



Photo above © Mary Andrews, Outdoor California Photography Award Program 1992

The domestic cat (left, seen eating sparrow) can be a serious threat to wildlife in California. They prey heavily upon native birds, small mammals, and reptiles and amphibians. Ground nesting birds, like the killdeer (above), are especially vulnerable. Killdeer nest (right).



Photo © Eva Begley, Outdoor California Photography Award Program 1992

Reducing cat predation on wildlife

By Frank Gray

It's a spring day at a California beach. Inland several hundred feet from the pounding surf lies a small sandy depression. It is the nest of a least tern, a small seabird. Inside are two chicks, being fed by parent birds. As the parents leave, a domestic cat approaches and pounces on one of the chicks.

The account about least tern chicks is not a stretch of the author's imagination. Cat predation is very real, both with this species and many others.

Humans react in many ways to cat predation. Both cats and many of their prey items are appealing, but which is considered most important? Sometimes, it's the cat. Unfortunately, the domestic cat is a serious threat to wildlife in California and in many parts of the world. They prey heavily upon native birds, small mammals, and

reptiles and amphibians, and have caused, or greatly contributed to, extinction of many animal species worldwide. The gravity of the cat problem has been recognized by the California Department of Fish and Game (DFG), the U.S. Fish and Wildlife Service, the Humane Society of the United States, various conservation groups, and others.

What is a "cat"? Domestic cats (*Felis catus*) descend from the European and African wild cat (*Felis silvestris*) and include cats that hunt outdoors as free-ranging pets and wild-born "feral" cats. Domestic cats have been introduced around the world, mostly by colonists from Europe. They were brought to North America in the 1800s to control rats. Although affectionate as pets, their skills and behaviors as predators remain

essentially unchanged from those of their ancestors.

Cats are super-abundant. This is the main reason why they are such a serious problem in California and many other places. There are an estimated 66 million pet cats and 40-60 million unowned, free-roaming cats in the U.S., according to the American Bird Conservancy (ABC). Numbers of pet cats and unowned cats are growing. About 30 percent of U.S. households have pet cats, and they are the most numerous pet. Studies in Wisconsin have shown that outdoor cats reached densities of about 114 cats per square mile *in some areas*. Cats were several times as abundant there as all other *mid-sized* wild predators combined, including bobcats and foxes. Cats have been artificially maintained at numbers up to 100 times or more the

typical abundance of their wild counterparts. They also have the capacity to reproduce rapidly in the wild, with up to three litters per year.

An urban myth claims that feeding and other human care will diminish hunting – it does not. Wild predators decline in abundance when prey becomes scarce, but cats fed by humans will remain abundant and continue hunting.

Unfortunately cats kill many birds. Fledglings, birds roosting at night and parents or young on a nest are particularly at risk. The many species of ground-nesting bird species are virtually defenseless from cats during breeding times whether adults, hatchlings and juveniles. California quail, western meadowlark, snowy plover, and the endangered clapper rail and least tern are examples of species facing particular pressure from cats.

Extensive studies of the feeding habits of free-ranging cats over 50 years and four continents have shown that small mammals make up about 60 to 70 percent of the kill, according to the ABC, and include: rabbits, wild mice, voles, and bats, and some reptiles and amphibians. Some of these are rare or endangered species or are locally uncommon and vulnerable animals in diminished habitats.

The number of animals killed is colossal. Researchers estimated that “outdoor” house cats and feral cats were responsible for killing nearly 78 million small mammals and birds annually in the United Kingdom in 1990. University of Wisconsin ornithologist Dr. Stanley Temple, who has done extensive studies with radio-collared cats, estimates that 20-150 million songbirds are killed by rural cats annually in Wisconsin alone. There is a report of another study in suburban desert neighborhoods near Tucson, Arizona, where cats killed slightly more than 80 small animals each per year; about 26 percent birds, 62 percent mammals, and 11 percent reptiles. Cat control is particularly important for those who live in rural areas. Studies have shown that the average number of birds and other animals killed by cats annually is greater in rural areas, as would be expected. Cat-related losses of wildlife on islands is often particularly severe, especially where fauna has evolved with no predators.

Cats hurt wildlife in ways other than just direct mortality. Cats often just



Photo © Steven Holt

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“play” with prey, injuring it in the process. Cat-induced injuries are one of the most common reasons for animal admission to wildlife care centers. Diseases can be transmitted from cats to wildlife, such as feline distemper and leukemia. The saliva from even minor cat bites will cause lethal infections in small prey. Cats compete with native predators such as barn owls for prey while the cats themselves usually enjoy protection to varying degrees from disease, predation, and starvation.

“Cat colonies” or feeding aggregations destroy wildlife. Feeding aggregations are groups of *outdoor* cats that are fed and otherwise cared for by individuals and many organizations. They occur in almost all cities in

California and elsewhere. One of California’s most controversial cat aggregations has been maintained at Chico’s Bidwell Park, prompting a city-imposed ban on cat feeding within park boundaries. Cats abandoned around garbage or places where they can get handouts often give rise to aggregations. Some of the better organized cat-advocacy groups advocate TTVAR (trap, test, vaccinate, alter, and release) of cats. Cat feeders or aggregation advocates working with cat feeders typically will decide to manage an existing feeding group to develop a long-term, TTVAR-managed aggregation. The landowner is usually contacted for support. Cats then get food and health care. But this may encourage people to abandon unwanted

Tips for reducing cat predation on wildlife

(The reference to outdoor cats includes both feral and free-ranging domestic animals.)

Keep cats indoors

- This is the key measure to reduce cat problems. Indoor cats lead longer and healthier lives than those roaming freely, according to the Humane Society of the United States.

Outdoor cats face:

- being hit by a vehicle
- contracting feline leukemia virus, feline immunodeficiency virus, rabies, or other contagious diseases
- getting fleas, ticks, fungi, or worms
- being attacked and harmed by dogs, by wildlife, and/or by malicious people
- suffering wounds and abscesses in cat fights
- getting lost or being stolen
- eating poisoned food or pesticides
- being caught in a trap or in a car's fanbelt
- Indoor cats typically live into their upper teens, while outdoor cats have an average life span of three to five years.

Unwanted Breeding

- Sterilize cats by neutering males and spaying females. This can be done at a low cost via veterinary clinics and sometimes without cost.

Bird Nest / Bat Boxes

- Efforts to aid bird and bat reproduction by placement of boxes can be completely negated by cats. Place bird nest boxes where cat presence is minimized or avoided. Cats are adept at killing birds in nest boxes, and may even reach into box openings to remove nestlings. Bat boxes should be located 12-20 feet above ground, on buildings or poles, according to Bat Conservation International.

Outdoor Cat Feeding

- Don't feed outdoor cats. Feeding will not diminish hunting and will tend to form high densities of cats that adversely impact wildlife.

Declawing

- Don't rely on declawing. Declawed cats can bat prey to the ground and bite it. Once bitten, the prey will likely die.

Cat Regulations

- Work with your local humane society, veterinarians and private organization to enact and enforce free-roaming cat regulations, such as those requiring that cats be licensed and under the owner's control.

Pest Control

- Find alternatives to use of cats as "mousers", such as use of authorized traps.

Bells

- Don't rely on bells. They are sometimes placed on cats to reduce hunting success by scaring potential prey. They are largely ineffectual. Birds and other wildlife do not associate bells with being stalked. Young birds and mammals are especially susceptible to cats, with or without bells. Also, many cats learn to stalk quietly even while wearing a bell.

Bird Feeders

- Put bird feeders away from areas where cats hunt.
- Keep escape cover for birds off the ground or at least 10 feet away from feeders and spilled seeds. Stop feeding if necessary; birds can feed elsewhere.

Legislation

- Encourage the development of laws which require cat licensing and responsible cat ownership. Examples are leash laws, laws requiring spaying/neutering, etc.

You can easily help our diminishing wildlife populations by implementing these suggestions. With proper care, it is possible to maintain populations of domestic cats and wildlife.



Photo © Cheyenne Rouse

Cats hunt naturally; they are born with that instinct. A well fed cat will still hunt.



Photo © Welvie Biggs, Outdoor California Photography Award Program, 1997

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cats at aggregation sites. Cats from aggregations often end up stalking wildlife, irrespective of care or feeding. The problem is particularly serious in “urban” wildlife areas, such as San Francisco’s Golden Gate Park, where the quail can no longer survive.

Misconceptions about cat predation persist. One is to trivialize it in lieu of addressing the “real” problem, loss of habitat. Cat predation greatly *magnifies* impacts from habitat loss, particularly from housing projects. Another common misconception is that a cat owner’s efforts are insignificant, since there are so many other cats around.

Predator status notwithstanding, cats are not “bad.” They are an important aspect of modern society and can still be pets. Fortunately, people have the opportunity to implement practical measures to reduce cat predation problems. The main solution is responsible pet ownership. The Humane Society of the United States, the ABC, and other groups have recommendations for reducing cat problems.

Additional Information

The DFG’s Ron Jurek provided technical assistance for this article. He



Photo © William Gill, Outdoor California Photography Award Program 1990

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has developed a web site regarding cat-wildlife issues: www.dfg.ca.gov/wmd/feralcat.html. The ABC web site is www.abcbirds.org. Many organizations have available information. These include the ABC’s *Cats Indoors! The Campaign for Safer Birds and Cats* at 202-778-9666. The Humane Society of the United States, the Society for the

Prevention of Cruelty to Animals, and county and city animal shelters have practical information about spaying, neutering, cat adoption and control issues, and other related topics.

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