

Highlights:

- It's time to listen for and prevent Cuban Treefrog breeding!
- Killer kitties
- Tegu reproduction confirmed
- Results from the Python Challenge™
- Dead mouse drop
- African rock pythons still in FL

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Focal Species: Cuban Treefrog

Scientific name:

Osteopilus septentrionalis

Size:

Usually 1.5–4" long
nose to rump (5.5" max)

Native range:

Cuba, Bahamas, Cayman Islands

Notes:

Coloration can vary – look for warty skin and large toepads



Left: adult Cuban treefrog; Upper right: juvenile Cuban treefrog; Lower right: metamorphosing froglet

(Photo by Dr. Steve A. Johnson)

Although Cuban treefrogs may not receive the same media attention as pythons, the impact of their introduction in Florida may arguably be as severe. Globally, amphibians are declining and invasive species are one of many contributing factors. In Florida, invasive Cuban treefrogs have spread throughout the peninsula, where they prey on native amphibians and their tadpoles outcompete those of native amphibians. In natural areas, Cuban treefrogs cause native treefrogs to decline – in urban areas, Cuban treefrogs may replace the natives altogether. However, the removal of invasive Cuban Treefrogs allows the natives to return. Therefore, management of invasive Cuban treefrogs in urbanized areas may prove essential to helping native treefrogs persist.

Cuban treefrogs are large, warty treefrogs with bug-eyes and large toepads. Their body color may range from white to gray, green, brown, or even yellow – sometimes with splotches – and so the presence of warty bumps and large toe pads are the best identifying characteristics. Juveniles often have red eyes and a light stripe down each side of the body. Cuban treefrogs can be captured by hand or in PVC traps and humanely euthanized. For more information, see "[The Cuban Treefrog in Florida](#)." Perhaps more importantly, Cuban treefrog breeding should be prevented and their eggs and tadpoles removed with a net or pool skimmer. Cuban treefrogs breed from Mar-Oct in most areas of Florida; the breeding call of males is a distinctive, hoarse "mraaak" often heard after midnight. These frogs will breed, laying an easily recognizable surface film of eggs, in any still, fish-free water – including garden ponds and birdbaths. Potential breeding sites should be removed or monitored often for eggs – predatory native fish added to ponds may reduce suitability for breeding. Swimming pools at vacant homes should not remain untreated or they may become breeding sites. Informing neighbors about these frogs could aid management efforts. [Learn More...](#)



Science: Killer Kitties



Feral kitten consumes a wild rabbit.
(Photo by Jake Berzon, courtesy of [Wikimedia Commons](#))

Domestic cats—both free-ranging and indoor/outdoor pets—cause significant mortality of birds and small mammals on a global scale. Nevertheless, management of feral cat populations focuses on the welfare of the cats and trap-neuter-release programs are common. In Washington, D.C. alone, there are more than 300 managed feral cat colonies. Regulations related to management of feral cat colonies often require neutering and annual vaccination and allow feeding and provision of shelter structures. However, these regulations do not consider potential environmental impacts or require an environmental impact assessment as part of the process of establishing a colony.

Most estimates of annual wildlife mortality from domestic cat predation are based on limited data and state or country-wide estimates are extrapolated from smaller-scale studies. Recently, researchers with the Smithsonian and U.S. Fish and Wildlife Service sought to generate a better estimate by conducting a systematic review of all previous, published estimates of cat predation from the U.S. and other temperate regions. They estimated that domestic cats in the contiguous U.S. kill 1.4-3.7 billion birds and 6.9-20.7 billion mammals annually and that un-owned cats are the biggest offenders, although owned cats are far from innocent. This estimate ranks bird and small mammal mortality from cats higher than all other human-related sources of mortality including bird collisions with buildings and other structures. Furthermore, the researchers note that the degree of impact varies greatly between highly urban and suburban areas. Perhaps this new estimate will lead to serious re-consideration of existing cat management strategies and regulations. [Learn More...](#)

Argentine Tegu Nesting Confirmed in Florida

It's official—Argentine Black and White Tegus are established in Florida. Although this species has been present in west-central and southeastern Florida for many years, reproduction had not been confirmed. Researchers from the National Park Service, Florida Fish and Wildlife Conservation Commission (FWC), and University of Florida working as part of the Everglades Cooperative Invasive Species Management Area (ECISMA) began intensive tegu trapping in southeastern Florida to learn more about this primarily terrestrial, burrowing lizard. Due in large part to its burrowing nature, nesting had not previously been documented. In conjunction with the trapping study, the ECISMA fitted a few tegus—including at least one female—with radio transmitters and began to follow their movements. The female tegu led researchers to a nest chamber buried in vine-covered organic soil and detritus at the base of a tree stump in a thicket in highly disturbed habitat near a canal. The nest contained 21 eggs and was located on top of remnants of an old, partially-hatched nest from an earlier year. Research suggests that these lizards disperse along canals, thus this nest was ideally situated for dispersal. [Learn More...](#)

2013 Python Challenge™ Update

The FWC's 2013 Python Challenge™, a month-long, sponsored hunt for pythons on public lands, concluded on February 15th with a total of 68 pythons removed. Novice and expert hunters alike hunted for pythons during this event aimed at increasing awareness of pythons and their impacts—the most pythons (18) were captured by permit-holder Ruben Ramirez, while the longest python (14'3") was captured by a competitor in the general category. The total catch, although seemingly low, offers an unprecedentedly large sample for scientists who hope to learn more about these snakes. Although most of the snakes were euthanized, three males were fitted with transmitters and released—they will lead biologists to breeding females, which will also be removed. For more information visit PythonChallenge.org and check out our [Florida news page](#).



Guam's Dead Mouse Drop

Invasive Brown Treesnakes are the “poster child” of catastrophic biological invasions. These snakes hitchhiked to the island of Guam, multiplied rapidly, wiped out 9 out of 12 native bird species, and damaged electrical infrastructure but are difficult to find and capture. The costs related to this invader are estimated to be around \$1 billion per year, and therefore a great deal of research is devoted to efforts to manage Brown Treesnakes on Guam. Scientists at the USDA-APHIS National Wildlife Research Center have identified an over-the-counter pain killer, acetaminophen, that is highly toxic to these invasive snakes even at low doses. In April or May, scientists plan to drop dead mice – laced with acetaminophen and with parachutes attached – from helicopters into the jungle near Andersen Air Force Base. Scientists hope that the parachutes will become tangled in the treetops where these snakes live and will be consumed by snakes; extensive research suggests there will be little or no negative impacts on native species. If this pilot study proves effective, aerial application of toxic bait may be expanded. [Learn More...](#)



UF Hosts Exotic Pet Amnesty Day

The University of Florida's Department of Wildlife Ecology, in collaboration with the Florida Fish and Wildlife Conservation Commission (FWC) will be hosting its first ever “[Pet Amnesty Day](#)” on Tuesday, April 16, 2013 from 10:00 a.m. - 2:00 p.m. Pet Amnesty Days were created by FWC to minimize the effects exotics have on Florida's native wildlife. Non-native species can have negative impacts on native species, cause economic damage, and threaten human health. Unwanted exotic pets may be surrendered with no questions asked and no penalties for surrendering unlicensed or illegal exotic pets. Surrendered pets will be placed in adoptive homes with individuals approved by the FWC. Surrender exotic pets at the [Straughn Center](#). This event is free and open to the public. Please join us in our efforts in stopping the release of non-native pets! For additional information [contact Dr.](#)



African Rock Pythons Persist

In this recent photo, Ruben Ramirez ([Florida Python Hunters](#)) poses with an African Rock Python captured in South Florida. The Florida Fish and Wildlife Conservation Commission has conducted numerous surveys of the Bird Drive Basin to the west of Miami to remove African rock pythons. However, as this picture shows, these efforts have not yet succeeded in eradicating the African rock pythons from this area – three were found during the recent Python Challenge™. Anecdotal reports suggest that removal of rock piles or other debris might enhance efforts to detect and remove these large snakes.



Noteworthy

[National Invasive Species Awareness Week](#), an annual event, took place in early March and numerous educational events and invasive species roundups were held in Florida. Many of these events were sponsored by [Co-operative Invasive Species Management Areas](#) – join your CISMA today and be ready for NISAW next year!

‘[Holy Carp!](#)’ – a natural resource expert and a local improv troupe in MN are combining forces to offer invasive species education with a comedic twist – “outside the box” thinking that should serve as an inspiration!



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Do you have questions, comments,
suggestions, or an In Focus photo?
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In Focus...

Murray Stanford (FWC) poses with a non-native, 14 lb. 3 oz. Bullseye Snakehead that would have broken international records if it had been caught on hook and line! The FWC caught this fish during a routine electro-fishing survey in South Florida canals. These fish are very tasty – why not get out there and try to catch a snakehead for dinner?



(Photo © FWC 2013)

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.

Related Resources

- ◆ [The Cuban Treefrog in Florida](#) – UF/IFAS EDIS Fact Sheet
- ◆ [FWC Non-native Amnesty Day Events](#) – UF Pet Amnesty Day is April 16th
- ◆ [Tegu Lizards](#) – UF Wildlife
- ◆ [FWC: 2013 Python Challenge™](#)
- ◆ [Dead mice are going to be dropped on Guam from helicopters \(really\)](#) - NPR
- ◆ [Brown Treesnake Research at NWRC: Fumigants and toxicants](#) – USDA
- ◆ [Efficacy, effort, and cost comparisons of trapping and acetaminophen-baiting for control of brown treesnakes on Guam](#) (PDF) – Human-Wildlife Interactions
- ◆ [Global Invasive Species Database – Brown Treesnake](#)
- ◆ [Stocking Florida Bass in Texas Reservoirs May Alter Stream Systems Connected to Stocked Reservoirs](#) – Science Daily
- ◆ [National Invasive Species Awareness Week \(NISAW\)](#)
- ◆ Know of an important resource? Let us know – email a description and URL to monicaem@ufl.edu.