

# Everglades Cooperative Invasive Species Management Area



## Outreach: Successes and Improvements

Justin Dalaba, Outreach Coordinator





# Targeted Outreach

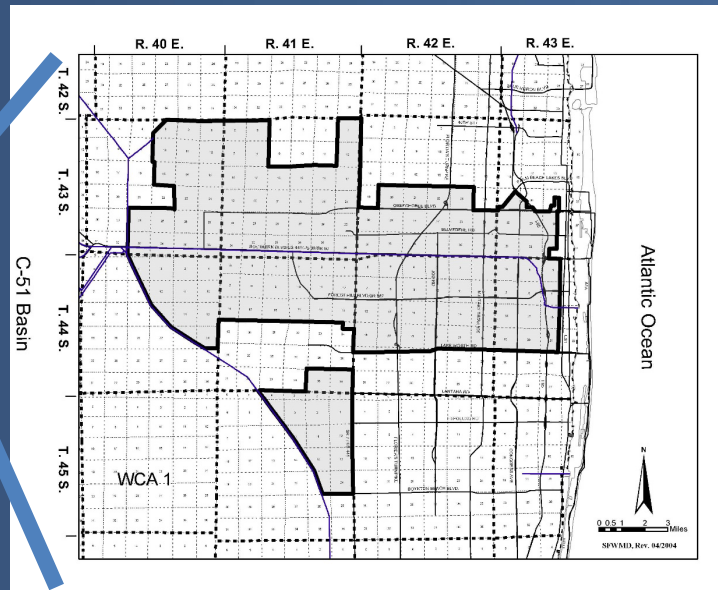
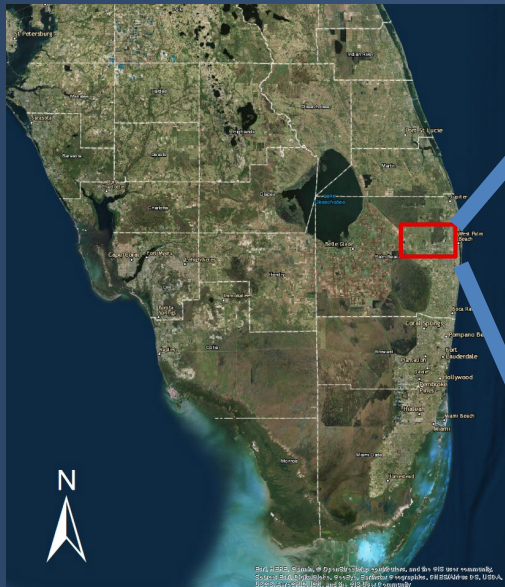
- Expand observational network as part of interagency effort to detect and remove Nile monitors and Argentine black and white tegus
- Evaluate different media with specific message for a specific audience
- **Goal:**  
Fill in knowledge gaps → improve detection and removal





# Targeted Outreach - PBC

- Palm Beach County (PBC) – Nile monitors in C-51 Basin
- Proximity to residential neighborhoods – public engagement
- Door hangers, social media, flyers, presentations



## **NILE MONITORS:** **REPORT SIGHTINGS IN SOUTH FLORIDA** **We Need Your Help!**



Photo above: Nile Monitor (*Varanus niloticus*) spotted in SW Ranches (via EDDMaps)



Photo above: Monitor caught in Pembroke Pines (via EddMaps)



Photo credit: Patrick Lynch, South Florida Water Management District.

### **Monitor Facts**

- Large (3-5 feet in length ) invasive lizard from Africa
- Dark in color with greenish-yellow markings
- Forked black/blue tongue
- Most likely to be seen in wetlands or along canals banks
- Have long sharp claws, a powerful bite, and a long, muscular, whipping tail
- Opportunistic hunters and scavengers



Photo credit: Bill Bayless



Photo credit: Nick Scobel, University of Florida

## **IF SPOTTED IN YOUR AREA:**

- Take a picture
- Note the location

### **PLEASE CONTACT:**

1-888-IVE-GOT1

(Invasive species hotline)

- OR -

Report online at [ivegot1.org](http://ivegot1.org)



**Thank you for your cooperation!**





# Targeted Outreach - PBC

## Presentations to targeted groups

- Loxahatchee NWR visitors and volunteers
- SFWMD Field station briefing
- Audubon Everglades monthly meeting
- Okeehetee Nature Center
- Grassy Waters Preserve Nature Center





# Targeted Outreach - PBC

## Social Media

- Neighbors sharing door hanger through “Next Door” app
- Targeted message through Facebook pages
  - Village of Wellington
  - Okeethee Park and Nature Center
  - Contacted equestrian groups and golf clubs

**The Croc Docs**  
Published by Justin Dalaba [?] · February 25 · 🌐

This week is National Invasive Species Awareness Week. Take a look at this young lizard from sub-Saharan Africa. It may be hard to believe, but this carnivorous lizard can grow up to 7 feet in length! South Florida is a hotspot for Invaders including the Nile monitor, which has found a home away from home. With an appetite for native wildlife, Nile monitors are a new predator in localized parts of South Florida's ecosystem, causing concern for many unique, threatened and enda... [See More](#)

<b>4,827</b> People Reached		
<b>175</b> Reactions, Comments & Shares		
80 Like	42 On Post	38 On Shares
2 Love	1 On Post	1 On Shares
1 Haha	1 On Post	0 On Shares
28 Wow	8 On Post	20 On Shares
3 Sad	0 On Post	3 On Shares
1 Angry	0 On Post	1 On Shares
18 Comments	6 On Post	12 On Shares
42 Shares	41 On Post	1 On Shares
<b>584</b> Post Clicks		
49 Photo Views	6 Link Clicks	529 Other Clicks
<b>NEGATIVE FEEDBACK</b>		
0 Hide Post		1 Hide All Posts
0 Report as Spam		0 Unlike Page

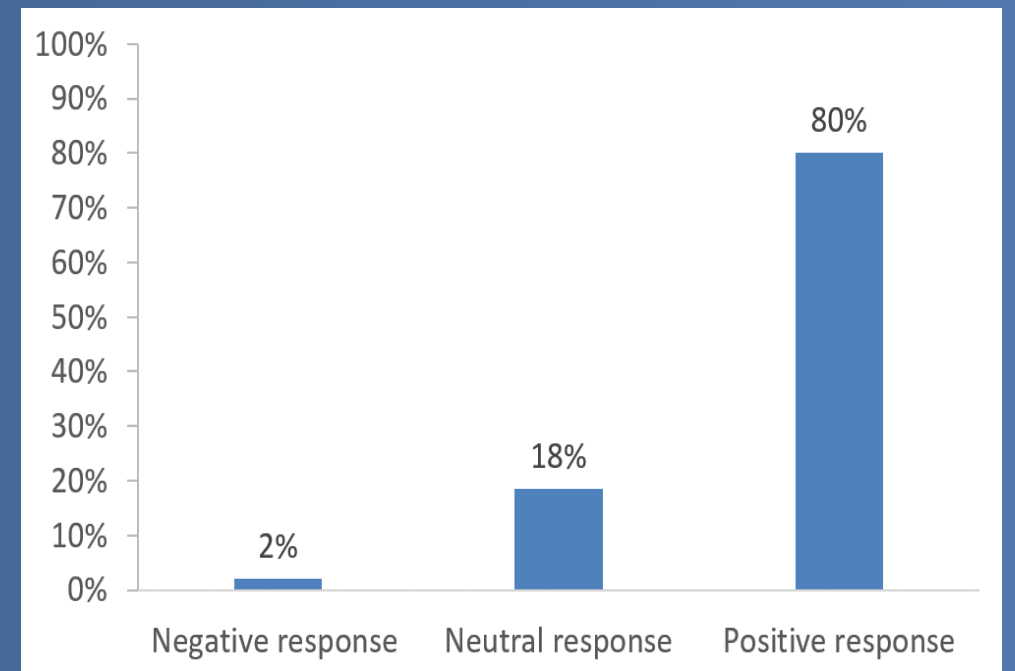
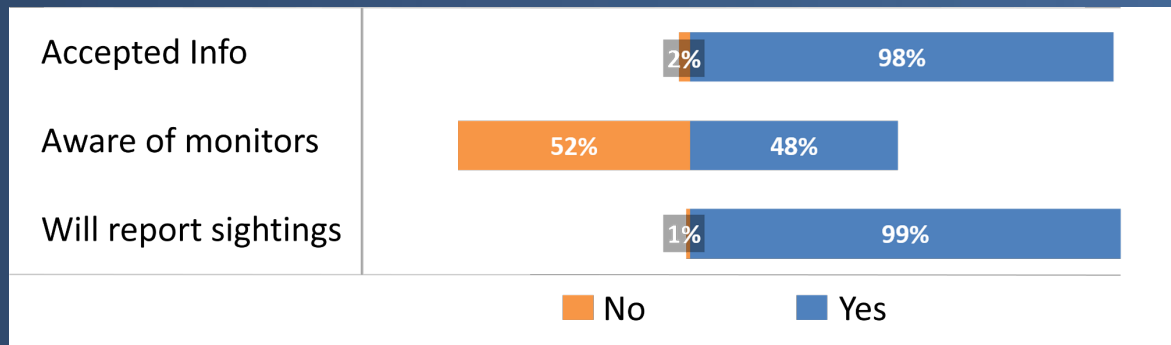
Reported stats may be delayed from what appears on posts



# Targeted Outreach – PBC

## In-person interactions

- ~200 total
- Overall positive response
- Most valuable component of door hangers
- More likely to take action and spread the word





# Targeted Outreach – PBC

Method	Total effort / Reach	In-person contacts
Door hanger	3,423	199
Flyer	91	17
Presentation	290	290
Social media	7,664	N/A

## Results

- At least 4 verified Nile monitor reports from PBC attributed to UF door hangers
- 5 Argentine black and white tegu reports from PBC
- 1 Rhinoceros iguana reported as Nile monitor
- Many misidentified reports



# Targeted Outreach (cont.)

## Other successes

- Monitor report from Tara Park in Plantation (May 2019)
- Interagency communication effort
- Led to removal of another monitor in Pembroke Pines and a tegu report in adjacent neighborhood

## Next steps

- Hope to continue funding
- UF developing large lizard lineup and online interactive key to aid in proper identification





# Exotic Pet Amnesty Days

Stephanie Krug (FWC) – Nonnative Species Outreach and Education Specialist, based in Homestead

- Coordinating Exotic Pet Amnesty Programs/other outreach initiatives
- Amnesty Days are held on 2-year rotation schedule, next events will be at:
  - Gulfarium Marine Adventure Park (Fall 2019)
  - Naples Zoo (Winter 2019)
  - Jacksonville Zoo (Spring 2020)

**Exotic Pet**



**Amnesty Program**  
**Great pets. Great homes.**



# 2019 ECISMA Newsletter



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## Newsletter

VOLUME 9 2019



*Nypa* stand at Montgomery Botanical Center (Photo: Dennis Giardina, FWC).

### The Mighty Mangrove Palm, *Nypa fruticans*

by Dennis J. Giardina, Florida Fish and Wildlife Conservation Commission

In past issues, we have chronicled ECISMA's efforts to eradicate two woody mangrove species, *Lumnitzera racemosa* and *Bruguiera gymnorrhiza*, from Miami-Dade County, as well as our subsequent efforts to curb the importation of exotic mangroves into the state of Florida (<https://bit.ly/2n4smvx>). While we were working with plant ecologists at USDA/APHIS's Plant Protection and Quarantine to officially prohibit the importation of species in the genera of *Lumnitzera* and *Bruguiera* through the "Not Authorized Pending Pest Risk Analysis (NAPPPRA)," another species made the list: *Nypa fruticans*, the only true mangrove palm. *Nypa fruticans* is monotypic, or the only species in its genus. Its fronds grow from belowground rhizome stems that can reach up to 30 feet in height, and it can form dense monocultures. The fronds have many indigenous uses for thatching and weaving, and *Nypa*'s sweet sap is processed into a form of sugar called jaggery. It is often made into vinegar and wine, and *Nypa*'s ripe seeds are widely consumed and contain a sweet, gelatinous center that can be eaten raw or added to other confections.

The native range of *Nypa fruticans* is extensive and includes tidal swamps, rivers

and estuaries of Southeast Asia, as well as parts of India, Australia and the Pacific. But, interestingly, its origins are in the West. The fossil record of the late Cretaceous Period in North and South America contains the oldest samples of *Nypa* pollen and fruit collected to date. Apparently *Nypa fruticans* arose in northern South America and then spread around the globe just before the Earth was hit by a large asteroid, which led to an extended period of global cooling and drying. *Nypa* died out everywhere except in the Coral Triangle of Malaysia and Indonesia (like many other mangrove species), from where it eventually expanded out to its current native range.

Unfortunately, *Nypa fruticans* was planted around the turn of the 20th century in Nigeria, West Africa. It rapidly spread up and down rivers and colonized estuaries, and it now occurs in Cameroon to the south. Expediting the proliferation of *Nypa fruticans* in West Africa has been the razing of native mangrove forests for petroleum extraction and pipeline construction, sand mining, and development.

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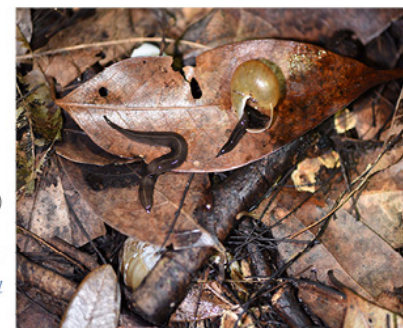
### Fearsome Flatworm Threatens Native Snails

by Tim Collins, Florida International University, and Alicia Warren, PhD, Miami-Dade County Parks

Flat, slippery, and one of the world's 100 worst invasive species, *Platydemus manokwari* has made its way to Florida. *Platydemus manokwari* is a terrestrial flatworm first described at an agricultural research station in the town of Manokwari on the Pacific island of New Guinea (hence its common name: the New Guinea flatworm). The species was initially recorded in Miami-Dade County in 2015 (Justine et al. 2015, <https://peerj.com/articles/1037/>), although some records (unreported at the time) date to 2012. Since then, it has been widely reported around the state of Florida, as well as in Alabama and Georgia (<https://www.eddmaps.org/distribution/usstate.cfm?sub=78294>). In other parts of the world, it has been introduced accidentally (for example, in the soil of potted plants) and sometimes intentionally

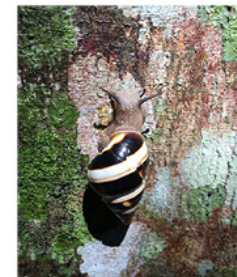
(with the intent to control snail pests like the giant African land snail). From an environmental perspective,

under foundations after heavy rains or crawling up walls.



*Platydemus manokwari* in low light (Photo: Tim Collins).

*Platydemus* is a concern because it is the suspected cause of rapid decline or extinction of native species. We have seen its effects on South Florida's tree snail populations. *Platydemus manokwari* is a threat to Florida's native snail species—in particular, iconic Florida tree snails like *Liguus* (see image to the left).



Florida tree snail, *Liguus fasciatus*, in Miami-Dade County (Photo: Tim Collins).

You might wonder, "Where would I see *Platydemus*?" and "How will I recognize it?" *Platydemus manokwari* is primarily nocturnal, so there is a good chance to see it one to four hours after sunset and especially during or immediately following rainfall. You may also see it on rainy or overcast mornings or early evenings. During the day, the flatworms seek refuge under rocks, boards, or leaf litter in moist areas. You may also see some emerge from

The mature flatworm at rest is typically 4-7 centimeters in length and 0.5-1 centimeter wide. In motion, specimens may be over 10 centimeters (4 inches) in length. The body is thickest in the middle and tapers at either end, giving it an appearance similar to some leeches. The angle of the taper is more acute at the front end, where bulging eyes are often visible. The body color is a light to dark tan to brown with a lighter

cream-colored stripe often apparent down the middle of the dorsal (back) side (see image above). Note that in bright light, the body appears almost black, and the stripe on the back can be difficult to discern. The body of this flatworm is robust, has a D-shaped profile, and is rounded over the dorsal side and flat on the bottom. The mouth is located on the ventral side, where a feeding tube (pharynx) emerges that is pushed into the body of the prey by muscular and enzymatic action. The flatworm tracks its snail prey by following the mucus trail snails leave as they move. You may notice *Platydemus* swinging its head back and forth, touching the ground to sense the presence of mucus trails.

Although *Platydemus* has been widely reported, it is often misidentified. For example, blind snakes, slugs and snails have been reported as *Platydemus*.

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# Future Events

- April 6<sup>th</sup> (2019) preliminary Florida Panthers hockey benefit for ECISMA
- Sat. Feb. 29<sup>th</sup> (2020) Florida Panthers vs. Chicago Blackhawks
- NISAW
- Goal to add education event during day prior to game
- NEED ECISMA PARTICIPANTS





# Acknowledgements & Questions

