AMERICAN BIRD CONSERVANCY

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Domestic Cat Predation on Birds and other Wildlife

CATS INDOORS

How many animals do domestic cats kill each year in the United States? Exact numbers are unknown, but scientists estimate that nationwide, cats kill between 500 million and one billion birds[1] and billions more small mammals such as rabbits, squirrels, and chipmunks each year. Cats kill common species such as the Northern Cardinal, Blue Jay, and House Wren, as well as rare and endangered species such as the Piping Plover, Florida Scrub-Jay, and California Least Tern.[2]

Multiple studies have found that free-roaming cats reduce wildlife abundance and diversity, and cause extinctions and dramatic reductions of native wildlife populations.[3]

There are more than 80 million pet cats in the United States according to market research and a pet food trade association.[4] A 1997 nationwide poll showed that only 35 percent are kept exclusively indoors, leaving the majority of owned cats free to kill birds and other wildlife at least some of the time.[5] In addition, millions of stray and feral cats roam our cities, suburbs, farmlands and natural areas. Abandoned by their owners or lost (stray), or descendants of strays and living in the wild (feral), these cats are victims of human irresponsibility due to abandonment, neglect, and failure to spay or neuter pets. No one knows for certain how many homeless cats there are in the United States, but estimates range from 60 to 100 million.

After loss of wildlife habitat and fragmentation due to human development, scientists now list invasive species, including cats, as the second most serious threat to bird populations worldwide.[6] It is estimated the annual economic loss from feral cat predation on birds in the United States amounts to $17 billion.[7] Birds make a number of significant economic contributions to the U.S. economy. Birdwatchers spend billions of dollars on their pasttime, and birds provide billions more dollars worth of ecosystem services, such as insect control and plant pollination that benefits agriculture.

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Cats Are Not a Natural Part of Ecosystems

The domestic cat, *Felis catus*, is a descendant of European and African wild cats, and did not exist in North America until colonists arrived. In the United States, cats were not abundant until the late 1800s, when they were imported to help control burgeoning rodent populations associated with agriculture.

Cats Transmit Disease to Wildlife

Unvaccinated cats can transmit diseases such as rabies to other cats, native wildlife and humans. Cats are the domestic animal most frequently reported to be rabid to the Centers for Disease Control and Prevention.[8] Cats are also suspected of spreading fatal feline diseases to native wild cats such as mountain lions, endangered Florida panthers, and bobcats, and to marine mammals, sea otters, and the endangerd Hawaiian Monk seal. For more information, see the fact sheet, *The Great Outdoors Is No Place For Cats* at http://www.abcbirds.org/abcprograms/policy/cats/materials/hazards.pdf.

Cat Predation Studies

Extensive studies of the feeding habits of free-roaming domestic cats have been conducted over the last 55 years in Europe, North America, Australia, Africa, and on many islands. These studies show that the number and types of animals killed by cats vary greatly, depending on the individual cats, the time of year, and availability of prey. Roughly 60% to 70% of the animals cats kill are small mammals; 20% to 30% are birds; and up to 10% are amphibians, reptiles, and insects.

Some free-roaming domestic cats kill more than 100 animals each year. One well-fed cat that roamed a wildlife experiment station was recorded to have killed more than 1,600 animals (mostly small mammals) over 18 months.

Birds that nest or feed on the ground, such as California Quail, are the most susceptible to cat predation, as are nestlings and fledglings of many other bird species.[9] The U.S. Department of Agriculture report, *Threats to At-Risk Species in America's Private Forests,* recommends increasing awareness about negative impacts of roaming cats. According to the report, "Ground-nesting species and birds that nest in the open in shrubs or trees are particularly vulnerable to predation from domestic cats."

The following are summaries of specific studies:

East Bay Regional Park District, CA: A two-year study was conducted in two parks with grassland habitat. One park had no cats,while but more than 25 cats were being fed daily in the other park. There were almost twice as many birds seen in the park with no cats as in the park with cats. California Thrasher and California Quail, both ground-nesting birds, were seen during surveys in the no-cat area, whereas they were never seen in the cat area. The researchers concluded "Cats at artificially high densities, sustained by supplemental feeding, reduce abundance of native rodent and bird populations."[10]

San Diego, CA: In a study of the relationships between coyote, mid-sized predators such as cats, and scrub-dwelling birds, cat owners living along the rims of canyons collected the prey their cats brought home. These canyons are isolated pockets of habitat with higher species abundance and diversity than found elsewhere. On average, each outdoor cat that hunted returned 24 rodents, 15 birds, and 17 lizards to the residence per year. Birds were 26.7% of the prey killed by cats.

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The researchers estimated that cats surrounding mid-sized canyons return 840 rodents, 525 birds, and 595 lizards to residences each year. This level of predation appears to be unsustainable. The study also found that in small canyons where the coyote was absent, there was an increase in mid-sized predators such as cats, and a drastic decline in diversity or elimination of scrub-breeding birds.

But in the larger canyons where coyotes were present, the scrub-breeding birds were also present.[11]

England: The Mammal Society conducted a survey of animals brought home by domestic cats. During a five-month period in 1997, 964 cats killed more than 14,000 animals. The mean number of catches or kills per cat was 16.7, and birds were 24% of the prey. The mean kill rates for belled cats was 19 and for cats without bells 15. Only 162 rats were killed by the cats. The researchers concluded, "Although it is unlikely that cats alone will cause any species to become endangered in Britain, for those which are already under pressure for other reasons, such as thrushes, harvest mice, grass snakes, and slow worms, cats could become significant."[12]

Wichita, Kansas: In a study of cat predation in an urban area, 83% of the 41 study cats killed birds. In all but one case, when feathers were found in scat, the owner was unaware that their cat had ingested a bird. In fact, the majority of cat owners reported their cats did not bring prey to them. Instead, the owners observed the cats with the bird or found remains in the house or in other locations.[13]

Wisconsin: Researchers at the University of Wisconsin coupled their four-year cat predation study with data from other studies, and estimated that rural free-roaming cats kill at least 7.8 million birds per year in Wisconsin. Suburban and urban cats add to that toll. In some parts of the state, free-roaming cat densities reach 114 cats per square mile, outnumbering all similar-sized native predators.[14]

Virginia: Researchers compared a free-roaming domestic pet cat in a rural area with four urban cats. The rural cat captured a total of 27 native species (eight birds, two amphibians, nine reptiles, and eight mammals). The four urban cats captured 21 native species (six birds, seven reptiles, and eight mammals). Between January and November 1990 each cat caught, on average, 26 individual native animals in the urban area, and 83 in the rural area. The study did not count prey killed and completely consumed, prey killed and left elsewhere, prey that escaped but died later from infection or injury, or non-native prey.[15]

Cats on Islands: Because some island bird populations evolved in the absence of mammalian predators, they have no defense mechanisms against them. When cats are introduced or abandoned on an island, elimination of entire bird populations can result. Domestic cats are considered primarily responsible for the extinction of eight island bird species, including Stephens Island Wren, Chatham Island Fernbird, and Auckland Island Merganser, and the eradication of 41 bird species from New Zealand islands alone. On Marion Island in the sub-Antarctic Indian Ocean, cats were estimated to kill 450,000 seabirds annually prior to cat eradication efforts.[16]

Cats in Habitat Islands: Cats can have significant impacts on local wildlife populations, especially in habitat "islands" such as suburban and urban parks, wildlife refuges, and other areas surrounded by human development. The loss of bird species from habitat islands is well documented, and nest predation is an important cause of the decline of neotropical migrants.[17]

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Cat Predation of Federally-Protected Wildlife

The Migratory Bird Treaty Act prohibits the hunting, taking, capturing, or killing of any migratory bird. In seeming violation of this landmark law, owners of free-roaming cats permit their pets to kill protected birds. As noted above, domestic cats are also killing birds and other wildlife protected under the Endangered Species Act.

The Truth About Cats and Birds:

Well-fed Cats Do Kill Birds. Well-fed cats kill birds and other wildlife because the hunting instinct is independent of the urge to eat. In one study, six cats were presented with a live, small rat while eating their preferred food. All six cats stopped eating the food, killed the rat, and then resumed eating the food.[18]

Cats With Bells on Their Collars Do Kill Birds. Studies have shown that bells on collars are not effective in preventing cats from killing birds or other wildlife. Birds do not necessarily associate the sound of a bell with danger, and cats with bells can learn to silently stalk their prey. Bells offer no protection for helpless nestlings and fledglings.

Most Birds That Seem to Escape Do Not Survive

Wildlife rehabilitation centers report that most small animals injured by cats die. Cats carry bacteria and viruses in their mouths, some of which can be

transmitted to their victims. Even if treatment is administered immediately, only about 20% of victims survive. A bird that looks perfectly healthy may die from internal hemorrhaging or injury to vital organs.

A large percentage of patients at wildlife rehabilitation centers are cat attack victims and animals orphaned by cats. In one study at Wildlife Rescue, Inc. in Palo Alto, California, approximately 25% of their patients between May and June were native cat-caught birds, and almost half were fledglings. Thirty percent of birds and 20% of mammals at the Lindsay Wildlife Museum in California were caught by cats.

Cat Colonies Are a Problem for Birds and Other Wildlife

Domestic cats are solitary animals, but groups often form around an artificial feeding source, such as garbage dumps or food specifically put out for them. These populations can grow very quickly, can have significant impacts on wildlife populations, and can cause significant health risks to other cats, wildlife, and humans. Feeding these cats does not prevent the predation of birds and other wildlife. See ABC's Trap, Neuter, Release brochure at www.abcbirds.org/cats.

Conclusion

Ultimately, cats are not responsible for killing our native wildlife—people are. The only way to prevent domestic cat predation on wildlife is for owners to keep their cats indoors! Citizens can also oppose Trap, Neuter, Release programs, which are inhumane and ineffective at reducing cat populations. See www.abcbirds.org/cats for more information.

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