Office of Environmental Management










FDOT and the Endangered Species Act Consultation Process

Webinar Series –

ESA Laws & Listing Updates

March 8, 2022

With Presentation's from:

NOAA FISHERIES

U.S. FISH & WILDLIFE SERVICE

FDOT

Welcome and Introduction to Workshop

Purpose of Workshop:

- The sessions are anticipated to provide a basic overview of the ESA consultation process for transportation projects. These webinars are intended for NEPA and Environmental Permitting practitioners and participants should have a base level understanding of the NEPA process and/or Environmental Permitting as it relates to the Federally listed species consultation process.
- **Workshop Format:**

▪ All four sessions are available on our website:

https://www.fdot.gov/environment/sched/oemtrainingprogramstandalonetrainingevents/oem-training-program-esa-consultation

FDOT HOSTS:





Katasha Cornwell
State Environmental Process Administrator
Office of Environmental Management
Florida Department of Transportation

Denise Rach
Project Delivery Coordinator
Office of Environmental Management
Florida Department of Transportation

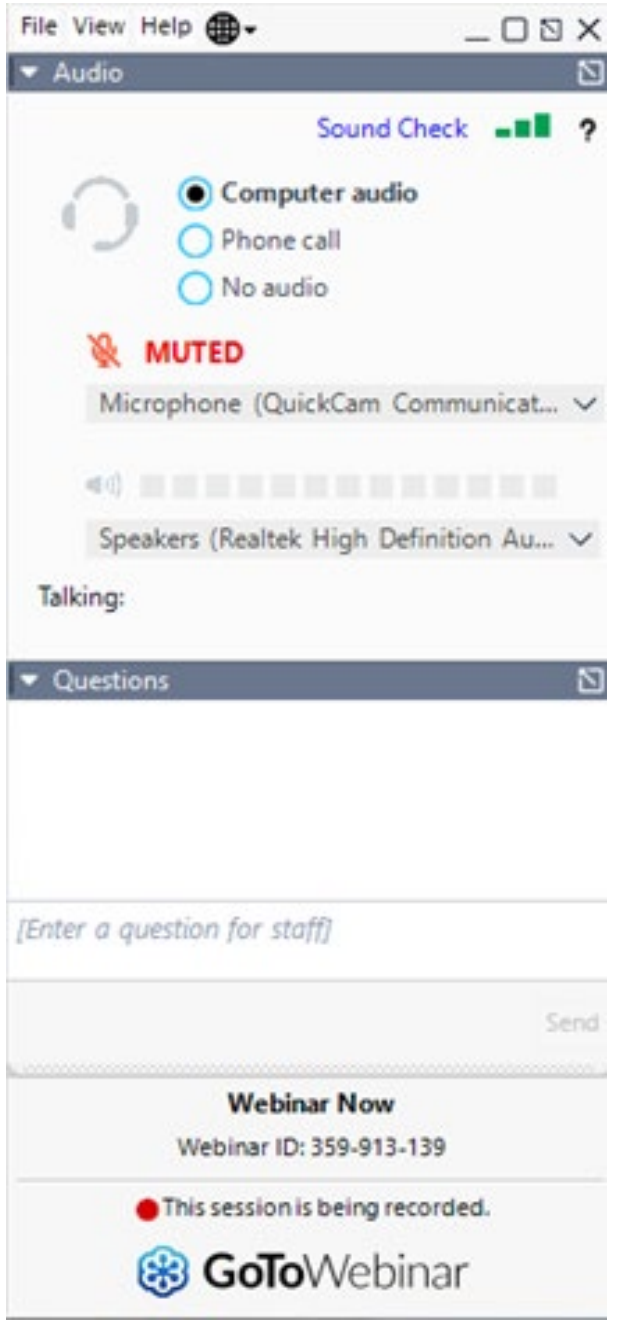
Orientation to the Go To Webinar Platform



Kendra Pewtress
Stantec
Webinar
Administrator

How to…

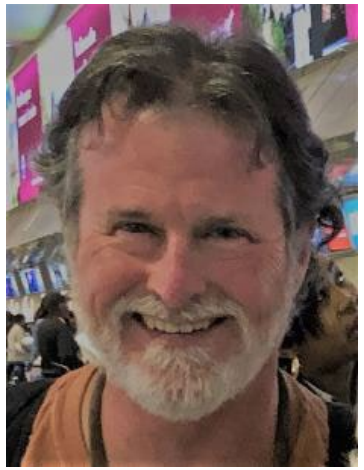
- Send your questions and comments to the presenters through the Question box
- Questions and comments can be submitted any time during the workshop presentation
- This session is being recorded
- Materials from the webinar will be available



Speaker Introductions



Jose Rivera – U.S. Fish and Wildlife Service (USFWS), Panama City

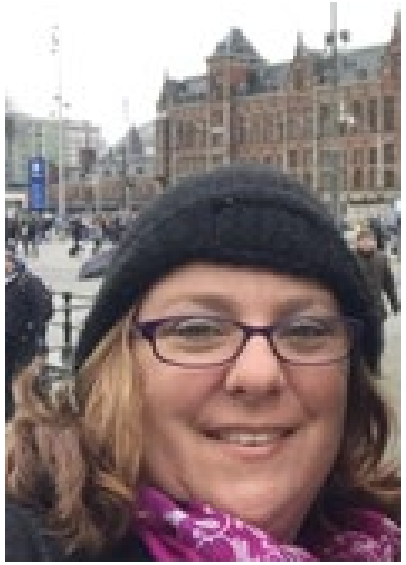


David Rydene- National Marine Fisheries Service (NMFS)-West Coast, Habitat Conservation Division (EFH)



Kurtis Gregg- National Marine Fisheries Service (NMFS)-East Coast, Habitat Conservation Division (EFH)

Speaker Introductions- Species specific presentations



Ulgonda Kirkpatrick – U.S. Fish and Wildlife Service (USFWS), Eagle Biologist for the Southeastern U.S



Sandra Sneckenberger – U.S. Fish and Wildlife Service (USFWS), Species Biologist,



Kevin Kalasz - U.S. Fish and Wildlife Service (USFWS), Species Biologist,



Jereme Phillips- National Wildlife Refuge System – U.S. Fish and Wildlife Service (USFWS)

Flying manta ray?!



A giant manta ray photobombed a surfer in Florida - CNN

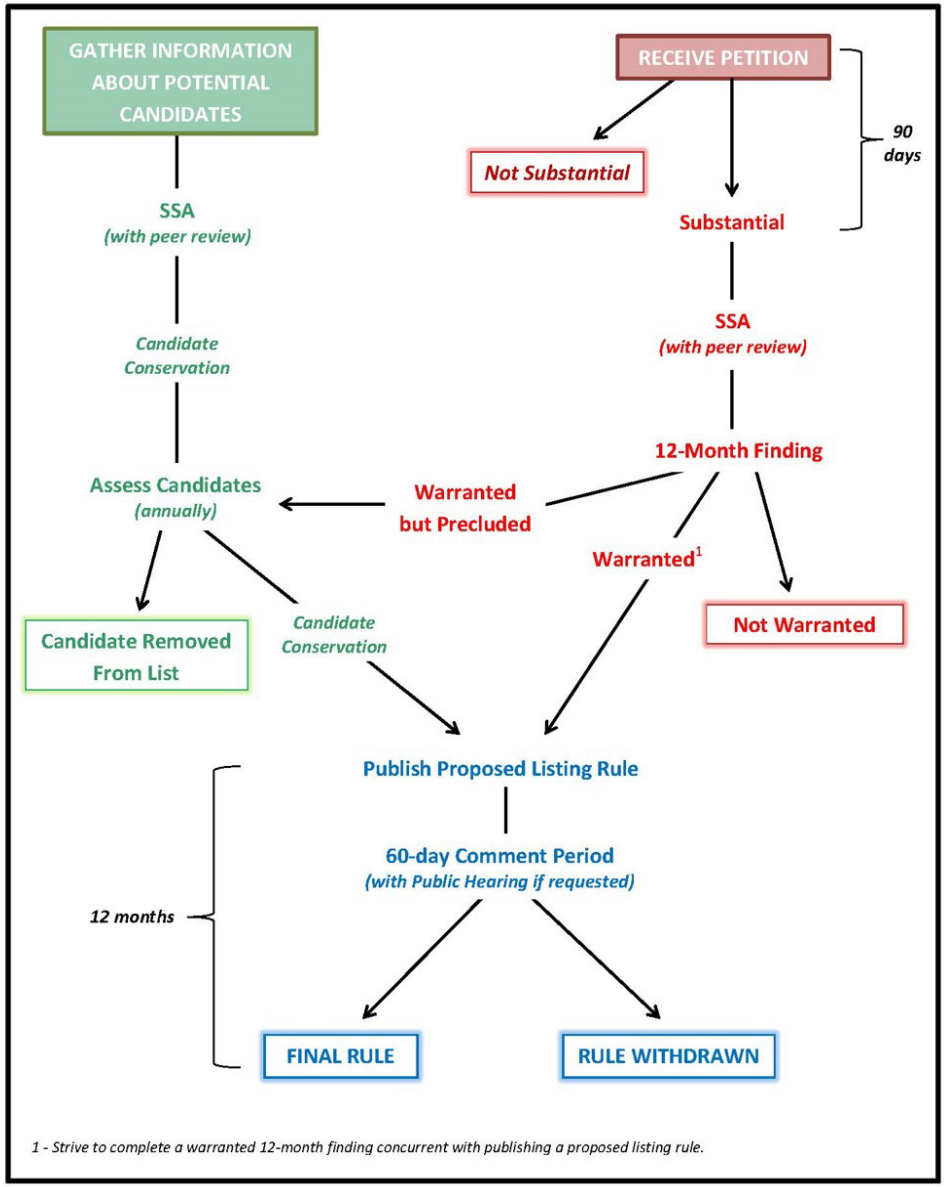
Session 4 – ESA Laws & Listing Updates

- **Jose Rivera**
  - *USFWS Listing Updates*
- **Kurtis Gregg**
  - *Johnson's sea grass delisting*
  - *Coral habitat listing update*
  - *Species Highlight: Nassau Grouper*
- **David Rydene**
  - *Pile Driver Calculator*
- **Ulgonda Kirkpatrick**
  - *Species Highlight: Bald eagle*
- **Sandra Sneckenberger**
  - *Species Highlight: Florida Bonneted bat*
- **Kevin Kalasz**
  - *Species Highlight: Black rail*
- **Jereme Phillips**
  - *National Wildlife Refuge System*

USFWS Listing Updates

- General process overview
- 5-year reviews
- Current listings including CH that are underway and/or recent changes

ESA Listing Process Overview



5-Year Review

The five-year review **provides a recommendation, with supporting information, on whether a species classification should be changed; it does not change the species' classification**. A species classification cannot be changed until a formal rulemaking process is completed, including a public review and comment period

Some Current Listing Actions Underway

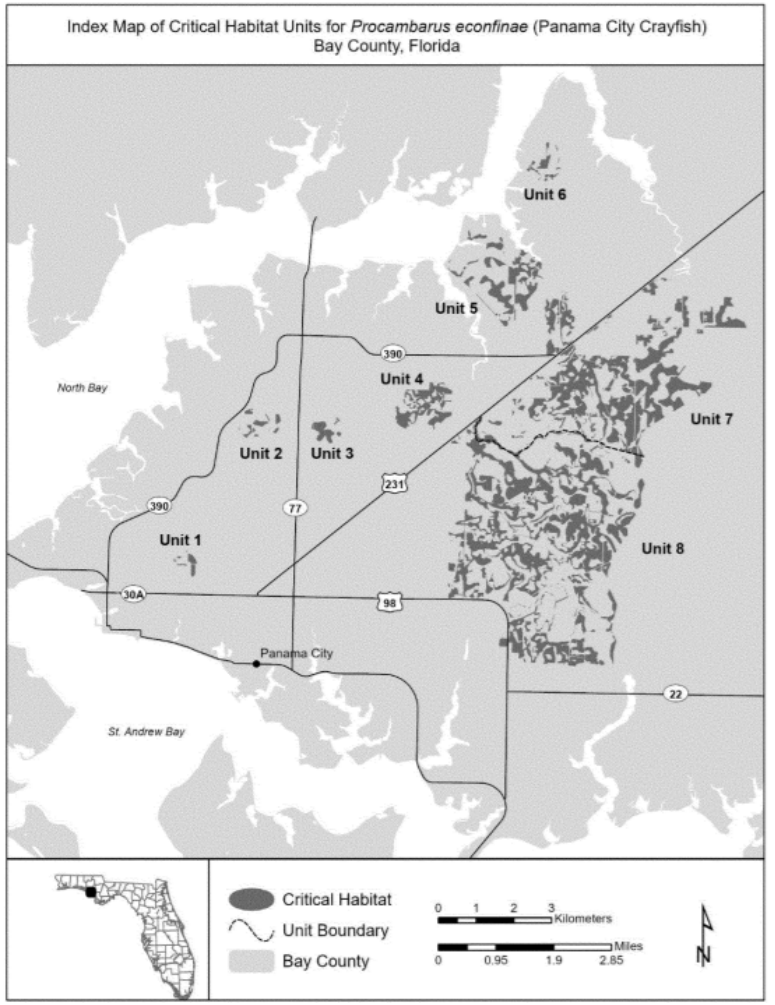
- Miami Cave crayfish - 12-month finding
- Gopher Tortoise - 12-month finding
- Suwannee alligator snapping turtle – pending final rule to list
- FL Bonneted bat - revised proposed Critical Habitat
- Green sea turtle (nesting) - proposed Critical Habitat
- Okaloosa darter – pending final rule to delist

Panama City Crayfish
Procambarus econfinae

FR Notice 1/5/2022 effective 2/5/2022

- Threatened
- Designated Critical Habitat
  - *8 Units - 4,138 acres (1,675 ha) in Bay County, Florida.*
- 4(d) rule
  - **Allows for:**
    (C) Utility actions, including: (1) Ditch mowing and maintenance outside of critical habitat units; (2) Ditch mowing or maintenance within critical habitat units after development of BMPs in coordination with the local Service office; (3) Culvert replacements





Where does the USFWS mitigation policy stand?

- FWS Mitigation Policy – The USFWS 2016 Mitigation Policy was withdrawn in 2018, thus reverting back to the 1981 policy, yet the Service is likely to reissue an updated Service-wide mitigation policy in 2022.

- Section 329 of the National Defense Authorization Act of 2021 requires the Service to publish a regulation on conservation banking and gives the Service a deadline of January 1st, 2022 to publish an Advanced Notice of Proposed Rulemaking.

U.S. Fish and Wildlife Service's draft revised Mitigation Policy.

- The revised Policy will build upon the 1981 Mitigation Policy (46 FR 7644-7663, January 23, 1981), to provide consistent and effective recommendations for mitigating the adverse impacts of land and water developments on fish, wildlife, plants, and their habitats.
- The revised Policy is motivated by changes in conservation challenges and practices since 1981, including accelerated loss of habitats, effects of climate change, and advances in conservation science.
- The revised Policy provides *a framework* for applying a landscape-scale approach to achieve *no net loss* of resources resulting from proposed actions.
- The revised Policy will establish a broader scope relative to our 1981 Mitigation Policy:
  - *It addresses all resources for which the Service has an existing authority to recommend or require mitigation, and*
  - *it reverses the exclusion of the Endangered Species Act (ESA) from the 1981 Mitigation Policy.*
- The result is an overarching policy that applies to all FWS authorities. A step-down policy specific to ESA mitigation is under internal review.

USFWS Law Enforcement

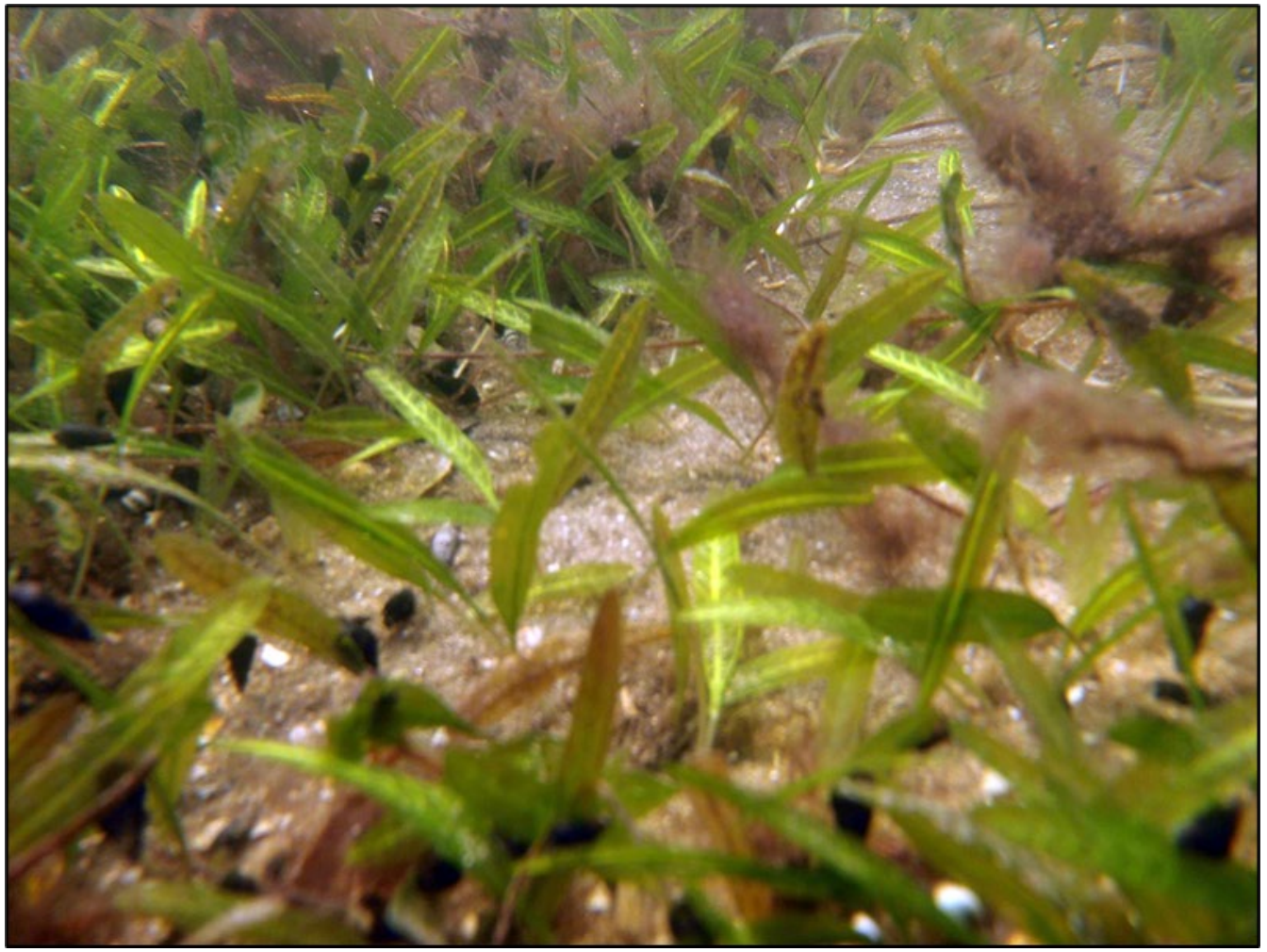
The USFWS Office of Law Enforcement

Our mission is to protect wildlife and plant resources through the effective enforcement of federal laws. By working with federal, state, tribal and foreign enforcement agencies and other conservation partners, we combat wildlife trafficking, help recover endangered species, conserve migratory birds, preserve wildlife habitat, safeguard fisheries, prevent the introduction and spread of invasive species, and promote international wildlife conservation.

Species Highlight – Jose Rivera, USFWS

- The usual suspects:
  - *Wood stork*
  - *Skinks*
  - *Indigo Snake*
- These species are routinely encountered, and the potential to mitigate is usually routine.
- Don’t panic - this is a review of how to address these endangered/threatened species that are often encountered.

Johnson's Seagrass: Listing Status Update



Kurtis Gregg
National Marine Fisheries Service
(NMFS)

NOAA FISHERIES

Johnson's seagrass - species overview

1980 first described as a species

- Based on morphological characteristics

Similar to other Halophila species

- H. decipiens and H. baillonis in the Atlantic

- H. ovalis from the Indo-Pacific

Biological characteristics

- Very small in stature: 2-5 cm in height

- Limited geographic distribution: Intracoastal waters of Florida's east coast

- No male flowers

- No seedling recruitment

- Ability to survive in a wide range of conditions

Endangered Species Act

- 1993 Status review
- 1993 Proposed rule to list as threatened under the Endangered Species Act
- 1994 Proposed rule to designate critical habitat
- 1997 Updated status review - called for genetic analysis
- 1998 Final rule to list as threatened
- 2000 Final rule designating critical habitat
- 2002 Recovery plan - called for genetic analysis
- 2007 5-year status review

History of genetic analyses

Jewitt-Smith et al. (1997) - some genetic variability within Johnson's seagrass
- differentiated *H. johnsonii* from *H. decipiens*

Freshwater (1999) - little to no genetic variation within Johnson's seagrass
- same technique as Jewitt-Smith but more samples

Waycott et al. (2002) - phylogenetic analysis of *Halophila*
- *H. johnsonii* and *H. hawaiiana* could not be differentiated from *H. ovalis*

Uchimura et al. (2008) - reassessed *Halophila* taxonomy
- Recommended collapsing *H. johnsonii*, *H. hawaiiana*, and *H. minor* into the single species *H. ovalis*

Short et al. (2010) - *Halophila* samples in Antigua resolved as *H. ovalis*
- Both morphometrics and genetics identified samples as *H. ovalis*
- No genetic deviation from *H. johnsonii*

Waycott et al. (2015) - Report to NOAA
- newer genetic techniques (Microsatellites and SNPs)
- Proved *H. johnsonii* was not a unique taxon but lacked evidence for reclassifying

Most recent manuscript (Waycott et al. 2021)

Summary

- 3 phylogenetic datasets
  - *Plastid DNA and nuclear DNA sequences - 105 samples from 19 populations*
  - *Genome-wide SNPs - 48 samples from 13 populations*
- 2 population-level genetics datasets
  - *Microsatellites - 294 samples at 10 loci*
  - *SNPs - 47 samples from 13 populations*
- Data clearly resolved *H. johnsonii* as a singular clone of *H. ovalis*
- Samples from Antigua part of the same female clone found in Florida

Review

- NOAA Genetics Group
  - *4 reviewers provided a cumulative summary*
  - *supported the methods and conclusions of the paper*

Now what?

✓ Evaluate whether this seagrass (under its new identity) still meets the criteria for listing under the Endangered Species Act

- Johnson's seagrass no longer meets the statutory definition of a species

✓ Proposed rule to remove from the Endangered Species Act - published 12-23-21

- 60 day comment period (closed 2-22-2022)

- **Final rule - will address all pertinent comments received from the public comment period for the proposed rule and make a final decision**

If Delisted…

Protected Resources - *responsible for Endangered Species Act Section 7 consultation*

- ESA Section 7 consultation will no longer be necessary for this seagrass
- Other ESA-listed species (sea turtles, sawfish, giant manta ray, etc.) will still require consideration if in the action area

Habitat Conservation - *responsible for Essential Fish Habitat consultation under the Magnuson Stevens Fishery Conservation and Management Act*

- *Essential Fish Habitat* is defined as waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity
- MSA does not differentiate seagrass species in terms of essential fish habitat

- Will continue to protect this seagrass like all other seagrass species

Additional materials

NOAA Fisheries website - Johnson's seagrass page

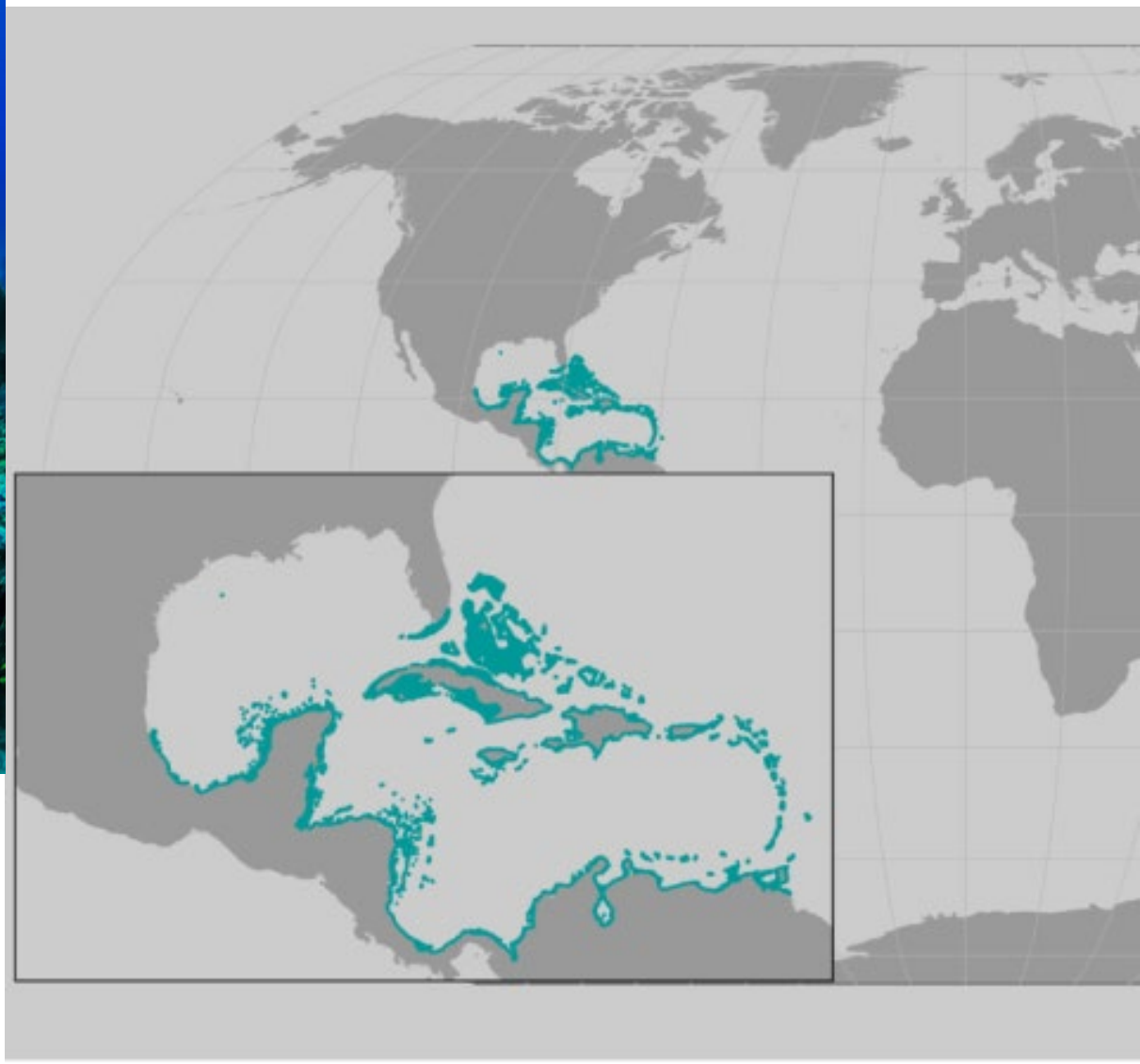
- *Species overview*
- *Proposed delisting rule*
- *FAQs associated with the proposed rule*
- *Link to the Waycott et al. 2021 manuscript*

Seven Species of ESA Listed Corals Occur in Florida

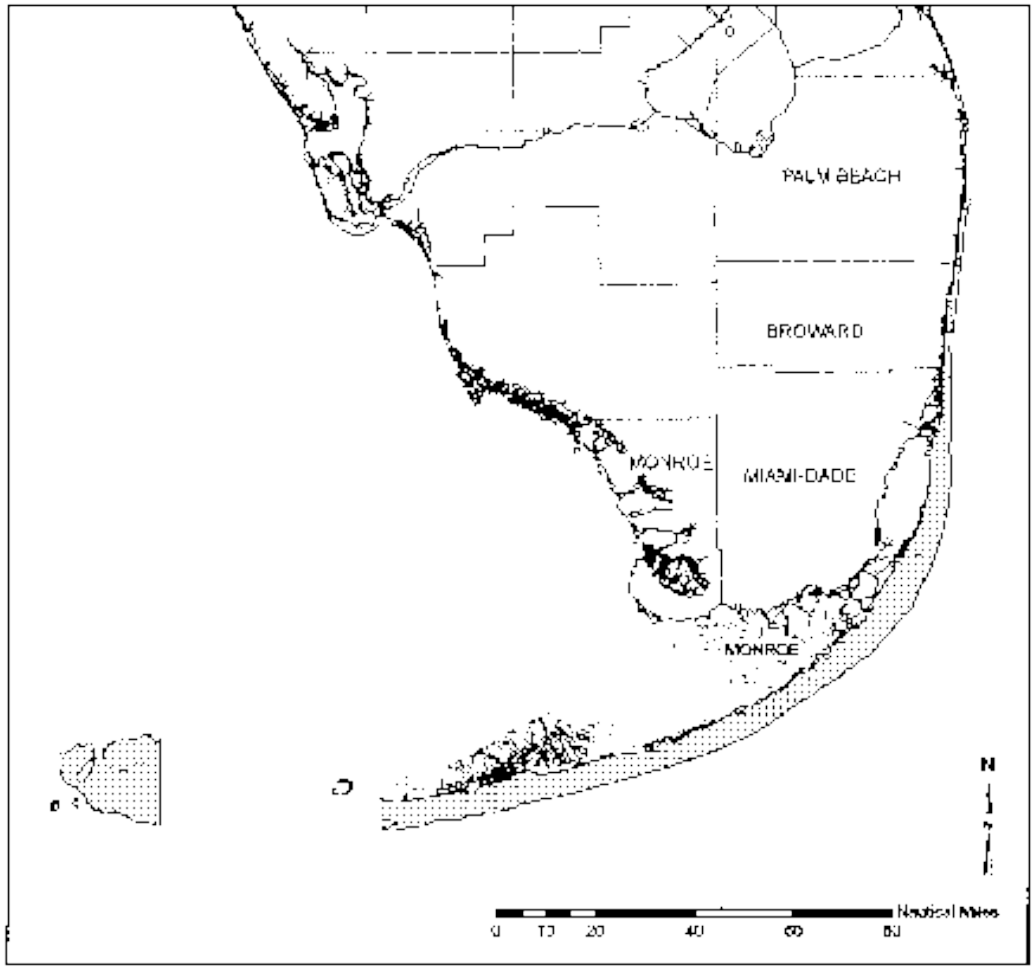





Jim Abernethy



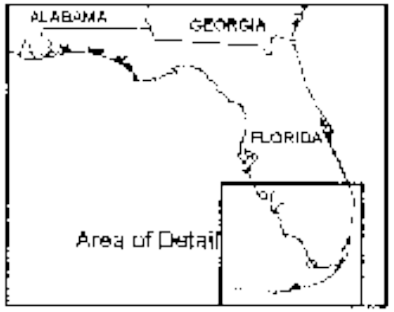
Critical Habitat for Elkhorn and Staghorn Corals
Area 1: Florida



Legend

County Line

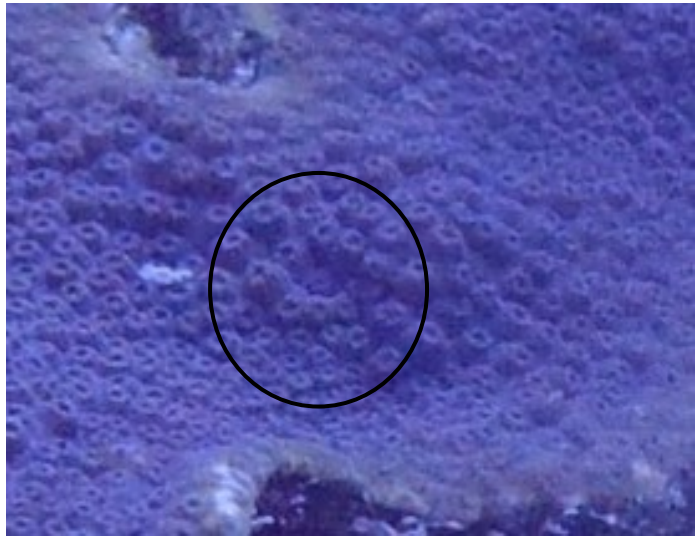
Critical Habitat

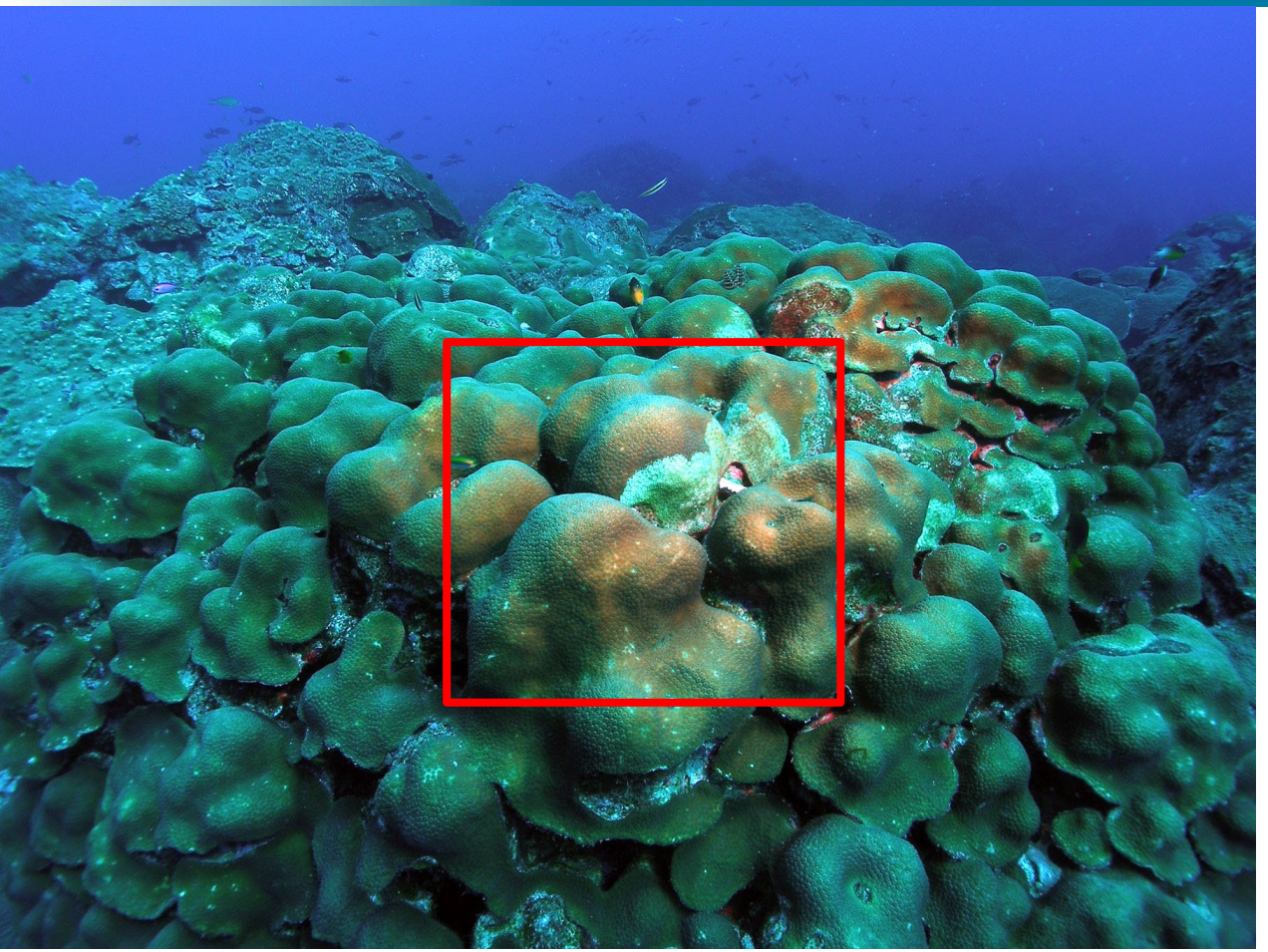


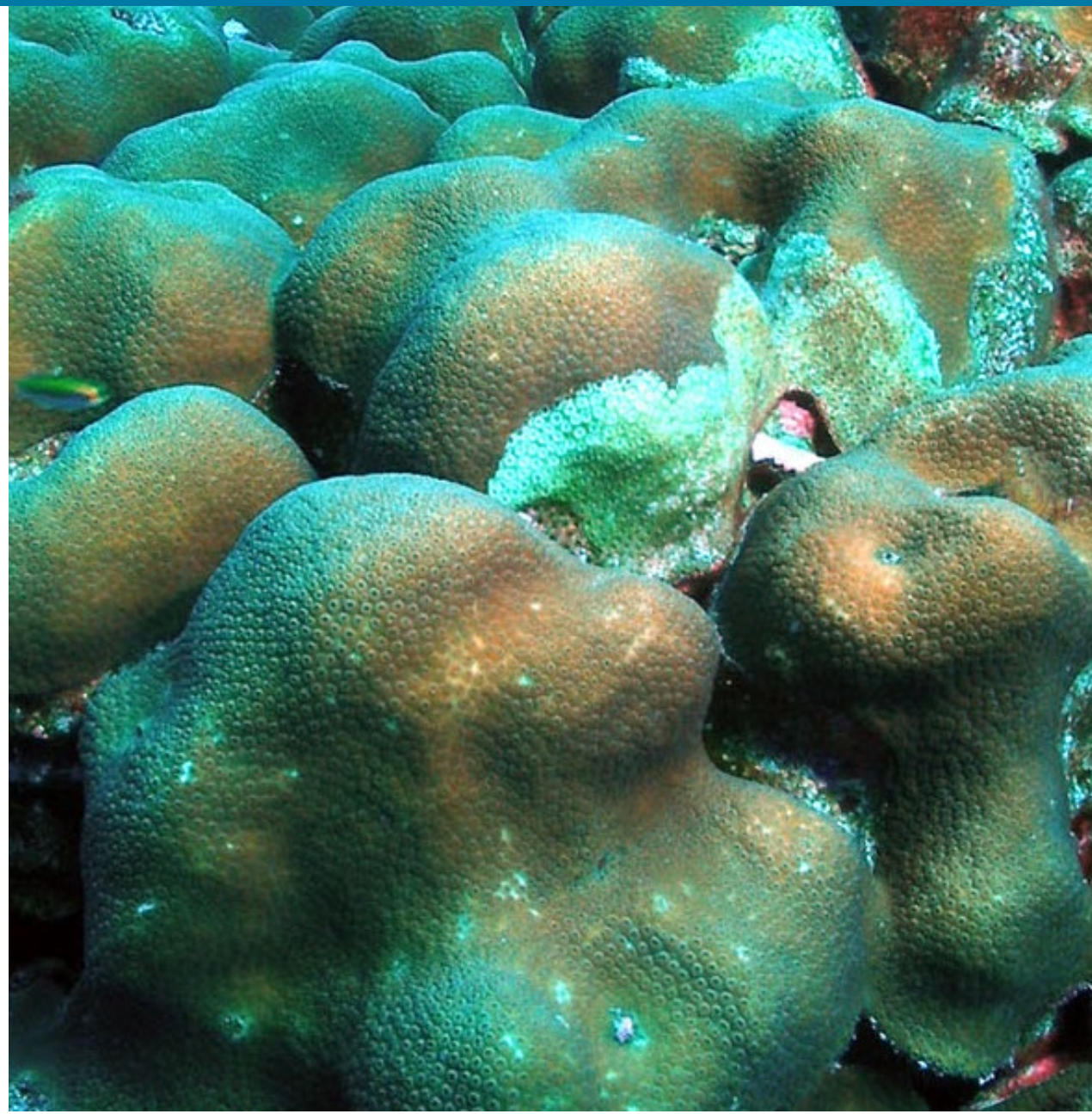


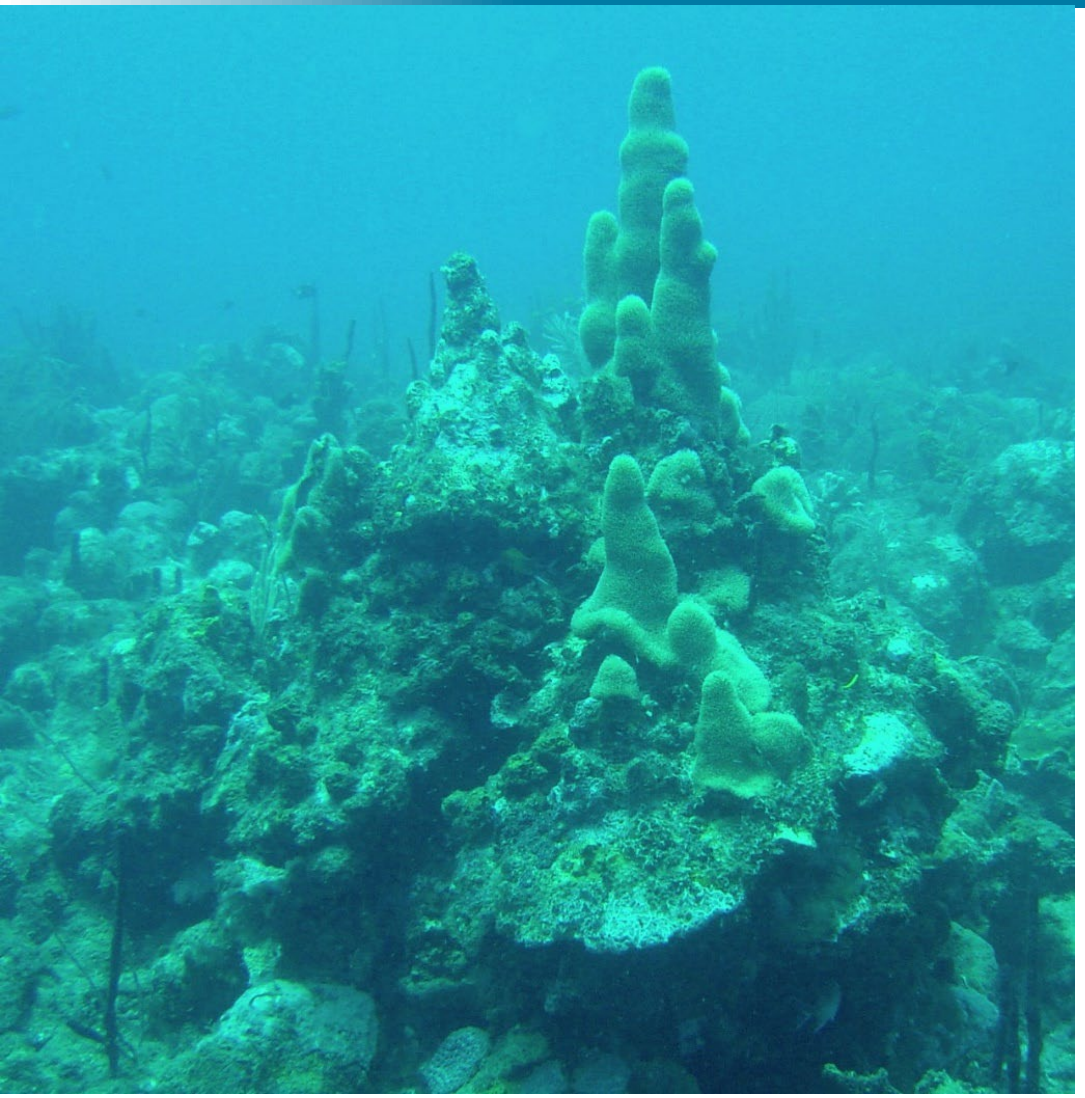








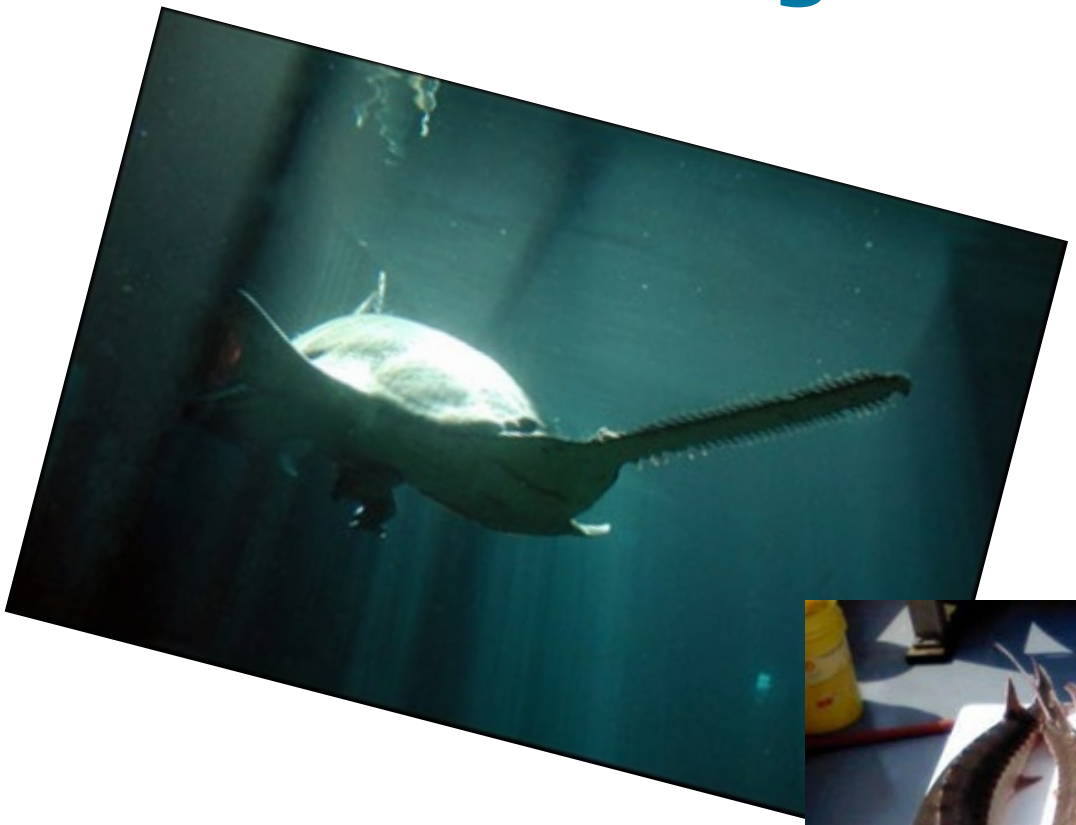


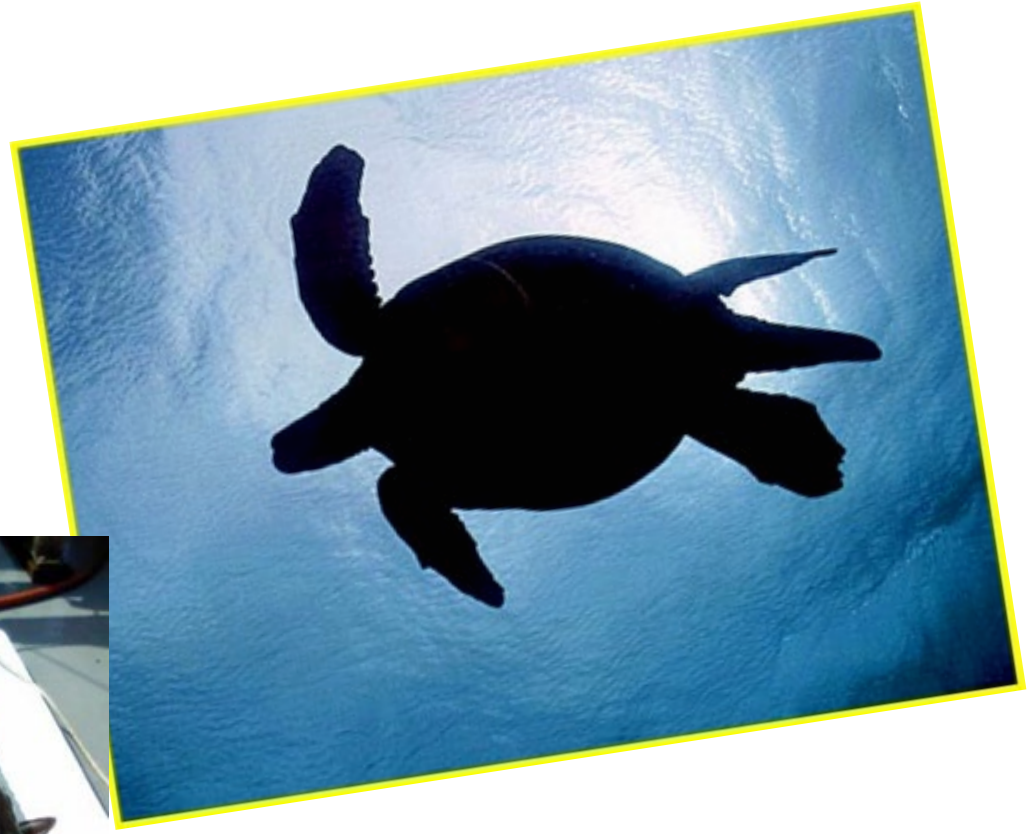




- *As shown, critical habitat has only been designated for staghorn and elkhorn coral.*
- *Critical habitat designation for the other five species of ESA listed corals in Florida is expected to occur this year. A final rule review may begin as early as this month (March 2022)*
- *There are no active petitions for listing additional coral species at this time.*
- *NMFS is currently conducting a status review of all seven ESA listed species of corals that occur in Florida*

Pile Driving Noise and ESA-Listed Species

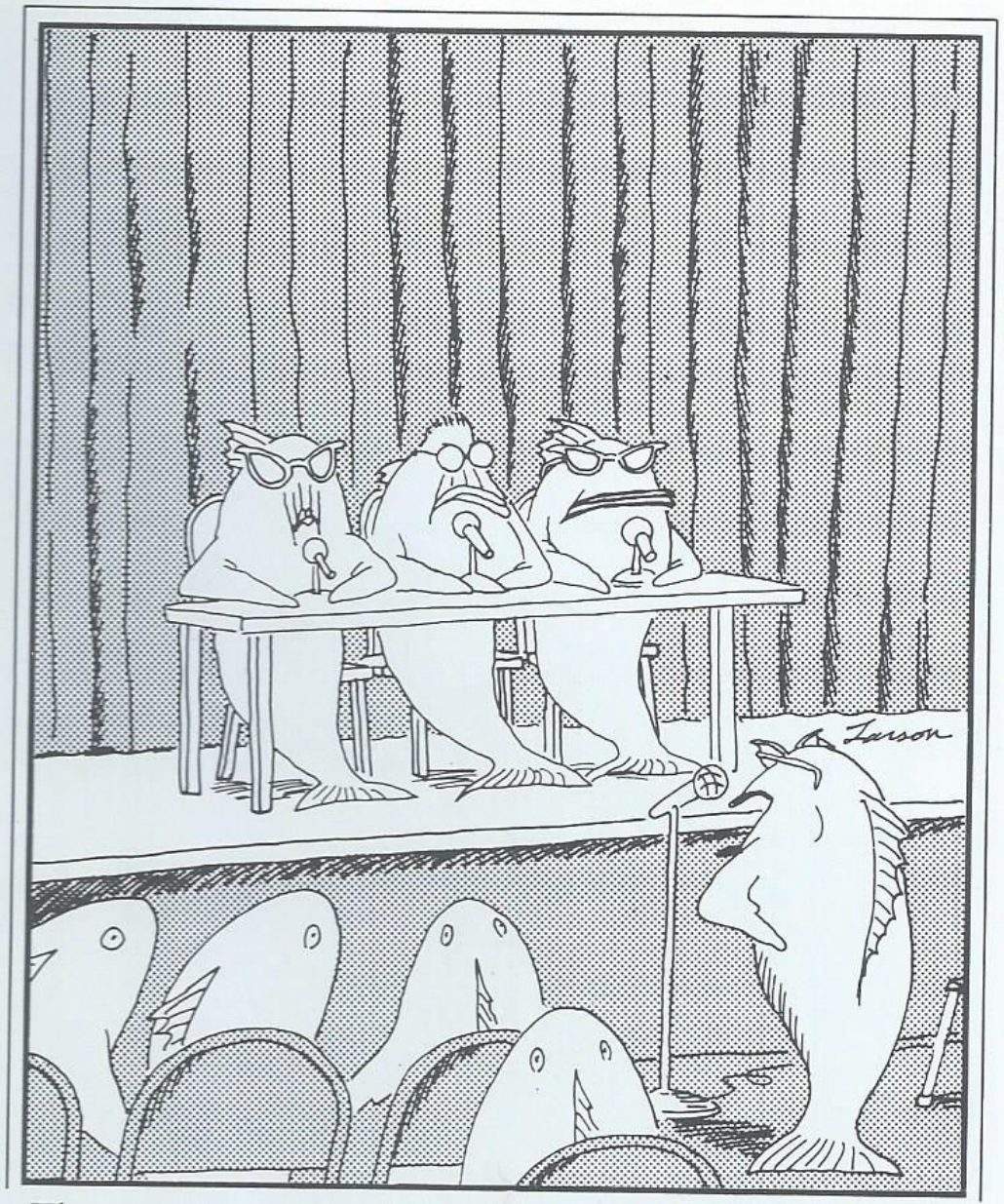






David Rydene
National Marine Fisheries Service
(NMFS)

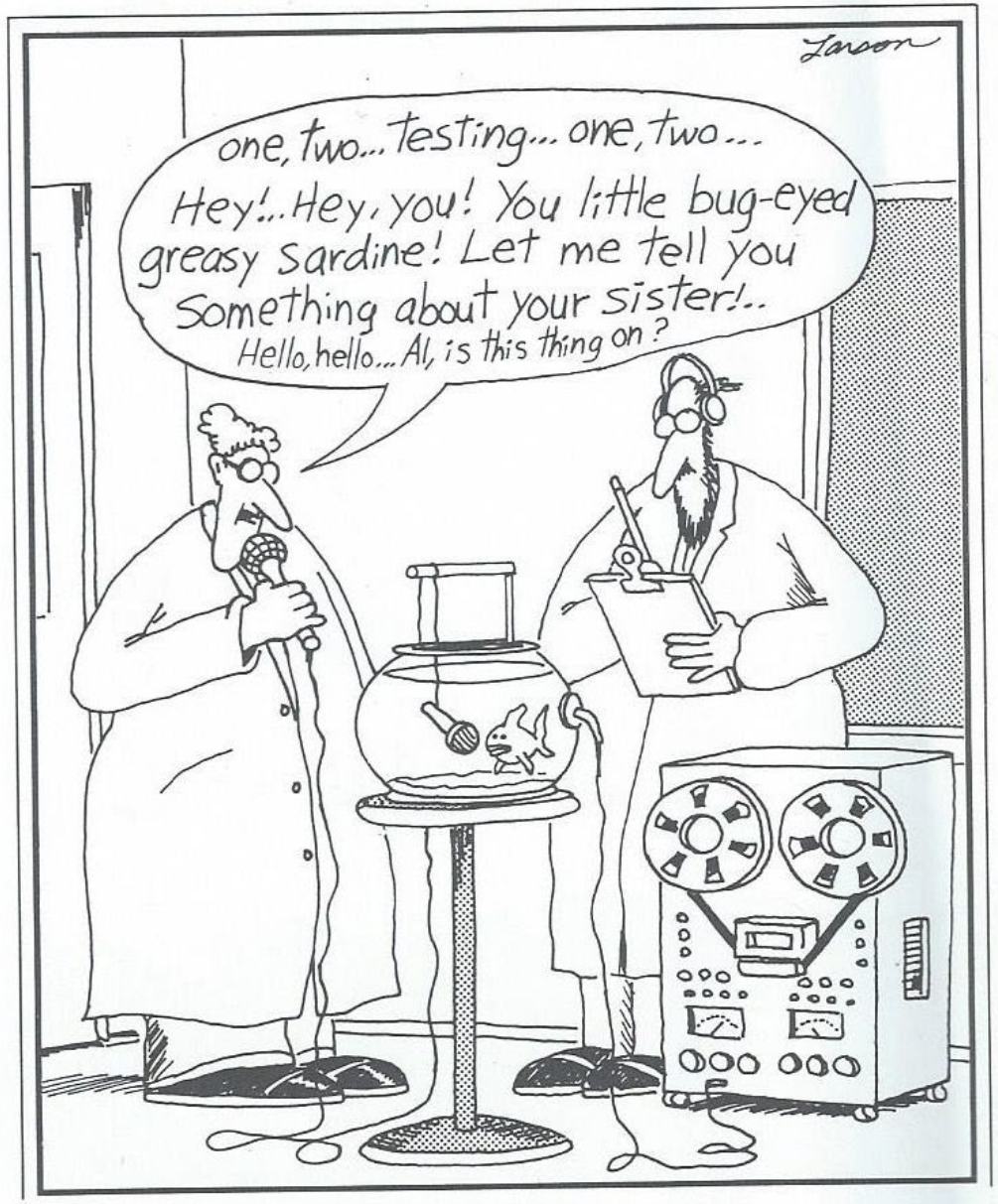
NOAA FISHERIES



The committee to decide whether spawning should be taught in school

There is sound in the aquatic environment and it is important to many marine/estuarine animals (e.g., intraspecific communication, prey detection, predator avoidance, reproduction)

Some research has been done on the effects of human-generated sound on aquatic organisms



Testing whether fish have feelings

Why is Pile Driving Noise a Potential Problem for ESA-List Species (Fishes and Sea Turtles)?

Potential adverse effects include:

Physical injury or death (ruptured or partially deflated swim bladders or lungs, hematomas, bruising, or bleeding of organs and blood vessels

Temporary (TTS) or permanent (PTS) hearing damage (e.g., sensory hair cell damage)

Changes in or disruption of behaviors (migration, feeding, breeding, resting)

Stress responses

Masking of intraspecific communication, prey and/or predator detection

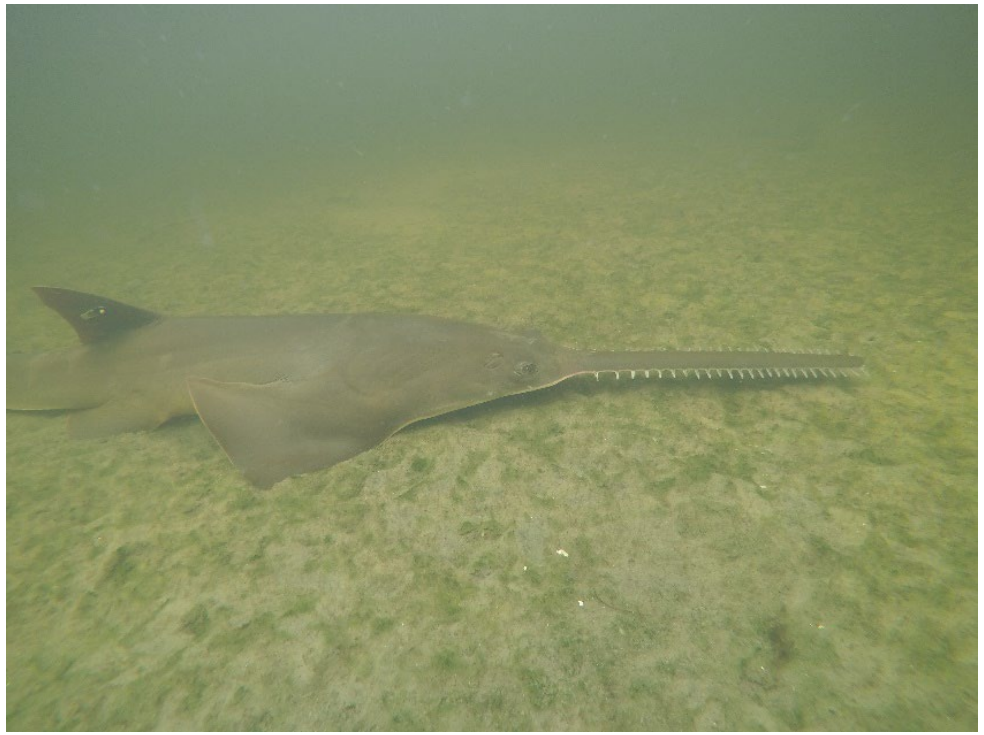


Physical Injury to Lake sturgeon:186 dB sSEL for 960 strikes = 216 dB cSEL

(Halvorsen et al. 2012)

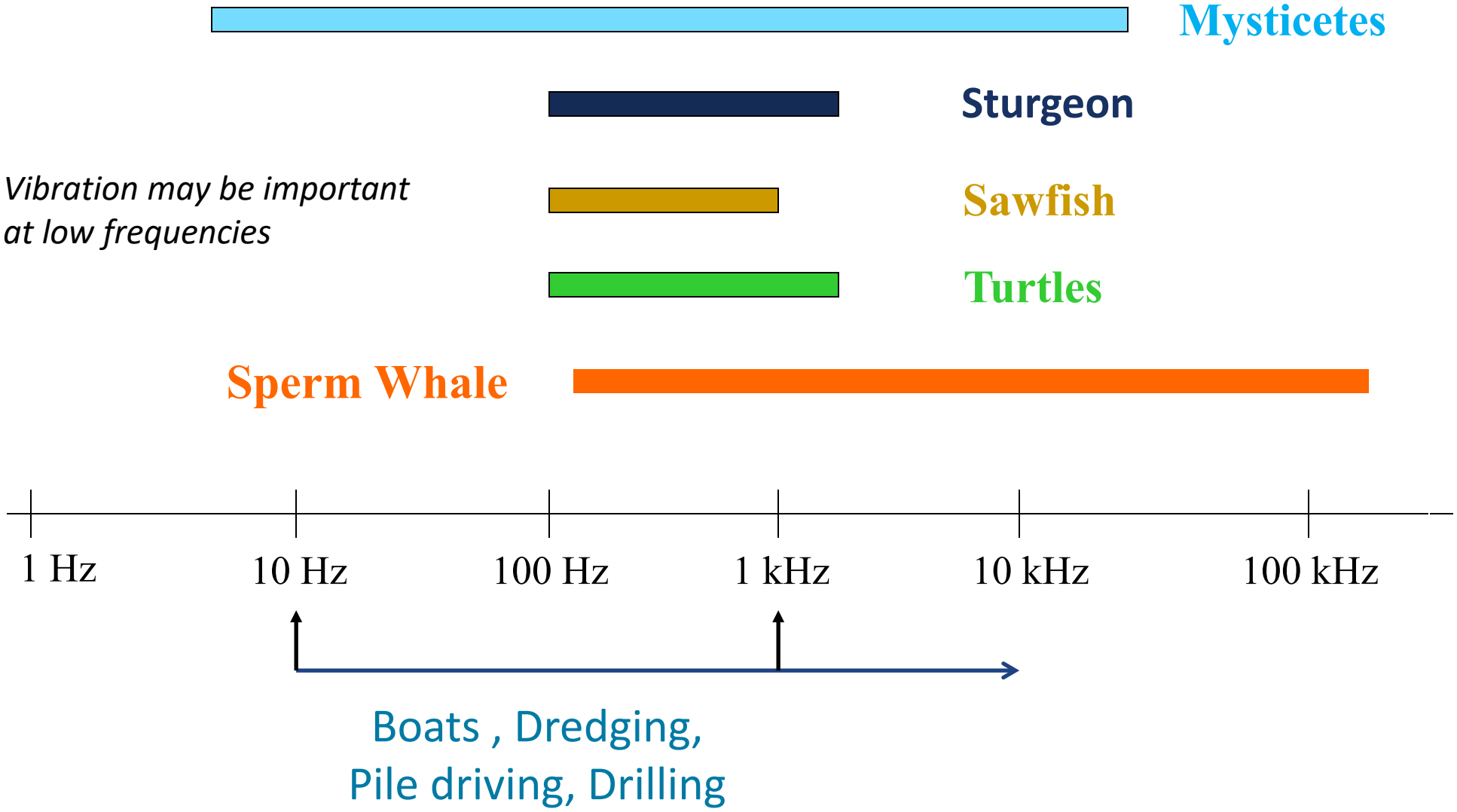
What about fish species that do not have swim bladders?

The lack of a swim bladder makes them less susceptible to injury, but they may still suffer temporary or permanent hearing loss



They also tend to occur on or near the bottom and may be exposed to sound energy propagating through the sediment or rock

Protected Species Hearing and Construction Noise



Criteria – Impact Driving…..**BAM!!!**

Fish – Injury	206 dB Peak Pressure
Fish – Injury	187 dB SELcum
Fish – Behavioral Dist.	150 dB RMS

Sea Turtles – PTS Injury	232 dB Peak Pressure
Sea Turtles – PTS Injury	204 dB SELcum
Sea Turtles – Behavioral Dist.	175 dB RMS

Criteria – Vibratory Driving….**BZZZZ**

Fish – Injury	No Injury Threshold
Fish – Behavioral Dist.	150 dB RMS

Sea Turtles – PTS Injury	220 dB SELcum
Sea Turtles – Behavioral Dist.	175 dB RMS

What information is needed to do a noise analysis in the Calculator?



- What material is the pile made of? (concrete, steel, plastic polymer)
- What kind of pile is it? (square, pipe pile, sheet pile)
- What is the width or diameter of the pile? (24 by 24 inch square pile, 30-inch diameter pipe pile)
- For Impact Driving, how many piles will be installed per day, and approximately how many hammer strikes will it take to install each pile. This will be used to calculate the total number of hammer strikes that will occur in a day.
- For Vibratory Driving, how many piles will be installed per day, and approximately how many minutes of vibratory hammer usage will it take to install each pile. This will be used to calculate the total number of minutes of vibratory hammer usage that will occur in a day.



NOAA Fisheries **New** Multi-Species Pile Driving Noise Calculator!!!




BREAK
TIME!!!

Bald Eagles in Florida

(*Haliaeetus leucocephalus*)



Dominik Martino

Ulgonda Kirkpatrick- Eagle Biologist
U.S. Fish and Wildlife Service

Interesting Facts



- National emblem of the USA
- Spiritual symbol for Native Americans
- One of first species covered by ESA
- Average lifespan in wild is ~20 years
  - *Oldest wild banded eagle recovered at 38 years*
- Sight is 8 times better than a human's
- FL has 2nd highest concentration of breeding eagles in the lower 48 states



Physical Features

- Length: 2 – 3 ft
- Wingspan: 6 – 8 ft
- Weight: 5 – 10 lbs
- 2nd largest raptor in North America
- Females are ≥25% larger than males
- Sub-adults have varying plumage until 5th year
  - *Eyes change from dark brown to yellow*
  - *Bill changes from gray/black to yellow*
  - *Heads and tails turn white*



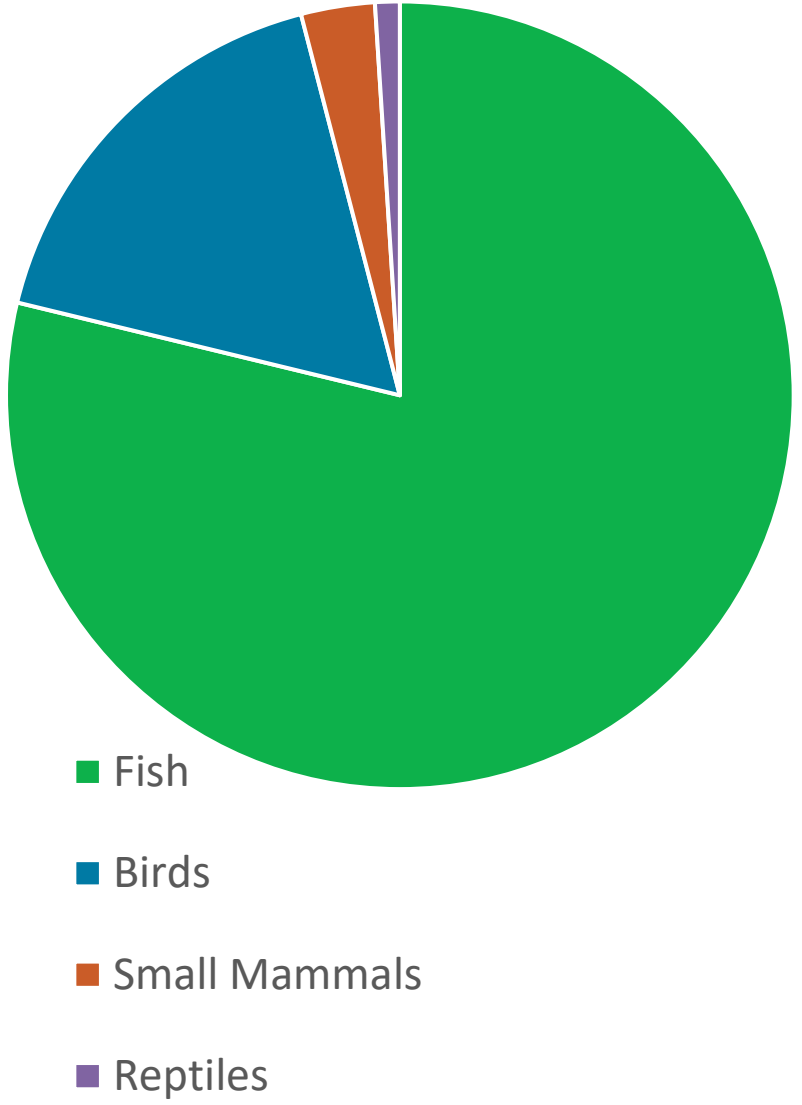






Bald Eagle Diet

- Eagles are opportunistic
- Hunt, steal, and scavenge food items
  - *Often harass osprey into dropping fish*
  - *Known to scavenge roadkill, landfills*
- Fish are preferred, followed by waterbirds such as coots and egrets



Bald Eagle Nesting



- Return to same nest in successive years *(if successful)*
- Fiercely competitive for territories

- Likely to have alternate nests within a territory
- Record for largest tree nest
  - *St. Pete, FL: 20ft high, 10ft diameter, 2 tons in weight*



Bald Eagle Breeding Behavior

- Breeding season Oct-May (Aug-April) in Florida,
  - *Aug – July across the southeast*
  - *Male and female return to nest territory*
  - *Lay 2-3 eggs in Dec-Jan*
  - *Incubate for 35 days*
  - *Eaglets fledge around 10-12 weeks but remain in the area for 1-2 months*







Courtesy of American Eagle Foundation







- Bald eagles in Florida prefer to nest in live native pine trees, also hardwoods and mangroves
- Use of artificial structures has grown during the past 30+ years
  - *Transmission towers/distribution structures, communication towers, light beacons, osprey platforms*
- 1002 monitored nests; 208 (~21%) are on artificial structures (Eagle Watch 2020/2021 season)

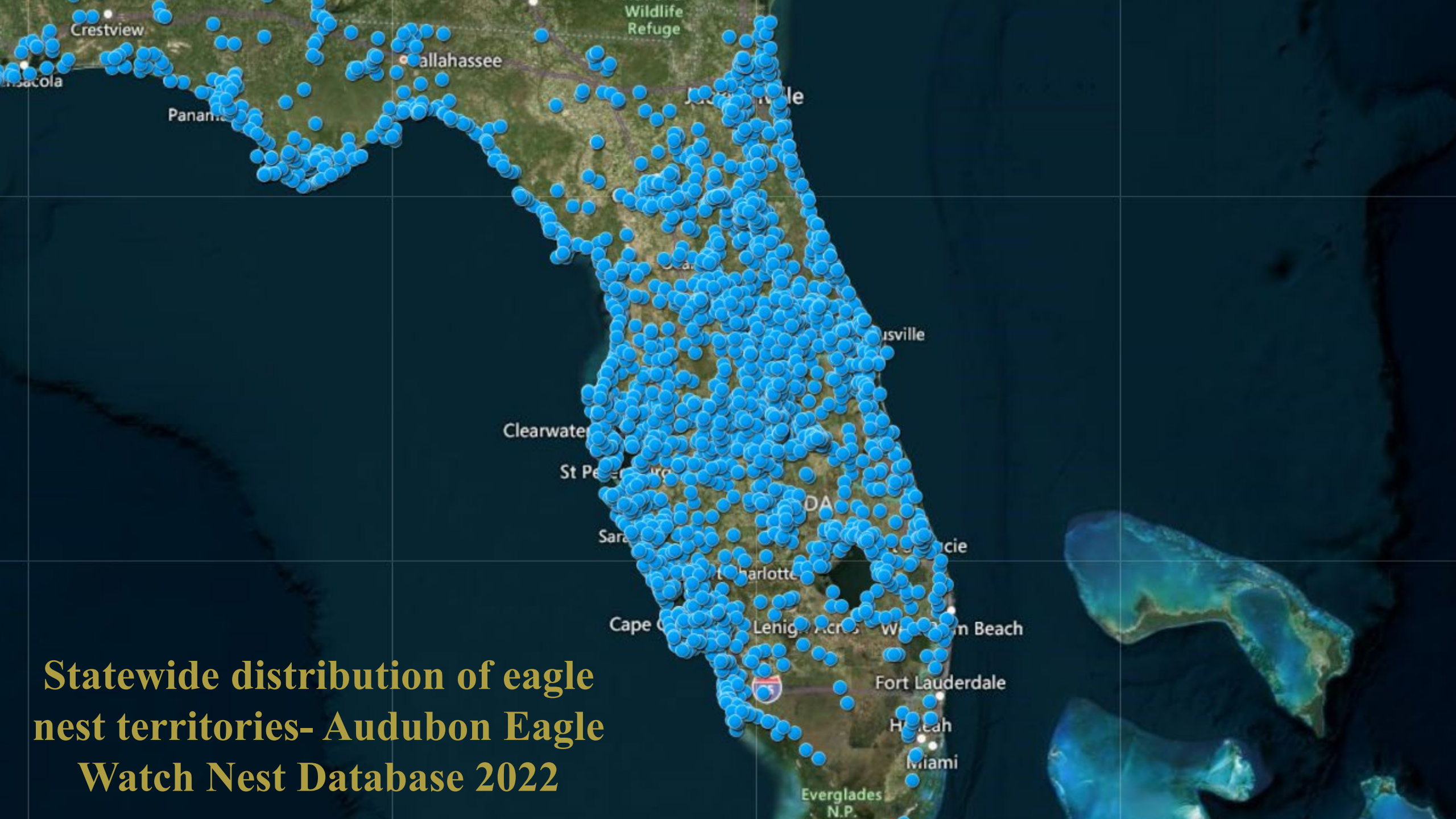












Statewide distribution of eagle nest territories- Audubon Eagle Watch Nest Database 2022

Audubon of Florida EagleWatch

- Citizen science program
  - *Founded to address growing eagle population amidst growing human population*
  - *Based at Center for Birds of Prey*
- Maintain the state nest database



https://cbop.audubon.org/conservation/about-eaglewatch-program

Conservation Status

- Eagles were removed from the list of Endangered Species (ESA) in 2007
  - *A true success story: ~80 pairs in FL in the early 1970s*
  - *USFWS estimated 316,700 bald eagles were present in the four EMUs (Flyways) in the 2019 breeding season,4.4 times more eagles than in 2009*

- Federal protections still apply
  - *Federal: BGEPA & MBTA*



Bald & Golden Eagle Protection Act (BGEPA)

- Protects eagles, nests, eggs and parts
- Take, defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or ***disturb***"

Working with others, to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

What is Disturbance?

To agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available,

1. Injury to an eagle,
2. A decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or
3. Nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

National Bald Eagle Management Guidelines & Permitting

Technical assistance: Follow the management guidelines, follow the monitoring guidelines, or apply for a permit.

- FWS Natl BAEA Mgmt Guidelines-2007
- FWS FL BAEA Monitoring Guidelines-2007
- Incidental Take (disturbance) & Nest Take Permits

- E-Permits: https://fwsepermits.servicenowservices.com/fws/
  - **ePermits_support@fws.gov**

E Crown Point Rd
Webster Western Beltway S
Daniel Webster Western Beltway N...
429
OR066
438
E Plant St
State Road 438
State Road 438
438
State Road 438
438
Daniel Webster Western Beltway

Questions?



Florida Bonneted Bat



FDOT Sec 7 ESA training
Florida Ecological Services Office
March 8, 2022



Species Overview

The Florida bonneted bat (*Eumops floridanus*):

- Is a large, tropical bat
- Roosts in tree cavities/hollows, snags
- Travels long distances to forage (>50 miles per night)
- Uses a variety of habitats for roosting & foraging
- Has known population substructure
- Is active year-round (no hibernation)
- Has no recovery plan or SSA, but has a Conservation Strategy and Consultation Guidelines





Florida Bonneted Bat - Habitat Use

Foraging habitat:

- *Significant spatial needs*
- *Dark, unobstructed areas*
- *Equipped to eat larger, harder insects*
- *Insect-producing habitat*
- *Includes open water, riverine areas, prairies*

Roosting habitat:

- *Predominately includes pine, cypress, royal palm*
- *Pine rocklands, pine flatwoods, cypress communities*
- *Roost trees tend to be larger in height and dbh*



Florida Bonneted Bat - Life History

- Harem social structure
- Breeding activity possibly year round
- Raise one pup a year
- Life span estimated at 10+ years
- Low population size compared to other bats, possibly less than 1,000 individuals
- Clumped distribution, demographically isolated populations



Reason for Listing

- Listed as endangered in 2013
- Primary threats:
  - *habitat destruction, modification and fragmentation, impacts associated with human development*
  - *small population size*
  - *restricted range*
  - *vulnerability to catastrophic events*



Threats/Potentials for impacts/Effects of actions

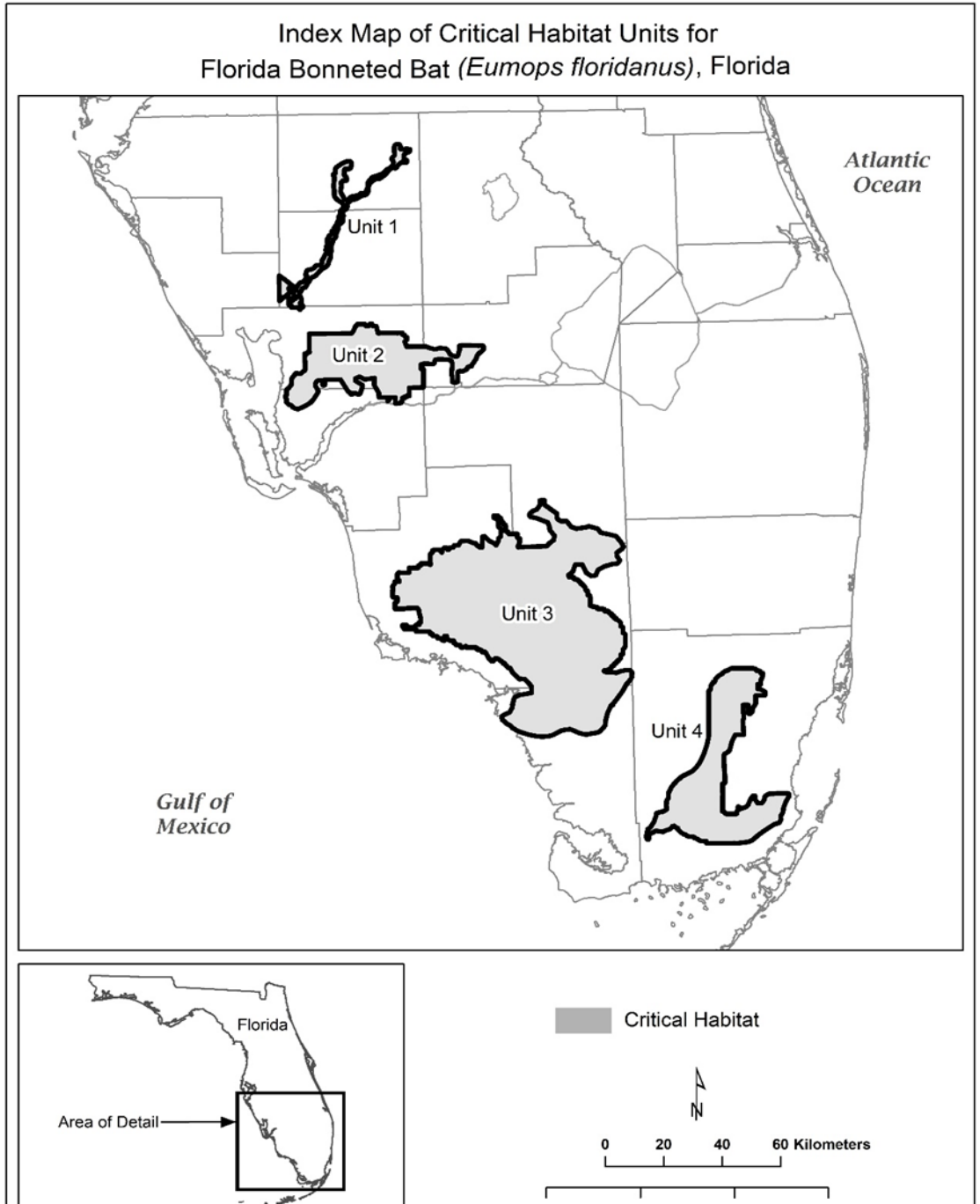
- Loss of foraging and roosting habitat
- Loss of active roosts
- Lighting
- Noise
- Alterations of hydrology
- Obstructions of space
- Roofers & nuisance wildlife professionals (inadvertent)
- Insecticides and pesticides



Project Planning

The Florida bonneted bat *(Eumops floridanus):*

- Consultation Area
- Consultation Guidelines
- Acoustic Surveys
- Roost surveys
- Avoid & minimize with BMPs, offset impacts
- Critical habitat



Proposed Critical Habitat

What is critical habitat?

- Specific areas that contain **physical or biological features** essential to the conservation of the species & that may need special management/ protection
- A designation that only affects Federal agency actions or federally funded or permitted activities
- A tool to guide Federal agencies in fulfilling their conservation responsibilities
- FBB pCH status update



Recent Projects and Future Efforts

- Acoustic surveys
- Locating natural roosts
- Development of monitoring/survey techniques
- Increasing public awareness
- Developing data framework
- Investigating population genetics
- Determine effects of restoration efforts



Thank you!

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Eastern Black Rail ESA Listing Update

Kevin Kalasz

USFWS Coastal Program Coordinator – South Florida/Everglades

Species Overview

- Secretive Marsh Bird
- Occupies tidal high marsh and freshwater wetlands with DENSE cover
- Distribution and annual occupancy seems highly dependent on hydrology
- North Florida and South Florida/Everglades are not the same
- Nesting occurs March – July (approx)



Habitat Characteristics

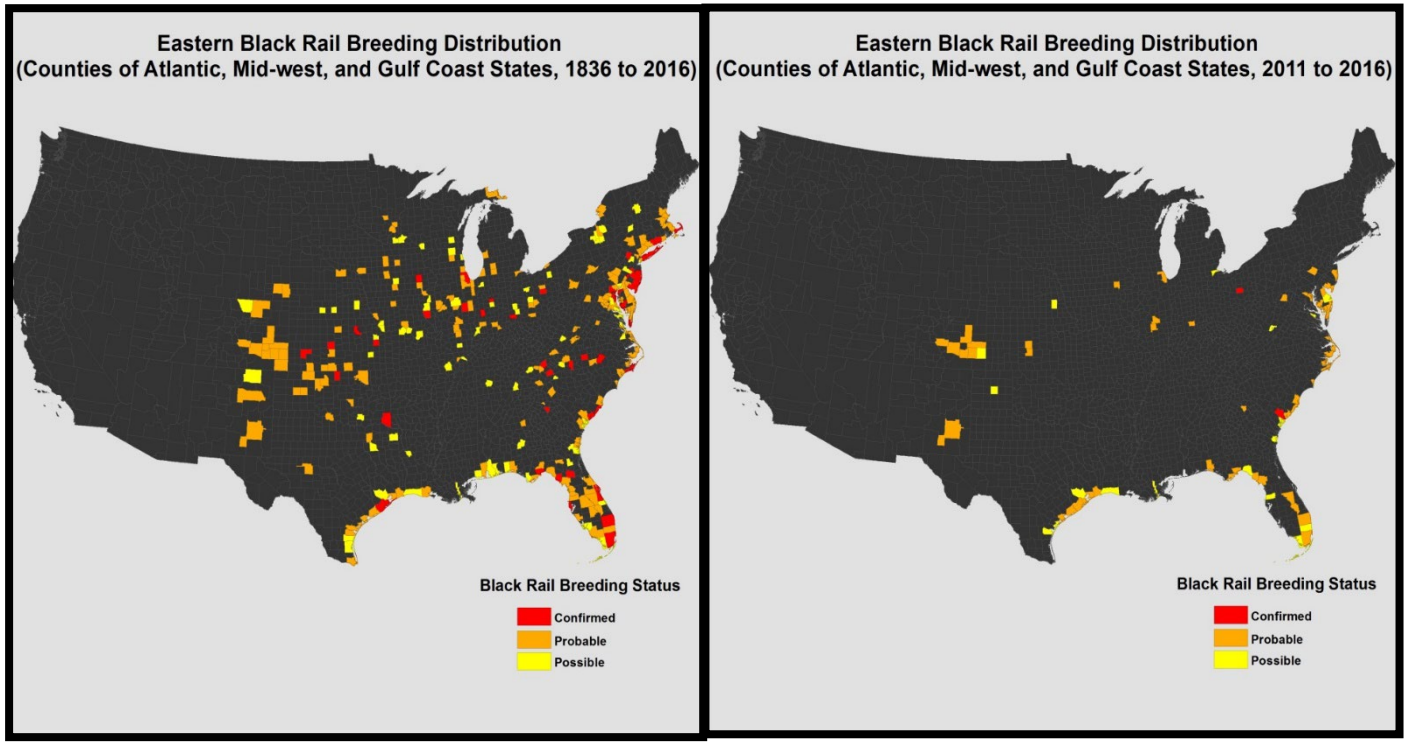
- Fine-stemmed emergent plants (rushes, grasses, and sedges) including sand cordgrass and black needlerush
- High stem densities and dense overhead cover
- Elevational variability in the substrate is required to accommodate fluctuations in water conditions



Reasons for Listing

- Precipitous declines - >95% (listed as Threatened in 2020)
- Range contraction of 450 km
- Historic hotspots have disappeared

Changes in Occurrence



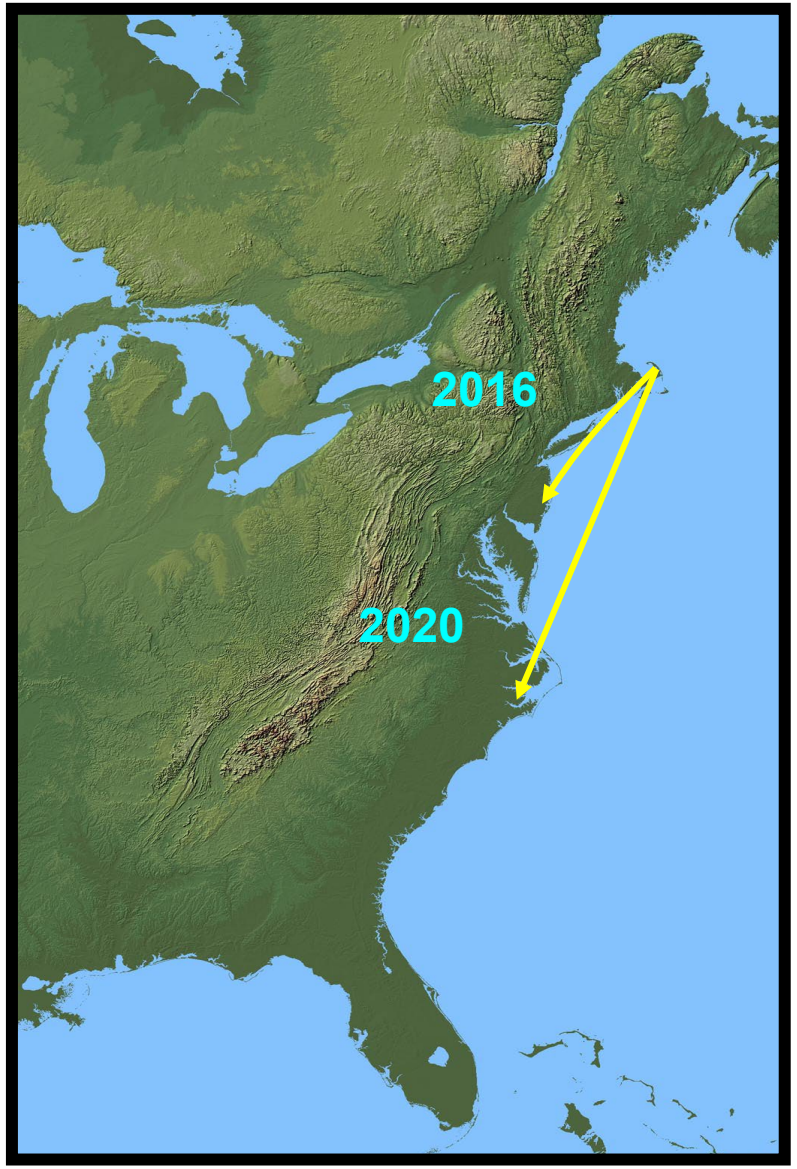
298 Counties **70 Counties**

Watts 2016

Range Contraction

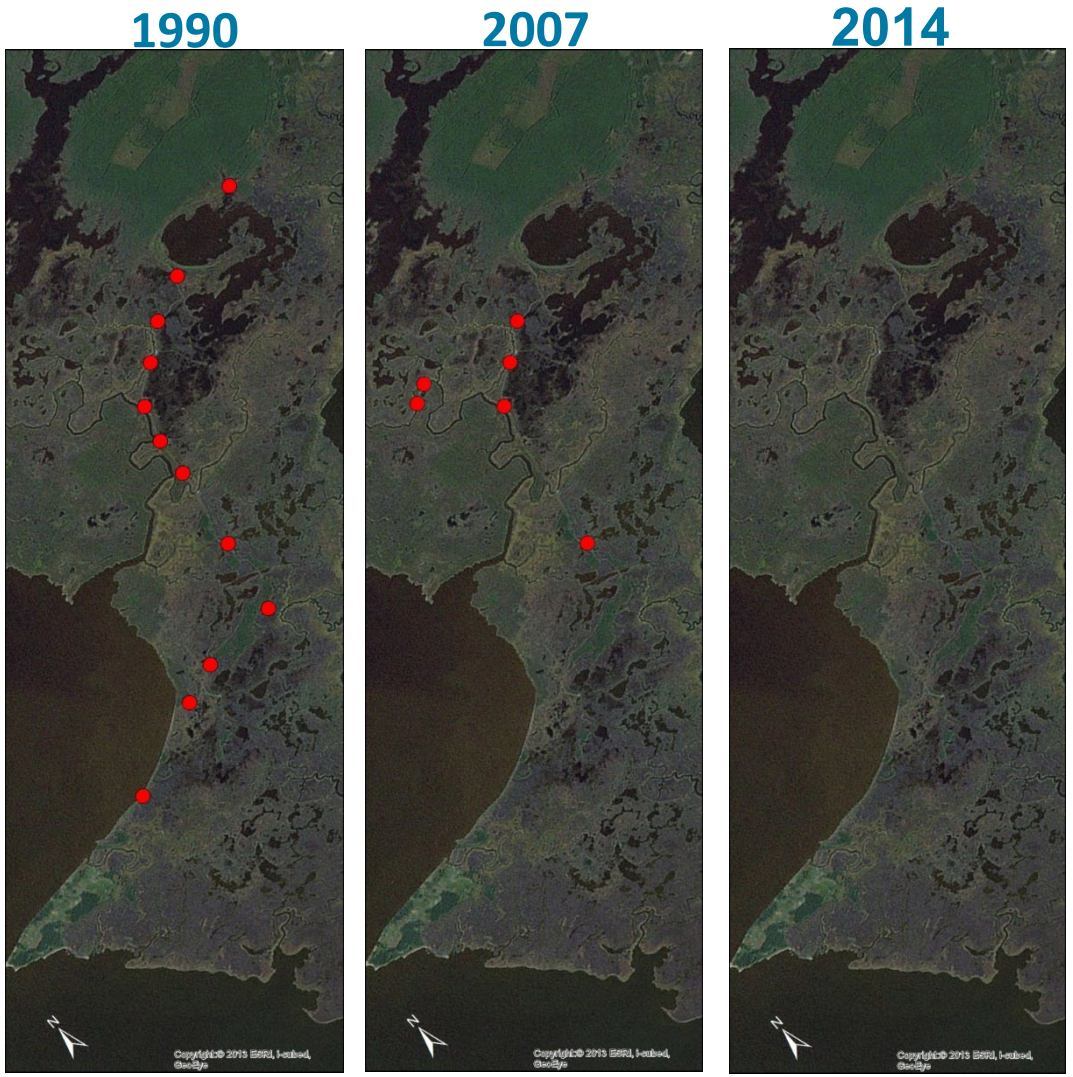
2016: 450 km (MA-NJ)

2020: 940 km (NJ-SC)



Maryland Example

Elliott Island



Brinker et al.

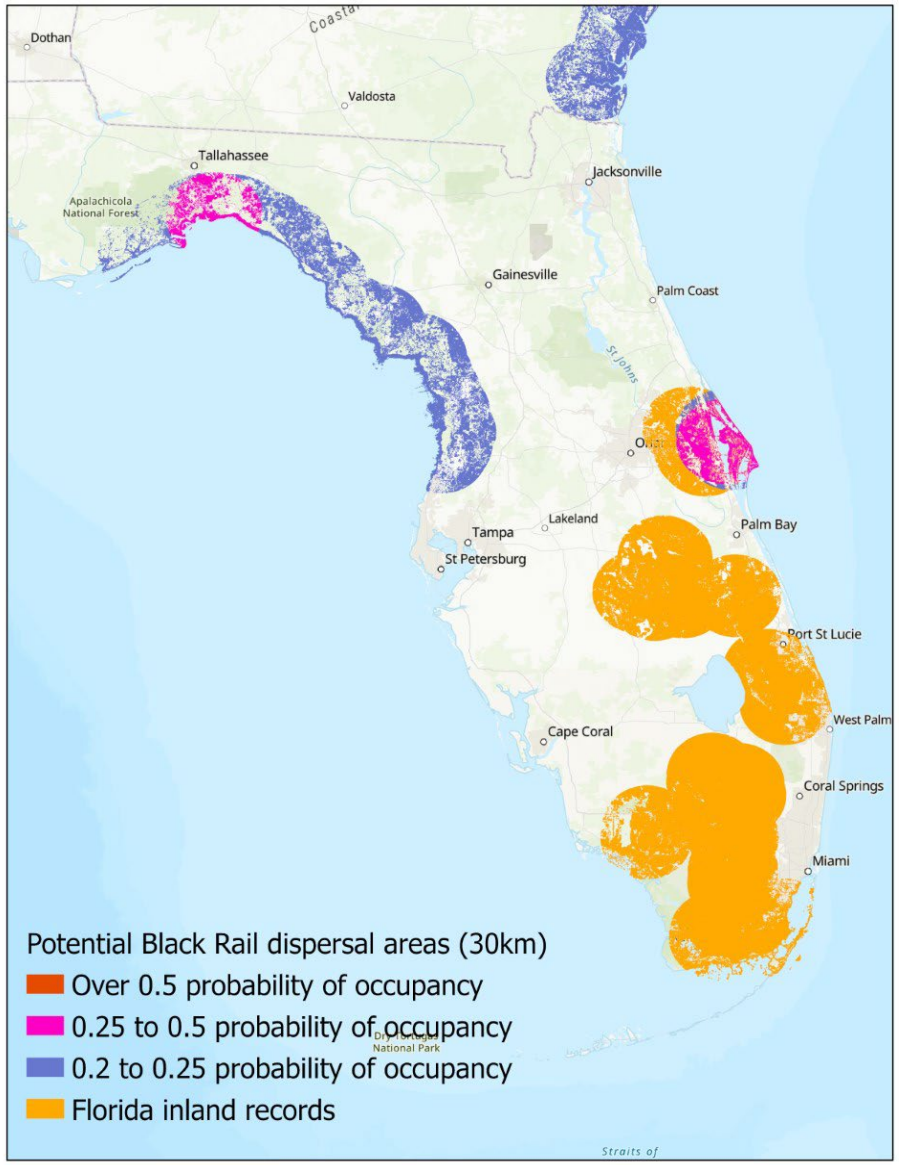
Threats

- Wetland Modifications/Altered Hydrology
- Sea Level Rise
- Lack of Fire
- Predators
- Incompatible Land Use





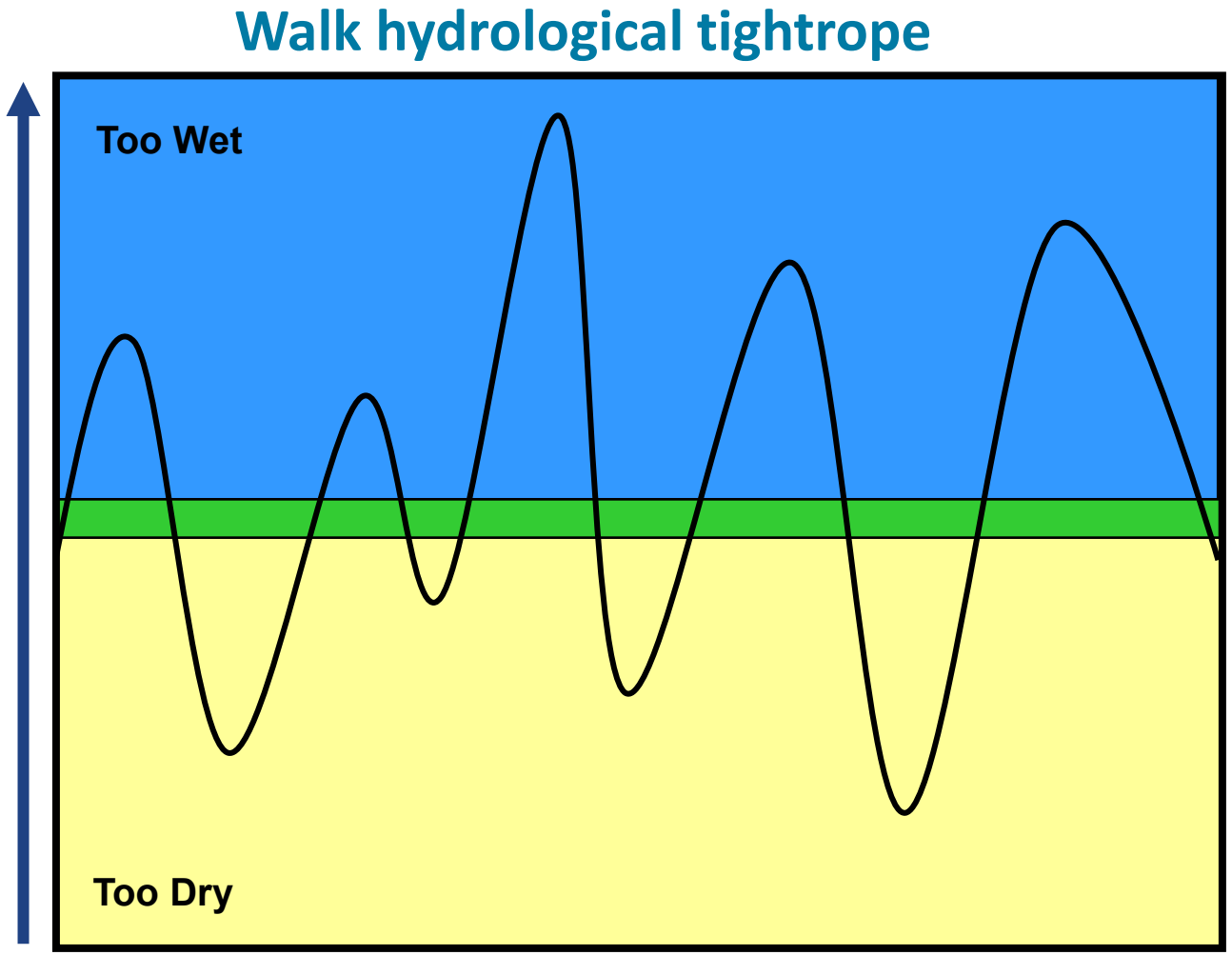
BLRA in Florida – A Species Stronghold



ESA Considerations

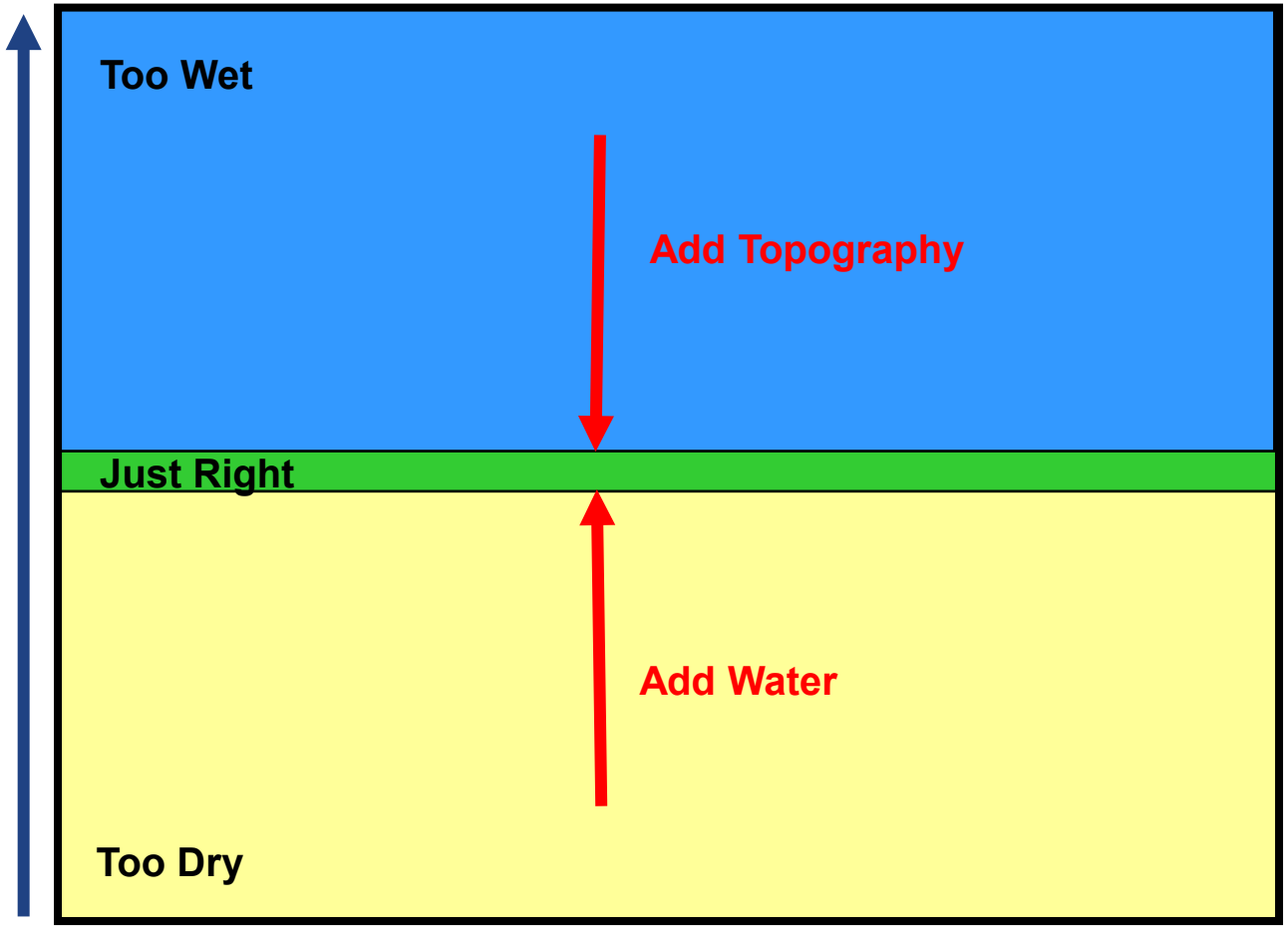
- Low Detectability
- Critical habitat is not designated
- Known locations from sparse data; Few directed surveys in FL
- Recommend surveys at sites with suitable habitat.
- Species specific survey methods available and are being refined. More guidance on surveys, *timing, frequency*, etc. coming soon

Management Considerations



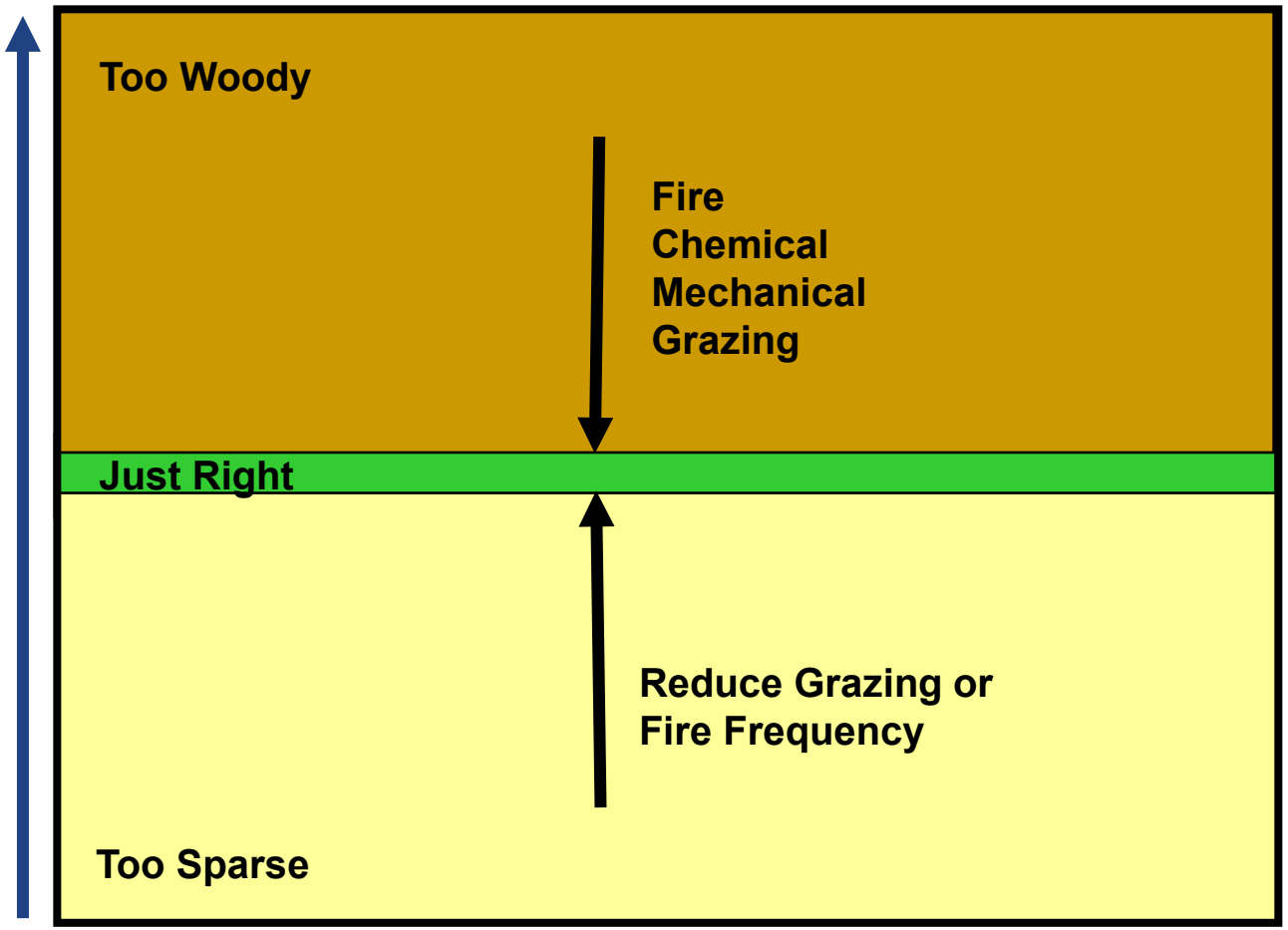
Ideal Water Conditions

- Topographic heterogeneity
- Sheet Flow
- Moist soil to <3 cm deep



Ideal Vegetation

- Dense overhead grassy cover
- Sparse woody vegetation

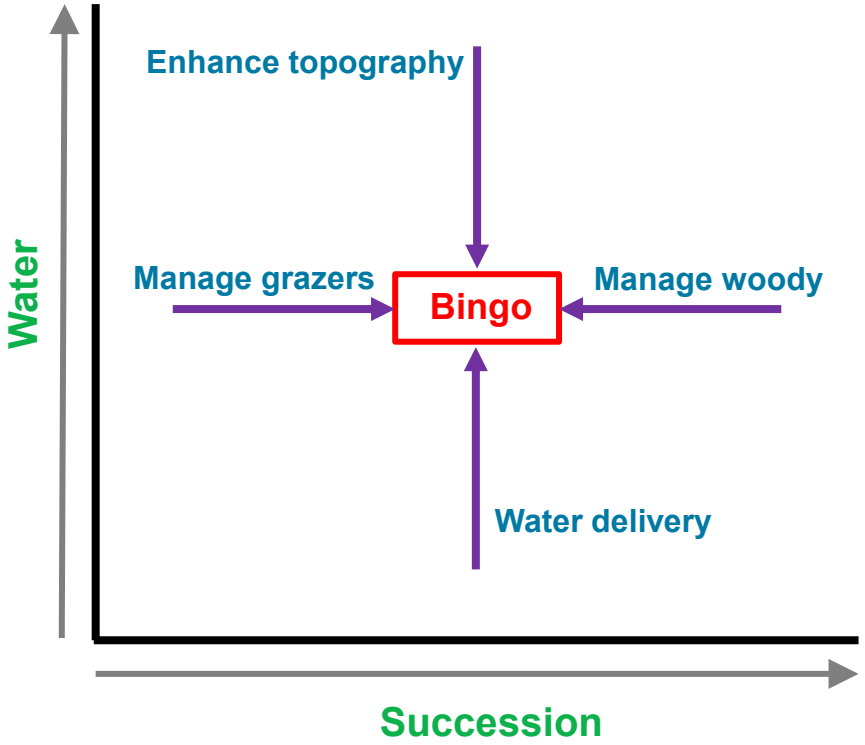


Multi-factor Management





Sweet Spot



For additional information and guidance:

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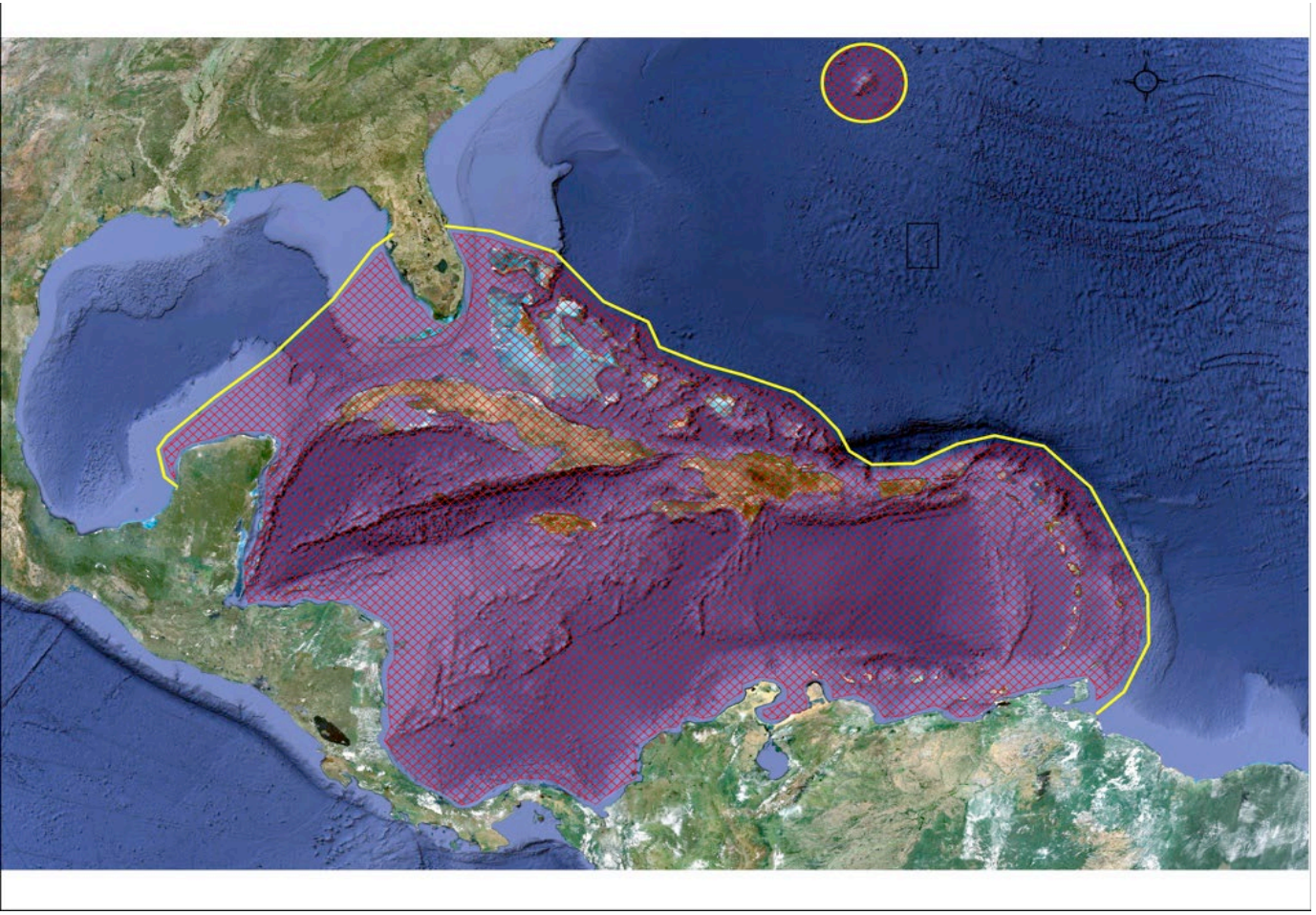


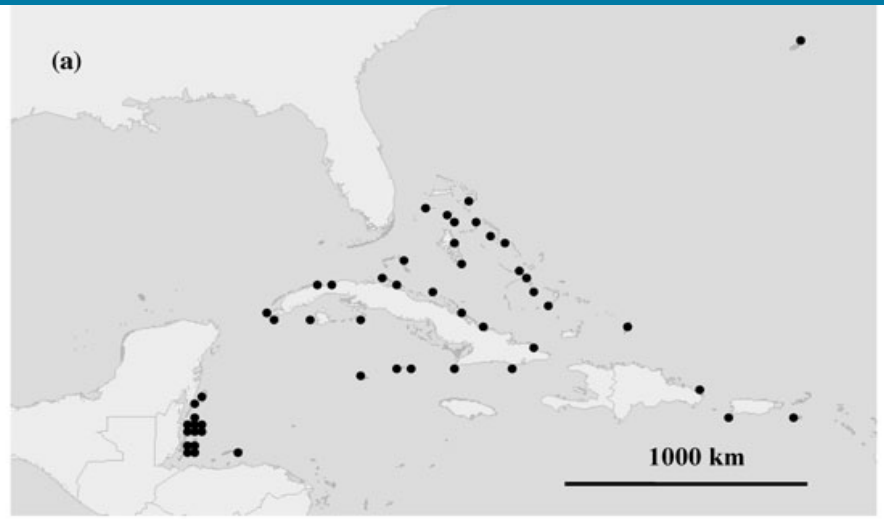

BREAK
TIME!!!

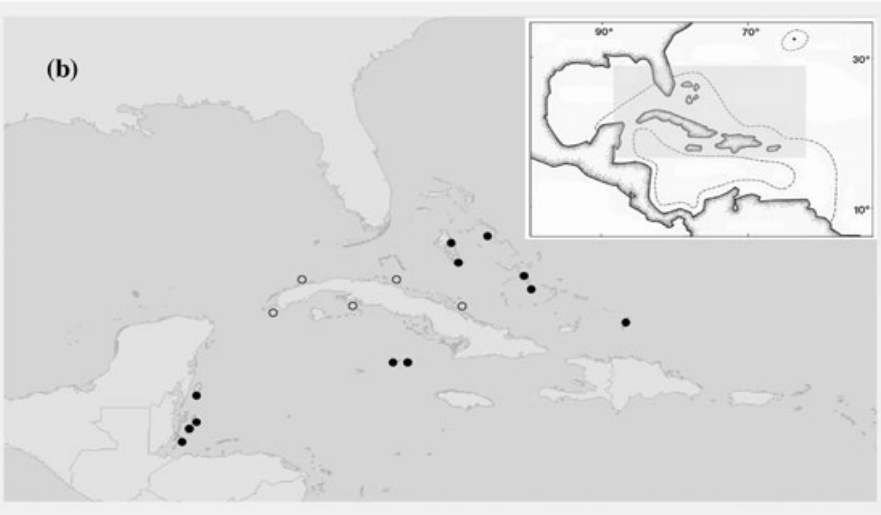


Image Credit: *Diane* Rome Peebles

Species Highlight: Nassau Grouper, *Epinephelus striatus*







(a) Historical known Nassau grouper spawning aggregation sites

(b) Known Nassau grouper spawning aggregation sites as of 2007: NMFS Nassau Grouper Biological Assessment 2016 citing:

Smith 1972; Sadovy and Eklund 1999; Sala et al. 2001; Whaylen et al. 2004; Belize Spawning Aggregation Working Group, unpublished data; R. Claro, unpublished data; E. Sala, unpublished data, as presented in Sadovy de Mitcheson et al. 2008)

The Nassau grouper is primarily a shallow-water species that has long been valued as a major fishery resource throughout the wider Caribbean, South Florida, Bermuda and the Bahamas

The Nassau grouper is slow-growing and long-lived; estimates of maximum age range up to 29 years

The Nassau grouper is considered a reef fish, but it transitions through a series of ontogenetic shifts of both habitat and diet:

- *As larvae they are planktonic.*
- *As juveniles, they are found in nearshore shallow waters in **macroalgal and seagrass habitats**. They shift progressively deeper with increasing size and maturation into predominantly reef habitat.*
- *Adult Nassau grouper tend to have high site fidelity and are found most abundantly on high relief coral reefs or rocky substrate in clear waters, although they can be found from the shoreline to about 100-130 m water depth.*



Juvenile Nassau grouper using seagrass habitat.

Photo Credit: NOAA

Larger adults tend to occupy deeper, more rugose, reef areas. Both adults and juveniles will use either natural or artificial reefs.



Nassau grouper observed in the Dry Tortugas in 2016
Photo credit: Kurtis Gregg



Nassau grouper observed on an artificial reef three miles north of Port Everglades, Fort Lauderdale, Florida in 2018
Photo credit: Kurtis Gregg

Background on ESA Listing of Nassau grouper

1970s-1990s: Declines in Nassau grouper catch rates were observed in Florida and around the Caribbean as a result of extensive fishing directed at known spawning aggregation locations. As a result, numerous known spawning aggregations were extirpated, with only about one third of known locations remaining actively used by Nassau grouper.



Photo Credit: Alexander Tewfik for Wildlife Conservation Society

In 1992, the South Atlantic Fishery Management Council prohibited the harvest and possession of Nassau grouper and Goliath grouper in the south Atlantic EEZ (federal waters) in response to observed declines in both species.

Since the early 1990's, abundance of Goliath grouper has increased as a result of the protections from harvest; however, abundance of Nassau grouper has not followed that pattern.

ESA listing details for Nassau grouper:

- A petition for listing was received by NMFS on September 3, 2010

- NMFS completed a Biological Report that found Nassau grouper still occurred throughout its historical range, but due to continued fishing of spawning aggregations, it was likely to become in danger of extinction

- The Proposed Rule for ESA listing a Threatened was published September 2, 2014

- The Final Rule for ESA listing as Threatened became effective July 29, 2016

- A proposed rule for designation of critical habitat is expected to be advertised later this year; however, areas under consideration for critical habitat designation do not include Florida.

5 Things You Should Know About Sustainable Seafood

The United States is recognized as a global leader in sustainable seafood, because we rely on strong science, responsive management, and enforced compliance.

1. U.S. fishermen abide by some of the most rigorous environmental measures in the world.
2. U.S. fisheries are managed under 10 national standards of sustainability.
3. Managing wild fish populations sustainably and keeping fishermen on the job is a dynamic process.
4. Expanding aquaculture can stabilize and diversify seafood supply.
5. Illegal, unreported, and unregulated (IUU) fishing leads to unsafe and unsustainable practices and harms law-abiding fishermen around the world.

National Wildlife Refuge System









National Wildlife Refuge System

Founded by President Theodore Roosevelt in 1903 and administered by the U.S. Fish and Wildlife Service, the National Wildlife Refuge System is a diverse network of lands and waters dedicated to conserving America's rich fish and wildlife heritage.



National Wildlife Refuges in Florida

Public Use (Hunting, Fishing, Birding, Nature Photography, Hiking, Environmental Education and Interpretation)

Habitat Management

Wildlife Monitoring

Scientific Research

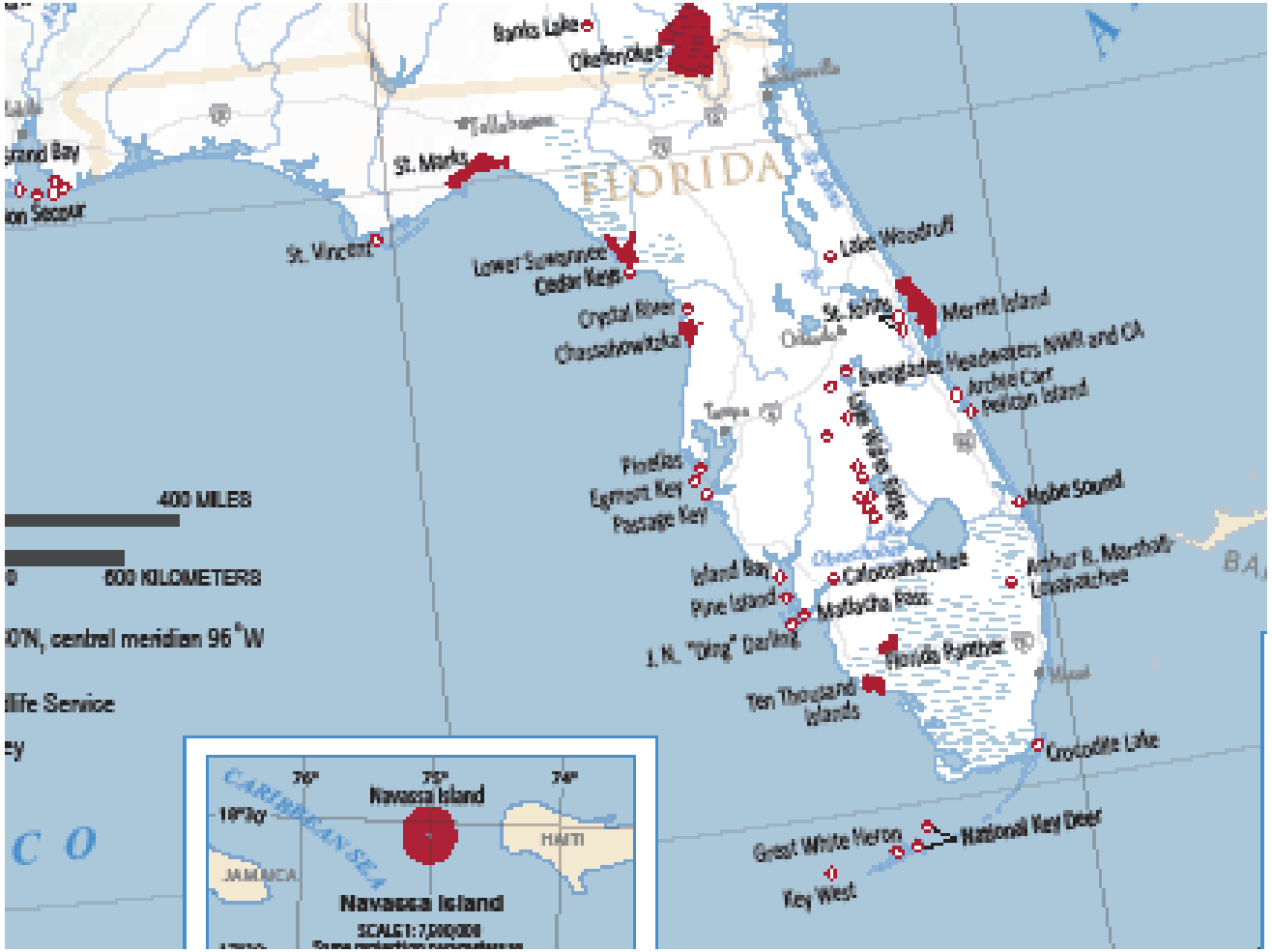


National Wildlife Refuges in Florida

30 national wildlife refuges

Managed as **7** refuge complexes:

- *Florida Keys*
- *Loxahatchee*
- *Everglades Headwaters*
- *Southwest Florida*
- *Crystal River*
- *Merritt Island*
- *North Florida*



Florida Keys NWR Complex

National Key Deer Refuge

Crocodile Lake NWR

Key West NWR

Great White Heron NWR







Arthur R. Marshall Loxahatchee National Wildlife Refuge Complex



- Arthur R. Marshall Loxahatchee NWR
- Hobe Sound NWR





Everglades Headwaters National Wildlife Refuge and Conservation Area



- Everglades Headwaters NWR
- Lake Wales Ridge NWR
- Archie Carr NWR
- Pelican Island NWR

Southwest Florida National Wildlife Refuge Complex



- Florida Panther NWR
- J.N. "Ding" Darling NWR
- Ten Thousand Islands NWR
- Matlacha NWR
- Caloosahatchee NWR
- Island Bay NWR
- Pine Island NWR

North Florida National Wildlife Refuge Complex





- St. Marks NWR
- St. Vincent NWR
- Lower Suwannee NWR
- Cedar Keys NWR

Merritt Island National Wildlife Refuge Complex



- Merritt Island NWR
- Lake Woodruff NWR
- St. Johns NWR

Crystal River National Wildlife Refuge Complex

- Crystal River NWR
- Chassahowitzka NWR
- Tampa Bay NWRs
- Egmont Key NWR
- Passage Key NWR
- Pinellas NWR





Thank you!



Theodore Roosevelt Collection - Harvard College Library

Session 4 Wrap-Up

Questions?

End of Session 4 – Overview of ESA Laws & Listing Updates

- **Laws & Listing Updates**
  - FWS mitigation policy, process overview, current listings
- **Pile Driver Noise and "New" Calculator**
- **Species Highlights**
  - Bald eagle – **Ulgonda Kirkpatrick**
  - Florida Bonneted bat – **Sandra Sneckenberger**
  - Black rail – **Kevin Kalasz**
  - Nassau grouper – **Kurtis Gregg**
- **National Refuge System**
  - **Jereme Phillips**
- **Questions, reflections?**

ESA Webinar Series - Summary

https://www.fdot.gov/environment/sched/oemtrainingprogramstandalonetrainingevents/oem-training-program-esa-consultation

Office of Environmental Management

Training Program

Endangered Species Act (ESA) Consultation Process (2022)

This web page includes recordings and materials from the four-part webinar series on the ESA consultation process hosted by Florida Department of Transportation (FDOT), Office of Environmental Management (OEM). The sessions provide a basic overview of the ESA consultation process using transportation project examples. Guest speakers from US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) focus on specific listed species, protection issues faced by law enforcement, and updates on current ESA listings and laws. This webinar series gives a broad perspective of activities performed by FDOT, USFWS, and NMFS under the Endangered Species Act.

These webinars are intended for NEPA and Environmental Permitting practitioners. Participants should have a basic understanding of the NEPA process and/or Environmental Permitting as it relates to the Federally listed species consultation process.

Session 1 - Tuesday February 15, 2022

ESA Consultation Process (Part 1)

- Recording
- Presentation Slides (PDF)
- Session Handouts (PDF):
  - Endangered Species Act
  - ESA Section 7 Regulations
  - SERO Protected Species Construction Conditions

ESA Webinar Series – Future Trainings?





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Katasha.Cornwell@dot.state.fl.us

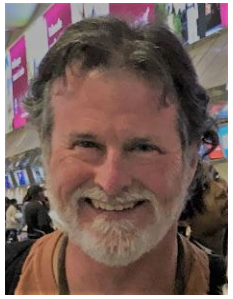
ESA Webinar Series Presenters, **Thank you!**



Mark Cantrell, USFWS



Kurtis Gregg, NOAA



David Rydene, NOAA



Zakia Williams, USFWS



John Wrublik, USFWS



Adam Brame, NOAA



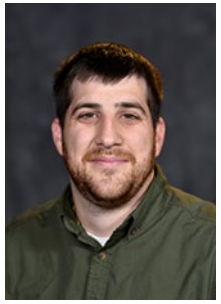
Ruth Roaza, FDOT



Victoria Garcia, USFWS



Calusa Horn, NOAA



Lucas Davis, USFWS



Ulgonda Kirkpatrick, USFWS



Sandra Sneckenberger, USFWS



Kevin Kalasz, USFWS



Jereme Phillips, USFWS



Jose Rivera, USFWS

Thank you!!