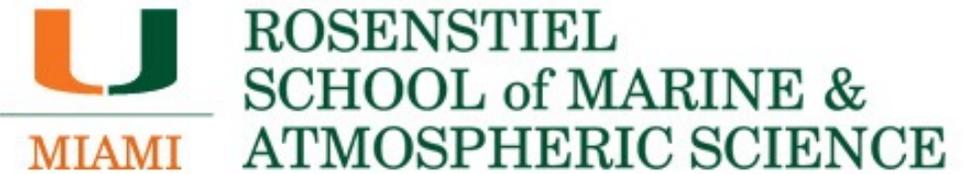
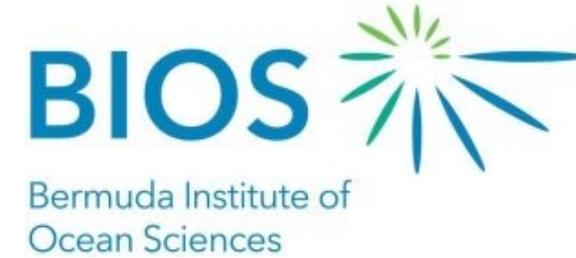
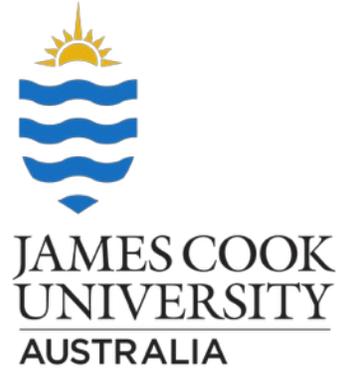




Manatee Conservation and Stewardship

Tiare 'TJ' Fridrich, MPS | Manatee Biologist

About Me



About Save the Manatee Club

Nonprofit 501(c)(3) organization established in 1981 by Jimmy Buffett and former U.S. Senator / Florida Governor Bob Graham.

Our mission:

- To protect manatees and their aquatic habitat for future generations.

Our work:

- Increasing public awareness and education.
- Funding research, rescue, rehabilitation, release.
- Advocating for strong protection measures and taking legal action when appropriate.
- Supporting efforts in the Wider Caribbean, South America, and West Africa.



This Presentation

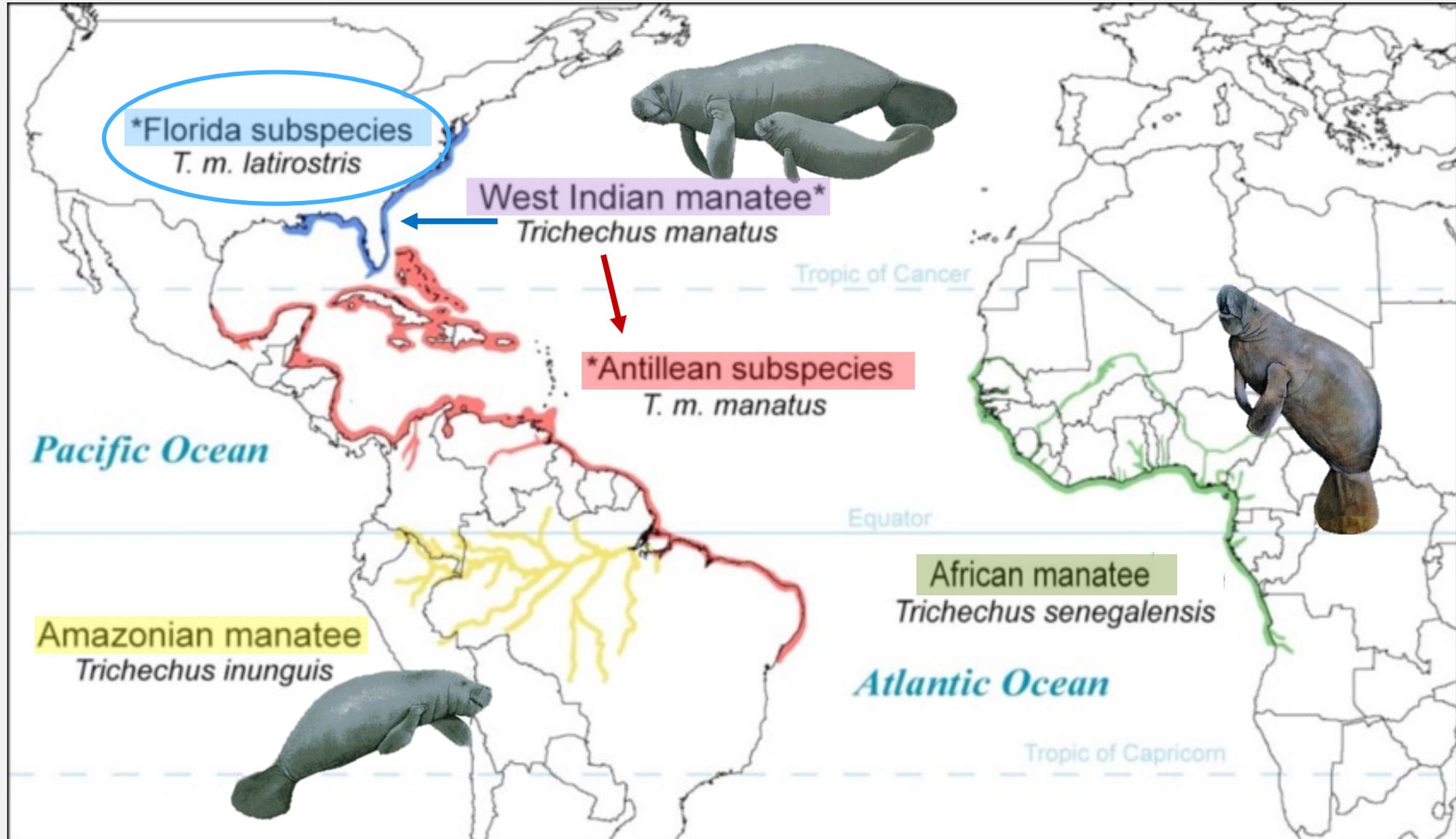
1. Manatee 101
2. Manatee Habitat
3. Manatee Conservation
4. Manatees and Paddling



Manatee 101



Manatees of the World

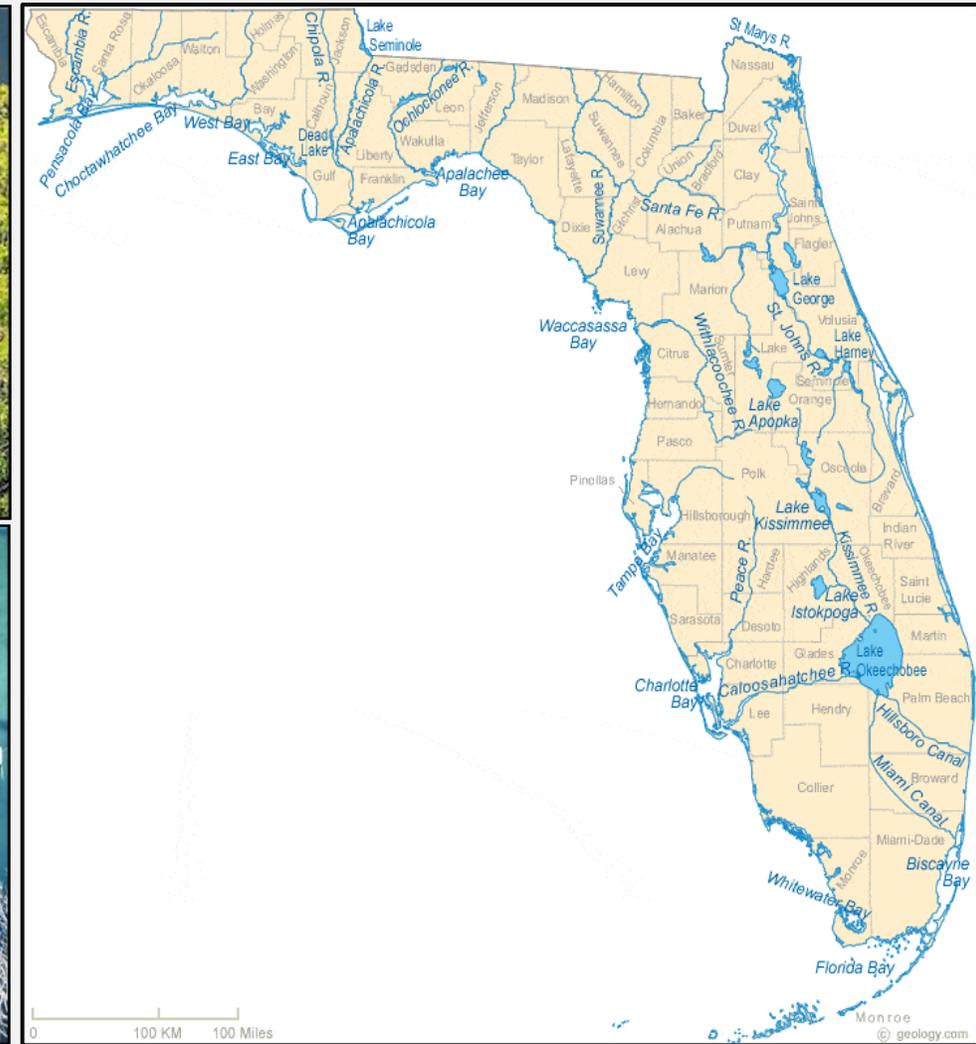


What is a Florida manatee?

- Large, slow-moving aquatic mammals
 - Warm blooded, breathe air, give live birth + nurse, have hair
- Subspecies of the West Indian Manatee, endemic to Florida
- Spend entirety of their lives in marine/freshwater habitats
- Generalist herbivores – eat >60 species of aquatic plants, majority of diet is grasses
- Strongest social bond is between mother & calf – stay together ~2 years
- Protected federally and statewide



Where do manatees live in Florida?



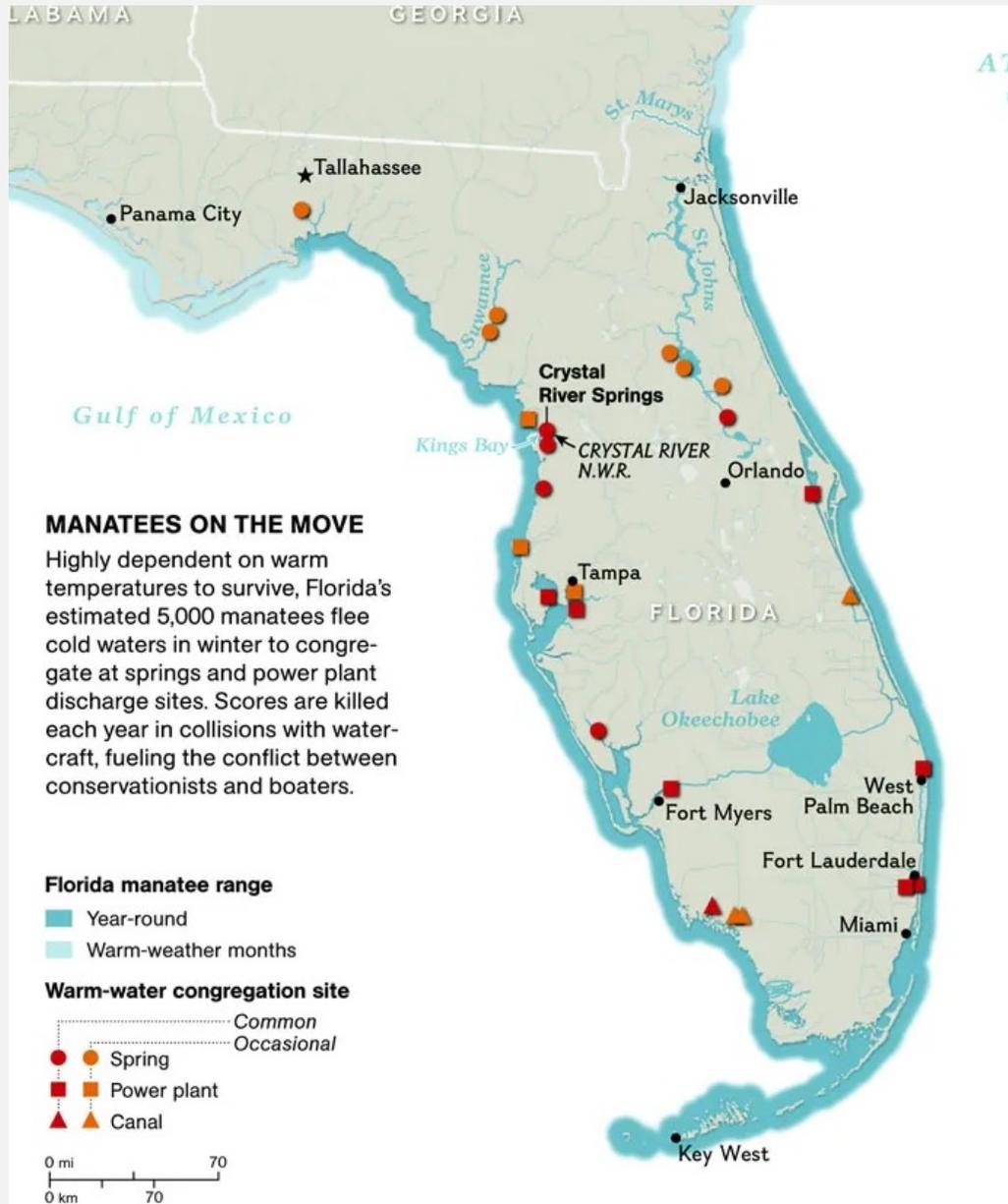
Map of Florida Waterbodies

Florida has 1,360 miles of coastline & 1,540 navigable miles of intracoastal and inland waterways. Some waterways are blocked by structures – dams, gates or locks.

Manatees migrate!

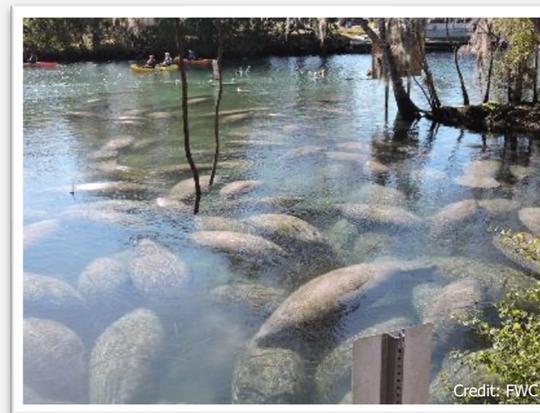
- In the winter, manatees gather at warm-water sites throughout FL
- Why?
 - Manatees are adapted for the tropics – have trouble staying warm in cold water
 - When water temps drop below 68°F (20°C), manatees can get cold stress syndrome
 - Need warm water to survive the winter
- High site fidelity*
- When water warms up, manatees disperse throughout FL and into neighboring states!



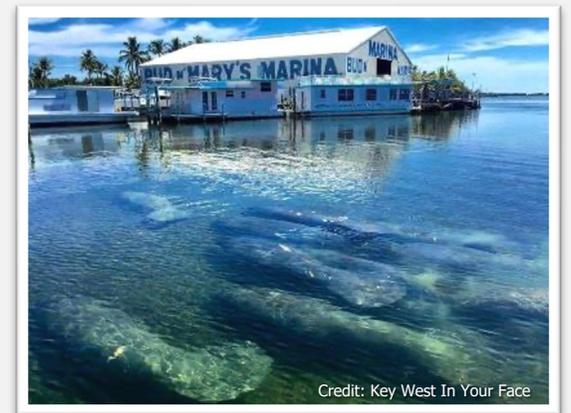


Warm-Water Refugia

- 67 known primary and secondary warm-water sites used by manatees in Florida (FWC 2020)
 - 10 power plants
 - 23 springs and spring complexes
 - 34 passive warm-water sites (thermal basin)
- Some east-coast manatees swim south to the Florida Keys to stay warm



Crystal River

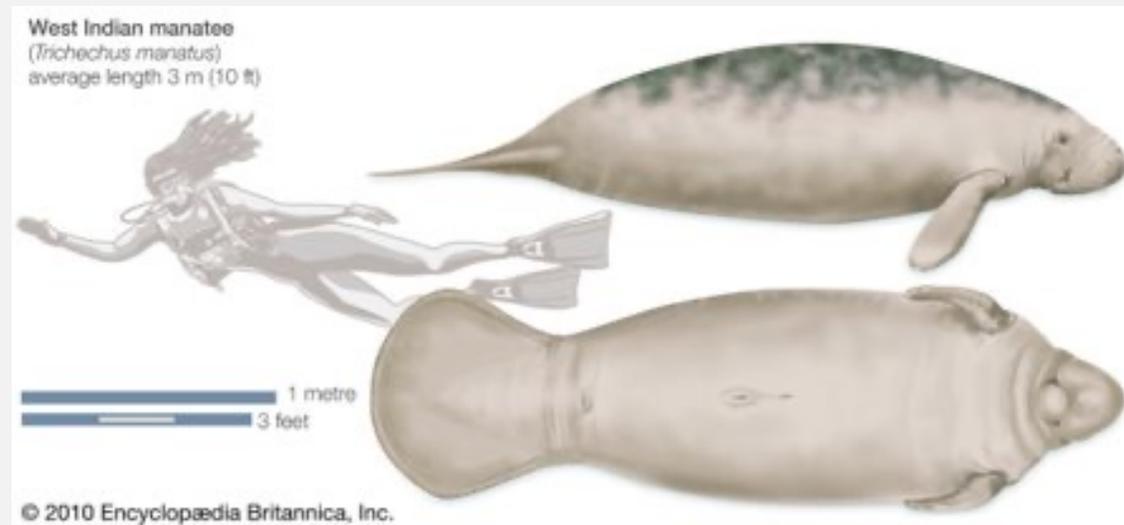


Islamorada

JEROME N. COOKSON, NGM STAFF; LOU CROSS; TANYA BUCKINGHAM
 SOURCES: FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION; USGS

Manatee Size

- Average adult manatee size:
 - ~10 feet long
 - 800-1,200 pounds
- Largest manatee >13 feet, 3,500lbs
- Females bigger than males
- Manatee calves weigh between 60-70lbs when born



Manatee Feeding and Drinking

- Manatees are generalist herbivores – they eat over 60 species of aquatic plants, such as:
 - Seagrasses (seven species in Florida)
 - Eelgrass (freshwater grass)
 - Mangrove leaves
 - Algae
 - Invasive species - water hyacinths, hydrilla
- Grasses make up the bulk of their diet
- Manatees eat 10% of their body weight in plants every day; feed 6-8 a day
- Manatees consume water from the plants they eat, but in marine environments they need to find water to drink as well
 - Will slurp fresh water from surface or drink from freshwater runoff sites



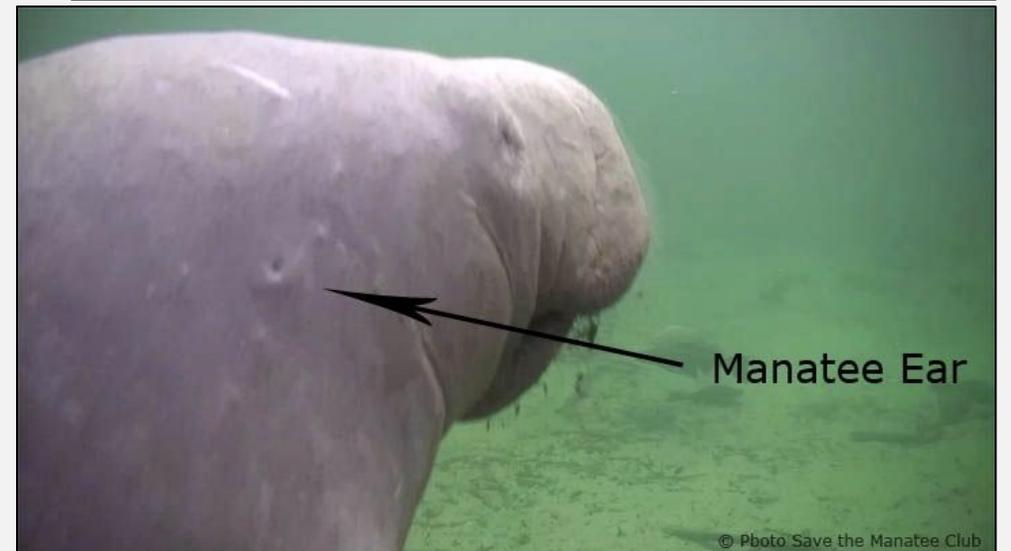
Manatee Feeding and Drinking

- Use their front flippers and flexible lips to pull plants into their mouths.
- Ridged pads at the front of a manatee's palate and lower jaw break vegetation into smaller pieces.
 - Behind the pads, molars grind the food.
- Molars form at the back of their jaw and move forward horizontally as they wear down, termed '**marching molars**'.
 - Eventually molars fall out, continuously replaced
- Gastrointestinal tract ~20% of body weight; produces heat during digestion.
- Takes ~7 days for material to pass through a manatee's digestive system – hindgut fermentation
- Part of the nutrient cycle – produce waste



Manatee Senses

- Tiny tactile hairs called vibrissae cover their entire body - 3,000 hairs on their body; 2,000 hairs on their nose.
 - Use to investigate objects in dimly lit environments
- Small eyes – can see better at a distance.
 - Dichromatic vision - can see blue, green but not red.
- Small ears
 - Can hear high-pitched sounds well (squeaks, squeals) - communicate with each other especially mom and calf.
 - 2018 study proved that manatees could hear boats – respond by changing orientation, depth, and swimming away



Manatee Reproduction & Lifespan

- Females reach sexual maturity in 3-5 years, males in 5-7 years old.
- Mating herd - single female followed by group of 12+ males
- Females are pregnant for ~12 months; have one calf every 2-5 years (twins rare)
- Calves nurse from auxiliary teats under mom's pecks
- Nurse their young for 1-2 years, then calf leaves mother
- No real social structure, strongest bond is mother-calf
- Manatees capable of living more than 60 years but threats in the wild shorten their lifespan – only half of manatees live to 20 years (FWC)



Breathing and Resting

- Manatees breathe air, must come up to breathe
 - When active (swimming, feeding, socializing), manatees usually breathe every 3-5 minutes
- Resting
 - Bottom resting - Come to the surface every 7-10 minutes (max 15 minutes recorded) for 2-3 breaths at a time and then slowly sinks to the bottom
 - Resting on surface - Back floating at surface, will take 2-3 breaths every 7-10 minutes
 - A resting manatee can hold its breath as long as 20 minutes.
 - When resting, they come up to breathe without fully waking up.



Tiare Fridrich

Common Manatee Behaviors

- Feeding & Drinking
- Nursing
- Resting
- Cavorting – rolling, tail slapping, grabbing other animals, body parts coming out of the water; pre-cursor to mating if focal female present
- Mating – focal female needs to be present, cavorting focused on one specific animal; when female is receptive, copulation is very calm, little activity detected
- Socializing - touching noses; chewing along body, slight body touching; close following while milling followed by touching; mother and calf squeaking
- Parking – mothers will leave their babies in calm, protected areas when they go out to feed
- Traveling/Swimming – movement with a directed path and purpose, speed constant and fast
- Human interaction - a change in behavior caused by humans in the water or on land (i.e., harassment)



Socializing



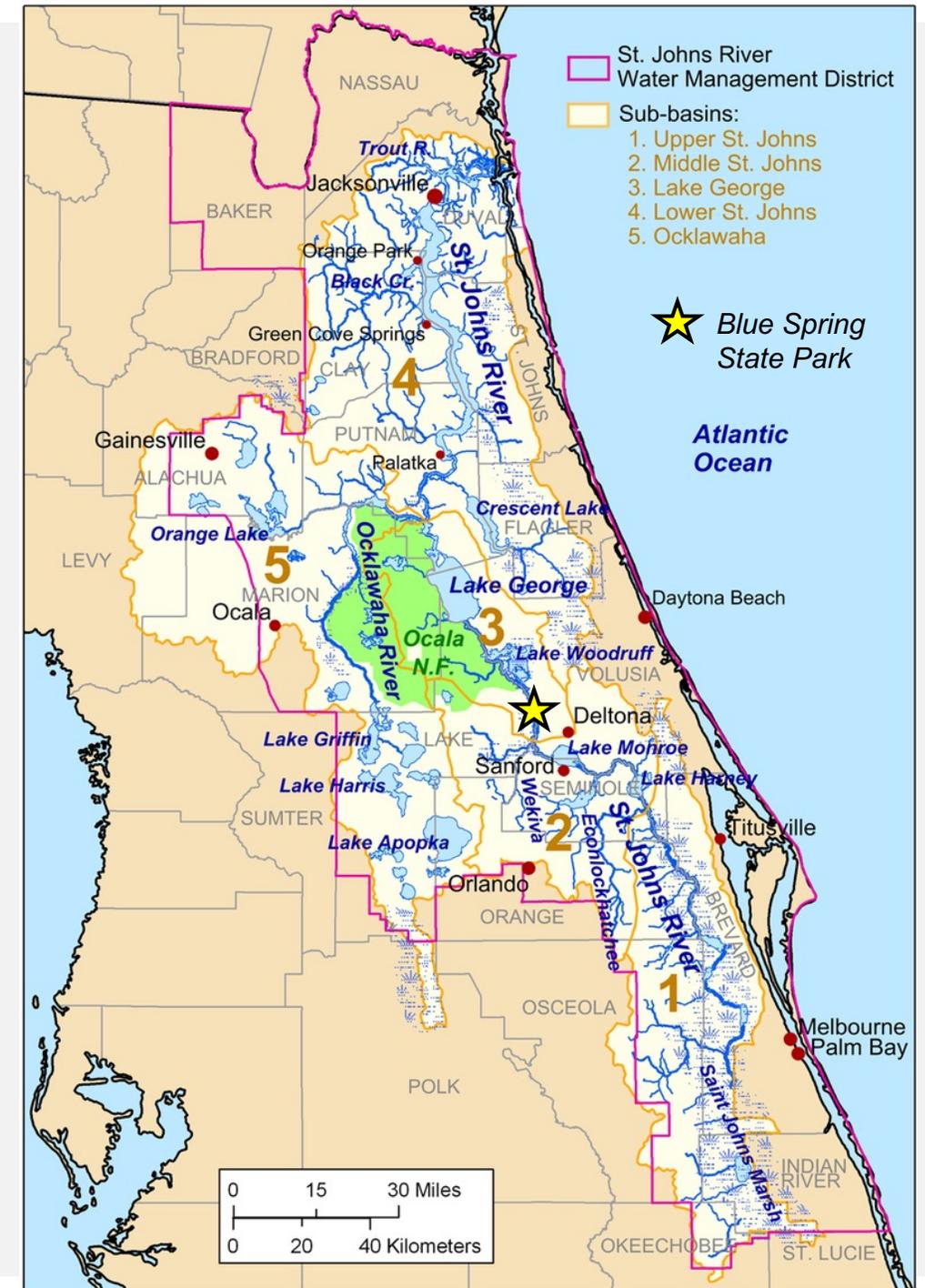
Traveling

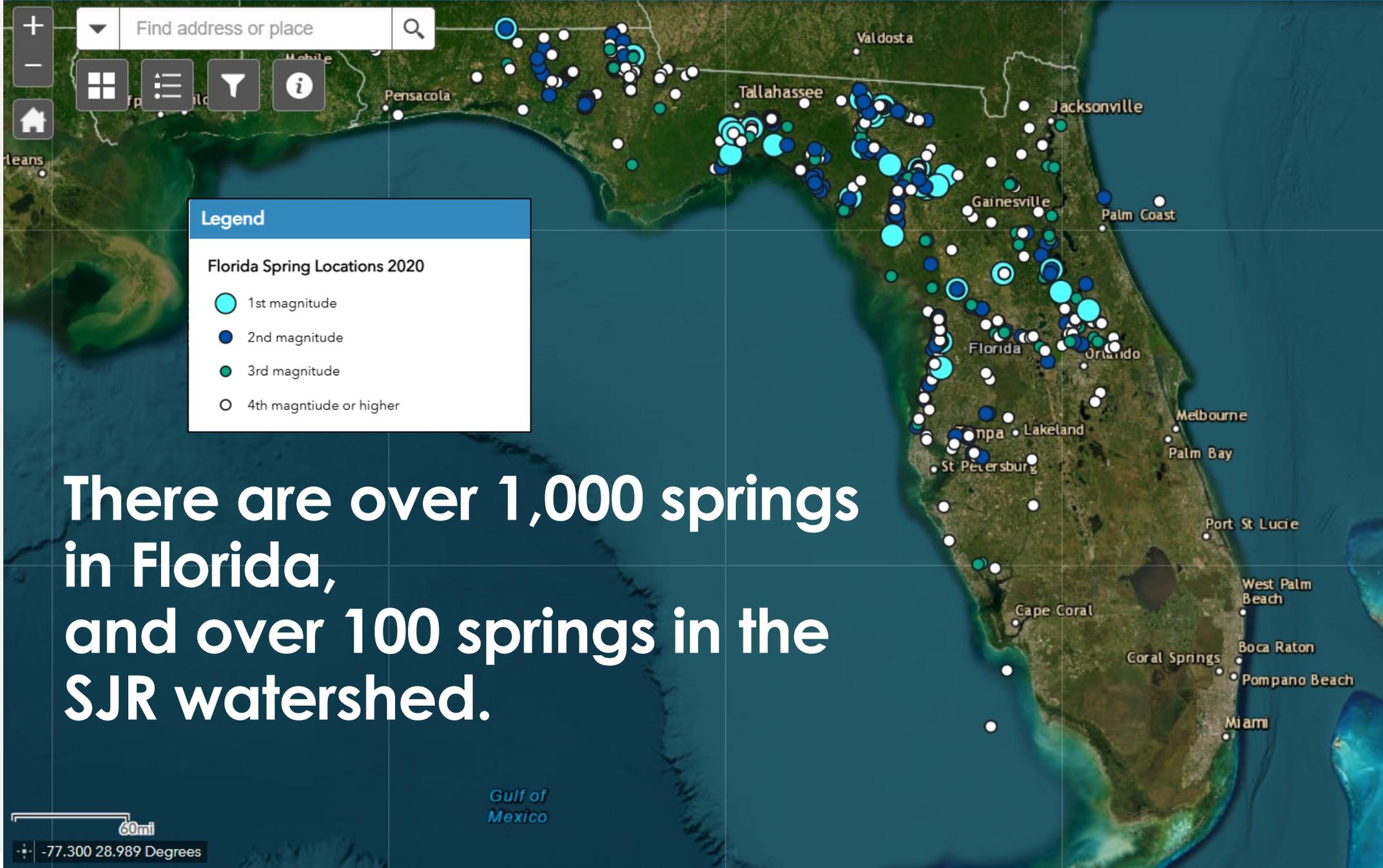
Manatee Habitat – St. Johns River



The St. Johns River (SJR)

- Longest river in Florida – flows 310 miles north
- Start/Headwaters – Blue Cypress Lake in Indian River County
- End/River mouth – east of Jacksonville, empties into Atlantic Ocean
- SJR divided into multiple watersheds/ drainage basins
 - Upper SJR – headwaters; swamps, shallow lakes, difficult to navigate/no main channel
 - Middle SJR –where SJR widens after meeting the Econlockhatchee River in east-central FL; river widens, faster current
 - Lower SRJ – begins where SJR and Ocklawaha Rivers meet; widest parts of river; ends in Jax
- Volusia Blue Spring is in the middle basin

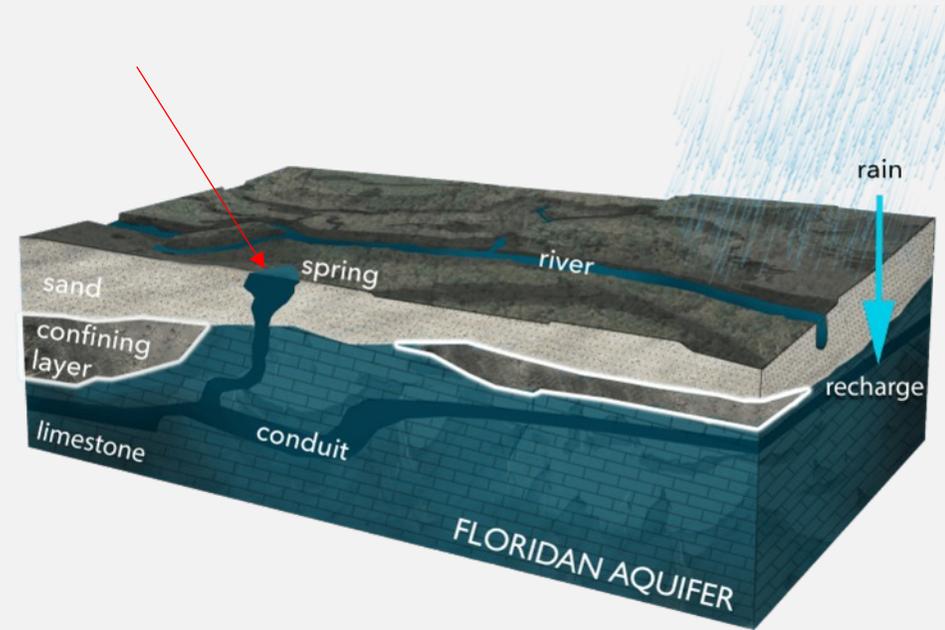




There are over 1,000 springs in Florida, and over 100 springs in the SJR watershed.

What is a spring?

- A **spring** is a natural opening in the ground where water flows directly from the **Floridan aquifer** to the earth's surface
- An **aquifer** is a vast underground of porous rock (karst limestone) that can hold or transport water through the holes in the rock
 - Where water in the aquifer is confined, the water is under pressure; that pressure allows the water to rise in a well above the land, creating a spring
- The main source of freshwater in Florida comes from the Floridan, which is the largest aquifer in the SE US.
- Springs are categorized by their flow rate (1st to 4th magnitude)
 - First magnitude springs are the largest springs and discharge at least 64.6 million gallons of water per day
 - 33 first magnitude springs in Florida
 - Many of FL's rivers are spring-fed rivers



Becky Kagan Schott

Where does the water in an aquifer come from?

- The water stored in the Floridian aquifer is **replenished / recharged by rainfall** - rainwater seeps through sandy soils down into the aquifer
- On average, FL receives 51 inches of rain each year, but not all that rain reaches the aquifer
 - Over 70% of this rain either evaporates or runs off the land into lakes, rivers and streams before it has a chance to soak into the ground
 - Leaves ~13 inches of rain to replenish the aquifer
- The area of land that contributes groundwater to a spring is called a **springshed**; a springshed can be hundreds of square miles
 - Within a springshed, water also seeps into the ground from nearby agricultural activities and septic tank leakage



Springs Habitat

- Florida springs and their associated rivers and estuaries are home to countless plants and animals
- Individual springs are considered stable systems – very little change in water temp, flow, water chemistry
- Crystal clear water allows for abundant freshwater vegetation – eelgrass meadows
- Water flowing from springs is 72 degrees year-round; constant temp provides essential habitat for manatees and fish





Volusia Blue Spring

- 1st mag spring – 102 million gallons of water flow out of the spring every day
- Spring run is ~0.4mi long
- When temp of SJR drops below 68F, manatees gather in large numbers in the spring run to stay warm
- No food (beyond bank vegetation) for manatees in spring, must leave to find food
- Record # of manatees in 2024 - >900

Habitat Connectivity & Access

- Manatees must travel large distances to access the different habitats of the SJR
 - Blue Spring State Park is ~150 miles south of the river mouth
 - Manatees traveling from the northern Indian River Lagoon swim an additional ~100 miles to the mouth of the SJR
- Not all springs along SJR are accessible to manatees
- Other important springs habitats along the SJR:
 - Silver Glen Spring
 - Wekiwa Springs
 - Salt Springs
 - Silver Springs* - Ocklawaha River



Ocklawaha River & Silver Springs

- The Ocklawaha River is the principal tributary of the St. Johns River
- Ocklawaha flows south to north for 78 miles before it meets the SJR
- The Silver River is the main tributary of the Ocklawaha River, provides most of the Ocklawaha's flow
- In the late 1960s, a barge canal was constructed in Palatka to connect the St. Johns River to the Gulf of Mexico. Before the project was deauthorized in 1992, the Buckman Lock, a section of the Cross Florida Barge Canal, and the Rodman Dam / Rodman Reservoir were completed.
- Manatees access the Silver River by traveling through the Buckman Lock, which connects the St. Johns River to the Ocklawaha River through the Cross Florida Barge Canal.
- Dozen sunken springs in the lower Ocklawaha, no manatee access
- Biggest long-term threat to manatees – loss of warm-water habitat

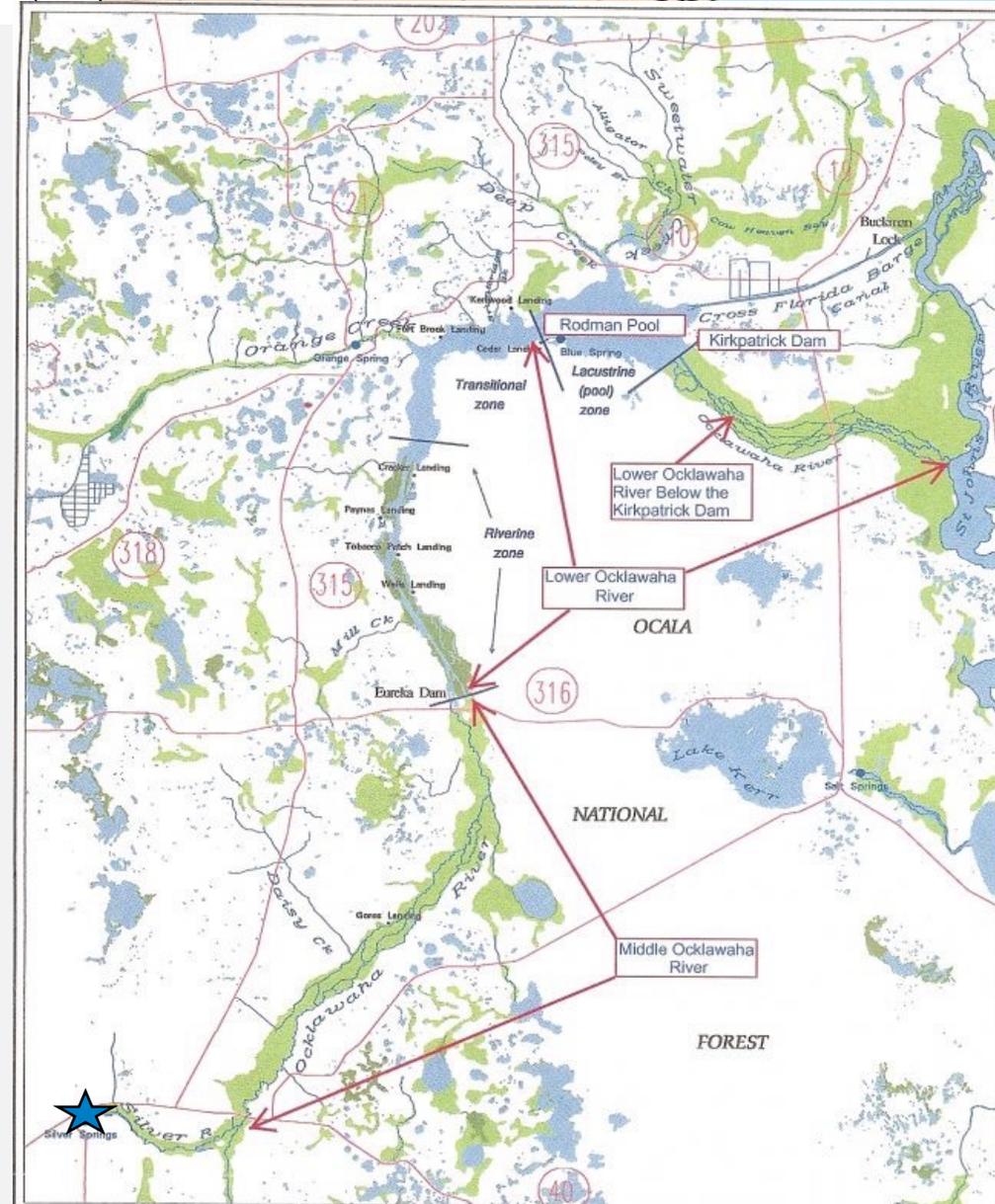
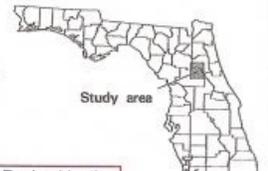


Figure 1.

RODMAN POOL AND THE MIDDLE AND LOWER OCKLAWAHA RIVER STUDY AREA. V. 7. June 2013

- Hydrography
- Intermittent water bodies
- Deepwater wetlands
- Marsh or forested wetland
- Highways



Map Revised by the

Manatee Conservation



Why Save Manatees?

- Eat plants including invasives (water hyacinth, hydrilla) that may clog up waterways.
- Their presence protects certain habitats that are essential – springs, mangroves. Clean habitat is important to humans, too.
- Charismatic megafauna that tourists come to see – manatees boost our economy.
- Manatees are fascinating animals. People enjoy seeing them and learning about them.
- Part of our ecosystem – they've been here much longer than humans have.





Manatee Protections

Federal

- Marine Mammal Protection Act of 1972
- Endangered Species Act of 1973

State

- Florida Manatee Sanctuary Act of 1978.

Federal Manatee Protection

Marine Mammal Protection Act – 1972

- Protects all marine mammals from 'take' which includes harassment, molestation, killing
- Under MMPA it is illegal to feed/water manatees, block their path, separate cow and calf, disturb resting animals, molest
- Enforced by NOAA Fisheries (whales, dolphins, porpoises, seals, sea lions) and USFWS (walrus, manatees, sea otters, polar bears)

Endangered Species Act – 1973

- Purpose is to protect and **recover** imperiled species and the ecosystems upon which they depend.
- Creation of 'recovery plans,' 5-year reviews, and designation of critical habitat
- FL manatees were listed as 'endangered' under the ESA when it was established in 1973



Federal Manatee Protection

ESA Amendment - Manatee Protection Areas (1979)

- Provides a means for establishing **manatee protection areas** (Federal manatee sanctuaries and refuges) within which certain waterborne activities are restricted
- Types of Federal protection areas:
 - Manatee sanctuary – all waterborne activity prohibited (seasonal)
 - Manatee refuge – certain activities are prohibited
- There are 12 sanctuaries and 14 refuges throughout FL - ex: Three Sisters Springs



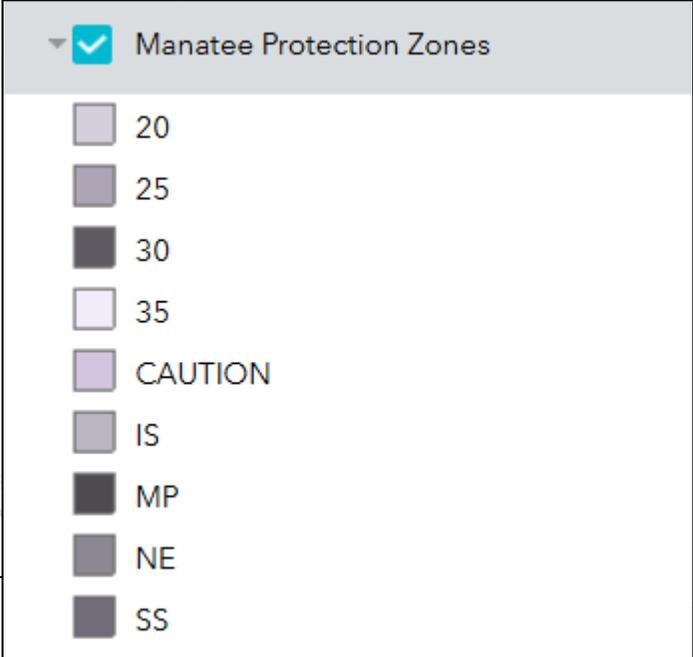
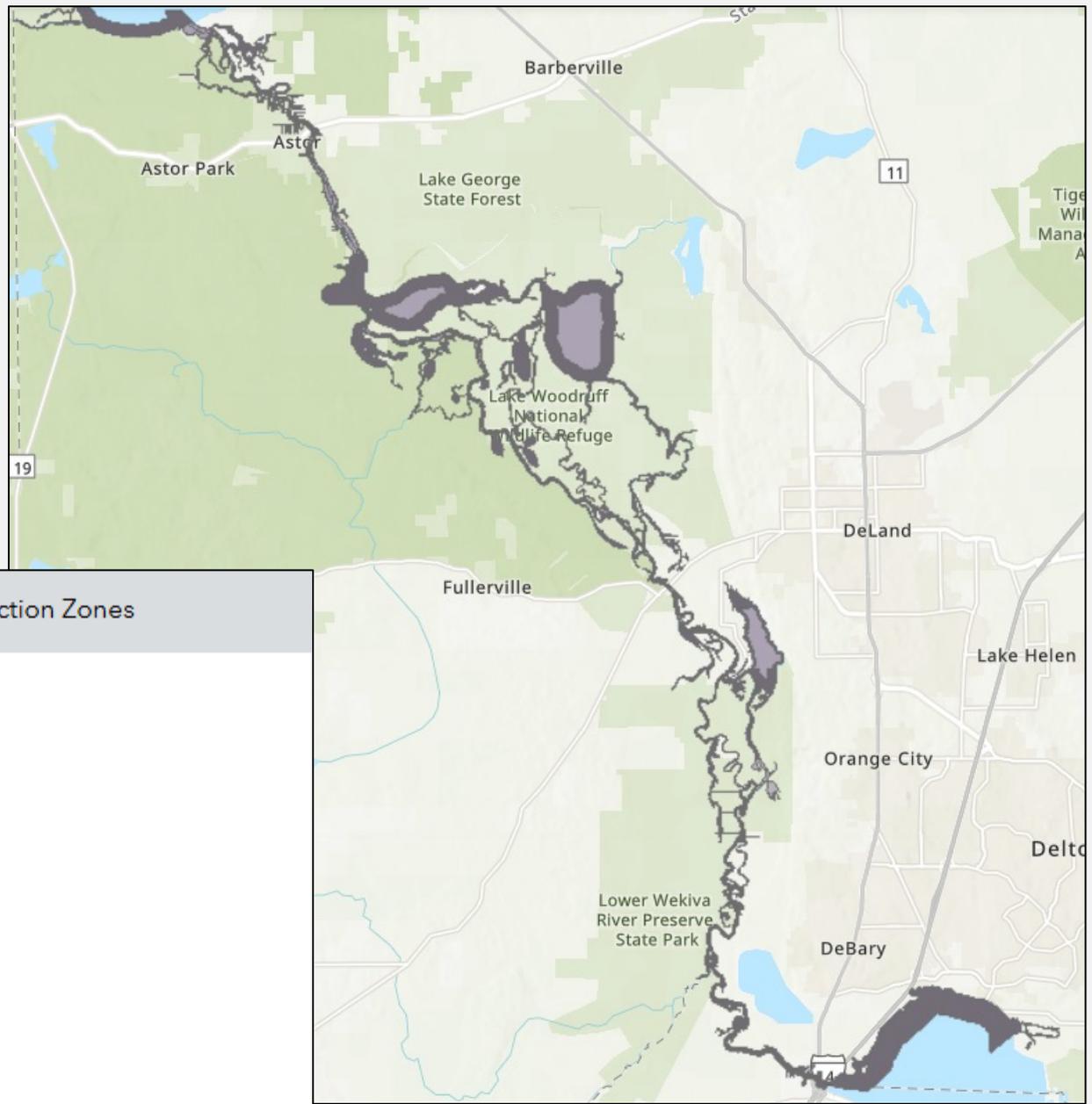
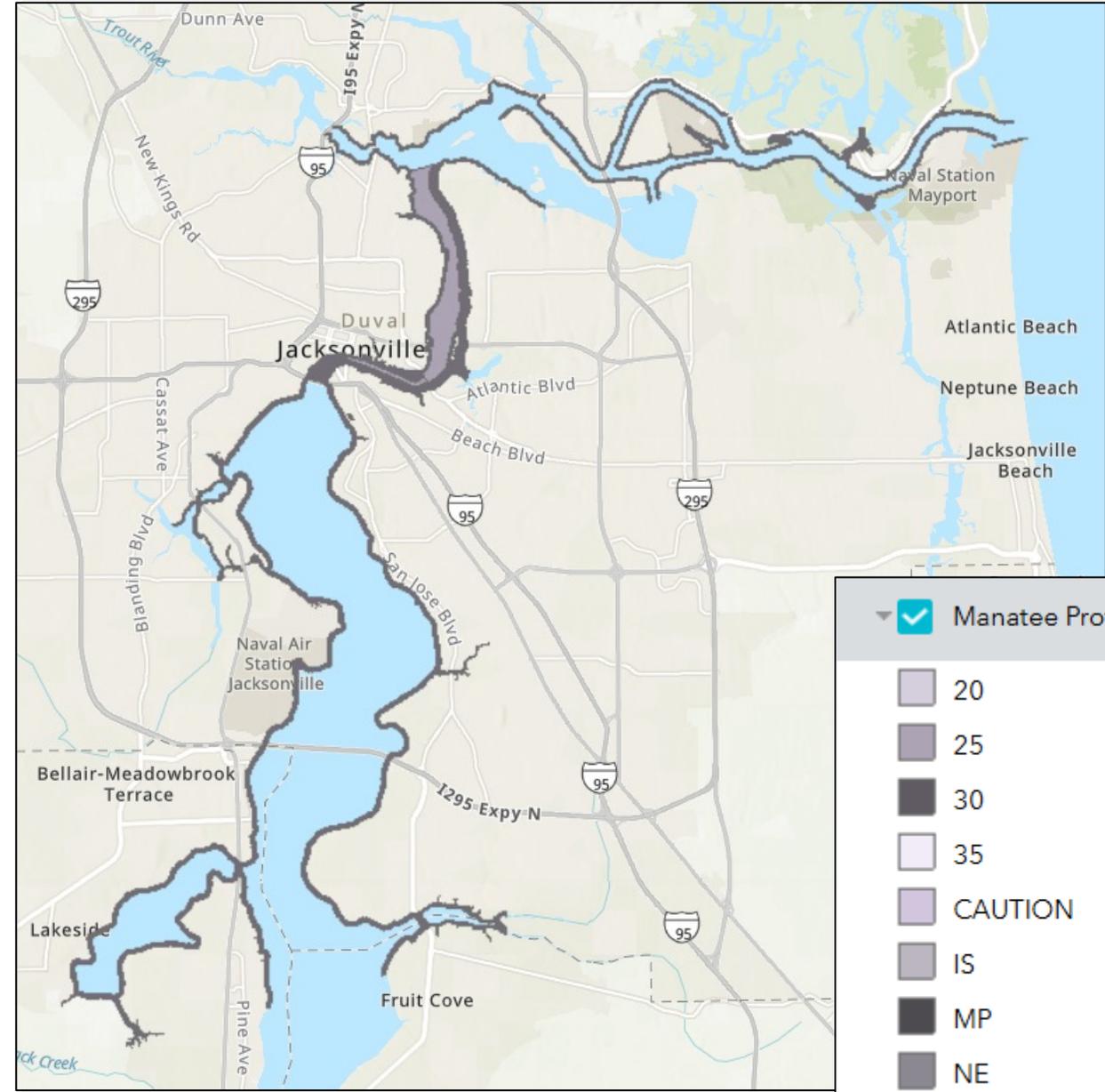
DiscoverCrystalRiverFl.com

Statewide Manatee Protection

Florida Manatee Sanctuary Act (1978)

- Declares entire state of FL a refuge and sanctuary for manatees (pre-eminent protection for manatees on a state level)
- Established restrictions to:
 - Protect manatees from harmful collisions with motorboats and harassment; protect manatee habitat from destruction by boats or other human activity
 - Provide limited safe havens where manatees can feed, rest, reproduce, give birth or nurse undisturbed by human activity
 - Allows FWC to regulate boat speeds to protect manatees and manatee habitat in areas where manatees are frequently sighted
- Manatee protection areas are not permitted to be established in higher speed channels such as the Intracoastal Waterway





Manatee Protection Plans (MPPs)

- In 1989, the governor required 13 key counties to create Manatee Protection Plans to reduce the number of manatee-watercraft interactions
- An MPP is a county specific management plan developed, approved and used by federal, state and local governments to ensure the long-term protection of manatees and their habitat within what is defined as the County boundaries.
- As of 2007, all 13 “Key” counties have FWC-approved MPPs, which include: Brevard, Broward, Citrus, Collier, Duval, Indian River, Lee, Martin, Miami-Dade, Palm Beach, Sarasota, St. Lucie and Volusia counties
- MPPs include a ‘facility siting plan’ which determines where new marinas and boat ramps can be built, prevents harm to manatees from boating activity

Manatee Protection Plan

[Home](#) > [Departments and Divisions](#) > [Growth and Resource Management](#) > [Environmental Management](#) > [Sustainability and Resilience](#) > [Florida manatee](#) > [Manatee Protection Plan](#)



The Florida Fish and Wildlife Conservation Commission (FWCC) approved Phase II of the Manatee Protection Plan (MPP) for Volusia County on October 19, 2005. Phase II is the Boat Facility Siting component of the MPP, which establishes boat slip to shoreline ratios throughout the county, mandates the use of specific siting criteria, and creates mitigation fees that will support the new Manatee Conservation Fund for additional on-the-water manatee speed zone enforcement and conservation.

In February 2001, the FWCC approved Phase I of the MPP, which addresses manatee/human interaction, habitat inventory, habitat protection, education, research and governmental coordination.

[Permitting Process](#)

[Manatee Protection Plan-Phase I](#)

[Manatee Protection Plan-Phase II](#)

[Non-single family residence commercial](#)

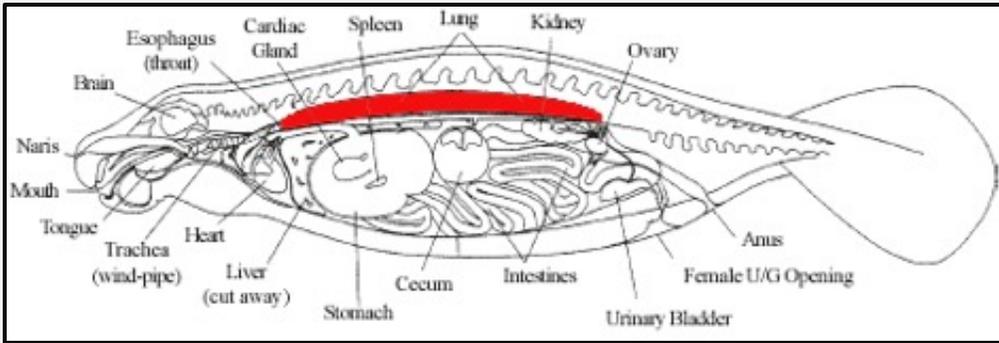
[Single family residence](#)

[Manatee Protection Plan 2024 Annual Report](#)

Threats to Florida Manatees

- Boat strikes
- Loss of SAV & warm-water habitat
- Cold stress
- Entanglement
- Impingement in dams/locks
- Harmful algal blooms/ red tide
- Ingestion of plastic
- Harassment*





Boat strikes are the largest human-related cause of death for manatees (25% of mortality each year)

Why do manatees get hit by boats?

- Manatees use travel corridors to swim between habitats – they share our waterways
- Characteristics of manatees make them vulnerable to collisions and injuries by boats:
 - Feed in shallow water on SAV
 - Swim horizontally, only nose comes out to breathe
 - Long, oblong lungs run length of back
 - Cannot turn heads to look behind them
 - Slow moving (3-5mph, burst up to 18mph)
- The best way to protect manatees from boat strikes is to boat slow!

—————> **Manatee Protection Zones**

Aquatic Habitat Loss



- **Most serious long-term threat facing manatees today.**
- Growth and overdevelopment leads to loss of habitat and pollution.
- Conserving natural springs is essential – water flow and quality.
- Dependence on power plants as a warm-water source – what to do?
- Climate change – increasing storms, changes in seagrass abundance and location, extended range, decreased funding.
- Global and localized submerged vegetation loss (Tampa Bay included)

Threats to Florida Springs

- Weather and Drought: less rainfall → less water in the aquifer → reduced spring flow
- Over pumping of groundwater can decrease spring flows and cause saltwater intrusion
- Nutrient pollution: increased nutrient concentrations (nitrogen and phosphorous) from wastewater and agriculture can cause algal blooms
- Runoff: runoff can carry heavy metals, pet waste, and other pollutants into the system
- Recreation: trampling vegetation, discarding trash



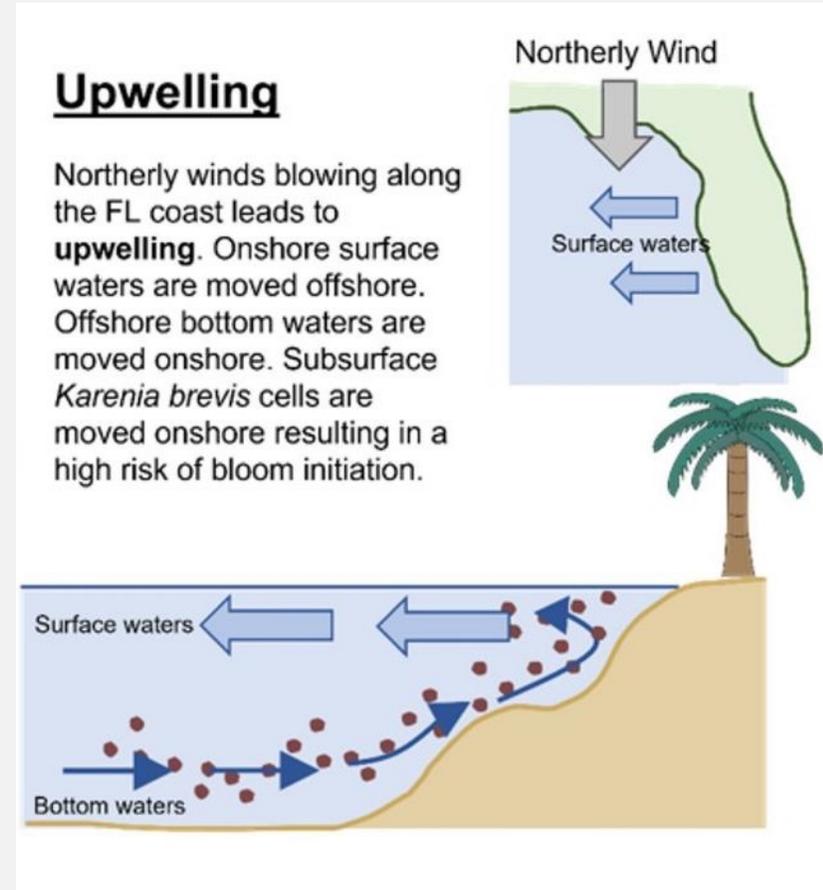
Harmful Algal Blooms

- Algae is a plant like organism that lives in the water; makes food like plants do, with nutrients and the sun
- Algal blooms- occur when algae grows out of control due to excess nutrients entering the system (nitrogen, phosphorous)
- Harmful because they:
 - Block light to plants in the water, causing them to die (ex: seagrass)
 - When algae dies, decomposition uses all the oxygen in the water, causing massive die offs (fish kills)
 - Can also produce harmful toxins, like red tide



Red Tide Blooms

- Specific type of harmful algal bloom caused by *Karenia brevis*
- *K. brevis* occurs naturally in marine systems along the Gulf of Mexico
- Blooms of *K. brevis* begin offshore before traveling to FL coastline by currents and upwelling
 - Upwelling – process in which deep, cold water rises towards the ocean surface
 - Bloom fueled by nutrients as it gets closer to shore
- *K. brevis* produces brevetoxins, a neurotoxin that causes respiratory and central nervous system issues
- Manatees suffering from brevetoxicosis need to be rescued and rehabilitated



East Coast Unusual Mortality Event (UME)



Photo courtesy Philip Stasik

- Harmful Algal Blooms (HABs) in the Indian River Lagoon killing seagrasses. HABs due to human-caused pollution over many years.
- Wintering manatees at power plants along the IRL had no seagrass nearby to eat. Choice: freeze or starve?
- 1100 manatees died in 2021 alone
- Restore seagrasses – planting, filters, reducing pollution.
- Working with agencies to prioritize this restoration. Rescues + feeding trial at Cape Canaveral Power Plant
- Summer '22-'23 – seagrass returned to northern IRL
- UME closed 2025

Manatee Rescue and Rehabilitation Partnership

- The Manatee Rescue and Rehabilitation Partnership (MRP) is a group of organizations (non-profits, private, state, federal) that is working to rescue, rehabilitate and release manatees.
- Rescue injured, sick, orphaned and stranded manatees; recover manatee carcasses for necropsy.

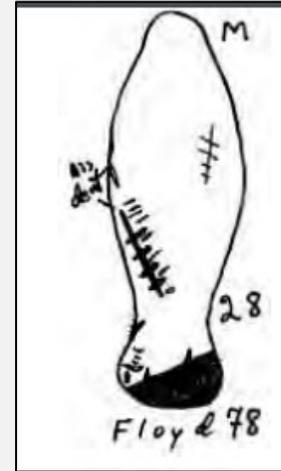


Who Is Involved in Manatee Rescue, Rehab and Rehabilitation?



Research – Behavior, Photo-ID, Tracking

- SMC, USGS Sirenia Project, FWC, DISL, CMARI, Oceanaria
- Studying:
 - Photo identification (MIPS), population monitoring, tracking, and more.
 - Genealogies going back to the early 1970s.
 - Aerial synoptic surveys – population estimates
 - Collecting citizen-science data (SMC Manatee Sighting Form)



Filter



1,002 / 1,002 (filtered/total)

Survey submission dates: 12/19/21 - 8/15/25

Filter configuration panel with dropdowns for 'DATE AND TIME OF SIGHTING' and 'is on', and an 'Add expression' button.

Add group

Can filter data by:

- Date/time of siting
- # adults, # calves
- Manatee behavior
- Harassment/boating violation
- Photos/videos



Filter



518 / 1,002 (filtered/total)

Survey submission dates: 12/19/21 - 8/15/25

PLEASE UPLOAD PHOTOS OR VIDEOS OF MANATEE(S) ...

is not blank

Add expression

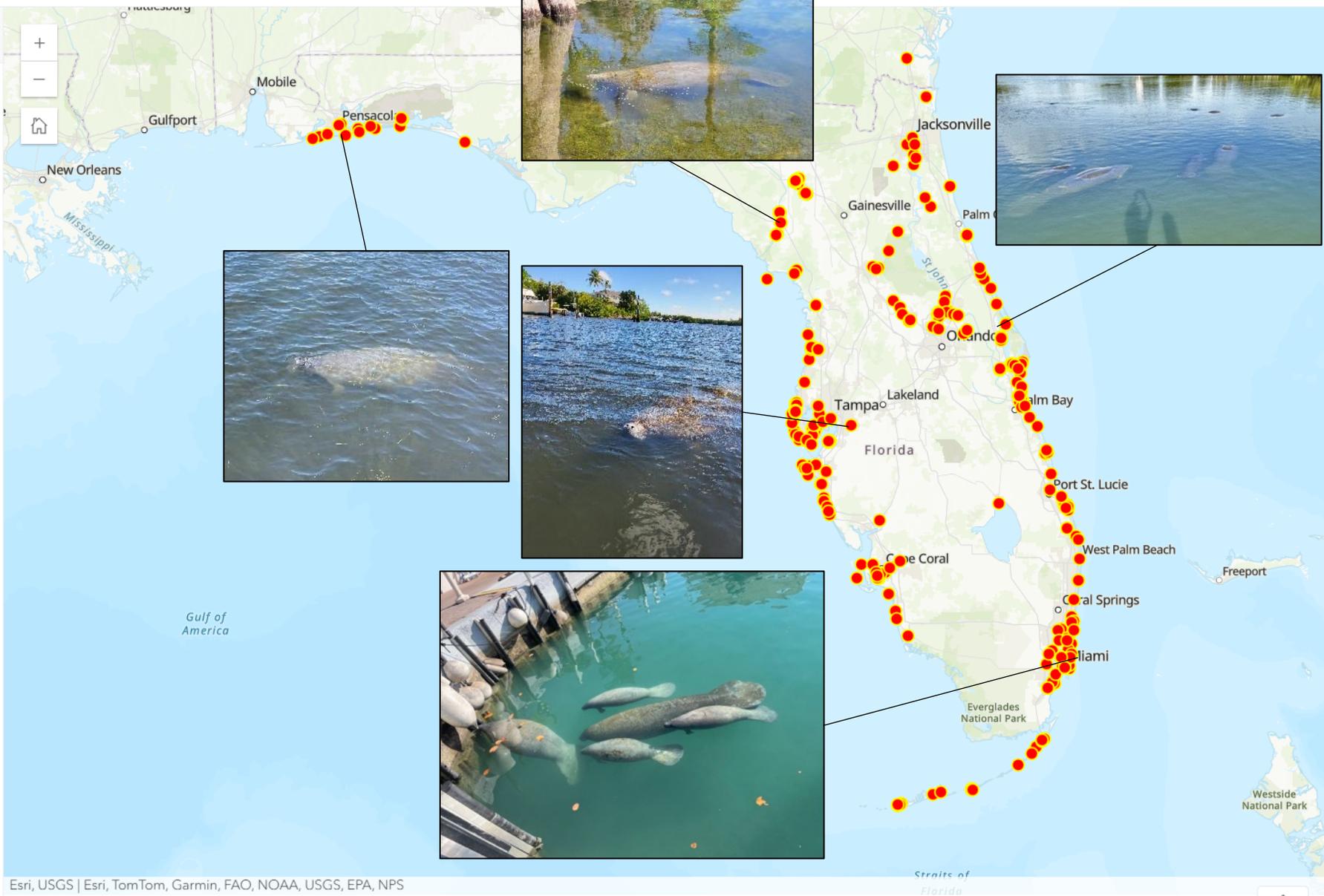
Add group



Sighting in FL Panhandle.

Apply and zoom to

Apply



Manatee Stewardship



About Guardian Guides

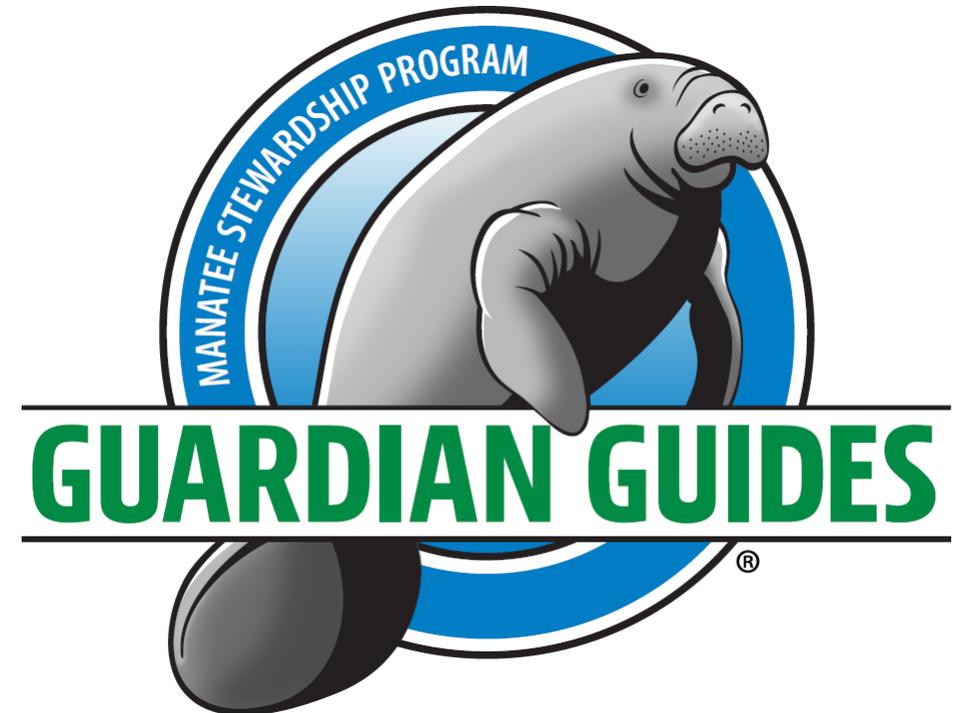
Guardian Guides is Save the Manatee Club's Manatee Stewardship Program for Tour Operators and their Staff.

Background:

- Originally developed to encourage best manatee viewing practices in Crystal River

The program:

- Voluntary recognition and certification.
- Consists of principals that guides must follow
- Goal is to eliminate disturbance to manatees from commercial manatee-viewing activities and promote stewardship and education of manatees and their aquatic ecosystems.



Guardian Guides – The Goal

To reduce / eliminate harassment of manatees from wildlife viewing activities through education.

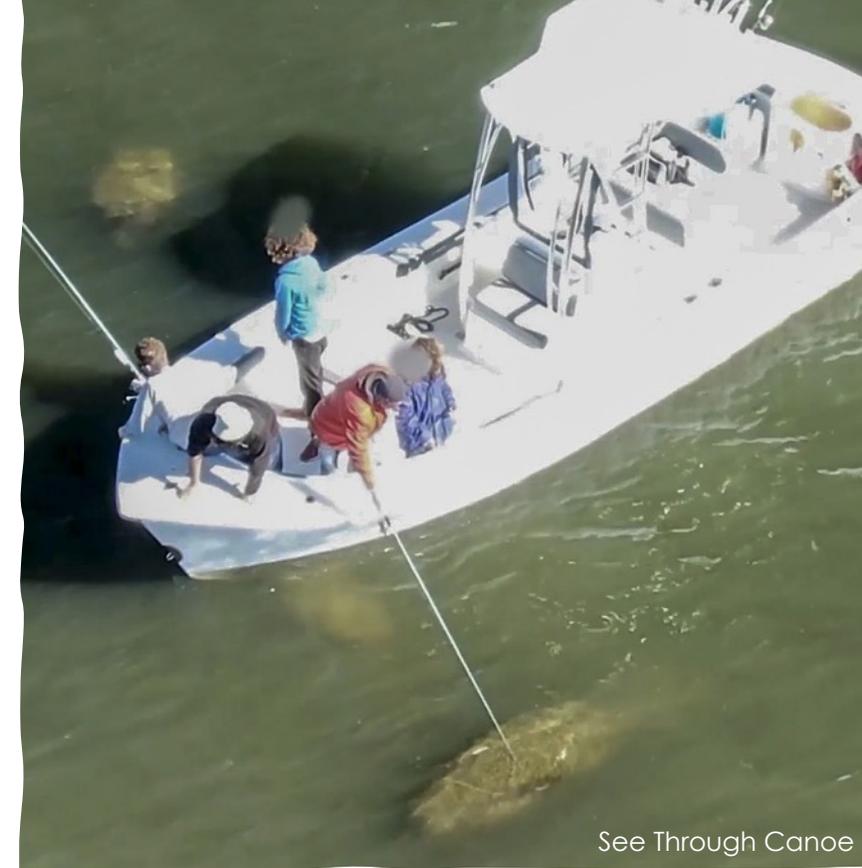
What is 'harassment'?

Defined Under the Federal Marine Mammal Protection Act (MMPA) as:

- Any act that has the **potential to injure** a marine mammal or marine mammal stock in the wild OR
- Acts that **disturb** (but not injure) a mammal by disrupting behavioral patterns such as migration, breathing, nursing, breeding, feeding, or sheltering.

This includes feeding & watering manatees.

Under the MMPA, harassment of manatees is ILLEGAL.



See Through Canoe



Why is harassment harmful?

- Everything a manatee does – swimming, feeding, resting – takes energy
- When we disrupt these natural behaviors, we are harming them
 - During winter, manatees need to keep warm. If we cause them to leave a warm water area, this is detrimental to their health
 - Human behavior can cause a mother and calf to be separated, and they may not reunite
- When we feed, water or touch manatees, we are teaching them that humans aren't a threat – and we ARE!
- Over time, they may lose their natural fear of people or boats, making them more likely to get hit
- Even if a manatee seems to like being touched, we must keep in mind what's best for them.



How do we prevent harassment?

Proper Wildlife Viewing – Passive Observation

- The best method for wildlife viewing is a ‘hands off’ method – passive observation
- Passive observation – watching wildlife from a distance, thereby allowing them to continue their natural behaviors without disturbance
- Why passive observation:
 - Doesn’t disturb the animal – allows them to continue biologically necessary behavior (feeding, resting, drinking)
 - No additional stress to animal
 - Reduces likelihood of separating mother and calf pair
 - Doesn’t habituate manatees to people, so less likely for boater interactions
- Also referred to as ‘Manatee Manners’



What does 'Passive Observation' look like?

- View manatees from a distance and quietly.
 - Distance: Stay 2 kayak lengths away, if possible
 - Quietly: whisper, reduce splashing (manatees can hear you)
- Do not approach, surround or paddle over manatees.
- If you see a manatee in the distance, stop paddling, pull paddles out of the water, and wait to see where the animal is going
 - If it is traveling by/under you, wait for the animal to pass you (paddles up)
 - If it is resting / feeding, give plenty of space when passing
- If a manatee approaches you, stop paddling, and wait for them to pass; do not interact with the animal
- If a manatee responds to your presence, you are too close!
- And remember – look but don't touch!





Proper Recreational Behavior

Paddling:

- Stay in paddle craft
- Do not anchor over grass beds
- Do not push paddle craft onto shoreline (causes erosion)

Swimming/ Scuba Diving:

- Only swim within marked areas
- Keep feet off the bottom – avoid trampling vegetation + stirring up sediments

Motorboating:

- Stay in deepest parts of channel
- Raise motor in shallow water
- Turn off propellor when near people or wildlife
- Mushroom anchor vs traditional

How to Encourage Stewardship

- Explain 'passive observation', 'viewing from a distance' and 'manatee manners' during your pre-tour orientation talk and throughout the tour.
- Model good behavior.
- Speak quietly when encountering manatees.
- Help your paddlers feel calm – people get scared when large creatures are near them in the water.
- If you take photos for your clients, use zoom, and encourage them not to exhibit wrong behavior just for the photos.
- Create responsible social media posts. Avoid photos of people touching or coming too close to a manatee.
- Be a voice for manatees and educate people on best manatee viewing practices.



SMC's Manatee Sighting Form

If you see a healthy manatee, you can report it via our sighting form!

- Time
- Date
- Location
- # of animals
- Manatee Activity



Do NOT use this form to report sick, injured or orphaned manatees!

A screenshot of the 'REPORT MANATEE SIGHTINGS' web form. The form is titled 'MANATEE SIGHTING FORM' and includes fields for 'DATE AND TIME OF SIGHTING*' with input boxes for '5/12/2022' and '02:31 PM'. Below this is the 'LOCATION OF SIGHTING*' section, which includes instructions and a numbered list of steps for recording the location. At the bottom of the form is a map interface with a search bar and a world map showing continents. A tip on the map reads: 'Tip: This question will try to use your location. Press to continue.'



Report a Manatee Sighting

- Report a sick or injured manatee in Florida
- Report a manatee sighting outside of Florida
- Report a healthy manatee sighting 



Report Healthy Manatee Sightings

Use our Manatee Sighting Form if you see a manatee along a river, estuary, canal, or coastal area in the southeastern U.S. Your sightings can help provide valuable information to researchers who are tracking manatees. When you spot a manatee, please fill out our simple electronic form below with details about what you observed. We welcome any photos or videos to accompany the form.

If you have any difficulty filling the form out below, you can [access a full-page version here](#).

REPORT MANATEE SIGHTINGS

When you spot a manatee, please fill out our simple electronic form below. We welcome any photos or videos to accompany the form.

Your sighting information is shared with our partners for possible inclusion in the statewide Manatee Individual Photoidentification database (MIPS) and may be used to help identify manatees and track their movement. We appreciate your help with this important information!

Please do not use this form to report injured manatees. Report sick, injured, orphaned, and dead manatees immediately to the Florida Fish and Wildlife Conservation Commission at 1-888-404-3922. Click the following link to [get more info on reporting injured manatees](#).

If you are reporting a manatee sighting outside of Florida, [please click the following link to get your local agency's contact information](#).

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NUMBER OF ADULT MANATEES PRESENT*

NUMBER OF MANATEE CALVES PRESENT*

If you see a manatee calf or small manatee traveling alone, immediately call the to the Florida Fish and Wildlife Conservation Commission Wildlife Hotline at 1-888-404-3922, as the manatee may be orphaned and in need of rescue.

MANATEE ACTIVITY (CHECK ALL THAT APPLY)*

- Resting/Sleeping
- Feeding
- Drinking (such as from a drain or hose)
- Nursing (mothers nurse calves from behind their flippers)
- Traveling/Swimming
- Mating or Cavorting (multiple manatees in a group, rolling around)
- Other

WERE YOU ABLE TO GET PHOTOS/VIDEO?

Yes

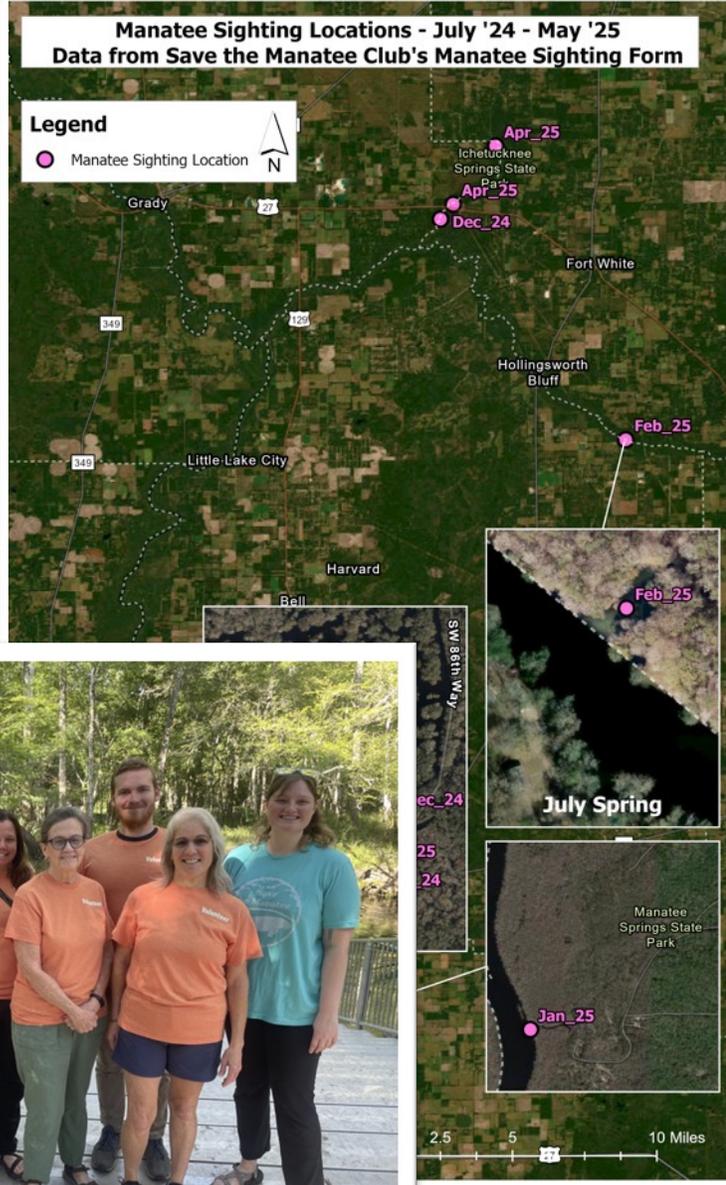
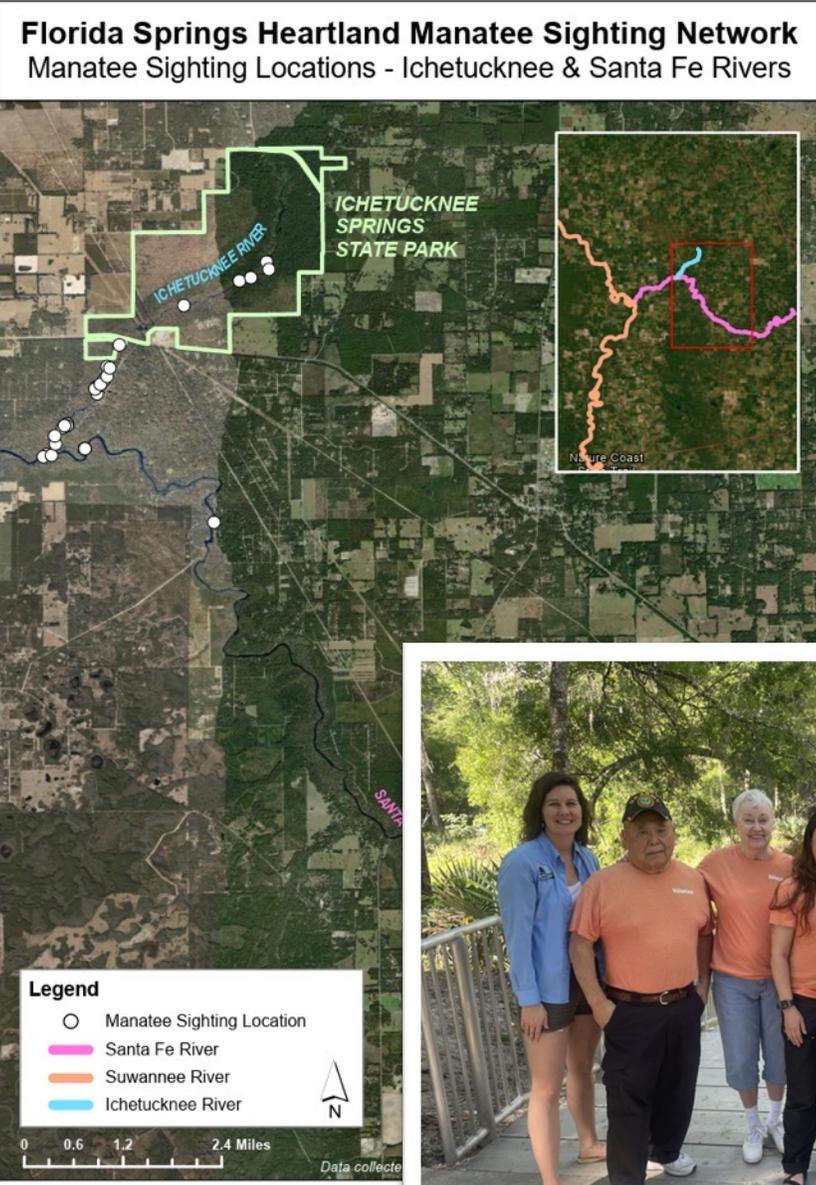
No

IF THE MANATEES HAD DISTINGUISHING MARKINGS, PLEASE DESCRIBE THEM.

Distinguishing markings include boat scars & tail notches.

Back Next

Collaborations & Data Sharing:



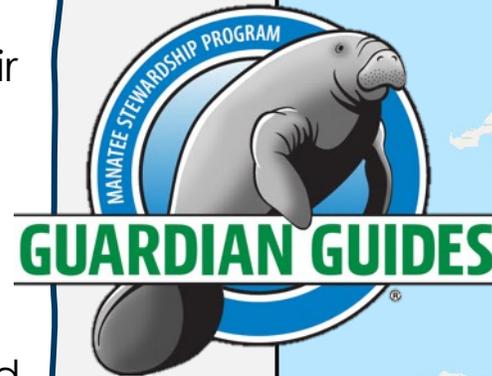
Guardian Guides Certification Training Program

Save the Manatee Club's free Manatee Stewardship Program for Tour Operators and their staff.

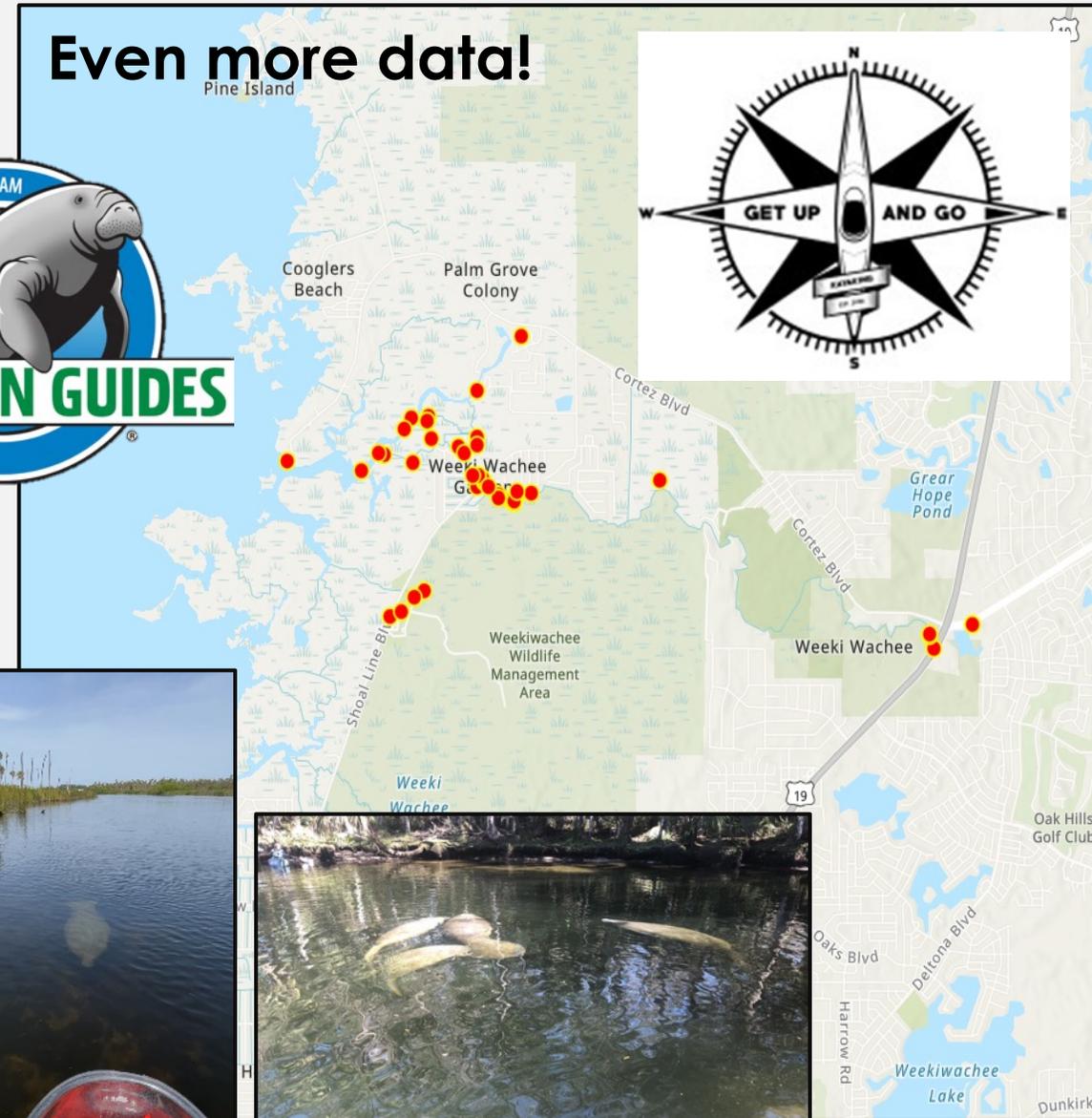
Voluntary recognition and certification.

Consists of principals that guides must follow

Goal is to eliminate disturbance to manatees from commercial manatee-viewing activities and promote stewardship and education of manatees and their aquatic ecosystems.



Even more data!



How to Spot a Manatee

- Wear polarized sunglasses.
- Look for snouts, backs, tails, flippers, or manatee footprints.
- Listen for manatee breaths.
- Look out for tracking devices.



How to Spot Sick & Injured Manatees

Signs of sick/ injured/ orphaned manatees include:

- Animal is floating high in the water
- Unable to swim straight or go down
- Fresh wounds (pink)
- Rapid breathing (<once per minute)
- Cold stress – lethargic, skinny, lesions
- Stranded, small calf alone



How to Report a Distressed/Dead Manatee

- Call the FWC hotline at **1-888-404-3922**
- If possible, stay with the manatee
- Measure its respiration – if breathing every 30 seconds – 1 minute something might be wrong
- If possible, take a photo/video (without disturbing the manatee)



How You Can Help

- Purchase a 'Save the Manatee' license plate
- Donate to the [Manatee Rehabilitation and Rescue Partnership \(MRP\)](#)
- Donate to Save the Manatee Club/ [Adopt a Manatee](#) and become a member
- Order [free materials](#) from SMC savethemanatee.org/resources
- Sign up for our [newsletter & Action Alerts](#): savethemanatee.org/signup
- [Volunteer](#) with local groups – beach clean ups, habitat restoration
- Send us your [manatee sightings!](#)



THANK YOU!



Tiare 'TJ' Fridrich, MPS

Manatee Biologist

E: tfridrich@savethemanatee.org

SMC Main Office: 407-539-0990