



Everglades Cooperative Invasive Species Management Area

2018 EVERGLADES INVASIVE SPECIES SUMMIT

Nonnative Fishes Workgroup

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U.S. Fish and Wildlife Service

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July 17-18, 2018

EvergladesCISMA.org



Nonnative Fish Workgroup - Activities

- Fish Slam (2017)
- FWC Nonnative Fish and Wildlife Activities
- Fish Chat – May 2018 (Loxahatchee NWR)
- Nonnative Fish Roundup
- Miccosukee Tribe Native and Nonnative Fish Roundup
- Other Fish Surveys





Fish Slam - The Hunt For The Southernmost Snakehead (November 2017)

- eDNA analyses conducted in the L-29 and L-67 canals (Tamiami Trail) by USGS, tested positive for bullseye snakeheads.
- This location is 53 km SW of the nearest known population.
- 35 sites in Broward and Miami-Dade counties were sampled
- 31 fishery biologists from 11 agencies participated in a 2-day event.
- Sampling gear: electrofishing boats, backpack electrofisher, minnow traps, cast nets, seines, dipnets, and hook and line.



eDna "+" for Bullseye Snakehead (star on map)



Fish Slam - The Hunt For The Southernmost Snakehead (November 2017)

- 20 species of non-native fishes were collected or observed.
- This is the 6th Fish Slam event since our program began in 2013.
- No Bullseye Snakeheads found! (eDNA Effectiveness)



Scientific Name	Common Name
<i>Ctenopharyngodon idella</i>	grass carp
<i>Piaractus brachypomus</i>	pacu/pirapitinga
<i>Hoplosternum littorale</i>	brown hoplo
<i>Pterygoplichthys</i> spp.	sailfin catfish
<i>Clarias batrachus</i>	walking catfish
<i>Belonesox belizanus</i>	pike killifish
<i>Monopterus</i> sp.	Asian swamp eel
<i>Macrognathus siamensis</i>	spotfin spiny eel
<i>Astronotus ocellatus</i>	oscar
<i>Cichla ocellaris</i>	butterfly peacock bass
<i>Cichlasoma bimaculatum</i>	black acara
<i>Cichlasoma urophthalmus</i>	Mayan cichlid
<i>Hemichromis letourneuxi</i>	African jewelfish
<i>Heros severus</i>	banded cichlid
<i>Oreochromis aureus</i>	blue tilapia
<i>Parachromis managuensis</i>	jaguar guapote
<i>Tilapia buttikoferi</i>	hornet tilapia
<i>Tilapia mariae</i>	spotted tilapia
<i>Trichromis salvini</i>	yellow belly cichlid

Pacu (top) Oscar



2018 ECISMA Nonnative Fish RoundUp

- April 28 and 29 2018
- 4 weigh-in locations
- 64 Anglers
- 1,811 fish
- 1,013 pounds
- 18 different species
- No new species

- Biggest Fish – 4.7 lb Bullseye
- Most Species – 9 adult, 10 kid
- Most Weight – 271 lbs

- T-shirts For Sale!





2018 ECISMA Nonnative Fish RoundUp

- One of the winning teams –
- Arrow Assault Bowfishing
- 271 pounds of fish!





Bay Snook Renovation Pinecrest Gardens

- Bay Snook (*Petenia splendida*)
- Jeff Kline first identified the species at Pinecrest Gardens
- Other Species: Koi Carps
- 2016 Fish Slam target the area
- USGS and FWC worked to eradicate





Bay Snook Renovation - Pinecrest Gardens



FWC staff applied rotenone



Fish were collected for 3 days



Bay Snook Renovation - Pinecrest Gardens

- When water was safe, native fish were stocked
- No Bay Snook observed in follow-up sampling.
- Renovation considered successful!





Other Partner Activities

- Fish Chat – May 2018 (Loxahatchee NWR)
- Miccosukee Tribe Native and Nonnative Fish Roundup
- AIS Coordinators Training (Electrofishing, Python Patrol)
- Everglades day at Loxahatchee NWR (FWS & FWC Demonstrations)



Questions?

