



Families ForEverglades™

Invasive Species IN THE Everglades

Learn more about the impacts of invasive species, best management practices, and what you can do to help with these resources and activities.



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WHAT'S INSIDE?



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Read the *Burmese Pythons in Your Backyard* write-up by Susan Toth in English and Spanish to learn about one of the Everglades' most notorious invasive species.



How to Help

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There are many actions we can take to help prevent and stop the spread of invasive species. These are just a few of the ways you and your family can help in your area.



Invasive Species Resource Links

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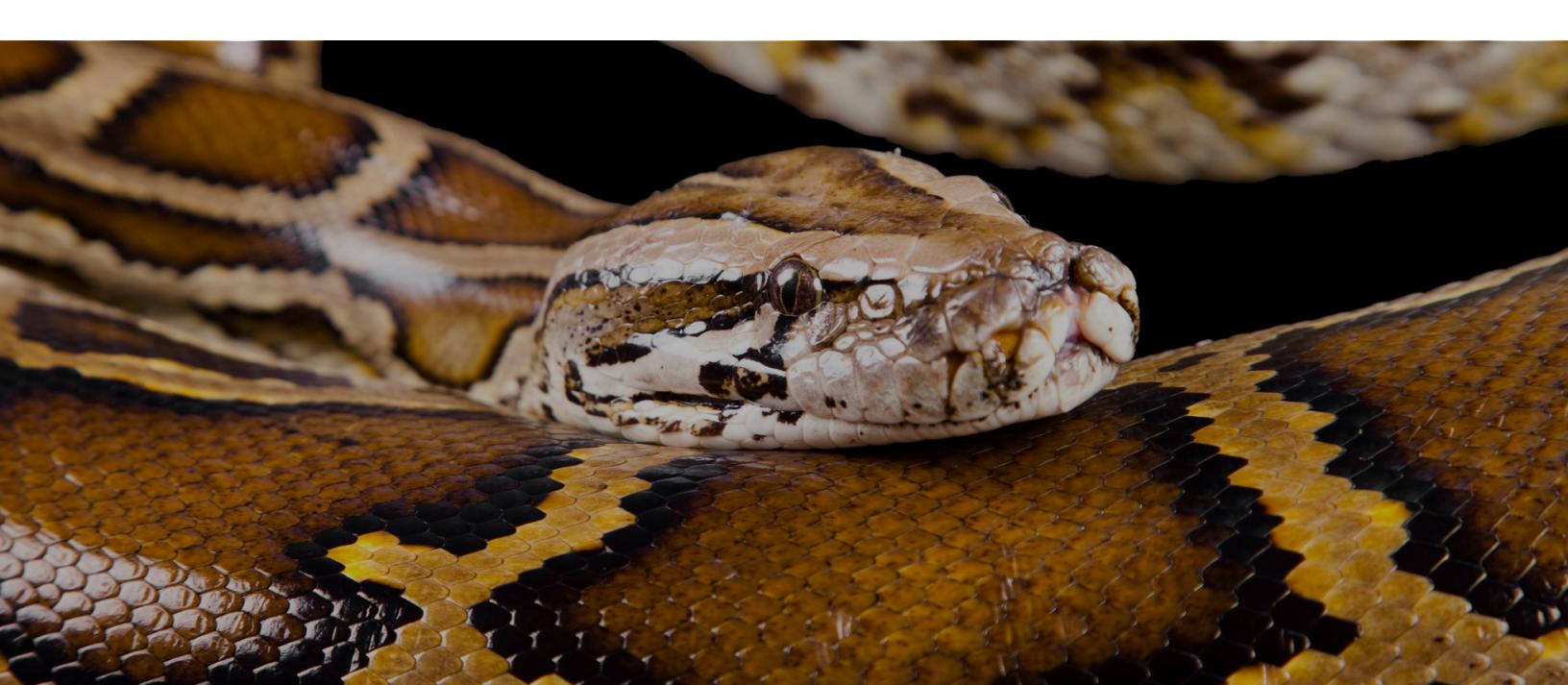
Use these links to learn more about the Everglades Dirty Dozen, FWC's invasive species programs, Florida Native Plant Society, Florida-Friendly Yards, and more!



Educator Resources

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Are you an educator or know someone who is? Share these educator resources to get schools and classrooms involved.



Burmese Pythons IN YOUR BACKYARD

Written by Susan Toth

Adapted from ***Burmese Pythons in Your Backyard***

by Dr. Ruscena Weiderholt

What's taller than a giraffe, weighs up to 200 pounds, and can swallow a deer in a single gulp? The Burmese python! The Burmese python is one of the Everglades' most notorious invasive species, non-native plants or animals that cause harm to the environment, economy, or human health.

But how did they get here? Why are they such a problem? And what can we do to help?





As its name implies, this species comes from the country of Burma, and other areas in Asia. One of the world's five largest snakes, they can reach lengths of 23 feet and swell to the girth of a telephone pole. Burmese pythons were a popular pet, so popular in fact that nearly 100,000 of them were imported to the United States between 1996 and 2006. As hatchlings, they grow fast and can reach eight feet long within a year.

Some pet owners, unable to care for their giant snakes, release them into the wild. These careless and illegal actions have led to a massive problem. Burmese pythons were spotted in the Everglades as early as the 1980s and 1990s. Today, the Burmese python population has exploded. There are tens of thousands of pythons covering over 1,000 square miles of South Florida, including Everglades National Park and Big Cypress National Preserve. To make matters worse, these breeding snakes are likely spreading into new areas.

So why are pythons a problem? The answer is their appetites. They can and do eat a wide variety of native Everglades animals. They can even eat adult alligators. One python was found with the remains of three deer in its stomach. Amazingly, pythons can eat something half of their own body size at a time. That is like an average American man eating 95 pounds of pizza for dinner. Because of their big appetites, mammal populations like bobcats, rabbits, raccoons, foxes, opossums, and white-tailed deer have undergone massive declines (88% to 99%).

Species like the endangered Key Largo woodrats and threatened Wood Storks are also at risk. So are wading bird nesting colonies. This means that wading birds like Roseate Spoonbills, Great Egrets, Snowy Egrets, and White Ibises, already in decline, now face a new threat. In addition to devouring mammals and birds, they also spread disease to native snakes.

What's being done to stop the Burmese pythons? Despite their large size, pythons are quite difficult to detect in nature because they're so well camouflaged. Fortunately, there's a whole group of researchers from the University of Florida, Davidson College, U.S. Geological Survey, National Park Service, and the South Florida Water Management District (SFWMD) dedicated to studying the problem. Various techniques are being tried out to eradicate pythons. For instance, individual snakes are implanted with a transmitter which leads researchers to other pythons for removal. There's also legal hunting. The Florida Fish and Wildlife Commission (FWC) offers free training on identifying and removing Burmese pythons and offers incentives to humanely kill them in the Everglades. The SFWMD also sponsors a Burmese python hunt in the Everglades. Recently, they reached the astounding milestone of removing over 11 tons of pythons that, if lined up, would stretch nearly 2.5 miles.

But like diseases, early detection is important for preventing the spread of invasive species. Once established, like Burmese pythons are, they're very difficult to eradicate. The focus now is on preventing any further spread of pythons and keeping their population sizes down.



Giant constricting snakes don't make good pets, and Burmese pythons can no longer be acquired as pets here in Florida. But what can we do to slow the spread of other invasive species in the Everglades? Another way to help is to be a responsible pet owner. Fish, like the Mayan cichlid or lizards, like the Argentine black and white Tegu, are just two more examples of harmful invasive species that started as pets and have ended up in the Everglades and are wreaking havoc on the food chains of native animals.

In the case you have an unwanted pet, turn it in at a Pet Amnesty Day. Remember it's illegal to release non-native wildlife in Florida, and there are penalties for doing so. Perhaps the best way we can help is to share what we know about the problem of invasive species with other people. The more people who understand the problem, the better we can all help control invasive species.

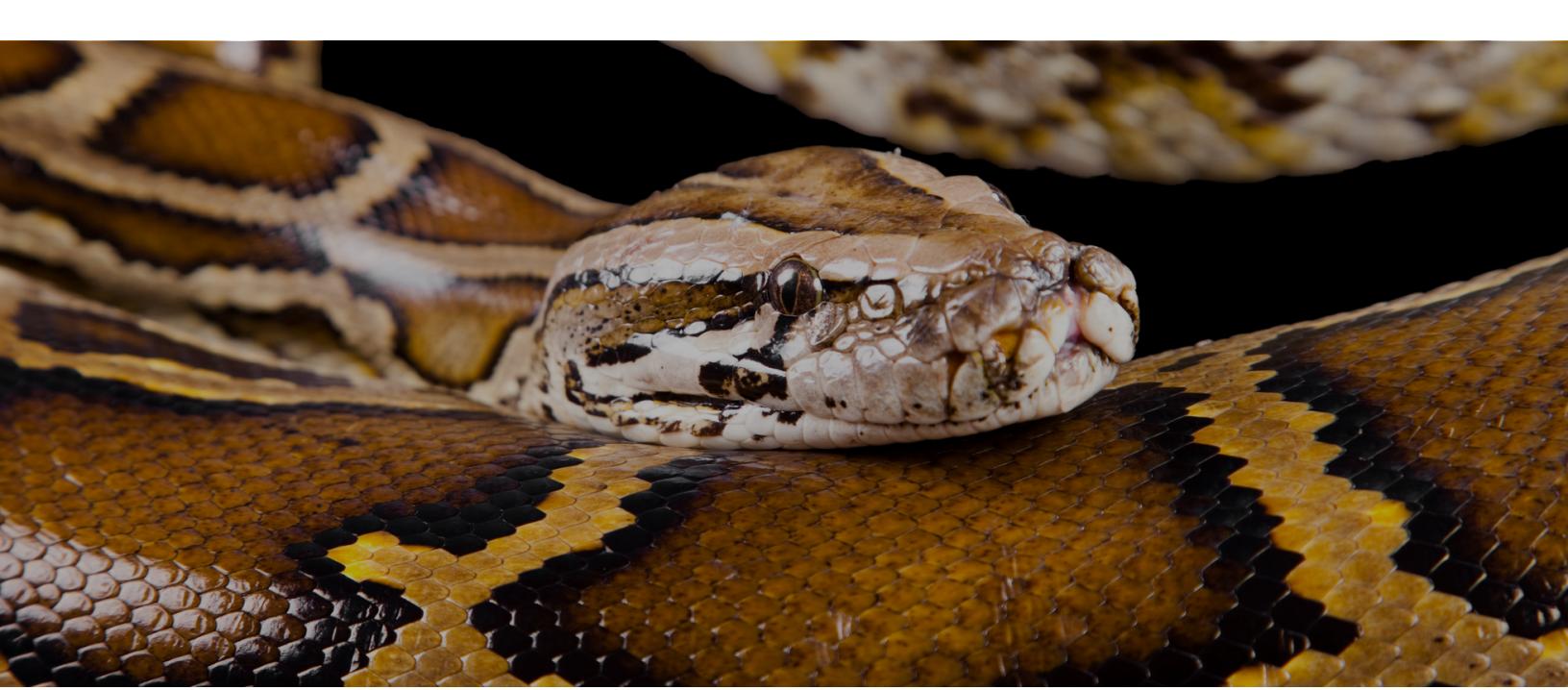
For more information, visit

<https://myfwc.com/wildlifehabitats/nonnatives/amnesty-program/>

To report the sighting of any invasive species go online at

www.IveGot1.org

If you happen to see a Burmese python, call the U.S. National Park Service Python Line at **305-815-2080** or the Keys Python Line at **1-888-483-4681**.



Pitones Birmanas EN TU PATIO

Escrito por Susan Toth

Adaptado de ***Burmese Pythons in Your Backyard***

escrito por Dr. Ruscena Weiderholt

¿Qué es más alto que una jirafa, pesa hasta 200 libras y puede tragarse un ciervo de un solo trago? ¡La pitón birmana! La pitón birmana es una de las especies invasoras más notorias de los Everglades, plantas o animales no nativos que causan daño al medio ambiente, la economía o la salud humana.

Pero, ¿cómo llegaron aquí? ¿Por qué son un problema? ¿Y qué podemos hacer para ayudar?





Como su nombre lo indica, esta especie proviene del país de Birmania y otras zonas de Asia. Una de las cinco serpientes más grandes del mundo, puede alcanzar longitudes de 23 pies e hincharse hasta la circunferencia de un poste de teléfono. Las pitones birmanas eran una mascota tan codiciada que casi 100,000 de ellas fueron importadas a los Estados Unidos entre 1996 y 2006. Como crías, crecen rápido y pueden alcanzar dos metros y medio de largo en un año.

Algunos dueños de mascotas, incapaces de cuidar a sus serpientes gigantes, las liberan en la naturaleza. Estas acciones descuidadas e ilegales han causado un problema masivo. En las décadas de 1980 y 1990 ya se veían las pitones birmanas en los Everglades. Hoy en día, la población de pitones birmanas se ha disparado. Hay decenas de miles de pitones que cubren más de 1,000 millas cuadradas del sur de Florida, incluido el Parque Nacional Everglades y la Reserva Nacional Big Cypress. Para empeorar las cosas, es probable que estas serpientes reproductoras se estén extendiendo a nuevas áreas.

Entonces, ¿por qué son las pitones un problema? La respuesta es su apetito. Pueden comer y comen una amplia variedad de animales nativos de los Everglades. Incluso pueden comer caimanes adultos. Se encontró una pitón con los restos de tres ciervos en el estómago. Sorprendentemente, las pitones pueden comerse algo de la mitad del tamaño de su propio cuerpo a la vez. Eso es equivalente a un hombre estadounidense promedio comerse 95 libras de pizza para la cena. Debido a su gran apetito, las poblaciones de mamíferos como gatos monteses, conejos, mapaches, zorros, zarigüeyas y venados de cola blanca han experimentado una disminución masiva (88% a 99%).

Especies como las ratas de bosque de Key Largo en peligro de extinción y las cigüeñas de bosque amenazadas, también están en riesgo. También lo están las colonias de anidación de aves zancudas. Esto significa que las aves zancudas como las espátulas rosadas, las garcetas grandes, las garcetas nevadas y los ibis blancos, que ya estaban en declive, ahora enfrentan una nueva amenaza. Además de devorar mamíferos y aves, también transmiten enfermedades a las serpientes nativas.

¿Qué se está haciendo para detener a las pitones birmanas? A pesar de su gran tamaño, las pitones son bastante difíciles de detectar en la naturaleza porque están muy bien camufladas. Afortunadamente, hay un grupo completo de investigadores de la Universidad de Florida, el Davidson College, el Servicio Geológico de Estados Unidos, el Servicio de Parques Nacionales, y el Distrito de Administración del Agua del Sur de Florida (SFWMD, por sus siglas en inglés) dedicados a estudiar el problema. Se están probando varias técnicas para erradicar las pitones. Por ejemplo, a las serpientes individuales se les implanta un transmisor que lleva a los investigadores a otras pitones para su eliminación. También existe la caza legal. La Comisión de Pesca y Vida Silvestre de Florida (FWC, por sus siglas en inglés) ofrece capacitación gratuita sobre la identificación y eliminación de pitones birmanas, y ofrece incentivos para matarlas con humanidad en los Everglades. El Distrito de Administración del Agua del Sur de Florida también patrocina una cacería de pitones birmanas en los Everglades. Recientemente, alcanzaron la asombrosa meta de eliminar más de 11 toneladas de pitones que, si se alinearan, se extenderían casi 2.5 millas.

Pero al igual que las enfermedades, la detección temprana es importante para prevenir la propagación de especies invasoras. Una vez establecidas, como las pitones birmanas, son muy difíciles de erradicar. El enfoque ahora es prevenir una mayor propagación de pitones y mantener bajos los tamaños de su población.



Las serpientes constrictoras gigantes no son buenas mascotas, y las pitones birmanas ya no se pueden adquirir como mascotas aquí en Florida. Pero, ¿qué podemos hacer para frenar la propagación de otras especies invasoras en los Everglades? Otra forma de ayudar es siendo un dueño de mascotas responsable. Los peces como el cíclido maya, o las lagartijas como el tegu argentino blanco y negro, son solo dos ejemplos más de especies invasoras dañinas que comenzaron como mascotas y han terminado en los Everglades. Ahora estas especies están causando estragos en las cadenas alimenticias de los animales nativos.

En caso que usted tenga una mascota no deseada, entréguela durante un día de amnistía para mascotas. Recuerde que es ilegal liberar vida silvestre no autóctona en Florida y existen sanciones por hacerlo. Quizás la mejor manera que podemos ayudar es compartir lo que sabemos sobre el problema de las especies invasoras con otras personas. Cuantas más personas entiendan el problema, mejor podremos ayudar a controlar las especies invasoras.

Para obtener más información, visite

<https://myfwc.com/wildlifehabitats/nonnatives/amnesty-program/>

Para informar sobre el avistamiento de cualquier especie invasora, visite
www.IveGot1.org

Si ve una pitón birmana, llame a la línea Pitones del Servicio de Parques Nacionales de Estados Unidos al **305-815-2080** o a la línea Pitones de los Cayos al **1-888-483-4681**.

HOW CAN YOU HELP?



Be a Responsible Pet Owner

- Don't let it loose - never release unwanted pets into the wild.
- Do your research before adopting a pet. How long does it live? How big does it get? Where did this animal come from?

RESOURCES

Surrender Exotic Pets

- If you can no longer take care of an exotic pet, surrender it to FWC's Exotic Pet Amnesty Program.
- Face no legal penalties, and FWC will facilitate the adoption process to rehome the pet.

MORE INFO



Report Invaders

- Keep your eyes open and cameras ready!
- Report invasive species 3 ways:
 - Free smartphone app - I'veGot1
 - Online - www.IveGot1.org
 - Exotic species hotline - 888-IVE-GOT1

IVEGOT1.ORG

Learn More

- Attend public workshops on Burmese pythons, green iguanas, or other invasive species.
- Join a local [Native Plant Society](#) and learn about the different species of native plants that attract native animals.
- More resources on the next page!



INVASIVE SPECIES RESOURCE LINKS

- **Florida's Non-Native Fish and Wildlife - FWC**

- Check out Florida Fish and Wildlife Conservation Commission's website to learn more about the non-native species reported in Florida, removal and permit information, and what they're doing to minimize the adverse effects of non-native species in Florida.

- **Non-Native Handouts and Educational Materials**

- The FWC's Non-native Fish and Wildlife Program has produced a variety of educational materials including brochures, cards and flyers, posters, and coloring and activity pages. These are available to the public and can be downloaded and printed as needed.

- **Burmese Pythons in Florida**

- Click here to review the rules and regulations on removing pythons in Florida, how to identify a Burmese python on your property, and python removal programs like the Python Patrol and Detector Dog Team.

- **Everglades Cooperative Invasive Species Management Area - ECISMA**

- Interested in learning more about the Everglades Dirty Dozen and what is being done to manage them in the Everglades? Discover the ECISMA website to learn more about what they do and how you can help!

- **Florida Native Plant Society**

- Find out more about the native plants in your area and how you can plant native flora, which is essential to the healthy ecosystems that support native wildlife and people.

- **Florida-Friendly Landscaping™**

- Through the UF/IFAS Extension offices, learn how you can create and maintain a beautiful yard using research-based, environmentally-sustainable landscaping practices that are beneficial to native species.

EDUCATOR RESOURCES



Invasive Species in the Everglades - 5th Grade Lesson

Students will examine the effects of exotic and invasive species in an ecosystem using riddles and research. Students will be able to explain how exotic and invasive species can harm native species or habitats in the Everglades.



Invasive Species in the Everglades - Additional Instructional Resource Part 1

Students will learn about the invasive species in the Everglades damaging the environment, and use the research worksheet to learn how to help.



Invasive Species in the Everglades - Additional Instructional Resource Part 2

Students will investigate two Everglades invasive species part of the Dirty Dozen using both video and written resources. Students will complete a T-chart to summarize the information they found on both species and will complete a Venn diagram to compare and contrast.



Odyssey Earth Invasive Videos

Check out these videos by our partner, Odyssey Earth, about invasive species in the Everglades. View *Invasion of the Snakeheads*, and *Constricted: Florida's Exotic Invaders*, to learn more.