

# Outdoor cats kill between 1.4 billion and 3.7 billion birds a year, study says

By [Juliet Eilperin](#), Published: January 31

[Outdoor cats](#) are the leading cause of death among both birds and mammals in the United States, according to a [new study](#), killing 1.4 billion to 3.7 billion birds each year.

The mammalian toll is even higher, concluded researchers from the Smithsonian Conservation Biology Institute and the U.S. [Fish and Wildlife Service](#), ranging from 6.9 billion to 20.7 billion annually.

The analysis, published Tuesday in the journal *Nature Communications*, suggests that feral and owned cats pose a far greater threat than previously thought. One study in 2011 estimated that cats in the United States kill roughly half a billion birds annually.

Peter P. Marra, the paper's senior author and a research scientist at the Smithsonian institute, said he and his colleagues "pulled together all the best estimates" from 90 studies to reach their estimate, taking into account the difference in behavior between owned and unowned cats.

"I don't think there's ever been an attempt like this," Marra said in a telephone interview, adding that the new estimate is "conservative."

Researchers estimate that one pet cat kills one to 34 birds a year, while a feral cat kills 23 to 46 birds annually. As a result, the new study provides a wide range of the total bird death count. "It's not a single number," Marra said.

George H. Fenwick, president of American Bird Conservancy, said in a statement that the findings should serve as "a wake-up call for cat owners and communities to get serious about this problem before even more ecological damage occurs."

"The very high credibility of this study should finally put to rest the misguided notions that outdoor cats represent some harmless new component to the natural environment," Fenwick said. "The carnage that outdoor cats inflict is staggering and can no longer be ignored or dismissed."

Cats pose the greatest danger to birds and mammals living on islands because

there are fewer opportunities for these animals to escape. Cats are responsible for helping drive 33 species of birds, mammals and reptiles to extinction on islands, including the Stephens Island wren in New Zealand in the late 1800s, according to the International Union for Conservation of Nature.

Scientists have a hard time measuring the effect of cats on small mammals in the United States because they lack precise population counts for these species, Marra said.

“We don’t know how many Eastern cottontail rabbits are out there, and we don’t know how many chipmunks are out there,” he said.

By contrast, researchers estimate that the United States is home at least 15 billion adult land birds. Cats kill about 10 percent of them each year, according to the analysis.

Marra and two other scientists, the Smithsonian institute’s Scott R. Loss and Tom Will from Fish and Wildlife, conducted their analysis as part of a broader study of humans’ impact on bird mortality. Roughly 150,000 to 400,000 birds in the United States [die annually in wind turbines](#), according to recent estimates, while 10 million to 1 billion birds die after [colliding with glass](#).

The fact that humans can take action to prevent some of these deaths — such as adopting policies to reduce feral cat populations and altering how wind turbines are designed — should provide hope, Marra said.

“These are things that are reversible once we understand them,” he said. “That’s the important thing here.”