Sea Turtle Conservancy Newsletter



Science-Based Sea Turtle Conservation Since 1959

Issue 1, 2016



Sea Turtle Conservancy (STC) is proud to announce the release of a series of short, 5-minute videos about sea level rise (SLR) and the need to protect Florida's beaches in an era of rising seas for both sea turtles and people. The video series, *Ahead of the Tide*, was produced in partnership with the nonprofit film-maker CAVU.

The first video in the series highlights the impor-

tance of beaches to all Floridians as told in their own words. To produce the video series STC and the talented CAVU production team traveled the state interviewing climate scientists and legal scholars at three universities, local coastal government officials and planners, high school and college students, surfers and other beachgoers, federal agency officials, and public figures such as one of

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Inside: "Adopted" Turtles Return to Tortuguero



In Memorium: Larry Ogren

Events

Florida Marine Turtle Permit Holder Meeting

In January, Sea Turtle Conservancy and the Florida Fish and Wildlife Conservation Commission hosted the 19th annual Florida Marine Turtle Permit Holder Meeting in Jacksonville, FL. The

Permit Holder Meeting brings together over 400 sea turtle experts, government regulators, permit holders and dedicated volunteers to discuss current research, trends and emerging issues in sea turtle conservation across the state. This annual meeting is an essential part of the Florida Marine Turtle Protection Program, as it helps keep permit holder organizations and their volunteers fully informed and engaged. It also provides an opportunity to recognize and network with sea turtle conservation leaders.

Southeast Regional Sea Turtle Meeting

Southeast Regional

Sea Turtle Network

In February, STC staff members traveled to Mobile, AL (the birthplace of founder Dr. Archie Carr) for a whirlwind week of sea turtle workshops, presentations, outreach and fun at the Southeast Regional Sea Turtle Meeting!

STC was well-represented throughout the meeting. Our very own Lighting Project Manager Rick Herren served as the Meeting's

al Florida Marine Turtle Permit Hold

reat with Care

official Registrar, Communications Coordinator Lexie Beach gave an educational presentation about social media, Executive Director David Godfrey delivered a moving tribute to both Dr. Carr and

the late Larry Ogren, Policy Coordinator Gary Appelson presented on sea level rise in Florida, Technology and Research Specialist Dan Evans gave a presentation on STC's satellite transmitter work, and the STC lighting team presented a poster on their lighting retrofit work.

International Sea Turtle Symposium

Just a few weeks after returning from the regional meeting in Mobile, several STC staff members traveled to Peru for the International Sea Turtle Symposium. This annual Symposium, hosted by the International Sea Turtle Society, is a unique event that draws participants from around the world, from across disciplines and cultures to a common interest and objective: the conservation of sea turtles and their environment. The symposium encour-

ages discussion, debate, and the sharing of knowledge, research techniques and lessons in conservation to address questions on the biology and conservation of sea turtles and their habitat.



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.

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Technology & Research Specialist Daniel Evans

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... from cover

Florida's favorite authors, Carl Hiaasen.

Sea level rise is projected to have serious and longlasting impacts to the state's globally-important sea turtle nesting beaches.

Sea wall west of Blue Mountain Beach in Walton County Florida.

Our hope is that this series of short, powerful films will help to serve as a Call-to-Action for all Floridians to demand that our elected leaders, government agencies and coastal communities begin planning for SLR in order to protect Florida's most valuable asset -- its natural sandy beaches -- both for sea turtles and for people. We hope these videos also will encourage the public to push local elected officials to make smarter decisions regarding where we can build along the shoreline.

STC has long been concerned about impacts to the nesting beach resulting from rising seas. How will Florida maintain viable nesting habitat for sea turtles? Will the state permit the "armoring" of the shoreline with sea walls to protect adjacent buildings and just let our beaches wash away? STC is working to highlight these concerns and increase public awareness about SLR by focusing attention on impacts to the nesting beach and promoting strategies that can help ensure the long-term protection of the beach. Public awareness and involvement on these issues is critical in a state like Florida, where many elected leaders still deny the realities of SLR and where state coastal development and management laws fail to even acknowledge climate change or sea level rise. Sadly, even the few local government efforts at SLR adaptation planning focus primarily on infrastructure and ignore impacts to the beach and fail to include strategies to reduce the loss of coastal habitat.

STC Policy Director Gary Appelson has been traveling the state making presentations to highlight the need for Florida to begin planning for sea level rise along the shoreline. Late last year he addressed the Florida Shore and Beach Preservation Association, a professional association of local coastal governments and coastal engineers. He stressed the need to plan for SLR in the state's beach management program, to reform our outdated coastal development policies, and to study better ways to rebuild beaches that have less of an impact on sea turtles and other nearshore resources. STC has also carried its message to other conferences and workshops.

Long-term planning for SLR is essential if we are to avoid the hardening of the beach through the widespread construction of sea walls that are constructed in the hope of protecting upland properties from the rising surf. Already, some coastal developers are proposing to line the beach with sea walls before buildings are even constructed on the coast. Sea walls are bad for the beach and bad for sea turtles. Once constructed, sea walls redirect wave energy to areas immediately in front of and to the sides of the walls. This refracted wave energy results in increased erosion around the wall and interferes with the beach's ability to naturally recover from storms. Sand locked up behind sea walls is now removed from the beach system and is no longer available to help naturally replenish beach sand lost to erosion. Sea walls also deter female sea turtles from nesting and cause nests to be laid in sub-optimal habitat where they are more susceptible to sea water inundation and erosion.

SLR skeptics often argue that ocean levels have been rising and falling for millennia and sea turtles are just as adapted to rising seas as they are to periodic hurricanes and other major storm events. It is certainly true that in the distant past sea levels were much higher and Florida's beaches and barrier islands were located much further inland than they are today. And undoubtedly sea turtles simply nested wherever those beaches were located and slowly adapted as sea levels slowly receded. What

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TdT Update

Leatherback Calypso Blue IV Wins Sea Turtle Conservancy's "Tour de Turtles"

Calypso Blue IV, an endangered female leatherback sea turtle from Panama, finished in first place in Sea Turtle Conservancy's (STC) 8th annual Tour de Turtles migration marathon.

The Tour de Turtles (TdT) is an online, educational sea turtle migration program. This year, audiences followed the migration of 13 sea turtles, representing four species, on www.tourdeturtles.org, an interactive website which allows people to track, learn about, and adopt their favorite sea turtle. The ultimate goal of the TdT is to conduct valuable research about sea turtle migrations and simultaneously raise public awareness about the threats to turtles and their habitats. Two of the seven species of marine turtle are classified as critically endangered worldwide (hawksbill and Kemp's ridley) and a further two are classified as endangered worldwide (green and loggerhead).

Leatherback Calypso Blue IV, sponsored by Atlantis, Paradise Island, traveled an impressive 3,745 km from Panama to the mid-Atlantic coast of the US during the three month-long race. With a streamlined body shape and powerful front flippers, leatherbacks like Calypso Blue IV can swim thousands of miles in the open ocean and against fast currents. They are natural-born marathon swimmers.

The 2015 TdT included live turtle releases in Panama, Costa Rica, Nevis and Florida. Before each turtle release, STC scientists attached a satellite

transmitter to each turtle's shell. These transmitters allow STC to track the turtles as they migrate from nesting beaches to their foraging grounds, and through TdT the public can follow each turtle's journey.

Well over 90% of a sea turtle's

life is spent in the ocean — feeding, mating, migrating and doing whatever else a sea turtle does when no one is watching — and yet most sea turtle research has been conducted at nesting beaches. Scientists are missing potentially important information that could help us better protect all sea turtles, not just those being tracked. In particular, to adequately protect sea turtles using marine and terrestrial habitats, we must learn more about their migratory behavior at sea, where their marine habitats are located, how the turtles use these different habitats and the migration routes turtles travel between habitats. This is where the technology of satellite telemetry becomes a very useful and important tool to help conserve sea turtles.

"Sometimes tracking gives exciting new information; sometimes it provides supporting data to show that certain areas are really important to sea turtle species," said Dr. Emma Harrison, STC's Scientific Director. "This year's TdT has done both, which is pretty fabulous."

For example, winning turtle Calypso Blue IV followed one of the more "common" migration routes that STC has previously observed for leatherbacks nesting in Panama. "It was interesting to note that she hung out off the southern coast of Cuba for a few days back in July, before heading off into the Atlantic," said Harrison. "She's now off the Maryland coast, and it seems as if she has found a food source there, as she is swimming around in the deeper waters."

Some exciting discoveries to note from this year's TdT include: Pawikan, a green turtle tagged at Tortuguero, Costa Rica pictured below, went up to the southwest Gulf of Mexico, and is currently hanging out off the Yucatan Peninsula in Mexico.



"This area is starting to look like another foraging site for Tortuguero greens, as we have had a couple of satellite tracked turtles end up in the same area," said Harrison. "We've also had a couple of turtles show up on the nesting beach in Tortuguero with tags from Mexico, so it is possible that they might have been encountered and tagged on foraging grounds up there."

Susie Q, another green turtle tagged in Tortuguero, was especially interesting. She is the first green turtle that STC has tracked from Tortuguero that headed south. "All the other green turtles, even though they might have swum south for a bit initially, have ended up going north," said Harrison. "But not her; she's now in coastal waters close to the Guajira peninsula, which separates Colombia and Venezuela. There have been some (limited) tag returns from that region; there are indigenous groups in Venezuela that definitely hunt turtles, including some of our greens on their foraging area



apparently. So this is a very cool track."

Pictured at left is Millie, a hawksbill tagged in Nevis, West Indies that traveled south from the island and has been foraging around Grenada for the past two months. This is the first time one of the hawksbills tagged in Nevis has been tracked to this area. "I would say that most commonly hawksbills from Nevis go north or west, while few go east or south," said Dan Evans, STC's Technology and Research Specialist. "Millie's migration is unique in that it is the furthest south we have tracked a hawksbill from Nevis."

Dash, a loggerhead tagged on the east coast of Florida, traveled north after being released, which was the route she was expected to take. But instead of turning around and heading back down south, as is typical with loggerheads tagged in this area, she kept on going north towards the coast of North Carolina. Three other loggerheads were also tagged and released from the same area as Dash; all of these females are now hanging out in the warm waters around the Bahamas.

Even though the official TdT race is over, supporters can continue to learn about sea turtles and track their journeys on STC's main website under the Turtle Tracker at *www.conserveturtles.org*

By Lexie Beach Communications Coordinator

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is different for sea turtles now, as they are forced once again to adapt to shifting shorelines, is that Florida's beaches are no longer undeveloped and free to move inland as seas rise. Instead, they are lined with homes, businesses, and high-rise condos.

A line in the sand has been drawn where development is now located, and property owners are willing to defend that line at all costs. As seas rise and beaches wash away and recede, turtles that come ashore to nest are finding that their habitat literally is being squeezed between the rising sea and the immovable line of development. While state leaders continue to ignore SLR, Florida continues to allow high-risk and high-density shoreline development as if our beaches are stable land upon which to build. STC believes there are many specific policies that can be implemented to help coastal communities adapt to rising seas, while also protecting our natural beaches both for sea turtles and for people. Most importantly, we have to start taking action and making smarter decisions about the management of our coasts in an era of rising seas. We have to get "Ahead of the Tide."

The first chapter in the series, Florida's Lifeblood, can be watched now on STC's website at *www. conserveturtles.org*. You can also receive notification when each of the remaining nine chapters are released by signing up at *www.aheadofthetide.org*, a joint website set up by multiple organizations to advance our common campaign to address SLR in Florida.

> By Gary Appelson Coastal Policy Coordinator

Membership

Adopted Turtles Return to Tortuguero

From July to September each year, Sea Turtle Conservancy researchers tag and collect data on the green turtles that nest on the beaches of Tortuguero, Costa Rica. Since these turtles are not tracked via satellite, STC keeps adoptive "parents" informed when their turtles are spotted nesting in Tortuguero. The "parents" of the turtles are listed below:

Mary Armstrong Alyssa Badstein Yanick Baert Lorraine Bal Disa Banker Sandy & George Beckham Jessica Berry Mark Besch Sylvia V. Blazina Erika Bonoo Dan & Sue Borden Bianca Boscher Hyke Bouma Emma Brandt Debra Brent Jamie Bricker Fred & Cynthia Burdick Madeline Liphardt Cann Travis Caron Joseph Clark Abby Colarusso Thomas Cole Rick Covell **Benjamin** Crofton Jonathan Delconte Shakie Desai Louise Devilee Gioia Dolmetsch Noa Drummond and Bella Lubotzky Kieran Duncan **RJW** Dupont Noelle Eberz Shannon Ehle **Thomas Enfraze** Susan Faust Mary Ellen Frazier Mauricio & Selena Garcia Hogbin Yoshikatsu Goossens Andrea Gordon Abigail, Ben & Holly Griffin Victoria Hale Grandma & Grandpa Hanna Stephen Harsany Marieke Heinsbergen

Joe & Mary Howard Maya Howard Carel Iedema Sophie Jaoven Johnson Family Katz Family Rob & Sue Kempf Ticia Anne King Carolyn Koepp Undine Krausse-Arnecke Susan Kuveke Angelique Makkenze William Mangan Vicky Marisa Ken McCall Charlene McClurg Janet McCormack **Opal Mae McCormick** Alyssa McGowan Sheena McNally Patricia Meijer Nadia Mercier Adolf Mok Philip & Nancy Moldofsky John Mullen Peter Naegele Josh Napial New Central Public School Annemieke Pecht Renee Perales Claude Perrin Susan Perry Karen Peterson **Rachel Phillips** Anna Potts Rebecca Powell Josie Pry Koen Putteman Eileen Reed Melanie Renk Han Rens Pamela Rich Alexander McCabe Rintye Ingrid Ritchie



Cameron Rohall Robert Sari Karin Schepers Karen and Alan Sedell Abby & Emma Sharer **Olivia Shattler** Patricia & Gord Shuttleworth Monika Sigg Julie Smith Suzanne Stewart Sheila Sullivan Kristin Swift Jimmy Tang Ken Tanimoto Libby Taylor Blaise Tilton Leah Trunsky Casey Tryon Alanna Turner Frank Van Beede Van den Munckhof Harry & Milie Van Den Octelaar Fam Van der Asdonk P Van der Heijden Sylvia Van Ravesteijn Emma Walker Jennifer Walker Jennifer Weston Dennis Wilson Mary Yates Ann Zyglocke



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In Memorium - Larry Ogren

It is with a heavy heart that STC shares the news that longtime sea turtle conservationist Larry Ogren (pictured at right in Tortuguero) has passed away. Larry Ogren studied biology at the University of Florida under Archie Carr in the 1950s. He was one of Archie's first graduate research assistants and accompanied Archie on some of his earliest trips to Tortuguero. In fact, when Archie set up the sea turtle tagging program in Tortuguero, it was Larry who stayed behind, in the field, to run the program when Archie returned to Florida. This field work led to some of the earliest and most important published papers on sea turtle ecology and migrations, which Larry co-authored with Dr. Carr.

In 1956, the first year of sea turtle tagging, Dr. Carr accompanied Larry to Tortuguero, where he left him alone to carry out the work. There was no research station and nothing but an open air hut to sleep in. As Archie left Larry on the beach that year, he left him with these parting words (as told by Larry), "Now you know it's hot as hell down here; you'll get sand in your britches walking the beach, and you'll get bored to death. If you do, just go into town and have a beer. Take a break, because it's going to be a long, wet summer. See you in a few months."

And with that encouraging send-off, Larry's adventures in Tortuguero began. And for anyone who has ever spoken with Larry about those years, there was plenty of adventure, like the time he was flying over the Yucatan in Mexico on a Navy plane as part of Operation Green Turtle, which was an attempt coordinated by Sea Turtle Conservancy (known then as Caribbean Conservation Corporation or CCC) in partnership with the Navy to start new green turtle nesting colonies by releasing hatchlings at beaches around the Caribbean. They were flying at night in a horrible storm and quickly running out of gas. The weather was socked in and they couldn't find the airport. The pilot thought they were going to crash until he spotted headlights on a road below, which could be either coming from or going to the airport. He made a guess that happened to be right; they found the runway just before having to ditch the plane.

After completing numerous seasons in the field with CCC, Larry went on to a very successful career with the National Marine Fisheries Service, where he

played a prominent role in stimulating global interest in sea turtle conservation. His efforts led to the funding of the first systematic study of sea turtles in the Atlantic, the results from which were presented at the Western Atlantic Turtle Symposium, which Larry organized. That symposium was the first international conference focused on sea turtles that involved elected officials



From "Turning Turtles in Tortuguero"

and natural resource managers from around the Atlantic and Caribbean. The symposium helped stimulate turtle protection regulations in countries around the region that previously had no laws protecting sea turtles. Also through his work with Fisheries Service, Larry helped push through the first regulations requiring the use of Turtle Excluder Devices on shrimp trawls in the U.S., regulations that undoubtedly saved tens of thousands of sea turtles. Larry served for many years as a member of CCC's Board of Directors and continued to guide the organization as a member of STC's Scientific Advisory Committee.

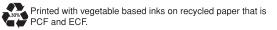
Like Dr. Carr before him, Larry Ogren was a lifelong champion of sea turtle conservation. A few years back, STC established an award to honor individuals, who, like Archie Carr, had dedicated a substantial part of their lives to the cause of sea turtle research and protection. Larry Ogren is one of just four people to be awarded the "Archie Carr Lifetime Achievement Award," which he was presented in New York in 2009 as STC celebrated its 50th anniversary.

In 2013, Larry worked with writer Anne Ake to publish the book "Turning Turtles in Tortuguero: Stories from the Origins of Sea Turtle Conservation," a wonderful and humorous look back at Larry's experiences working with STC and Archie Carr in the earliest days of sea turtle conservation – work that helped inspire the global movement to protect sea turtles.

Larry was a trailblazer, a one-of-a-kind naturalist, conservationist and human being. He was a friend to many in the sea turtle conservation community and he will be missed dearly.

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Turtle With a Past

Since the mid-1950s Sea Turtle Conservancy has tagged and monitored hundreds of thousands of sea turtles at its research site in Tortuguero, Costa Rica, one of the most important green sea turtle rookeries in the world. One of the goals of this program is to gauge the overall health of this population, in terms of size, through the nesting behavior of individuals.

Some turtles are tagged and never seen again. Some turtles return time and time again. STC was fortunate to encounter one of these returning turtles during the 2015 nesting season. A female green sea turtle that was encountered nesting last year was originally tagged in 1984! Here are some stats about this longnesting turtle:

- She is at least 50 years old, but could be as old as 80;
- Encountered 26 times between 1984 and 2015;
- Very strong "site fidelity", nesting within the same .5 miles of beach; and
- Has produced an estimated 4,200 hatchlings!

This turtle is a sign of the success of this program, which has increased turtle populations through education, poaching protections and research. We hope to be able to encounter this turtle for another 31 years!



Want your own turtle with a unique nesting history? Visit *www.conserveturtles.org* to adopt a Tortuguero turtle!

By Becca Gelwicks Membership Coordinator

2016 Sea Turtle & Cultural Expedition to Cuba

Join STC as we explore Havana and the Guanahacabibes Peninsula in search of culture and sea turtles. Tentative dates are June 26 - July 5, 2016.

For more information, please contact David Godfrey at david@conserveturtles.org