

The Caribbean

Conservation Results – July 2007-June 2008

Campaign for a Sustainable Planet



Caribbean beach © Nestor Windevoxhel

With its colorful reefs, crystal clear waters and palm lined beaches, few places on Earth embody the word “paradise” as fully as the Caribbean. The Caribbean Sea harbors nearly 8,000 square miles of coral reefs, including two of the longest barrier reefs in the world, the Mesoamerican Reef and the Andros Barrier Reef. These reefs are underwater oases for more than 1,400 species of fish and marine mammals, including sharks, manatees and dolphins. Each year, 40 million people flock here, bringing vital income, but putting pressure on the finite natural resources that many residents depend on for survival.

Recognizing the rich biological diversity throughout the Caribbean, the Nature Conservancy has established marine conservation programs across the region to preserve and protect its resources, of which only 7% are presently protected. In the Caribbean, the Conservancy is working with partners to create new and improve existing marine protected areas to safeguard corals and other marine life. We are also helping to develop finance mechanisms to sustainably protect lands and waters, building political will to mobilize support for conservation and addressing the current and imminent threats caused by global climate change.

As the only large conservation organization working throughout the Caribbean and with over 30 years of experience in the region, the Conservancy is well-positioned to help turn the tide of ocean and coastal degradation. Be it improved turtle nesting numbers on the beaches of St. Croix or governments committing unprecedented resources to conservation, we are seeing changes that make us hopeful for the future. We have made strong progress toward our conservation goals in this globally- important seascape over the past year and we are proud to share some of them with you.

Accomplishments



Eleanor Phillips, Director of The Nature Conservancy Northern Caribbean Program, Dr. Earl Deveaux, Bahamian Public Works Minister, and Rebecca Patton, Chief Conservation Strategies Officer of The Nature Conservancy at the launch of the Caribbean Challenge in Bonn, Germany © Jürgen Kura

The Caribbean Challenge

“In our quest to conserve the invaluable natural resources which sustains livelihood on many of our Small Island Developing States, the people of the Caribbean will undoubtedly continue to face unique challenges ... We must act today in order to meet the challenges that global biodiversity faces, such as the projected impacts of climate change. We must act, because, we can serve no greater public good than to conserve, protect, and sustainably utilize the invaluable marine and terrestrial resources that support our people, enhance our culture, and improve all our livelihoods.” –Dr. Earl Deveaux

The Conservancy’s Campaign for a Sustainable Planet was launched as Caribbean governments, partners and the Conservancy announced the beginning of one of the most far reaching and high-leverage conservation programs ever undertaken in the Caribbean. The Caribbean Challenge, announced at the May Conference of the Parties to the Convention on Biological Diversity (COP9) meeting in Bonn, Germany is now driving a goal of conserving at least 7.4 million acres of nearshore and marine habitat.

To date, the Challenge has been endorsed by the governments of The Bahamas, Dominican Republic, Grenada, Jamaica and St. Vincent and the Grenadines – all of which pledge to place, at a minimum, 20 percent of their marine resources under protection by 2020. Across the Caribbean, nations and territories participating in the Challenge protect their natural environment by initiating new and improved systems of protected areas, including resilient networks of marine reserves. As part of the Challenge, the chronic under-funding of national parks and other protected areas in the Caribbean is addressed by developing sustainable finance mechanisms such as the establishment of visitor fees, and the creation of conservation trust funds that direct resources toward supporting conservation on the ground and in the water. Funds generated by the Challenge will mean more rangers, patrol boats, scientists and education programs-- now and into the future-- that protect fisheries and tourism-related livelihoods for the tens of millions of people living here. The Caribbean Challenge has already received pledges from multilateral, European and US government

sources, as well as national commitments, to expand marine and coastal conservation, generate sustainable funding and prepare the Caribbean for climate change.

Establishing and Improving Marine Protected Areas

Marine protected areas are a key component of the Conservancy's strategy to conserve ocean and coastal habitats. Our goal is to establish resilient marine protected area (MPA) networks that are scientifically designed and effectively managed to survive or recover rapidly from threats ranging from coral bleaching to pollution to overfishing. MPA networks protect and restore the most resilient examples of healthy ocean and coastal habitats in ways that benefit marine life, local communities and economies.

Building a Solid Foundation: *The Program of Work on Protected Areas*: The Program of Work on Protected Areas (PoWPA) is an international framework guiding the creation and maintenance of comprehensive, effectively managed and ecologically representative national and regional protected areas. Since 2004, over 180 countries have committed to implementing the Program of Work and many are making great progress towards their goals. The Nature Conservancy has pledged to help the world achieve this vision by supporting governments in implementing the PoWPA. With the help of the Conservancy, the Caribbean is leading the world in achieving Program of Work implementation.



MPA marker in the Mesoamerican Reef
© Nestor Windevoxhel

In the past year, the Conservancy has helped a number of Caribbean governments, from The Bahamas to Grenada, complete some or all of the three key components of their protected area planning: the *ecological gap assessment*, the *capacity assessment* and the *sustainable finance assessment*. To ensure the newly-designed national protected area systems conserve the highest priority habitat, these assessments were complemented by on-the-ground and in-the-water science and research. Efforts focused on critical areas such as fish spawning locations; coastal, estuary, mangrove and seagrass habitat assessments; coral reef and mangrove climate adaptation studies; and “willingness to pay studies” which analyzed tourist receptiveness to fees for environmental protection.

Protecting Fish Spawning Sites: The Conservancy has been a leader in spawning aggregation (SPAG) conservation in the Mesoamerican Reef (MAR) region of the Caribbean for over 10 years. Protecting the sites where fish spawn is crucial to protect the health of the region's fisheries and coral reefs. For the past 3 years we have worked with local partners in the MAR to locate these sites, work that is extremely difficult, costly and, at times, dangerous.

The Conservancy, with support from our partners, made great progress in protecting spawning aggregation sites along the Mesoamerican Reef this past year. During the 2008 spawning season, 9 new SPAG sites were formally located and validated while 12 sites were actively monitored to determine their natural condition. In villages surrounding the Cayos Cochinos Marine Reserve in Honduras, the Conservancy helped communities protect four new spawning aggregation sites by

declaring them “no take zones,” a key strategy for the long-term viability of fish populations here and throughout the region. The Conservancy also provided financial and technical support to 10 partner organizations for SPAG protection enforcement, a crucial component of effectively conserving a protected area, and trained 10 marine practitioners in SPAG monitoring in Mexico.

Climate Change and the Caribbean

Climate change is already upon us. Sea surface temperatures are warming, sea levels are rising, and storm intensity is increasing, posing great threats to both people and nature. At the same time, rising CO₂ levels are making our ocean waters more acidic, creating a potentially devastating threat to coral reefs and other marine organisms. The Caribbean will be greatly affected by these changes and thus we are creating tools and conservation strategies to increase ecosystem resilience, protect threatened ecosystems, and develop science-based climate-change adaptation plans.

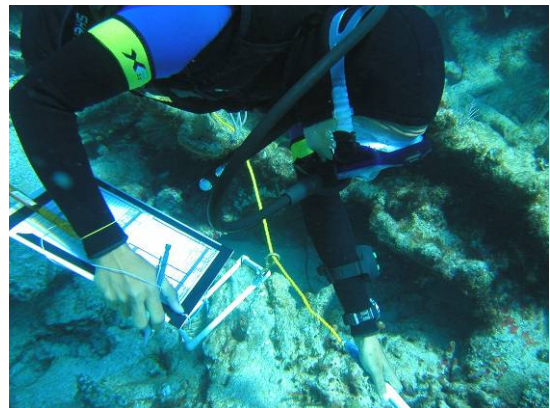
Coral reefs: The Conservancy is a leader in developing the science and conservation actions that promote coral reef resilience—the ability of a coral system to resist changes or recover quickly in the face of environmental stresses such as mass coral bleaching or storms.

In Florida, as part of the Florida Reef Resilience Program, 60 scientific divers from 10 organizations sampled coral condition and response to heat stress at 166 sites between the Dry Tortugas and Martin County, the largest effort of its kind in the world. Results were presented at the “Reef Resilience Conference 2008: Coping with Climate Change” in Key Largo last April.

One hundred fifty-five participants from 68 entities around the Caribbean and Australia including local, state, territorial and federal government agencies, numerous universities, non-governmental organizations, divers and fishermen from Florida, reviewed, developed and ranked strategies for increasing coral reef resilience in the face of global climate change.

The Conservancy and partners recently established the Mesoamerican Coral Reef Watch Program which is a collaboration between local dive operators, fishermen and other reef users to create a system by which they can inform or alert marine practitioners when they observe coral bleaching. This baseline data is an important component in the management of coral reef systems.

Coastal Adaptation: The Conservancy is working in Puerto Rico, Jamaica and the Dominican Republic to apply a Soil and Water Assessment Tool (SWAT) to help these nations model how climate change will affect their countries and identify strategies to address the threat of a warming planet. Forty three people participated in a training workshop in the use of the SWAT modeling program to be applied for estimating sediments and contaminant fluxes into coastal areas as a result of climate change.



A diver carries out research on a coral reef in Pedro Bank, Jamaica © Brandon Hay/TNC

Assessment of impacts of sea level rise on Florida's Big Pine Key, home of the Conservancy's Terrestrial Preserve, was completed. This assessment process will be replicated to other sites in the Caribbean, beginning with the US Virgin Islands and Grenada.

Creating Sustainability throughout the Caribbean Basin

Sustainable Financing for Protected Areas. As part of the Northern Caribbean Program's multi-year effort to make the case for building a national system of protected areas in The Bahamas, the Conservancy and partners recently carried out a "Willingness to Pay Survey." Over 1,100 tourists who were departing the Bahamas via air or ship were surveyed. 95 percent of respondents were willing to pay at least \$5 and 90 percent were willing to pay at least \$10 to help protect the natural and cultural environment in The Bahamas. The results of the study will be used to help The Bahamian government develop sustainable finance mechanisms which could lead to millions of dollars devoted solely to managing protected areas. Given the success of the Survey in The Bahamas, the Conservancy will work with the Dominican Republic government to carry out a similar survey. This is one of the many examples of how the Conservancy is leveraging its resources and working to encourage governments around the world to commit significant resources to conservation.

Protecting Endangered Species in St. Croix.

Annual sea turtle nesting monitoring at the east end beaches of St. Croix was completed and there is good news! Preliminary results suggest there is a steadily growing trend of a comeback of endangered and threatened green and hawksbill turtles. At the three bays monitored annually by the Conservancy, Jack's Bay, Isaac's Bay and East End Bay, 54 hawksbill turtles created 69 nests while 136 green turtles created an astounding 211 nests. This exciting news will be highlighted in the Winter Issue of Nature Conservancy.



A Green Turtle in the Caribbean © Nancy Sefton

Combating Invasive Species: The Bahamas. In August, Conservancy staff conducted National Parks Conservation Assessments, Training and Planning. The Conservancy led invasive species identification and control training and fire management planning with The Bahamas National Trust at the Lucayan National Park and Rand Nature Center on Grand Bahama Island. Similar efforts were undertaken for Andros Blue Holes National Park in October and Abaco National Park in January. All but two invasive plant populations are now under control in the Andros Park and only one remains in the Abaco Park.

Florida Keys. The Conservancy successfully completed an invasive species control and prevention project. The Keys Program's Exotic Plant Control Strike Team started work in October on public conservation lands and the private lands surrounding them. By the end of their work season in April 2008 they had cleared invasive species from more than 1,000 acres. The Conservancy-led Florida Keys Invasive Exotics Task Force also mobilized an early detection and rapid response effort for pythons, the latest alien species to threaten endemic Keys wildlife.

Dominican Republic. An analysis and strategy to abate invasive species in the Dominican Republic was completed. This work resulted in the government signing an international agreement at COP9 to avoid or control alien invasive species. These commitments from the Ministry of the Environment will facilitate solid action to deal with the invasive species' threat to biodiversity in the Dominican Republic and the Caribbean.

Sustainable tourism: Dominican Republic. The Dominican Republic's Sustainable Tourism Project was officially launched this past year. The Nature Conservancy is a key partner in this large-scale project and will collaborate with government and multi-lateral agencies, local organizations and academia. Over 250 stakeholders participated in regional planning workshops and helped identify conservation and sustainable tourism priorities. The Conservancy will now work in five sites to complete conservation action plans, protected area business plans and co-management agreements that allow civil society to engage in the management of protected areas.

US Virgin Islands. The Conservancy's efforts have been fully integrated into the USVI government's work and through partnerships with the National Park Service and US Fish and Wildlife Service. This cooperative relationship has been acknowledged by the Governor of the USVI as a great example how government and non-governmental organizations can work to together for the betterment of the territory.

Yucatan, Mexico. During the past year, in collaboration with UNESCO's World Heritage Center, the United Nations Foundation, and Amigos de Sian Ka'an, the Conservancy kicked off implementation of a two-year project to promote biodiversity conservation through sustainable local development in Sian Ka'an Biosphere Reserve, a World Heritage Site since 1987. The project focuses on training local communities in and around Sian Ka'an and supporting the commercialization of their products and services, as well as increasing the management effectiveness of Mexico's national park service to ensure that park managers have the capacity to monitor and manage tourism impacts.

Jamaica. After much anticipation and excitement from the community, the Cockpit Country's Discovery Center at Wait-A-Bit opened in May 2008. The Center serves as an education center for community members and a repository of information on the biodiversity of the Cockpit Country. The community of Wait-A-Bit, believed to be named after of thorn of the same name, is the gateway to the Cockpit Country and will be the primary interpretive center for the region's biodiversity. This facility will be the local venue for interpreting the Cockpit Country to local children and will house a variety of resources sought by community leaders and tourists.

Sustainable Harvests: Jamaica. The Conservancy helped strengthen the enforcement of environmental laws in the watershed of the Rio Grande, Jamaica's largest free-flowing river and a major inland fishery, that has suffered from destructive and illegal fishing practices of river poisoning with toxic agents such as cyanide. To promote enforcement as a deterrent, the Conservancy and partners designed and implemented a certified training and sensitization program for dozens of Rio Grande residents, law enforcement officers and judges.

Jamaica. In April of 2008, the Conservancy conducted a fisher learning exchange to raise awareness and increase support for conservation efforts among Belizean and Jamaican fishers. The exchange, carried out in collaboration with Belizean partner, Friends of Nature, was designed to

promote best fishing practices from Belize to Jamaica and to further encourage Belizean fishers to recognize the value of their resources and to continue protecting and sustainably managing them.

Looking Ahead



A young girl from the Caribbean coast of Central America © Nestor Windevoxhel

In the first year of the Campaign for a Sustainable Planet, the Conservancy's Caribbean Project made strong progress toward our ambitious goal of protecting the region's biodiversity. From playing a key role in the largest regional protected area project ever undertaken to incorporating adaptation strategies in our work in order to address threats from global climate change, these efforts are laying the groundwork for conservation that takes into account the needs of local people.

In the months ahead, we will build on these accomplishments, launch new projects, and continue to expand our work on key conservation strategies including:

- Provide technical expertise and build financial support for the Caribbean Challenge in order to help governments reach their goal of protecting 20% of their marine resources
- Continue to implement the Program of Work in 12 Caribbean countries in order to create resilient, well-managed, and sustainably financed protected areas
- Ensure that our work includes adaptation strategies to address the effects of global climate change

On behalf of the entire Caribbean team, please accept our appreciation for your interest in protecting this globally important area. We look forward to keeping you informed about our exciting work in the months to come.