

# The Management of Green Iguanas, *Iguana iguana* throughout Florida, Bahamas and the Caribbean.

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IUCN Crocodile Specialist Group  
Tomistoma Task Force  
King Cobra Conservancy



# The Caribbean: 11 species of *Cyclura*, totaling 16 taxa.



# Natural Selections of South Florida has had several contracts to remove green iguanas.

FWC RFP 17/18-33-----	2,374
FWC RFP 17/18-87-----	1,929
Cat Cay Bahamas-----	25,293
Fairchild Tropical Gardens-----	549
SFWMD-----	419
Florida Power & Light-----	450
Various calls/contracts for green iguana removal-----	2,500
Sub-total of green iguanas removed-----	33,514



# What are the actual problems caused by green iguanas?

- Undermining roadways
- Other infrastructure damage, collapsing sidewalks, seawalls berms and canal banks.
- FAA hazards:
  - Iguanas thermoregulating on runways.
  - Iguanas digging under roadways.
- Seeking warmth in transformers causing power outages.
- Incomplete data set regarding diets i.e.; nestling birds, endangered plants, host plants for certain butterflies.
- Damage to landscaping, as green iguanas prefer many ornamental plants to native species.
- They can potentially spread bacteria such as salmonella.
- They can consume vegetable gardens and farms. On many islands where they occur, the damage to family farms is devastating.
- Hybridization---occurred in 2016 on Little Cayman. (Green iguana x Sister Island iguana.) 2025---Unknown iguana in Utila Honduras

# Iguanas are undermining runways.



Beautiful landscaping prior to green iguanas.



# Landscaping after iguanas have arrived!



Iguanas are harvested in native countries.



Iguana sales in Guyana



Honduras

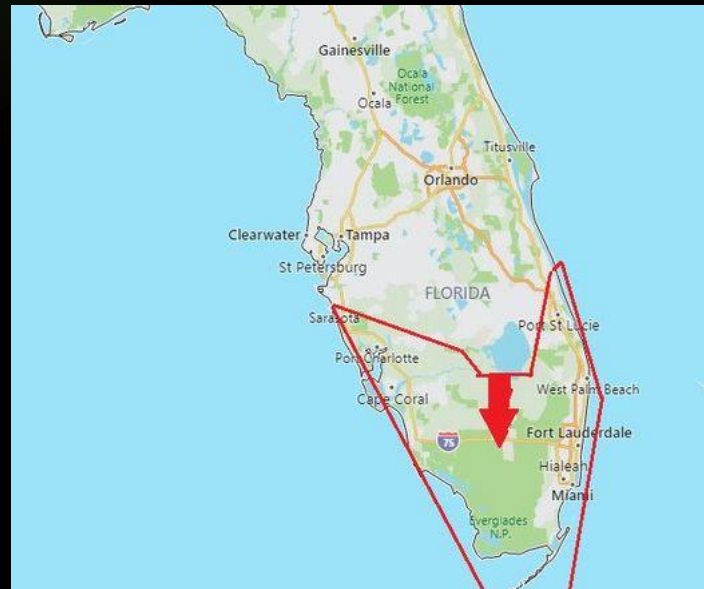
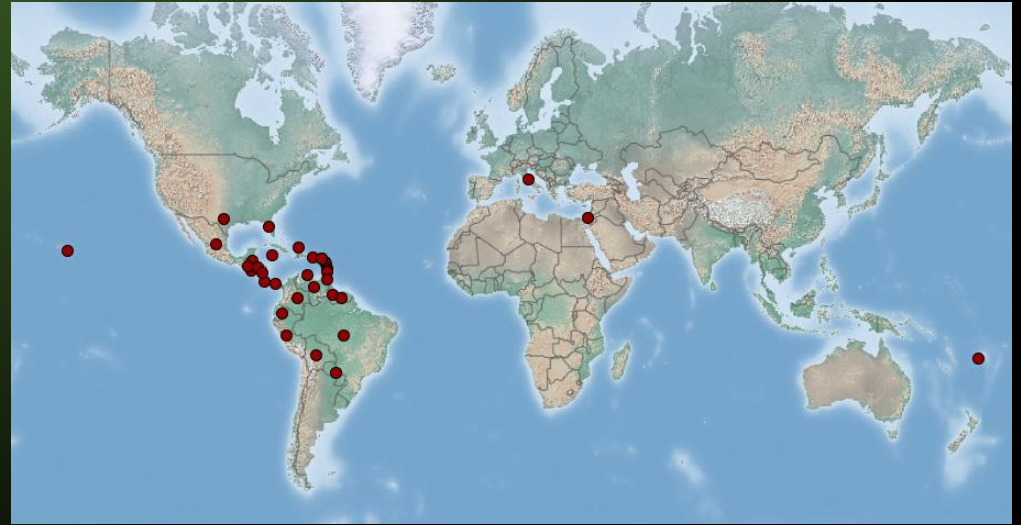


# Countries where green iguanas have some form of protection:

- Costa Rica----Considered endangered---the state can grant licenses and/or use permits.
- Mexico----considered “Endangered Species”
- Nicaragua---Hunting is regulated, closed season in winter months.
- El Salvador---they are a protected species and a permit is necessary for hunting.
- Belize---protected under the “Belize Wildlife Protection Act”, a permit is needed to hunt or sell.
- Guatemala----widely hunted and regulated.



# Green iguana range maps:



# Countries/Islands with native green iguanas:

## Mexico/Central America:

Mexico  
Belize  
Costa Rica  
El Salvador  
Ecuador  
Guatemala  
Honduras  
Nicaragua  
Panama

## Caribbean

St Vincent  
Grenadines  
Trinidad/Tobago  
Netherland  
Antilles  
Grenada  
Aruba  
Bonaire  
St Lucia  
Montserrat  
Saba

## South America

Bolivia  
Brazil  
Paraguay  
Colombia  
Guyana  
Suriname  
Peru  
Venezuela  
Ecuador





# Countries/Islands with invasive green iguana populations:

Puerto Rico

Grand Cayman

Mexico

Bahamas

Hispaniola

South Africa

St Martin

Thailand

Guadeloupe

Singapore

Martinique

Israel

Taiwan

British Virgin Islands

Anguilla

US Virgin Islands

USA—Florida, Hawaii, Texas





## Countries/Islands where green iguanas could establish:

- Cuba
- Hispaniola
- Several Islands in the Lesser Antilles
- Jamaica
- Turks and Caicos
- Basically, any other island with the proper conditions for arrival.
- However, several of the countries/islands have biosecurity measures in place.





Green iguanas are known for rapid population expansion, as in:

Grand Cayman-----near zero to 1.3 million in 16 years.

Bahamas (several islands)----25,000 taken from 80 ha island.

Puerto Rico----no formal assessment, but the population is estimated at 10-14 million (January 2023).

Florida---widespread and common in many areas---assessment needed.





# Euthanasia: YES or NO??

- According to the ISG Position Statement the proper humane euthanasia technique is outlined as follows:
- <https://www.avma.org/KB/Policies/Euthanasia-Guidelines.aspx>

**Warning**

---the following slides show graphic images---





# Captive Bolt Systems

9mm blank shell



# Spring loaded plunger



Green iguanas are not always green.



Mature male green iguanas turn orange during the breeding season.



# Removal Methodology

- Shooting with high powered air rifles
- Hand captures
- Drones
- Noosing
- Snaring
- Trapping
- Ideas?

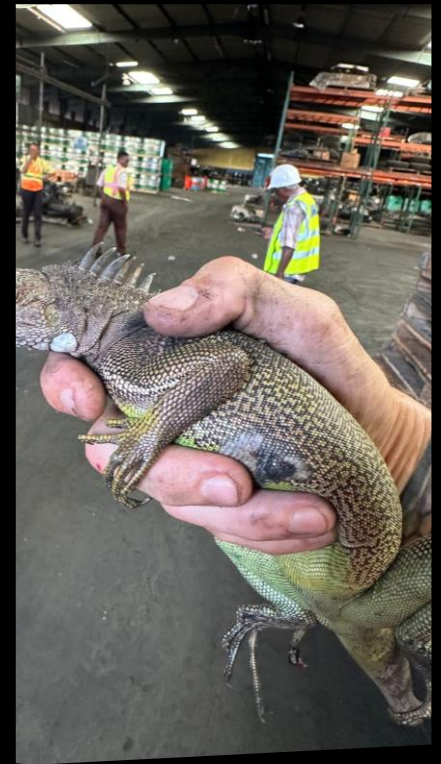




Be on the lookout for evidence of foraging. You can have an idea of the numbers Of iguanas as well as their approximate size by observing the size of the bites taken out of the plants.

First, one must locate the iguana----



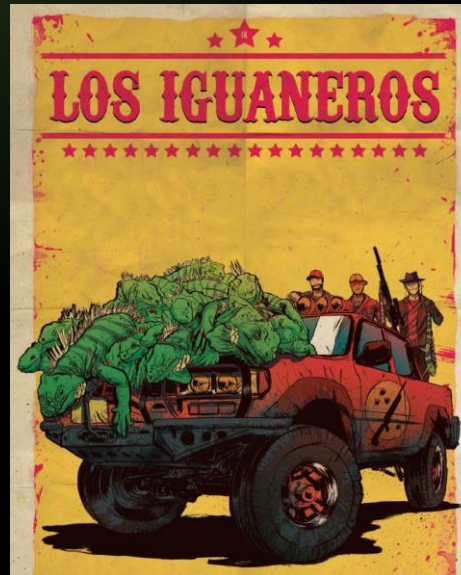


Rapid response is critical in keeping invasive herpetofauna out of the island. Jamaica has a successful program.





# Puerto Rico has taken matters into their own hands.



Iguana meat is processed and legally sold in Puerto Rico.



# Florida has many start-up companies removing green iguanas.

Rewards Games Sports Extra Help Optic

**IGUANAS TAKING OVER?**

Our Trained Professionals Are Proven To Work

- TRAPPING
- ANTI-HOLE BARRIER
- TREE WRAPS
- SPRAYS
- BARRIERS
- SEA WALL CONTROL
- SITE MONITORING
- FOLIAGE CONTROL

Commercial & Residential

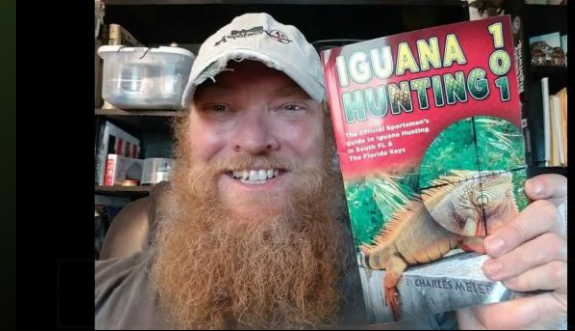
Call For A FREE Estimate

Call Toll Free: **855-525-5656**

www.iguanacontrol.com

INSTITUTE OF ANIMAL MANAGEMENT

WELCOME



Facebook

Facebook has a “Florida Iguana Hunters and Other Invasives” Group. FB photos below:





Sometimes Florida green iguana hunters make mistakes.

Cuban iguana, *Cyclura nubila*

Rhinoceros iguana, *Cyclura cornuta*



Facebook



Examples of shooting iguanas:  
Everyone claims “one shot”  
or “head shot”.  
When we process iguanas, we  
find many old pellet wounds.





6 out of ten adult iguanas have remnants of pellets that did not kill them.

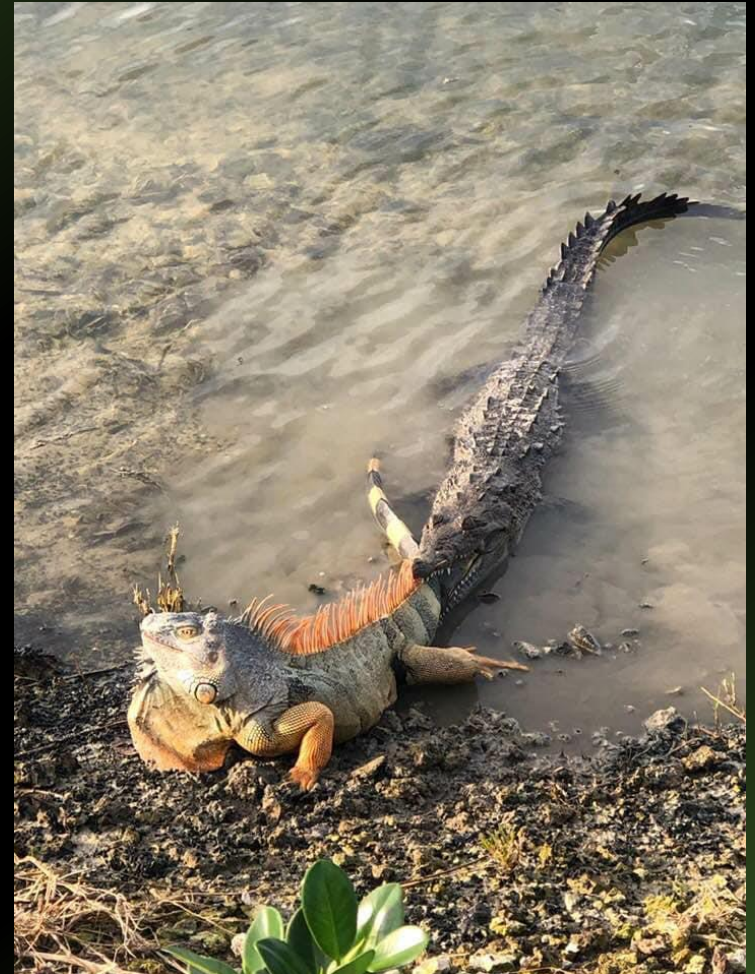


# Florida's other methodology for removing iguanas.



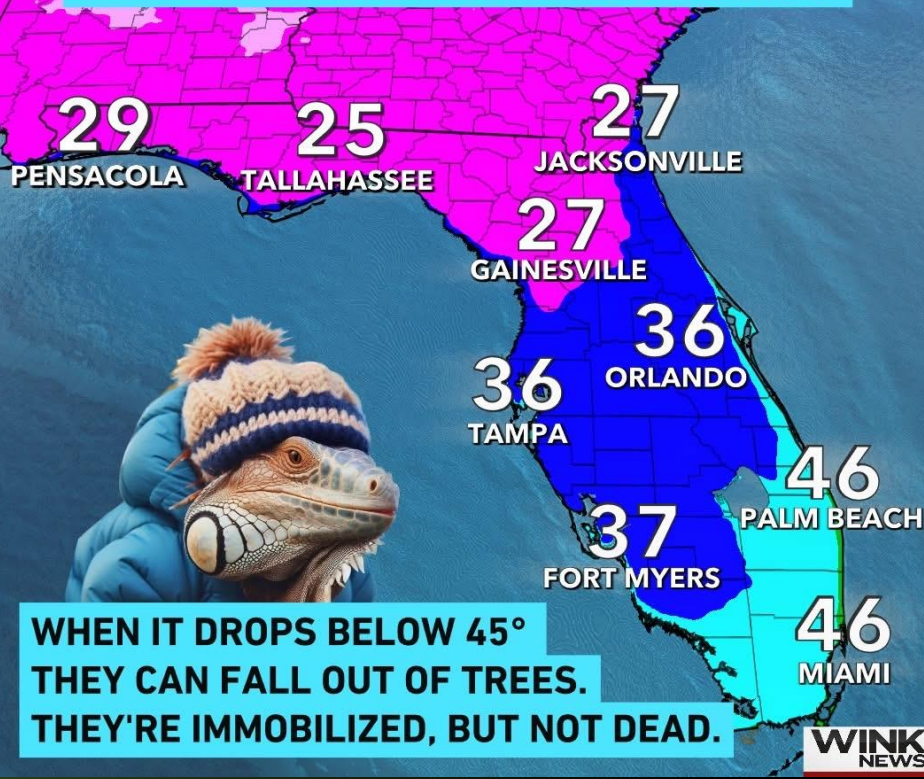
Florida Keys

Zoo Miami



# FALLING IGUANAS

POSSIBLE SATURDAY MORNING



The best method for green iguana removal  
Cold Front!

# Where are all these invaders originating? Where are they going?



South Florida has numerous nurseries that ship ornamental plants all over the world, including the Caribbean.



Lizards deposit eggs in nursery pots.



Marine toads burrow in nursery pots.



Snakes hide in the palm fronds.



# Goods shipped from Florida to the Caribbean.

Gardening supplies



Construction materials



# Catching iguanas at night.



# Catching iguanas by tongs & by hand.



Arboreal green iguanas are not affected by wind.



# Flying Iguanas

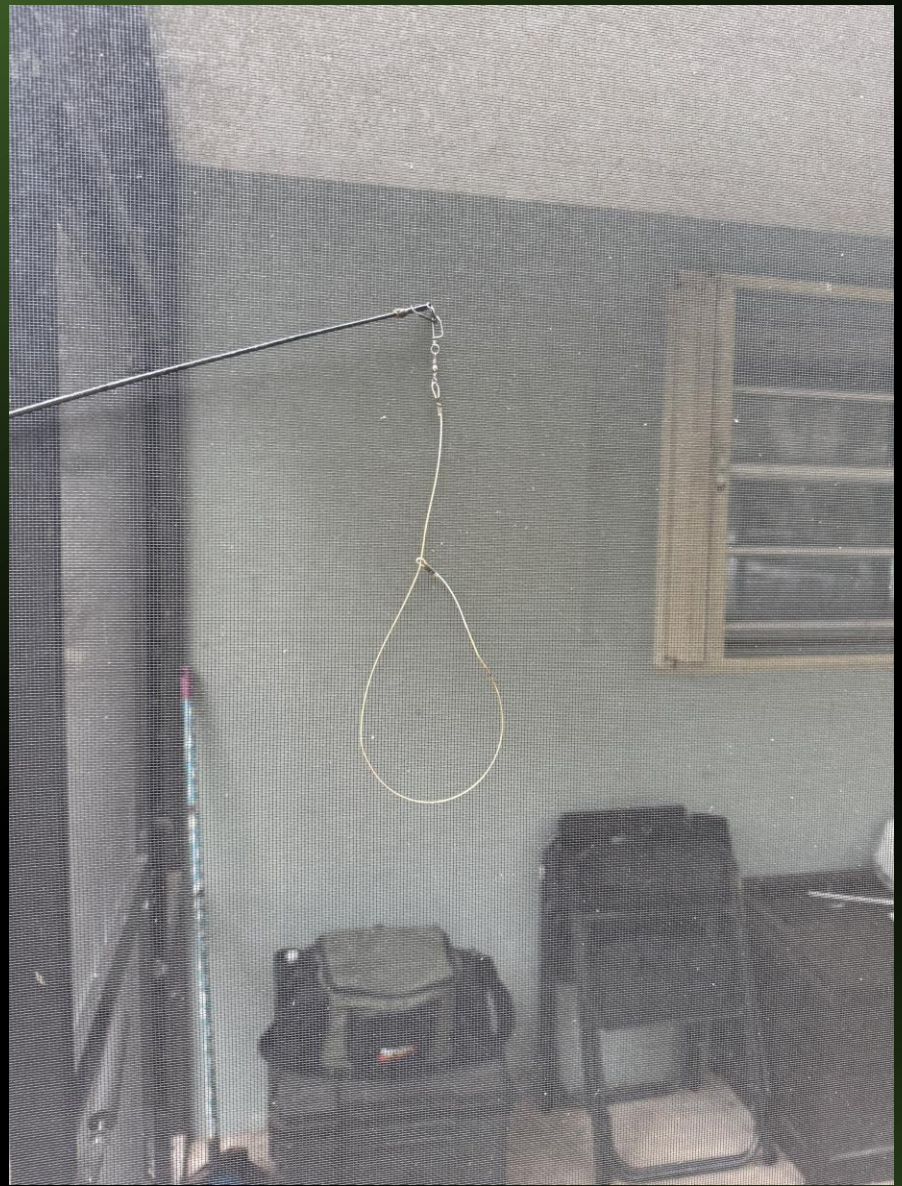














Devices are being designed by people  
Trying to improve capture percentages.

FB photo



# Setting snares at iguana burrows.

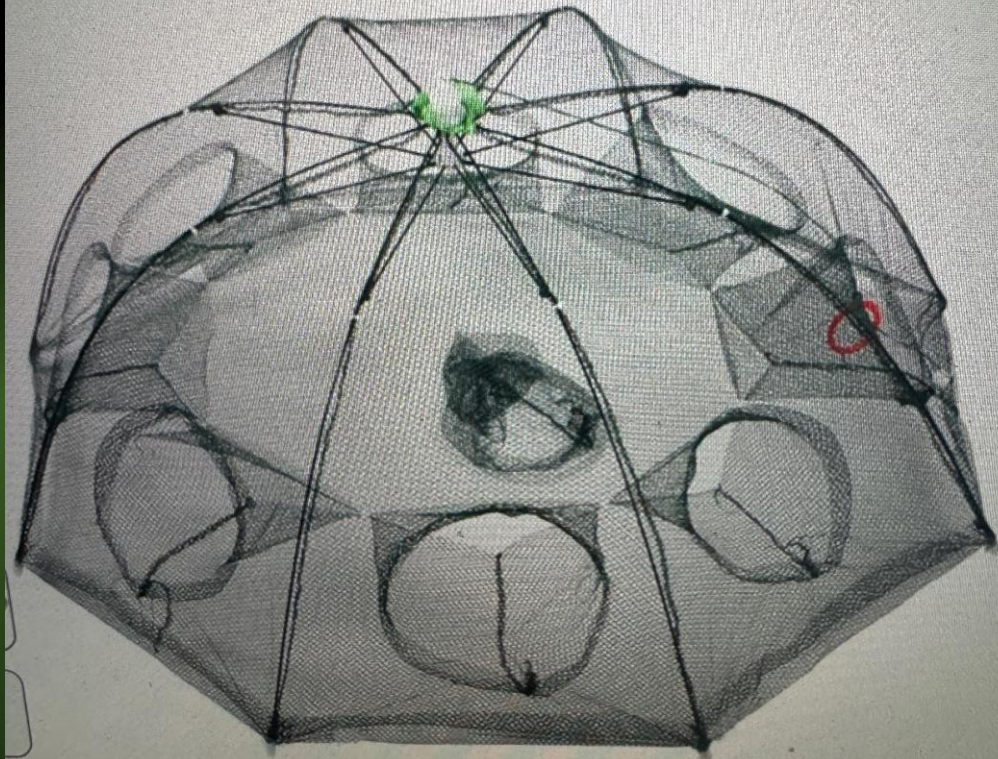


# Snared iguanas.



# Trapping iguanas.





Roll over image to zoom in

This trap for minnows is effective for hatchling green iguanas.

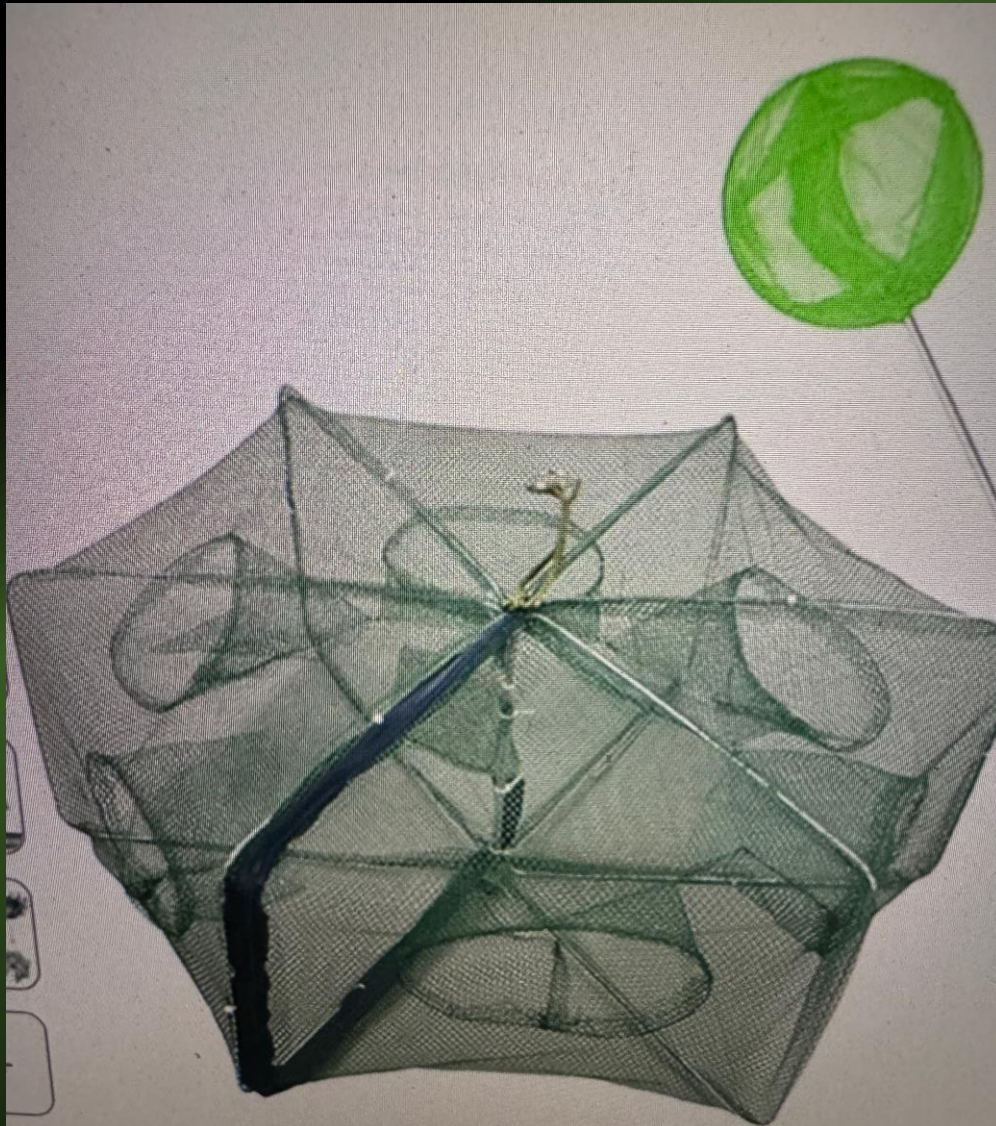
Traps are baited with artificial flowers along with some fruit.





Crawfish traps can catch many hatchlings, actually up to 1-meter iguanas.





Roll over image to zoom in

This particular trap is not as Effective. The entrance holes are straight up and down, not on an angle as the previous trap.



It is possible to remove large numbers of iguanas in a short period of time.





We could keep going.....



Every iguana is weighed, measured and sexed.





Females are checked as to their reproductive state.





Female iguanas in the fall, high in fat bodies.



# February Egg Development:



# April Egg Development:



Florida's green iguanas:  
No formal study on their numbers.  
Early records of green iguanas in Florida is 1964.  
Anecdotal information is the green iguana  
population has increased logarithmically  
over the past 10-20 years.





# FWC 23/24-120

## Iguana Removal In The Florida Keys

- 2017, 2018-----43 pages
- 2022-----63 pages
- 2024-----73 pages
- Criteria for awarding the contract; lowest price-----
- One iguana per bag? Some nights we catch 150-200 iguanas.
- GPS each iguana, coordinates on each bag?
- The GPS coordinates for the park should suffice.
- 6 hours in each park? Some parks can be completed in 2-3 hrs.

The bidding companies past experience with green iguana removal doesn't seem to affect the decision to award the contract.



# Possible working solutions:

- Bring in Grand Cayman biologists for training in population assessments.
- Organize the “iguana hunters” i.e.; permits, regulations, reporting.
- Re-write the FWC RFP for iguana removal in the Florida Keys and make it more user friendly. The RFP is not meant to be a scientific study, it is meant to be a plan of action. It is meant for removal.  
Take out the restrictive verbiage and let the awarded company develop their plan to be more efficient and cost effective.
- FWC and/or other agencies---award more RFP’s, partnering with local municipalities.
- Develop, print and distribute educational material so people can have some knowledge and control over the ever-increasing green iguana population.
- Produce public service announcements for television.
- Form social media groups with the intention of education, not sensationalism.
- Convince the FDA to approve green iguana meat for sale.
- Form a statewide green iguana (or invasive reptile) task force.

Additional ideas?



# Why is all of this important? June 2016 on Little Cayman.....



Photos by Tanja Laaser



In March of 2025, the following iguana was photographed on Utila Island.  
Three species of iguanas occur on the island:

- Green iguana, *Iguana iguana*
- Spiny tailed iguana, *Ctenosaur similis*
- Utila Island iguana, *Ctenosaur bakeri*



Photo:  
Daisy Marion

# Can history repeat itself?

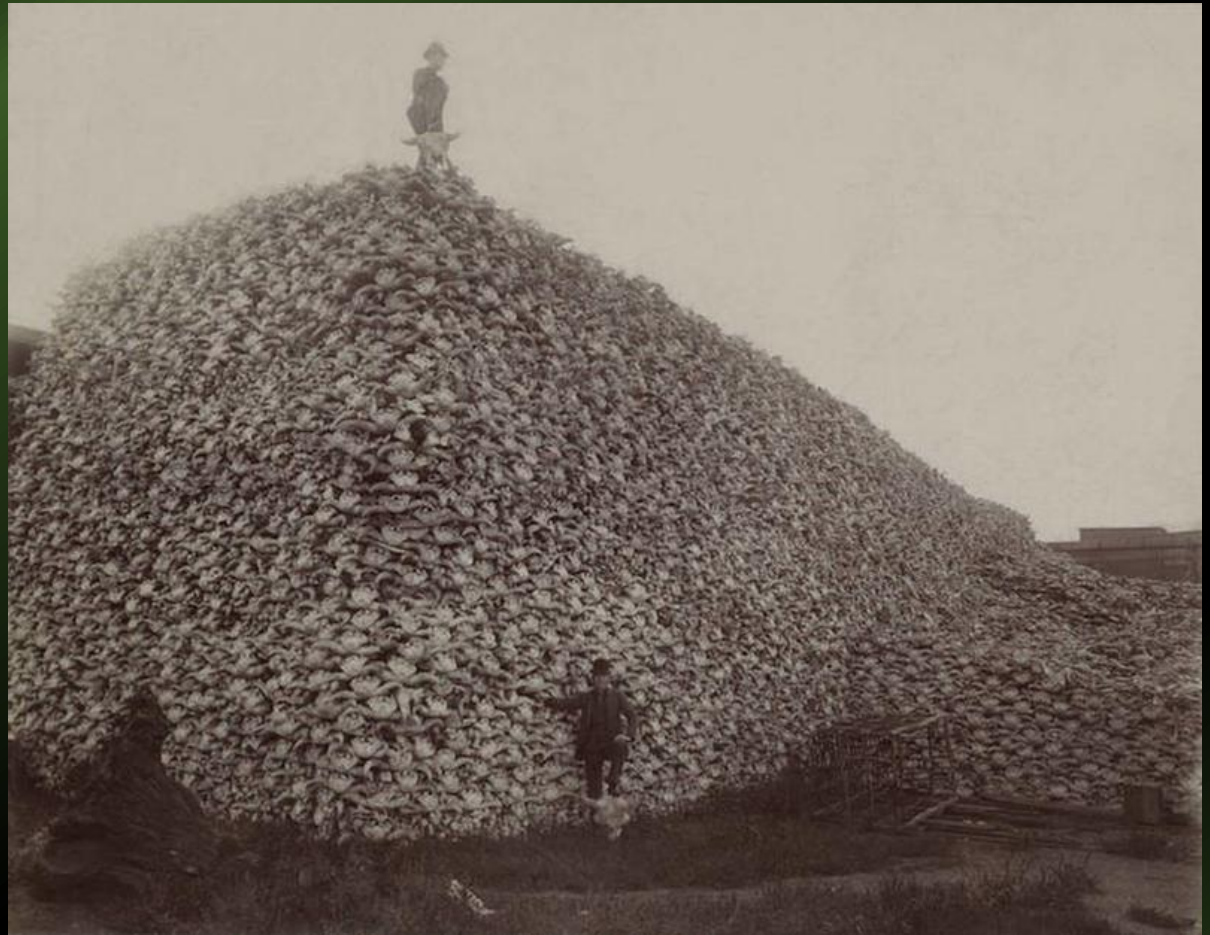
American bison estimated numbers:

Pre-1800—60,000,000

1830-----40,000,000

1880-----395,000

1900-----300



# Acknowledgements



- Florida Fish and Wildlife Conservation Commission
- Bahamas National Trust
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- Tim Brust
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- Mike Vallee
- Janelle Budell
- Ruben Ramirez
- Joe Burgess
- Jeff Beauchamps and many more.....

# ??Questions??



Photo by  
Janelle Budell

