

# VELADOR

Science-Based Sea Turtle Conservation Since 1959

Issue 3, 2015

## Bermuda Green Turtle Surprises Researchers



Kirsty, a juvenile green turtle tracked by satellite as part of the collaborative Bermuda Turtle Project (BTP), has flown the coop! After being fitted with a satellite transmitter and released in Bermuda in August 2014, Kirsty's movements and habitat use were carefully tracked by BTP researchers Drs. Anne and Peter Meylan and Robert Hardy, with scores of Sea

: Turtle Conservancy members and supporters following the turtle's movements online. For months, the young turtle shuttled between positions in the nearshore sea grass beds of Somerset Long Bay, where it was originally tagged, and two locations located on the west side of the Bermuda Platform. But then Kirsty did something exciting!

*continued on page 3...*

Leatherback Tracked by Satellite Found Dead in Colombia



Dune Vegetation Restored as Part of STC's Lighting Program


## STC supporters help with fundraising drive to rebuild the Kontiki (Staff Housing) in Tortuguero

In the mid-1950s, Dr. Archie Carr established the first ever sea turtle research and protection program at Tortuguero, Costa Rica. That original program is still in operation today and is now the longest-running, and arguably most successful, sea turtle monitoring and recovery program in the world. In the nearly 60 years since the program was launched, many changes have taken place in Tortuguero. Sea Turtle Conservancy has seen staff come and go and the organization's first research station (Casa Verde) was replaced by a modern field station in 1994. Over the last two decades, one constant at the John H. Phipps Biological Field Station has been the rustic staff housing facility, affectionately known as the Kontiki—the only building already present on the property when it was acquired as the site of STC's new station. Unfortunately, the old building that so many STC researchers and staff members have called home is succumbing to the unforgiving salt and humidity of Tortuguero, rendering it unsafe despite multiple repairs.



STC Staff and Researchers in June 2015

In December of 2014, STC launched a campaign to raise the necessary funds to replace the current structure with a safe building made with sustainable materials and able to handle the local climate. After meeting with a Costa Rican architect firm to draft plans for a cost-effective building, STC issued a call to action. The response was overwhelming. Over the course of two day-long fund drives, one in December 2014 and one in June 2015, STC members, supporters, corporate partners and Board Members stepped up to donate over \$40,000 to help make these plans a reality! We still have a few more dollars to raise to furnish the building and upgrade an attached structure, but STC staff members in Tortuguero are now assured of having secure new living quarters. STC staff members at the field station work tirelessly every day and night throughout turtle nesting season to ensure the survival of these magnificent creatures. Now they will have a safe, comfortable place to call home and rest after long nights patrolling the beaches.

The staff of STC would like to thank each and every member and supporter for their efforts in supporting this crucial fundraising campaign. With your support, we can ensure another half-century of conservation work in Tortuguero. 

**By Becca Gelwicks**  
**Membership Coordinator**

## 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. Now 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.

*Executive Director*  
**David Godfrey**

*Controller*  
**Pat McCloskey**

*Scientific Director*  
**Dr. Emma Harrison**

*Technology & Research Specialist*  
**Daniel Evans**

*Coastal Policy Coordinator*  
**Gary Appelson**

*Director of International Policy*  
**Marydele Donnelly**

*Membership Coordinator*  
**Becca Gelwicks**

*Communications Coordinator*  
**Lexie Beach**

*Office Manager*  
**Kim Aslan**

*Lighting Project Co-Manager*  
**Gwen Oberholtzer**

*Lighting Project Co-Manager*  
**Rick Herren**

*BIC Community Stewardship Coordinator*  
**Donna Lee Crawford**

*Panama Research Coordinator*  
**Cristina Ordoñez**

*Panama Education & Outreach Coord.*  
**Georgina Zamora Quílez**

*Director, Costa Rica Operations*  
**Roxana Silman**

*Tortuguero Station Manager*  
**David Aparici**

*Tortuguero Field Research Coordinator*  
**Raúl García Varela**

*Tortuguero Education & Outreach Coordinator*  
**Guillermo López Torrents**

*Tortuguero Visitor Center Coordinator*  
**Diana Horgen**

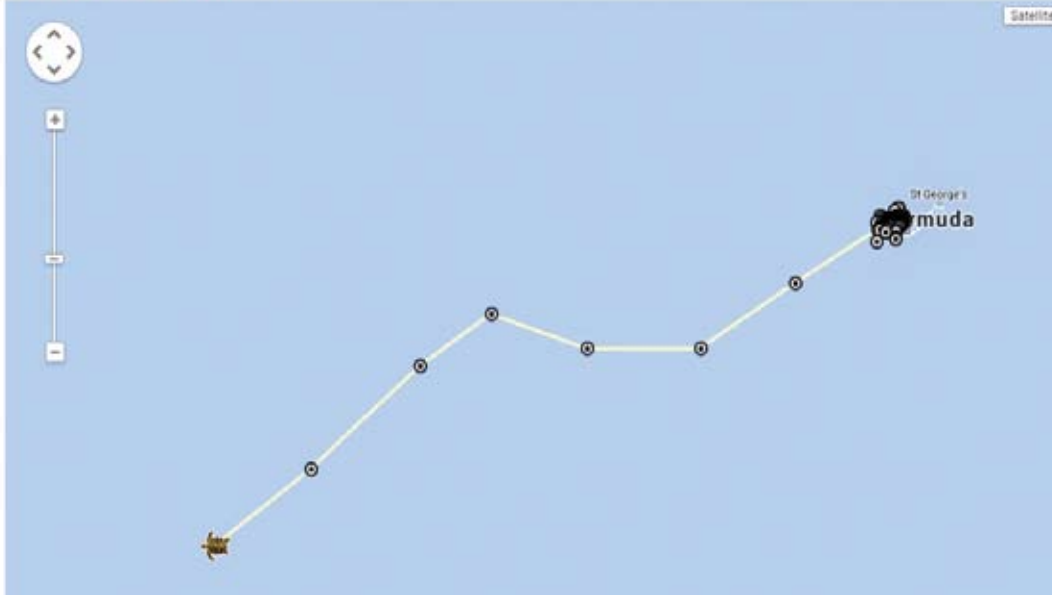
**Sea Turtle Conservancy**  
4424 NW 13th Street, Suite B-11  
Gainesville, Florida 32609  
Phone: (352) 373-6441  
E-mail: [stc@conserveturtles.org](mailto:stc@conserveturtles.org)  
Website: [www.conserveturtles.org](http://www.conserveturtles.org)

... from cover

STC and its Bermuda Turtle Project partners learned decades ago that Bermuda’s nearshore waters provide important developmental habitat for green turtles that originate from all over the Caribbean and Atlantic. No regular nesting of green tur-

Bermuda. However, with scores of turtles having been tracked in Bermuda, only one other green turtle was observed by BTP researchers leaving the island. “It was very exciting to track the start of Kirsty’s important habitat transition,” said STC Executive Director David Godfrey, “but for now her ultimate destination will remain a mystery.”

Satellite Tracking | Kirsty



The BTP was initiated in 1968 by former STC Board Member Dr. H. Clay Frick II, in cooperation with the Bermuda Government. Since 1991, the project has been a collaborative effort of STC, the Bermuda Aquarium, Bermuda Zoological Society and Drs. Peter and Anne Meylan. The research efforts of the BTP Project are focused on filling in the information gaps on

tles occurs anymore in Bermuda, yet its waters are filled with thousands of young green turtles that arrive when they are roughly the size of a Frisbee and leave the island shortly before reaching full adulthood. When and how they leave Bermuda, and where they go, are important mysteries in the life cycle of green turtles. In an attempt to answer these questions, STC and its partners use satellite transmitters to track some of the larger green turtles captured each year as part of the in-water monitoring program. On June 2, 2015, with researchers watching closely, Kirsty left the Bermuda Platform and began a long migration toward what will become her adult foraging grounds. Unfortunately, Kirsty’s transmitter quit sending signals just a week into her migration, though she appeared to be headed toward known foraging grounds off the south Florida coast.

green turtle biology so that successful protection may be given to these amazing animals.

In addition to annual research, every year since 1996 the BTP has offered an international in-water course on sea turtle biology and conservation. It brings students and scientists from around the world to Bermuda to study the pelagic and juvenile phases of the marine turtle life cycle, turtle biology and conservation through observation of the animals in their marine habitat, necropsies, and a capture-tag-release study.

Kirsty was a big turtle (66.7 cm “Straight Carapace Length”) when measured last August, so it was not entirely unexpected that she might soon leave

This year’s course, to be held in August, will be led in part by STC Scientific Director Dr. Emma Harrison. This summer, STC also will host a group of Board members and donors on an exploratory trip to observe and participate in the Bermuda turtle research program. 🐢

**By Lexie Beach**  
Communications Coordinator

## Restoring Native Dune Vegetation to Reduce Impacts of Artificial Lighting

STC's lighting team is working in the Florida Panhandle to fund the efforts of willing private beachfront property owners, associations and property managers to restore native dune vegetation. This restoration encourages the growth of healthy dunes and provides a natural light screen to protect nesting sea turtles and their hatchlings from the harmful effects of artificial light. Planting native dune vegetation also serves to trap and stabilize sand, contributing to a taller and wider dune environment that provides increased protection against erosion and reduces the amount of artificial light pollution reaching sea turtle nesting habitat.

Several properties in Walton County targeted for lighting retrofits participated in enhancements to natural buffers on their properties. STC consulted with Florida Fish and Wildlife Conservation Commission, local marine turtle permit holders, property managers, U. S. Fish and Wildlife Service and local contractors in Walton County in order to coordinate and complete dune projects prior to the start of sea turtle nesting season, which commenced May 1st in Panhandle counties.

Frederique Beroset of Dune Doctors provided guidance to ensure dune planting best management practices were followed. These included surveying the existing natural plant community, selecting plants appropriate for site conditions, designing plant layout to maximize success, planting during the right time, monitoring plant survival, and avoiding impacts to nesting shorebirds. Some of the projects included installation of sand fencing according to Department of Environmental

Protection standards to help gradually build up dunes; however, STC did not contribute funding toward installation of sand fencing since these structures sometimes can present obstacle for nesting sea turtles. In cases where they were used, STC provided recommendations to avoid potential impacts to turtles.

In all, a total of 10 dune enhancement projects, ranging from small to extremely large resort type properties were completed in the spring of 2015. A mixture of native grass and groundcover species were utilized for plant community diversity. Native plant species selected for the projects consisted of Sea Oats (*Uniola paniculata*), Dune Panic Grass (*Panicum amarum*), Seashore Elder (*Iva imbricata*), Sea Purslane (*Sesuvium*



*portulacastrum*), and Morning Glory (*Ipomoea pes-caprae*). This project resulted in a total of 43,090 square feet of beach planted and 13,021 native plants being added to the dune system in Walton County.

These dune enhancement projects, which were part of STC's Florida Panhandle Lighting program, were funded through the National Fish and Wildlife Foundation's Gulf Environmental Benefit Fund. Not only will these enhancements help sea turtle hatchlings safely reach the sea, they will benefit shorebirds and beach mice. 🐌

**By Gwen Oberholtzer**  
Lighting Project Co-Manager

# Sponsorship Spotlight

## Tour de Turtles Welcomes Back Sponsor Ripley's Aquariums

Sea Turtle Conservancy is excited to have our friends from Ripley's Aquariums sponsor a turtle in the Tour de Turtles for the third year in a row! Last year, Ripley's sponsored a loggerhead turtle named Shelley that was released from the Barrier Island Center (BIC) in Melbourne Beach, FL. Shelley swam 761 km and came in 2nd place in the People's Choice Award Competition!



This year, Ripley's sponsored turtle will be released from the BIC on Sunday, August 2nd, and her name is...MYRTLE! Myrtle the loggerhead will be swimming to raise awareness about the threat of plastic debris.

For more than 90 years, Ripley's Entertainment, Inc. has entertained visitors around the world, with more than 90 attractions in 10 countries. Ripley's three aquariums in Myrtle Beach, SC, Gatlinburg, TN, and Toronto, Canada have educated millions of visitors. In the next decade, Ripley's plans to open more aquariums around the world.

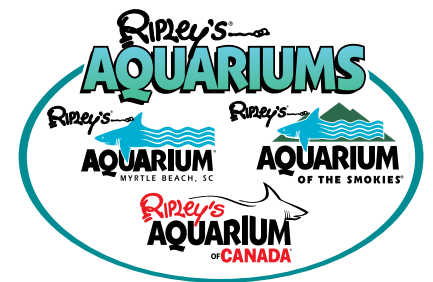
Ripley's mission is to provide an immersive experience into the aquatic world while fostering education, conservation and research. The three aquariums are each home to more than 10,000 exotic sea creatures such as sting rays, sharks and jellyfish, which entertain, inspire and encourage visitors to respect and protect the waters of the world.

Each of the Ripley's Aquariums are home to rehabilitated and unreleasable green turtles that swim alongside sharks, moray eels and fish. All four turtles receive consistent and excellent care overseen by Dr. Robert George, Ripley's Chief of Veterinary Services. Ripley's sea turtle exhibits help educate the public and raise awareness about the threats that sea turtles face.


The past two Ripley's turtles in the Tour de Turtles raised awareness about the dangers sea turtles face from longline fisheries. The turtles, attracted to the bait, get caught on the hooks used to catch fish. Loggerheads face higher risk to longline fisheries than other species because of their feeding habits.

Ripley's is involved in numerous conservation efforts such as the AZA's Party for the Planet/Earth Day Celebration and Species Survival Program, as well as participation in International Coastal Cleanup and other local community cleanups. Ripley's Aquarium Conservation Team is partnering with the North Myrtle Beach Sea Turtle Patrol to help

monitor sea turtle nests along previously unmonitored portions of the beach. Other actions include partnership with the organization Ocean Wise to support sustainable seafood and efforts to reduce in-building energy and water usage.



One of Ripley's Aquariums main goals is to promote conservation and protection of marine wildlife, and Tour de Turtles is an excellent way to achieve this goal! Ripley's especially feels that it is important to support sea turtle conservation efforts and sees Tour de Turtles as a way to engage and educate guests about sea turtles.

Thank you, Ripley's Aquariums! 

**By Lexie Beach**  
Communications Coordinator

## Leatherback turtle being satellite-tracked by STC found dead in Colombia

In May 2015, a leatherback turtle was tagged with a satellite transmitter by STC biologists after she nested at Chiriqui Beach, Panama. The massive turtle was named “Caña” by local children. In July 2015, a dead leatherback was spotted by tourists after it washed ashore in Salinas del Ray, Colombia. The animal’s flipper tags and the still-attached satellite transmitter were used to positively identify the turtle as “Caña.” Once informed about Caña’s fate, STC began trying to piece together information that might explain what happened to this turtle, which had been observed healthy and nesting just two months prior.

STC was receiving strong signals from Caña as soon as she was released. She even returned to nest one more time before starting her migration east toward Colombia. Caña was providing invaluable scientific data and her migration route proved very interesting. This was the first time one of STC’s satellite-tracked leatherbacks had headed to South America. STC researchers and thousands of people watching the turtle’s migration online were very excited to see where Caña would go next.

In early July, STC migration researcher Dan Evans noticed that Caña’s transmitter had not sent signals for several days. This could have meant one of two things—that the transmitter had been damaged and could no longer send signals, or that Caña had not surfaced for some reason. The transmitter used to track Caña is saltwater activated and sends a signal to orbiting satellites whenever the device breaks the surface of the water, such as when the turtle surfaces to breathe or emerges onto land.

Evans did not want to jump to conclusions about the leatherback’s fate, and hoped the transmitter was simply malfunctioning and would start working again soon. Several days later,

Caña’s transmitter began sending a very strong signal from the shores of Colombia. On July 8, STC received an email from the Environmental Corporation of the Atlantic in Barranquilla, Colombia, stating that a tourist had found a dead leatherback washed ashore with STC’s tags and contact information. It was Caña.

While we are still awaiting the results of a necropsy, the satellite data is very telling. STC received no satellite signals for three days, which means that Caña could have been trapped underwater and drowned. The waters off of Colombia are filled with fishing nets that indiscriminately trap anything they entangle. It is likely that Caña became tangled in one of these nets and drowned. Sea turtles are air breathing reptiles and can only hold their breath for extended periods of time when they are inactive or sleeping. If she was, in fact, trapped in a net, Caña’s struggling would have caused her to drown fairly quickly. This is only one theory about what may have happened to her, but this may be the most likely explanation.

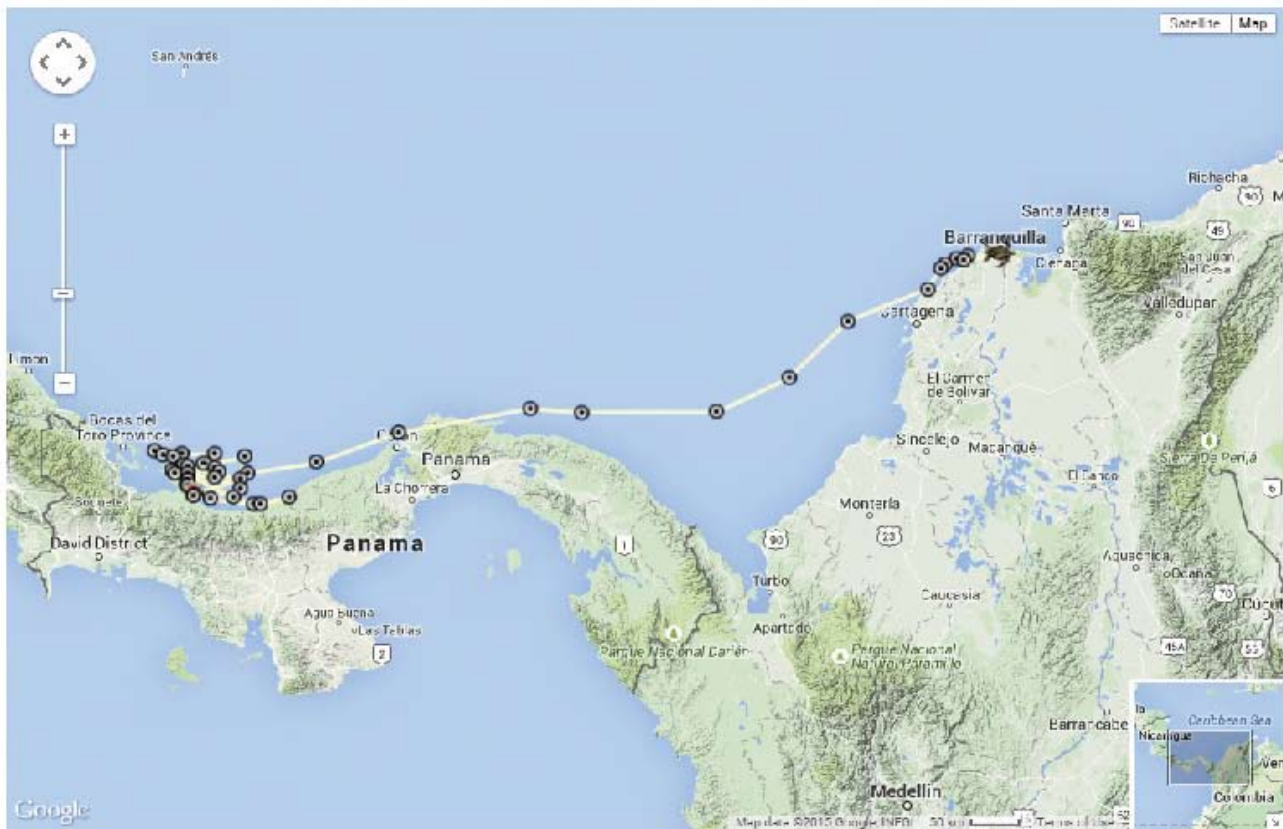
Although stories like this are very sad to share, they demonstrate how important it is for STC to keep tracking sea turtles and to raise awareness about the very real threats all sea turtles face. 🐢



Beautiful “Caña” finishes nesting in May, 2015.

**By Lexie Beach  
Communications Coordinator**

## Satellite Tracking | Cana




Sea Turtle Conservancy was able to track Caña all the way to Colombia before her transmitter stop sending signals.



Caña's bloated body was found by tourists on this beach in Colombia in July, 2015. Interaction with fishing nets is suspected as the most likely cause of death.

4424 NW 13th Street, Suite B-11  
Gainesville, FL 32609  
(352) 373-6441  
Fax: (352) 375-2449  
stc@conserveturtles.org  
www.conserveturtles.org

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## Membership Update

### Show some Love for your Favorite Turtle!

This year Sea Turtle Conservancy will again be crowning a winner in two Tour de Turtles categories: Longest Distance Traveled and People's Choice. Some turtles are at an advantage because of their size and species, so we decided to let even the little guys have a chance at winning! Fans and supporters can show their support for their favorite turtle in one of three ways. Each method will contribute to the overall People's Choice count. From each turtle's official web page at [www.tourdeturtles.org](http://www.tourdeturtles.org), fans can tweet their support for their favorite turtle or turtles. Each tweet will be recorded and tallied. You'll be able to see your impact on the turtle's profile page right away!

Supporters can also give a financial contribution in honor of their turtle of choice. You can adopt your favorite turtle and receive a personalized certificate as well as a keepsake folder, stickers, a bookmark, a magnet and a sea turtle conservation guide. Want to keep things interesting? Try pledging your support in the Tour de Turtles Swim-A-Thon. For example, you can pledge to contribute 10 cents (or any amount) for every mile that one of the turtles swims. At the end of the Tour de Turtles we'll tally up the results and let you know how much your contribution will be. Adoptions and Swim-A-Thon pledges will be weighted to account for more in the race for People's Choice.



2015 Tour de Turtles Contestant "Pawikan", sponsored by PacSafe, begins her first strokes in the race.

Be sure to log on to [www.tourdeturtles.org](http://www.tourdeturtles.org) to show your support by tweeting, pledging or adopting a turtle in the 2015 Tour de Turtles race. 