

# Status of the Cuban Treefrog in the Southeast

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# Presentation Overview

- Species background
- Impacts in Florida
- CTF Identification
  - Eggs, Juveniles, Adults, Comp. w/ natives
- Status in Florida
- Status in other GSARP states
  - LA and GA breeding populations
- Potential GSARP distribution
- Summary & Resources

# CTF—Background

- Family Hylidae: *Osteopilus septentrionalis*
- Native to Cuba, Bahamas (likely just GBB), Cayman Islands
- Arrived in Florida ~1920's
- Hitchhiked on cargo ships from Cuba
  - Two Cuban sources (Heinicke et al., 2011)
- Human-mediated movement aided colonization of peninsula and beyond
  - Ornamental plants, palms, vehicles

# CTF—Impacts

- Depredate native treefrogs in suburbia and natural areas—cause declines of natives
- Tadpoles superior competitors
- Calls are annoying—people lose sleep
- Noxious skin secretions
- Invade homes, bird boxes
- Feces are messy
- Damage electrical equipment



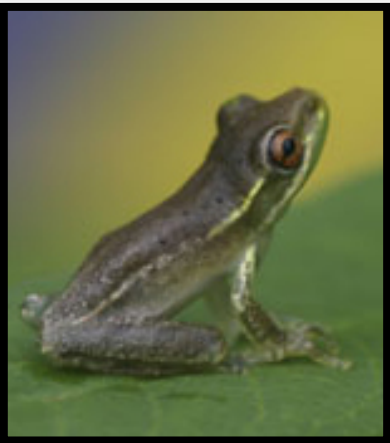
# CTF Identification—Eggs & Tadpoles

- Tadpoles non-descript, lateral eyes
- Eggs laid as surface film
- Breed in ornamental ponds, swimming pools, ditches, ephemeral ponds, etc.
- Call is a raspy, squeaking sound



# CTF Identification—Juveniles

- Tiny warts; green, gray, brown body
- Light, lateral lines fade w/age
- Blue-green limb bones



# CTF Identification—Adults

- Males to ~3 in. SVL; Females >6 in. SVL
- Color highly variable: beige, white, brown, green, yellow
- Patterned or not, some boldly marked
- Skin usually quite warty
- Skin fused to skull >1.5 in.
- “Bug-eyed” appearance
- Relatively large toe pads
- Yellow wash in groin





# CTF Identification—Adults





# CTF Identification—Adults

## *Native Treefrogs*

Gray TF

Green TF

Barking TF



Squirrel TF

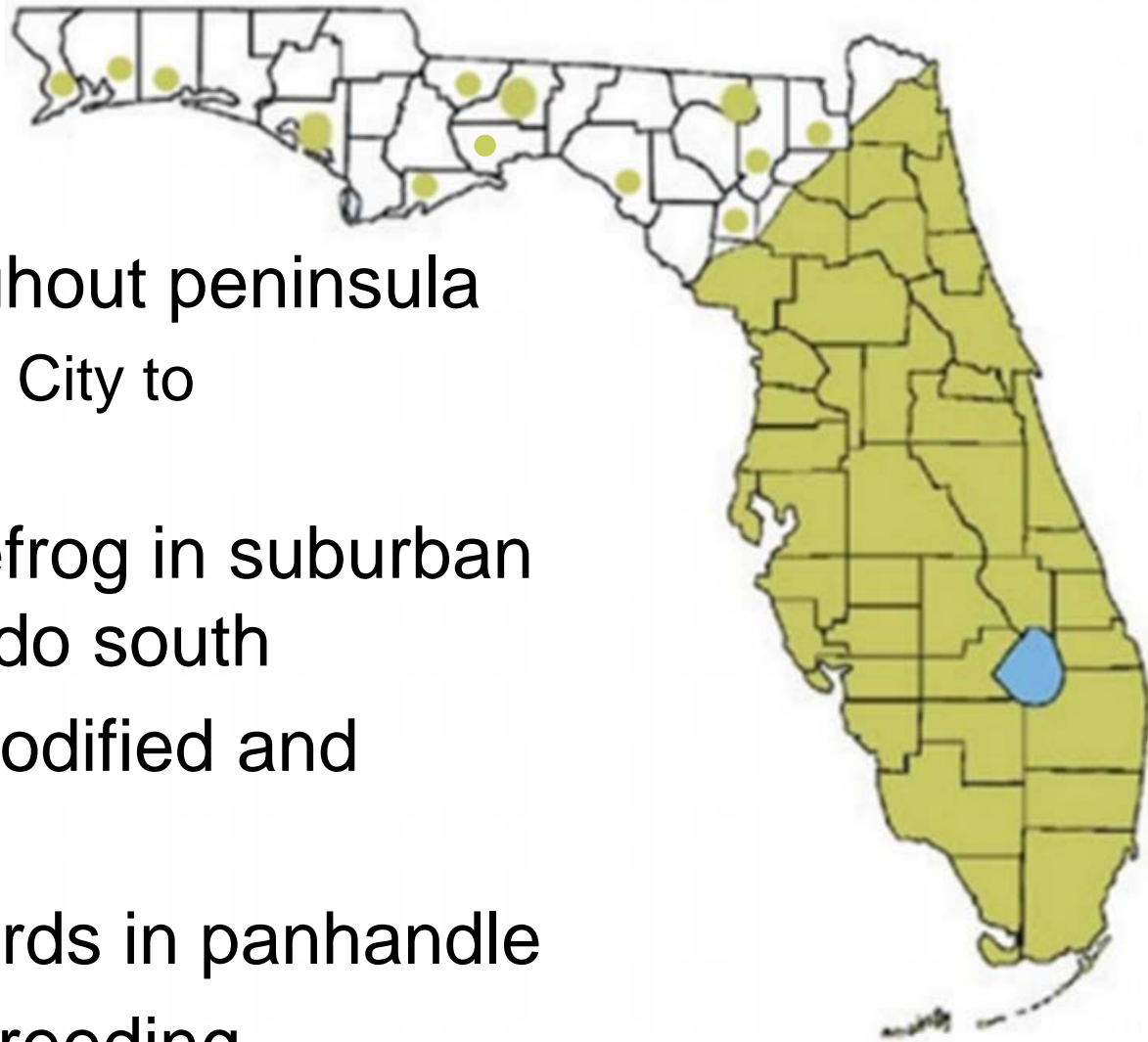


Pinewoods TF

CTF



# CTF Status in Florida



- Established throughout peninsula
  - Cedar Key to Lake City to Jacksonville
- Most common treefrog in suburban areas from ~Orlando south
- Occur in human-modified and natural areas
- Accumulating records in panhandle
- Likely will be/are breeding populations in Florida's panhandle

# CTFs in Southeast

- Established population in ***Georgia***
  - Breeding population on Jekyll Island (Jarboe et al. 2019)
  - Likely invasion pathway via imported palms
  - Other records from: Chatham, Spalding, Walton, Wilkinson & Dougherty Counties
- Established populations in ***Louisiana***
  - 1<sup>st</sup> breeding pop. in New Orleans, near Audubon Zoo (Glorioso et al. 2018a)
  - Likely invasion pathway via imported palms from FL
  - Ongoing removals, population size fluctuating
  - 2<sup>nd</sup> breeding pop. in St. Rose (Glorioso et al. 2018b)
  - Invasion pathway unknown, palms?
  - Other records from: Jefferson, St. Tammany, East Baton Rouge & Lafayette Parishes

# CTFs in Southeast

- Records from other GSARP states
  - ***Texas***: Potential pop. near Houston?; additional records in Harris, Montgomery & Midland Counties (SAJ file)
  - ***Mississippi***: 2 known records: Jackson Co. (SAJ file) & Lamar Co. (USGS-NAS)
  - ***Alabama***: 2 records from Dauphin Island (SAJ file), 2 additional records in Lee & Mobile Counties (USGS-NAS)
  - ***South Carolina***: Beaufort, Jasper & Charleston Counties (USGS-NAS); 2 additional Charleston Co. records (SAJ file)
  - ***North Carolina***: 1 record from Alamance Co. (SAJ file) and another from Orange Co. (USGS-NAS)

# CTF Potential in GSARP

- Well established in peninsular FL, numerous records from panhandle
- Established populations in GA and LA
- Several 'one-off' records in other GSARP states
- Breeding populations not yet documented?



# CTF Potential in GSARP

Severity of cold,  
not warming *per*  
*se*, is likely to  
dictate range  
expansion

Potential CTF distribution under potential climate change scenarios  
—Rodder & Weinsheimer 2009

# Summary

- Be vigilant for CTFs in your state/region
- Learn to identify CTFs
- Confirm sightings via digital images emailed to SAJ, other experts
- Report to EDDMapS, USGS-NAS, state agencies
- Take action to eradicate incipient pops.!
- Educate others!

# Some Resources

- Me: tadpole@ufl.edu
- USGS-NAS: <https://nas.er.usgs.gov/>
- EDDMapS: <https://www.eddmaps.org/>
- CTF Fact Sheet: <edis.ifas.ufl.edu/uw259>
- UF Wildlife Website: <ufwildlife.ifas.ufl.edu/>
- Others?

# Thank You!