

# VELADOR

Science-Based Sea Turtle Conservation Since 1959

Issue 1, 2025

## Training the Next Generation of Conservation Professionals



STC Interns and Volunteers teach at the BIC outreach table during the 2024 Tour de Turtles release in the Archie Carr Refuge.

Sea Turtle Conservancy (STC), alongside our partner the Brevard County Environmentally Endangered Lands Program, continues to grow the Conservation Career Training program to train future conservation professionals at the Barrier Island Center (BIC) in Melbourne Beach, Florida. The Conservation Career Training program

welcomes high school and college students for a nine-week paid immersive experience where they work alongside BIC staff and experience all aspects of nature center operations and serve as mentors in the Sea Turtle TECH (Technology Education Challenges Horizons) STEM (Science, Technology, Engineering and Math) Mentorship

*continued on page 2...*

*Inside: Florida Legislative Update*



*Tortuguero Nesting Trends*



... from cover

Program. Now in its sixth year, the BIC team has trained 19 interns and will hire an additional five interns for summer 2025. Our interns learn the communication skills, field techniques, tools and technology needed to become tomorrow's conservation leaders.

During summer 2024, STC hired five paid college and high school interns through the support of the Disney Conservation Fund and Conservancy Friends of Aquarina; Maggie Reed, Avery Cook, Lucy McDonald, Kania Tellez and Chloe Biby. STC's interns improved their knowledge of sea turtles, their habitats and Florida's ecosystems as well as of scientific field tools, technologies and techniques. They also learned sea turtle field science skills by assisting with Night Turtle Walks and observing sea turtle scientists at work, and improved their environmental education and interpretation skills through teaching and designing programs.



Sarah Rhodes-Ondi with STC interns Maggie Reed, Lucy McDonald, Kania Tellez (front row left to right) and Avery Cook and Chloe Biby (back row left to right).

Interns mentored dozens of underserved youth and teens in the Sea Turtle TECH STEM Mentorship Program. They also taught students from area summer camps and guests who visited the BIC during the Tour de Turtles. By the end of the internship, 100% of the interns planned to pursue a STEM career and were confident in their ability to succeed in STEM fields.

For Chloe Biby, a recent graduate of Melbourne High School, the internship was an extension of the volunteer work she has been conducting at the Barrier Island Center since the summer of 2022. Chloe was familiar with many of the environmental issues facing our local Carr Refuge community due to her volunteer work in local community organizations and her participation in science fair. The internship took her passion for sea turtles and the environment to the next level. "I can confidently say that I can now educate others about the problems our environment is facing, and work to preserve it," says Chloe. "I always liked sea turtles, but I've grown to really love these animals and I feel that it's of the utmost importance to save them." Chloe is now a freshman at the Florida Institute of Technology.

## 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)**. 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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Intern Chloe Biby teaches a student how to use a GPS device for a scavenger hunt.

Maggie Reed, a recent college graduate with a B.S. degree in Marine Conservation from Florida Tech, came into the internship as a first year graduate student at Florida Tech working on her Masters' of Science in Conservation Technology. Maggie grew up as a farmer's daughter in Maryland and experienced first-hand the dangers of fertilizer runoff which caused fish die offs in her local ponds. Maggie moved to Florida for college and learned that similar human impact issues are prevalent in coastal habitats. "I loved educating others about our local and global environmental concerns, and learning more about our ecosystems while doing so," said Maggie.

"Now that I have connected with sea turtles first hand, I feel more passionate about protecting the species as a whole and teaching others what they can do to help protect and advocate for sea turtles."



STC Intern Maggie Reed installing an oyster gabion reef at the Brevard County EELs Hogpoint Cove preserve.

Maggie shared that the most useful internship experiences that she will use in her career as an environmental consultant were "communicating science in relatable and understandable ways, interpretive training and knowledge about Florida's ecosystems."

Chloe and Maggie are just two of the 19 Conservation Career Training interns who have built useful STEM and conservation job skills while working at the BIC. STC is grateful to the Glenn W. Bailey Foundation and the Conservancy Friends of Aquarina for underwriting our paid intern program for summer 2025. While internships are paid, no housing is provided.

***Applications for Summer 2025 will be accepted through April 1, 2025. Interested applicants can contact BIC Community Stewardship Coordinator Sarah Rhodes-Ondi at [sarah@conserveturtles.org](mailto:sarah@conserveturtles.org) or download an application at [conserveturtles.org/program/barrier-island-center](https://conserveturtles.org/program/barrier-island-center).*** 🌊



Merope Moonstone from UCF Marine Turtle Research Group teaches interns and Sea Turtle TECH students about green turtles.

***By Sarah Rhodes Ondi  
BIC Community Stewardship Coordinator***



## Monitoring a Bad Plastic Preemption Bill back from 2024

The Sea Turtle Conservancy (STC) has a long history of influencing state, federal and international policies that impact sea turtles and their habitats. STC places a special emphasis on the policy decisions made in Florida because, as the third-most populous state and a global biodiversity hotspot, the lawmaking decisions in Florida have wide-ranging impacts for marine life. Florida's beaches are among the most important nesting grounds for threatened and endangered sea turtles in the Western Hemisphere. In addition, Florida's vast sea grass beds, lagoons, estuaries, and nearshore reefs are utilized by sea turtles during various stages of their life cycle. Through tireless effort and science-based education, STC has influenced numerous changes in policy for the benefit of Florida's sea turtles.

Every year, the Florida Legislature, made up of 120 House members and 40 Senate members, convenes to pass legislation. STC closely monitors bills and policies that could positively or negatively impact Florida's sea turtles and their habitats and, when necessary, calls upon its members and followers to contact legislators about these policies.



Photo credit: Ben Hicks


The 2025 Florida Legislative Session is taking place from March 4 to May 2. Our legislative priorities are focused on reducing the many threats that Florida's sea turtles face, including:

climate change and sea level rise, risky coastal development, plastic pollution, and degraded water quality and associated impacts to sea turtle food sources. A bill that STC has been following closely this legislative session is **HB 565/SB 1822 - Regulation of Auxiliary Containers**.

Last year, the Florida environmental community widely opposed and defeated SB 1126, a bill that would have prevented local governments from regulating single-use items (such as plastic bags or Styrofoam boxes) that pollute our environment. Unfortunately, that same bill is back as HB 565 in 2025.

The bill passed through its first committee stop, the Natural Resources & Disasters Committee, on March 11. At the meeting, STC and our environmental partners shared the need for local governments in Florida to protect their own natural resources by regulating single-use items. We discussed how this bill could harm Florida's wildlife, human health, and tourism economy if it were to pass.

Just two days after the House version of this bill moved forward, we learned that the Senate version would be heard on March 17. We once again mobilized our social media following and sent out an action alert to our email list asking them to contact Committee members and urge them to vote NO on SB 1822. If it passes, this bill will invalidate all existing local government regulations on single-use items, will stop local governments from passing new regulations, and will prevent the State from conducting a new study on the effectiveness of these regulations. Florida's sea turtles will suffer if trash can enter our environment without limits.

Policies like this move quickly through hearings, and this was the latest news at the time of publication. For the most up to date policy news, visit our webpage [conserveturtles.org/program/stc-programs-policy-initiatives/](https://conserveturtles.org/program/stc-programs-policy-initiatives/) 

## STC Receives Grant to Retrofit Properties Impacted by 2022 Hurricanes

In late 2022, storm surge and damaging winds from Hurricanes Ian and Nicole devastated coastal communities across the Florida peninsula. As communities are rebuilding more than two years later, the impact on conservation services, including reducing sea turtle disorientations through the use of wildlife friendly lighting, has been vast. On Florida's east and west coasts, coastal erosion destroyed dune vegetation that once served as a screen for artificial light on the beach.

On Fort Myers Beach, an area that was hit particularly hard by Hurricane Ian, properties that were once wildlife friendly were either completely destroyed – leading to lights further inland suddenly becoming visible from the beach – or sustained damage to their existing wildlife friendly lights, leading to the possibility that they could be replaced with short wavelength options that could lead to sea turtle disorientations.

In January 2025, the National Fish and Wildlife Foundation (NFWF) awarded Sea Turtle Conservancy (STC) a two-year grant to specifically address problematic lighting in areas impacted by Hurricanes Ian and Nicole. Through this grant, STC will have the ability to ensure that as coastal property owners rebuild, they will be utilizing wildlife friendly lighting. This will continue the progress that STC and our partners across the State have achieved in reducing sea turtle disorientations.

During the two-year project timeframe, STC will partner with coastal property owners in hurricane-affected areas to restore sea turtle nesting habitat by providing them with shielded, wildlife-friendly fixtures lamped with long wavelength LED lights. Key measurable results include the amount of beach darkened and the number of fixtures and bulbs retrofitted. Where electricity is available, STC will measure pre- and post-retrofit foot candle measurements. Where data is available, STC will also analyze the pre- and post-retrofit disorientation rate in front of retrofitted properties.

STC is grateful for the opportunity to assist coastal property representatives with rebuilding their homes while also reducing sea turtle disorientations.

***To learn more about STC's Lighting Program visit [conserveturtles.org/program/beach-lighting](https://conserveturtles.org/program/beach-lighting) or email [rachel@conserveturtles.org](mailto:rachel@conserveturtles.org)*** 🐢



Aerial photo showing remnants of two Fort Myers Beach properties that were destroyed during Hurricane Ian. Both properties were working with STC to retrofit their lights.



Sundial Beach Resort & Spa, located in Sanibel, was in the process of installing new wildlife friendly fixtures through STC's grant but were unable to complete the retrofit due to the extensive damage they received during Hurricane Ian.



South Beach Bar & Grille, located in Boca Grande, was also working with STC to retrofit their property when it was destroyed.



# *Southeast Regional Sea Turtle Meeting*

STC staff hit the road in February to attend the Southeast Regional Sea Turtle Meeting (SERSTM) in Hilton Head, South Carolina. SERSTM is a bi-annual scientific meeting that hosts sea turtle scientists, students, professionals and volunteers from around the Southeastern United States, including Puerto Rico and the US Virgin Islands.

STC's Lighting Team kicked things off hosting a full-day wildlife friendly lighting workshop, "Expanding Your Network to Achieve Lighting Compliance." The workshop explored the benefits of building a wider network of support and introduced different groups who all play a role in reducing artificial light and its impacts to sea turtles. Presentations were given from multiple individuals representing three broader groups, including: the lighting industry, coastal property representatives, and government agencies. The workshop provided a platform to foster partnerships and utilize expertise from these multidisciplinary groups to further aid in the management of artificial light on sea turtle nesting beaches. Attendees left the workshop with a better understanding on how they can expand their network and were inspired to build wildlife friendly communities across the coastal southeastern region of the United States.



STC staff pose for a photo at the SERSTM farewell social.

Multiple STC staff members presented posters and gave oral presentations during the meeting. Biologist Rick Herren presented a poster titled, "Juvenile Green Turtle Overwintering Behavior in the Northeastern Gulf of Mexico," which focused on the movements of 21 satellite tagged juvenile green turtles in Florida's Big Bend area. Policy Coordinator Stacey Gallagher presented a poster titled, "Protecting Florida's Sea Turtles by Establishing an Area of Critical State Concern" about the passage of the Brevard Barrier Island Protection Act.

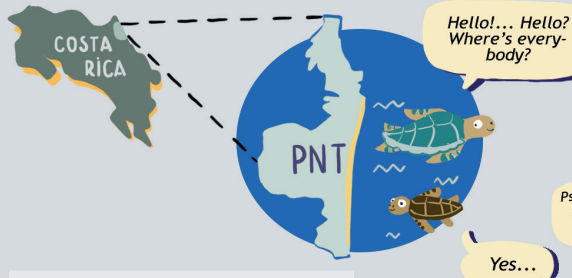
Senior Lighting Project Specialist Emily Wooley hosted an oral presentation, titled "Illuminating Change: Analyzing and Updating Lighting Ordinances for Sea Turtle Protection," which focused on the results of STC's collaboration with the National Wildlife Federation and Florida Fish and Wildlife Conservation Commission to score the effectiveness of local sea turtle lighting protections throughout the State. Emily also discussed our efforts to assist local governments with improving their lighting ordinance language and enforcement and shared successful strategies for encouraging local governments to protect their natural resources. Lighting Project Specialist Madeleine Khoury hosted a presentation titled "From Shelves to Shores: Improving Access to Wildlife Friendly Lighting." The presentation discussed the challenges coastal property owners face with accessing wildlife friendly products and how STC is aiming to fill those gaps through our Home Improvement Store Initiative. Madeleine shared how STC has identified home improvement stores interested in selling wildlife friendly products, coordinated with lighting manufacturers to sell their products directly to local stores, and created a professional display to help educate customers on wildlife friendly lighting solutions as they shop.

Throughout the course of the meeting, STC also staffed a popular educational exhibit and merchandise table, and coordinated the event's silent auction. To cap off a successful week, Policy Coordinator Stacey Gallagher gave an impassioned speech at the Farewell Social honoring the legacy of the late Dr. Llewellyn Ehrhart and the important policy work being done in the Archie Carr National Wildlife Refuge. The next SERSTM will be held in 2027 in the US Virgin Islands. 🌊

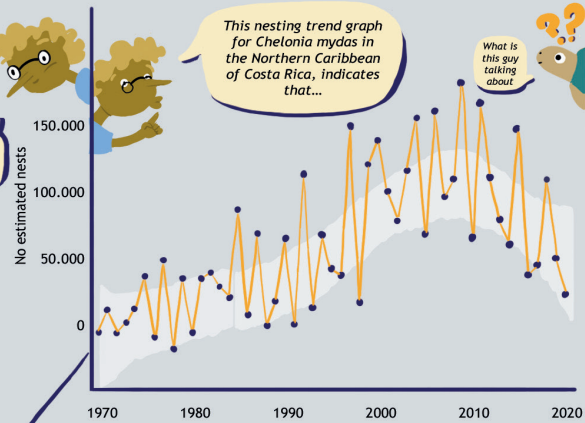
## NESTING TRENDS\*

## GREEN TURTLE *Chelonia mydas*

\* direction or approach toward a place, object, effect, or limit



The Tortuguero National Park (PNT) was created in 1970 and it is located on the Northern Caribbean Coast of Costa Rica.  
The monitored beach is 18 miles long



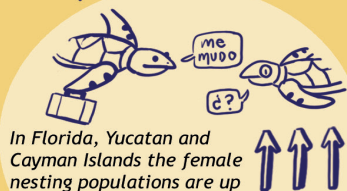
And we're contemplating some theories of why is this happening

Oh! Let's hear them then!

Ok, the thing is that the number of nests for green turtles within the 18 miles of Tortuguero beach has been decreasing since 2008. And, although we've had good years, such as 2012 or 2016, we can confirm that the trend is going down.

WHY IS IT DECREASING

MIGRATION



Through genetic studies we know that in feeding areas such as Bonaire and The Bahamas, the Tortuguero population is not predominant any more

FEEDING



Sea grass habitat loss might be negatively affecting green turtle populations

original paper

CAPTURE



It is estimated that around 20,000\* sea turtles are being captured annually in feeding areas such as:

- Nicaragua (legal up to 10,000)
- Venezuela Wayuu (3,400)
- The Guajira in Colombia (5,000)
- Panama

\*approximate numbers last decades.

CONCLUSION



We think that...

It is important to conduct long-term monitoring that provides information for a certain period of time.  
Collaboration between projects is essential to progress in a more efficient way with wildlife conservation.

Recent decline of green turtle *Chelonia mydas* nesting trend at Tortuguero, Costa Rica  
Jaime Restrepo, Emily G. Webster, Iván Ramos, Roldán A. Valverde



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## Check out our new website!

STC is thrilled to finally unveil our shiny, new website! Our redesigned site is packed with exciting new features and interactive elements to help you explore and expand your knowledge about sea turtles like never before. But don't worry, you can still find your favorite turtle tracking maps and gift shop goods! We hope the new site inspires you to dive deeper into the world of sea turtles and learn more about STC's six decades of work in the areas of Conservation, Advocacy, Research & Education (CARE). Over the next few weeks, we will continue to improve the site and add pages, but feel free to reach out if you feel like we've missed something. Also a big thank you to our collaborators and partners at Avanti Branding, who we couldn't have completed this massive undertaking without! [www.conserveturtles.org](http://www.conserveturtles.org)

