

FWC Iguana Management Projects

Dan Quinn

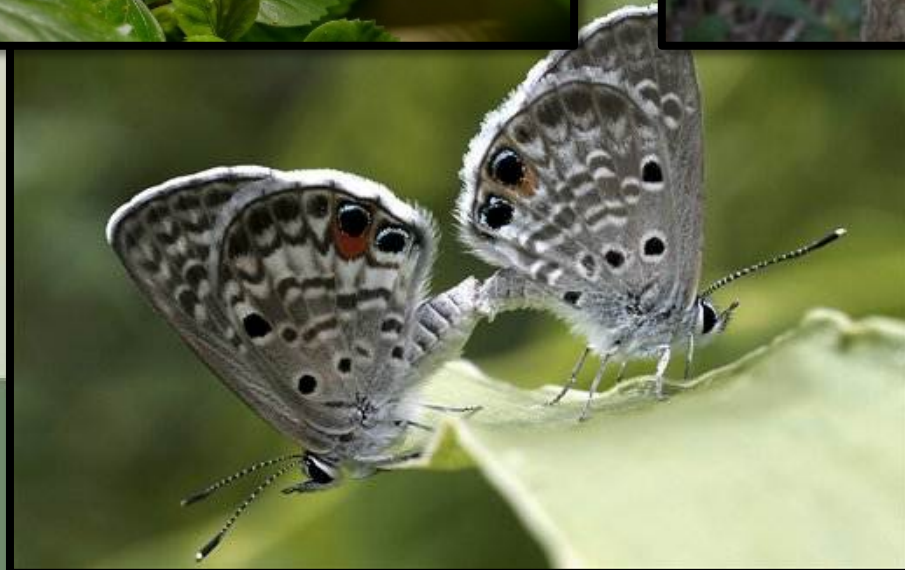
Nonnative Fish and Wildlife Biologist

Florida Fish and Wildlife Conservation Commission



Ecological Impacts

Credit: <http://animals.nationalgeographic.com>



Other Impacts

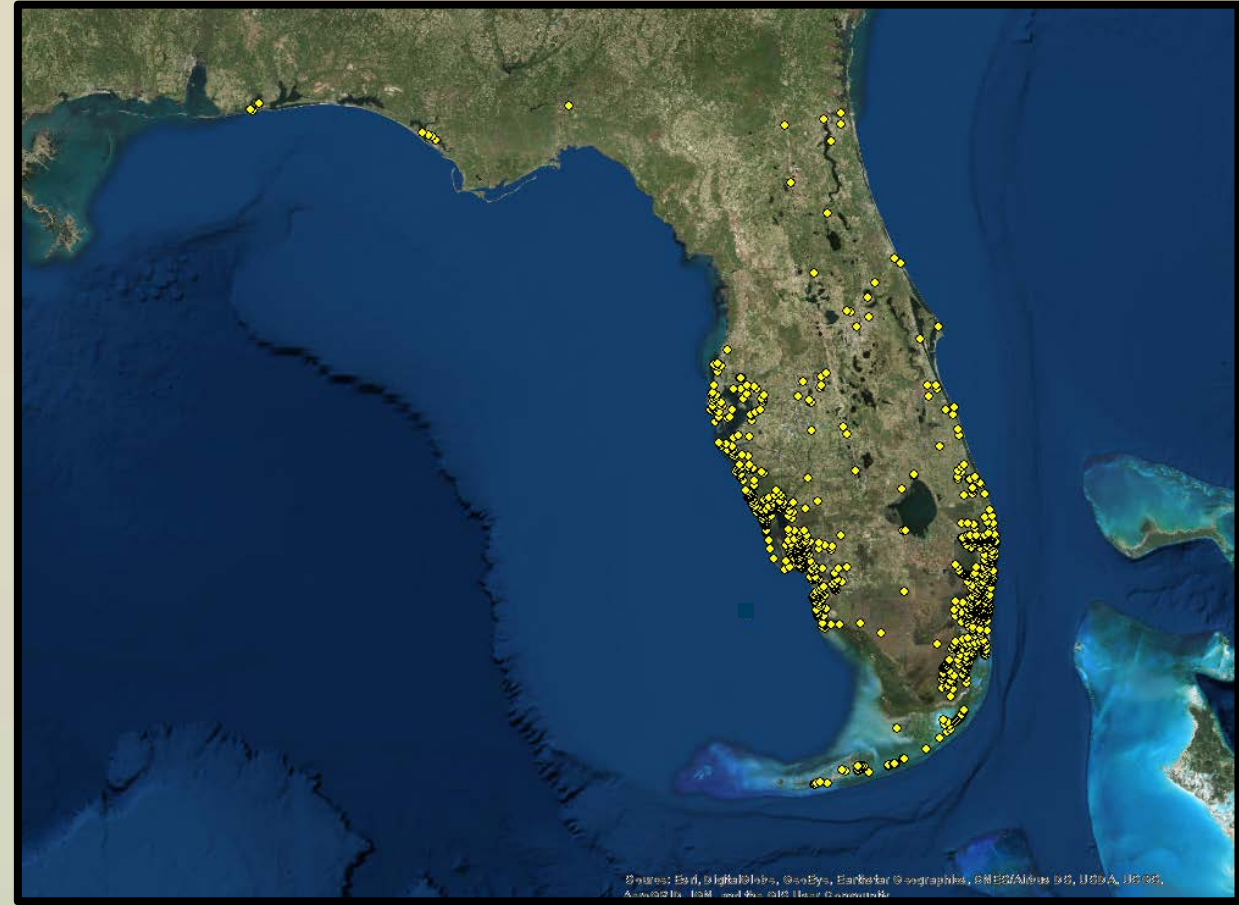
Credit: <http://www.anapsid.org>



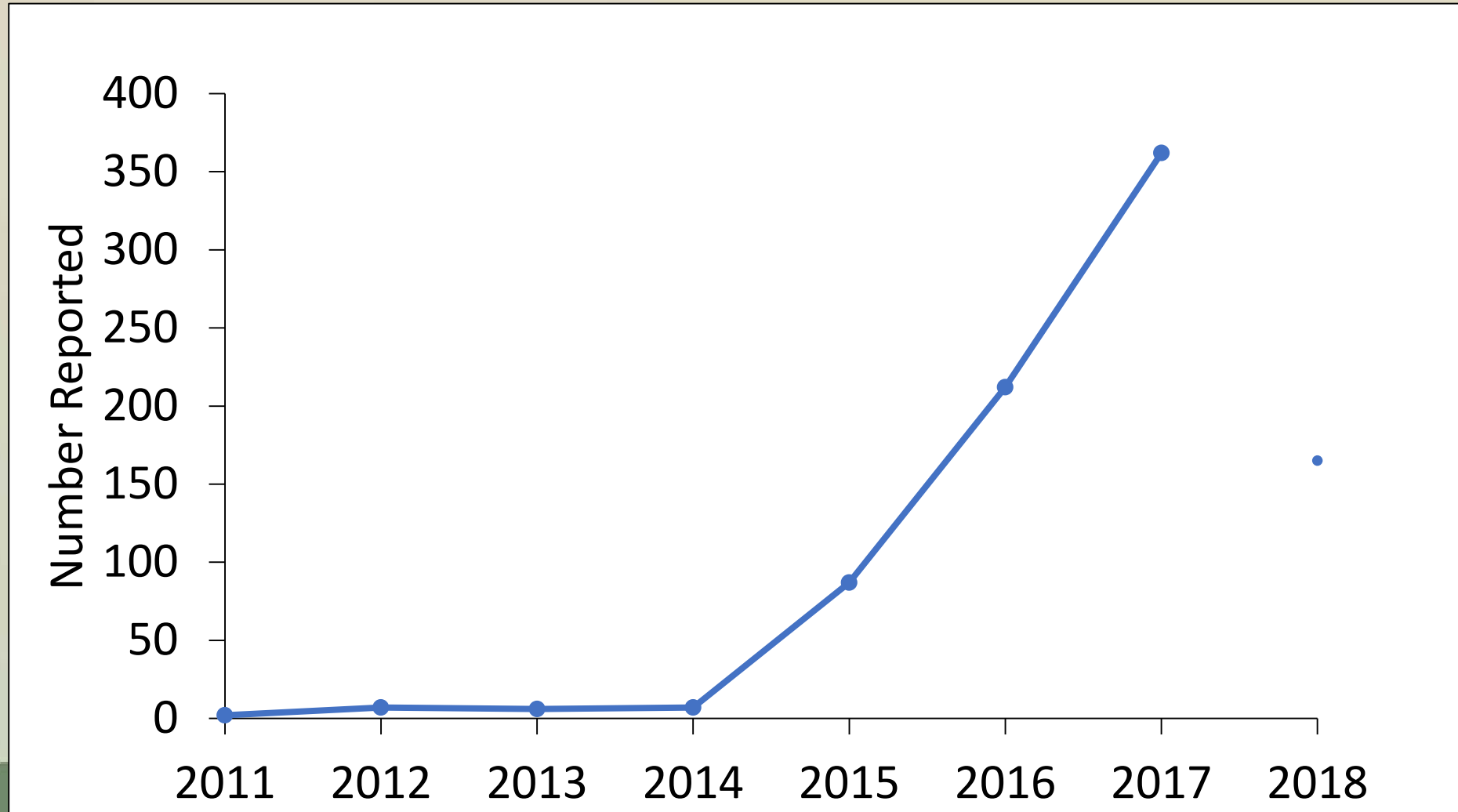
Credit: <https://www.flmnh.ufl.edu/>

Iguana Reports

- 4460 reports total in Florida
- FY 17/18 = 315 hotline reports



Increasing Iguana Reports



Iguana Project Goals

- Public technical assistance
- Evaluation of management techniques
- Removal in ecologically sensitive areas



FWC Website

Green Iguana (*Iguana iguana*)



Adult green iguana



Male green iguana displaying orange coloration


Description

The green iguana (*Iguana iguana*) is a large lizard not native to Florida. Hatchling and young green iguanas usually have bright green coloration. Adults range in color from green to brown to almost black, although usually remain predominantly green as they mature. Some adults can take on an orange or pink coloration during breeding season. Green iguanas have a row of spikes down the center of the neck, back, and upper portion of the tail, and have dark black rings on the tail. Mature male iguanas develop heavy jowls and a throat fan (or dewlap) that are much larger than those of female iguanas. Larger throat fans can make male iguanas appear bigger, repel rivals or warn predators. Female iguanas may choose to breed with male iguanas that have larger dewlaps. The throat fan can also help iguanas regulate body temperature.

Green iguanas can live on the ground, in shrubs or in trees in a variety of habitats including suburban developments, urban areas, small towns and agricultural areas. Green iguanas are excellent swimmers and tolerate both salt and freshwater. They can submerge themselves for up to 4 hours at a time.

Technical assistance information

Can I remove iguanas from my property?

Green iguanas are not protected in Florida except by anti-cruelty laws and can be removed from private property year-round with landowner permission. The Florida Fish and Wildlife Conservation Commission (FWC) encourages removal of green iguanas from private properties by landowners. Members of the public may also remove iguanas from 22 FWC managed public lands without a license or permit under [Executive Order 17-11](#) .

How can I deter green iguanas from frequenting my property?

If you have an iguana frequenting your area, you can take steps to deter the animal such as modifying the habitat around your home or humanely harassing the animal. Examples of effective habitat modification and harassment include:

What if I own a pet iguana I can no longer care for?

Escaped or released pets remain a primary source of introduced species in Florida, although it is illegal to introduce nonnative species into the state. Through the FWC's [Exotic Pet Amnesty Program](#), pet owners who are either unable to care for their exotic pets, such as green iguanas, or who no longer wish to keep them can surrender them with no questions asked and without penalties regardless of whether those pets are kept legally or illegally.



FWC Brochure

Iguana fast facts

- Iguanas are large lizards that can grow over 4 feet in length.
- Green and spinytail iguanas are native to Central and South America, but are commonly found in the exotic pet trade.
- Iguanas bask in open areas and are often seen on sidewalks, docks, patios, decks, in trees or open mowed areas.
- They can run or climb swiftly when frightened and dive into water or retreat into burrows or thick foliage.
- Green iguanas can range from green to grayish black in color and have a row of spikes down the center of the head and back.
- During the breeding season, adult male green iguanas can sometimes take on an orange hue.
- Spinytail iguanas can range from gray to dark tan in color with black bands and have whorls of spiny scales on the tail.
- Green iguanas are mainly herbivores and feed primarily on leaves, flowers and fruits of various broad-leaved herbs, shrubs and trees, but will feed on other items opportunistically.
- Spinytail iguanas are omnivorous, eating primarily vegetation, but have been documented eating small animals and eggs.

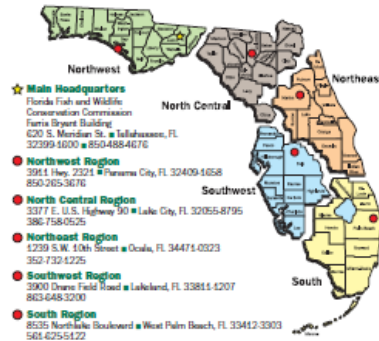


Black spinytail iguana, Adam G. Stern



Mexican spinytail iguana, Kenneth L. Krysko

If you have further questions or need more help, call your regional Florida Fish and Wildlife Conservation Commission office:



9/2017

Iguanas in Florida



Green iguanas, FWC

How You Can Help Stop the Spread of These Invasive Lizards



Florida Fish and Wildlife Conservation Commission
MyFWC.com



Male green iguana

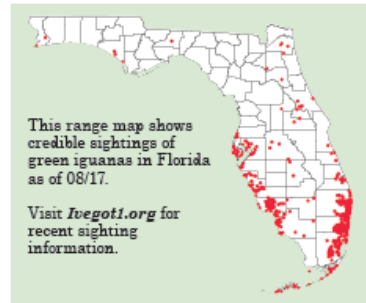
An Invasive species

Florida's subtropical climate has allowed iguanas to thrive and reproduce in regions of the state where they have been introduced into the wild.

Iguanas can be a nuisance to homeowners by damaging landscape plants or gardens, leaving droppings in yards and pools, or causing property damage by digging burrows.

Detering iguanas

- Never feed iguanas directly or inadvertently by leaving attractants outside, such as pet food or ripened fruits.
- Avoid planting vegetation that iguanas eat, such as hibiscus, orchids and roses.
- Protect valued plants or gardens with cages or screened enclosures.



- Plant iguana-resistant vegetation such as milkweed and citrus.
- Haze basking iguanas by spraying with a water hose until they leave the area, or install a motion activated water scarecrow sprinkler.
- Create a wire fence barrier along seawalls or other sensitive areas on your property to prevent digging.
- Make loud noises to startle iguanas and create an unwelcome atmosphere around your property.

Legal options to remove iguanas

- All species of iguana may be humanely captured and removed from private property without a permit at any time with landowner permission.
- As with all wildlife, iguanas are protected by anti-cruelty laws, and inhumane treatment of them is punishable by law.
- No poisons are legal for use on iguanas or any reptiles in Florida.
- The Florida Fish and Wildlife Conservation Commission (FWC) recommends the use of cage traps to homeowners interested in the live capture and removal of iguanas.
- All captured iguanas must be kept in captivity or humanely euthanized. It is illegal to relocate or release nonnative species in Florida.
- Homeowners who capture other nonnative species and need help should call the FWC's Exotic Species Hotline at 888-Ive-Got1 (888-483-4681).
- Florida state law requires euthanasia to be humane. Please consult the American Veterinary Medical Association website for complete guidance on methods of humane euthanasia.
- Iguanas may be euthanized by use of a firearm on private property during daylight hours with landowner permission. Please check with the local sheriff's office or police department for firearm ordinances before discharging a firearm.
- Iguanas and other nonnative reptiles may be taken year-round without a permit on 22 public lands. Please visit MyFWC.com/Python and click on "Removing Pythons" for more information.



Open trap, FWC

Trapping iguanas

- Live animal traps can be baited with red flowers or fruit such as strawberries, banana, grapes, pieces of ripe melon, papaya or mango.
- Pre-baiting can make live traps more effective in catching iguanas. Simply bait the open trap for a few days until iguanas are regularly entering the trap, then release the door and set the trap normally.
- Iguanas can get cuts or wounds when trying to escape from traps, so cover traps with foliage or cardboard to help the animal feel less exposed or vulnerable.
- For the welfare of any caught animal, traps should be set in a shaded area.
- Set traps during the day when iguanas are active to avoid catching non-target species such as cats, raccoons and opossums that are more likely to be caught in traps left open at night.
- Traps must be checked at least once every 24 hours.
- Captured non-target native species are required to be released on site.
- The FWC recommends hiring a nuisance wildlife trapper for interested property owners who may find it difficult to perform trapping or humane euthanasia on their own.
- A list of trappers can be found at MyFWC.com by typing "trappers by county" in the search box and clicking on the search result that says "Nuisance Wildlife Trappers."



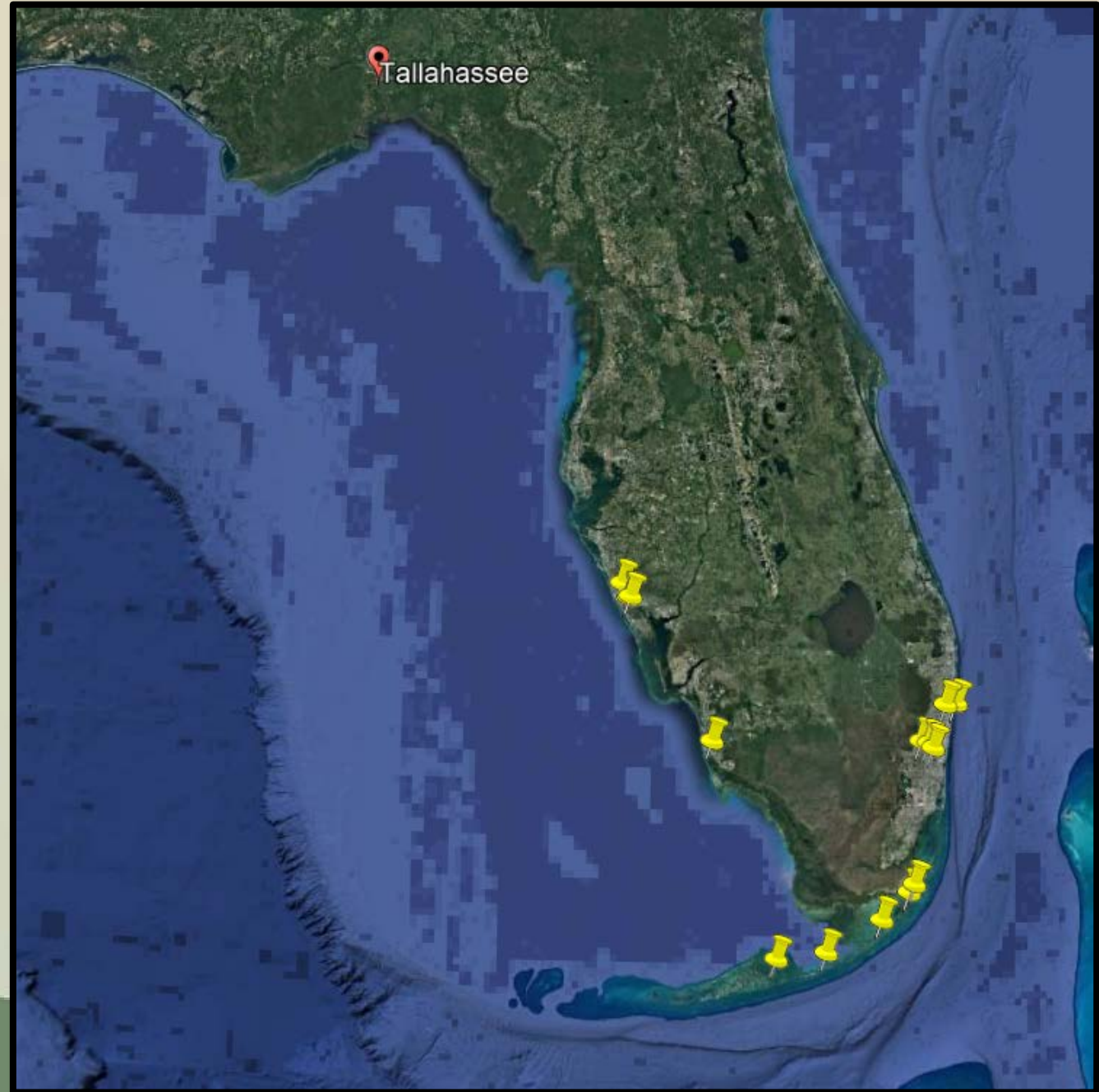
Covered trap, FWC



Statewide Efforts

Counties

- Monroe (Florida Keys)
- Broward
- Collier
- Sarasota



Florida Keys – Iguana Biology

Goals

- Public technical assistance
- Remove iguanas on FWC lands
- Remove BSTI's on No Name and Big Pine Key's



Florida Keys – Iguana Biologist (Workshops)



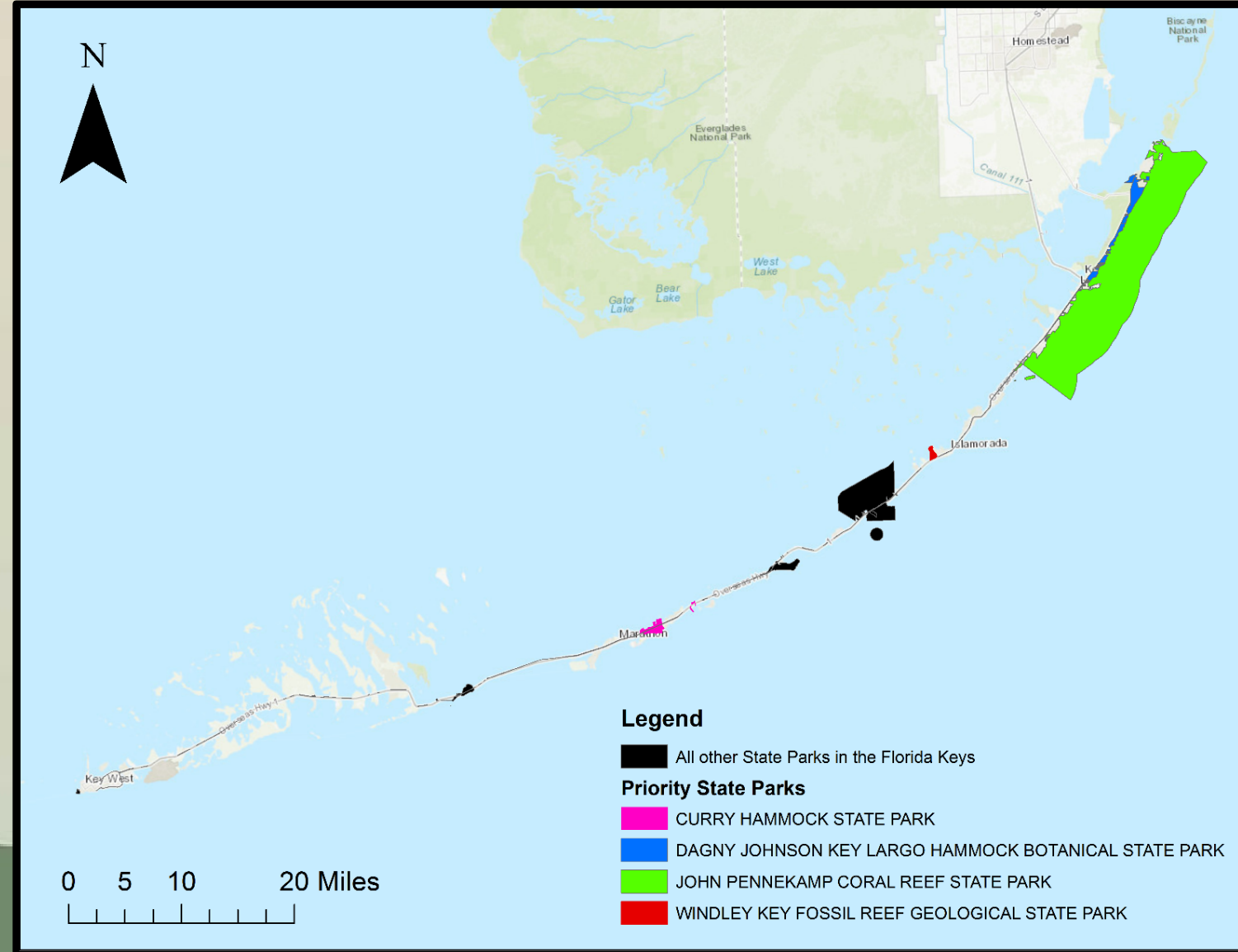
Florida Keys – Iguana Biologist (No Name Key)



Florida Keys – Contractors

Priority State Parks

- John Pennekamp SP
- Windley Key
- Dagne Johnson
- Curry Hammock



Florida Keys – Contractors

Removed >800 since April



East Coast – Volunteer Removal



Hollywood, FL

East Coast – Volunteer removal

- Removed 45 BSTI with traps
- Began pilot snaring project



East Coast – UF Research Contract

Goals

1. Compare trap types
2. Evaluate manual removal effectiveness
3. Compare trapping to manual removal
4. Evaluate environmental correlates to capture



East Coast – UF Research Contract

Trapping

- Single and Multi-capture

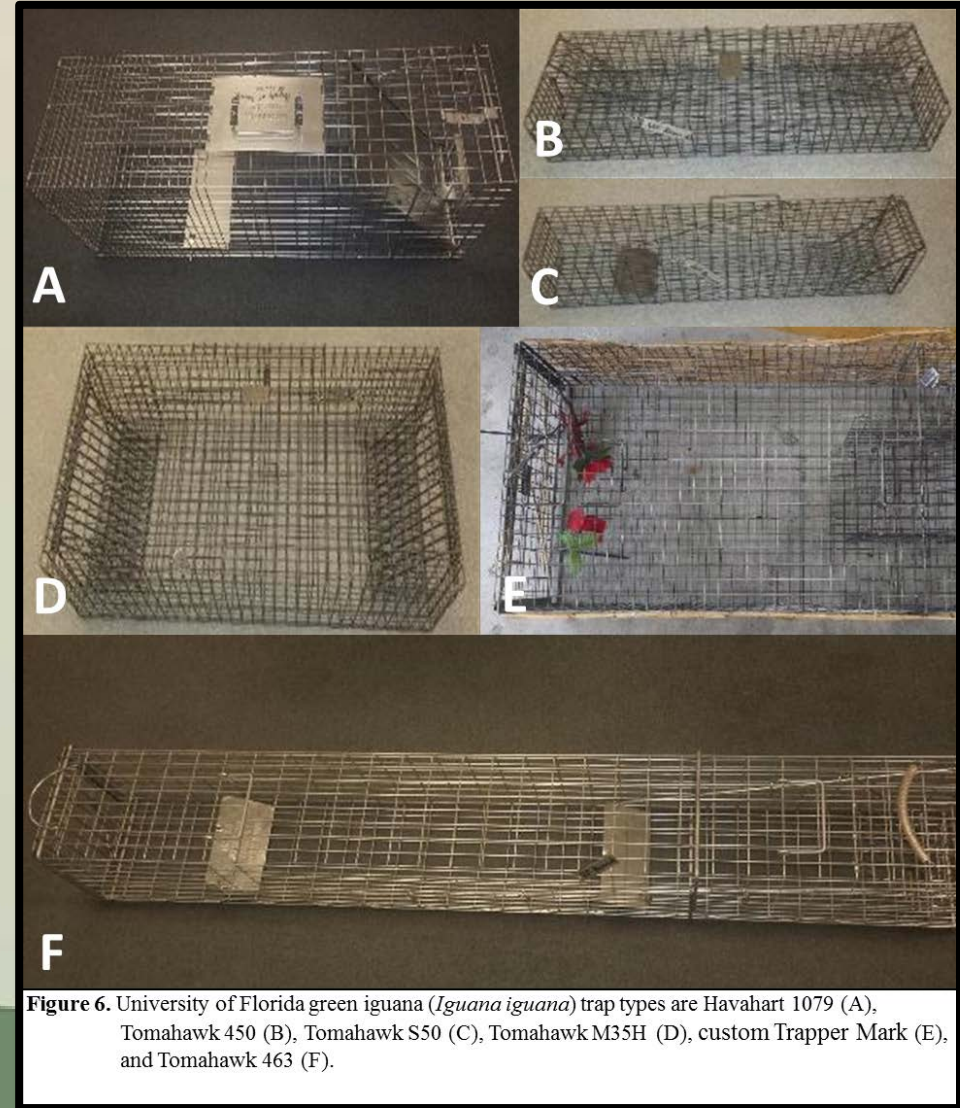


Figure 6. University of Florida green iguana (*Iguana iguana*) trap types are Havahart 1079 (A), Tomahawk 450 (B), Tomahawk S50 (C), Tomahawk M35H (D), custom Trapper Mark (E), and Tomahawk 463 (F).



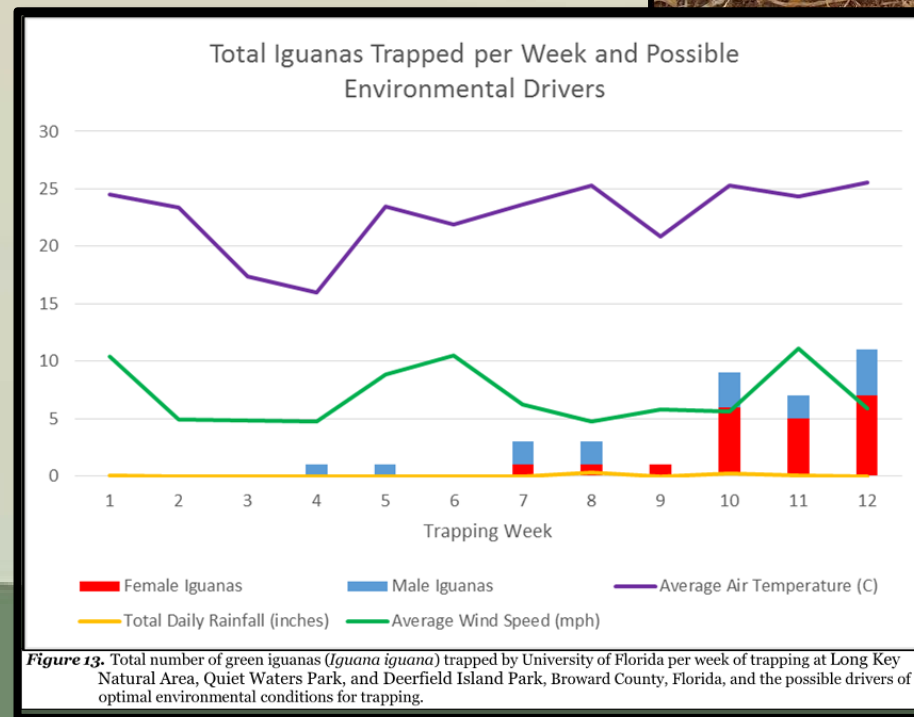
East Coast – UF Research Contract

Trapping

- 38 removed (0.026 iguanas/trap night)
- Havahart 1079 had most captures (n=14, CPUE = 0.05*)
- Moderate correlation with average air temperature



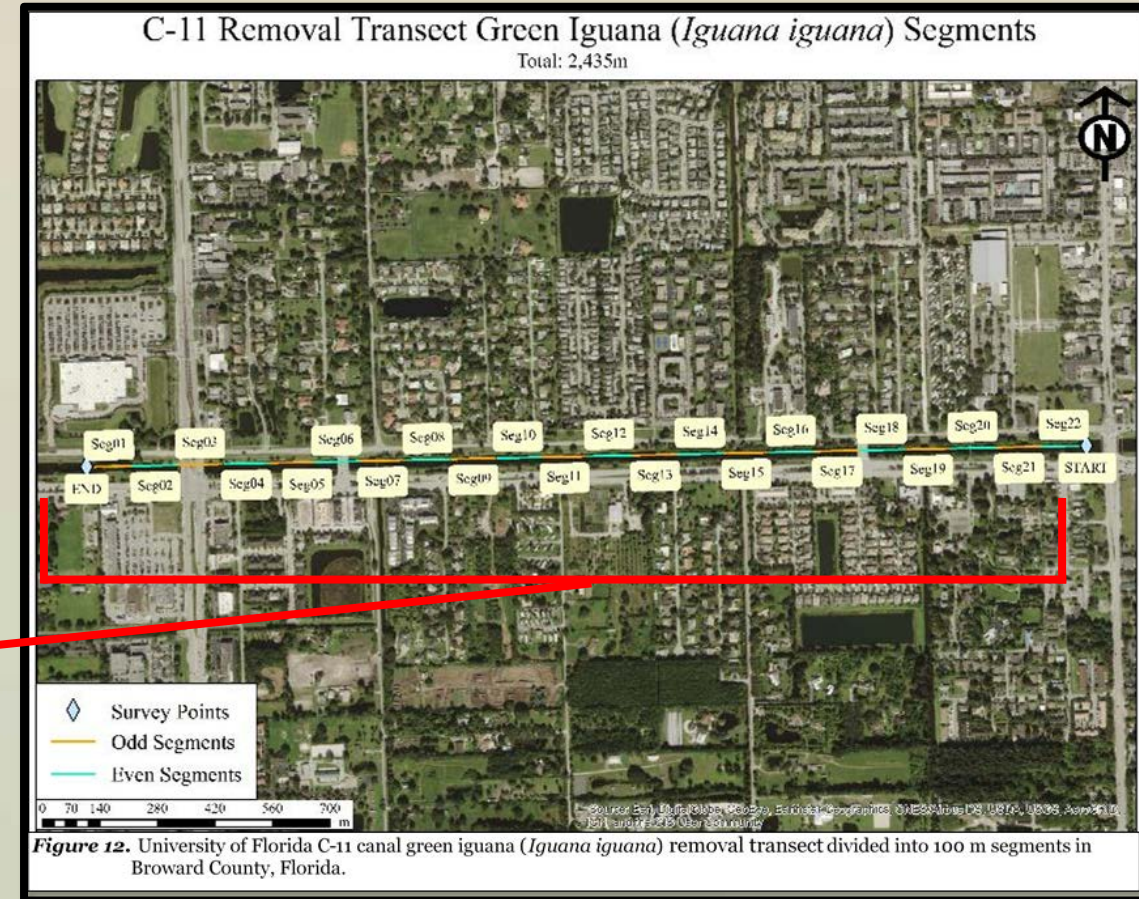
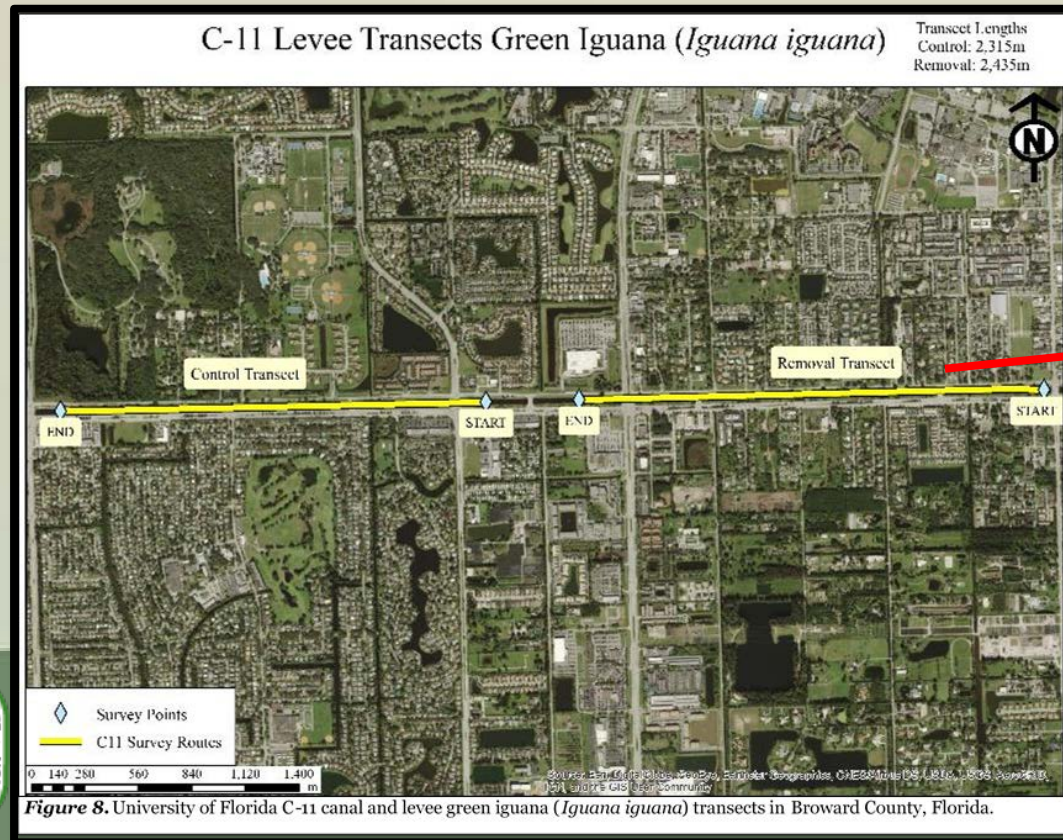
Photo Credit: University of Florida



East Coast – UF Research Contract

Manual Removal

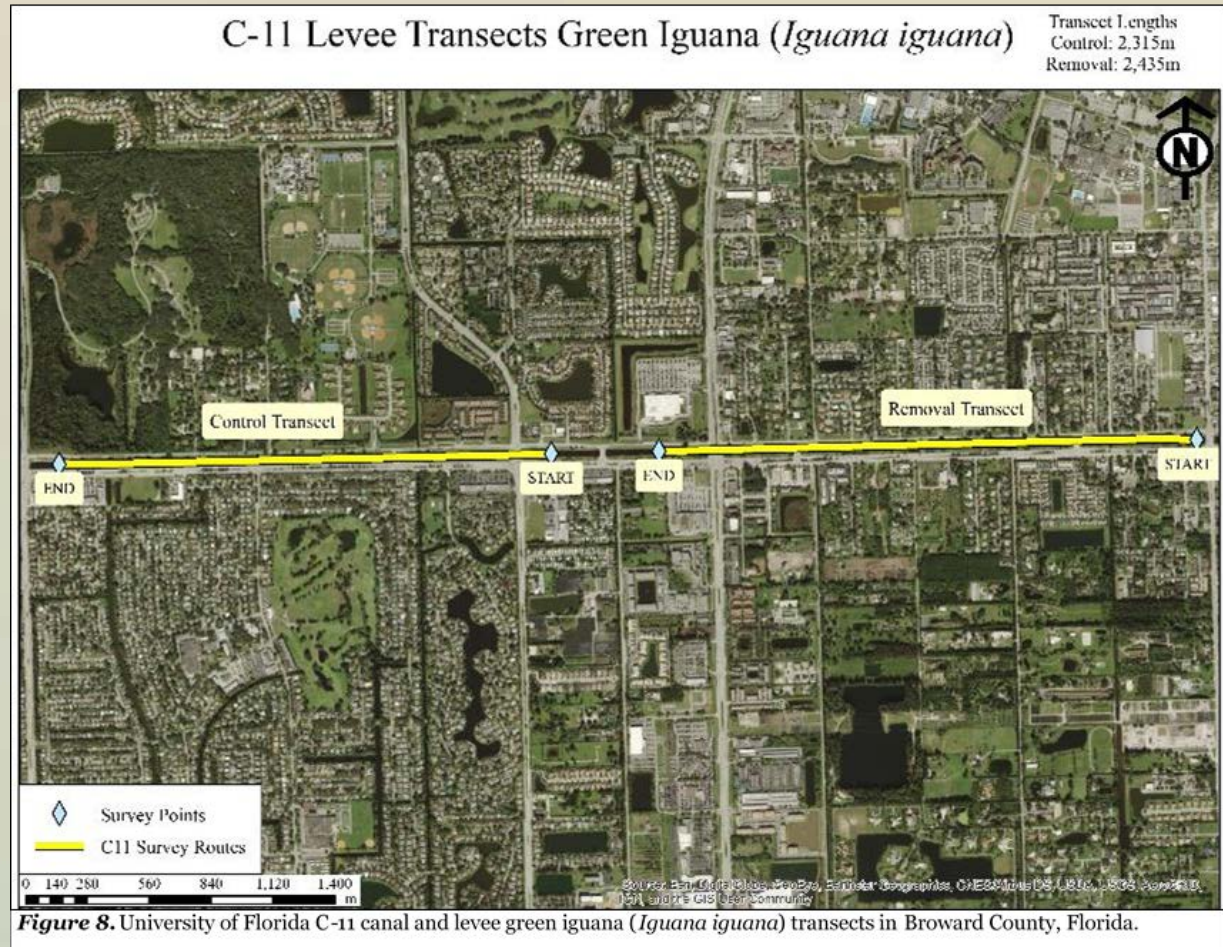
- Night transect on canal



East Coast – UF Research Contract

Manual Removal:

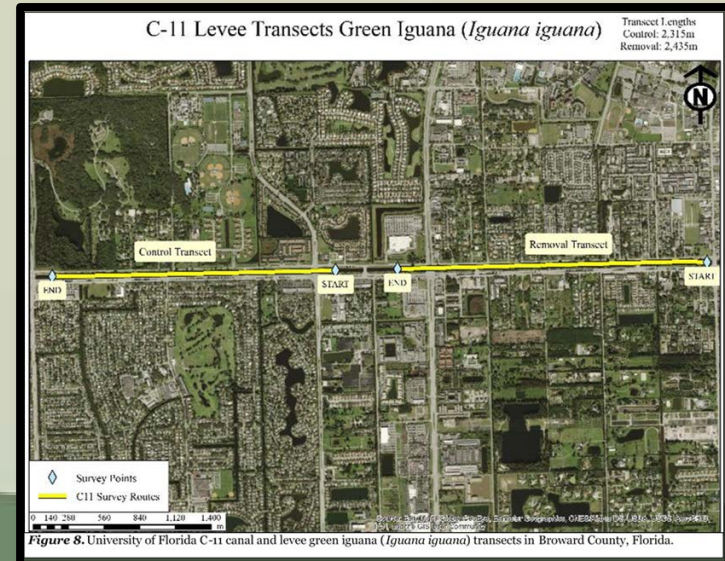
- 808 removed (2.56/person-hr)
- Control Transect Survival = 96.4%
- Removal Transect Survival = 77.5%



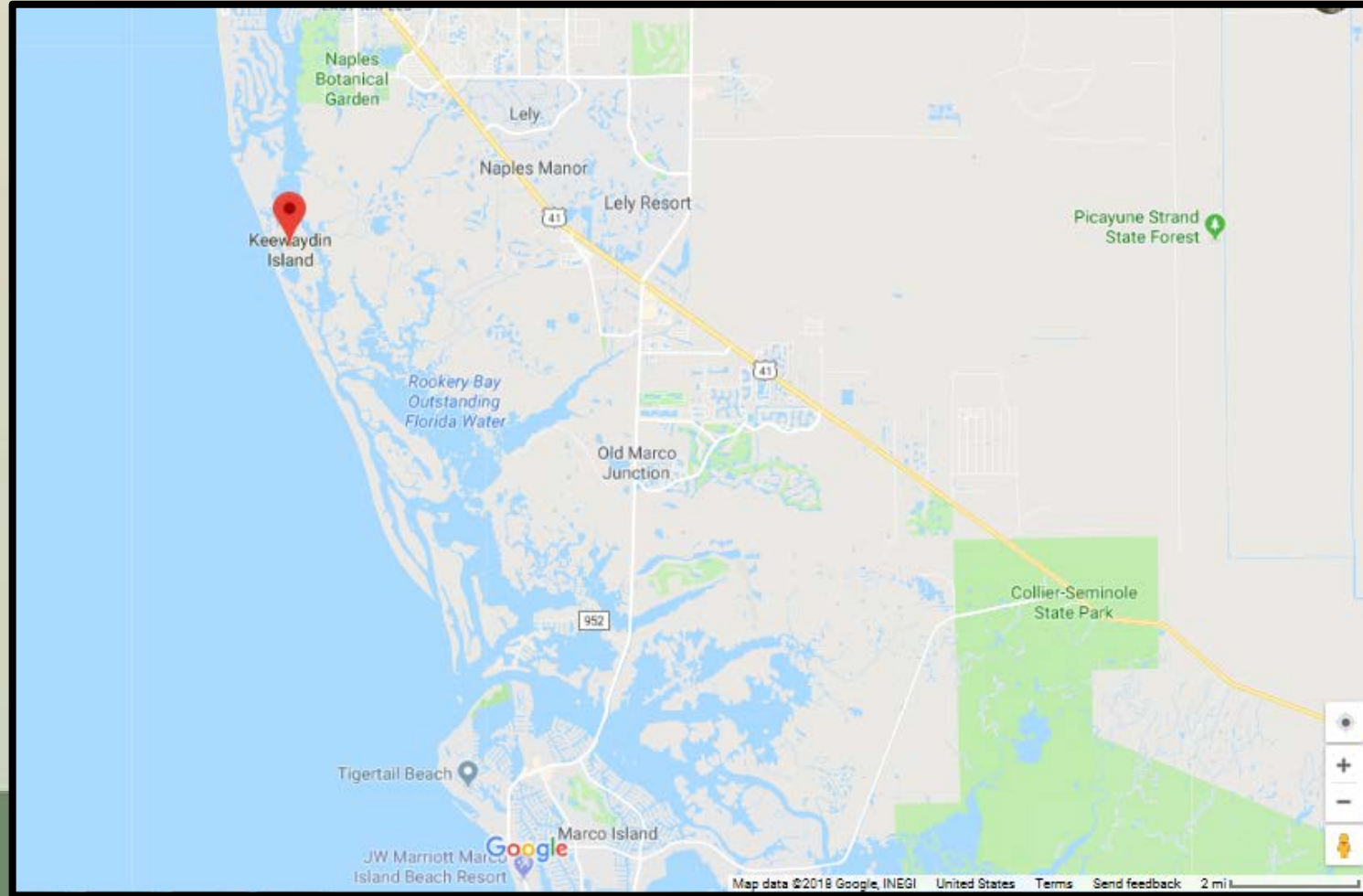
East Coast – UF Research Contract

Trap vs. Manual Removal:

- Trapping had lower CPUE*
- Trapping sites = 26.3% decrease
- Manual Removal sites = 66% decrease



West Coast – Keewaydin (BS)



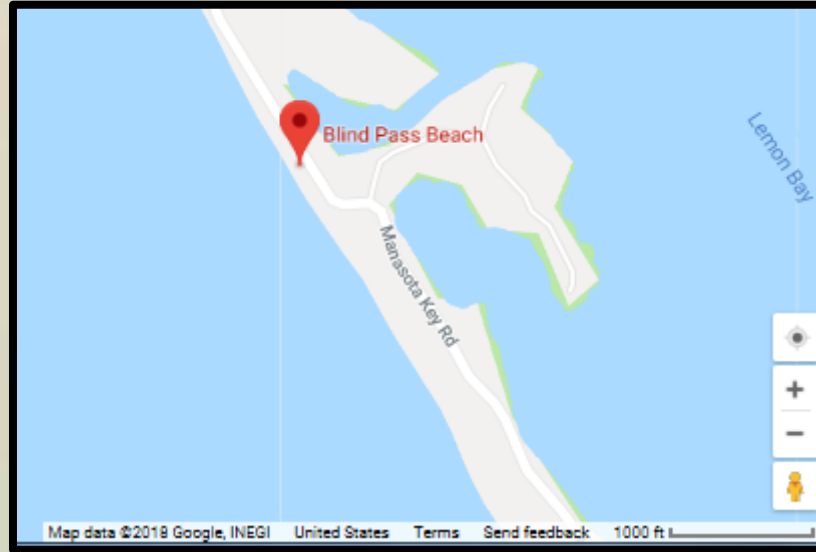
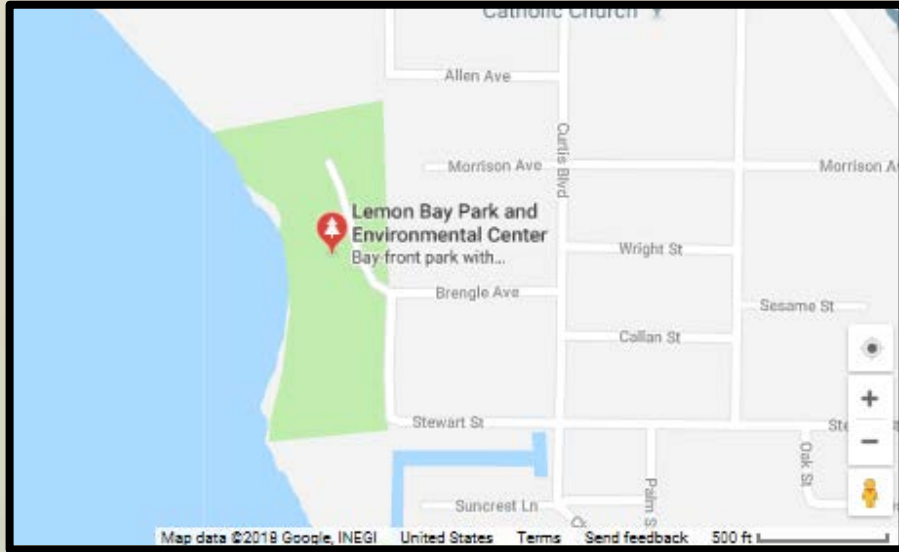
West Coast – Keewaydin (BS)



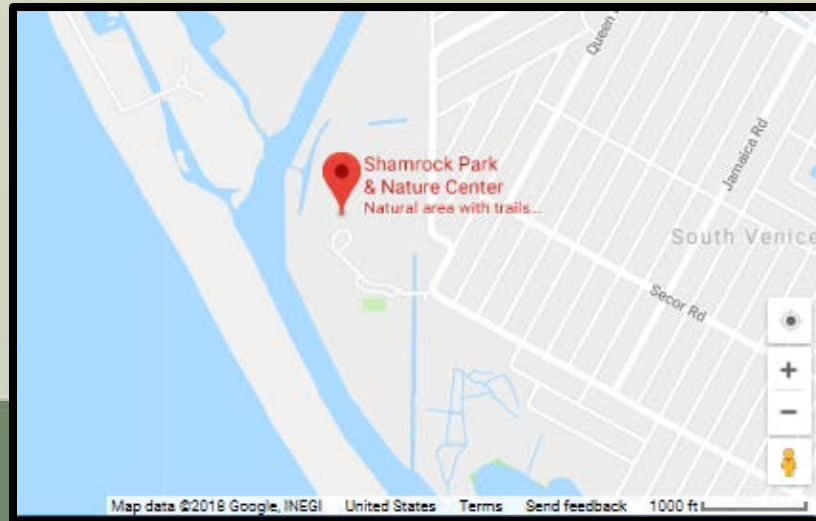
Removed 54



West Coast – Sarasota County (B)



Removed 160



Thank You

