

Snakes on the 'Glades

Laura Bradley

In the past decade, giant serpents have slithered into the Everglades in large numbers and wreaked unbelievable havoc.

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They eat everything, from bunnies to gators. They are almost impossible to spot in the wild, making their exact numbers just as elusive. And they are destroying one of the nation's most precious ecological treasures.

Huge snakes have invaded Florida's Everglades – and to researchers and policymakers alike, they are an enormous problem.

“The Burmese pythons are unique in that they're an apex predator species,” said Phil Andreozzi of the National Invasive Species Council, meaning they are at the top of the heap, with no natural predators of their own. “They're eating deer ... They're eating wood storks. They're devastating the raccoons and rabbits.”



Burmese pythons starting to hatch

WPTV - West Palm, FL



The list of prey goes on, and Andreozzi said the cascading impacts of the snakes' eclectic eating habits make their threat to the environment both considerable and difficult to predict.

The Burmese pythons — which can grow to be 23 feet long and weigh up to 200 pounds — are a small part of a nationwide invasive species dilemma. A 2005 Cornell University study found the U.S. spends more than \$120 billion each year dealing with 50,000 introduced species of plants, animals and microbes.

Every region has its own problem, Andreozzi said — from kudzu in Georgia to quagga and zebra mussels in the Great Lakes. Coiling kudzu vines are known as “the vine that ate the South,” while the pesky shellfish latch onto boats and damage their motors.

Researchers point to the damage the Burmese python has done as a cautionary tale, as the U.S. Fish and Wildlife Service seeks public comment on listing five additional snake species — boa constrictors, reticulated pythons and three species of anacondas — as injurious wildlife. Doing so would ban their import or transportation across state lines without a permit. The Burmese python, Northern and Southern African pythons, and yellow anaconda are already listed as injurious.

The four species already listed and the five that might be added were all proposed for injurious listing in 2010. The United States Association of Reptile Keepers, the United States Herpetoculture Alliance and other groups representing the reptile trade argue that adding more snake species to the list would cripple the pet snake industry and threaten breeders' livelihoods. But researchers see it as a necessary preventative measure to keep additional invasive species from slithering into the Everglades, an already precarious ecosystem.

Pythons are not just a Florida problem

The Everglades might be a faraway tourist attraction to many, but the python problem could endanger many regions outside Florida. One 2008 study from the U.S. Geological Survey warned the snakes could spread across the southern third of the nation. The possibility is not as far-fetched as it might seem.

“Thinking about it objectively, they can live in fairly temperate climates in their native range, so why couldn't they do it here?” said J.D. Willson, professor at the University of Arkansas.

It's tempting to think the snakes' current residence means they can only survive in hot, humid climates, but in their home turf in Asia, the snakes thrive in places cooler than the Sunshine State. Research suggests the snakes might not make it as far north as South Carolina, Willson said, but several studies suggest the Gulf Coast and maybe even further north could be suitable climates for the pythons.

Even if the snakes stay put, the ecological destruction they cause will have repercussions beyond Florida. As mammals run out, birds could become a bigger part of the snakes' diets - a big concern to researchers for a variety of reasons. Birds play a vital role in marsh ecosystems everywhere, but their migration patterns make population declines harder to track. Willson said the Everglades could become a sinkhole for bird populations, as birds migrate to the area and only some make it out alive.

A serious cautionary tale

The giant snake problem cropped up alarmingly quickly: People first started encountering them with notable frequency in the early 2000s. By the time the Burmese python population was considered established - meaning the snakes were breeding, and all age groups could be seen regularly - they had apparently already started having noticeable effects on the Everglades.

The Burmese python first arrived in Florida as part of the exotic pet trade, and over time made its way into the Everglades as overwhelmed pet owners released the animals into the wild or they escaped. Scientists have soundly dismissed a theory that Hurricane Andrew might have damaged breeding facilities, releasing the snakes.

“Our analysis suggests that they were probably around a lot longer than that,” Willson said. “It doesn’t support that scenario very strongly.”

Regardless of how the problem started, the search for a solution has involved removal agents, state and federal agencies and researchers.

One prong of the effort involves snake removal: Authorized agents may humanely capture the snakes and collect data on their locations and habitats, and hunters are also allowed to remove pythons from wildlife management areas. Last year Florida conducted its Python Challenge, allowing the public and permit-holders alike to try to capture the snakes. The month-long challenge only removed 68 snakes, but Carli Segelson, a spokeswoman with the Florida Fish and Wildlife Conservation Commission, said the event drew national and international attention to the Burmese python and other nonnative species.

U.S. Sen. Bill Nelson, D-Fla., and wildlife commissioner Ron Bergeron, right, search the grassy underbrush on an island in the everglades for pythons, Jan. 17, 2013.



The effort’s policy side involves both federal and state agencies. In 2010 the commission listed eight types of snakes as conditional species, banning individuals from acquiring one within the state for personal use. The USFWS placed three of those snakes on the injurious species list in 2012, and its current proposal would add two more of Florida’s conditional species to the injurious species list.

Florida residents are urged to report Burmese python sightings; Exotic Pet Amnesty Days allow overwhelmed pet owners to turn in any species of nonnative animal - not only pythons - without penalty. Education initiatives also emphasize responsible pet ownership and the importance of not releasing these animals into the wild.

These efforts might be raising awareness and preventing new problematic populations from growing, but Willson says there hasn’t been any real marked decline in the already-established Burmese pythons.

“One of the big problems with the Everglades is even if you remove them from one area, there are many other areas where they’re not even accessible,” he pointed out.

Hope for the future

Learning more about how to best detect and capture the snakes is a crucial first step to addressing the problem. Density estimates could provide better information on how many pythons are out there, and how many would need to be removed to make real headway.



Pythons “live a very long time — decades, many of them — and they get very large, and require a lot of different kinds of feeding that really would not be typical of your average pet,” she explained.

However difficult the solution might be, Willson said the ecological threat is too severe and potentially widespread to ignore.

“It’s an extremely difficult problem, but I think that it’s one that’s serious enough that we can’t afford to throw up our hands and say it’s impossible,” Willson said. “I’m not willing to give up the Everglades.”

Laura Bradley is a reporter with Medill News Service.