

Educational Forum on Cats (Impacts and Regulations)
Joint Meeting of the Parks & Public Health and Safety Committees
Village of Shorewood Hills

Wednesday, March 1, 2017
Village Hall - 810 Shorewood Boulevard

I. Meeting called to order at 7:00 pm by Karl Franz.

Parks Committee Roll Call: Members present: Kathie Brock, Sue Denholm, Roma Lenehan, Nancy Heiden, David Boutwell and Anne Readel.

Public Health and Safety Committee Roll Call: Members present: Felice Borisy-Rudin, Mark Lederer, Tim Crisp, and Josh Sotos.

Others present: Approximately 50 residents attended the event, including Board members Fred Wade, Mark Sundquist, Dave Benforado, and John Imes.

II. Summary

The educational session was led by the following panel of four well-known experts on the issue of free-roaming cats (in order of presentation):

- Dr. Bryan Lenz, Director of Bird City Wisconsin
- Dr. Stanley Temple, Emeritus Professor at University of Wisconsin-Madison
- Dr. Sandra Sawchuk, Faculty at University of Wisconsin Veterinary Care
- Dr. Susan Krebsbach, Veterinarian and Founder of Dane County Friends of Ferals

Each panelist spoke for approximately 20-30 minutes. The four panelists provided information on the impacts of pet cats¹ on wildlife, human health, and cat health. Dr. Krebsbach provided some additional information on issues specific to community cats. Drs. Lentz, Temple, and Sawchuk general felt that the best course of action for wildlife, human health, and cat health is to keep pet cats indoors, or only allow pet cats outdoors if under owner control (i.e., if the cats are on a leash, confined to a cat patio or cage, or otherwise restricted to the owner's yard). Dr. Krebsbach noted that she keeps her own cats indoors with access to a fenced-in yard and believes that there are good reasons to keep pet cats indoors. However, she also felt that whether to allow cats outdoors is a personal choice. She believes education is key as ordinances are difficult to enforce or regulate.

III. Evidence Presented

1. **The Village's Current Ordinance.** The Village's current ordinance allows a pet cat to free roam as long as it wears a bell. Drs. Lentz and Temple noted that domestic cats are one of the only domestic animals that current society allows to free-range with few restrictions. For example, Dr. Temple noted that most societies have restricted the ability of dogs (and other domestic species) to free-range. It was raised during the session that the Village is one of the only communities in the surrounding area that allows cats to free-range.

¹ Dr. Krebsbach defined "pet cats" to mean cats have an identifiable owner and home setting. She defined "community cats" to mean cats that may or may not have a caregiver (such as a barn cat) but do not typically have a home setting. The other panelists appeared to accept these definition for the purposes of the session.

Dr. Lentz also noted that while the ordinance allows cats to free-range, it also prohibits cats from depositing feces in another person's yard. Dr. Lentz stated that these provisions are contradictory since free-roaming pet cats will deposit feces in another person's yard. Dr. Lentz further indicated that cats could be considered a public nuisance under the ordinance since free-roaming pet cats can kill wildlife in and spread diseases to a neighbor's yard.

Dr. Temple suggested the following test for creating an ordinance to deal with free-ranging cat issue: (1) will what you're doing reduce the free-ranging cat population; (2) will it avoid causing ecological harm to native wildlife; and (3) will most people feel the solution is reasonable. He does not believe that our current ordinance meets at least points 1 and 2. Dr. Temple stated that he vigorously supports solutions that support this test. If current cat owners elected to keep their cats indoors, it could eliminate 1/3 or more of all free-ranging cats.

Dr. Krebsbach stated that although there are health and environmental issues associated with allowing pet cats outdoors, she believes it is a personal choice. She also stressed that the issue really comes down to education since ordinances are difficult to regulate. She would rather have people making more educated choices. For example, if you're going to let cats out, don't let them out during the morning and early evening (increased predation risks to cat and birds). Don't let them out during bird migration time periods. She also noted that there are collars that owners can make cats wear to reduce bird predation.

2. Many Major Animal-Focused Organizations Recommend Keeping Cats Indoors. Dr. Lentz reported that virtually all conservation organizations are against allowing cats outdoors. Further, PETA, the Humane Society, and AVMA are all against allowing cats outdoors.

3. Impacts of Free-Roaming Cats on Wildlife

- a. Wildlife Conservation. Cats are an invasive and exotic species. Dr. Lentz defined invasive species as a "plant or animal whose movement is assisted by humans, is nonnative to a particular region, and spreads widely in its new environment causing damage to the native species in the ecosystems they invade."

Dr. Temple indicated that the problems with free-ranging cats are well-documented. In particular, much research has been conducted on the impacts of cats on wildlife. Some of this research was conducted by Dr. Temple in Wisconsin (discussed in more detail below). Dr. Temple reported that a recent study identified domestic cats as the exotic mammal that has caused the most damage to wildlife species that are currently threatened with extinction, or have already gone extinct. In particular, cats have been responsible for numerous species extinctions on islands. Overall, Dr. Temple and Dr. Lentz stated that free-ranging cats are a major issue in conservation biology of wildlife.

- b. Predators. According to Dr. Temple's research, there are at least 1.4 million free-ranging cats in rural Wisconsin (which includes both pet cats and community cats). In some areas, cat densities were higher than the combined densities of other predator animals. Cats are the major predator in rural Wisconsin. Dr. Krebsbach noted that there is a negative correlation between the number of free ranging cats and other predators.

Dr. Temple noted, in response to a resident's question, that there is a difference between the rates of predation between native predators and cats. Pet cats are a subsidized predators (they are fed by humans). Native predators are not subsidized; they have a very tight relationship with prey. When prey declines, native predators move out of the area. This is not the same with pet cats. As a result, pet cats have a disproportionate

impact on prey in an area. Even if there are only a few prey animals in an area, they could be killed by cats.

- c. Birds. Dr. Lentz reported that cats are the primary drivers of bird declines, aside from habitat loss and climate change. Dr. Temple and Dr. Lentz noted that studies have reported that approximately 9-10% of the bird population is killed by cats each year.² These cats prey upon a wide range of species, including songbirds and ducks. Dr. Temple's research found no difference in the average number of birds killed by cats each year between free-roaming pet cats and community cats, even if cats were being fed. Thus, "even well-fed cats kill wildlife." Drs. Lentz and Temple both concluded that cats can have a strong impact on bird populations.

Dr. Krebsbach noted that habitat loss and climate change are the main drivers of bird declines. She noted that while that it does not mean that we shouldn't do something about cats, we need to understand the causes from habitat loss.

One resident was concerned that we were focusing too much on cats when habitat loss and climate change were the larger drivers of bird declines. Dr. Lentz noted that even if one disease kills more people than another, it doesn't mean that we shouldn't be trying to reduce deaths from both diseases. Dr. Temple noted that bird loss from cats is something that, as a Village, we can directly influence, unlike the large scale issues of habitat loss. Likewise, even though native predators kill wildlife, free-ranging cats are directly related to human decisions. We don't have the ability to make decisions where native hawks fly, but we can decide about cats.

- d. Mammals. Dr. Lentz indicated that cats predate an estimated 12 billion mammals a year. Cats can also transmit diseases to other wildlife, such as leukemia, feline immunodeficiency virus, feline distemper, rabies, and toxoplasmosis. Dr. Temple told a personal story about a bobcat family that made a den close to his Baraboo home. The bobcat babies all died from distemper. The babies likely contracted distemper from the cats the mother was killing and feeding to her babies. Dr. Temple also reported that seals in the United States have died from toxoplasmosis transmitted by cats.
- e. Birds and Mammals in the Village. Using published estimates of the number of birds and mammals killed by cats each year in the United States, Dr. Lentz estimated that cats in the Village kill 3502.5 birds and 6395.6 mammals per year. For this calculation, Dr. Lentz estimated that there were 430.1 cats in the Village, based on the Village population size and the average number of cats per household in the United States.
- f. Bells. Studies have shown that cats wearing bells kill wildlife at the same rate, or a slightly reduced rate, as cats without bells. Drs. Lentz and Temple agreed that the slight reduction in predation rates in a few studies were not adequate to protect wildlife from cat predation. The panel did appear to agree that there may be other collar devices available that can more significantly reduce cat predation rates. For example, brightly colored collars, like those found at <https://www.birdsbesafe.com/>, may reduce bird predation rates by providing a brightly colored pattern that can help birds identify cats. Other bib-like

² Dr. Lentz reported that one study estimated that 2.4 billion birds are killed per year in the US by cats. There are 20 billion birds each year in the US. Further, Dr. Temple reported the results of his own Wisconsin-based study where he found that free-ranging cats killed average of at least 5.6 birds per cat per year. There was no difference in indoor/outdoor house cats and outdoor cats, even if they were fed. These cats kill at least 7.8 million birds per year (1.4 million cats x 5.6 birds per cat per year).

devices, similar to those shown on this website, <https://catgoods.com//>, can also help to reduce bird predation rates if worn by cats.

4. Impacts of Free-Roaming on Pet Cat Health

- a. Lower Life Expectancy. Allowing pet cats to free-roam can reduce their life expectancy. Dr. Sawchuk reported that indoor cats live an average of 12-20 years and that indoor/outdoor cats live 2-3 years less. Dr. Temple further reported that free-roaming pet cats in his Wisconsin study experienced higher rates of mortality than indoor cats.
- b. Greater Risk of Infectious Diseases. Free-roaming cats are at a greater risk of contracting diseases, including zoonotic diseases, which can be transmitted from cats to people or wildlife. Dr. Sawchuk reported that cats that free-roaming cats can contract upper respiratory infections. For example, 2.3% of cats are positive for Feline Leukimia Virus (FIV). FIV can cause cancer and there is no cure. FIV is also transmitted through contact with other that are carrying this disease. She indicated that owners that allow their pet cats to free-roam are putting their cat, and possibly other neighbor cats, at risk. Dr. Krebsbach noted that many of the infectious diseases we worry about with cats, such as FIV, are found at comparable levels in pet and feral cats.
- c. Contact with Poisons. Dr. Sawchuck reported that free-roaming cats can come into contact with poisons. For example, permethrin is a pesticide that can be applied to lawns and is a serious toxin for cats. The leaves, flowers, and pollen of asiatic lilies are also toxic to cats. Asiatic lilies are common in gardens and cats can ingest poisonous pollen from these plants, even if they just brush against them, get pollen on their fur, and then groom themselves.
- d. Other Risks. Dr. Sawchuk reported that outdoor cats can get lost, and are at risk from other predators, such as owls, dogs, and coyotes, which can all prey on cats. Dr. Sawchuk also reported that she regularly has cat patients that come in with frostbite and lose body parts from being outside in extreme weather. Cats can become trapped in garages/buildings, and that humans sometimes hurt or kill cats.

5. Impacts of Free-Roaming Cats on Human Health

Dr. Sawchuk provided the most intensive overview of the various diseases that humans can contract from cats. Other panelists also noted various human health concerns from free-roaming pet cats, primarily toxoplasmosis and rabies.

- a. Toxoplasmosis: Cats are the only animal that can shed the organism into the environment. Once shed, they are in the environment and they are very resistant (survive heat, cold, drought, etc). People can become infected by toxoplasmosis from undercooked meat (grazing animals are ingesting it from soil), gardening in soil (where it was also deposited), or touching cat feces. The CDC identifies it as the second leading cause of death from food borne illnesses. Approximately 25% of US population are infected. If a woman becomes infected while pregnant, toxoplasmosis can cause abortion or birth defects. If a person becomes immunocompromised (HIV, chemotherapy, immunosuppressant drugs), toxoplasmosis can become active and a huge problem for such people. Dr. Sawchuck said that this is one of the main reasons she wants to see cats indoors – safety of humans.
- b. Roundworms. Roundworms (or their eggs) are extremely hard to remove from the environment. Approximately 25% of cats are positive for roundworms. People cannot realistically get rid of them once the soil is contaminated. If you have cats roaming the

neighborhood and defecating, it can cause a big risk to children. In particular, there is an ocular risk to children – roundworms are one of the leading causes of blindness in young children. Roundworms can also migrate to various organs in the body and the brain.

- c. Hookworms. Hookworms are not prevalent here (more in the south) but we do see it occasionally. Humans can become infected by hookworms if they walk through an area that is contaminated. It can be very painful and may result in several weeks of having larvae migrating under your skin. In children, it can migrate to the gut and cause horrible gastrointestinal disease.
- d. Tapeworms. Cats can ingest tapeworms when eating other animals. There is one variety of tapeworm that cats can carry in this area. The eggs cannot be seen but are immediately effective. If ingested by people, tapeworms can cause a disease that is almost always fatal. The CDC is getting involved with this issue; it says that if you have cats or dogs eating prey, they should be dewormed quarterly for tapeworms.
- e. Ringworm. Ringworms are a fungus that can be transmitted from cats to people. Outdoors cats come in greater contact with the spores.
- f. Rabies. Rabies is rare but still a concern. There have only been two cases in Wisconsin of cats transmitting rabies. However, if a person becomes infected, and not treated, it is a fatal disease. Dr. Lentz noted that more rabies cases arise from transmission from cats than from dogs. Dr. Krebsbach noted that raccoons, skunks, and bats are more likely to carry rabies than cats. She further noted that feral cats often don't come close enough to bite humans. It was noted that in order to license your pet cat in the Village, you need to show proof of rabies vaccination. However, Karl noted that very few people license their cats in the Village.
- g. Fleas and ticks. Once fleas get into your house, they are hard to get rid of. They can also transmit tapeworms to people. Dr. Sawchuk also noted that the Lonestar tick is hitting Wisconsin and it transmits a disease that is fatal to cats. If you have an indoor/outdoor cat, you should be giving them anti-tick medications.
- h. Criticism from residents. There was some criticism from a resident that rates of infection/illness were not provided for all of the above diseases. That resident stated that such information is necessary to assess the risks from allowing pet cats to free-roam. The panelists did note that 100% of toxoplasmosis cases are linked to cats. Dr. Sawchuk further stated that even if risks are low for some diseases, the damage of infection can be high (such as blindness in children).

Some residents noted that other animals, such as chipmunks birds, and dogs can also bring infectious diseases into the Village, such as rabies, bird flu, and parasites. Dr. Sawchuk noted that it is much more likely for a person to get sick from their cat than a chipmunk. We are in much closer contact with our pet cats, in some cases, we may even share a pillow with them. She also noted that dogs can spread diseases from feces and urine, which is one of the reasons why we require owners to pick up dog feces.

6. **Additional Resident Concerns Not Addressed Above**

- a. Welfare concerns about keeping cats indoors. All of the experts noted that there are many methods available for cats to enjoy the outdoors without all the issues discussed above. Dr. Temple noted that he puts his cats in a cat enclosure (i.e., "catios") to give it outdoor time. Dr. Krebsbach noted that she allows her pet cats to go outside, but only in

her fenced-in backyard. Dr. Sawchuk noted that many outdoor cats can be transitioned into indoor cats if given enrichment indoors (bird feeders that they can watch, play time, cat trees, etc.).

Dr. Lentz said that the argument that “my cat is happier outdoors” applies to a lot of animals, such as dogs, who would probably rather be running around outside but we don’t allow due to a variety of public health reasons.

Dr. Krebsbach noted that there are many ways to confine cats while allowing them outdoor access. For example, cat fencing can be used to keep them in the backyard. Screened in cat porch or cat tents are also available. Pet strollers can also be used. Some cats can also be trained to walk on a leash or harness. She noted that there are good reasons to keep them indoors, but that she believes it is a personal choice that is very hard to regulate.

- b. Outdoor cats keep the rodent population down. It was noted that cats do kill a lot of mammals. However, Dr. Lentz noted that in terms of solutions for dealing with rodent problems, the UW Extension identifies free ranging cats as low on the list. However, as numerous residents noted, some of the other alternatives, such as poisons, may have their own issues.

7. Issues Specific to Community Cats

- a. Dr. Krebsbach believes that community cats need to be handled differently than pet cats. The solution that she advocates is TNR (trap, neuter, return). Community cats are trapped, brought into clinic, vaccinated and neutered. Cats are then returned to their original location. The process is intended to halt reproduction without causing harm, eliminate reproduction, reduce population size through natural attrition. She believes this method improves cats’ welfare, decreases nuisance behaviors (fighting, urinating), and is the only scientifically proven way to decrease cat populations. She also noted some unintended consequences of removing free-roaming cats, such as an overpopulation of rodents. Additionally, it may create a “vacuum effect” in which more cats actually move into the area.
- b. Drs. Temple, Lentz, and Sawchuk noted that they were told that they were asked to talk about pet cats, not community cats. Each noted that they had some disagreement with Dr. Krebsbach’s recommendations for TNR, and whether a vacuum effect was created, but these areas of disagreement were not explored in any detail due to time constraints.
- c. There appear to be some community cats that live in the Village, although it is not clear how many. It was noted that the Village ordinance may not allow trapping of cats.

Adjourned at 9:38