

Cuban Treefrog (Osteopilus septentrionalis)

By: Matthew S. Atkinson

Background:

Cuban treefrogs (*Osteopilus septentrionalis*) are large arboreal frogs that have been introduced into numerous states within the southeastern United States. Cuban treefrogs are native to Cuba and initially colonized Florida via shipping routes in the early 1930's¹. Since their introduction, Cuban treefrogs have become well established in the state of Florida, often out-competing native treefrogs in more urbanized locations². Recently, Cuban treefrogs have been observed in other southeastern states including Georgia, Alabama, South Carolina, North Carolina, Louisiana, and Texas. Louisiana specifically contains multiple breeding populations that have been documented since 2016 with at least one population likely originating from a palm nursery in southwest Florida³. Given the current models predicting the impact of global climate change on the spread of this species, Cuban treefrogs are likely to continue invading the southeast and should be actively monitored⁴.

Identifying characters:

While there are native treefrogs that could be confused for the Cuban treefrog, there are a few key characteristics that distinguish this invasive species. One of the most distinctive features is large prominent eyes, which give this frog species its bug-eyed appearance⁵. Additionally, Cuban treefrogs will generally be much larger than native tree frogs as adults, with even the largest native treefrog in the southeastern region of the United States, the barking treefrog (*Hyla gratiosa*) only reaching an average length of two inches whereas Cuban treefrogs can exceed five inches as adults⁵. Finally, Cuban treefrogs have larger toe pads relative to their body size when compared to native treefrog species.

Impacts on native wildlife:

The negative impacts of Cuban treefrogs have been well-documented since their initial colonization of the Southeast. This invasive species outcompetes or consumes native species^{2,6}, and their calls can interfere with the reproductive calls of native treefrogs⁷. Additionally, Cuban treefrogs often serve as hosts for several highly destructive amphibian pathogens and parasites,

including two of the pathogens of concern in the Southeast, Ranavirus and amphibian Perkinsea^{8–10}. As a result, the increased presence of Cuban treefrogs can result in increased infections in native species⁸. However, native populations can recover when Cuban treefrogs are removed if they remain excluded from the area¹¹.

What to do if you find one:

We recommend that you humanely euthanize Cuban treefrogs that you encounter (see reference 5 for more details); however, ensure that you correctly identified that the animal is a Cuban treefrog⁵. Additionally, especially if you live outside of the state of Florida, it



is highly recommended that you contact your state's wildlife agency so that your observation can be documented, and state biologists can assist with identification and euthanasia if needed and ensure it is not an established breeding population. We also encourage you to report your observation through community science applications such as Herp Mapper, EDD Maps, or Inaturalist.

Additional resources:

1) USGS Cuban Treefrog Species Account: https://nas.er.usgs.gov/queries/factsheet.aspx?SpeciesID=57

2) UF IFAS Extension Cuban Treefrog Fact Sheet: https://edis.ifas.ufl.edu/publication/uw259

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