

Innocent Pet, Vicious Predator

The Impacts of Cats on Wild Bird and Mammal Populations

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Currently, there is a lot of concern over the dwindling populations of many species and there are many efforts to stop this negative trend. Ironically, however, one of the most significant menaces to wildlife, especially to birds and mammals, has also been one of the most ignored by the public and many who are very worried about the decline of many species contribute to this crucial problem themselves. Unlike some of the reasons for the global decline of many animal populations, the agents of this problem are not industrial or far and away. In fact you might be keeping one in your household. This very serious danger is domestic cats and it is time that everyone recognize the significance of the predation of wildlife by millions of cats and put an end to it.

In contrast to domestic cats, feral cats have been recognized as a definite threat to wildlife and there have been many efforts to control their populations. Unfortunately, they are far more difficult to control than domestic cats and they still take a great toll of wildlife, especially impacting the animal populations of many islands where they are considered to be the most damaging predators, with rats following closely in terms of impact. Especially on many oceanic islands, where few native mammalian predators occur (and very few predators can be as efficient as cats), many birds and mammals do not have the predator-avoidance mechanisms and are preyed on extensively. For example, the whole

population of the Stephen Island Wren *Xenicus lyalli*, one of the four species belonging to a very distinct family of songbirds endemic to New Zealand, was decimated by the single cat of the lighthouse keeper of the island. By the time a biologist identified one of the dead birds that the cat had brought to the lighthouse keeper as a new species, it was too late, and the species was extinct. Feral cats also significantly contributed to the extinction of eight other bird species living on other islands off New Zealand. On many other islands, the situation is very similar. On Marion Island in the subantarctic Indian Ocean, it was estimated that a single cat kills over 200 seabirds every year, totaling about 600,000 birds a year (15,000 per square mile) and on

Kerguelen Island in the southern Indian Ocean, Pascal estimated that cats were responsible for 1.2 million bird deaths every year. The damage caused by the feral cats is not limited to islands. In Australia, for example, there are about 12 million feral cats, each killing up to a thousand animals every year, devastating the unique marsupial and bird fauna of Australia. Even though there is a large campaign going on to eliminate feral cats from Australia, their elusive habits make it very unlikely for them to be eradicated completely. Feral cats are present on other continents as well, and are widespread in North America. For example, a study showed that on the small campus of Stanford University, there were about 2000 feral cats killing many vertebrate species. Add to



A British cat plays with a victim. Source: Natural History, August 1989.

this widespread presence the fact that cats are very prolific compared to many other mammalian predators (a cat in Great Britain produced over 120 offspring per year over the course of ten years), and you have millions of very effective predators roaming the countryside, decimating small mammal and bird populations (as well as eating reptiles, amphibians and fish in small quantities) all around the world. Unfortunately, the exact numbers of feral cats in many parts of the world (including the U.S.) are not known, and their control and elimination from native habitats is extremely difficult.

However, an epidemic of cats that is just as significant has largely been neglected. Even though an average domestic cat hunts smaller numbers of animals than a feral cat does, domestic cats also prey on small birds and mammals, and their large number results in a tremendous impact on wild vertebrate populations. Probably the best-known of the few studies on the impact of domestic cat predation on birds and mammals was by Churcher and Lawton who studied all but two of the 80 well-fed cats in an English village.

The average cat brought home 14 individual prey items every year even though it had plenty to eat at home, and this fact is confirmed by other studies (Churcher and Lawson later reported that one proud owner

from Dorset related that his cat brought home more than 400 individual prey items in one year). Cats do not bring home everything they catch, and in a study in Illinois, George found that only about half of the prey caught by well-fed domestic cats were brought home. Considering this, the average figure is more like 30 individual animals caught every year by a single domestic cat. This figure does not take into consideration the domestic cats that live in farms and other rural areas that are usually expected to provide for themselves. The catch rates of such cats are probably very similar to those of feral cats.

When one multiplies this average rate with the very high number of domestic cats found in many countries, the magnitude of the problem becomes clear. Currently, there are about 70 million domestic cats in the U.S., and even if one assumes that all are well-fed and their hunting is more "recreational" than for feeding, one would calculate an astounding figure of over two billion animals caught every year. True, some of these cats are not allowed out at all or

are too old to hunt, but even if a quarter of the population of domestic cats did not hunt at all, the figure would still be over one and a half billion animals killed every year. Even if a large proportion of this figure is made up of introduced and abundant species such as rats, European sparrows and starlings, cats have a very wide range of prey species, and every year millions of individuals of many native and rare species (such as Black Rails, *Laterallus jamaicensis*) are killed by cats.

Studies on domestic cat predation indicate that in rural areas where suitable habitat is more abundant, most of the prey of cats is small mammals, whereas in suburban and urban areas, birds form the majority of animals caught. Overall, somewhere near 800 million birds every year are killed in the U.S. alone, where the widespread presence of suburban dwellings in habitats suitable for many small passerine species adds to the dimensions of the problem.

Besides causing the direct mortality of many animals, cats also compete with native predators. With a total population nearing 100 million, cats are far more abundant

than any of the native predator species in the U.S., and they substantially reduce the prey base available for predatory animals such as snakes, weasels, bobcats and birds of prey. Furthermore, in a lot of rehabilitation and treatment centers for birds, many of the treated birds have been injured by cats. Without cat predation, the very-limited funds of such

centers would have been allocated to saving animals that died because of inability to provide care. In addition, domestic cats can carry a number of diseases such as pneumonia, rabies, feline leukemia, feline distemper, Herpes virus, ringworms, hookworms and toxoplasmosis, that can be lethal to wildlife and people, children being especially susceptible. One must also note that a cat that is free to wander around is susceptible to cat thefts (sometimes the cats are starved to convince research labs that they are strays) and to predation by coyotes (in the den of one coyote pair living near a suburban area there were close to 20 cat collars). It is also likely to get hit by cars, to get into fights with other cats, and to get lost.

It is ironic that in a country like the U.S. with relatively strict laws for protecting wildlife (for example, it is prohibited, without permit, to take home the corpse of a protected bird species--i.e., most of the native species--even if you find it dead) and with tens of millions of people in-

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Domestic and feral cats kill millions of individuals of native and rare bird and mammal species every year, and have been blamed for several extinctions.

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terested in wildlife, birdwatchers and people with bird feeders making up the majority, there is very little reaction against this massacre of native wildlife by domestic cats. It is very sad to see the efforts of many organizations that tend to think of the animal world being composed of domestic, laboratory and other captive animals, such as the so-called Society for the Prevention of Cruelty to Animals, preventing the control of feral cat populations as well as protesting against restrictions on domestic cats. In fact, one of the "feral cat feeding programs" that are often promoted by the Society for the Prevention of Cruelty of Animals greatly contributed to the extirpation of California Quails, *Callipepla californica*, in San Francisco's Golden Gate Park (Joel Weintraub, personal communication). Cruelty to animals is definitely something that should not be tolerated under normal circumstances, but it is necessary to acquire a more ecological and holistic perspective and to realize that allowing cats to run rampant will result in the loss of millions of individuals belonging to hundreds of species, some of which are very threatened. Unfortunately, in this critical issue, emotions and fear of eliciting reaction from cat owners has taken over common sense, and one of the most important threats to wildlife gets very little publicity and support for prevention.

To put an end to this problem is very simple and it would not involve any kind of harm to domestic cats. The most important thing to do is not to let your cat outside if you live in any kind of environment with native wildlife. This is especially important if you have a bird feeder which concentrates many birds in one place and also attracts cats. If your cat has to go out, it should be on a leash or, at least, it should be belled, that is, it should be wearing loud bells (not the tiny decorative bells) that can be easily heard from a distance. Make sure your cat cannot easily take off its bells as many cats are able to do. Show your disapproval clearly if it is stalking or bringing any animals to you. Also, make sure your cat is neutered or spayed.

Even if you do not have a cat, there are many things you can do to prevent this destruction of wildlife. Support projects for controlling, removing or eliminating feral cat populations, be they in your area or on another part of the world, by backing organizations conducting such programs. If you see any cats in your area that are roaming freely, either find its owner and warn her/him or contact the local officials so that they can warn its owner. Make sure no cats are allowed to enter your yard. Obviously, cat owners should should take these preventive measures as well.

It is obvious that the causes beyond this tremendous destruction of wildlife are not very complicated or hard to prevent. Like many other environmental problems,

it springs from the collective actions of individuals or the lack thereof, and the way to stop it is simply making sure that you take the necessary actions to prevent it. If you simply let your cat hunt freely, do nothing to support feral and domestic cat controls, and do not raise your voice against faulty policies, you will be contributing to this senseless extermination of billions of birds, mammals and many other animals every year.

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