

Bobcats Beat Back Boas?



“We thought the snake must have caused the damage herself by somehow crushing her own eggs, but then we saw the photo and, well, it was just incredible.” – A. Currylow

Florida’s Everglades, the river of grass consisting of 1.5 million acres of wetland, is the largest sub-tropical wilderness in the U.S. Its unmatched landscape provides habitat for numerous endangered species like the Manatee, American crocodile, the Florida panther and many species of birds. It is so unique it has been recognized internationally as a World Heritage Site, an International Biosphere Reserve, a Wetland of International Importance and a specially protected area under the Cartagena Treaty.

Yet this irreplaceable ecosystem is being assailed by many forces. In the long term, rising sea levels caused by global warming threaten its very existence. In the short term, human development has already altered the natural ebb and flow of water southward from Lake Okeechobee to Florida bay, and the presence of many exotic species has upset the delicate balance of interactions that occur among the native species.

Perhaps the most destructive of these is the Burmese python (*Python bivittatus*). How this top predator from Asia made it to the Everglades is unclear, but by 2003 Everglades National Park was filled with rapacious snakes reaching up to 18 feet in length and eating their way through native mammals. Populations of large and small mammals: rabbits, foxes, deer, raccoons, bobcats and opossum all crashed, some to local extinction. Even large alligators were not safe.

And as an example of completely unforeseen consequences, these severe predations prompted a mosquito vector for an encephalitis-causing virus to turn to people for its blood meal (see 2018 “*Upsetting Mother Nature (And Paying for It)*,” at <https://www.hras.org/past-sciencewatch-articles>).

But hope springs eternal. Writing in the February 19, 2022 issue of *Ecology and Evolution*, a team of ecologists led by Andrea Currylow, US Geological Survey, Homestead FL, describes predation of Burmese python eggs by a native bobcat (*Lynx rufus*).



In June 2021, to gain data for their program to eradicate breeding female Burmese pythons, the team deployed a motion sensitive camera near the nest of a large female snake in Big Cypress National Preserve. The program radio-tags male snakes and follows them to a breeding group of males to find and euthanize the female the males are pursuing.

A few hours after they placed the camera the snake was gone and into the evening a bobcat appeared and began eating the eggs. “We were completely floored. We had no idea that the nests of these snakes were being predated,” said Dr. Currylow. As the evening progressed, the bobcat reappeared three more times for additional snacks. The bobcat returned the next morning to cache some uneaten eggs for later consumption. And that evening it turned up for another nosh, but the snake was back on her nest and the 20-pound cat wisely stayed a safe distance from the 14-foot long, 120-pound snake, and then left.

A photo taken the next night shows the two predators staring each other down and the bobcat retreating. But in morning it returned and aggravated the snake enough for her to strike, but miss, while the cat made several swipes at her.



When the team returned to collect the camera, they thought the snake had trashed its nest. It was only when they saw the footage that they realized what had happened and decided to salvage the eggs for laboratory incubation. They collected 42 destroyed eggs and 22 others that appeared viable but never hatched. The bobcat had wiped out the entire clutch.

This is the only reported case of a bobcat preying on python eggs. Usually, it’s the bobcat that’s at risk. Dr. Currylow says the bobcat was lucky that female pythons typically don’t feed while brooding. Otherwise, she could easily have made a meal of the cat.

Nevertheless, Dr. Currylow is keeping her fingers crossed. “The python problem is so huge, that any little glimmer of hope that the Everglades might be resilient to this invader—it’s just inspiring,” she said.

Saul Scheinbach