

## Highlights:

- This issue marks the beginning of the Invader Updater's second year!
- Nutria swat teams strike again in Louisiana.
- Food for thought: should the threat assessment process for wildlife imports be revised?
- Got Pythons? There's an App for that!

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## Focal Species: Nutria

### Scientific name:

*Myocastor coypus*

### Size:

Body = 12–18 in.

Tail = 16–24 in.

Weight = 10–20 lbs.

### Native range:

South America

(southern regions)



Nutria are large, semi-aquatic, invasive rodents with distinctive orange incisors. (Photos courtesy of Wikimedia)

The Nutria is listed among the 100 worst invasive species in the world by the Global Invasive Species Database. Nutria were historically introduced for weed control and farmed for fur production. However, they quickly escaped from containment and began to disperse, resulting in introductions in at least 44 countries, including the United States. The Nutria is considered an established invasive species in 11 states, is present but status uncertain (or controlled) in 8 states, and is cultivated in captivity in 5 additional states. Introduced Nutria were unable to survive in Kentucky and Nebraska and were success-

fully eradicated from California in the late 1970s.

These large, semi-aquatic rodents are especially prevalent in man-made canals and ditches, through which they can disperse to new areas, but are also found in (or within 100 yards of) other permanent water bodies such as marshes, rivers, and lakes. With their large, orange incisors, they munch vegetation to the ground, devastating important habitats and transforming vegetated wetlands into open waters. These large rodents also prey on aquatic invertebrates, which are often important prey for native species, and have been known to damage beet crops. Nutria burrows also undermine levees, dikes, and canal banks, causing erosion and serious safety concerns.

Management strategies for feral Nutria populations currently include habitat alteration, shooting, and trapping. Rodenticide baits have been shown to have little impact on alligators and are a potential management tool. Some areas, such as Jefferson Parish in New Orleans, currently have to resort to spending hundreds of thousands of dollars to support Sheriff SWAT teams and pay private trappers to help with control. Although these costs may seem excessive, costs to repair Nutria damage to drainage systems are more than triple control costs. Unfortunately, Nutria in Jefferson Parish are becoming wary of SWAT teams and increasingly difficult to trap.

[Learn more...](#)

## Science: Python Cold Tolerance



Pythons at SREL altered their behavior as temperatures decreased, spending more time basking above ground and even in trees.

In Winter 2009 we presented two contradictory studies of the potential for Burmese Pythons to expand their range northward in the U.S. Here, we report on observed cold tolerance of pythons.

Researchers at a USDA facility in Gainesville ([Avery et al. 2010](#)) report that 80% (7 of 9) of pythons from Everglades National Park (ENP) held in outdoor enclosures last winter died (or became fatally ill). The two that survived sought refuge in heated underground shelters. Similarly, scientists radio-tracking wild pythons in

ENP ([Mazzotti et al. 2010](#)) reported that 90% of snakes (9 of 10) carrying transmitters died, and approximately 30% of other pythons that they encountered (not carrying transmitters) also died as a result of the cold temperatures. Investigators at the Savannah River Ecology Laboratory (SREL) in South Carolina tested the hypothesis that pythons could survive cold winters outside of Florida ([Dorcas et al. 2010](#)). Although they found that 100% of pythons from ENP died, they attributed 20% of this mortality to exception-

ally cold temperatures and suggest that a few pythons could survive average winters in many areas outside of Florida.

All of these studies agreed that pythons from ENP behaved inappropriately by basking instead of seeking shelter, and suggest that this may be because most pet pythons came from tropical source populations or these snakes may have acclimated to warm temperatures in ENP—suggesting that there is still potential for python survival outside of ENP.

[Learn more...](#)

## Legislation: Role of Regulation

Defenders of Wildlife proposes:

*“Federal agencies shall only allow imports and interstate commerce in non-native animals that have been assessed by a responsible federal official and determined to pose a low likelihood of causing harm to the environment, the economy, public health or animal or plant health in the United States.”*

In recent months, Florida has seen increased regulation of the former Reptiles of Concern, including Burmese Pythons. These reptiles are now listed as conditional species and can no longer be bought, possessed, or sold. Individuals who already owned these species can get a permit for the life of the animal (but cannot sell it) and breeders can sell their existing stocks outside of Florida. In addition, the U.S. Fish and Wildlife Service, the U.S. Senate, and the U.S. House of Representatives have proposed to list several

reptile species as injurious under the Lacey Act.

However, this seems to be a classic case of “too little too late.” Burmese Pythons imported to the U.S. for the pet trade have already invaded our native ecosystem and become firmly established, and the long-term impacts of this invasion remain to be seen. Banning controversial species while allowing import of other potentially invasive species is not an effective conservation strategy.

According to the 2007 “Broken Screens” report issued by the Defenders of

Wildlife, approximately 16% of vertebrate wildlife species imported into the U.S. have become invasive or are considered a potential risk elsewhere. Whereas the process of prohibiting importation by listing a species as injurious under the Lacey Act can take years, this report was able to assess the potential risk off all imported species in only months—with a very limited budget. Given that these species can pose risks to human health as well as the environment, the case for better regulation of imports is a strong one.

[Learn more...](#)

## Innovations: iPhone App for Invasive Reptiles



The University of Georgia's Center for Invasive Species

and Ecosystem Health and the Everglades Cooperative Invasive Species Management Area (ECISMA) recently announced the release of their new iPhone app. The app is based on a set of laminated cards produced by the ECISMA, and features detailed illustrations and expert tips to help observers recognize and identify large, invasive reptiles "on the go."

The app also includes instructions for data collection and online reporting of reptile sightings.

The FREE iPhone app is currently available for download through the iTunes Application Store.

[Learn more...](#)

**"Need to Identify a Python? There's an App for That!"**

*~Erin Griffin,*

*USDA Blog*

## News Updates: Lionfish Derbies

Since initial sightings in the early 1990s, venomous Lionfish have rapidly invaded the eastern seaboard of the U.S., the Caribbean Sea, and now the Gulf of Mexico. In response to this invasion, REEF (an organization of conservation-minded divers and marine enthusiasts) decided to expand their "Lionfish Derby" initiative to the Florida Keys. In the Bahamas, the

first annual REEF Lionfish Derby netted an astounding 1,408 fish!

The Florida Keys Derbies were scheduled for Fall 2010 and sponsored by the Ocean Reef Conservation Association and several dive shops. On September 11th, approximately 100 divers formed 27 teams and competed to see who would capture the most, the

biggest, and even the smallest Lionfish in the Upper Keys. At the end of the day, a total of 534 invasive Lionfish had been collected, and the teams sat down to a gourmet dinner of... you guessed it, Lionfish!

The Middle Keys derby in October was also a success, and 13 teams have signed up for the final Lower Keys derby (Key West, 13 Nov). [Learn more...](#)



## Noteworthy: SW FL Invasive Species Conference

On 1 December 2010, Florida Gulf Coast University (Ft. Myers) will host the 15th Annual Southwest Florida Invasive Species Conference. This FREE event, held each year, has become an exceptional resource for invasive species information,

and provides land managers and other specialists the opportunity to earn continuing education credits (CEUs) in hands-on workshops. In addition to overviews of the current status and distribution of invasive plants and animals,

the conference will feature presentations on rapid response efforts, innovative management strategies, and the use of cutting-edge technology in the fight against invasive species in Florida.

[Register Now...](#)





## In Focus...

This photo, by Edward Wilke, is a great example of the huge amount of variation in coloration and markings exhibited by invasive Cuban Treefrogs (*Osteopilus septentrionalis*). Notice that this treefrog has distinct warts, large toepads, and “bug eyes.”

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Do you have questions, comments, suggestions, or have an In Focus photo to submit? Email Monica at [monicaem@ufl.edu](mailto:monicaem@ufl.edu)



Photo © Edward Wilke, 2009

The Invader Updater is a quarterly newsletter focused primarily on providing information on invasive vertebrate animals in Florida and the southeastern U.S., and was first published in Fall 2009.

## Resources

- Are you REDDY? If you have not yet completed the Introduced Reptile Early Detection and Documentation Training, be sure to visit: <http://ufwildlife.ifas.ufl.edu/reddy.shtml>
- Follow the Invader Updater on Facebook for news updates and more – visit the [Invader Updater webpage](#) to find us on Facebook.
- [Nutria: Damage Prevention and Control Methods \(USDA APHIS WS Fact Sheet\)](#)
- The FREE IveGot1 iPhone App is now available for download from the iTunes Application Store – visit <http://www.eddmaps.org/florida/iphone/> to view screenshots from the App and learn more.
- The Global Invasive Species Database is an outstanding source of information. The database is managed by the Invasive Species Specialist Group (ISSG) of the IUCN Species Survival Commission and was developed as part of the global initiative on invasive species led by the Global Invasive Species Programme (GISP) . Visit: <http://www.issg.org/database/welcome/>
- Get Involved! Visit the Florida Invasive Species Partnership website to join your local chapter! [www.floridainvasives.org](http://www.floridainvasives.org)
- EDDMapS is the official reporting website for invasive wildlife in Florida – visit [www.IveGot1.org](http://www.IveGot1.org) to register and start reporting!
- Know of an important resource not listed here or in our archives? Let us know – email a description and URL to [monicaem@ufl.edu](mailto:monicaem@ufl.edu)