REDUCING THE IMPACT OF CATS ON BIRDS AND WILDLIFE:



RECOMMENDED POLICIES AND BYLAWS FOR LOCAL GOVERNMENTS





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The Stewardship Centre for BC and Nature Canada

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Nature Canada works with partners across Canada to keep cats safe and save bird lives. Please visit their websites (www.catsandbirds.ca) and take full advantage of their resources and on-the-ground reach. Keep Cats Safe and Save Bird Lives is a coalition of individuals and organizations concerned about the well-being of cats and birds. We believe all animals are important, and as humans we owe both cats and birds protection. Cats are at risk when they go outdoors unsupervised. Through improving our treatment of cats we, as a society, also limit their impact on the environment generally, and birds in particular.

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RECOMMENDED LOCAL GOVERNMENT POLICIES AND BYLAWS TO ADDRESS CAT PREDATION OF BIRDS AND OTHER WILDLIFE

SUMMARY

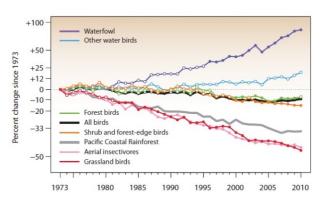
"For cat welfare to be improved in any community, regulatory and educational initiatives are needed." (BC SPCA 2015)

This document suggests bylaws and policies that can be adopted by local and regional governments to address the serious impact of free-roaming and feral cats on birds and other small wildlife. The BC SPCA, the Canadian Federation of Humane Societies and Nature Canada have published model animal bylaws, and although many of the bylaws are compatible with conservation objectives to protect native species, the needs of domestic companion animals take priority. The recommendations and background information presented here have birds and other native wildlife as the top priority and are also compatible with animal welfare objectives of improving cat welfare and mitigating cat overpopulation. Included are recommendations on cats roaming at large, sterilization, spay/neuter funds, identification, licensing, feral cat colonies, humane trapping, and public education programs.

BACKGROUND

BIRD POPULATIONS ARE IN TROUBLE

Slow but steady declines in the populations of specific groups of birds in North America have prompted analysis of the factors related to these decreases. Although birds are small and somewhat secretive they are well-censused. Annual bird counts and bird surveys have been conducted since 1900. "The State of Canadian Birds", published by Environment Canada on behalf of the North



American Bird Conservation Initiative (2012), concludes that on average, Canadian breeding bird populations have decreased 12% since 1970. Some groups of birds such as aerial insectivores (i.e. swallows, swifts, nightjars, flycatchers), shorebirds and grassland birds

show

Figure 1. West Coast and Mountains: Indicators of

major declines of 40 % to 60% or more in this same period.

The well-being of wildlife populations is affected by direct and indirect human activities. Indirect impacts include forestry and agricultural practices, habitat loss and pollution. Direct impacts include factors or practices that lead to direct deaths such as wind turbines, industrial machinery or collisions with buildings and vehicles (Calvert et al. 2013). Two recent studies have concluded that cats are one of the largest direct human-related sources of mortality for wild birds in the United States and Canada (Blancher, 2013, Loss et al. 2013). Blancher estimates that cats kill between 100 and 350 million birds per year in Canada, with the majority likely killed by feral cats. Furthermore, Blancher estimates that 2-7% of the bird population in southern Canada is killed by cats every year.

In the United States, Loss et al (2013) cites even higher numbers, with an estimated 1.4-3.7 billion birds and 6.9-20.7 billion small mammals killed annually by domestic cats. Even at the low end of estimates, predation by house cats is a significant contributing factor to bird decline in urban and rural areas. Bird species that nest or feed on or near the ground are especially vulnerable to cat predation. Impacts are highest in densely settled areas in southern Canada.

CAT OVERPOPULATION IS A WORLD-WIDE EPIDEMIC

Cat overpopulation in Canada is a tragedy for cats, for the environment and for our communities.

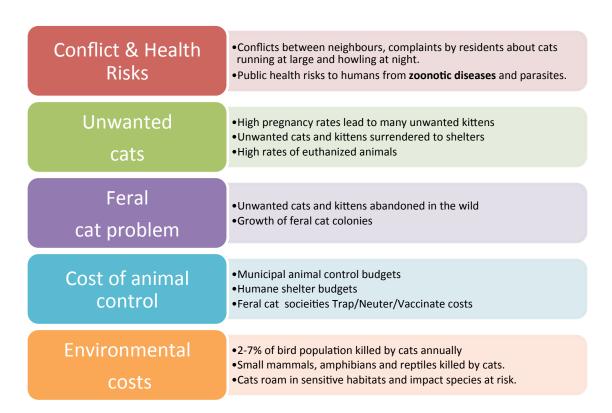
At the same time that many bird populations are experiencing declines, North America, along with many other parts of the globe, is experiencing a cat overpopulation crisis.

Recent estimates of the number of cats owned by Canadians range from 8.5 to 10.2 million animals (Blancher 2013, Canadian Federation of Humane Societies, 2012), with a rough approximation of an additional 1.4 to 4.2 million feral cats. In 2013, shelter statistics submitted to the Canadian Federation of Humane Societies show that within participating shelters, an average of 3 % of cats were returned to their owners, 47% were adopted to new homes, and 33% had to be euthanized. Animal welfare organizations are often unable to accept cats and kittens due to overcrowding and inadequate staffing and financial resources. Pet owners with unwanted or pregnant cats who are unable to relinquish them to humane shelters may release them into the wild or a rural neighbourhood, or simply stop caring for them, arguably and offence under the Criminal Code of

Canada. Newly born kittens are killed or left to die. Colonies of feral cats are now a common sight at dumps, industrial areas, parks and even in residential areas.

THE CONSEQUENCES OF ALLOWING CATS AT LARGE

1



The outdoors can be a dangerous place for a cat. Far too many cats are injured by cars, other cats, dogs and wildlife. Roaming cats are exposed to ticks and fleas as well as fatal diseases like rabies, feline leukemia, cat scratch disease and distemper, some of which are transferable to humans. Veterinarians agree that indoor cats easily live for ten to fifteen years and need less medical care, while the average outdoor cat's life span is two to five years and can involve more medical care. Lastly, roaming cats pick up and spread disease including those that can be transferred to humans. Cat feces in gardens, children's play areas and parks spread these diseases, and parasites throughout the community, all due to cats that are allowed to roam free. *Toxoplasma gondii* is a parasite carried by cats that can be transmitted to humans, mainly through contact with cat feces. While it has no effect on most people, it can cause symptoms in people with weak immune systems.

¹ Zoonotic diseases are those that can be spread between animals and humans.

A number of recent studies have linked *Toxoplasma gondii*infection with mental illnesses, particularly schizophrenia.

Surveys of Canadian households show that over sixty percent of cat owners keep their pets indoors or allow their cat out but on a leash or in an enclosed yard. These cats, with care and attention, live long fulfilling lives indoors. It is therefore, a smaller percentage of the public that are unaware or downplay their cat's impact on wildlife and the nuisance factor of their cats' roaming outdoors.

Cats allowed to roam at large cost taxpayers money through animal control costs, including investigation of complaints, catching stray and feral cats, and shelter costs. Humane societies and shelters allocate substantial budgets to sheltering and caring for animals and many must euthanize significant numbers of the cats who enter their care.

Each year in Canada hundreds of thousands of animals enter shelters and the vast majority of these are cats. Some are pets surrendered by their owners who can no longer care for them, while others are found roaming as strays... Some are never adopted... It is projected that more than 600,000 homeless cats in Canadian shelters did not find new homes in 2011. (Catsandbirds.ca)As Canada's population grows, the number of unwanted companion animals also increases. Many factors contribute to cat overpopulation. A lack of adequate municipal bylaws and budgets allocated to enforcement and support of humane shelters and societies keeps the situation acute.

Companion animal overpopulation is an issue of significant relevance to municipal government for health and safety reasons and also as a matter of fiscal sustainability. As our population grows, so does the work load of animal control departments – and the control, housing, and euthanasia of unwanted animals are costly budget items. Municipalities that have invested in proactive strategies for reducing pet overpopulation have realized new financial efficiencies in their operational costs. BC SPCA 2015

CAT CONTROL BYLAWS: GOOD FOR CATS, BIRDS AND COMMUNITIES

Most municipalities and regional municipalities in Canada have had dog control bylaws for many years. Bylaws restrict dogs from freely roaming to protect domestic pets, wildlife, farm animals and humans from injury. Historically, cats have been allowed to be unsupervised because of a belief that cats are independent and need to explore outdoors. We think of cats as being able to 'look after themselves' more than other pets. This ignores the fact that cats have been domestic pets for thousands of years and do not belong in the wild.

Bylaws and policies evolve to reflect the values and needs of communities. Older bylaws for animal control often stipulated regulations for dogs. Newer bylaws called "Responsible Pet" or "Companion Animal' bylaws reflect a concern for general animal welfare as well as public safety. Recognizing the impact of human activities on birds and other wildlife, local governments have the opportunity to protect birds and other small wildlife within their jurisdictions.

Domestic free-roaming cats and feral cats have been shown to have a significant negative effect on local wildlife and bird populations. Conservation agencies and organizations should be encouraged to lobby local and regional governments to adopt the following bylaws and policies to address cat predation of sensitive species. The recommended bylaws would also mitigate the current feline overpopulation problem which not only threatens birds and other wildlife but requires ever increasing resources of animal welfare organizations and animal control agencies.

RESPONSIBLE CAT OWNERSHIP BYLAW RECOMMENDATIONS

1. ADDRESS CATS RUNNING AT LARGE

The single most important bylaw that can be adopted to mitigate wildlife mortality and reduce the number of lost, unwanted and feral cats is to restrict cats from roaming freely off their owner's property.

OPTION 1: CATS TO BE KEPT SECURED IF OUTDOORS OR UNDER DIRECT SUPERVISION.

Although many municipalities state a preferred policy of keeping cats indoors, no Canadian bylaw explicitly restricts a cat from being outdoors. Bylaws can require a cat to be contained within a building (including outdoor enclosures), or under direct supervision on an owner's property. Direct supervision includes walking a cat using a leash or supervising a cat within a fenced yard.

Example bylaw: Creston Bylaw 1704: section 4

Every person who owns, harbours or possesses a cat shall ensure that the cat is not running at large. No cat shall be allowed off the premises of its owner except on a leash or contained within a carrier designed for the transportation of animals.

"At large, run at large, or running at large" means being elsewhere than on the premises of the owner of the cat, including public or other private property and not being under the care and

control of the owner, either by being securely leashed, tethered or penned, or confined within a building or other enclosure.

Benefits of a cat secured or supervised bylaw:

- Reduces expenses and resources required by municipal animal control and animal welfare organizations to manage and house stray and feral cats.
- Significantly reduces bird and wildlife mortality and helps to maintain wildlife biodiversity.
- Does not have to be accompanied by a cat licensing bylaw.
- Reduces unwanted pregnancies and mitigates release into the wild of unwanted cats and kittens.
- Reduces complaints and management actions needed to deal with cats at large such as cats defecating in gardens and the noise and fighting associated with females in heat.
- Reduces the exposure of cats and their guardians to parasites and zoonotic disease (diseases that can be passed from pets and wildlife to humans).
- Eliminates cat mortality and injury due to contact with vehicles, dogs and predatory wildlife.

Challenges:

- Residents may be resistant to following a "cats indoors or supervised only" bylaw because of historic attitudes to cats roaming free.
- Bylaws must be accompanied by an education campaign to increase public awareness of cats being kept indoors.
- Requires response by animal control officers to catch cats off premises.
- Property owners who are the complainants and responding animal control officers must be able to live trap cats.

Considerations:

- A no-roaming bylaw is often accompanied by a cat licensing and identification program to identify the pet owners. Licensing provides funds for animal control but requires additional human resources.
- An estimated 66 % of Canadian cat owners already have indoor cats so public perceptions are changing. Indoor cat owners and neighbours bothered by free-roaming cats will support the bylaw.

OPTION 2: NO RUNNING AT LARGE

No running at large is the mandatory confinement of cats to their owners' property or use of a leash when off the owner's premises. Since cats are not required to be contained or supervised, roaming off property is probable.

Example bylaw: City of Winnipeg Responsible Pet ownership Bylaw No. 92/2013

Subject to this section, the owner of a cat that is in the City of Winnipeg must,

- ...ensure that the cat does not run at large; ensure that, except when it is
- (i) on the owner's property; or
- (ii) on the property of another person who has consented to the presence of the unleashed cat; the cat is at all times kept on a leash...

Benefits of no-roaming cat bylaws:

- Allows residents to register complaints for cats allowed to roam
- Allows municipalities to respond to complaints and take management actions to deal with cats at large.
- May reduce wildlife mortality due to cats at large of their owner's property.

Challenges:

- Cats are allowed outside unsupervised on an owner's property so cats may frequently wander off the premises.
- Without education, the tendency of cat guardians is to ignore the bylaw and be unaware or indifferent to cats roaming off property.
- The onus is on neighbouring property-owners to complain to the municipalities about cats roaming at large.
- Requires response by animal control officers to catch cats off premises.
- A no-roaming bylaw is often accompanied by a cat licensing and identification program to identify the pet owners.
- Property owners who are the complainants and responding animal control officers must be able to live trap cats.

2. SPAY AND NEUTER REGULATIONS

Regulations stipulate the mandatory spaying or neutering of all cats over the age of six months and no running-at large for an unsterilized cat over six months of age.

Example bylaw: Surrey Spay/Neuter By-law, 1998, No. 13548.

It shall be unlawful for any person to be or become an owner of a cat that is actually or apparently over six months of age unless the cat has been sterilized or unless the person holds a valid cat breeding permit for an unsterilized cat as provided for in this By-law.

It shall be unlawful for any person to allow an unsterilized cat that is actually or apparently over six months of age to be at large whether or not the person holds a valid cat breeding permit for the cat as provided for in this By-law.

Sample Bylaw: Any pet store, breeder or humane shelter that sells or offers kittens or cats for adoption or sale must sterilize animals prior to releasing them to their new owners, unless a breeder's licence is obtained.

Benefits:

- Reduces unwanted pregnant cats and kittens which often are surrendered to human shelters, euthanized, or released into the wild to become feral.
- Reduces nuisance complaints due to females in heat, male fighting and noise associated with mating interaction.
- Reduces the number of unowned cats at large, thereby reducing the human resource and financial costs to local government and animal welfare organizations of managing cats at large.
- Sterilized cats are less likely to roam and become lost and homeless.

Challenges:

- Cats can become fertile at three months of age or less so a six-month stipulation may be inadequate. Many shelters sterilize kittens over eight weeks old to prevent pregnancies.
- Although cat overpopulation is addressed, sterilization has little impact on wildlife mortality due to cat predation.
- It is difficult for bylaw control officers to assess on sight, whether a cat has been spayed or neutered
- The bylaw is effective if accompanied by a cat licensing and education program.

Considerations:

- Ten municipalities in British Columbia have bylaws restricting unsterilized cats from being at large.²
- Municipalities should endeavour to support low-cost spay/neuter clinics for cat owners on limited incomes.

3. ESTABLISH A MUNICIPAL LOW-COST SPAY/NEUTER FUND

Many local governments have a policy of allocating dog and cat licence fees to a dedicated fund given to subsidize veterinary fees at low-income spay and neuter cat clinics. Larger cities with inhouse veterinary services at animal shelters may offer spay and neuter services to residents who can offer proof of need. Smaller municipalities may allocate these funds to animal welfare organizations that sponsor low-cost spay/neuter clinics.

² BC SPCA (2015). Model Animal Responsibility Bylaw

Benefits

- Makes veterinary services affordable for low-income pet owners.
- Reduced number of animals that are given up for adoption due to pregnancy, unwanted kittens and fees or fines associated with unsterilized cats.
- Reduces abandonment of cats and kittens into the wild to become feral.
- May reduce overpopulation leading to overburdened humane shelters and cat care societies.
- May reduce number of feral cats preying on birds.

Considerations

- The fund can be supported by dog and or cat licence fees, or as part of the municipal tax levy that supports animal control services.
- Subsidized rather than free veterinary spay/neuter services may engender increased responsibility for animals among owners.
- The fund can be for the benefit of animal shelters or registered animal care societies.

4. LICENCES AND IDENTIFICATION

Licences and/or identification, through collar tags, microchips or tattooing, assists in the return of lost cats to their owners but has little impact in the protection of birds and other wildlife from cat predation. It does allow cats found at large to be returned and the owners fined, which may encourage owners to supervise their cats.

OPTION 1: CAT IDENTIFICATION REQUIRED

Every owner of a cat shall affix an individual identification to a cat by a collar and tattoo or microchip to allow the identification of a cat and contact information for the owner. An identification program does not need to be accompanied by annual licensing. Cat welfare organizations recommend permanent identification methods over collar tags.

Example Bylaw: City of Surrey Animal Control Bylaw 13844

It shall be unlawful for any person to be an owner of a cat that is actually or apparently over six months of age unless the person maintains an identification worn by the cat.

"Identification" means: (1) a collar or tag worn by a cat which includes the current name, address and telephone number of the owner (2) a traceable tattoo; and (3) a traceable microchip.

Example bylaw: City of Toronto Bylaw 349-19

Registration; licence tags. Every owner of a cat shall:

A. Have registered the cat with the Executive Director, paid a licence fee in the amount specified in Chapter 441, Fees and Charges, and acquired a licence tag, including the payment of a licence fee in the amount specified in Chapter 441, Fees and Charges, for the cat.

B. Until ceasing to be the owner of the cat, renew a licence for the cat prior to the expiration of each licence issued for the cat.

C. Keep the cat licence tag securely fixed at all times on the cat for which the licence tag is issued.

Benefits:

- Licensing and identification not only assists in the return of cats to their owners but increases the value of the animal to the owner who has invested in the licensing.
- Licence tags allow people with unwanted cats on their property to more easily identify the owners through the tag.

Challenges:

- A much lower percentage of residents purchase licences for cats than for dogs, reflecting the lower value of cats to owners. A cat licence program must be accompanied by an education campaign that emphasizes the benefits of licencing.
- Permanent microchip and tattoo programs require owners to keep their addresses updated in a database. Several different databases and microchip readers may be needed to identify animals.

Considerations:

- Differential licences and fines for cats found at large will encourage owners to spay and neuter their cats to avoid higher fees.
- Licence fees and fines may discourage owners to retrieve lost cats from animal shelters.

5. ADDRESS FERAL CAT COLONIES

Local governments often ignore feral cat populations and leave their management to individuals and cat welfare organizations. These colonies are a growing problem and not only threaten local bird and wildlife populations but are a source of disease that can be passed to domestic pets and humans. Municipalities and regional districts can address the feral cat epidemic by offering guidelines and support to animal welfare organizations that care for feral cats, and allow residents

to trap feral cats on their properties. Colonies are often located near abandoned buildings, industrial areas, farms and parkland. Where feral cats reside on land within the jurisdiction of a local government, management should be the responsibility of that government's animal control agency.

OPTION 1: PUBLIC FEEDING OF STRAY AND FERAL CATS IS PROHIBITED EXCEPT BY REGISTERED FERAL CAT CARE SOCIETIES.

Municipalities can establish mutually beneficial relationships with animal welfare organizations who manage feral cat colonies with a program of spay, neuter, vaccination and rehome or release (TNVR). Public feeding of feral cats by individuals is discouraged.

Example bylaw: City of Toronto Feral Cats, Trap Neuter Return Program 349-22

The Executive Director may operate a trap, neuter, return program in respect of any feral cat or feral cat colony and maintain a record of the feral cat's sterilization- (The Executive Director of the Municipal Licensing and Standards Division of the City of Toronto or any person acting under his or her authority.)

FERAL CAT - A cat found in the City of Toronto that has no owner, is not socialized and is extremely fearful or resistant to humans. FERAL CAT COLONY - A collective term, referring to a group of mostly or all feral cats in the City of Toronto that congregate as a unit.

OPTION 2: TRAP, NEUTER AND <u>REHOME</u> -- THE ONLY OPTION FOR FERAL CAT COLONIES LOCATED IN AREAS DESIGNATED AS ENVIRONMENTALLY SENSITIVE.

Use spatial data from all levels of government to identify environmentally sensitive areas where unmanaged feral colonies should be removed and managed feral colonies should not be permitted:

- Local government mapping identifying environmentally sensitive development permit areas
 or water course development permit areas.
- 2. Provincial Sensitive Ecosystem Inventory (SEI) mapping.
- 3. Federal critical habitat mapping.
- 4. Inter-agency biodiversity mapping identifying areas of high biodiversity.
- 5. Important Bird and Biodiversity Areas

Mapped sensitive habitat should be designated as inappropriate for feral cat release programs with adoption or permanent rehoming as the only option permitted.

The release of sterilized unowned cats back into the wild should be considered an unsatisfactory, short-term solution. It is recommended that local governments support registered TNVR groups that have the goal of reducing feral cat colony populations and securing a permanent sanctuary for cats that cannot be adopted. Local government funding, through taxation or animal licence fees, is needed to help feral cat welfare groups pay for veterinary fees and costs associated with feral cat sheltering and management.

Benefits:

- Reduced feral cat colony numbers will decrease cat predation on birds.
- Feral cat management is regulated with the goal of not only feral cat welfare but reducing their populations.

Challenges:

- Frequently shelters and animal welfare organizations lack the capacity to accept owners' requests to surrender cats.
- Trapped feral cats are often unwelcome in municipal or humane society shelters due to veterinary care needs and unsuitability for adoption.
- An education program is needed to discourage feeding stray and feral cats unless they can be caught and offered permanent homes.

Considerations:

- Management of feral cat colonies should be the responsibility of municipal animal control working with registered cat care societies.
- All free-roaming abandoned and feral cats not in managed colonies should be removed from their environment and treated like any other invasive, non-native animal when they are found living in parks and sensitive areas under the jurisdiction of municipal, provincial or federal agencies.
- Local governments must work with local humane and cat care societies to develop a feral cat response program including a feral population estimate tool.

6. ALLOW CAT LIVE TRAPPING

Residents in both urban and rural areas should have the opportunity of humanely trapping cats that regularly visit or reside on their property.

Example Bylaw: City of Yorkton, Saskatchewan, BYLAW NO. 23/2003

Where an Animal Control Officer receives a complaint of a nuisance caused by a cat, the Animal Control Officer may at his discretion;

- (a) Issue a trap to the complainant upon execution by the complainant of an agreement as set out in Schedule "A", attach hereto and forming part of this Bylaw; or
- (b) If deemed necessary by the Animal Control Officer, he may seize and impound any cat found causing a nuisance.
- (c) Any person may restrain any cat found running at large and becoming a nuisance in the City of Yorkton and shall deliver the cat so restrained to the Pound Keeper for impoundment. The person shall leave with the Pound Keeper a statement in writing, describing the name of the owner, name of the cat (if known) and the place and time of restraint.

Schedule A: The undersigned agrees to the following terms and conditions:

- to place the cat trap on his or her property which is within the City of Yorkton;
- to personally check the cat trap every two (2) hours while the trap is set;
- in the event a cat is trapped, to immediately deliver the cat to Yorkton Society for the Prevention of Cruelty to Animals
- A captured cat should be left in the trap and placed in a shed, garage, basement or other
 place that is warm, dry and secure with a blanket placed over the trap to pacify the animal.
 Do not attempt to remove an unfamiliar cat from the trap this will be done by the Pound
 Keeper.
- If the undersigned cannot comply with this condition, the trapped cat must be freed unharmed.
- to ensure that no harm comes to any trapped cat while in their possession including exposure to inclement weather; cat traps are not to be used when the temperature falls below 0 degrees Celsius or rises above 25 degrees Celsius;

Benefits:

- Allows property owners to deal with nuisance cats so that no-roaming enforcement does not solely depend on animal control officers.

7. SUPPORT RESPONSIBLE CAT OWNERSHIP EDUCATION PROGRAMS

Encouraging community members to adopt cats from local shelters is one important factor in reducing cat overpopulation. When shelters are full, people who want to surrender cats and kittens are turned away, leading to some cats being released to the wild while others are euthanized.

Local government can support responsible cat ownership by working with animal welfare organizations and veterinarians to communicate the following messages to the public:

- Encourage people to adopt cats from shelters rather than from pet stores or breeders.

- Promote the benefits of sterilizing cats and the opportunity to apply for subsidized spay/neuter veterinary services.
- Promote the benefits of keeping cats indoors or under supervision, including: cats living longer, healthy lives; the reduction of disease and parasite transfer which is healthier for cats and humans; the reduction of cats' predation on birds and other wildlife; the reduction of unwanted pregnancies; and last but most importantly the reduction in lost and homeless cats.
- Provide ideas on how to care for indoor cats and supervise cats enjoying the outdoors.
- Inform the public that abandoning a pet cat is an offence under the Criminal Code of Canada.

CONCLUSION

Since cat predation of birds is a human-related cause of mortality, human attitudes and behaviours must be changed before this threat is mitigated. Although local government bylaws can draw attention to the problems associated with cats at large, committing funds for bylaw administration and enforcement is of equal importance. Groups that lobby decision-makers to enact legislation will face resistance about the costs of additional animal control measures.

Nature Canada and its regional and local partners have chosen a "cat-friendly" path forward to address this issue. With regard to Municipalities though, we have described many reasons why municipalities should strengthen their bylaws, enforcement, education and support to address the issues caused by roaming cats and feral cats. This is part of building healthier and more sustainable communities, something that we, as a nation are committed to. To improve our chances of making progress on this challenging issue, conservation organizations and wildlife agencies must collaborate with animal welfare organizations on campaigns about responsible cat ownership. Also, wildlife advocates must recognize the added costs of bylaw enforcement and be able to link enforcement results to community benefits such as lowering zoonotic disease risks to humans, benefitting biodiversity, lowering nuisance complaints and improving the general health and welfare of domestic cats. It is about creating healthier communities.

Table 1: Qualitative assessment of the costs and benefits of recommended bylawsⁱ.

Bylaw	Added administrative costs	Added enforcement cost	Potential to reduce bird mortality	Potential to reduce cat over population
No Free Roam	Nil	Medium	Very high	Very high
Cats limited to owner's property	Nil	High	Medium	Medium
Spay/neuter requirement for cat sales/adoptions	Nil	Low	Low	High
Low-cost spay neuter fund	Low	Nil	Low	Medium
Licensing	Medium	High	Nil	Nil
Identification	Nil	High	Nil	Nil
No public feeding	Nil	High	Nil	Nil
Trap-Neuter & Rehome	High	Low	High	High
Trap-Neuter-Release	High	Low	Low	High
Live-trapping allowed	Low	Low	Medium	Low

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WEB RESOURCES

Cats and Birds http://catsandbirds.ca/

Nature Canada invites Canadians to consider what they can do to make Canada a safer place for both cats and birds. See tips on caring for cats, research on cat and wildlife issues, information for municipalities, and ideas on how to take action. Cat owners can "Take the pledge" to keep cats safe and save bird lives.

Stewardship Centre for BC http://www.stewardshipcentrebc.ca

In addition to this document, SCBC has produced a series of documents encouraging individuals, communities and local governments to adopt practices that can reduce the impact of cats on birds and wildlife including "The Happy Cat" brochure which offers tips on responsible pet ownership; "Species at Risk: Voluntary Stewardship Practices to Reduce the Impacts of Cats on Birds and Wildlife"; and "Reducing the Impacts of Cats on Birds and Wildlife: a briefing note for local governments."

American Bird Conservancy http://www.abcbirds.org/abcprograms/policy/cats/index.html
Information and educational resources on cat predation and how to transform outdoor cats into contented indoor cast. ABC has public educational brochures which are available to order.

Cornell Lab of Ornithology http://www.allaboutbirds.org/Page.aspx?pid=2656
"View from Sapsucker Woods", an excellent short essay on the impacts of cats on bird populations.

BC SPCA http://www.spca.bc.ca/animal-issues/professional-resources/model-bylaw.html
Recommended local government bylaws for all animals.

Rithets Bog Conservation Society	http://www.rithetsbog.org/
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Videos of domestic cat predation on songbirds in a Victoria Conservation Area

Cat Bib Information http://catgoods.com/

END NOTES

ⁱ Table 1 estimates the costs and benefits of different cat control bylaws. Requiring the containment or