

# 13<sup>th</sup> Annual Everglades Invasive Species Summit



EVERGLADES CISMA



# CISMA Partners

## MOU Signatories

South Florida Water Management District

Miami-Dade County

US Fish and Wildlife Service

US National Park Service

Army Corps of Engineers

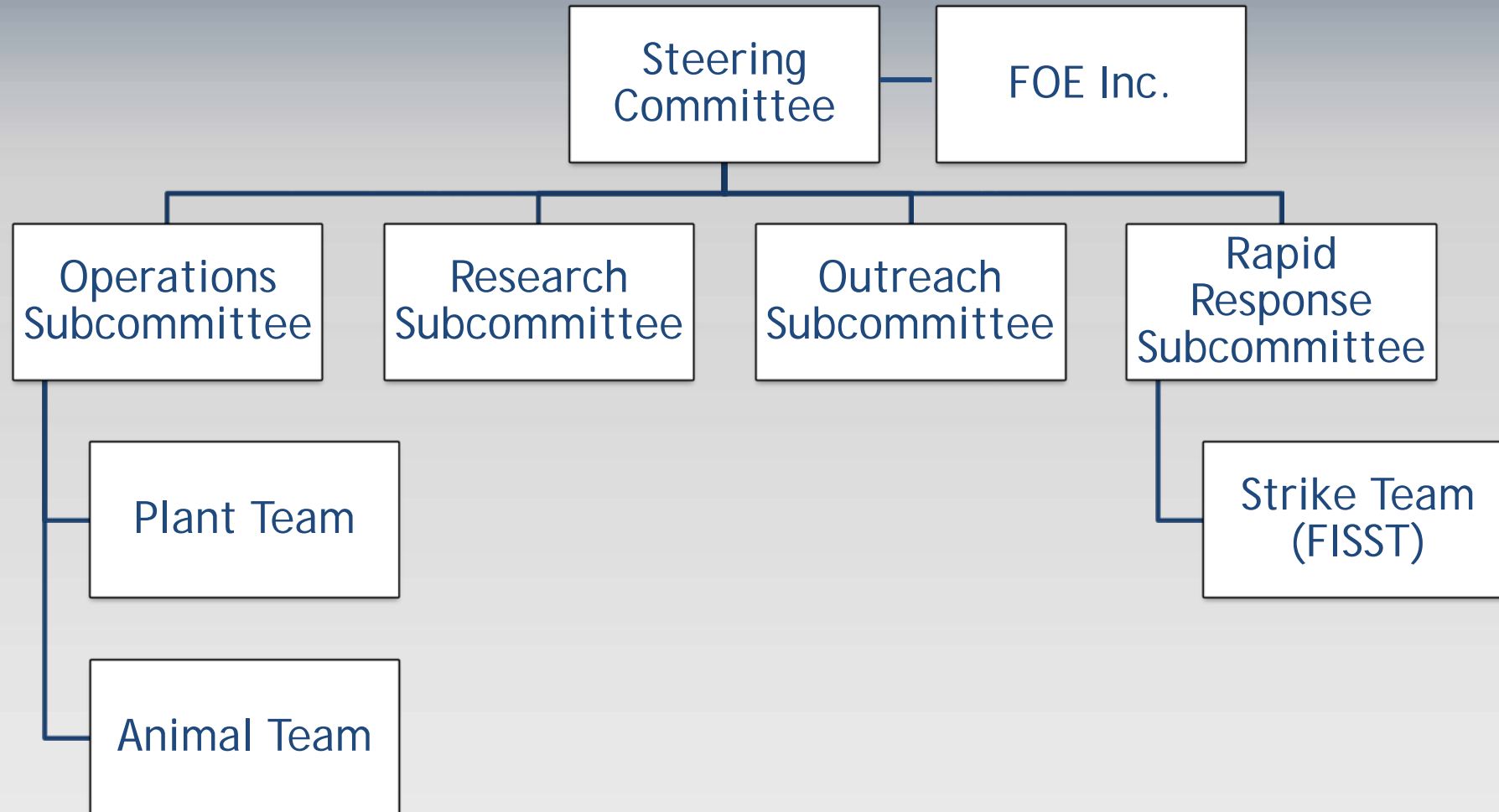
Florida Fish and Wildlife Conservation Commission

## Partners

Broward County, The Nature Conservancy, University of Florida, Department of Agriculture and Consumer Services, Florida Department of Environmental Protection, U.S. Geological Survey, Florida Department of Transportation, Florida Power and Light, Miccosukee Tribe of Indians of Florida, Seminole Tribe of Florida, U.S. Department of Agriculture, U.S. Department of the Interior, Florida Department of Transportation, Fairchild Tropical Botanic Garden, Kampong Tropical Botanic Garden, the Everglades Foundation, Auburn University, Palm Beach County



# Everglades CISMA Organizational Chart



Next Steering Committee Meeting

**October 12, 2016**

University of Florida  
Ft. Lauderdale Research and Education Center

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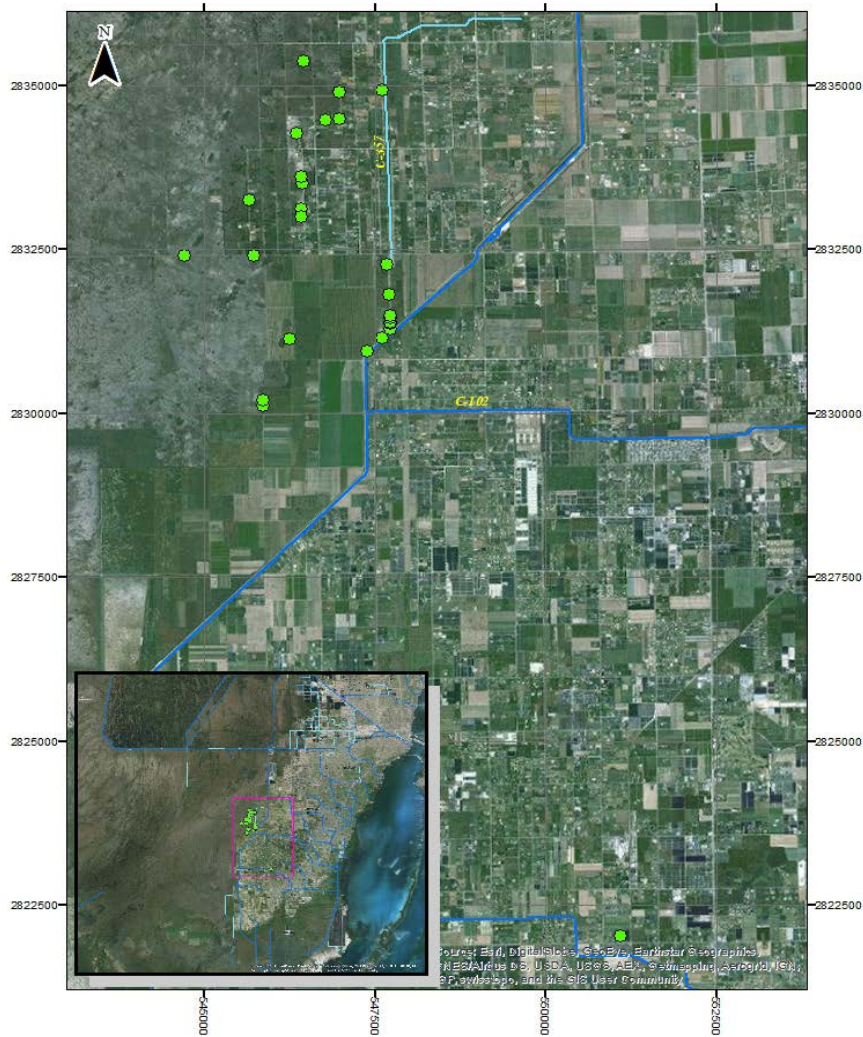
# Eastern Everglades Agricultural Area Workshop



# 2nd Annual Florida CISMA Fall HALLO-WEED Count

Everglades CISMA Coordinator: Christen Mason, [cmason@sfwmd.gov](mailto:cmason@sfwmd.gov)

2015 ECISMA HalloWeed Count - *Flueggea virosa*



*Flueggea virosa*



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# EvergladesCISMA.org Website Upgrade



## Everglades Cooperative Invasive Species Management Area

WORKING TO PROTECT THE EVERGLADES FROM INVASIVE SPECIES

HOME

HOW YOU CAN HELP

WHAT WE DO

THE DIRTY DOZEN

PUBLICATIONS & TOOLS

INFORMATION FOR PARTNERS



**BURMESE PYTHON**  
*Python molurus bivittatus*



**OLD WORLD CLIMBING FERN**  
*Lygodium microphyllum*



**BLACK & WHITE TEGU**  
*Salvator merianae*

Have you spotted an invasive animal or plant in Florida? Please report all sightings to IveGot1!



☎ 1-888-IVE-GOT1

[www.IveGot1.org](http://www.IveGot1.org)

📱 iPhone app

🤖 Android app

South Florida is a hotspot for biological invasions.

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# FWC Invasive Plant Management Section

- Exotic plant control on 11 million acres of Public Conservation Land
- Site Managers are in charge of day-to-day Project Management
- Funding for the 'heavy lifting' - first few treatments
- Herbicide Bank available to help [free!] with maintenance
- 2015/16 funded ~150 projects; \$17,440,000 (a record high)
- 2016/17 (expecting the same)
- FWC Priorities: First 3-5 years of maintenance (ferns, grasses and vines); initial treatments; areas on regular maintenance intervals (**ROTATION**)

# FWC Invasive Plant Management Section



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# Lygodium Biocontrol



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# Lygodium Biocontrol



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# Brazilian Pepper Biocontrol?



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# 2016 Invasive Species Awareness Festival





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# 2016 Python Patrol



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# 2016 Python Challenge



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# Sacred Ibis



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# Sacred Ibis



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# Nile Monitor Lizards



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# Argentine Black and White Tegus



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# Golden Tegus



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# Northern African Pythons



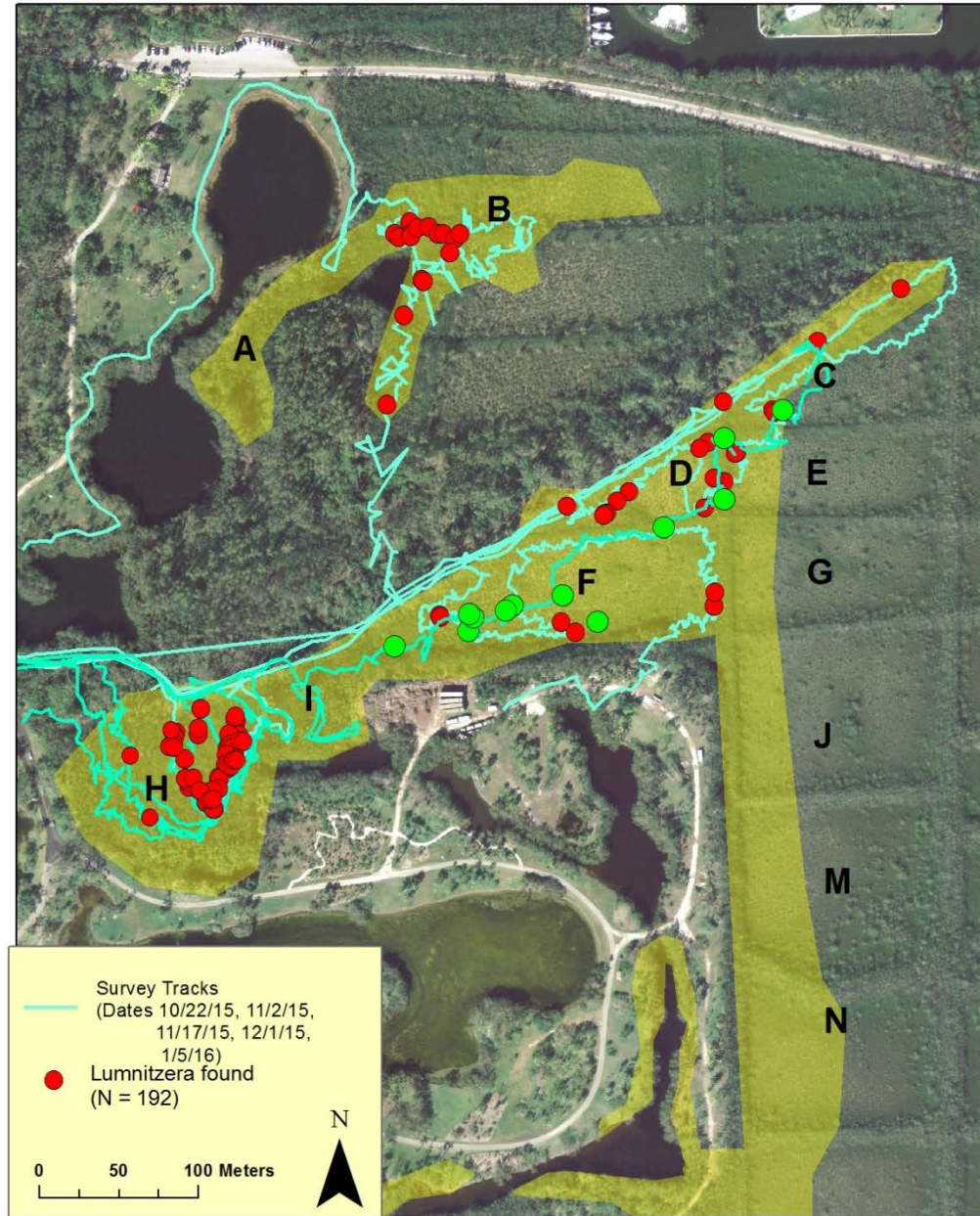
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# Red-tailed Boas



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# Lumnitzera Surveys, Fall 2015 & Winter 2016



# Lumnitzera



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# Mikania



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# Redwing



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# Dalchampia

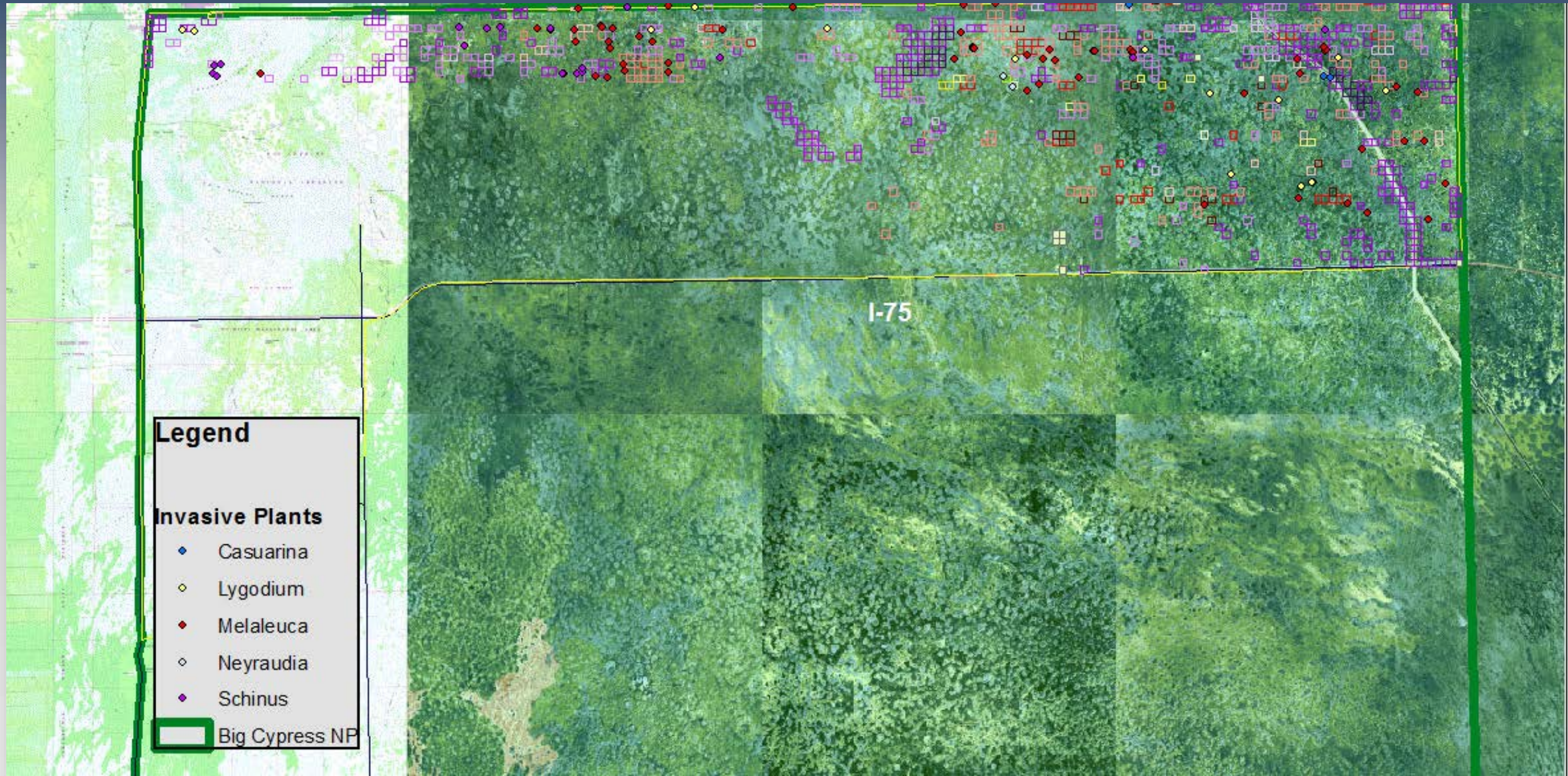


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# Bruguiera



# DASM 2016



**Friends of Everglades CISMA Inc**



**EVERGLADES CISMA**

# Friends of Everglades CISMA Race Against Invasives

3/26/16 Grassy Waters Preserve



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Friends of Everglades CISMA

Race Against Invasives 5K Fun Run/Walk

10/22/2016 Shark Valley Slough, Everglades NP



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# Fish Chat/Slam



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# 2016 Non Native Fish Roundup



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# 2016 Non Native Fish Roundup



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# 2016 Non Native Fish Roundup



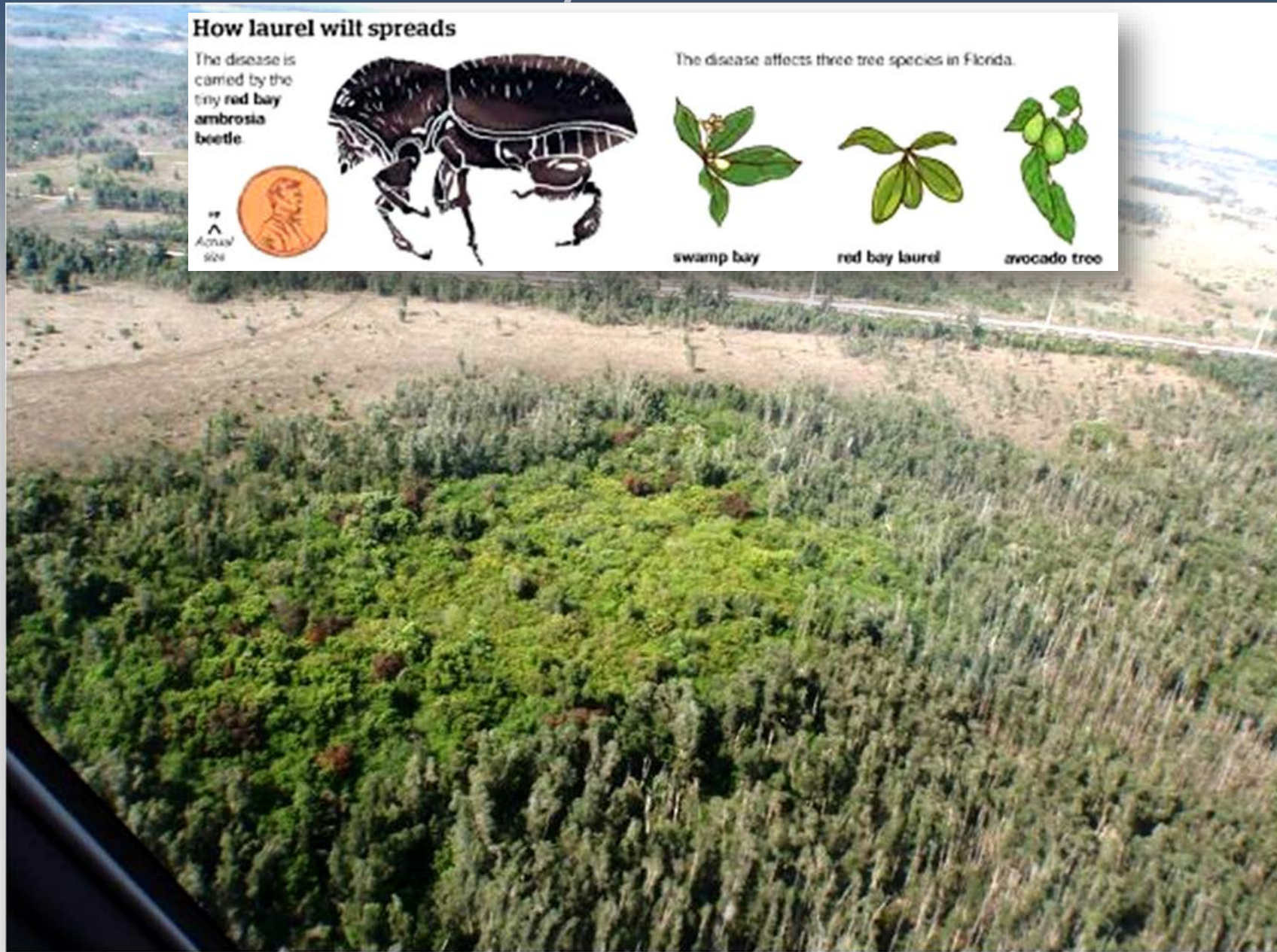
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# 2016 Non Native Fish Roundup



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# Laurel Wilt/Ambrosia Beetle



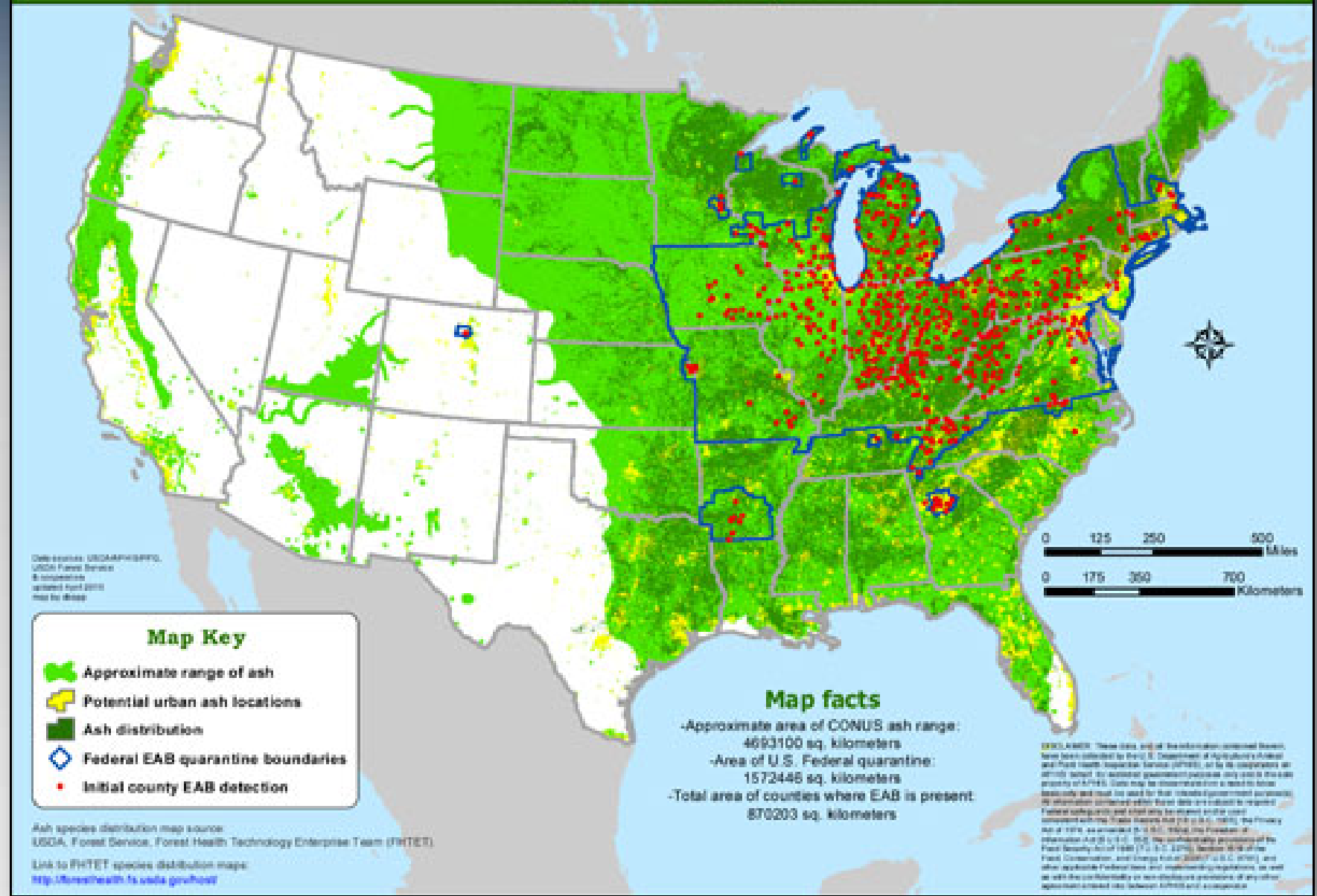


United States  
Department of  
Agriculture

# Cooperative Emerald Ash Borer Project

Approximate range of ash species in the Contiguous U.S.  
with EAB positives and Federal quarantines

June 1, 2015







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# EDRR Plan Revision Meeting 6/30/2016

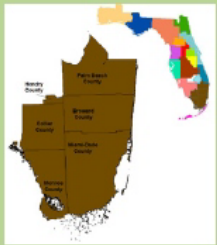




Everglades Cooperative Invasive Species Management Area

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# 2015 Newsletter

VOLUME 6 JULY 2015



ECISMA partners survey for Northern African pythons. (Photo by Liz Barraco, FWC)

## Chasing the wild invasives

by Jenny Ketterlin Eckles, Florida Fish and Wildlife Conservation Commission biologist

Over the past year, the Florida Fish and Wildlife Conservation Commission (FWC) and partners increased resources directed at three nonnative species that have been under on-going management efforts for several years: Northern African pythons, Argentine black and white tegus and Nile monitors. Increased staff and contractor funding allowed the number of surveys to increase markedly for Northern African pythons in Miami-Dade County and Nile monitors in Palm Beach County. Increased contractor funding also resulted in an increase in the number of live traps set, camera traps deployed and tegus telemetered in Miami-Dade County. Generally, these increased efforts resulted in increased removals.

Starting in fall 2014, FWC led an effort to ramp up surveys for Northern African pythons in Miami-Dade County. Surveys were increased from monthly to more than twice per week by hiring a technician (an experienced python permittee), contracting with the University of Florida (UF) and partnering with Miami-Dade County Parks, Recreation, and Open Spaces (MDCPROS), Everglades National Park (ENP), U.S. Geological Survey (USGS), South Florida Water Management District (SPWMD) and Miccosukee Tribe of Indians.

Some new approaches were tested, such as setting out artificial refuges and testing for environmental DNA. More than 50 individuals participated in the 48 survey days that totaled over 370 man-hours. Despite all these efforts, including increased outreach to the local community, no Northern African pythons were found during this past dry season. Two Burmese pythons were removed. While somewhat disappointing to the searchers, the absence of Northern African pythons may be a sign that past efforts affected this population and eradication is indeed possible. It will take many more surveys to make this declaration decisive, but there may be a silver lining to an observation of zero.

In 2014 and 2015, FWC and ENP were able to contract with UF and USGS to trap and monitor natural areas for Argentine black and white tegus. UF also conducted a telemetry study on females while USGS tracked tegus during their period of dormancy, or brumation. FWC and Miami-Dade County Fire Rescue Venom One unit also continued to respond to tegu sightings in the Florida City and Homestead residential areas. The increased number of traps and coverage area resulted in 404 tegus removed in

Species	Removed in 2014	Removed Jan, 1 2015 to June 15, 2015
Northern African pythons (Miami-Dade County)	1 (Dead on Road)	0
Argentine black and white tegu (Miami-Dade County)	404	338
Nile monitors (Palm Beach County)	19	8
Spectacled caiman (Miami-Dade County)	36	6
Oustalet's chameleons (Miami-Dade County)	8	5

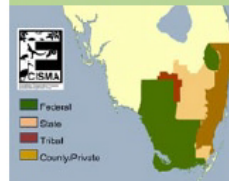
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# 2014 Newsletter

VOLUME 5 JULY 2014



The total eradication of brightly colored panther chameleons from a Broward County site was one of this year's success stories. (Photo courtesy Pat Howell, Broward County Parks)

## Rapid Response success for nonnative wildlife

by Jennifer Ketterlin Eckles

### FISST puts the hammer down!

The Florida Invasive Species Strike Team (FISST) is the field team under the Everglades Cooperative Invasive Species Management Area's (ECISMA) Rapid Response Subcommittee that is deployed to respond to new sightings of primarily nonnative wildlife within ECISMA's footprint. The team is comprised of a number of ECISMA partners with response capabilities and is directed by the affected land management agency for any given response.

The team has had a number of rapid response successes over the past year. Two significant rapid responses were the removal of a Nile crocodile from Everglades National Park (ENP) and the discovery and possible eradication of panther chameleons on a Broward County property.

### Nile crocodile

In February of this year, while searching for Burmese pythons, members of the Swamp Apes, a volunteer group with ENP, spotted and photographed an odd crocodilian in the Chekika area of the park. The animal was identified as a Nile crocodile based on the photo and the identification was later confirmed by FISST. With permission from ENP, the University of Florida (UF) led an interagency team comprised of ENP rangers, Florida Fish and Wildlife Conservation Commission (FWC) staff and members of the Swamp Apes to remove the animal. On Sunday, March 9, 2014, the FISST team began the operation to remove the animal alive or dead. After several hours of using nets to corral the crocodile into a small section of a canal, the animal was harpooned and captured alive. Based on physical markings, the crocodile was identified as the same individual that eluded FWC and UF after it had been sighted two years earlier. The animal grew

over two and a half feet since it was last seen and due to the rapid response efforts of the FISST interagency team, the five and a half foot-long Nile crocodile was successfully identified and removed.

### Panther chameleon

Last July, a Broward County employee reported removing an adult panther chameleon from a county owned property on the Early Detection and Distribution Mapping System (EDDMaps) website ([www.eddmaps.org](http://www.eddmaps.org)). After receiving this report, staff from UF and FWC searched the property the following night and found a juvenile panther chameleon. Subsequent surveys over the next few weeks resulted in the removal of a third juvenile chameleon. During this time, the group also received reports of three more animals from different residents of the neighborhood, including one adult that was removed and two of unknown age found dead on the road. It is not known whether this represents a breeding population or the release of multiple age classes. The team has since conducted follow-up surveys to determine if there is a breeding population established in the area, but no chameleons have been found or reported since late July. More follow-up surveys will be conducted in 2014 but the team is hopeful that this population has been extirpated. ♦



This Nile crocodile eluded authorities for two years, but was finally identified and removed from Everglades National Park this year. (Photo courtesy of Michael Rochford, University of Florida)

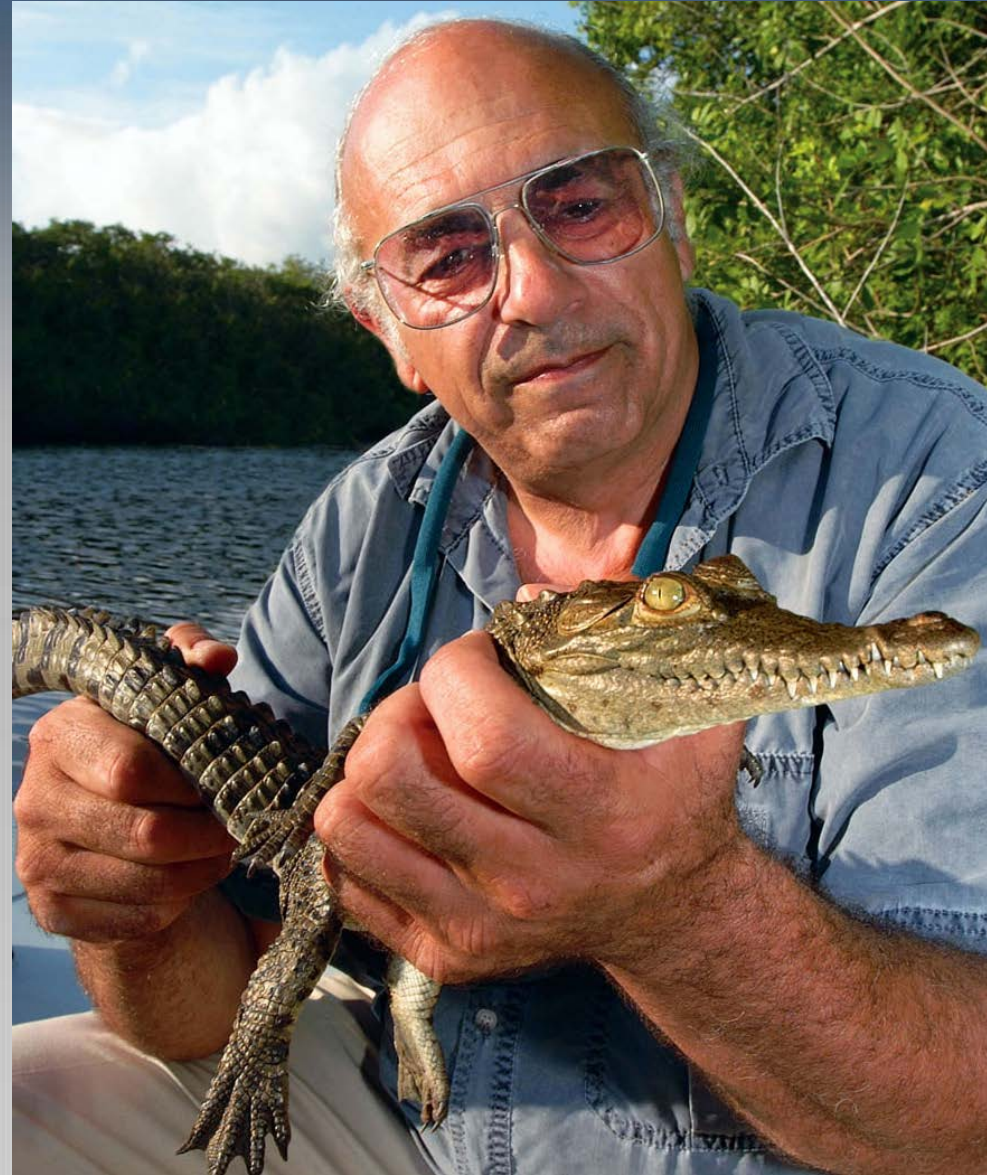


**Partner of the Year Award**

Rebecca Harvey

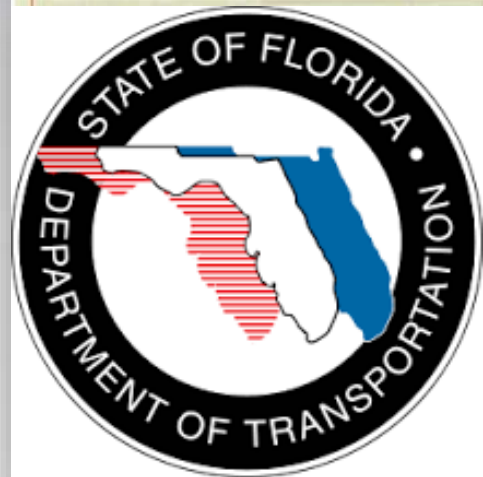
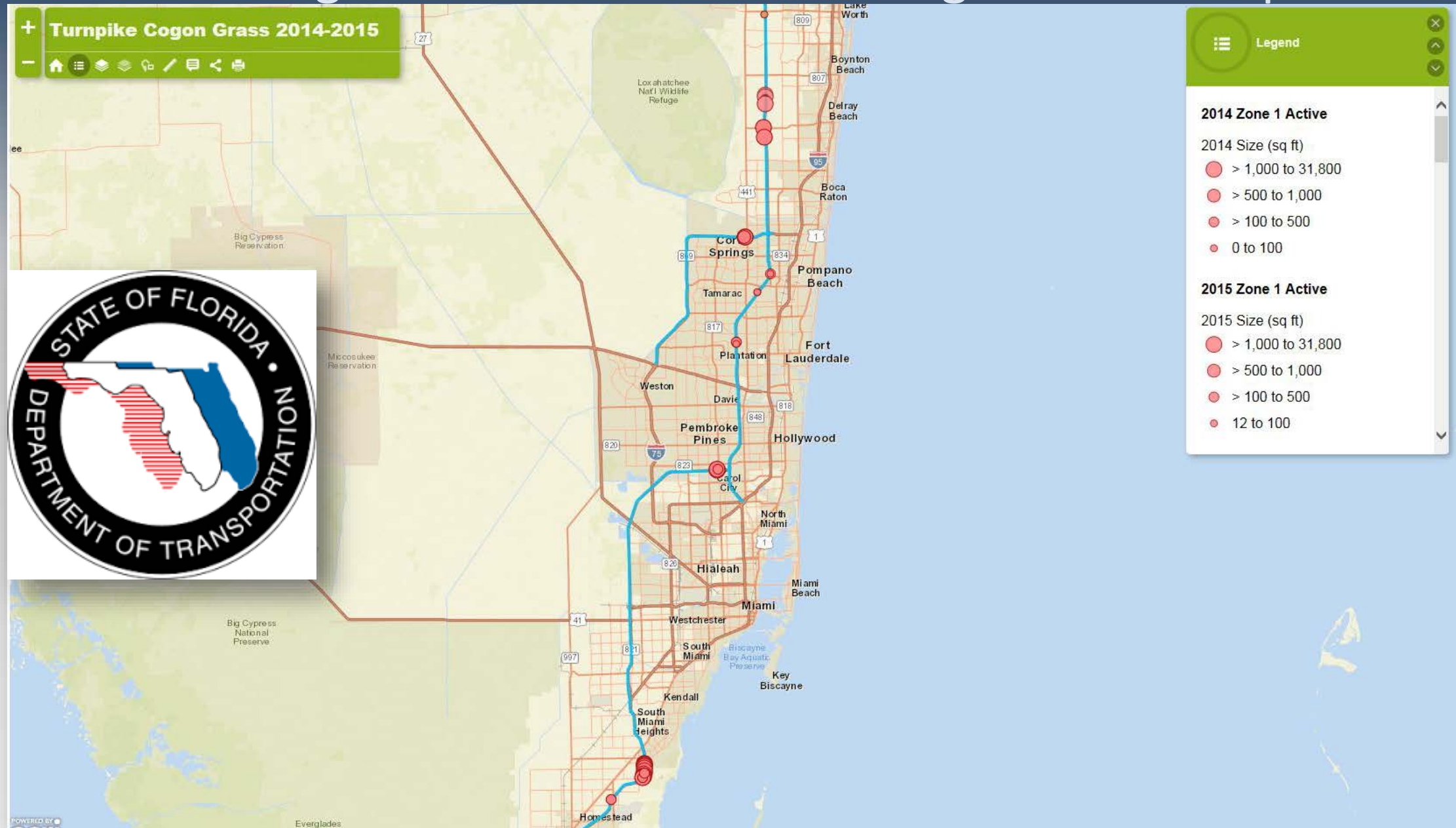


Frank Mazzotti

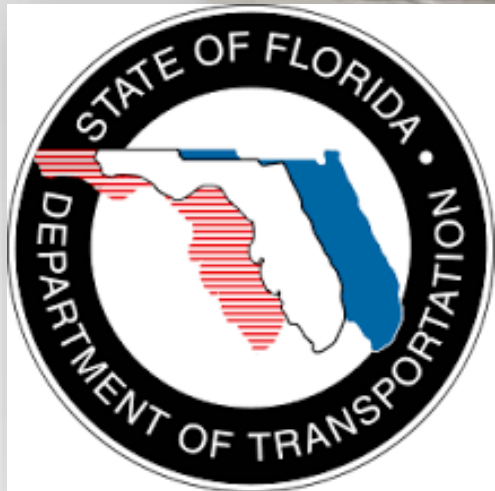


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# FDOT Cogon Grass Treatments Along Florida Turnpike



# Elizabeth Hassett, Florida Department of Transportation



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