



SEA TURTLE CONSERVANCY

2021 Annual Report



From the Executive Director

Over the last 60 years, Sea Turtle Conservancy has shown that endangered sea turtles can be recovered—through sustained research and conservation that includes habitat protection, elimination of human-caused threats, and creative education programs that build public support for saving these amazing animals. As evidence of this success, both loggerhead and green turtle numbers in Florida are increasing. Similar results are being seen at STC's project sites in Panama, where both hawksbills and leatherbacks are setting record nesting levels.

I wish all the news for sea turtles was good, but the reality is turtles are struggling in a few locations where STC works. This is particularly true in Bermuda, where we've seen a major die-off of seagrass that is having a calamitous impact on the island's juvenile green turtle population. And in Panama, despite a major growth in nesting by leatherbacks at Soroopta Beach, during the last two years we've seen a shocking increase in the rate of illegal egg harvesting.

Started over 50 years ago, the Bermuda Turtle Project (BTP) is one of our longest-running programs. For millennia, sea turtles and seagrasses thrived together in a balanced ecosystem in Bermuda, but as so often is the case, that balance has been destroyed by human disturbances, including nutrient runoff, boat traffic and climate change. In 2021 STC researchers documented a dramatic decline in seagrass throughout the island. As a result, sea turtles are vanishing from many long-term study sites, and those that remained show health declines. It is critical that we learn why seagrass is disappearing in Bermuda, and support conservation actions to restore this habitat.

The Bocas del Toro region of Panama hosts globally important levels of nesting by hawksbill and leatherback turtles. Since the early 2000s, STC has studied these nesting populations and conducted community-based education and conservation to protect nests and curtail illegal hunting. This summer STC documented a dramatic increase in leatherback nesting at Soroopta Beach, which is very encouraging and provides evidence that STC's sustained efforts are producing measurable results. Unfortunately, while we celebrate this jump in nesting, we are alarmed about a significant increase in illegal egg harvesting. In 2022, STC will implement a new approach to curtail poaching at Soroopta, including the operation of hatchery where we can relocate and protect as many nests as possible. STC uses hatcheries only as a last resort; unfortunately, we have reached that point at Soroopta.

This combination of good and bad news for sea turtles is a constant reminder that STC cannot rest on its past successes. While it is important to acknowledge and celebrate whenever our research finds that sea turtles are responding well to conservation efforts, we must also remain vigilant in identifying and responding to each new threat. To do this, we depend on the support of people, businesses and foundations that care as much as we do about sea turtles and the marine environment. Thank you for your support!



David Godfrey
Executive Director

U.S. Staff

David Godfrey - Executive Director
Dr. Roldan Valverde - Scientific Director
Pat McCloskey - Controller
Dr. Dan Evans - Senior Research Biologist & Grants Manager
Kim Aslan - Office Manager
Lexie Beach - Communications Coordinator
Evan Cooper - Membership Coordinator
Stacey Gallagher - Development Coordinator / Lighting Project
Rick Herren - Biologist & Project Manager
Rachel Tighe - Lighting Project Manager
Emily Asp - Lighting Project Specialist
Casie Hain - Lighting Project Specialist
Sarah Rhodes-Ondi - Community Stewardship Coordinator
Erin Darling - Senior Accountant

Staff

Costa Rica Staff

Roxana Silman - Costa Rica Director
Maria Laura Castro - San José Office Assistant
Ivan Ramos - Tortuguero Station Manager
Jaime Restrepo - Research Coordinator
Laia Nadal Agullo - Education & Outreach Coordinator
Hazel Rankin - Visitor Center Coordinator

Panama Staff

Cristina Ordoñez - Panama Research Coordinator
Raul Garcia Varela - Panama Assistant Coordinator
Felipe J Baker - Panama Indigenous Community Liaison
Xavier Ow Young - Panama Education & Outreach Coordinator

Programmatic Achievements

Tortuguero and Panama Research and Conservation Programs

Because travel restrictions due to COVID-19 were lifted in 2021, STC resumed normal operations and achieved its research, conservation and education goals in Tortuguero. In-person educational outreach resumed, resulting in hundreds of community members and visitors learning about how they can protect Tortuguero's sea turtles. STC participated in direct conservation by rescuing adult green turtles from illegal hunting and re-burying hawksbill eggs that were recovered by law enforcement.



STC's RAs monitored all sea turtle species nesting at Tortuguero to determine population trends, reproductive success and survival threats. Green turtle nesting results (June–December): During the 2021 green turtle season, 44,275 green turtle nests were laid on Tortuguero Beach. The average hatching and emergence success for nests was 78.3% and 73.4%, respectively, which is quite good for this species. Leatherback nesting results (early 2022): During the 2022 leatherback nesting season, 156 leatherback nests were laid on Tortuguero Beach. The average hatching success was 48.1% and the average emergence success was 43.21%, which were both slightly higher compared to last year.

Through our research and conservation programs in Bocas del Toro, Panama, STC monitored and protected both leatherback and hawksbill turtle nests at several project beaches, including Chiriquí Beach, where over 3,600 leatherback nests and more than 1,500 hawksbill nests were recorded. Based on data collected by STC since 2003, an assortment of half a dozen beaches near Bocas del Toro hosts the fourth largest nesting colony of leatherback turtles in the world and one of the largest colonies of hawksbills remaining in the Caribbean. STC's work in the area is protecting turtles, raising public awareness, fostering community involvement in conservation and promoting ecotourism as a substitute to sea turtle consumption.

Sea Turtle Lighting Update

In 2021, STC completed several lighting evaluation trips to Southwest Florida and Fort Lauderdale Beach, the area in Florida with the highest rate of sea turtle disorientation, as part of two long-term grants from the National Fish and Wildlife Foundation. In total, STC completed the lighting retrofit at 19 beachfront properties in Florida in 2021. STC also educated 220 code enforcement personnel from 14 different Florida counties on how to identify lighting violations and recommend the best turtle-friendly solutions to correct the problem. As a global leader in light pollution mitigation for sea turtles, STC uses creative educational strategies and turtle friendly lighting technology to reduce sea turtle disorientations.

Board of Directors

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Tour de Turtles Education Program

STC's most popular education program is the annual Tour de Turtles (TDT), an online education event that tracks the migrations of a dozen or more turtles being monitored by satellite. In 2021, the fourteenth year of the program, we released the following turtles with satellite transmitters: five leatherbacks from Soroopta Beach, Panama; four leatherbacks from Jupiter Island, Florida; two green turtles and one hawksbill from Tortuguero, Costa Rica; four loggerheads from the Archie Carr National Wildlife Refuge in Melbourne Beach, Florida; two hawksbills from Nevis, West Indies; and two rehabilitated juvenile green turtles in partnership with The Turtle Hospital in the Florida Keys. Due to COVID-19 restrictions, we weren't able to hold our normal large public releases. However, the Tour de Turtles website was more popular than ever as 22,800 people logged on in just three months.

Advocacy in Florida

Florida's globally-important sea turtle populations face a myriad of anthropogenic threats, with coastal armoring and artificial lighting being the most urgent. During the 2021 Florida Legislative Session, STC advocated against two bills that would have greatly expanded both of these threats. One of the bills, which failed to pass through its first committee, sought to deregulate coastal armoring and would have created an explosion of sea wall construction along important sea turtle nesting habitat in Florida. Another bill would have undermined local sea turtle protection ordinances that prohibit unshielded white lights during sea turtle nesting season. STC worked with the Florida Fish and Wildlife Conservation Commission (FWC) to craft amendment language, which was later approved, that exempted sea turtle protection ordinances from the restrictions in the bill. STC will continue to be a strong voice for Florida's threatened and endangered sea turtles and their habitats to ensure that they survive well into the future.

Bermuda Turtle Program Update

This summer, STC staff biologists Dr. Dan Evans and Rick Herren joined our long-term partners in Bermuda to successfully carry out critical field research as part of the Bermuda Turtle Project (BTP). Studying sea turtles in their marine environment is vital to finding out how well they are doing at various life stages. Over the last five decades, the BTP has developed into a multifaceted study of sea turtles in their developmental habitat – a place where young sea turtles from around the Atlantic and Caribbean come to grow up. While we had to postpone our Bermuda field research in 2020 due to the pandemic, the project forged ahead in 2021 under the scientific leadership of STC's staff. The most notable takeaway from this year's research in Bermuda is that major ecological changes underway on the island have resulted in a massive die-off of seagrasses – the main food source for juvenile green turtles. More research is needed to fully understand the complicated factors at work, but it almost certainly involves water quality degradation associated with excess nutrient and pollutant runoff from the island, combined with disturbance by human activities. Some people in Bermuda have been quick to suggest overgrazing by sea turtles as the cause, but it seems unlikely an animal that has thrived around Bermuda for thousands, or possibly millions, of years – in greater numbers than seen today – would be the cause of this collapse. To better understand the changes underway in Bermuda, the BTP was expanded this summer to include vessel-based transect surveys to estimate the current size of the green turtle population. We also initiated a new sea turtle health assessment that involved analyzing blood samples from captured animals to compare with healthy populations in Florida.



Membership

- Total Members - 5,878
- New Members - 3,911
- Renewals - 492
- Monthly Givers - 249

Tortuguero Research Station

- Visitor Center Visitors - 4,525
- Visitor Center Gift Shop Sales - \$10,964
- Research Assistants Trained - 25
- Environmental Education Assistants - 4
- Eco-Volunteers - 28

Soropta, Panama Station

- Eco-Volunteers - 1

Barrier Island Center

- Turtle Walk Participants - 465
- Volunteer Hours - 1022
- Gift Shop Sales - \$25,209

Website

- Page Views - 3,527,178
- Visits - 1,641,746
- Unique Users - 1,032,116

E-Communications

- E-mail Subscribers - 24,000
- Facebook Fans - 540,000
- Twitter Followers - 30,000
- Instagram Followers - 67,000

Tour de Turtles Program

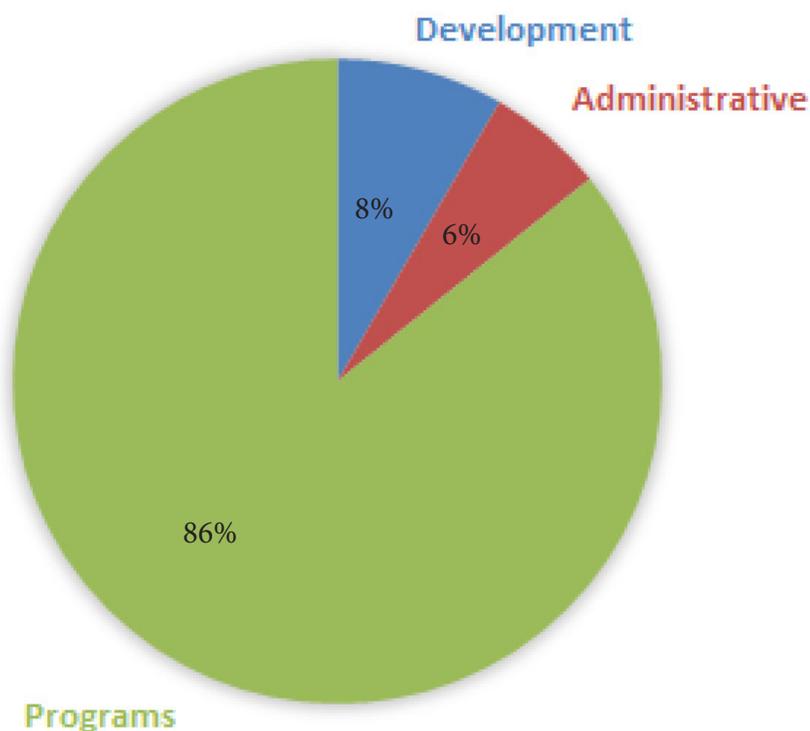
- Turtles Tracked - 20
- Release Countries - 4
- Website Visitors - 22,800

Sea Turtle Grants Program

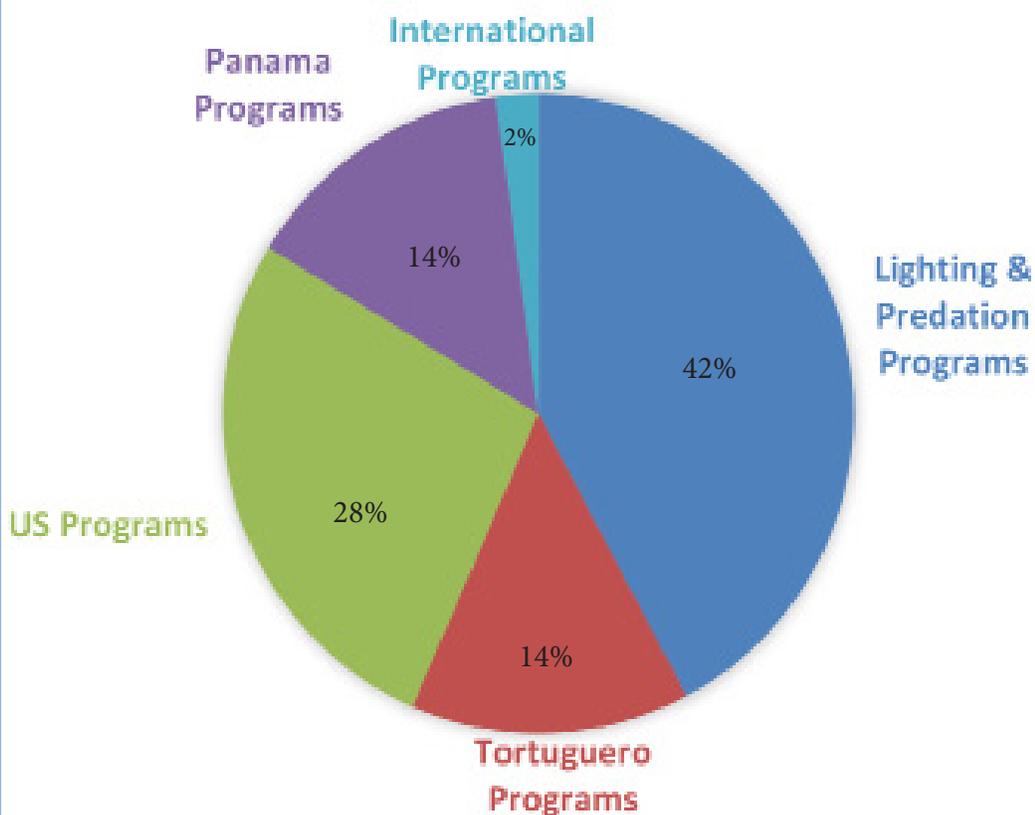
- Total Awarded - \$423,464
- Education Grants - 6
- Research Grants - 10
- Conservation Grants - 10

Cover Photo by Barbara Selles

Total Expenses



Program Expenses Breakdown



Foundation & Corporate Support

1888 Mills	For the Environment, Inc.	Paypal Giving Fund
Adventure Aquarium	Friends for a Better Way	Pledgeling Foundation
Altruette	Frontstream	Pura Vida Bracelets
AmazonSmile	Gili Sports	Quail Valley Charities, Inc.
American Endowment Foundation	GIMME Health Foods	Ress Family Foundation
Atlantis Blue Project	Give Lively Foundation	Roberta A Pierce Family Trust
Bates Foundation	GoodCoin	Rusczyk Family Foundation
Beauty 21 Cosmetics	Graft Cider	Schwab Charitable Fund
Benevity Fund	H.C. Frick Foundation	SEE Turtles
Bessemer National Gift Fund	Hardner Foundation	Seedlings Foundation
Blackbaud Giving Fund	HONU	Shark Reef at Mandalay Bay
Blue Sphere Foundation	INDO Board	Shop for Your Cause
Bruce and Phipps Menk Family FDN	J.W. Couch Foundation	Target Corporation
Certina	Julie VOS	Tarte Cosmetics
Charities Aid Foundation	Kanula Clothing	Tee Mill Tech
Clough Family Fund	Kendra Scott	TD Ameritrade Clearing
Coastal Conservation Creations	L3HARRIS	The Columbus Foundation
Coastal Wildlife Club	Lilly Pulitzer	The Good Day Foundation
Community First Foundation	Marisla Foundation	The Munson – Simu Family Gift Fund
Community Foundation for Brevard	Marriott International	The Scoob Trust Foundation
Community Foundation of North Central FL	Mennen Foundation	The Cynthia & George Mitchell Foundation
Country Life Outfitters	Mey Share Foundation	Theophilius Foundation
Curtis & Edith Munson Foundation	Mighty Cause	Turtle & Hughes
Cybergrants	Minera Panama	United Way
Disney	Mitchell Foundation	Vanguard Charitable Foundation
Disney Conservation Fund	Munson Foundation	Vanderpool Conservation fund
DivinityLA	National Christian	Wild Tribute
Edward Jones Trust Co	New Hampshire Charitable Foundation	Wildlife Collections (Fahlo)
Elinor Patterson Baker Trust Fund	National Fish and Wildlife Foundation	World Nomads
Felburn Foundation	NG Developments	Your Cause, LLC
Fidelity Charitable Gifts	Network for Good	Youth Development Foundation
Firedoll Foundation	NOGU Bracelets	Zev Trust Bequest
FLOAT Apparel	Oceans Lending	
Florida Aquarium	ODOS Eyewear	
Focused on Nature	Path Solutions	

Archie Carr Fellow (\$5,000 & above)

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Lavinia Clay	Kenneth Ferguson, Jr	James Lenhard	Mary Jane Seipler
Richard Clay	Rick Fletcher	Sandra Moss	Nancy Taylor
Thomas Clay	Laura J Forte	Jeffrey S Phipps	Dr. Joan Woolard
Mike & Marie Collins	Mr. Henry C Frick, III	Tom & Sharon Scanlan	

Kemp's Ridley Level (\$1000 - \$4,999)

John Alic	Jared Flinn	Helen Stamatacos & Charles	Susan Schonberg
William Allan	Alison Frey	Magal	Virginia Schwerin
Joseph Amisano	Elise Frick	Pamela Manice	Maureen Setter
Gregory & Janet Bastian	Curt Fuhrmann	Jane W. Miller	Deborah Shores
Kenneth Bedell	Brian Graham	Ms. Paula Miller	Nicholas A. Shufro
Dr. Gabrielle Bolton	Chloe Greenstein	Tama Olver	Greg & Susan Sickal
Jason Bonato	Kenneth A Hale	Litzi Oster	Anthony Skinner
Cecil Burgin	Karen & Richard Hall	Louise Pfister	Mary Stahley
John Byrd	Cecilie Hansen	Susan Place	Molly Sullivan
Landon H. Clay	Charles Harding	Kendra Porta	Gordon & Diana Tracz
Mr. and Mrs. Jim Cronin	Dale Henderson	Ms. Penny Purtzer	Sebastian & Gretel Troeng
Aileen Cudia	Jessica Hodgins	Mr. & Mrs. Chris Rajczi	Nancy Tuma
Rachel DeCavage	Dana Hurwitz	Jerry Randgaard	Jordan Urstadt
Shawn Dennis	Joan Kelsch	Tom Randgaard	Norman Varney
Tami Doll	Jeanie & Murray Kilgour	Diane Randgaard	Kennard Watson
C.H. Drollinger	Dr. Anthony Knerr	Richard Ratliff	Ian Westley
Elizabeth Duckworth	Jeffrey Kromrey	Peter & Margaret Reed	Roberta Wiener
Lisa Dunlap	John Lansing	Virginia B. Rogers	Louise M. Wilker
Thomas Engle	The Lieberman Family	Janis Scaramucci	