

Stopping the Burmese Python Invasion

Halting the spread of Burmese pythons out of the Everglades and into nearby conservation lands is the goal of the “Python Patrol,” a program where regular citizens are taught to call in snake sightings and wildlife officials are trained to capture the snakes. It is all part of The Nature Conservancy’s efforts to **prevent the spread of a breeding population** and protect the often-rare animals these snakes feed on.

The Python Patrol was launched by The Nature Conservancy in the Florida Keys in 2008 when Burmese pythons were found eating rare Key Largo woodrats.

Success in the Keys has prompted the Conservancy, with support from the National Park Service and the Florida Fish and Wildlife Conservation Commission, to **expand the program** to mainland sites around the Everglades National Park—infested with a population that some estimate at **between 30,000 and 100,000 snakes**. The Everglades problem started more than a dozen years ago because of escaped or released pets.

Today, more than 200 python capture responders have been trained.

“Python Patrol is a perfect model for alerting people to report the snakes and training people who can respond to the discoveries in order to stop expansion of invasive pythons from the Everglades,” says Cheryl Millett, the Conservancy biologist who oversees the Python Patrol.

“That’s why we’re focusing on setting up a **response network on the leading edges** of the invasion — to contain and stop the spread,” Millett says.

Snake in the Road!

Workers such as FedEx and U.S. Postal Service drivers were the first Eyes and Ears team in the Keys: **Pythons often warm themselves on the roads** so drivers make ideal spotters.

The Conservancy created a python hotline, 1-888-IVE-GOT-1. Today, Florida Fish and Wildlife Conservation Commission call centers in South Florida quickly dispatch a trained responder.

“We have 24-hour response by law enforcement in 10 counties, although anyone in Florida can leave a message,” Millett says. The counties where a Conservancy-trained responder is dispatched are: Monroe, Miami-Dade, Collier, Hendry, Broward, Palm Beach, Glades, Martin, St. Lucie and Okeechobee counties.

The response force is being built throughout South Florida, with more Python Patrol workshops being scheduled.

“Early-detection, rapid-response is the best way to stop them from spreading,” says Millett.

Safety Matters

Capture techniques the responders are trained in include treadmilling — where the catcher drags his or her hands one after the other along the underbelly of the snake to make it think it’s getting away — and distraction of the snake by one person so another can capture it by surprise.

“We ask the responders to consider safety first and then work to tire out the snake before they capture it. Luckily these pythons tire very quickly,” Millett says.

When the snake is tired, the capturer firmly grabs at the base of the head and avoids the writhing body getting wrapped around his or her legs. Snakes

captured in the wild are securely bagged, boxed, tagged and dropped off to a designated recipient for research or training.

In the Belly of a Python

The first Keys python was discovered alive in 2007 when researchers checking on the status of a male Key Largo woodrat wearing a radio transmitter noticed it strangely had moved more than a mile from its original documented habitat.

The signal led the two researchers — a University of St. Andrews graduate student and a volunteer assistant studying federally endangered Key Largo woodrats — to a 7-1/2-foot Burmese python sunning itself.

The contents of the captured **snake's stomach included not only the collared woodrat but another one as well.**

While pythons aren't known to attack people, **they are voracious and indiscriminate eaters.** To reach a full-grown length of about 13 feet, one python would need to eat nearly 200 pounds of food over five years. **Some captured Florida snakes have grown as large as 16 feet.** A March 2010 research paper reported that 25 different bird species, including the endangered wood stork, had been found in the digestive tracts of pythons in Everglades National Park, highlighting "the potential for considerable negative impact of this invasive species on native bird populations."

In January 2012, a severe decline in a variety of mammal populations in the Everglades over the last eight years was documented in a report released by the Proceedings of the National Academy of Sciences called Severe Mammal Declines Coincide with Proliferation of Invasive Burmese Pythons in Everglades National Park. Researchers correlated pythons with the dramatic declines in mammal numbers and noted other potential causes, like disease, are unlikely since so many species showed decline.

Policy of Prevention

The Conservancy's work on this issue doesn't stop with Python Patrol. **We have long called for a more preventative and proactive approach to address the threat of invasive species.**

"Right now imported species are innocent until proven guilty," says Kris Serbesoff-King, the Conservancy's associate director of conservation. "As a nation, we need to focus on pre-importation screening – that is to say looking at what will likely be a small number of non-native imported wildlife that could go on to be harmful to the lands and waters we are working to protect."

The Conservancy has been working on the policy end since 2006, starting with support for the South Florida Water Management District's petition to list the Burmese python as a federal injurious species.

In 2010, the **Florida Legislature adopted a Conservancy-backed measure** prohibiting personal possession of seven large constrictors and one large monitor lizard, formerly designated "reptiles of concern."

These eight reptiles, including the Burmese python, are **now classified as conditional species**; people who owned these reptiles before the law went into effect and followed state permitting, microchipping and caging requirements were allowed to keep the reptiles they already owned.

Next Stop: Washington D.C.?

At the federal level, the Conservancy has supported efforts by Sen. Bill Nelson (D-FL) to advance legislation banning the importation and interstate commerce of the Burmese python.

The U.S. enacted that ban January 17, 2012 on four snakes: the Burmese python, the yellow anaconda, and the northern and southern African python. This step — to include these species in the prohibitions of the federal Lacey Act used by the U.S. Fish and Wildlife Service to prevent and manage invasive

species — is needed to reduce the number of pythons escaped from or released into the wild by pet owners who don't understand the responsibility caring for a large python entails.

This approach is significant, as the snakes are potentially more than just Florida's problem. The native climate of the invasive pythons — southeast Asia — reaches as far north as South Carolina and as far west as Texas, according to new “climate maps” released by the U.S. Geological Survey.

“Their native habitat compares well to the Gulf region of the southern United States,” adds Serbesoff-King.

More broadly, the Conservancy has strongly backed efforts to introduce a comprehensive approach that would proactively restrict trade in animals predicted to be highly invasive — before they become established.

The Conservancy supports federal legislation to institute a preventive approach — give the U.S. Fish and Wildlife Service authority to proactively assess the risks associated with imported wildlife and prohibit the importation of species likely to be invasive in the United States. It would alleviate the need for a petition-by-petition listing of injurious species — a process that takes an average of four years.

“Prevention is always the most cost effective and efficient approach to addressing invasive species,” says Serbesoff-King. “It protects our native plants and animals and saves money by avoiding costly and difficult control efforts.”

What Can You Do?

- “We encourage everyone to become more familiar with distinguishing invasive from native reptiles by taking the free online REDDy training offered by the University of Florida,” Millett says. [Online REDDy training is available](#) and offers a certificate at end of the 40-minute free training, plus ID and reporting handouts.

- Call 1-888-I’veGot1. Sightings can be filed on-line at IveGot1.org as well. There is also an iPhone App available through iTunes called IveGot1 that was developed by the University of Georgia. The phone number and web site are open for reports of all invaders, including fish.