

# Big Cypress

National Park Service  
U.S. Department of the Interior

Big Cypress  
National Preserve



## Alien Invaders: Burmese Pythons

*The Burmese python (*Python molurus bivittatus*) is internationally classified as a “threatened species” due to habitat depletion, demand as exotic pets, and hunting for their skins for fashion and flesh for food. Their introduction into Florida habitats has labeled them as an “exotic invasive species.” Many federal and state agencies are working to remove these large reptiles from ecosystems within the state to try to outpace the reproduction of these snakes in the Everglades and Big Cypress Swamp.*

**B**urmese pythons originate from Southeast Asia and are one of the largest growing snakes in the world. Pythons are internationally listed as threatened mostly due to huge sections of their habitat in Asia being destroyed. The Burmese pythons that are now currently in the wild throughout South Florida were either released by pet owners who could no longer care for their snakes when they got too large or inadvertently or intentionally released when hurricanes blew through South Florida. Burmese pythons are now living and reproducing rapidly within South Florida since they have no natural predators in North America and are highly adaptable.

### Is it a Python?

Pythons can become over 20 feet in length in their native land, but are typically between six to ten feet living as expatriots in South Florida with the largest, 16 feet, captured in the Everglades. At this length they still are generally larger than any of the native snakes. When small, pythons are frequently confused with native snakes. They are tan in color with dark giraffe-like blotch markings.

Pythons can be differentiated by a dark arrowhead shaped blotch on the back of their head.

### Squeeze to Eat

Pythons are an ambush predator and use their unique skin markings as camouflage to surprise their prey. They grab onto their prey with a mouth full of sharp, backward shaped teeth to hold on while the snake suffocates it. Pythons are large constrictors meaning that they coil around their prey and squeeze until the animal faints from lack of oxygen. Like all reptiles, pythons need to be a certain temperature (80–90° F) to digest their food. Pythons typically eat smaller prey like birds, other snakes, and small mammals. However, pythons have been known to eat larger prey such as goats, alligators, deer, or whatever they can catch.

### Reproduction & Incubation

Burmese pythons breed in the early spring after a period of brumation—a behavior like hibernation, but biologically different as it is used to survive a winter period and prepare

### Python Facts

- In Rudyard Kipling’s “The Jungle Book,” an Indian python named “Kaa” hypnotizes its prey before eating it. Pythons that are able to hypnotize prey do not exist.
- An estimated 112,000 pythons have been exported to Florida since 1990.
- Burmese pythons are nonvenomous
- The only humans that have been harmed by Burmese pythons have been python owners and their families.
- From 2000-2009, 1,334 pythons were captured and removed from Everglades National Park.

the reproductive organs for mating. Females will then lay clutches which average between 12-36 eggs in March or April. The mother will remain with the eggs until they hatch. To incubate her eggs, she will wrap around them and twitch her muscles in such a way as to raise the ambient air temperature around the eggs by several degrees. When ready, the hatchlings use their egg tooth to cut their way out of the eggs. Once the hatchlings are out of the eggs, there is no further maternal care.

### Native versus Exotic

A native species of plant, animal, or insect is one that was naturally occurring in Florida prior to the year 1500. An exotic species is one that has been introduced by humans to an ecosystem from somewhere else. Over 400 species of fish and wildlife and 1,180 species of plants have been documented and introduced to Florida and as many as 40 exotic agricultural insects arrive each month. Many of these species were introduced by pets escaping or being released, birds spreading the seeds of plants used for landscaping, or food being brought from other places.

Typically introduced species don't survive in a new ecosystem. Natural occurrences such as predators, flooding, hurricanes, occasional freezes, and wildfires keep invasives from becoming established. The species that do survive are adapted for local conditions and have no natural predators to keep the population size in check within the new ecosystem. These exotic species then become invasive species and begin to take over that habitat.

### The Economy of Pythons

Burmese pythons are a top seller within the exotic pet trade. Many people own pythons because of their unique skin markings and the ease in which an untrained individual can handle them. They have been used in many TV shows, movies, and music videos throughout the world. In Asia, they are hunted for their meat and skins to sell as boots, belts, hats, and bags.



**A python managed to swallow an entire alligator, but was unable to digest the animal. The alligator carcass punctured the python's flesh which killed the python.**

Burmese pythons get very large and become hard to handle as they gain weight and length. As such large snakes, they become difficult to manage for pet owners and are released into the wild. The Everglades and Big Cypress Swamp ecosystems are similar to their native homes in Asia and these snakes are quickly becoming the top predator within these ecosystems; even over the American alligator. Pythons prey upon many of the native species of animals and endangered species within these ecosystems in South Florida creating an even bigger problem in conservation efforts for native wildlife.



**The Burmese python has blotchy giraffe-like markings with an arrowhead shaped wedge on its head (above).**

**The length of a 16 foot long python, a record capture, is displayed.**

### Eliminating Pythons in Big Cypress

While many people would rather stay away from these snakes, others are partnering with the Preserve to track down and kill these invaders. Hunters with the proper state permits may hunt in Big Cypress National Preserve for pythons during any hunting season through the Big Cypress Partner Through Hunters Program. The pythons must be killed and documented within 36 hours to help monitor the program's success.

Public awareness programs such as "Don't Let it Loose" encourage exotic pet owners to maintain their snakes and other animals responsibly. Occasionally, the local zoo will accept unwanted pet pythons from the public on amnesty days in an effort to avoid their release into the wild. Fortunately, scientists estimate that the 2010 record winter freeze killed as many as 50 percent of the python population in South Florida.

### Did You Know?

US Geological Survey scientists estimate that the Burmese python can adapt to live anywhere within the state of Florida.

### References

Florida Herpetological Society, [www.cfhs.com](http://www.cfhs.com)

Florida Fish & Wildlife Conservation Commission, <http://myfwc.com>

Everglades National Park, [www.nps.gov/ever](http://www.nps.gov/ever)