

# VELADOR

Science-Based Sea Turtle Conservation Since 1959

Issue 1, 2023

## STC leads policy battles to protect Florida's sea turtles and nesting beaches



Loggerhead turtle nesting in the Archie Carr National Wildlife Refuge. Photo credit: Rachel Smith.

During 2023, the Florida Legislature will be in session from early March until May 5. Sea Turtle Conservancy (STC) is actively engaged with numerous proposed bills and policy changes that will impact sea turtles and their habitats. At various times, STC will call on its supporters to contact legislators to voice either support or opposition to specific policies. Outside the Legislative process, STC also is monitoring several local proposals that

will greatly impact sea turtles and their critical nesting and foraging habitats. The following are some of STC's policy priorities for 2023. Many of these policies will evolve as amendments are added, and some may move quickly through committee hearings. For up-to-date news and guidance on how to have your voice heard, visit [conserveturtles.org](http://conserveturtles.org) > Programs > Policy > Policy Priorities 2023.

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***STC supports the passage of HB 91/SB 1512 – Release of Balloons.***

The passage of these bills would close a loophole allowing countless balloons to enter our waterways and kill marine life, including sea turtles. Currently, Florida Statute 379.233 prohibits the release of ten or more balloons per day, but makes an exception for “biodegradable” balloons, which is not scientifically sound. By removing these two loopholes, as read in these bills, Florida can significantly reduce plastic debris in the marine environment and save countless marine animals.



A deceased Kemp's ridley turtle washes up, tangled in debris from balloons. Photo credit: Justin Williams.

These bills would reduce a major threat to sea turtles: the ingestion of or entanglement with released balloons and associated plastic ribbons. Although many Floridians participate in balloon releases as part of a celebration or to honor a loved one, once balloons are released, they can travel thousands of miles before landing. When a balloon bursts and lands

in the ocean, sea turtles and other marine wildlife often consume it because of its resemblance to jellyfish. Sea turtles are unable to regurgitate, so once the balloon enters the digestive tract, it can cause an impaction that can lead to death. The ribbons attached to balloons also wrap around the flippers or necks of sea turtles, inhibiting breathing, eating and swimming.

***STC supports the passage of HB 1489/SB 1686: Designation of Brevard County (FL) Barrier Island Area as Area of Critical State Concern.***

The passage of these bills would serve as a statewide recognition of the critical importance of the Brevard Barrier Island Area, which encompasses the Indian River Lagoon and the Archie Carr National Wildlife Refuge. The enacted law would provide an additional layer of state oversight limiting the adverse impacts of coastal development, reduce nutrient sources contributing to poor water quality within the Indian River Lagoon, protect shoreline and marine resources, and ensure that development is compatible with the Barrier Island Area's unique resources, particularly sea turtles.

Like many places in Florida, Brevard County's unique coastal and marine resources are under threat from overdevelopment. The southern barrier island of Brevard County represents one of the most fragile and endangered coastal ecosystems in North America and the beaches, dunes, coastal scrub, and maritime hammock areas of the barrier island ecosystem represent some of the most fragile and endangered natural upland communities in the state and nation. In particular, the Archie Carr National Wildlife Refuge hosts the largest aggregation of loggerhead sea turtles in the world,

**VELADOR {bel.a.dor}**

In Caribbean cultures, *Velador* translates as “one who stands vigil” —referring to turtle hunters who waited at night for turtles to come ashore. STC claims this title for its newsletter, and around the world STC's researchers and volunteers are replacing poachers as the new veladors. The *Velador* is published for Members and supporters of the nonprofit **Sea Turtle Conservancy**. STC is dedicated to the conservation of sea turtles through research, advocacy, education and protection of the habitats upon which they depend.

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and the Indian River Lagoon serves as important developmental habitat for a variety of species. This special designation would place restrictions on the density of development in this area, and it would solidify the State’s commitment to preventing further harm to the ecosystem.

***STC opposes SB 170 – Local Ordinances.***

The passage of this bill would require local governments, before enacting or updating new ordinances, to prepare a “business impact estimate” that would demonstrate the cost that the ordinance could impose on every business in a local government’s jurisdiction. It would allow any business to sue the local government in opposition to an ordinance, and would require the local government to stop all enforcement of the ordinance while litigation was underway. It would also allow that business, if it prevailed in litigation, to recover attorney fees from the local government. Not only would this bill have a “chilling effect” on local governments’ ability to enact laws to protect their local environment, but it would also freeze the enforcement of crucially important ordinances that protect Florida’s sea turtles from disorientation. The State of Florida leaves it to county and city



Artificial beachfront lighting is regulated through local government ordinances in Florida. SB 170 would prevent local governments from enforcing and updating their ordinances, which could lead to more sea turtle disorientations.

governments to adopt and enforce their own beachfront lighting ordinances, which regulate harmful artificial lighting during sea turtle nesting season to prevent sea turtle disorientation. This means that the responsibility of protecting Florida’s sea turtle populations (many of which are globally-important) falls on local governments and depends



STC Policy Coordinator Stacey Gallagher speaks at a recent Brevard County Legislative Delegation Meeting.

on their ability to adopt and enforce lighting ordinances. If local governments are unable to enact or strengthen their outdated ordinances, it is not an exaggeration to say that thousands of additional sea turtle hatchlings may die each year due to disorientation. In addition, if an ordinance is suspended while litigation is occurring, it would mean artificial light on that area’s beach would not be regulated, and more disorientations could occur.

***STC opposes HB 359/SB 420 - Local Comprehensive Plans.*** If a local citizen wanted to challenge a proposed change to a comprehensive plan or an existing comprehensive plan and loses, these bills would require them to pay for the developers’ or local governments’ attorney fees. This would prevent most citizens from challenging a comprehensive plan or amendment.

Local comprehensive plans are a local government’s way to set limits on growth and development within its jurisdiction. A comprehensive plan could limit development in a highly vulnerable coastal area, for example, which would protect sea turtles and their nesting habitats. If an amendment application to a comprehensive plan would result in an increase in coastal density, it could greatly impact the beach dynamics by adding additional problematic lighting, activity on the beach, and high rises. Allowing for denser development also increases the amount of impermeable structures near waterways, leading to decreased water quality, which can result in seagrass die-offs.

STC also has advocacy priorities outside of the legislative session, which include ***opposing the Brevard County Comprehensive Plan Amendment***. Most of the development along the Refuge consists of single-family homes and smaller businesses that are intertwined with publicly-owned parcels. This unique patchwork of public conservation land and relatively low-impact development has proven to be very resilient, while at the same time providing critical nesting habitat for sea turtles. The proposed amendment would allow high-rise condominiums and resorts along Brevard County’s South Beaches, which encompass the Archie Carr National Wildlife Refuge.

The Refuge, a 20.5-mile stretch of beach spanning from Melbourne Beach to Wabasso Beach, is the site of the largest aggregation of loggerhead sea turtle nesting in the world. It’s also the most important nesting area for green turtles in the United States. The Refuge saw more than 30,000 sea turtle nests in 2022 alone. By allowing denser development in this highly sensitive ecosystem, more problematic lighting, activity on the beach, and poorly managed coastal construction

could hinder the delicate balance between the sea turtle nesting population and Brevard County’s residents and visitors. Given all of the funding and effort it has taken to establish the Carr Refuge, the declining health of the Indian River Lagoon, and the impacts of recent hurricanes on highly-developed beaches – increasing residential density on this barrier island is the last thing any of us should want to see happen.


Another issue STC is monitoring includes ***Volusia County’s Coastal Construction Activities***.



Green turtle returns to the ocean after nesting in the Archie Carr Refuge. Photo credit: Betty Gonzalez.

Hurricanes Ian and Nicole struck Volusia County in quick succession in 2022, leading to severe beach erosion that has undermined thousands of coastal homes and businesses. As state law currently reads, no coastal construction activities can occur during sea turtle nesting season (May 1 – October 31). As coastal homeowners and business owners scramble to shore up their homes ahead of the 2023 hurricane season, many have cited this rule as a barrier to repairing broken sea walls or adding in other types of erosion control methods. Some have also proposed using rock revetments, or piles of rocks dumped onto the sand, as a method to stop beach erosion in front of their property.

STC supports the enforcement of coastal construction laws as they stand now, particularly restrictions on siting of seawalls and the timing of construction activities. STC supports replacing damaged seawalls that were already in place using the existing guidelines that require the placement of seawalls as “far landward as practicable.” Rock revetments extend much further onto the beach than

vertical walls, resulting in greater impacts on sea turtle nesting habitat and the natural beach system. While we understand that owners of beachfront properties impacted by coastal erosion are seeking relief, we ask Florida’s lawmakers to represent the interests of all Floridians. We believe it is in the greater interest of the State of Florida, its citizens, our property insurance market, our coastal tourism economy, and sea turtles to uphold existing laws. 

**By Stacey Gallagher**  
STC Development & Policy Coordinator

# Lighting Project Update

## STC retrofits eight high-traffic properties on Fort Lauderdale Beach

At the end of 2022, Sea Turtle Conservancy (STC) completed a two-year lighting retrofit program on Fort Lauderdale Beach, the area with the highest sea turtle disorientation rate in the United States. With funding from the National Fish and Wildlife Foundation, STC retrofitted the exterior lights on eight of Fort Lauderdale's prominent beachfront resorts, condominiums, and restaurants.

Through these retrofits, STC replaced 880 unshielded fixtures and white, full-spectrum lamps with long wavelength, shielded fixtures at lowered mounting heights. The retrofit of these properties resulted in a reduction in the amount of light (in foot candles) reaching sea turtle nesting habitat in front of retrofitted properties. STC recorded an 88.6% average decrease in light output within 25 feet of buildings, a 96.8% average decrease in light output at the toe (or base) of the primary dune where most sea turtles nest, and a 78.2% average decrease of light output on the beach.

During the busy season on Fort Lauderdale Beach, there is a possibility that thousands of visitors will be in and around coastal hotels and businesses late into the night, which factors into the lighting choices that coastal businesses make and their willingness to change. In order to successfully retrofit two coastal restaurants during this grant, STC had to carefully ensure that bartenders had adequate lighting to mix drinks, bar and restaurant patrons could see their menus, and turtle friendly lighting sufficiently lit egress areas such as stairs and walkways at night. STC employed many lighting solutions for the first time in order to achieve this delicate balance, such as utilizing downward facing shielded string lighting, lamped with long wavelength LEDs.

STC also sourced amber diode tape from a lighting manufacturer to retrofit property signs visible from the beach – a novel approach to illuminating business signs. By taking property managers' unique needs into account and researching new solutions, STC successfully persuaded them to retrofit all of their problematic lights visible from the beach. These property managers likely would not have executed



STC tinted The Westin Fort Lauderdale Beach Resort's beachfront pedestrian bridge and elevator with 15% net tint transmittance.

their grant agreement if STC was unable to find a solution for these complicated applications. Additionally, in collaboration with the City of Fort Lauderdale, STC provided funding to shield 108 beachside pedestrian street lights along State Road A1A, further reducing the amount of light reaching Fort Lauderdale Beach.

STC also addressed the threat of interior lighting during this project. For the first time, STC tinted an enclosed, glass pedestrian walkway and beachfront elevator with 15% tint transmittance as part of a property retrofit at The Westin Fort Lauderdale Beach Resort, which is in a high traffic area along Fort Lauderdale Beach. STC has learned from coastal code enforcement in the area that interior lighting is a major compliance issue on Fort Lauderdale Beach due to a lack of funding available and knowledge surrounding tint transmittance. This project provides an excellent example of what 15% tint transmittance looks like in the real world.

This project would not have been possible without close collaboration from the City of Fort Lauderdale, Broward County, Florida Fish and Wildlife Conservation Commission, Florida Department of Transportation, Florida Power and Light, and local sea turtle conservation groups. Representatives from each of these entities are actively working to reduce sea turtle disorientations on Fort Lauderdale Beach. In order for a meaningful change to occur, it will take a community-wide shift in attitudes, a renewed effort to enforce the local ordinance by code enforcement personnel, and consistent education and outreach to ensure that all local stakeholders have the tools to replace problematic lighting with turtle friendly alternatives. Through this project, STC has helped lay the groundwork to ensure that these long-term changes will occur. 🐢

# Archie Carr Refuge Update

## STC volunteers restore Archie Carr Refuge nesting habitat before nesting season

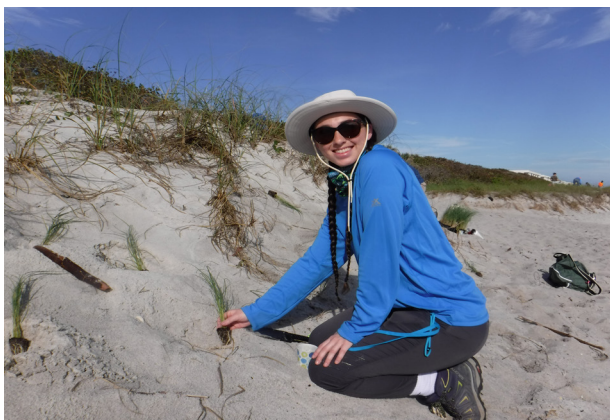
The Archie Carr Refuge is home to one of the largest loggerhead and green sea turtle nesting populations in the world. This 20.5 mile stretch of beach in Southern Brevard and Indian River Counties had 30,468 sea turtle nests in 2022. For sea turtles to continue nesting on these beaches and for their hatchlings to survive, a healthy, dark, stable beach dune is necessary. Sea oats are a critical native Florida beach dune plant that grows deep roots to help stabilize the sand dunes during extreme weather events and provides nesting habitat for sea turtles and shorebirds. For over a decade, the Sea Turtle Conservancy has mobilized community volunteers in the Archie Carr Refuge to plant sea oats to restore sea turtle nesting habitat. Volunteers have planted 54,300 sea oats with 864 volunteers donating over 2,500 hours of service to restore habitat. The 2022 hurricanes that affected the Carr Refuge, Ian and Nicole, removed approximately 390,000 cubic yards of sand from Brevard County beaches.



Visible erosion in the Carr Refuge after Hurricanes Ian and Nicole.

Emergency sand restoration projects are underway in both Brevard and Indian River counties. On February 11, 2023, STC partnered with Brevard County Environmentally Endangered Lands Program, Brevard County Natural Resources Management Department, Keep Brevard Beautiful Inc., and the Town of Melbourne Beach to plant more than 2,300 sea oats plants in and near the Refuge with more than 75 volunteers to help restore damaged sea turtle habitat.

Volunteers also removed 30 lbs of trash and 25 cubic feet of invasive exotic plants. To participate in the annual sea oats planting event or to donate to support the restoration project reach



STC College Intern Mairi Brooks (above) and youth volunteers (right) planting sea oats in the Archie Carr Refuge.

out to Sarah Rhodes-Ondi, STC Community Stewardship Coordinator, at [sarah@conserveturtles.org](mailto:sarah@conserveturtles.org). Collaborative ongoing stewardship efforts that engage the local community are essential for helping sea turtles survive in the Archie Carr Refuge. 🐢



**By Sarah Rhodes Ondi**  
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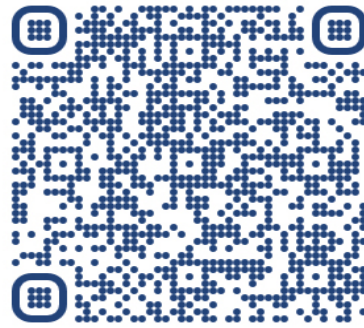
# Turtle Tracking App

## STC Turtle Tracker App now available for FREE download!

Sea Turtle Conservancy's (STC) Turtle Tracker App lets you follow the migrations of sea turtles that have been tagged with a satellite tracking device from nesting beaches, in-water research, and rehabilitation centers. Maps are updated as new data become available for active turtles. Follow along as STC learns about the movements of sea turtles through our Turtle Tracker App, available for download in the App Store for Apple and Android!



Apple

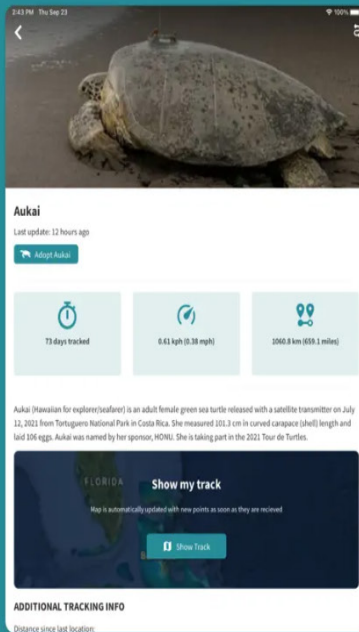


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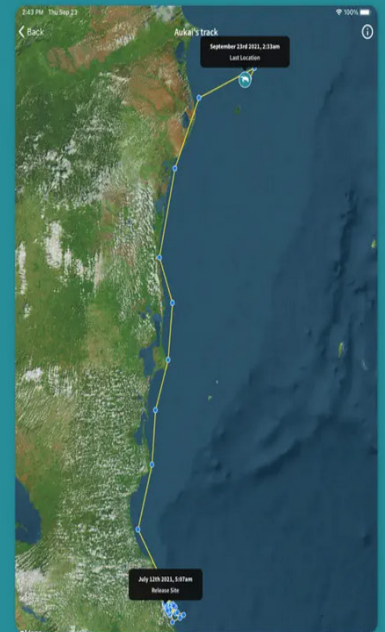
### Live locations of tracked turtles



### Get to know each turtle




### View turtle's track





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## *Leave A Legacy*

The Sea Turtle Conservancy (STC) is the oldest and most accomplished sea turtle research and protection group in the world. By giving a planned gift to the STC, you can leave a legacy that ensures sea turtles and their habitats will be protected for years to come.

Planned Giving is the process that takes place when a contributor decides to leave a substantial gift to a charity. It simply means that you are planning as you would plan for any substantial financial transaction, such as purchasing a house, college tuition, or a car. The most common forms of Planned Giving are Wills and Life Insurance Policies. There are also a variety of Planned Giving options that allow you to give a substantial contribution to STC, obtain a tax deduction and receive lifetime income now or in the future. These options include setting up one of the several types of Trusts or establishing a Gift Annuity. Trusts and Annuities are becoming increasingly popular and are actually relatively easy to establish.

For more information on Planned Giving, please contact Executive Director David Godrey at [david@conserveturtles.org](mailto:david@conserveturtles.org) or 352-373-6441.



Photo credit: Abbie Guthier