



# REDUCING THE IMPACT OF CATS ON BIRDS AND WILDLIFE

RECOMMENDED POLICIES AND BYLAWS FOR LOCAL GOVERNMENTS



STEWARDSHIP CENTRE  
FOR BRITISH COLUMBIA

# Table of Contents

<b>INTRODUCTION</b>	<b>1</b>
<b>BYLAWS AND EXAMPLES</b>	<b>2</b>
1. EDUCATION PROGRAMS	2
2. ADDRESS UNOWNED CATS RUNNING AT LARGE	3
3. SPAY AND NEUTER REGULATIONS	6
4. ESTABLISH A MUNICIPAL LOW-COST SPAY/NEUTER	8
5. LICENCES AND IDENTIFICATION	9
6. ADDRESS UNOWNED CAT COLONIES	11
<b>CONCLUSION</b>	<b>15</b>
<b>REFERENCES</b>	<b>16</b>
<b>WEB RESOURCES</b>	<b>17</b>
<b>END NOTES</b>	<b>17</b>
<b>APPENDIX</b>	<b>20</b>
BACKGROUND INFORMATION	20
CAT MANAGEMENT ISSUES	24
STEWARDSHIP PRACTICES TO REDUCE THE IMPACT OF CATS ON BIRDS AND WILDLIFE	25

# INTRODUCTION

This document suggests policies and bylaws that can be adopted by local and regional governments to address the serious impact of roaming (both owned and unowned) cats on birds and other small wildlife.

The recommendations presented here have birds and other native wildlife as the top priority and are compatible with the animal welfare objectives of improving cat wellbeing and mitigating feline overpopulation.

Included are recommendations on cats roaming at large, sterilization, spay/neuter funds, identification, licensing, feral cat colonies, and public education programs.

*For further information on cat and bird issues please see the Background Information section in the appendix of this document.*

**“For cat welfare to be improved in any community, regulatory and educational initiatives are needed.”**

**- BC SPCA 2015**

## A NOTE ON VOCABULARY

*Throughout this document, we refer to pet cats as “owned” (whether indoors or out), and unsocialized or feral cats as “unowned.”*

*It is worth noting that some unowned cats can get accustomed to humans and become owned cats. We use “outdoor cats” to describe both owned and unowned outdoor cats.*



# BYLAWS AND EXAMPLES

## CAT CONTROL BYLAWS: GOOD FOR CATS, BIRDS AND COMMUNITIES

Following are some recommended options that municipalities can consider. Adoption of policies and bylaws by local governments will help to address cat predation of sensitive species and 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.

There are six categories for consideration in this section:

1. EDUCATION PROGRAMS
2. ADDRESS OWNED CATS RUNNING AT LARGE
3. SPAY AND NEUTER REGULATIONS
4. ESTABLISH A MUNICIPAL LOW-COST SPAY/NEUTER
5. LICENCES AND IDENTIFICATION
6. ADDRESS UNOWNED CAT COLONIES

### 1. 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 not most importantly the reduction in lost and homeless cats.

- Provide ideas on how to care for indoor cats and supervise cats enjoying the outdoors.



## 2. ADDRESS UNOWNED 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 unowned cats is to restrict owned cats from roaming off their owner's property.

### **OPTION 1 (PREFERRED):**

#### **OWNED CATS KEPT INDOORS OR UNDER DIRECT SUPERVISION IF OUTDOORS**

Although many municipalities state a policy of keeping cats from roaming, no Canadian bylaw explicitly restricts a cat from being outdoors. Bylaws can, however, require cat owners to restrict their cats from running at large, meaning the owner must contain them on the owners' property (including outdoor enclosures) or under direct supervision if they're off of the 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:

- 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.

There are a wide variety of outdoor structures that allow cats to experience the outdoors without putting themselves or any other species

at risk. They can range from very simple, like a window box; to elaborate, like a screened in balcony or deck; to imaginative, like a mesh tunnel on top of a fence.

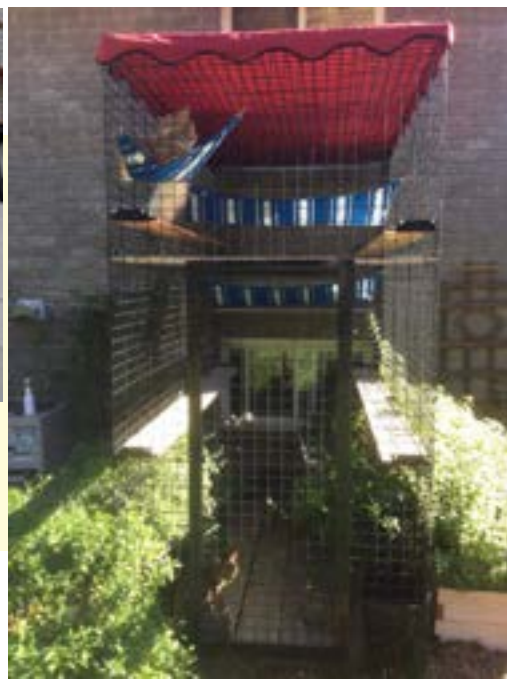


## Challenges:

- 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 the benefits to cats and wildlife of cats being kept from roaming.
- Requires response by animal control officers to catch cats off premises.

## 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 72% of Canadian cat owners already keep their cats or supervise them outdoors, so public perceptions are changing. Indoor cat owners and neighbours bothered by free-roaming cats will support the bylaw.



## OPTION 2: NO ROAMING OFF PROPERTY

This sample bylaw is similar to the Preferred Option, but cat owners are not required to keep their cats contained or supervised, but cats are simply supposed to stay on the owners' property. 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:

- 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 beyond 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.





### 3. SPAY AND NEUTER REGULATIONS

To address the issue of wildlife mortality due to cats, it is essential that municipalities work to improve spay/neuter rates in their community. Ensuring owned and unowned cats are sterilized is key to reducing the overall cat overpopulation.

#### **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.





### **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.<sup>1</sup>
- Municipalities should endeavour to support low-cost spay/neuter clinics for cat owners on limited incomes.

<sup>1</sup> BC SPCA (2015). Model Animal Responsibility Bylaw

## 4. ESTABLISH A MUNICIPAL LOW-COST SPAY/NEUTER

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 in-house 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.

### Benefits:

- Makes veterinary services affordable for low-income pet owners.
- Reduces 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 or enter the unowned population.
- May reduce overpopulation leading to overburdened humane shelters and cat care societies.
- May reduce number of unowned 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.
- Subsidize, 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.



## 5. LICENCES AND IDENTIFICATION

Mandatory 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 a larger proportion of lost cats to be returned to the owners, which can have beneficial effects for local shelters and the community. If there is also a no-roam bylaw in place, the return to the owner can provide an opportunity for bylaw officials to educate the owner about the impact of letting their cat roam as well as imposing fines or other penalties.

### 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.



## OPTION 2: CAT LICENCING

### 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 allows people with unwanted cats on their property to more easily identify the owners through the tag.

#### 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.

#### 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 licensing.
- Permanent microchip and tattoo programs require owners to keep their addresses updated in a database. Several different databases and microchip readers maybe needed to identify animals.



## 6. ADDRESS UNOWNED CAT COLONIES

Local governments often ignore unowned cat populations and leave their management to individuals and cat welfare organizations. Owned and unowned cat populations interact (through sex and getting lost), any plan to address cat and bird welfare must include different strategies for each. Municipalities and regional districts can address cat overpopulation by offering guidelines and support to animal welfare organizations and qualified individuals that care for unowned cats.

### **OPTION 1: PUBLIC FEEDING OF STRAY AND FERAL CATS IS PROHIBITED EXCEPT BY REGISTERED FERAL CAT CARE ORGANIZATIONS /QUALIFIED INDIVIDUALS**

Municipalities can establish mutually beneficial relationships with organizations or individuals who manage feral cat colonies with a program of spay, neuter, vaccination and rehome or release (TNVR). It is essential that any organizations or individuals engaged in unowned cat care be properly trained and registered with the municipality. This assists in the implementation of best practices in administering unowned cat care programs and enables the tracking of results.

#### **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 REHOME/REHABILITATE/RELOCATE – A PREFERABLE OPTION FOR UNOWNED CAT COLONIES LOCATED IN AREAS DESIGNATED AS ENVIRONMENTALLY SENSITIVE**

In addition to working with registered organizations and individuals to manage unowned cat colonies, municipalities can work to identify environmentally sensitive areas, such as Important Bird Areas, where unowned colonies should not be located. Existing colonies found in these sensitive areas should be relocated. As many of the cats as possible should be rehomed and rehabilitated and the balance relocated to a less sensitive area.

Methods of identifying sensitive areas include:

1. 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.

Most mid-sized to large municipalities have policy statements and strategies with regard to Natural Areas, Natural Policy Areas, Environmentally Sensitive Areas, Conservation Areas, or otherwise identified natural features on the landscape.

For example, the City of Toronto, Canada's largest City, has the following on protection within its Ravine Strategy:

*Ravines are fundamentally natural spaces. Ecological function and resilience is the foundation for long-term sustainability of the ravines and watersheds. We are all guardians of these spaces and must treat them with care and respect. All actions related to ravines should be guided by the overarching goal of protecting these spaces by maintaining and improving their ecological health.*

Within such a strategy, a statement to inform management to address a serious threat to ecological health would be helpful. Given the impact of domestic cats on wildlife populations, we recommend that municipalities include a statement similar to the following within their policies or strategies intended to protect ecological health, biodiversity, natural areas, or nature, as they wish to express it.

**Sample statement:**

In recognizing the impact of outdoor domestic cats (*Felis catus domesticus*) on wildlife, the City will discourage, by humane means, the presence of cats within roaming distance of all areas identified within the City’s policies and schedules as important for biodiversity and ecological health such as: natural features, natural parks, natural areas, ravines, and natural corridors. This includes, but is not limited to, unowned cat colonies, whereby no new colony can be established near a natural area, and any existing unowned colony must be relocated away from all natural areas within five years. To the greatest extent possible, relocated cats will be sterilized, rehabilitated, identified, and adopted out.



*If there is no bylaw limiting owned cats from roaming, the following statement should be added.*

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

**Sample statement:**

The City recognizes that, in the absence of a no free-roam bylaw, there is a need to educate residents living adjacent to natural areas of the consequences of allowing their pets (cats and dogs) to enter these areas unsupervised.

Local government funding, through taxation or animal licence fees, can 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.

**Considerations:**

- Management of feral cat colonies should be the responsibility of municipal animal control working with qualified individuals and organizations.
- Local governments must work with local humane and cat care societies to develop an unowned cat response program including a population estimate tool.

**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 encourage catching and spaying and neutering unowned cats that people are feeding outside of formal unowned cat care.





# CONCLUSION

Since cat predation of birds is a human-related cause of mortality, human attitudes and behaviours must change to mitigate this threat. Although local government bylaws can draw attention to the problems associated with cats at large, committing funds for bylaw education and enforcement administration is of equal importance.

Partnerships with local governments, animal welfare organizations and conservation organizations can be established to forge a cat and bird friendly path forward to address this issue. Municipalities can strengthen their bylaws, enforcement, education and support to address the issues caused by roaming cats, either owned or unowned. Enforcement outcomes have community benefits including increased biodiversity, decreased sheltering costs, decreased nuisance complaints and improved health and welfare of domestic cats. This all culminates in healthier communities.

**Table 1: Qualitative assessment of the costs and benefits of recommended bylaws<sup>1</sup>.**

Bylaw	Added Administrative Costs	Added Enforcement Costs	Potential To Reduce Bird Mortality	Potential to Reduce Cat Overpopulation
Cats supervised outdoors	Nil	High	Very high	Very high
No running at large	Nil	High	Low	Low
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 and re-home	High	Low	Medium	High

# REFERENCES

- Adamec, R. 1976. The Interaction of hunger and preying in the domestic cat (*Felis catus*)", Behavioural Biology, Vol. 18, Issue 2.
- American Association of Feline Practitioners (AAFP) no date.
- American Association of Feline Practitioners. 2003. American Association of Feline Practitioners 2003 Report on Feline Zoonoses.
- Avian Conservation and Ecology 8(2): 3.
- BC SPCA. 2015. Model Animal Responsibility Bylaw.
- Blancher, P. 2013. Estimated number of birds killed by house cats (*Felis catus*) in Canada.
- Calvert, A. M., C. A. Bishop, R. D. Elliot, E. A. Krebs, T. M. Kydd, C. S. Machtans, and G. J. Robertson. 2013. A synthesis of human-related avian mortality in Canada. Avian Conservation and Ecology 8(2): 11.
- Canadian Federation of Humane Societies. 2017. Cats in Canada 2017.
- Canadian Federation of Humane Societies. 2014. Animal Shelter Statistics 2013.
- Centonze, L.A. & Levy, J. 2002. Characteristics of free-roaming cats and their caretakers. American Veterinary Medical Association, 220(11); 1627-1633.
- Environment Canada. 2012. The State of Canadian Birds.
- Loss, S. R., T. Will, and P. P. Marra. 2013. The impact of free-ranging domestic cats on wildlife of the United States. Nature Communications, 4:1396, DOI:10.1038.
- Loyd, S. et al. 2013. Quantifying free-roaming domestic cat predation using animal-borne video cameras, Biological Conservation, Volume 160.
- NABCI. 2016. The State of North America's Birds.
- North American Bird Conservation Initiative. The State of North American Birds, 2016.
- Pearson, M. D. Blair. 2013. Species at Risk: voluntary stewardship practices: reducing domestic and feral cat predation.
- Holm, M. pers. comm. 2014.
- Slater, M. Community Approaches to Feral Cats. Washington, DC: Humane Society Press, 2002. Web.
- Slater, M. The Welfare of Cats. Ed. Irene Rochlitz. Dordrecht, the Netherlands: Springer, 2007. Web.

# WEB RESOURCES

Cats and Birds [www.catsandbirds.ca](http://www.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 [www.stewardshipcentrebc.ca](http://www.stewardshipcentrebc.ca)

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. The Happy Cat brochure offers tips on responsible pet ownership.

American Bird Conservancy [www.abcbirds.org](http://www.abcbirds.org)

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 [www.allaboutbirds.org](http://www.allaboutbirds.org)

“View from Sapsucker Woods”, an excellent short essay on the impacts of cats on bird populations.

BC SPCA [www.sPCA.bc.ca](http://www.sPCA.bc.ca)

Recommended local government bylaws for all animals.

Rithets Bog Conservation Society [www.rithetsbog.org](http://www.rithetsbog.org)

Videos of domestic cat predation on songbirds in a Victoria Conservation Area

Cat Bib Information [www.catgoods.com](http://www.catgoods.com)

Birds Be Safe [www.birdsbesafe.com](http://www.birdsbesafe.com)

# END NOTES

1 Table 1 estimates the costs and benefits of different cat control bylaws. Requiring the containment or supervision of cats is by far the most effective bylaw and is no more costly to enforce than the weaker “no running at large” bylaw.

# ACKNOWLEDGMENTS

Funding was provided for this project by the Environment Canada Habitat Stewardship Program, with in-kind support by BC SPCA, Nature Canada, Canadian Wildlife Service, South Coast Conservation Program, Bird Studies Canada; Wildlife Conservation Through Cat Welfare Group and the South Okanagan Similkameen Conservation Program for their technical review and project support.

This document does not necessarily represent the views of all individual members of the advisory committee, or the official positions of the organizations with which the individual committee members are associated.

This report was written by Margaret Holm.

The report was produced by the Stewardship Centre for British Columbia, 2016 © and updated in 2019 .

This project was undertaken with the financial support of the Government of Canada.

Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.

The logo for the Government of Canada, featuring the word "Canada" in a serif font with a red maple leaf above the letter "a".

## PHOTO ATTRIBUTIONS

- Cover: Cat on leash by Marion Grimes; Northern Red-legged Frog; Black-throated Green Warbler; Barn Swallows on wire
- Page 1: Black-capped Chickadee
- Page 3: Black cat in window by Puchan, Shutterstock
- Page 4: Catio 1 (left) by BeautifulWorld.com; Catio 2 (right) by Heather Lenz
- Page 5: Cat on leash by the sea by Somiko Onishi
- Page 6: Kitten on post, iStock
- Page 8: Bobolink; Barn Swallow; Western Bluebird by Birdiegal
- Page 9: Relaxed indoor Tabby cat
- Page 13: White cat by Alexa Fletcher
- Page 14: Tabby cat by Tadeáš Bednarz [CC BY-SA 4.0 (<https://creativecommons.org/licenses/by-sa/4.0>)]
- Page 27: Nest of Barn Swallows; Little Brown Myotis bat by Jared Hobbs; American Robin



# The Stewardship Centre for BC

The Stewardship Centre for BC (SCBC) was created to assist governments, businesses, conservation and environmental organizations, and citizens 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.

We are committed to champion science-based best practices so that British Columbians understand, enjoy, and sustain healthy ecosystems.

As good stewardship relies on good decision-making,

we work closely with our partners to develop innovative technical, educational, and capacity building.

For more information about the Stewardship Centre contact us at:

Tel. 1.866.456.7222

[info@stewardshipcentrebc.ca](mailto:info@stewardshipcentrebc.ca)

[www.stewardshipcentrebc.ca](http://www.stewardshipcentrebc.ca)

## Disclaimer

The Stewardship Centre for BC provides the information in this guide and its website for educational purposes only. Material contained within it carries no guarantee of any kind, express or implied. SCBC does not endorse, recommend or control linked websites and accepts no responsibility whatsoever for their contents or views. The Stewardship Centre for BC accepts no liability or blame for damages to any person or business entity because of using this website, its information or any website linked to it. This guide is meant to complement but not replace other existing resources, including the BC Ministry of Environment’s Develop with Care series and Best Management Practices (BMPs) that have been developed for individual species. Following the guide also does not replace the need for due diligence regarding the legislative and regulatory requirements for projects involving species at risk.

# APPENDIX

## BACKGROUND INFORMATION

### BIRD POPULATIONS ARE IN TROUBLE

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 birds such as shorebirds and grassland birds show major declines of 40 % to 60% or more in this 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. 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 unowned cats. Furthermore, Blancher estimates that 2-7% of the bird population in southern Canada is killed by cats every year. Other direct impacts such as wind turbines, industrial machinery or collisions with buildings and vehicles lead to bird deaths (Calvert et al. 2013).

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 BC such as the Fraser Valley, the South Okanagan, and Southern Vancouver Island.

Other vulnerable animals include reptiles and amphibians. They are reported as prey in almost all studies of outdoor cats, whether owned or unowned. They are rarely brought home by outdoor cats and are likely killed more often owners realize.

## **THE RISE IN CAT POPULATIONS IN CANADA**

The Canadian Federation of Humane Societies (CFHS) recently updated a multi-stakeholder research initiative to understand the scope of cat overpopulation in Canada (CFHS, 2017). The research found that there are an estimated 9.3 million owned cats in Canada. While it is difficult to estimate the Canadian unowned cat population, it is thought that these cats are significant contributors to overpopulation because of their lower spay/neuter rates leading to unwanted litters (Slater, 2007, 2002, Centonze & Levy, 2002). Adding to the problem is inter-breeding between unowned and owned pet cats, and a constant influx of owned cats into the unowned population. At this point, if large-scale, targeted action is not taken, the cat overpopulation problem in Canada will worsen.

## **CAT OVERPOPULATION IS A WORLD WIDE EPIDEMIC**

Cat overpopulation in Canada is a tragedy for cats, for the environment and for our communities. Recent estimates of the number of cats owned by Canadians range from 8.5 to 9.3 million animals (Blancher 2013, Canadian Federation of Humane Societies, 2017), with a rough approximation of an additional 1.4 to 4.2 million unowned cats. The 2017 Cats in Canada Report from the Canadian Federation of Humane Societies (CFHS) show that within participating shelters, an average of 5% of cats admitted to shelters were reclaimed by their owners, 60% were adopted to new homes, and 18% had to be euthanized (95% for health reasons). 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 do not relinquish them to humane shelters may release them into the wild or a rural neighbourhood, or simply stop caring for them, an offence under the Criminal Code of Canada. Colonies of unowned, unsocialized cats are now a common sight at dumps, industrial areas, parks and even in residential areas.

## THE CONSEQUENCES OF ALLOWING CATS AT LARGE

### CONFLICT & HEALTH RISKS

- Conflicts between neighbours, complaints by residents about cats running at large.
- Public health risks to humans from zoonotic disease and parasites.

### UNWANTED CATS

- High pregnancy rates lead to many unwanted kittens.
- Unwanted cats and kittens surrendered to shelters.
- High rates of euthanized animals.

### FERAL CAT PROBLEM

- Unwanted cats and kittens abandoned in the wild.
- Growth of feral cats colonies.

### COST OF ANIMAL CONTROL

- Municipal animal control budgets.
- Humane shelter budgets.
- Feral cat societies' trap/neuter/vaccinate costs.

### ENVIRONMENTAL COST

- 2 to 7% of bird population killed by cats annually.
- Small mammals, amphibians and reptiles killed by cats.
- Cats roam in sensitive habitats and impact species at risk.

The outdoors can be a dangerous place for a cat. Far too many cats are injured by cars, other cats, dogs and wildlife. 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. 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. Cat feces in gardens, children's play areas and parks from roaming cats can spread diseases and parasites throughout the community.

Cats in Canada (CFHS, 2017) shows that 72% of Canadian cat owners keep their pets indoors or allow their cat out on a leash or in an enclosed yard. These cats, with care and attention, live long fulfilling lives indoors. Therefore, it is a smaller percentage of the public that is unaware or downplays their cat's impact on wildlife and the nuisance factor of their cats' roaming outdoors, as well as overestimate their cats' ability to deal with outdoor dangers.

Cats allowed to roam at large cost taxpayers money through animal control costs, including investigation of complaints, catching

unowned 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, the 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 260,000 homeless cats in Canadian shelters did not find new homes in 2016 (CFHS, 2017).

As BC'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).*

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



## CAT MANAGEMENT ISSUES

### POPULATION MANAGEMENT

Cats are prolific breeders, and can produce two to three litters per year of three to six kittens. The problem of cat fecundity is exacerbated by cat owners who let their cats roam unsupervised outdoors, fail to spay or neuter their pets, and abandon unwanted cats. When considering cat management, both owned and unowned cat populations need to be addressed –with different management strategies for each. Roaming owned cats get lost, and interact and breed with unowned cats, adding to the already serious overpopulation problem.

### MULTIPLE AGENCIES

In BC, there is no one stakeholder or group responsible for the managing domestic owned pet and feral un-owned cats– it is truly a multi-stakeholder issue that requires a combined effort to resolve.

The Canadian Federation of Humane Societies identifies six stakeholder groups that are concerned with domestic cat care and management: municipalities, veterinarians, humane societies, animal rescue groups, spay and neuter groups, and feral unowned cat support groups (2012).

### CAT IMPACTS ON HUMAN HEALTH

The American Association of Feline Practitioners (AAFP) has noted that cat overpopulation, if ignored, could impact human health as well as native wildlife populations.

The AAFP published a comprehensive review of zoonotic disease<sup>1</sup> carried by roaming cats that are vectors for serious diseases passed through direct contact or soil and water contaminated by cats (2003).

Individuals most susceptible to zoonotic diseases include unborn children, the young, elderly and people with lowered immune systems.

---

<sup>1</sup> Zoonotic disease is a disease that can be passed between animals and humans. Zoonotic diseases can be caused by viruses, bacteria, parasites, and fungi.

## LOOK WHAT THE CAT BROUGHT IN!



- *Outdoor cats can contract diseases from other cats, from the soil, and from wildlife that are caught and eaten.*
- *Fleas are easily picked up and can quickly multiply.*
- *Feline leukemia is a life-threatening illness for cats.*
- *Cat scratch disease, rabies, flea-borne typhus, plague, roundworms, and toxoplasmosis are serious diseases that can be transferred from cats to humans.*

## STEWARDSHIP PRACTICES TO REDUCE THE IMPACT OF CATS ON BIRDS AND WILDLIFE

Most municipalities and regional districts in British Columbia have had dog control bylaws for years. Bylaws restrict dogs from roaming to protect domestic pets, wildlife, farm animals and humans from injury (BC SPCA, 2015). Historically, cats have been allowed to roam unsupervised because of a popular belief that cats are independent and need to roam. However, with the increasing owned and unowned cat populations, it is time to consider a different approach.

A multi-pronged strategy, which includes public education about responsible pet ownership; the enactment of local government bylaws to protect birds and other wildlife and reinforce responsible pet practices; and increased municipal support to humane shelters and societies will help address the cat overpopulation crisis and its impact on birds and wildlife.

### TIPS FOR HAPPY INDOOR CATS

- Provide window spots so cats can look outdoors and watch the neighbourhood.
- Ensure cats have sufficient vertical and private space to hide, sleep and feel safe.
- With multiple cats, be sure that all resources such as sleeping and hiding spots, feeding and litter are separated.
- Have enough litter boxes for all cats. Cats prefer two large litter boxes with daily cleaning. Avoid scented litter.
- Play with cats regularly and encourage their urge to chase and pounce with toys.
- Provide a scratching post such as vertical or horizontal posts of cardboard, carpet or natural fibre.
- Food puzzles are a great way for cats to “hunt” for their food. “Scatter-feeding” kibble allows cats to chase and catch their food like prey.
- Provide access to the outdoors with a screened porch or an enclosed outdoor run (catio).
- With training, cats can adapt very well to walking with a leash and harness.

## EDUCATE PET OWNERS

Following are various actions, called **Stewardship Practices**, which can help reduce the impact of cat predation on bird and wildlife populations. It must be kept in mind that limiting the impacts of unowned, roaming owned cats and farm cats require different strategies.

Local governments have jurisdiction to implement a number of mechanisms to control cats, but none are likely to be effective or politically possible in the absence of public education efforts. Public attitudes towards control measures typically vary with pet ownership. Non-cat owners are more likely to recognize that cats may pose a threat to wildlife in urban and suburban areas and are more likely to favour control of cat movement. However, finding and working with cat owners who do support strict controls can be very effective in educating others and increasing public acceptance of these measures. Other potential partners include animal shelters, local veterinarians, and nature clubs.

### KEY POINTS FOR PET OWNERS

#### KEEP OWNED CATS INDOORS OR ON LEASHES

Pet owners can prevent the deaths of many birds and mammals and their cat will likely live much longer by keeping the pet indoors. This is the single most effective stewardship practice to limit the impact of cat predation on wildlife and species at risk.

#### NEUTER CATS

Cats can breed at just 4 to 6 months of age and can produce two litters annually. With about 9.3 million owned cats in Canada, allowing pets to breed is unnecessary and contributes to the problem of cat predation on vulnerable wildlife. Neutered animals also range over smaller areas.

#### KEEP CATS AWAY FROM NESTS AND FEEDERS

Keep cats out of bird feeding areas by fencing the area to exclude all cats. If cats do have access to the bird feeding areas, place feeders on high poles away from areas where cats have cover to stalk. Avoid providing bird seed on the ground. If it is not possible to keep cats away from bird feeders, then do not put bird feeders out.

For more ideas on deterrents visit:

[www.catsandbirds.ca](http://www.catsandbirds.ca)

## ADOPT POLICIES AND BYLAWS TO REDUCE IMPACTS OF CATS ON BIRDS AND WILDLIFE

Bylaws and policies evolve to reflect the values and needs of communities. Bylaws for animal control often only stipulate regulations for dogs. Newer bylaws titled “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 modify or enact bylaws to protect birds and other small wildlife within their jurisdictions.



Roaming cats have been shown to have a significant negative effect on local wildlife and bird populations. The Stewardship Centre for British Columbia recommends the adoption of bylaws and policies to address cat overpopulation and wildlife conservation. Addressing the issues around the owned outdoor cat populations will decrease the demands on feral unowned cat care programs.

Municipalities in British Columbia can require that cats be licensed, neutered and/or vaccinated with permits for exceptions such as licensed breeders or animals too old or medically unfit to be neutered safely. Microchips or tags can be used to positively identify animals, reducing the number of lost pets that are sent to shelters or euthanized. A licensing program can also be used to limiting the number of cats per household and to allow the return of lost pets to owners. Farmers can be required to ensure all of their cats are sterilized, and educated about how to minimize the impact of their cats on local wildlife.

Barn Swallows, Little Brown Myotis bats, and American Robins are susceptible to cat predation.