COYOTES

PREDATORS TO PROWL LI

Experts say they'll be here within decade — and help curtail deer, raccoons and rodents

BY JENNIFER BARRIOS
jennifer.barrios@newsday.com

The question isn't whether coyotes will arrive here.

It's when.

Long Island is the last major landmass in the continental United States that does not have a coyote population, but scientists say it's only a matter of time before the canines take up residence here — permanently changing the landscape and ecology of the region.

While estimates vary, Long Island could see a breeding population of coyotes within a decade, said Mike Bottini, wildlife biologist with the Long Island Nature Organization.

Mark Weckel, postdoctoral conservation research and teaching fellow at the Center for Biodiversity and Conservation at the American Museum of Natural History, said the establishment of coyotes will ensure that the region once again has a top-level predator in the food chain.

"Nature abhors a vacuum," Weckel said. "And Long Island has been without a top predator for a long time."

The absence of coyotes on the Island now has scientists working to conduct research about animal and human behavior before the tenacious omnivore becomes established here.

"We have a very unique opportunity here on Long Island," Bottini said. "Long Island is one of the few places the coyote hasn't actually colonized yet."

Big obstacles to migration

In order to get here, coyotes would have to swim through the tides of Long Island Sound, brave traffic on the bridges from the Bronx or lope along the heavily used Long Island Rail Road tracks from Queens, researchers said — barriers that so far have kept Long Island basically coyote-free, even as the canine's range has expanded to cover the rest of the country.

Although a handful of coyotes have been spotted on geographic Long Island — which includes Brooklyn and Queens — only one has been confirmed in Suffolk County, this June, and none in Nassau, according to the state Department of Environmental Conservation.

The coyote

Height: 23 to 26 inches at the shoulder

Weight: 30 to 45 pounds

Life expectancy: 7 to 14 years

Coyotes aren't yet established on Long Island for two simple reasons, Weckel said: New York City and the Long Island Sound.

"New York City is one heck of a barrier to movement," Weckel said. "The large infrastructure, the bridges, the East River — they provide a big barrier to coyote dispersal."

Big obstacles — but not impossible ones, said Joshua Stiller, wildlife biologist with the state DEC. "They have a pretty significant barrier to get through in New York City, but they have proven they can get through it," Stiller said.

The absence of a top predator on Long Island — after humans, midlevel predators such as red foxes and raccoons top the food chain — means the area's ecosystem "is really out of balance," Bottini said.

Coyotes could act to control Long Island's white-tailed deer population — currently thriving in the absence of natural predators — or reduce the numbers of small mammals, such as rodents, that are part of a coyote's diet.

Cats without coyotes

Meanwhile, a group of North Carolina researchers is eyeing Long Island as a perfect laboratory for a study on how outdoor cats behave in the absence of a threat from coyotes.

Roland Kays, a professor at North Carolina State University in Raleigh and lab director at the North Carolina Museum of Natural Sciences, has been outfitting outdoor house cats in North Carolina with harnesses holding GPS units to determine where the cats go when they venture out.

Kays is expanding the project to Long Island specifically to find out how cats here behave in the absence of a large predator.

"In the United States, there's basically only one place without coyotes, and that's Long Island," Kays said. "We really want to see what these Long Island cats have been doing."

The idea, he said, is to study whether Long Island cats are more apt than their North Carolina counterparts to venture into forested areas — places they largely avoid in areas with

ISTOCK

coyotes, because the canines tend to take up residence there.

"Do coyotes restrict the movement of cats?" Kays said. "Does having a big, bad coyote in the woods keep the cats in the backyard?"

So far, about six Long Islanders have signed up for the study at cats.yourwildlife.org, but Kays hopes to eventually enroll 100 cats here.

An inevitable tenant

Cats won't be the only ones that will need to change their behavior once coyotes make Long Island their home. Humans, too, will need to adapt.

Because coyotes are opportunistic omnivores, able to survive on everything from deer carcasses to the bagged remains of last night's spaghetti dinner, people will need to keep tight lids on garbage cans, make sure bird feeders don't leave a mess in the yard, and stop allowing cats and small dogs to go outdoors unattended, experts said.

While most coyotes have evolved to stay away from humans, preferring to live in wooded, natural areas, the fragmented nature of Long Island — with its expanses of woods segmented by developed areas — means coyotes and humans will likely cross paths.

Most experts agree that coyotes, while not native to Long Island, would not be considered an invasive species. Assuming the coyote gets here by its own devices — and not by being trapped and released by humans — "it would be a natural range expansion," Stiller said.

The canine would be a natural successor to the top predators that once roamed Long Island — and were wiped out by humans, Bottini said. The gray wolf, black bear and bobcat once inhabited Long Island, for example, but all were driven out once Europeans colonized the area, Stiller said.

"Most wildlife biologists would consider it [the coyote] as a species that has evolved in many ways to replace the role of the wolf in our ecosystem," Bottini said.

Even if wildlife managers attempted to keep coyotes from establishing a population on Long Island, they likely wouldn't be successful, Weckel said.

"Out west there have been several attempts to remove coyotes from the landscape," he said.

The coyotes' response? "They've moved north, south, east and west," Weckel said. "Everywhere else we've tried, the policy of containment has never worked."