

# VELADOR

Science-Based Sea Turtle Conservation Since 1959

Issue 2, 2019

## STC Documents Increase in Poaching in Costa Rica and Panama



Left: STC Tortuguero Research Coordinator Jaime Restrepo and a volunteer prepare to rebury sea turtle eggs that were confiscated by the local police officer who is observing the process. Right: Park guards from Bocas del Toro, Panama, return from a successful anti-poaching operation conducted in partnership with STC. The recovered green turtle was alive and released unharmed.

During the 20th century, hawksbill nesting at Chiriquí Beach in the Bocas del Toro Province of Panama was decimated by decades of extensive harvesting for the international tortoise-shell trade. Meanwhile, the globally-important green turtle population nesting at Tortuguero, Costa Rica, was nearly wiped out from decades of harvesting to feed international demand for

turtle meat. It is estimated that the hawksbill population along Panama's Atlantic coast, once the largest in the Caribbean, was reduced by as much as 98% because of the relentless harvest. The size of Tortuguero's green turtle population was probably reduced by a similar percentage before Costa Rica finally put an end to the unregulated harvest of this species.

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**Inside: Lighting Project Updates**



**The 2019 Tour de Turtles begins!**

... from cover

STC's sustained conservation program at Chiriquí Beach, launched in 2003, helped greatly reduce poaching and other human-caused threats. As a result of this sustained effort, combined with other protections such as those put in place by the Convention on International Trade of Endangered Species (CITES), nesting levels have been showing very encouraging increases.

STC's activities in Panama include intensive nightly monitoring of nesting at Chiriquí and other nearby beaches; protection of nesting females and their nests; broad public education in the region; training and support for Panama's resource protection personnel; and cultivation of turtle-based ecotourism that benefits local communities. This work has built upon a decades-long research program conducted by Drs. Anne and Peter Meylan at the nearby Zapatilla Cays since 1989 (now conducted under the auspices of STC).

A species that was once on the brink of extinction in this part of the Caribbean is now recovering thanks to sustained conservation efforts. Unfortunately, one side-effect of this success is that the increased presence of hawksbills around Bocas del Toro has led to an increase in illegal poaching activity. Locals who used to harvest hawksbills back in the day are seeing more turtles in the water and on the beach, and STC is beginning to observe and hear reports of increased take of hawksbills in the area. The very activity that almost wiped out this species could jeopardize the remarkable progress made in recent decades to recover hawksbills.



Left: Hernandez Bonilla, an official with Panama's Environment Ministry, prepares to release a juvenile hawksbill that was recovered from poachers at sea. Right: Enforcement officers in Panama shown with a boat full of confiscated turtles and harpoons.

STC is seeing a nearly identical situation unfold with green turtles at the site of our six-decades-long conservation program at Tortuguero, Costa Rica. After achieving an estimated 600% increase in green turtle nesting, illegal poaching is on the rise at the beach where STC founder Dr. Archie Carr launched the world's first sustained sea turtle protection program. Tortuguero's green turtle population, the largest remaining in the Western

*Continued on next page ...*

## 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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Hemisphere (and possibly the world) is showing the first signs of decline after a long recovery that started in the 1970s. A major factor behind this decline is the unregulated harvest of thousands of adult green turtles each year from the waters of the Miskito Coast of Nicaragua—the largest known foraging ground for adult green turtles in the Atlantic. This threat has persisted for decades, even as the Tortuguero colony has been growing.

Adding to the problem for green turtles is an influx of people living in Tortuguero who know nothing and/or care little about the history of turtle protection that has benefitted both the people and wildlife of the region. Instead, they view the immense number of nests on the beach as an opportunity to harvest both turtles and their eggs. People by the hundreds have settled in Tortuguero over the last decade, coming from other areas of Costa Rica and even from Nicaragua, where harvesting turtles and eggs is still a way of life. They have little regard for laws banning the practice, and local law enforcement officials are struggling to keep up with the rise of illegal poaching, even within the boundaries of Tortuguero National Park.

On a fairly regular basis, STC staff and volunteers observe people in the act of digging up turtle eggs, and we occasionally find adult turtles that have been flipped over and dragged into the vegetation behind the beach, most likely by poachers who ran off as STC beach monitors approached. These troubling but all-too-common incidents are immediately reported to local law enforcement.

In early August, as STC staff members from the Gainesville office were visiting Tortuguero for the start of the Tour de Turtles program, our research coordinator, Jaime Restrepo, was contacted by local policemen who had confiscated several bags containing nearly 1,000 green turtle eggs taken from poachers spotted leaving the beach. Working quickly but delicately, STC staff reburied the eggs by re-creating ten turtle nests in a safe location near our station. Thanks to

the swift action of local police, these particular eggs now have a good chance of hatching successfully, but for many others the story will not end as well.



Lauren Hummel is a communications specialist with US-based The Greene Turtle restaurants, a sponsor of this year's Tour de Turtles. While visiting Tortuguero this year to observe the start of the event, Lauren got a first-hand look at some of the threats her company's sponsorship is helping address. Here she is helping rebury turtle eggs confiscated from an illegal poacher in Tortuguero.

In response to these concerning developments in Panama and Costa Rica, STC has stepped up its coordination with law enforcement agencies. It is not STC's place to enforce laws, but we can provide eyes on the beach to help detect and report illegal poaching activity. STC is expanding efforts to train, motivate and support the under-staffed and overwhelmed park guards and law enforcement personnel responsible for protecting sea turtles in remote Tortuguero and Bocas del Toro.

STC also is working hard to motivate local families in these areas to join us in speaking up for the turtles in order to protect a resource that is providing sustained income for the community through ecotourism. With the ongoing support of members, sponsors and contributing foundations, STC will remain vigilant in combating the resurging threat of illegal poaching at our various project sites in Latin America. 🐢

# Lighting Project Updates

## Lighting Retrofit Process begins at beachfront properties in Southwest FL

Sea Turtle Conservancy (STC) hit the ground running this summer by identifying and visiting 63 beachfront properties in southwest Florida known to be problematic for sea turtles, with support from a new four-year grant from the National Fish and Wildlife Foundation's (NFWF) Gulf Environmental Benefit Fund.

STC began collaborating with local sea turtle permit holders, code enforcement officers and Florida Fish and Wildlife Conservation Commission (FWC) staff in March to identify properties that are in close proximity to disorientation hotspots throughout Pinellas, Manatee, and Sarasota counties. The heightened development and tourism seen in these counties results in more artificial lighting on the beach, leading to a higher number of disorientations.

Property managers from seven of the properties visited by STC, including those referred by local code enforcement officers and permit holders, already have agreed to participate in the retrofit program. The lighting team is now in the process of evaluating and designing lighting plans for each of the properties.



STC Lighting Specialists Cypres Ferran (left), Emily Asp (middle) and Stacey Gallagher (right) record data on exterior lights during the evaluation of a single-family home in Treasure Island, FL.

“The positive feedback we’ve received so far is outstanding. While there are many residents in the area already taking steps to make their properties more sea turtle-friendly, others who may not have the financial means or knowledge to do so have been receptive to working with STC. We are looking forward to meeting with more property owners in the region over the next few years and creating darker nesting beaches for sea turtles,” STC Lighting Project Manager Rachel Tighe said.



In Phase III of STC's lighting retrofit project, the lighting team began measuring illumination of the night sky at select properties using a sky-quality meter to determine the likelihood of disorientation events near retrofit locations. The equipment is on loan from FWC, which also provided training on its use.

Property managers may decline to participate in STC's retrofit program simply because they are unaware of the plight sea turtles face on artificially lit beaches or the many economic and health benefits of using turtle-friendly lighting. To address this, the lighting team mailed letters to beachfront residents in Pinellas, Manatee, and Sarasota counties to gauge interest in the program in hopes that word of the new grant will not only spread faster, but raise awareness of the importance of turtle-friendly lighting. STC also met with lighting distributors who supply turtle-friendly lights in Pinellas, Manatee and Sarasota counties to share information about the program.

STC's list of candidates for retrofits continues to grow! If you live in Pinellas, Manatee, Sarasota, Charlotte, Lee or Collier County and are interested in retrofitting your beachfront property, call STC at 352-373-6441. To learn more about STC's grant process visit [www.conserveturtles.org/beachfront-lighting](http://www.conserveturtles.org/beachfront-lighting) and click Lighting & Dune Projects.

**By Natalia Bayona**  
Lighting Specialist



## Communities in FL Panhandle more knowledgeable, better prepared to use turtle-friendly lighting

After five years of conducting retrofits in the Florida Panhandle, Sea Turtle Conservancy (STC) bid farewell to the area in May by hosting a hands-on workshop in Okaloosa County about the ins and outs of implementing turtle-friendly lighting in beachfront communities. Nearly 30 attendees, including lighting professionals, permit holders, code enforcement officers, and city officials from throughout the Panhandle and the Alabama coast participated in the workshop, which featured talks from lighting agency representatives and Florida Fish and Wildlife Conservation Commission (FWC) staff who certify wildlife-friendly lighting.

“Attendees found the workshop to be very informative and commented on the ample amount of discussion with lighting professionals,” said STC Lighting Project Manager Rachel Tighe.

STC offered the workshop to allow professionals from multiple fields to network and share their experiences with introducing turtle-friendly lighting to their community. The workshop is one of several STC has hosted in Florida since 2016 with support from various granting agencies such as the Sea Turtle Grants Program and Disney Conservation Fund’s Reverse the Decline grant. Disney’s Reverse the Decline Initiative, which has primarily funded STC’s workshops since 2018, aims to reverse the decline of threatened species including sea turtles by supporting education programs and local conservation efforts in critical habitats. The grant will allow the lighting team to continue hosting workshops in Florida through 2020.

The workshop consists of a three-part presentation covering sea turtle biology, the laws surrounding turtle-friendly lighting and ways to conduct retrofits. STC also partners with the Florida Association for Code Enforcement (FACE) to award code enforcement officers who attend the workshop continuing education credits.



Kristi Spohn from SESCO Lighting Inc. talks about the technical side of turtle-friendly lighting at STC’s final workshop in the Florida Panhandle.

: To increase its reach throughout beachfront communities, STC is utilizing a portion of the Reverse the Decline funding to work with a production company to create short educational videos about sea turtles and lighting and how beachfront residents can make their homes turtle-friendly. Filming began at the Okaloosa workshop, including interviews with lighting professionals, STC staff and property owners who participated in STC’s lighting retrofit program. The video will be shared on STC’s social media channels and added to the lighting program’s traveling turtle-friendly lighting displays stationed around Florida.

: “Much of the burden of protecting our turtles falls to the millions of tourists who vacation during peak nesting season. Tourists are usually in the dark about sea turtle friendly lighting, and many never realize their actions and behavior determine our nesting season. Our outreach and community presence has allowed us to bring awareness not only to locals but also to tourists who fill our beachfronts every summer,” Lighting Project Specialist Cypres Ferran said.

: The lighting team will host workshops in Martin, Lee and Volusia counties later this year. For more information about workshops and location information, visit STC’s website at [www.conserveturtles.org/beachfront-lighting-education-outreach-materials](http://www.conserveturtles.org/beachfront-lighting-education-outreach-materials). 🐢

**By Natalia Bayona**  
Lighting Specialist

# Straw Program Update

## Skipping the straw is good for business

Since 2017, Sea Turtle Conservancy (STC) has partnered with 94 coastal restaurants in Florida to switch to paper straws or only offer plastic straws on request. While participating restaurant owners initially change their straw policies to protect sea turtles, they've also found an unexpected benefit: more customers.

Consumers are increasingly using their wallets to bring forth the change they wish to see in the world. According to a 2014 Nielsen survey, fifty-five percent of global online consumers were willing to pay more for products and services from companies that committed themselves to helping the environment.

One participating restaurant owner, Don Samora of the historic Beachcomber restaurant in St. Augustine, has seen this shift firsthand. Samora first decided to rethink how the Beachcomber distributed plastics during a remodel of the restaurant. After removing a wooden beachfront deck, Samora saw hundreds of plastic straws on the sand beneath it. At that moment, he vowed to only use paper straws and has since stopped offering plastic bags, cutlery and Styrofoam.



Beachcomber restaurant owner Don Samora interacts with customers on the restaurant's beachfront deck.

"If you look at it per straw, [paper straws] may be a little bit more expensive," Samora said. "But it's brought us more business." He regularly receives




STC's straw signage at DiLorenzo's Pizzas & Subs helps to educate restaurant guests about single-use plastics.

positive feedback about the paper straws and has gained new customers after making the change.

Rhett Fischer of Rusty's Seafood & Oyster Bar in Cape Canaveral also said that people are visiting his restaurant because they are "going green."

Restaurant owners participating in STC's straw program say that nearly all customers understand why they stopped using single-use plastics. For those who don't understand why they aren't being offered a plastic straw, STC provides educational coasters and signs to each participating restaurant to remind customers that plastic consumed on land can impact sea turtles. The signage also inspires guests to reduce plastic consumption in their own lives.

Jim Scherer, owner of Broke N Bored Grill in Redington Shores, believes it's only a matter of time before the rest of the world catches up. "I run my business how I would like the rest of the world to be," he said. "I believe that plastic is on its way out, and it takes someone starting the conversation to make it happen."

If you'd like your local restaurant to join STC's straw program, email Stacey Gallagher at [Stacey@conserveturtles.org](mailto:Stacey@conserveturtles.org). To see what restaurants are already participating in the program, visit [conserveturtles.org](http://conserveturtles.org) > Get involved > Reducing Plastic waste. 

**By Stacey Gallagher**  
Development Coordinator



## Tortuguero Update

STC's Junior Research Assistant Program in Tortuguero began in 2012 with local children who were ages 12 to 18 years old. They would help STC Research Assistants patrol the beach at night to take biometric data from green turtles. The Junior RAs only help collect data between 8-10 pm on the weekends, so the patrols don't affect their studies in school.



This year we had 28 kids who wanted to patrol. In order to become a Junior RA, they received training and took an exam (written and practical). During the day, Junior RAs participate in environmental activities such as beach clean-ups, and also get to explore Tortuguero National Park.

The objective of this group is that kids from town learn more about sea turtles, science and biology, and also that they have activities that can be helpful for their community that will increase sustainable development in a place that's livelihood used to depend on harvesting turtles.

From previous years, there are five junior research assistants who now encourage new kids to enter the program. There is also one young woman who stayed in the program for several years and now she is at the end of her studies in Biology at Costa Rica University. 🐢

**By Michelle Dorantes**  
Tortuguero Outreach Coordinator

## Tour de Turtles

### 17 turtles "compete" in this year's Tour de Turtles

Our turtle competitors continue to race to the finish line in the Tour de Turtles marathon, which began on August 1 and ends on October 31. Read on to learn more about some of our special satellite tagged turtles participating this year!

"Bortie, Too" was tagged after nesting on Anna Maria Island on June 21 and returned to nest again several weeks later on July 13. She is finished nesting for the season and is now making her way towards a popular loggerhead foraging site in the Bahamas. Her predecessor, "Bortie I," competed in last year's Tour de Turtles and is actually still transmitting a signal! She has traveled more than 2,000 miles since her release on June 19, 2018.

"St. Thomas" is a rehabilitated juvenile green turtle who happens to be the only male turtle among our Tour de Turtles competitors. St. Thomas was rescued by The Turtle Hospital in October 2018, near

Big Coppitt Key where he was found debilitated and covered in Fibropapilloma tumors.

"Lulu" the loggerhead returned to nest again near the Archie Carr Wildlife Refuge about two weeks after she was tagged and released.

Many of our turtles from last year's Tour de Turtles marathon are still sending signals, including Bean, Betsy, Bion, Colada, Kali, Lucaya, Milly, Mrs. Potato Head, Stella, Turtlette & Vida.

The Tour de Turtles race ends on October 31, but you can continue to follow the turtles until their transmitters stop working. Visit the Turtle Tracker on STC's homepage to see their maps.

Thank you to all of our amazing turtle sponsors who made this year's program possible: Anna Maria Island Turtle Watch, Bortell's Lounge, Disney's Conservation Fund, Disney's Animals, Science & Environment, Disney's Vero Beach Resort, Atlantis, The Greene Turtle, World Nomads, Shark Reef, tarte cosmetics, The Turtle Hospital, Four Seasons Resort Nevis, Certina, JD.com, Community Foundation for Brevard and honu. 🐢

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## Florida Staff Update



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STC welcomed two new sea turtle lighting project specialists, Cypres Ferran (below left) and Emily Asp (below right) to the lighting team in May 2019. Cypres' background is deeply rooted in herpetology and public outreach. She performed an independent study on the dietary preferences of threatened diamondback terrapins while completing a bachelor's degree at Flagler College. Cypres also practiced sea turtle husbandry, veterinary assistance and worked as a docent at the Whitney Laboratory for Marine Bioscience, where she hosted youth summer science camps.



Emily recently earned a master's degree from Coastal Carolina University studying the effects of artificial light on hatchlings upon emergence from the nest. Emily brings extensive knowledge about sea turtle biology and ecology to the team along with a variety of field experience dealing with sea turtle strandings, sea turtle nesting and in-water sea turtle research. Please join us in welcoming them to the team! 🐢