

Beyond the Litter Box: The Global Impact of Free-Ranging Cats

Unlike many indoor-only cats who are finicky eaters, cats with unsupervised outdoor access eat a random assortment of animals, including reptiles, amphibians and emus.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- A new study confirms what earlier research has uncovered — free ranging cats kill large numbers of wildlife, including endangered species
- Unlike many indoor-only cats who are finicky eaters, cats with unsupervised outdoor access eat a random assortment of animals, including reptiles, amphibians, and emus
- One of the goals of wildlife conservation organizations is to ensure “responsible pet owners” keep their cats indoors or similarly confined at all times; this obviously doesn’t address the feral cat population
- Not everyone agrees that free roaming cats are an imminent threat to wildlife; the advocacy group Alley Cat Allies has long been strongly opposed to “misinformation and misunderstandings about cats that all too often result in misguided policies that lead to cats being killed”

If you have feline family members, hopefully they’re **indoor cats** with controlled access only (e.g., on leash walks, and/or in an enclosure like a catio) to the great outdoors. This set-up is best for not only their health and safety, but the health and safety of their prey.

Cats are, after all, not only prey for larger animals, but also highly efficient predators. Per the Scientific American:

*“... [D]omestic cats (*Felis catus*) are perfectly adapted killing machines, armed with retractable claws, sharp fangs and night vision. And these potent predators are anything but picky. As humans have spread cats around the world over the past 9,000 years, these ferocious felines — which were likely domesticated thousands of years ago in the Near East — have terrorized native creatures on every continent except Antarctica.”¹*

Free Ranging Cats Are Definitely Not Fussy Eaters

Recently, an international team of researchers compiled a list of all the species on the average free-roaming domestic cat’s menu, and believe it or not, the number exceeds 2,000! Around 350 of the species are of “conservation concern,” and several are already extinct. The study was recently published in the journal Nature Communications.²

“We don’t really know of any other mammal that eats this many different species,” the study’s lead author Christopher Lepczyk, an ecologist at Auburn University, told Scientific American. “It’s almost like an indiscriminate eater; they’re eating whatever’s available.”³

I'm sure many of you are thinking, "Indiscriminate eater? My CAT? The same animal who regularly turns up her nose at the very expensive cat food I buy her? Impossible!"

But it would seem, based on this research and earlier studies, that the cat running loose in your neighborhood is far less finicky about his or her diet than the kitty living under your roof!

What the Cats Ate

Past research into domestic cat predation focused primarily on common prey animals such as small mammals and birds. For the current study, the researchers analyzed the largest database of cat diets to date — over 530 scientific papers, books and reports spanning more than a century. Then they organized the information into groups to understand what types of animals the cats dined on. The 2,083 different species included:

- 981 species of birds
- 463 species of reptiles
- 431 species of mammals
- 119 species of insects
- 57 species of amphibians

In addition to common animals such as mice, rats, sparrows, and rabbits, the cats also preyed on green sea turtles, emus, and domestic cattle.

The researchers then cross-referenced their information with the International Union for Conservation of Nature's (IUCN) Red List of Threatened Species and noted that 347 species the cats consumed are listed as near threatened, threatened (including some endangered or critically endangered species), or extinct.

Many of the threatened species are animals that are endemic to areas without natural "catlike" predators, leaving them naïve, without the ability to escape.

Cats: The 'Ultimate Versatile Generalist Predator'

Wildlife ecologist Sarah Legge of Charles Darwin University in Australia (who was not involved in the research) studies cats' impact on animals in Australia and believes they are "one of the most serious threats to the continent's biodiversity."

*"The study reaffirms that cats are the ultimate versatile generalist predator," Legge told Scientific American. "Cats continue to cause population decline, and more extinctions are inevitable if we don't manage cats. Australia's native fauna are not equipped to withstand predation from a versatile predator with a relatively quick reproductive rate."*⁴

Lead study author Lepczyk believes the team's findings are actually conservative, i.e., on the low end of which and how many species free roaming cats are eating. "We have a representation of what they're eating, but we think that they're eating a lot more," he says.

Lepczyk believes future research should explore cats' ecological impact in biodiverse regions of South America, Asia, and Africa, which will likely uncover a multitude of additional prey species. His hope is that the information he and his colleagues uncover will help conservationists and policy makers "combat the feline invasion."

"Cats are a problem that we can solve," Lepczyk says. "At the end of the day, people need to be responsible pet owners."

The Kittycams Cat Predation Project

As noted earlier, the above study of domestic cat predation isn't the first. Over a decade ago, the University of Georgia and the National Geographic Society conducted a study to observe the activities of 60 free-roaming house cats in an urban area of Athens, Georgia. The goals of the study were to assess the impact of cat predation on wildlife conservation and to improve the health and well-being of pet cats.⁵

The researchers discovered that the Georgia kitties, who spent 5 or 6 hours outdoors each day, killed an average of 2.1 animals each week, including birds, mammals, reptiles and amphibians.

The cats in the study wore small, lightweight video cameras around their necks that allowed for a "cat's eye" view without disrupting behavior. The "KittyCams" were put on the cats by their owners each morning before they were let outside for the day.

At the end of the day, the cats' owners downloaded the video footage and recharged the cameras. Each cat's outdoor activities were recorded for about a week — long enough for researchers to confirm that cats are accomplished little hunters. Their findings:

- 30% of the cats killed animals at an average rate of 2.1 per week, which is about 1 kill every 17 hours they were out and about
- About 25% of the animals the cats killed were brought home, 30% were eaten, and almost half were left in the spot where they died
- 40% of the prey were lizards, snakes and frogs, 25% were small mammals like chipmunks and voles, and 12% were birds

Extrapolating the results of the Georgia study to outdoor house cats and feral cats across the U.S., it could mean an estimated 4 billion wild animals end up as prey for housecats and their feral counterparts, according to George Fenwick, president of the **American Bird Conservancy**.

Fenwick asserts that, "Cat predation is one of the reasons why one in three American bird species are in decline."⁶ And from Michael Hutchins, executive director and CEO of the Wildlife Society:

"I think it will be impossible to deny the ongoing slaughter of wildlife by outdoor cats given the videotape documentation and the scientific credibility that this study brings. There is a huge environmental price that we are paying every single day that we turn our backs on our native wildlife in favor of protecting non-native predatory cats at all costs, while ignoring the inconvenient truth about the mortality they inflict."⁷

Cat Advocacy Group Fights Back

Alley Cat Allies, a national cat advocacy organization, has been in long-standing and vehement disagreement with the position that free roaming cats are decimating wildlife populations. The organization has a page on its site, **Cats and Wildlife**, from which it “correct(s) misinformation and misunderstandings about cats that all too often result in misguided policies that lead to cats being killed.”

That page has links dedicated to “debunking bogus studies blaming cats for wildlife depletion,” including one titled “Humans: The Number One Threat to Wildlife.” I think it’s important to understand both sides of the argument. While it’s proven that cats are healthier and safer living in homes with humans, the fact is they didn’t always, nor do all of them now. With regard to the biology and behavior of felines, as Alley Cat Allies points out:

“A look at cat biology and behavior shows they have a place in the natural environment and play an important role in balancing the local ecosystem.”⁸

Sources and References

^{1,3,4} [Scientific American, December 12, 2023](#)

² [Lepczyk, C.A. et al. Nature Communications volume 14, Article number: 7809 \(2023\).](#)

⁵ [Wild Things Sanctuary \(Archived\)](#)

^{6,7} [American Bird Conservancy, August 6, 2012](#)

⁸ [Ally Cat Allies, Cats and Wildlife](#)
