

I love Cats, but why should stray cats disappear from the streets?

As a cat person who doesn't have a cat, my only chance of encountering these cute little creatures is when I come across them on the streets. My irresistible desire makes it nearly impossible to refrain from petting them, and sometimes I would bring them treats. However, behind this harmonious scene of humans and stray cats living happily with each other lies a significant environmental issue.

Cats are inborn predators. Cats hunt mice may be common knowledge, and that would definitely benefit humans. They may not be as deadly as some of their relatives in the Felidae family, but what is less known is that other animals are also on their death note. [Billions of birds](#)(*Cornell Lab*) die because of those roaming little animals. But are stray cats actually a problem, and should they be taken down?

The origin of stray cats

People might mix real stray cats with feral cats. The main difference between them is that stray cats are socialized to humans while feral cats aren't. Today's cats are said to be domesticated in Africa and have been introduced to every corner of the world mainly by [sailors and settlers](#)(Pedersen and Pratt). Then, just like any other domesticated species, in human settlements, some feral cats started to interact with humans. They soon discovered that they were adored by the two-footed animals, very much alike their ancestors in ancient Egypt. That's when more and more feral cats become stray cats.



Ancient Egyptian Cats, © Getty Images

According to past records, the *felis catus* species have lived with people for a few thousand years, and humans love them. They don't mess with humans, but under their

reign of terror, some species hate cats.

Invasive species?

An invasive species, as to invade an area, [isn't indigenous](#)(*Invasive Species*). It must adapt to the new environment quickly, create offspring and then do harm locally, or it wouldn't be given the name. Let's look at what is the situation with cats.

Cats aren't indigenous. But even though they're far from their origin, they adapt to the environment terrifically well. Mating every spring, they reproduce very quickly. A good example of this would be what happened on Marion Island nearly a century ago. The government brought 5 cats there for mice control in 1949 and by 1977, there is a shocking number of [3400 cats](#)(*Invasive Species*) living on the island.

One of the most important factors in the classification process of invasive species is how much damage they do. Cats are inborn hunters. Domestic cats would go hunt small animals [for sport](#)(Alex) even when they're well-fed.

Now we grant cats the name of "invasive species", how do their role affect humans and the ecosystem specifically?

Crucial impact on the ecosystem

"Cats have been an issue for birds here in CSC for a long time, "says Antonio Sui, the leader of the Bird Conservation ZhiXing. "Last year, another student sent me a footage of a cat holding a dead bird with its mouth." In the footage, the cat ran away with the bird when it noticed the shooter's presence with blood dripping down from its mouth. It doesn't look like any teacher-owned cat.

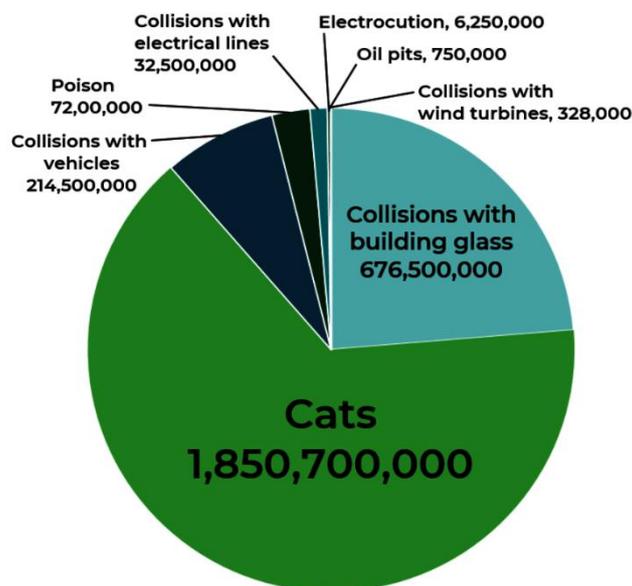


Tom the Cat Who Lives on Campus, photo by Will Wang

“The living conditions here (on CSC campus) might be a little bit too good for cats. They sometimes go to the greenhouse and consume waste from Sodexo that is supposed to be the fertilizer for the plants, and at the same time they kill for food.” He said.

Because wandering cats instinctively hunt, animals like birds are on tenterhooks everywhere. In the US, the 100-million roaming stray cats kill approximately [2.4 billion birds](#) ("Keep Cats") every year, making it the biggest cause of human-related(indirect) mortality for birds in the country. The devastating number is more than 1.5 times of the population of people of China.

LEADING CAUSES OF HUMAN-RELATED THREATS TO BIRDS



Source: U.S. Fish, Wildlife, and Parks - based on multiple studies
<https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>

Source: [NYC Audubon](#) ("Keep Cats")

In addition to the direct ramifications of predation, the diseases carried by cats are also troublesome. Toxoplasmosis, a kind of disease transmitted by the parasite *Toxoplasma gondii* in cats' feces, also indirectly damages the ecosystem. [Diarrhea, neurological signs like incoordination and tremors, and even blindness](#) (Ranjan) in some cases are found among birds, and small mammals suffer from symptoms such as [loss of vision, diarrhea, respiratory difficulties](#) (Diseases).

Rabies might be one of the deadliest diseases for humans, and stray cats carry it. Nearly 93% of rabies cases in the U.S. occur in wildlife. Annual data on rabies surveillance have shown distinct geographic trends, with [183 of the 241 cats \(76%\) testing positive](#) (Are stray) in 2018 originating from just nine states where the raccoon variant is widely spread—Pennsylvania, Maryland, New York, Virginia, Florida, Georgia, New Jersey, South Carolina, and North Carolina.

Unneglectable concerns

Cats, as serial killers and transmitters of viruses, seem to be heinous for their crimes. There are people who want them to be taken down, and some even lynch cats in the name of “eliminating the evil”. Before committing extreme actions, there are other things that we must consider.

Albeit being an invasive species, we can’t put aside the positive impact for humans of cats as pest control. From the legend of Unsinkable Sam as a ship cat during World War II to today’s Chief Mouser, Larry the Cat serving at 10 Downing Street, cats have been used for pest control even in modern times. A [2018 research](#) (*Frontiers in Ecology* 5) suggests that for each cat sighting, rats are 1.19 times more likely to hide and cease activities. A good example would be what happened in the city of Chicago.

The rodents didn’t stop disturbing people’s life until the [Cats at Work project](#) (*Tree House*) started. Under the management of the Tree House Humane Society, the seasoned rat hunters were released in certain areas that desperately needed rat control, and since then cats were proved to be inimitable in this field as human exterminators were able to do little.



Cat Free Roaming Outside Hunting Mouse © BPSPCA, [CC BY-NC-SA 2.0](#)

“I instantly saw the rat holes vanishing,” Thomas, a resident living in Chicago said after the project started. “I have not seen a rat cross our yard since the cats have arrived.”

Yet this symbiotic relationship has been going on for thousands of years. People are still in need of the cute animal to control rat activities.

Lovely companions

Cats are unconditionally loved by many people. According to [research](#) (*Frontiers in Psychology* 2), the reason why we consider felines to be cute is that they share many features with human babies, and it is human instinct to care for the young. Today's cats are pretty much domesticated to humans too, both mentally and biologically. [A study](#) (Montague et al. 3) suggests that the evolution of at least 13 feline genes allowed stray cats to become more sensitive to food rewards and be less fearful of people.

Unquestionably, people love cats very, very much. There has been a strong emotional bond between stray cats and human beings for thousands of years. Moreover, the bond is ingrained deep in the roots of some cultures. In the Islamic world, all animals are treated with much love and affection. In many hadiths, it is strictly forbidden to kill cats, and the love for cats is described as part of faith.

According to my own experience in Istanbul, cats are everywhere on the streets, not afraid of humans at all. In winter when the temperature drops, they're always welcomed in mosques, and the muezzins would care for them. Some even put money in donation boxes for the fundraising of cat food. The unconditional love for cats is already deeply rooted in the culture of the country.



Cats in Istanbul © Wikipedia Commons, CC BY-SA

Despite social norms and practices, countries have established animal welfare laws as well. With developed countries such as [Sweden, United Kingdom and Austria](#) ("Animal welfare") taking the lead, maltreatment of animals including stray cats are becoming unlawful in an increasing number of countries. Violators would face [a minimum of 6 months or up to 4 years](#) (Annamaria) of imprisonment in Sweden for being cruel to a cat.

In Sweden, you can't really see roaming cats on the streets. Nonetheless, cats are actually the most popular pet in Sweden according to a 2021 survey, [with 1.5 million cats living in households](#)(Annamaria). How is this situation made possible?

The future of human and stray cats

Why do we define stray cats as an invasive species? They didn't naturally become this pervasive, and it is a human-related problem if we count the damage they've caused. Stray cats themselves don't live easy lives either. The future goal of humans is to end this vicious cycle, and the current approach of developed countries like Sweden is the TNR.

TNR stands for [Trap-Neuter-Return](#)("Trap-Neuter-Return (TNR)"). The process consists of three simple steps: humanely trap cats, neuter, and vaccinate the cats at the vet, and at last return them to their outdoor homes to which they are bonded. The key part comes with spaying the cats so they can't reproduce, and it wouldn't affect other aspects of their lives either.



Cat at the Vet © Deposit Photos

But why not just contain them in shelters and then seek adoption? It would bring much pressure to the existing animal shelters, and not every stray cat makes a good pet. In countries like Spain, which is already using TNR as a practice, if you want to [have a cat as a pet](#)(Armstrong), you can only get them directly from their birth breeding nucleus or through adoption.

In the San Francisco Bay Area, [a study](#)(Spehar and Wolf 6) was carried on a 175-cat colony to verify if TNR is a good method to control the cat population. As of 2020, only one cat remained in the colony, and that was a 99.4% decrease in the number. As more and more regions and organizations picked up this way of cat treatment, this

seemed to be the best solution for the future of humans and stray cats.

What shall we do now?

In conclusion, it could be good to have stray cats around, but from a scientific perspective, we shouldn't ignore the negative impact the species bring to the ecosystem either. We shouldn't violently eliminate the species, but rather adopt a reasonable and scientific way to treat them and achieve a balance, and luckily, we have an available option now. Next time you come across some random cat on the streets, besides petting them, please consider if your acts would really benefit the cat, the whole *felis catus* species, human beings, and the earth as a whole.