

Highlights:

- Tadpole timing can affect Cuban Treefrog impacts on native species
- Use EDDMapS to view current range of invasive species and map new sightings
- Status update on proposed python legislation
- Cuban Treefrog Citizen Science
- Cold-killed Critters

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Focal Species: African Rock Python

Scientific name:

Python sebae

Size:

Can grow to 15+ ft.

Native range:

Sub-Saharan Africa

A recent survey suggests that another species of large constrictor snake, the Northern African Rock Python, may be established in South Florida. In mid-January of 2010, the Exotic Animal Strike Team of the Everglades Cooperative Invasive Species Management Area (ECISMA) held an organized hunt, specifically to look for African Rock Pythons. Several of these snakes had previously been captured near Kendall Lakes, Miami (see map above), where the January hunt took place. The hunters captured five African Rock Pythons – two males and three females – and saw two more but were unable to capture them. The largest was a male that was 14 feet long and weighed 138 pounds!



Python Hunt Site – Miami



African Rock Python Markings

Head above (by Skip Snow)
Body below (by Robert Reed)



When scientists dissected the pythons, one of the females was found to have developing eggs. The capture of juvenile and adult African Rock Pythons, especially the female with developing eggs, suggests that these nonnative snakes may be breeding in the wild. Like Burmese Pythons, which are now widespread in the Everglades, the ultimate source of the African Rock Pythons is escapes or releases of animals that were

imported for the exotic pet trade. In their native range, African Rock Pythons inhabit somewhat drier habitats than those used by Burmese Pythons, so it is unclear how far they might be able to spread or if they will invade the Everglades. However, the establishment of this new species should not be taken lightly, because this is a large carnivore with a very aggressive demeanor.

[Learn More...](#)

Science: Invasive Tadpole Timing



Cuban Treefrog tadpole

Photo: Renata Platenburg

Cuban Treefrogs are an invasive species established throughout peninsular Florida, and are believed to be causing the decline of native treefrogs. Studies

have shown that native treefrogs decline when Cuban Treefrogs invade an area.

Previously, lab studies conducted by Dr. Kevin Smith (Washington University in St. Louis) showed that when Cuban Treefrog tadpoles were present, native Green Treefrog tadpoles took longer to metamorphose, and Southern Toad tadpoles transformed at

smaller sizes.

A recent experiment, conducted by Dr. C. Michael Knight (Audubon Society) and his colleagues at the University of Memphis, used small experimental ecosystems called 'mesocosms' to look at these effects in more depth. They found that the timing of tadpole arrival at a pond could dramatically affect the survival of other species. When Cuban Treefrog tadpoles were present, survival of native Squirrel Treefrogs was reduced, and when Cuban Treefrog tadpoles arrived first, few if any native Squirrel Tree-

frogs survived. Dr. Knight found that these effects were the result of competition – Cuban Treefrog tadpoles did not directly kill native tadpoles.

These results suggest that preventing Cuban Treefrogs from breeding in backyard ponds or wetlands early in the breeding season could help to increase survival of native treefrog tadpoles.

[Learn More...](#)



Legislation: Federal Python Bans



Companion bills in the U.S. Congress seek to list at least nine large constrictors as injurious wildlife.

In early 2009, publicity surrounding the wild populations of Burmese Pythons in the Everglades resulted in the introduction of companion "python ban" bills in the U.S. Senate and House of Representatives.

Senators Bill Nelson (D-FL) and Carl Levin (D-MI) co-sponsored S. 373, to list all pythons as injurious wildlife under the Lacey Act. Injurious wildlife may not be imported or transported between states. The Pet Industry Joint Advisory Council (PIJAC) has strongly opposed such a

generalized python ban, instead supporting amending the bill to allow pythons to be possessed and sold in the U.S. under certain restrictions, and to be exported to other countries. This would reduce the impacts of a python ban on the pet industry, but such concessions may weaken the conservation value and make the ban difficult to enforce. According to Senator Nelson's office, the bill was amended in committee to include only the nine large constrictor species recommended by the U.S. Fish and Wildlife Service.

Representative Kendrick Meek (D-FL17) and 13 co-sponsors introduced H.R. 2811, an identical companion bill in the House. This bill initially also sought to ban all pythons, but was amended in committee to include only Burmese and African Rock Pythons.

Each bill has been reported by committee, and will be added to the calendars for consideration by the full Senate or House.

See News Updates on the next page for related information.

[Follow these bills...](#)

Innovations: EDDMapS



The Early Detection and Distribution Mapping System (www.eddmaps.org) was developed by the University of Georgia's Center for Invasive Species and Ecosystem Health, in collaboration with state and federal agencies, universities,

and multiple invasive species partnerships.

The EDDMapS system has been used primarily to document distribution, spread, and management of invasive plants. However, data are available for many invasive vertebrates as well, and this may soon be the preferred reporting method in Florida.

EDDMapS uses a GoogleMaps

-based system to allow users to easily pinpoint invasive species sightings by entering GPS coordinates or an address, or using the map to find the location. Photos can also be uploaded for verification. Users must currently register (free of charge) before submitting reports. Each report is sent to an expert for verification and further action.

[Learn More...](#)

The "Map It, Zap It, Map It Again" function allows EDDMapS users to document removal of a mapped invasive species.

News Updates

FWS Proposes Python Ban

On January 20th, the US Fish and Wildlife Service announced a proposal to ban import and interstate transport of 9 large constrictor snakes by listing them as injurious wildlife under the Lacey Act. If adopted, the FWS rule would take the place of other proposed python bans (see 'Legislation', pg. 2). The FWS proposal ensures that all legal avenues are being pur-

sued to ensure action on this issue. **The proposed FWS ban was added to the Federal register on March 11th, and is open for public comment for 60 days.** Concerned Floridians should be directed to visit www.regulations.gov and enter docket number FWS-R9-FHC-2008-0015-1397 to view the economic and environmental analysis and comment on the proposal. [Learn More...](#)

Cold-killed Critters

Recent cold snaps have killed many species of introduced vertebrates in Florida. Pets should be kept away from dead reptiles to avoid botulism poisoning.

[Learn More...](#)

Events – Past and Future

Since the last issue, Invasive Species Awareness Week and FWC Exotic Pet Amnesty Day were held. [Be sure to mark your calendar for upcoming events...](#)



Noteworthy: Cuban Treefrog Citizen Science

For years, Floridians have been reporting Cuban Treefrog sightings to the University of Florida and removing and euthanizing these invasive frogs. Now they can participate in a new research study that seeks to evaluate the success of their manage-

ment efforts. Participants record basic information about each Cuban Treefrog they capture and euthanize (e.g., size, location), and are encouraged to submit quarterly reports. Participants are also asked to document the presence of native treefrogs,

which may benefit from efforts to remove the larger invasive Cuban Treefrogs. For more information, follow the link to "Become a Citizen Scientist!" at the left of the Invader Updater webpage.

[Learn More...](#)



Residents can report efforts to manage invasive frogs.



This newsletter is produced by:

Dr. Steve A. Johnson
Assistant Professor & Extension Specialist
Dept. of Wildlife Ecology & Gulf Coast REC
and

Monica E. McGarrity, Biological Scientist
Gulf Coast REC

University of Florida/IFAS
1200 North Park Road, Plant City, FL 33563

Do you have questions, comments, suggestions, or an In Focus photo to submit? Email monicaem@ufl.edu

In Focus...

This photo, by Mike Morgan, shows an African Red-headed Agama lizard. These lizards were introduced by accidental or intentional releases of pets, and have been spotted in at least 8 counties in Florida (see map at right). They are usually seen around rock walls, fences, and concrete structures with crevices for the lizards to hide in. They can grow up to a foot long, and are likely to prey on native lizards.

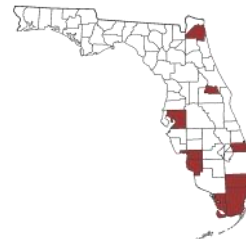


Photo © Mike Morgan, 2009

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 Winter 2009.

Resources

- [Field Guide to the Nonindigenous Marine Fishes of Florida](#) – NOAA's National Centers for Coastal Ocean Science, the Reef Environmental and Education Foundation, and the U.S. Geological Survey have formed a partnership to focus on early detection and rapid response of non-native marine fishes. The downloadable field guide and more information can be found online at http://fl.biology.usgs.gov/Marine_Fish_ID/index.html
- [Cooperative Invasive Species Management Areas \(CISMAs\)](#) are area partnerships that seek to expand invasive species management across the landscape. Partners include federal, state, and local governments and other groups interested in the management of invasive plants and animals. Join now at <http://www.floridainvasives.org>
- [EcoLearnIT Reusable Learning Objects](#) allow educators to easily create interactive learning modules on topics of interest to their audiences. Users can upload presentations in a variety of formats, including simple PowerPoint presentations. There is no fee for registering as an author, and users need not register. The RLO titled "[Invasive Species: A Florida Perspective](#)" (by Dr. James Cuda & Don Schmitz) is a great example of how this system can be used for invasive species education, and is highly informative for any audience. For more information visit the EcoLearnIT site at <http://ecolearnit.ifas.ufl.edu>.

Know of an important resource not listed here or in our archives? Let us know – email a description and URL to monicaem@ufl.edu