

UF study finds cats No. 1 predator to urban mockingbird nests

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A new University of Florida study shows cats are the dominant predator to mockingbird eggs and nestlings in urban areas, prompting conservationists to urge pet owners to keep felines indoors at night.

The findings challenge assumptions that urban areas are places of refuge for nesting mockingbirds, a species researchers say plays an important role in controlling [insect pests](#) and serving as environmental indicators for metropolitan areas.

"I thought the [cats](#) probably really hammered them [birds] when they were fledglings, but when they were in the nests, I didn't really expect the cats to be a huge problem," said study author Christine Stracey, who led the research as a doctoral student at the Florida Museum of Natural History on the UF campus. "But I was really wrong about that."

Researchers video recorded northern mockingbird [nest predators](#) in urban and natural habitats during the nesting seasons from 2007 to 2009. The study in the May 2011 issue of [Biological Conservation](#) shows cats were responsible for more than 70 percent of the urban attacks.

The highest [population densities](#) of the mockingbird – the state bird of five states including Florida — are found in urban areas. Urbanization is one of the main causes of species endangerment in the United States, but some species such as the mockingbird have adapted extremely well to humans and urban environments, said Florida Museum of Natural History Ordway Eminent Scholar Scott Robinson, Stracey's research

adviser.

"Here's this native species that is able to not only live with us, but do really well living with us, and so it represents kind of the opposite of what we normally think about the effects cities have on native birds," said Stracey, now an assistant professor of biology at Westminster College in Salt Lake City. "If we can figure out why and how it succeeds, maybe there's ways and things we can do in terms of city planning and management that could promote the success of some of these other native species that aren't doing as well."

Researchers used small security cameras from March to August each year in Gainesville, including the Duck Pond and Capri neighborhoods, at the Ordway-Swisher Biological Station in Putnam County and in UF-owned pastures. The 57 documented incidents showed Cooper's hawks carried out a majority of nest predation events in rural areas. After cats, snakes were the second-most dominant predator in urban areas, followed by the American crow and swallow-tailed kite. These three were also observed as predators in non-urban areas, in addition to the flying squirrel, opossum, raccoon and blue jay.

"We only put cameras on mockingbird nests, but there are a number of species that nest in similar places," Stracey said. "We don't see any reason why cats wouldn't also eat cardinal [nestlings](#), brown thrashers, towhees – anything else that is nesting in similar locations."

Because infrared cameras captured night events, the black-and-white footage made it difficult to distinguish if all cats were pets, but Stracey said some were wearing collars.

"All but one of these cat events occurred at night," she said. "People should not let their cats roam outdoors at all, but at the very least, keeping them inside at night will cut down on nest predation. Beyond

that, we need to think hard about the feral cat problem."

In the last 20 years, the "Sylvester & Tweety" issue has become increasingly controversial, with birders and cat lovers taking the stand. The American Bird Conservancy reports cats kill hundreds of thousands of birds in the U.S. every year. An invasive species, cats are prized as pets for their ability to control pests, such as rodents. Previous research has focused on rates of cat predation on adult birds, and this data adds new factors when investigating declines in bird populations.

"There are a lot of loud voices that deny cats are important predators of birds in our cities," said Amanda Rodewald, a professor of wildlife ecology at Ohio State University. "But this study shows clearly that cats were the dominant predator in this Florida system – and that wasn't presumed, it was recorded on video, so it was fact."

The study also challenges assumptions about how urban systems operate, as the different foods available in cities result in altered foraging behaviors, Rodewald said. To the researchers' surprise, five of the 17 cat attacks in urban areas were aimed at the eggs.

Robinson describes urbanization as a critical issue.

"We think of urbanization as a disaster for birds," Robinson said. "We strongly believe that it's important to keep wildlife in urban settings so people don't lose their connection with wildlife."

Provided by University of Florida

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