enclosures/fencing
- Spay and neuter cats
- No free roam municipal bylaw for cats/dogs
- Cat licensing
- None of the above

* For ethical reasons, respondents who responded "No" or "I prefer not to say" were prevented from answering the rest of the questions using Google Survey's screening option.

APPENDIX B: PHONE INTERVIEW QUESTIONS & RESULTS

Interview Questions

1. Currently, are there any bylaws on cats (if any), and are they being enforced? How? What are the consequences for violating the bylaw(s)?
2. How is the success of the bylaw(s) being measured – if at all? What are the parameters used to assess this success (e.g. drop in cat complaints, increase in returned lost cats, reduced number of cats in shelters, decrease in feral cat population)?
3. What is the general level of compliance for these bylaw(s)?
4. What was the motivation/ driving-force behind creating the bylaw(s) (e.g. public complaints, expert recommendation, educational campaign)? Who pushed for the bylaw(s) to be adopted (e.g. individual, animal-welfare group, veterinarians)?
5. Did you face any barriers or resistance when adopting the bylaw(s)? If so, from whom?
6. What kind of an effect have the cat bylaw(s) had – if any? Has it resulted in a noticeable drop in cat-related complaints? What has been the public response been like to these bylaw(s)?
7. Which of the following stewardship-practices would the city consider adopting? [If no to any, ask for their reasons why).
 - No free-roaming municipal bylaw
 - Mandatory cat licensing municipal bylaw
 - Trap-Euthanasia program
 - Mandatory Spay-neuter municipal bylaw
 - Trap, Neuter, Release Program
 - Trap, Neuter, Adopt program
 - Low-cost spay-neuter program
 - Public Education Campaign

Interviews: Attitudes to Cat Bylaws and Management Practices

#1	#2	#3	#4	#5	#6	#7
Animal welfare Organization	Local Govt elected official	Nanaimo SPCA	Dawson Creek elected official	Kitimat, elected official	Dawson Creek, animal welfare	Local Govt staff
No free-roam cat bylaw in place	No Yes but not enforced	No but has been recommended	Yes	Sterilized cats can free-roam	Yes	No
Would consider mandatory cat licensing	No	No, very unlikely to pass	Yes. Permanent ID program is enforced	No, hard to enforce	Permanent ID program in place.	DNA
Would consider Trap-Euthanasia program	No	No	No	Last resort, based on health	No	DNA
Would consider mandatory spay-neuter bylaw	No	Yes	In place	In place	Only encouraged	DNA
Would consider Trap, Neuter, Release Program	No	Yes, in place	No	Yes	Yes	DNA
Would consider Trap, Neuter, Adopt program	No	Yes, in place	Yes	Yes	Yes	DNA
Would consider low-cost spay-neuter program	No	Yes	In place	Yes	In place	DNA
Would consider education campaign	Yes	Yes	In place now	In place now, newsletters, Facebook	In place	DNA
Attitude to cats allowed outside	SW inappropriate	SW inappropriate	SW inappropriate	SW inappropriate	Inappropriate	Did not answer (DNA)
Biggest threat to cats	Vehicle mortality	Vehicle mortality	Interacting with wildlife	wildlife	Many factors	DNA

Continued on next page

Interviews: Attitudes to Cat Bylaws and Management Practices cont'd

	#1	#2	#3	#4	#5	#6	#7
	Animal welfare Organization	Local Govt elected official	Nanaimo SPCA	Dawson Creek elected official	Kitimat, elected official	Dawson Creek, animal welfare	Local Govt staff
Level of compliance with bylaw	NA	No enforcement of bylaw	Fine not enforced	Very high.	High compliance since fines in place		N/A
Motivation for establishing bylaws	Cat welfare organization	Unknown	Cat welfare organizations	SPCA, local government and residents	Complaints from residents, humane society recommended	Local SPCA, cost reduction for housing cats, resident's complaints, concern for wildlife	There are complaints about cats roaming onto neighbours property
Barriers to bylaws	Staff and money	Unknown	Cost, lack of understanding of issue			Government understanding problem and importance of enforcement. There was an initial increase in animals brought in.	DNA
Public response to bylaws; effect on community.	Mixed response to bylaw initiative	No awareness of bylaw	Unknown, no enforcement	Very positive response. Drop in cat complaints. Donations to sterilization program.	General agreement	More pets returned to owners; positive response from public; grant funds received.	DNA