



Guardian Guides Program

Save the Manatee Club

Ally Greco, Director of Communications and Outreach

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.



About Guardian Guides

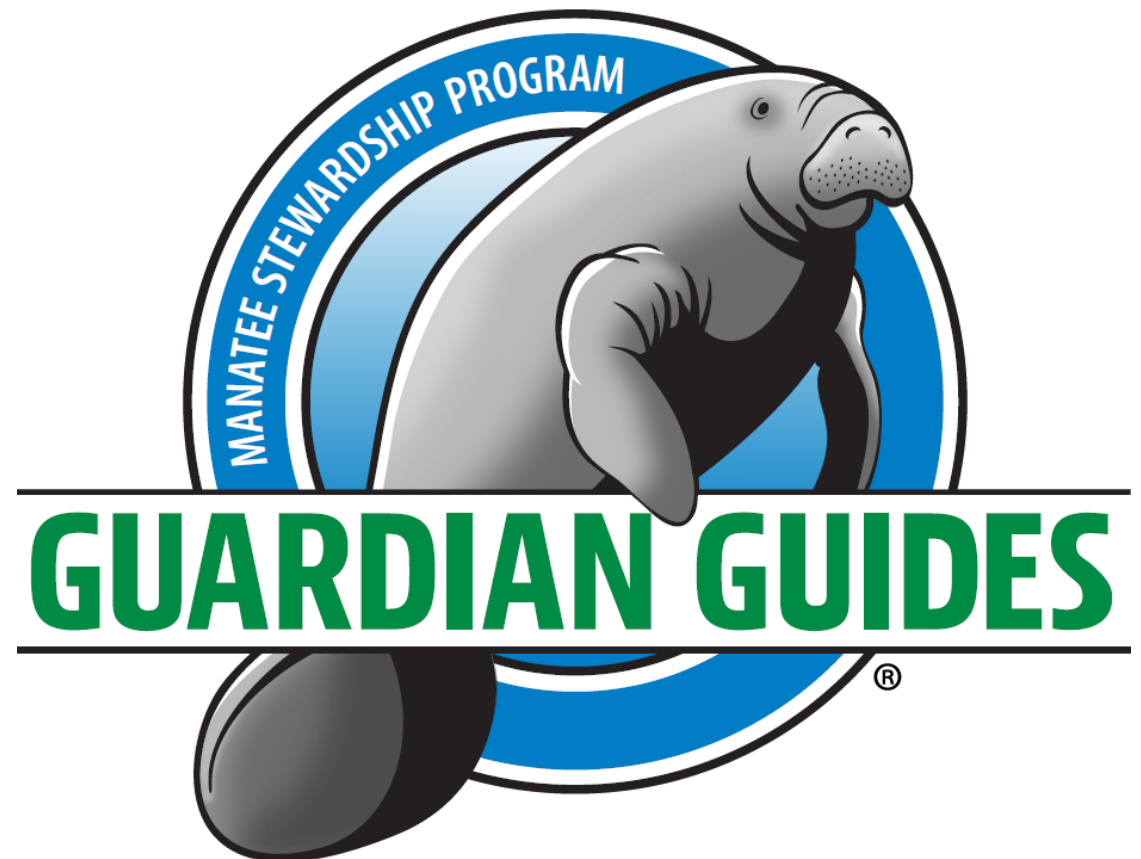
Guardian Guides is Save the Manatee Club's Manatee Stewardship Program for Tour Operators and their Staff.

Background:

- Originally developed for swim-with-manatee tour operators in Crystal River.
- Now available for tour operators around Florida including paddling tours.

The program:

- Voluntary recognition and certification.
- Consists of 5 principles that participants 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.



About Me



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FLORIDA



This Presentation



**Manatee
Facts**

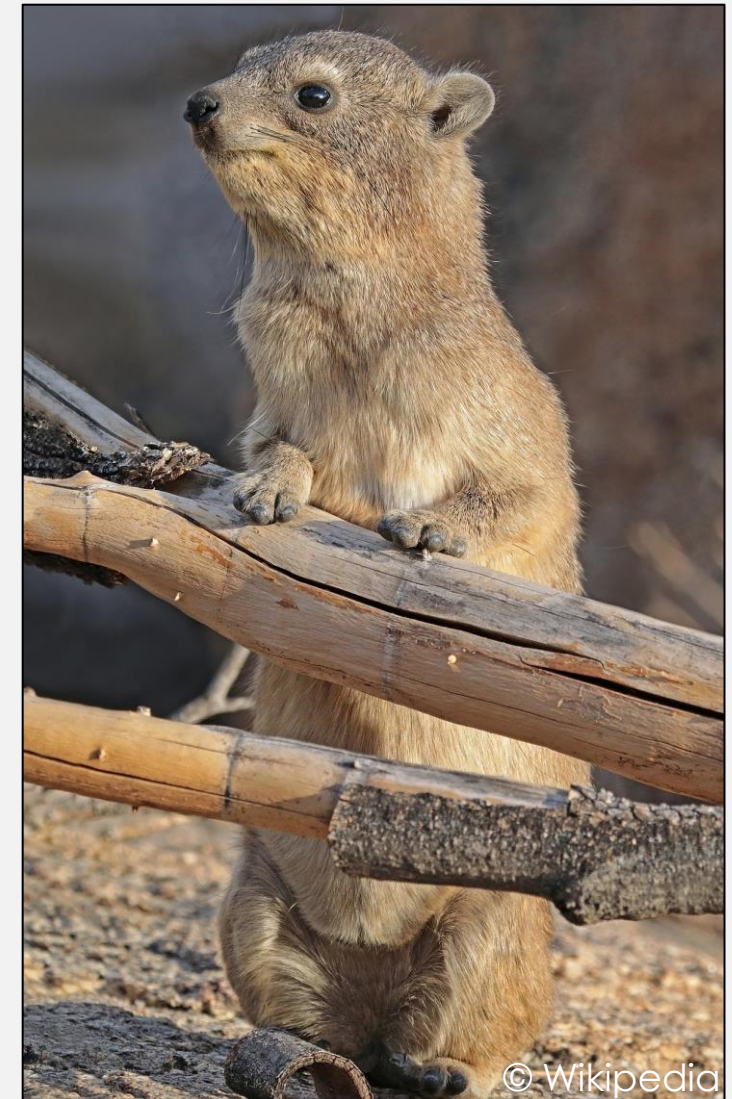
**Manatee
Manners**

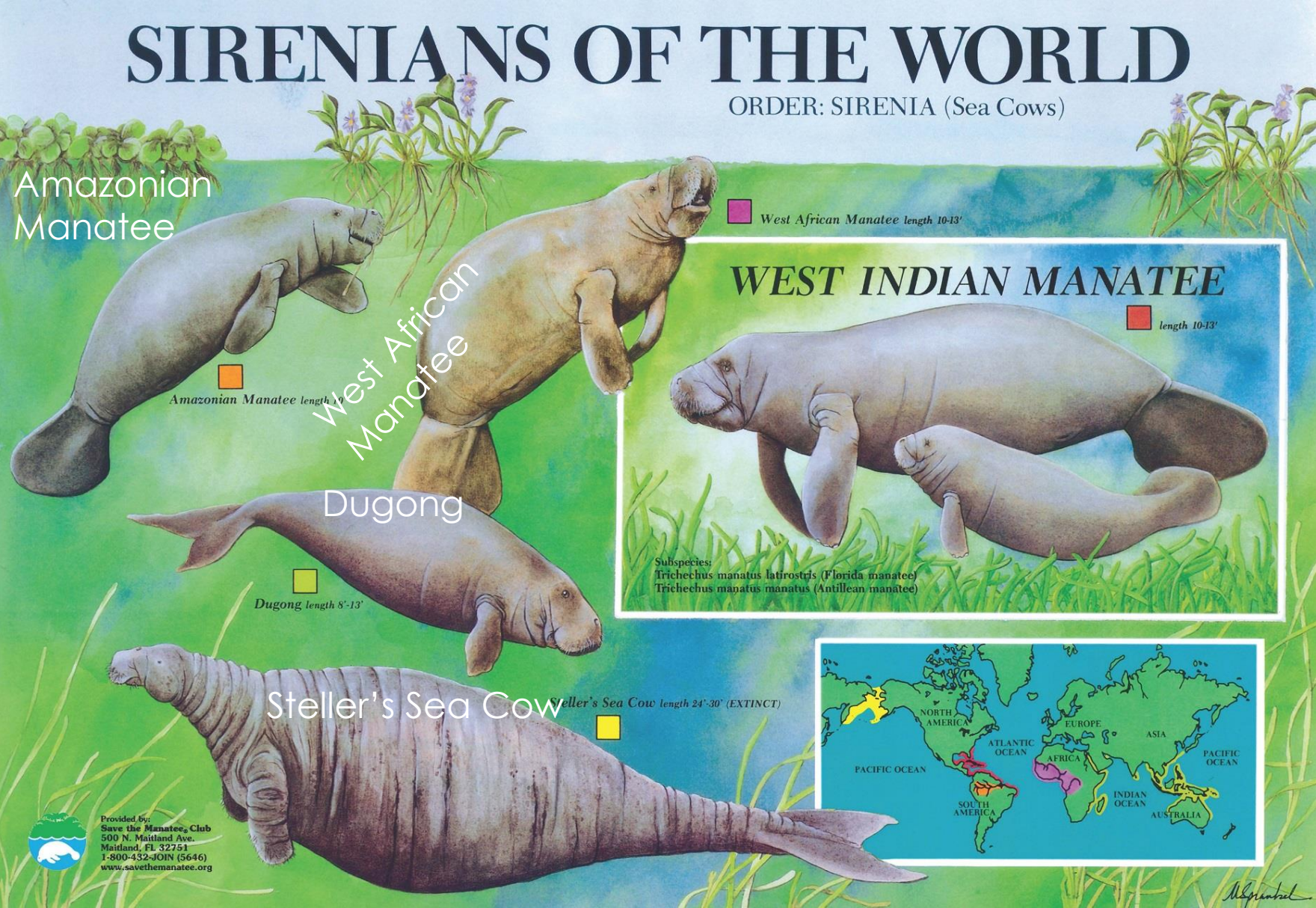
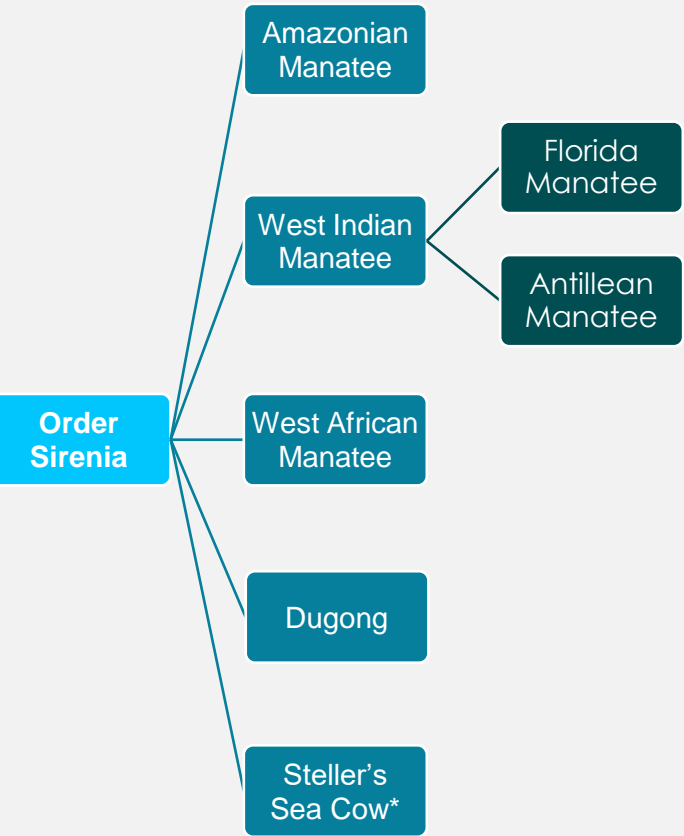
**Being a
Guardian
Guide**

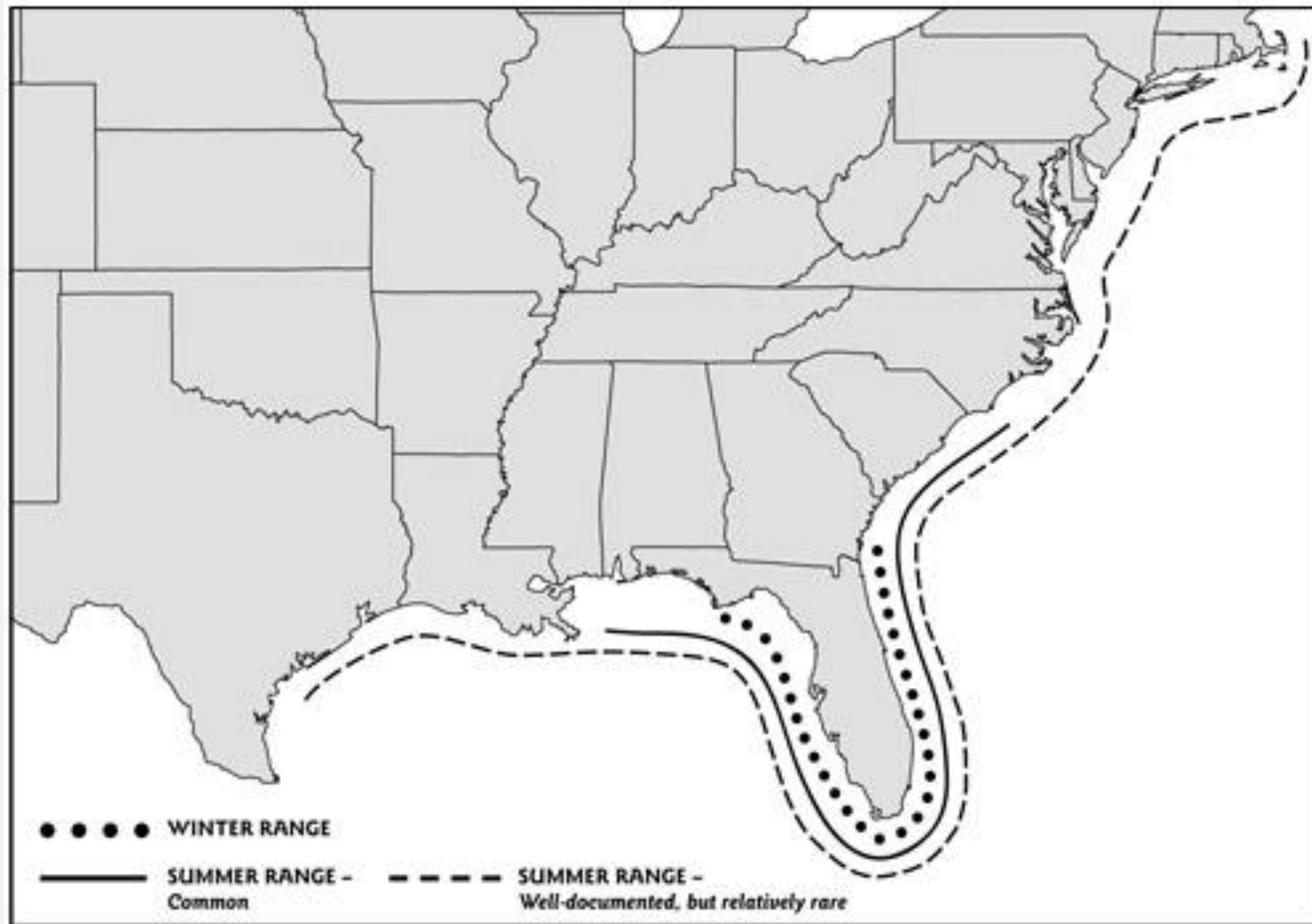
Manatee Facts



Relatives to the Manatee







Habitat

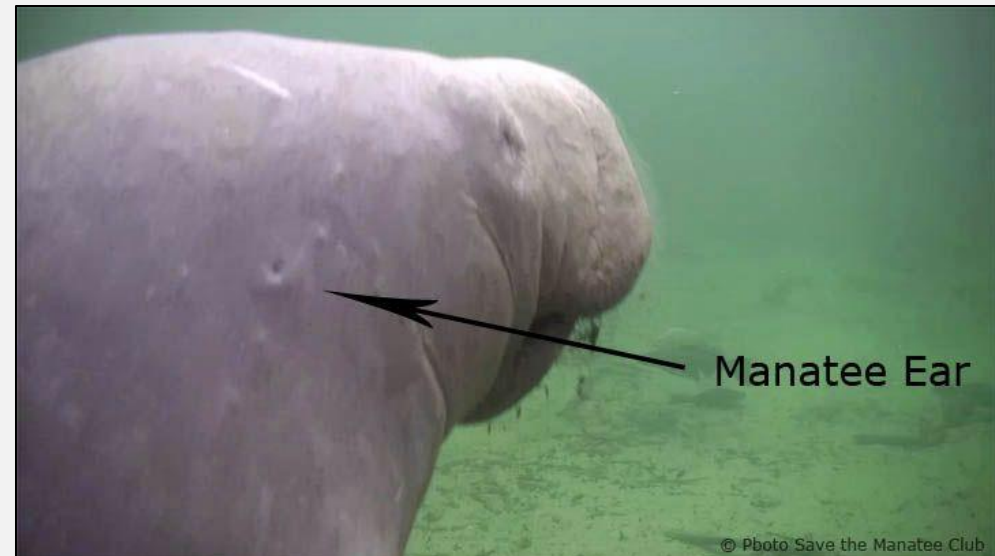


©Walker Stanberry

- Mostly found in shallow, slow-moving bodies of water.
 - Rivers, estuaries, saltwater bays, coastal areas.
 - Can live in fresh, brackish, or salt water.
- Prefer shallow waters where they feed on aquatic vegetation.
- Manatees cannot tolerate temperature below 68 degrees for long periods of time.
- Protected warm-water sanctuaries are critical for their long-term survival.
- Winter gatherings = “aggregations”

Senses

- Tiny tactile hairs called vibrissae cover their entire body.
 - 3,000 hairs on their body; 2,000 hairs on their nose.
- Small eyes – can see better at a distance.
 - Dichromatic vision. Can see blue, green but not red.
- Ear = tiny hole. Can hear high-pitched sounds well (squeaks, squeals).
- Communicate with each other especially mom and calf.



Breathing

- Manatees breathe air.
 - Usually come up to breathe every 3-5 minutes.
 - A resting manatee can hold its breath as long as 20 minutes.
 - An active manatee might come up for air every 30 seconds.
 - Less than 30 seconds – may be in distress.
- Come up to breathe without fully waking up.



Diet

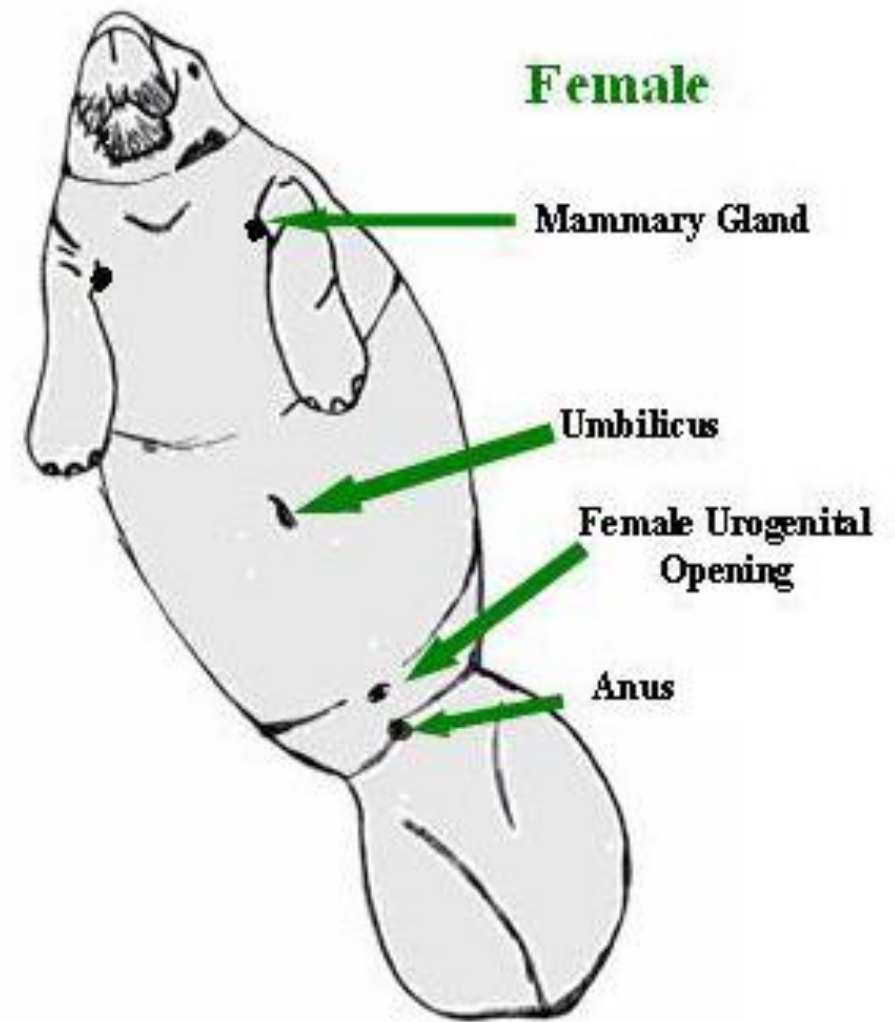
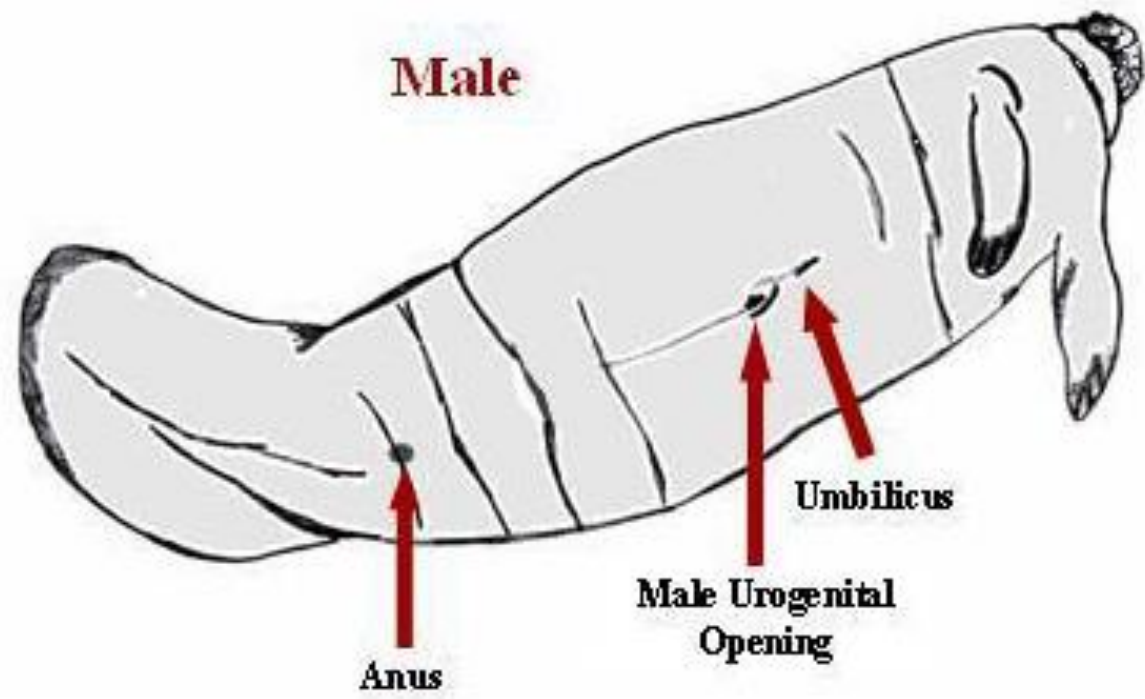
- Herbivores.
 - Eat all kinds of aquatic vegetation – floating, submerged, emergent.
 - Seagrasses, plants, branches.
 - May inadvertently ingest small animals like snails while feeding.
- Can consume 10-15% of body weight in vegetation daily. 6-8 hours a day feeding, 2-12 hours a day resting.
- Gastrointestinal tract ~20% of body weight; produces heat during digestion.
- Importance of never giving a wild manatee food.



Manatee Calves

- Females are sexually mature about 5 years old.
- Single female followed by group of 12+ males, forming a mating herd.
- Females are pregnant for about 1 year; have one calf every 2-5 years.
- Nurse their young for 1-2 years.
- Manatees capable of living more than 60 years but threats in the wild shorten their lifespan.





Manatee Protection

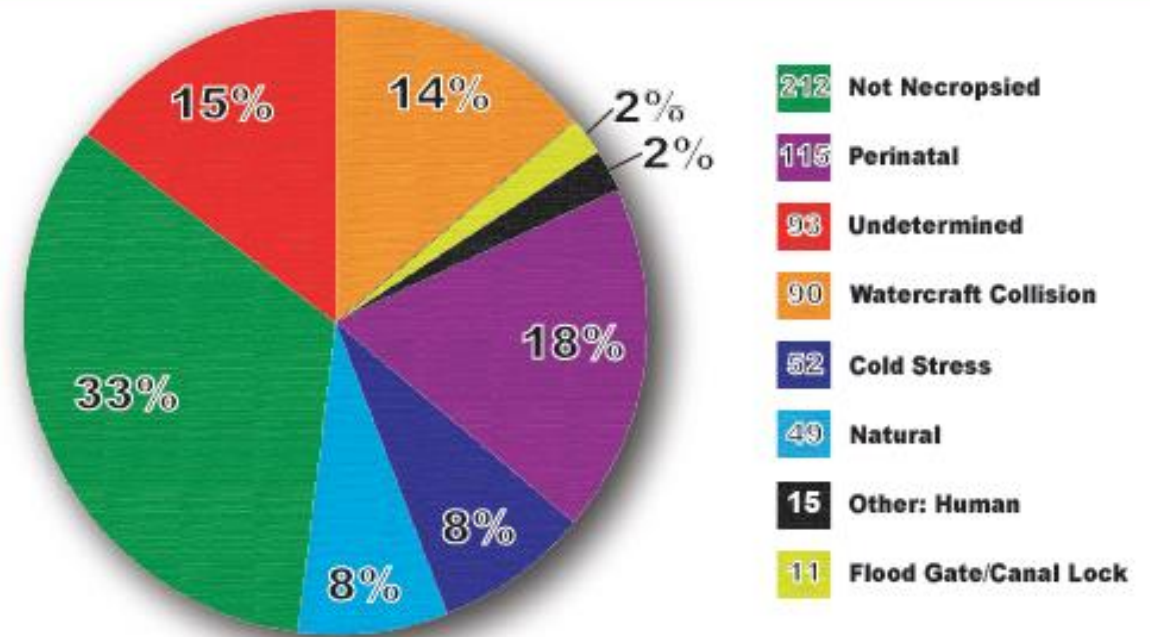
- **International:**
 - IUCN World Conservation Union – Vulnerable.
- **Federal:**
 - Marine Mammal Protection Act – 1972.
 - Prohibits the “taking” of any marine mammal species in U.S. waters. The term “take” means to harass, hunt, capture, kill, or attempt to harass, hunt, capture, or kill any marine mammal.
 - Endangered Species Act – 1973 – Threatened.
- **State:**
 - Florida Manatee Sanctuary Act of 1978.
- Violations of these state or federal laws could result in heavy fines or imprisonment.



2020 Manatee Mortality Statistics

637 Confirmed Deaths

2019 Minimum Estimated Number
of Manatees in Florida: 5,733*



Mortality and Population Data Courtesy of the Florida Fish and Wildlife Conservation Commission

Natural Threats



- **Cold Stress**

- Experience symptoms similar to frostbite or hypothermia if exposed to cold temperatures for prolonged periods of time.
- Become lethargic, malnourished and emaciated.
- White lesions, "Peanut head".

- **Red Tide Algae**

- Toxic algae that acts as a neurotoxin manatees.
- Can result in drowning.
- Can occur naturally but human-related pollution causes it to bloom excessively.

- **No significant natural predators.**

Boats



- **Largest known human-related cause of manatee deaths.**
- Characteristics of manatees make them vulnerable to collisions and injuries by boats.
- Propellers and blunt force trauma (more deadly).
 - Propeller guards would be no substitution for slow and idle speed zones.
- Preventable with increased awareness, education, regulations, and enforcement.

Trash



Photo © Wayne Hartley, SMC

- Entangled by monofilament fishing line, crab traps, and other debris.
- Ingesting debris that is hidden in seagrass beds. They feel “full” and stop eating.
- Pollution can also kill the plants that manatees eat.

2020 – 2021 Unusual Mortality Event (UME)



Photo courtesy Philip Stasik

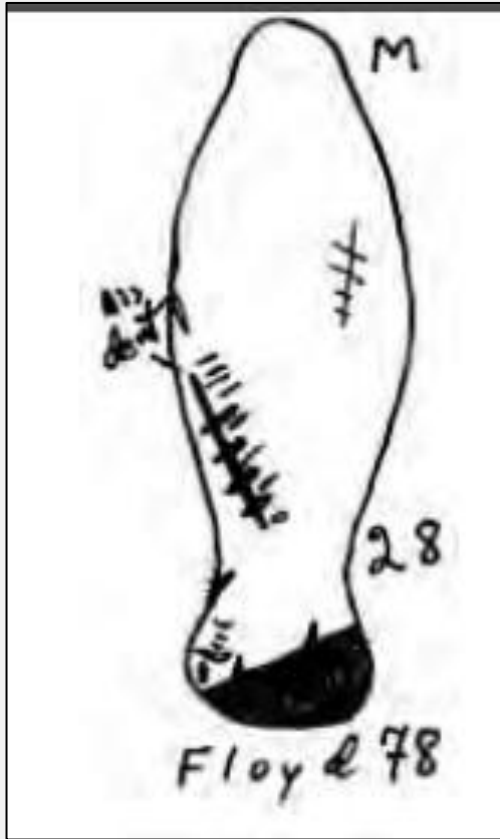
- Harmful Algal Blooms (HABs) in the Indian River Lagoon killing seagrasses. HABs due to human-caused pollution over many years.
- Wintering manatees at power plants along the IRL had no seagrass nearby to eat. Choice: freeze or starve? They chose to starve.
- Restore seagrasses – planting, filters, reducing pollution.
- Working with agencies to prioritize this restoration. Contingency plan for this winter + rescue plans.

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.

Research



©Wayne Hartley, Save the Manatee Club

- Many groups working together.
 - SMC, USGS Sirenia Project, FWC, Different zoos and aquariums.
- Studying:
 - Photo identification, population monitoring, tracking, and more.
 - Genealogies going back to the early 1970s.
 - Aerial synoptic surveys – population estimates.

Rescue



- Manatee Rescue and Rehabilitation Partnership (MRP)
 - Government agencies, zoos, aquariums, museums, SMC.
- Rescue injured, sick, orphaned and stranded manatees.
 - Pink/red wounds, deep cuts.
 - Tilting to one side, unable to submerge, trouble breathing.
 - Calf by itself with no adults.
 - Cold-stressed.
 - Entangled.
 - Stranded – do not push back into the water.
- Dead manatees should be reported to FWC.

Rehabilitation, Release, and Tracking



- USFWS deems them ready for release. Non-releasable may serve as “ambassadors” for their species.
- Tracking devices – do not touch.
- Report manatees with tracking devices to FWC.

Manatee Manners



Why Is It Wrong to Touch or Disturb Manatees?

- They may lose their natural fear of people or boats. They could leave a warm-water area and be put in harm's way.
- Even if they seem to like it, they may just be “tamed” and we should keep in mind what's best for them.
- If a mother and calf get separated, they may not reunite. Calves need mothers for up to 2 years to feed and learn survival skills.

Instead:

- Practice “passive observation” and observe manatees from above water and at a distance.
- By quietly observing them, you can get a rare opportunity to see their unique behavior.

Why Is It Wrong to Give Food or Water to Manatees?

- They may lose their natural fear of people or boats as they associate them with handouts.
- May seem harmless but not all people have good intentions.
- They may be given items not part of their natural diet.
- They are wild animals and can find food or water on their own.



For Boaters

- Wear polarized sunglasses.
- Stay in deep water channels and avoid seagrass beds and shallow areas.
- Look for snouts, backs, tails, flippers, or manatee footprints.
- Remain a minimum of 50 feet away from manatees and cut your motor if you wish to observe them.
- Obey posted speed zones.
- Familiarize yourself with manatee sanctuaries and speed zones.



For Swimmers

- Do not touch, disturb, pet, ride, surround or chase manatees. Don't touch or poke them with any object.
- Do not approach resting or feeding manatees.
- Use personal flotation devices to stay afloat and avoid kicking or disturbing manatees.
- Avoid excessive noise and splashing.
- Do not enter areas designated as "NO ENTRY – MANATEE REFUGE".
- If a manatee responds to your presence, you are too close.
- Importance of passive observation.
- Warm-water refuges are vital to manatee survival.



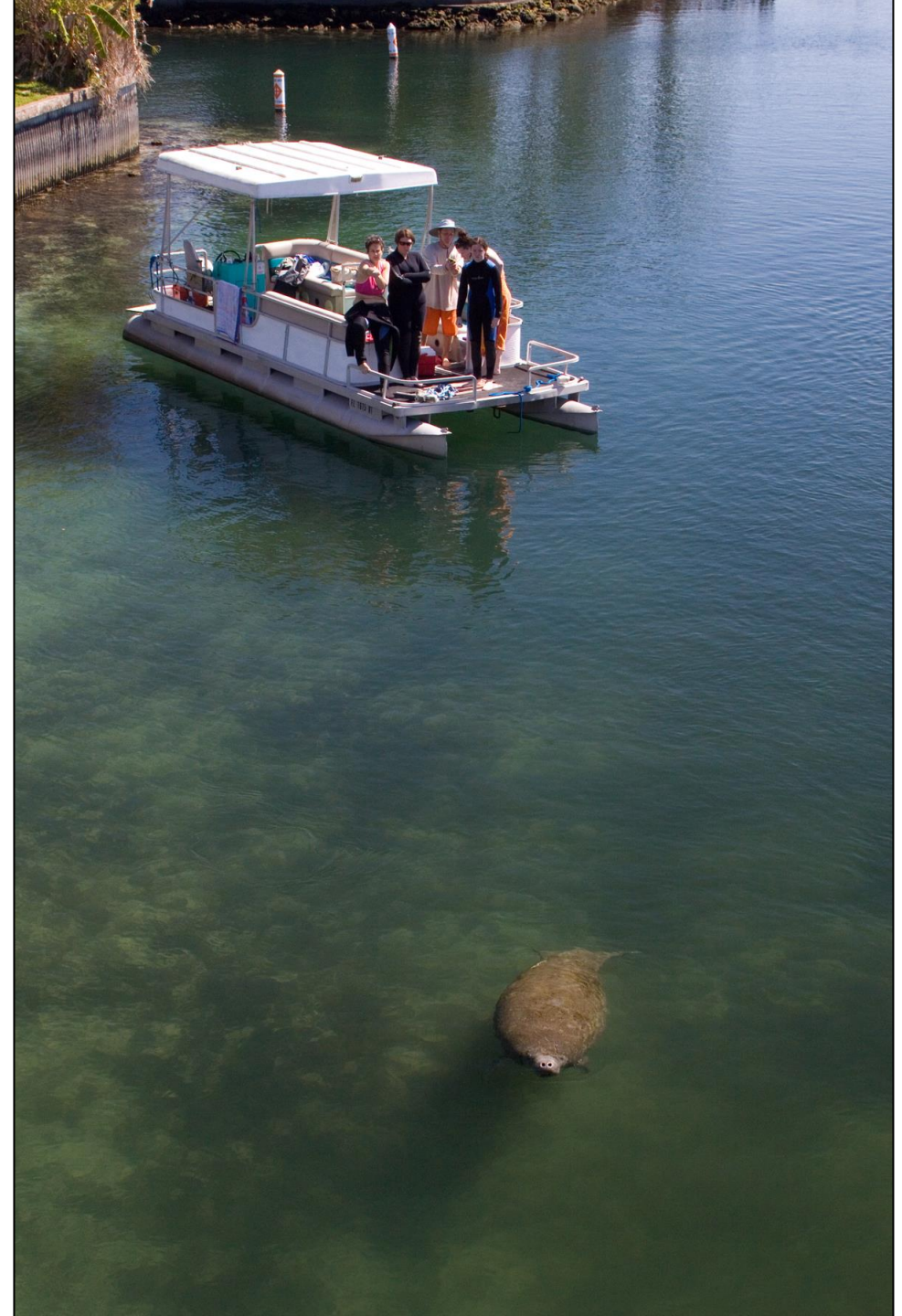
For Paddlers

- Do not approach, surround or paddle over manatees. Manatees who frequently encounter paddlers can lose their natural caution around all boats.
- Try to back away and keep your distance – 2 kayak lengths.
- Use surface paddling.
- Manatees are large enough to flip your vessel.
- Have your guests set their eyes on a manatee first before approaching closer.
- Approach upriver/into wind so you can drift back or back away easily.



Your Role as a Guide

- Explain these rules during your pre-tour orientation talk and throughout the tour.
- Model good behavior.
- Speak quietly when encountering manatees.
- Help your clients feel calm – people get scared when large creatures are near them in the water.
- Offer to take photos for your clients, use zoom, and encourage them not to exhibit wrong behavior just for the photos.
- Responsible social media posts.
- Be a voice for manatees and educate.



The “Authority of the Resource”

- Communication concept used by park rangers, law enforcement and guides. Part of Leave No Trace.
- Technique developed by Dr. George Wallace in 1990, professor at Colorado State University.
- Nature has an authority of its own.
- Give people the benefit of the doubt and incorporate an educational message into your interactions that focuses on the resource.
- Be friendly, use objective statements and non-confrontational body language, offer alternatives.
- <https://lnt.org/authority-of-the-resource/>

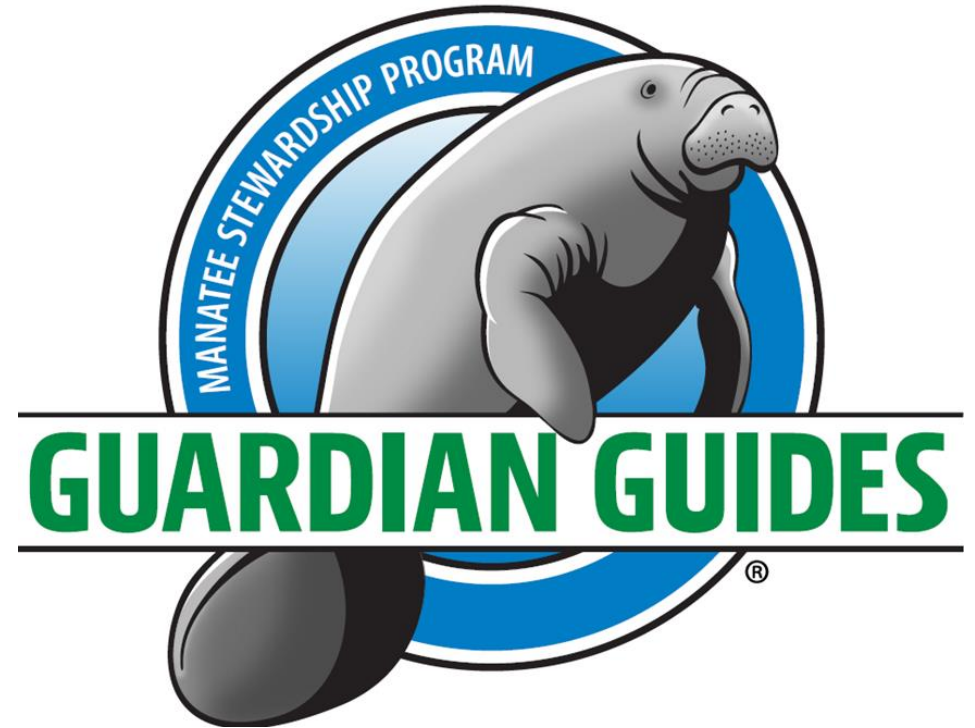


Being a Guardian Guide



Why Are We Becoming Certified?

- Earn recognition with the world's only certification for responsible manatee viewing.
- Provide world-class experiences for the guests through education and stewardship.
- Follow scientifically-informed guidelines and enhance customer satisfaction. Tourists want to travel sustainably. Guardian Guides stand out from other tour options.
- Listing on guardianguides.org; Referrals by SMC; Access to resources and continuing education.
- Help protect the very activities and resources on which your tours thrive: viewing imperiled manatees and appreciating their aquatic habitats.



Principles

In addition to following local, state, and federal laws that protect manatees and their aquatic habitat:

Principle #1: Prioritize education for guests and guides to create a true ecotourism experience.

- Complete initial training and annual check-in.
- Guides will educate guests about manatees and the threats they face on tours.
- Guides provide a briefing on how to responsibly view manatees and avoid harassment during tour orientation.
- Ads and social media posts only show activities following the GG principles – eliminate expectations of close interaction that could disturb manatees.

Principle #2: Vary times & locations of tours and prevent over-crowding to allow manatees the availability to rest undisturbed.

- Allow manatees enhanced undisturbed time at select springs.
- Prevent over-crowding & help create a high-quality experience for visitors while avoiding manatee disturbance.

Principle #3: Look, No Hands! No touching or disturbing manatees. Responsible ecotourism requires nature to remain in control of all experiences.

Swimming:

- Guides Get Wet. 12 guests to 1 guide.
- All swimmers to wear a wetsuit & utilize a flotation device.
- Manatees may choose to approach & make contact with swimmers. Swimmers should remain still in the water & observe manatees passively, not reach out to touch them.
- Swimmers will try to maintain 1 human body length away from manatees.
- No ropes to attract manatees.

Paddling:

- Paddlers and guides will not approach, paddle over, or chase manatees and practice passive observation by calmly observing manatees from a distance.
- Try to maintain 2 kayak length's away from manatees.
- Use surface paddling to gently paddle near manatees.
- Do not touch manatees with their bodies or paddles and will not get out of their vessels to swim with manatees.
- Rental outfitters will educate their guests on these practices prior to launch in whatever way they deem effective.

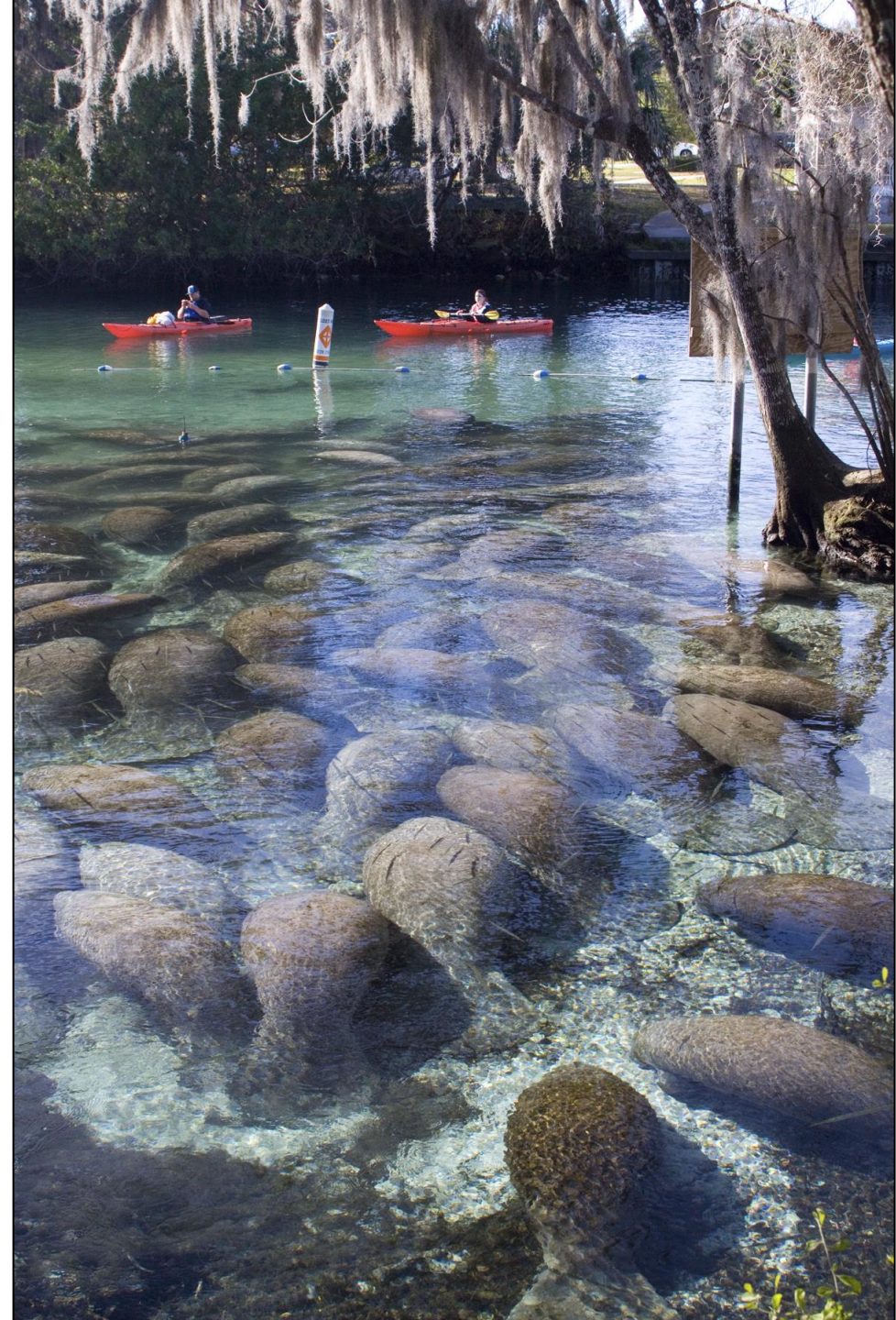


Principle #4: Foster Stewardship

- Choose Either:
- Complete a certain amount of hours of annual service by your business for manatee and aquatic habitat stewardship.
 - 25 hours per boat per business (for boat and swim tours), or 1 hour per paddlecraft per business (for paddling tours/rentals).
- Reserve \$1 from every guest to donate towards manatee and aquatic habitat conservation efforts of your choice.

Maintaining Certification

- Receive initial training workshop (today).
- Initial on-site evaluation (tour demo) to ensure program compliance.
- Annual check-in and training for new guides.
- Possibility of “mystery shoppers.”



Resources

- More resources available at guardianguides.org.
- Quick links to SMC, FWC, USFWS, MRP, other orgs.
- Research articles.
- Info from similar organizations.
- This presentation and notes.



MANATEES IN THE NEWS

Ice Age Manatees May Have Called Texas Home

UT News

October 4, 2020



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.
- Why not?





THANK YOU