

The Eastern Coyote

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One of the animals we get the most questions about is the coyote. It is also likely one that generates the strongest feelings in people we talk with, both positive and negative. Thus we wanted to use this Outdoor Observer to talk about the ecology of the coyote in our area.



While there are a few coyote fossils from the east, most experts agree that the coyote was generally restricted to the prairie and deserts west of the Mississippi. With the eradication of wolves and cougars from most of the US, the

coyote was able to expand its range to new places. Make no mistake, Americans also attempted to eradicate coyotes along with the other large predators. Even today, many states have bounties on coyotes and/or have annual coyote hunts with cash prizes -- about 400,000 coyotes are killed in the US each year, with millions of federal tax revenue spent by the USDA to kill 70 - 80,000 of that total with helicopters, traps, guns, and poison. But how is it that coyotes as a species manage to thrive even while under this intense pressure?



Any biologist or trapper will tell you coyotes are highly intelligent and are notoriously difficult to trap. They are also smaller than wolves and thus do not need as much territory or large prey. Their diet is very diverse and includes small mammals, birds, fruit, nuts, plants, and carrion in addition to larger mammals when possible. Additionally, coyotes can rebound after their numbers are reduced very quickly -- females have been known to have litters of 10 or more pups if population density is low and food is plentiful. The combination of a small-ish size, intelligence, broad diet, behavioral flexibility, and high reproductive potential are the characteristics that allowed coyotes to expand their range to all of North America save the high arctic.

The main route that coyotes took to get to NY was through Michigan, over the Great Lakes into Ontario, and south through the east coast. While working through Canada, they apparently interbred with eastern wolves,



a smaller species or subspecies of gray wolf. These wolf genes lead to our eastern coyotes being 10 - 15 pounds heavier than "purebred" coyotes in the west, with somewhat larger skulls and longer legs. What role wolf genes play in coyotes' success in the East is unknown, but many people think that their larger size allows them to be more successful at taking down larger prey such as adult deer. These animals have been termed "coywolves" by some, but biologists tend to prefer the name of "eastern coyotes" as the animals here in the US are hybrids descended from other hybrids, many generations removed from the first eastern wolf-coyote cross.

Coyotes across the country have made a home in the suburbs. This fragmented landscape of yards, small forests, golf courses, and parks is the perfect habitat for many of the coyote's prey species and the coyote has taken advantage of it. Animals such as the coyote can be viewed as a positive example of adaptation and resiliency in spite of drastic environmental disruption. Even more unexpectedly, coyotes have colonized truly urban areas such as Chicago, Boston, Los Angeles, and, most recently, New York City. Virtually every city in mainland US has a coyote population.

Since 2010, MRG has run a research group we call the Gotham Coyote Project (www.gothamcoyote.org), a long-term study looking at how coyotes are colonizing NYC. New York's human population density, the sheer extent and intensity of its urbanization, and the City's complex geography have delayed the establishment of permanent coyote populations compared to other eastern cities. But since we started, coyotes have become fairly widespread in the Bronx, and have established territories and a few dens in Queens and Nassau County. There are a few spots in Manhattan even that have resident coyotes, though no breeding activity or pups have yet been observed there.



Coyotes' tendency is to avoid us and remain in the background, but they are very opportunistic and may learn that wandering small pets are potential prey. Coyote attacks on people are very rare and in most cases involve young coyotes and/or coyotes that have learned to associate humans with food. However, the rate of all wild animal attacks is very low compared to many other risks we willingly expose ourselves to every day. In reality, if someone smokes, is obese, drives a car, owns a dog, or has neighbors that own a dog, they are at far more risk of injury or death from those things than from coyotes. Educating yourself and your neighbors about how to coexist with coyotes and keep them afraid of people is the only truly effective way to stay as safe as possible. Trying to eradicate coyotes usually just results in more coyotes and wasted money, for the same biological reasons that allowed them to survive here in the first place. Put frankly, people trapped, poisoned, and shot as many coyotes as possible for 200+ years -- and largely continue to do so -- and they answered that by showing up in Central Park. We ultimately may have no choice but to co-exist.