

This document summarizes the status of Burmese pythons in Florida, and an upcoming citizen science program, the 2016 Python Challenge™ that will begin in January 2016.

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Background

- Large constrictor that can grow to over 20 ft. in length
- Native to India/China
- Typically live near water and are considered semiaquatic
- Diverse diet and prolific breeder
- Reported in extreme south Florida since 1979
- Potential ecological, social and economic impacts



The Burmese python is a large nonvenomous constrictor and is considered an invasive species in Florida. Native to India and China, it tends to occupy areas near water. Burmese pythons have been reported in extreme south Florida since the 1980s, and most reports have been from south of Lake Okeechobee to Key Largo and from western Broward County over to the Naples area, however most have been found in and around the Everglades in south Florida. Due to its wide diet, and its placement as a top predator where it lives, it represents a threat to native fish and wildlife. Because of perceived human health and safety threat of large constrictor snakes, this species also has potential social and economic impacts despite the few documented injuries or attacks on humans in the wild.

Current Status

- Firmly established and continue to expand in distribution in areas of south Florida
- “Conditional Reptile” under FWC Rule 68-5
- “Injurious Species” Under USFWS Lacey Act
- Presently no reliable population estimates are available

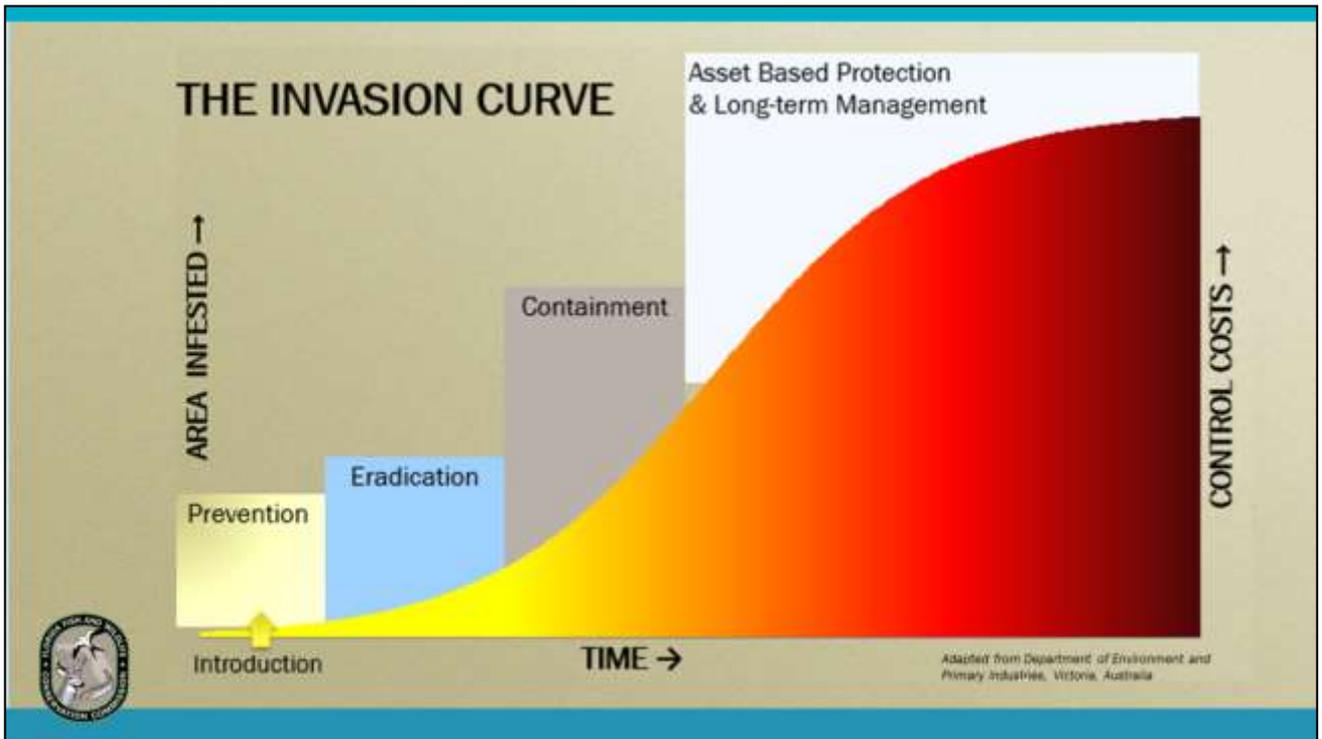


Dots indicate verified and credible sightings of Burmese pythons up to August 2015.

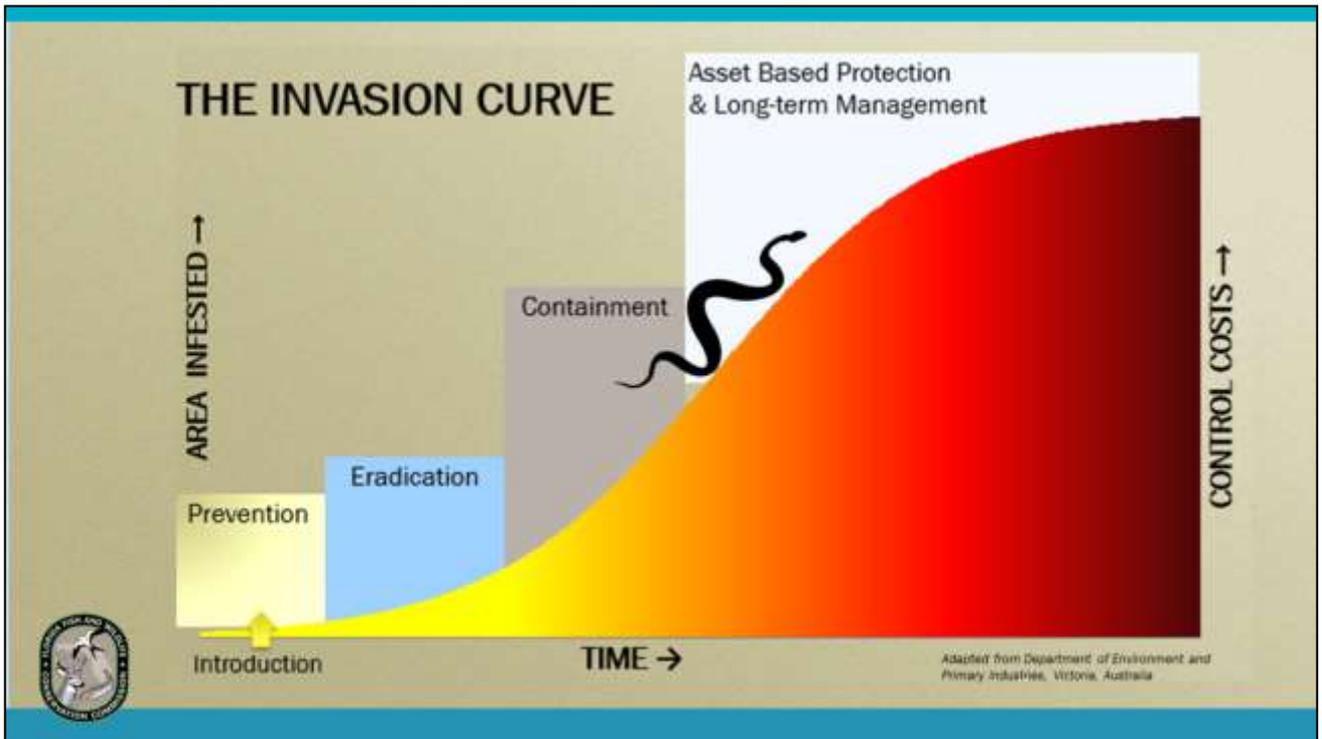


Burmese pythons are firmly established in south Florida and continue to expand in distribution. Location records reveal that pythons have been encountered further north and west in successive years. The climatic limit for the survival of this species is unknown at this time. The impacted area spans state, federal, tribal, local government and private lands. The state and federal government also have taken steps to decrease the probability of future Burmese python introductions through regulatory action. In 2010, FWC listed the Burmese python as a “conditional species” with the result that Burmese pythons were no longer allowed to be acquired as personal pets. These species are afforded no protections, and can be taken year-round with landowner permission. Similarly, in 2012, the USFWS placed this species on the injurious species list, which prohibits the importation and interstate transport without a federal permit.

Finally, there are presently no reliable populations estimated for Burmese pythons. Due to an exceedingly low rate of detection, population numbers remain elusive. Areas where pythons have been detected tend to be along levees, roads and canals with higher levels of human access. This is indicated by the dots on the map that denote verified and credible sightings of Burmese pythons up to August 2015.



The slide illustrates what has been referred to as the invasion curve. As more area becomes infested, the less likely the species will be eradicated and costs of management go up. Preventing the release and establishment of nonnative wildlife is clearly the key.



In regards to the Burmese python in Florida, we are in the asset based protection and long-term management part of this curve.

Current Strategies

Interagency Coordination

- Prevention
- Outreach and education
- Research to increase management effectiveness
- Routine surveys and removals
- Utilization of volunteers/enthusiasts



Due to the complex land ownership where pythons occur, interagency coordination is crucial. Our collective focus is on preventing additional python introductions, slowing or preventing the spread of this species to new areas through detection and reporting programs, managing impacts to high-priority natural resources, and continuing research on improved detection and long-term removal methods. Routine surveys are part of our collective interagency strategy, as are the utilization of volunteers and enthusiasts as one management tool.

Python Detection

- Detection rates of less than 1%
- Occur in inhospitable terrain with limited access
- To date, approximately 2,500 have been removed from the wild



The limiting factor in our effectiveness in many of these strategies has been detection. The removal of pythons from the Everglades ecosystem has proven difficult due to the inability to detect them in the environment. Detection rates have been estimated to be less than 1%. Low detection ability, combined with an inhospitable terrain with many access challenges, provides limited ability for the removal of pythons from natural areas. In spite of this difficulty, to date 2,500 pythons have been removed from the wild.

Because of these difficulties, FWC and our partners have been looking for innovative removal tools and ways to educate the public. One of innovative citizen science programs that we are reintroducing this coming year is the Python Challenge™.

Inaugural 2013 Python Challenge™



Primary Goal: Raise awareness about Burmese pythons and other exotic wildlife in Florida

- Increase participation and reporting of python sightings
- Examine effectiveness of an incentive-based model as a tool for invasive wildlife management
- Determine level of training needed for a citizen scientist program
- Remove pythons and collect biological and social data



In the winter 2013, FWC held its first Python Challenge, a month-long python removal competition. The goals of the program were to raise public awareness about Burmese python issues in Florida, increase participation and reporting of python sightings. We also wanted to determine level of interest in a public participation event if training and incentives were provided. Finally we wanted to collect social data on those who were engaged in the program and subsequent ecological and biological data from the pythons that were removed in the effort.

2013 Python Challenge™ Successes

- National and international attention and awareness
- Increased participation and reporting of python sightings
- Pythons removed added to our breath of knowledge
- UF Human Dimensions Study



The FWC considered the 2013 event widely successful. The education and awareness goals were exceeded with over 80 million television viewers seeing a story about pythons during the event. It received national and international attention. The two public awareness events held in conjunction were well attended, as were the training events held by the Nature Conservancy. During and since the 2013 event, we have seen an increase in python and other nonnatives reported to FWC that has helped us target rapid response when necessary. Although 68 has been criticized as a small number, more pythons were removed in this effort than had ever been removed from those areas in a comparable time frame. The University of Florida conducted a Human Dimensions study to understand the motivations and beliefs of participants and non-participants. Both the number of citizens that signed up to participate (over 1,500 people) and the results of the UF Human Dimensions study indicated that the public want to be involved.

2013 Python Challenge™

Lessons Learned



- The public are concerned about pythons and want to be involved
- Experience matters



The Human-Dimensions study conducted by UF also indicated that the public is concerned about invasive species, and believe that events such as the Python Challenge™ help to raise awareness about invasive species. Over 1,500 participants registered to compete, and of those 24 were registered as “Python Permit Holders” that had been part of the FWC Python Removal Program. Of the sixty-eight pythons removed during the 2013 event, most were by these experienced participants.

2016 Python Challenge™

Goals

- Increase the effectiveness of the public by providing training and education
- Educate the public about Burmese pythons to help limit the impact of this and other invasive species



Building on what we learned in 2013, the intent of the 2016 Python Challenge™ is to engage the public in participating in Everglades conservation through invasive species removal. The Everglades ecosystem is a national treasure and the 2016 Python Challenge™ will activate people to be part of the long-term solution of managing invasive wildlife in Florida. As part of this effort, we will be promoting expanded training opportunities and continuing to educate the public- focusing on how they can help limit the spread of invasive species, and promoting yearlong opportunities as one long-term management tool.

2016 Python Challenge™ Plans



- Python removal contest
- Extensive social media components
- Invasive Species Awareness and Python Challenge Kick-off Festival
- 2016 Python Challenge™ Awards Ceremony



Staff along with the Fish and Wildlife Foundation of Florida have been actively working on the plans for the 2016 event and will continue to do so over the next few months. Elements that are in the works include a python removal contest, extensive social media engagement, and 2 public events.

2016 Python Challenge™ Python Removal Contest Details



- Team and Individual competitions
- Awards for “Most Pythons” and “Longest Python” removed
- Expanded contest locations
- Online training required
- In-person training available

Information posted at www.PythonChallenge.org



Image Courtesy of Robert Leert



One of the primary components of the 2016 Python Challenge will continue to be the python removal contest. We realized during the 2013 event, that many participants were working in teams. To accommodate this, we have set up two competition tiers. Awards will be provided for “most pythons” removed by a team or individual and “longest python” removed by a team or individual. Staff have been working closely with our partners to expand the contest locations. Also, staff are developing an online training module that will be required for all participants. We will be providing hands-on, in person removal/capture and reptile identification workshops so that participants can more effectively participate in the detection and capture and removal of Burmese pythons.

Staff look forward to continuing to work the Commissioners, the Fish and Wildlife Foundation of Florida, and our partners to make this event a success.

Stay Tuned!

