



# Transformative Conservation Action

ear Friends and Supporters, we are excited to bring you our 2023 Impact Report for The Nature Conservancy in the Caribbean, where we work in 17 countries and territories stretching from The Bahamas to Grenada. This past year was one of both challenges and celebrations, as you will read in these pages.

This report highlights three overarching themes that capture a great majority of our conservation work across the Caribbean: Coral Conservation and Restoration, Climate Resilience, and Transforming Ocean Management. And given the scale of conservation outcomes we are striving for in the Caribbean and globally, we put a spotlight on some new partnerships that began in the past year that we believe will be catalysts for the kinds of transformative conservation action that is needed across the Caribbean.

This past year put into sharp focus the challenges that accompany our rapidly changing climate. A "marine heat wave" enveloped the Caribbean and required our team to take emergency measures to protect the most vulnerable species and colonies of corals that we have been using in our restoration sites. Fortunately, our team and our partners were anticipating a heat wave during an El Niño year, and we have the facilities and expertise needed to undertake such measures. We also have the technology needed to monitor reef health as this heat wave progressed and finally abated. We were relieved to see recovery of some of the corals that had bleached in the hottest months as they expelled the algae that gives them with nutrition and their vibrant colors. Nonetheless, this year reinforced the importance of harnessing the most resilient and heat-adapted corals for restoration, and the imperative to continue reducing pollution and other stresses on corals that begin on land.

Ensuring a climate-resilient Caribbean for nature and people is a central theme of our conservation work in the Caribbean, extending from the mountains to the sea, the ridge to the reef. To be sure, it isn't just corals that suffer as the changing climate exerts influence—it's also people. That's why we are seeking conservation solutions that protect and restore biodiversity

while also ensuring people's needs are met, from sustaining sources of clean freshwater to reducing the risk of flooding in urban areas and coastal communities. Nature is a powerful tool for increasing resilience, and by bringing in nature as a solution for people we are also fulfilling our mission to protect nature.

Despite their relatively small land area, the countries and territories of the Caribbean are surrounded by vast areas of ocean, and many refer to themselves as "Big Ocean States" to reflect their expansive sovereign ocean space. Effective management of these vast ocean areas is no small task, and TNC is working hand-in-hand with national governments and local fishers alike to bring science, conservation, and policy expertise to bear on this challenge. With new ways of gathering information on catch and fishing effort, it is possible to manage fisheries for sustainability. With input from people who directly depend on the ocean for their livelihoods, nations can build resilient economies that ensure the ocean's health is at the center of management decisions. Our team is engaged across the region to ensure a prosperous future based on healthy oceans is possible.

Finally, a lesson that emerged this year is the power of persistence. TNC is nothing if not persistent, and that is reflected in the Celebrations we include in this year's Impact Report. Our programs in Puerto Rico and Grenada celebrated 10 years, and there is much to show for our efforts in both places. Our past trustee, Dr. Rosa Margarita Bonetti de Santana, was also celebrated with two major awards in recognition of her actions and persistence on behalf of our environment.

We hope you are inspired by the stories and voices included in this report and by the impact we had together in the past year. With your continued support, we can continue to deliver the cutting-edge science and conservation results grounded in decades of experience from our Caribbean team.

Saludos





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Alicia Miñana Board Chair

Nobert DI III

Dr. Rob Brumbaugh
Executive Director,
TNC Caribbean



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## Where We Work...





Working in 17 countries and territories, The Nature Conservancy is committed to securing lasting conservation outcomes and a bright future for the Caribbean by protecting the ocean and coasts, safeguarding the habitats that sustain people and wildlife, building resilience against the impacts of climate change, and empowering communities to manage their natural resources in ways that allow people and nature to thrive together.



BLUE CARBON EXPLORER ONLINE TOOL

**ACCESSING BLUE CARBON** 

**EXPLORER** countries

PROTECTED UNDER DOMINICAN REPUBLIC WATERFUNDS PROJECT hectares

DOMINICAN REPUBLIC WATERFUNDS 873

PROJECT beneficiaries

28,800 hectares MAPPED USING DRONES

> 626 new users CaribbeanMarineMaps.tnc.org

3 new users CARIBBEAN SCIENCE ATLAS

## By the Numbers 2023

REEF HABITAT ENHANCED IN THE VIRGIN ISLANDS acres

IMPROVED MANAGEMENT, DOMINICAN REPUBLIC hectares

<2 million

LARVAE PRODUCED THROUGH **FACILITATED SEXUAL REPRODUCTION** 

16,850 **CORALS OUTPLANTED IN** THE BAHAMAS AND VIRGIN ISLANDS 85,143 **FOLLOWERS IN 2023** 

PEOPLE TRAINED THROUGH **CORALCARIB PROJECT** 

PEOPLE BENEFITING FROM TNC CAPACITY BUILDING









### **CoralCarib: Pioneering Climate-Smart**

## **CORAL RESTORATION**



oralCarib is a groundbreaking initiative to safeguard and improve Caribbean marine biodiversity. With a focus on Cuba, Dominican Republic, Haiti, and Jamaica, this six-year project aims to combat the alarming 60% decline in live coral cover over the past two decades.

CoralCarib is funded by the International Climate Initiative (IKI), a national effort led by the German government and important part of Germay's international climate finance commitment.

CoralCarib aspires to enhance marine biodiversity across 1,871 hectares of priority coral reef ecosystems in four Caribbean countries and regionally through scaling. Employing a pioneering approach called "coral climate refugia," CoralCarib will not only protect and restore coral reefs but also ensure their sustainable use in the face of climate impacts.

CoralCarib is funded by the International Climate Initiative (IKI), a national effort led by the German government and important part of Germany's international climate finance commitment.

Supported by:





based on a decision of the German Bundestag





(TOP) The CoralCarib team during the launch ceremony of the project at The Jamaica Pegasus Hotel in Kingston, Jamaica along with Senator the Hon. Matthew Samuda, Minister Without Portfolio in the Ministry of Economic Growth and Job Creation, and His Excellency Jan Hendrik van Thiel, German Ambassador to Jamaica. © *Omar Davis* 

(LEFT) TNC Jamaica, presenting to some of the Coral Carib Stakeholders in Portland Jamaica at the implementing partner Alligator Head Foundation facility © *Denise Henry* 

(RIGHT) TNC staff members in conversation with His Excellency Jan Hendrik van Thiel, (2nd right) German Ambassador to Jamaica and Minister Without Portfolio in the Ministry of Economic Growth and Job Creation, Senator the Hon. Matthew Samuda (3rd left) at the launch ceremony. © Omar Davis





In 2023, the CoralCarib team made strides in marine area management, mitigating threats to coral survival, advancing coral restoration techniques, promoting sustainable livelihoods, and scaling efforts for regional impact. Furthermore, local teams conducted experiments at land-based facilities to test the efficacy of various microplastics and biodegradable plastics, aiming to promote coral growth and sustainability. The teams also conducted Reef Health Monitoring across various localities, specifically monitoring coral bleaching, and drafted an action plan for the recovery of affected nurseries.

In Punta Cana, Dominican Republic, community engagement initiatives focused around engaging youth through active participation in various activities, including training sessions and support for evaluating alternative livelihoods. TNC staff also conducted a workshop on techniques and experiences in the reproduction of marine organisms and aquaponic systems, benefitting women involved in the climate change project. Additionally, TNC hosted two workshops in the Dominican Republic and Jamaica aimed at enhancing the skills of staff and partners focused on coral reef monitoring methodologies and collaborative restoration practices with the local communities.

CoralCarib will provide long-term socioeconomic benefits for Caribbean coastal communities by improving coral health, enhancing coastal protection, and enabling a more sustainable coastal tourism sector. The project also offers access to coral climate refugia mapping, restoration methods, spawning calendars, and online monitoring platforms to teams in Cuba, Dominican Republic, Haiti, and Jamaica.

Maxine Attis, project manager for CoralCarib, said, "our joint accomplishments for the first year of implementation represent innovation and dedication by enhancing capacities



and empowering local partners and communities. We are not just safeguarding coral reefs, we are pioneering a new approach to marine management, where science, collaboration, and partnerships intersect to forge a resilient future for the Caribbean."

#### **Project Launch**

CoralCarib was launched during an official ceremony in Kingston, Jamaica on April 25, 2023. At the launch ceremony, Senator Hon. Matthew Samuda, Minister Without Portfolio in the Ministry of Economic Growth and Job Creation, highlighted the urgent need to restore degraded marine ecosystems within the Caribbean region, as well as to access financing to save the islands' coral reefs.

His Excellency Jan Hendrik van Thiel, German Ambassador to Jamaica gave remarks on behalf of the German Government; Nickie Myers, General Manager, The Alligator Head Foundation (AHF) brought greetings on behalf of the consortium partners; while Dr Rob Brumbaugh, Executive Director, TNC Caribbean Division provided the context for the project and the launch event.

The project is a collaborative initiative led by TNC and includes a consortium of partners: Alligator Head Foundation (AHF) in Jamaica; Dominican Foundation of Marine Studies (FUNDEMAR) in the Dominican Republic; and Grupo Puntacana Foundation (GPCF) of Dominican Republic. This consortium is supported by three Local Implementing Partners: Haiti's Initiative for Integrated Environment (IEDIH) and Haiti Ocean Project (HOP) in Haiti, and Acuario Nacional de Cuba (ANC) in Cuba.







## USVI Coral Hub expanding in Reach and Impact

NC's U.S. Virgin Islands Coral Innovation
Hub (Hub), recently designated by NOAA
as a federal Coral Reef Research Center, has
expanded its program significantly over the past
year. In 2023, we were awarded a NOAA Transformational
Habitat Restoration and Coastal Resilience grant that has
allowed us to grow our team to a total of 19 coral scientists,
diving experts, and outreach specialists. With our new staff
and increased funding, we are roughly doubling our coral
reef restoration efforts within a Marine Protected Area
of St. Croix. Additionally, we received a new award from
the National Park Service to continue our coral restoration
work at Buck Island Reef National Monument.

Over the past year our team outplanted approximately 14,400 corals over roughly 14 acres of reef habitat. Our team was assisted by TNC scientific divers from around the Caribbean and beyond, building capacity for this work across TNC geographies. We also produced over 2 million coral larvae through facilitated sexual reproduction and settled 140,000 new corals onto substrates for subsequent outplanting to our restoration areas. Coral reefs support fishing, restaurant, and tourism industries, and a restored reef will provide increased shoreline protection and create a thriving reef ecosystem that supports industries and benefits the underserved community of St. Croix. This work also strengthens ecosystem resilience by bolstering coral genetic diversity and augmenting populations

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USVI coral team cleaning coral larvae cultures in the bins.

Photo © Macallan Durkin/TNC

corals that are more resistant to thermal stress and disease. In addition to ecological enhancement, this work benefits the community by enhancing coastal protection and resilience to climate hazards, such as extreme weather events and related storm surge and flooding (it has been reported that healthy reefs can dissipate up to 97 percent of incoming wave energy).

Our reach and impact have also grown; our Hub is a go-to facility for trainings and workshops, and a collaborative research center in partnership with several institutions of higher learning, including the University of the Virgin Islands and Woods Hole Oceanographic Institution. The lab has also become a popular attraction for tourists, as recently highlighted in Travel & Leisure Magazine, requiring us to expand our hours for public tours. We were also invited to participate in the 47th U.S. Coral Reef Task Force Meeting, held on St. Thomas, USVI.





#### (TOP-BOTTOM)

A Lobed star coral releases its eggs during a coral spawning event. These eggs will travel through the water column to be fertilised by coral sperm.

Photo © Megan Ehman/TNC Photo Contest 2022

Coral eggs after collection from a spawn event. Photo © Paul A. Selvaggio

A brain coral releases eggs during a spawing event on a reef in the US Virgin Islands. Photo © Eduardo Avila Pech/SECORE

A vial containing elkhorn coral eggs captured during the seasonal spawn. Photo © Paul A. Selvaggio



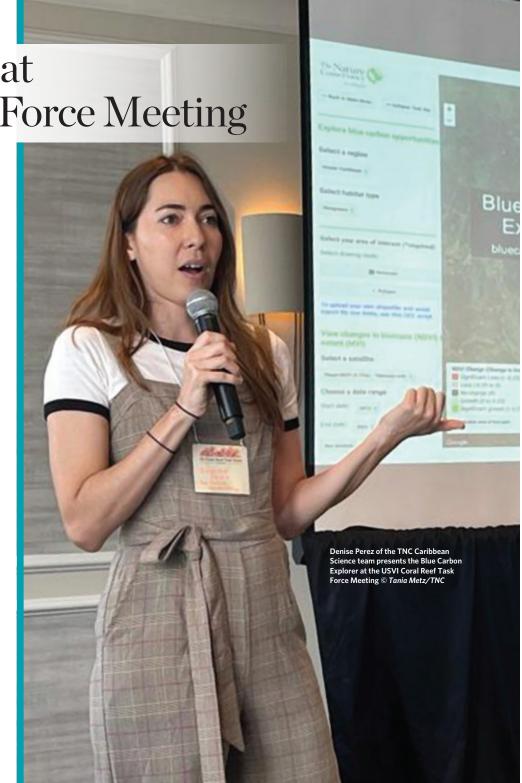
### TNC's Work Shines at US Coral Reef Task Force Meeting

rom October 24-26, 2023, TNC Caribbean staff from the U.S. Virgin Islands (USVI), Puerto Rico (PR), Policy and Strategy Programs, and Science Team attended the 47th U.S. Coral Reef Task Force meeting held in St. Thomas, USVI. The Task Force meets biannually to discuss key issues, propose actions, and present progress related to coral reef conservation and monitoring efforts across the U.S. states, territories, and associated states with coral reefs. It includes leaders of U.S. federal agencies and coral reef management staff from around the world, and meetings often include key partners.

It was at this meeting that the USVI Governor Albert Bryan Jr. announced his executive order proclaiming the coral ecosystems of the U.S. Virgin Islands as "natural infrastructure," which enables the USVI to spend federal and territorial infrastructure funds on coral reefs. This was timely, given the most severe and long-lasting bleaching event that the Caribbean has ever experienced was in full force at the time of the meeting.

Throughout the meeting TNC was called out as a shining example for our work creating the Coral Innovation Hub and implementing coral reef restoration at scale by the Assistant Secretary of Insular and International Affairs, Carmen Cantor; by the Coral Reef Watch Coordinator Derek Manzello; and by Governor Bryan.





During the meeting, TNC Caribbean sponsored a breakfast event for 100 participants where information was provided about TNC's ocean priorities and Caribbean coral strategy (presented by Elizabeth Shaver); on-the-ground activities in the USVI Coral Innovation Hub (Jessica Ward) and Puerto Rico (Tania Metz); and open-access science tools including our benthic habitat maps, Blue Carbon Explorer, coral climate refugia models, (Denise Perez). TNC staff also participated in a coral disease workshop, panel discussions, and field site visits.



USVI Governor Albert Bryan Jr.

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ishers from the eastern shoreline community of Soubise, Grenada have been plying their trade without proper docking and storage facilities for years, but this will soon be a thing of the past as TNC puts the finishing touches on a brand-new Climate-Smart Fishers Locker Facility.

The eco-friendly facility—a single-story reinforced concrete structure with concrete roof—is designed to withstand the effects of climate occurrences such as hurricanes, storm surges, and sea level rise. It contains twenty large storage lockers and is equipped with fishing gear cleaning stations, outdoor shower facilities, ice machines and rainwater and solar energy harvesting capabilities that promote energy efficiency and water conservation.

Once handed over, the climate-smart facility will provide much needed storage and security for fishing gear, which will save them thousands in costly equipment replacement due to damage and theft.

The Climate-Smart Fishers Locker Facility is just one component of a much bigger ecosystembased adaptation strategy for Soubise and surrounding communities that fall under TNC's Resilient Islands initiative—a partnership between TNC and the International Federation of the Red Cross and Red Crescent Societies (IFRC) with funding from the International Climate Initiative (IKI), and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) on the basis of a decision adopted by the German Bundestag.





"Through strategic integration of renewable energy, habitat restoration, and community engagement, the Fisher Facility epitomizes our holistic approach to climate resilience, fostering not just adaptation but genuine transformation in our socio-ecological landscape."

Honourable Kerryne James
MP for St. John, Grenada
Minister for Climate Resilience, the Environment and Renewable Energy
Photo: https://grenadaparliament.gd

### **TNC and WINDREF Partnership**

## Enhances Resilience in Grenville Bay

ince 2013, The Nature Conservancy (TNC) has made a concerted effort to work throughout the islands of the Eastern Caribbean. Based on scientific data and local knowledge, TNC developed adaptation strategies with communities to address the impacts of climate change, such as coastal erosion and sea-level rise, using nature-based solutions (NbS). One example of this is the ongoing intervention within the Grenville Bay Area (GBA) of Grenada. TNC has collaborated with communities and various stakeholders to design a suite of replicable, scalable actions, and piloted designed solutions to ascertain the feasibility of these strategies.





(LEFT TO RIGHT) Carol Forbes (WINDREF); Nealla Frederick (TNC); Honourable Dickon Mitchell, Prime Minister of Grenada; Senator the Honourable Dr. Dessima D Williams, President of the Senate; Trevor Noel, Deputy Director (WINDREF); and Kendon James © WINDREF



Recognizing the importance of partnerships for success, TNC broadened its collaboration within the GBA, and began working with the Windward Islands Research and Education Foundation (WINDREF) to further interventions. This led to the submission of a successful project proposal to the Caribbean Biodiversity Fund's EbA Facility.

The ensuing project, Innovative Nature-based Solutions to Enhance Community Resilience in Grenada (ING) comprised components of the suite of actions developed, with a focus on:

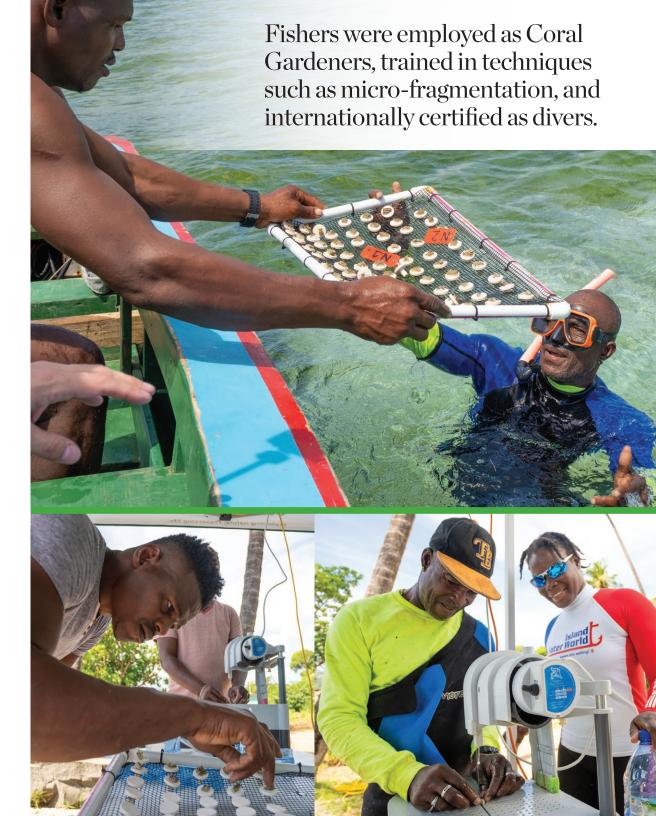
- Coral reef restoration, which entailed the outplanting
  of corals upon degraded reefs in the Bay, to restore
  their wave-breaking functions. In addition to
  restoration, there was also a capacity development
  component for community members. Fishers were
  employed as Coral Gardeners, trained in techniques
  such as micro-fragmentation, and internationally
  certified as divers, through the Professional
  Association of Diving Instructors (PADI)
- Seamoss training with HACCP certification
- Mangrove restoration
- Implementation of a Living Shoreline to address the most critical areas of coastal erosion, ensuring that there is continued safe access to the sea for all, while enhancing quality of life

This partnership augurs well for both organizations and the project communities. WINDREF has received a second grant from the facility to continue work within the communities, enhancing their resilience to climate change impacts, using nature.

(TOP) TNC is working with local fishers in Grenville Bay, Grenada to build their capacity to help restore coral reefs through coral gardening © *Hunter Nichols* 

(LEFT) TNC trains local fishers like Kellon Marist in coral gardening techniques to help restore the reefs they depend on © *Hunter Nichols* 

(RIGHT) Fishers trained in coral gardening techniques putting their training into action. © Hunter Nichols



## 112 Jamaicans receive EbA training



he Nature Conservancy in Jamaica was contracted by the United Nations Environment Programme as one of the implementing entities of the Global Environment Facility (GEF) funded CityAdapt Project, which was being executed in the City of Kingston. Under the contract, TNC was required to deliver on four aspects of the project including strengthening technical capacity for the practical application of ecosystembased adaptation solutions (EbA) in the context of a changing climate among public and private sector stakeholders; urban planning and development; and natural resources management. Towards this end, TNC developed the training program, titled, "EbA for Urban and Peri-urban Spaces: Using Nature-Based Solutions as a Key Climate Change Adaptation Strategy for Advancing Sustainable Development in Jamaica."

The fully online 20-hour training consisted of five modules and was attended mainly by members of a wide cross-section of Government of Jamaica (GOJ) entities, including municipal authorities and key government agencies such as the National Environment and Planning Agency and the Office of Disaster Preparedness and Emergency Management. Private consulting firms also attended. Overall, 60 of the

112 participants received certificates and have the capacity to utilize the knowledge learned. TNC also held an engagement with academics of the University of the West Indies (UWI) at Mona. The goal of the engagement was to enable EbA's infusion into courses at the university at both the undergraduate and graduate levels. This engagement resulted in approximately 30 final year students from the Department of Geography and Geology receiving a 2-hour presentation which was adapted from the full training course. The presentation was delivered as part of the course GGEO3332 - Disaster Risk Management and Development Planning. The course lecturer had previously audited aspects of the full course and expressed an interest to incorporate aspects of EbA in her courses. The presentation was welcomed as the Department of Geography and Geology wants to include EbA in the suite of courses it currently offers as well as in existing courses that would benefit from this content.

After the project was completed, the training material was shared with students at the University of Technology (UTECH) School of Architecture; additionally, informational videos targeting the Master Builders Association of Jamaica were also shared.







fter seven years, the Resilient Islands
Project has ended, but not without
hopes of its successful communityled approach to climate resilience
and disaster risk reduction being replicated in
other regions of the world. Resilient Islands by
Design project was executed with the support of
the International Federation of the Red Cross and
Red Crescent Societies, with a holistic approach to
climate change adaptation that advocated for and
applied nature based solutions at selected sites
around the insular Caribbean to help governments
and communities reduce flood risks and boost
climate resilience development.

It has positively impacted the lives of close to 2000 people in three Caribbean islands – Dominican Republic, Grenada, and Jamaica – and has restored more than ten hectares of land. It also assisted the communities, red cross national societies and governments to design and create portfolios of nature-based solutions for adaptation and disaster risk reduction through the application of enhanced and innovative tools and building capacities in areas such as mangrove and coral conservation, geographic information systems, and drone mapping to assess hazard, exposure, vulnerability, and the adaptive capacity of coastal communities and ecosystems. The Resilient Islands project began in August 2017, in the

middle of a highly active Atlantic hurricane season (17 named storms, ten hurricanes, and six major hurricanes), and was sponsored by a grant of around \$6 million from the Federal Government of Germany under their International Climate Initiative (IKI).

The Nature Conservancy (TNC) and the International Federation of the Red Cross and Red Crescent Societies (IFRC) forged an alliance sealed through the implementation of Resilient Islands and strengthened by the intersection of nature conservation, disaster risk reduction and climate change adaptation. Both organizations collaborated with governments, communities, and partners in Jamaica, Grenada, and

Dominican Republic to develop nature based and community adaptation plans for a more sustainable and resilient future, propelled by science, well-informed policy advocacy, strategic resource mobilization and community driven action planning.

In its seven years, Resilient Islands transitioned from a project into a partnership model to serve other at-risk communities to defend themselves against climate change hazards. The project lessons and accomplishments in Miches, Grenville Bay, and Old Harbour Bay are valuable for TNC, the Red Cross and their partners to scale and replicate Resilient Islands efforts in the Caribbean and beyond.

The completion of Resilient Islands is not the end of the journey, but rather a milestone that marks the evolution and growth of the partnership and encourages a more ambitious vision to help more communities and countries in their search to become more resilient and sustainable.

As a result of the success of the RI model, TNC and IFRC will now embark on a second phase of our partnership that will be more expansive geographically and thematically.

TNC Caribbean is currently supporting the efforts of the Tackle Climate Change Team to continue and amplify this work.





#### Current and projected impact of Resilient Islands project

		CURRENT BENEFICIARIES	HECTARES RESTORED OR EFFECTIVELY MANAGED	PROJECTED NUMBER OF BENEFICIARIES	PROJECTED NUMBER OF HECTARES
<b>2</b>	<b>Dominican Repul</b> Miches	<b>700</b>	10	10,000	>1,000
$\times$	<b>Jamaica</b> Old Harbour	380	None	8,000	70
	<b>Grenada</b> Grenville Bay	690	None	5,000	40

The project lessons and accomplishments in Miches, Grenville Bay, and Old Harbour Bay are valuable for TNC, the Red Cross and their partners.





n December 2023, a seven-year project funded by PEPSICO came to an end. The project began in November 2016, when PEPSICO and TNC signed a grant agreement to implement conservation initiatives for key Water Funds and watersheds in four Latin American countries (Mexico, Brazil, Guatemala and Colombia). This agreement was amended in April 2018 to expand the geographical scope of the project to include the Dominican Republic and deliver restoration and conservation actions in the Isabela River basin near the city of Santo Domingo.



**WaterFunds** Project

 $28\,{}_{\scriptscriptstyle{\text{created}}}\,40.12\,ha\,{}_{\scriptscriptstyle{\text{systems}}}$ 

Water quality samples demonstrate the clarity of water before (right) and after (left) filtration in TNC's artificial marshes in Jarabacoa, Dominican Republic © Ricardo Briones

Projects like this contribute to the long-term sustainability of companies with plants located in basins under water stress, thus contributing to both TNC 2030 goals and the long-term sustainability of communities and other users who also extract or use river water.

This project aimed to reduce forest loss, reduce over exploitation of aquifers, and to promote best management and farming practices. The project ended with the following results: 28 jobs created; 76 direct beneficiaries who have more sustainable and climate resistant productive systems; 40.12 ha of productive systems converted to sustainable practices; and 797 persons indirectly benefited from the volumetric benefits generated by the project.

The Santo Domingo Water Fund used this project to leverage key support and funding from other public and private organizations, both of which are needed to achieve large-scale impacts through collective action through participation in promoting technical studies and conservation work in the field.

(TOP LEFT/INSET) Jarabacoa, Dominican Republic. TNC has installed artificial marshes to help filter water runoff and keep water ways clear and clean © *Ricardo Briones* 

(BELOW LEFT) Sampling water quality and clarity at artificial wetlands in Jarabacoa, Dominican Republic to ensure our waters funds work are effective © *Ricardo Briones* 

(BELOW RIGHT) A cacao farmer obtains economic benefits from Santo Domingo's Water Fund cacao agroforestry intervention carried out in his plot. © *Ricardo Briones* 



Projects like this contribute to the long-term sustainability of companies with plants located in basins under water stress,





## Oceans, Fisheries and Land Management







n January 18, 2023, the Government of Barbados launched the country's marine spatial planning (MSP) process with an official ceremony held at the Hilton Barbados Hotel. The MSP launch followed the signing of the Blue Bond between the Government of Barbados, TNC, and the InterAmerican Development Bank in September 2022.



Dr Rob Brumbaugh, Executive Director of TNC Caribbean Division speaks at MSP launch Photo: https://coastal.gov.bb/



Honorable Kerrie D. Symmonds, Minister of Foreign Affairs and Foreign Trade (C) gestures to Dr Rob Brumbaugh, TNC Caribbean Executive Director (L); Honorable Adrian Forde, Minister of Environment, National Beautification and the Blue and Green Economy (R) looks on. Photo: https://coastal.gov.bb/





This MSP will organize the use of the ocean space, including the identification of new protected areas, and the interactions with human uses (e.g., fisheries, tourism, shipping, no-take protected zones) in a way that is ambitious, equitable, and achievable. As part of the MSP process, TNC began working with stakeholders from the Government of Barbados to establish a national conservation trust fund that would receive funds from the Blue Bonds debt transaction and direct them toward the highest impact activities, streamlining the path to achieve national 30x30 ambitions. The governance for the fund includes members of the government and TNC as well as leaders from key stakeholder groups throughout Barbados to ensure that funding decisions are made in a participatory, equitable, and transparent manner.







TNC is also working closely with the Barbados Coastal Zone Management Unit (CZMU). The CZMU is a government agency whose mission is to develop and implement a national risk-resilient integrated coastal zone management policy and planning framework. During the development of the Blue Bond transaction, the CZMU was tasked with executing the MSP, which would support the government's more aspirational marine protection and management commitments required by the Blue Bond. Throughout 2023, TNC staff worked closely with the CZMU to begin the planning process, providing assistance for the agency to build capacity and staffing support for an MSP, as well as working to advance some of the foundational science and technical elements that are essential to guiding a successful MSP.

### Oceans, Fisheries and Land Management

So far, the CZMU has established an MSP Unit, which is responsible for the technical and operational components of the MSP, while also engaging local entities in the mapping and classification of stakeholders—an integral part of the process.

As the Blue Bonds implementation phase continues, TNC will continue to guide the MSP process with its project management, science, and marine management expertise, further strengthening the financial, governance, and conservation infrastructure for the most effective use of the Blue Bond conservation revenue. We are committed to providing the support needed for Barbados to best leverage the benefits of the Blue Bond as it works toward protection of 30% of its marine space by 2030 and improved management of 100% of its ocean space.



A spotted moray eel hides in a coral reef in Barbados. © Shane Gross

Speaking at the MSP launch, Minister of Environment, National Beautification and the Blue and Green Economy, the Hon. Adrian Forde, said, "Having the full participation of all stakeholders is essential to this process. We need them to share information about our marine space to ensure that equitable consideration is given to all relevant sectors." Dr. Rob Brumbaugh, Executive Director of the TNC Caribbean Division, echoed these sentiments. "The marine spatial plan—developed with robust science, diverse and inclusive input—is not just a mechanism for enabling Barbados to meet milestones associated with the Blue Bond. Rather, the MSP is the very process for allowing people to act to conserve nature so that it can indeed fulfill needs and continue to enrich the lives of the people of Barbados."

Dr Brumbaugh also commended the Government of Barbados for taking the bold step of using the Blue Bond to advance its national agenda and move forward with a sustainable blue economy.

Philanthropic support enabled TNC to help build capacity and provide technical assistance to key government agencies and to establish and operationalize the national conservation trust fund. Philanthropic support also kickstarted the marine spatial planning process, which will ensure that ocean protection and related blue bond financing are deployed in a manner that is efficient, effective, and equitable. TNC is grateful for the leadership support of Pamela and Neville Isdell and the Bank of America Charitable Foundation.





## TNC Showcases Capacity Building with FishPath at GCFI Conference

he Gulf and Caribbean Fisheries Institute (GCFI) hosted its Seventy-Sixth Annual Conference from November 6-11, 2023, in Nassau, Bahamas. Stakeholders gathered from fisheries, government, and academic communities from across the Caribbean and the United States.

The conference theme was "Linking science and society towards a vision for sustainable fisheries." TNC hosted two sessions on November 5 and 8 showcasing the work of FishPath and provided opportunities for six fishermen from The Bahamas to participate in GCFI as well as four students from The Bahamas Agricultural and Marine Science Institute.

The first workshop for fisheries managers, entitled "Developing Harvest Strategies Using FishPath to Achieve Human & Ecological Welfare Objectives," focused on training 30 Caribbean fisheries managers on implementation of the FishPath tool including hands-on exercises so that participants could explore the potential to improve their sustainable fisheries management practices.

FishPath is a decision-support tool developed by TNC, NOAA Fisheries, and CSIRO Australia to guide managers through the full range of data-limited options for fisheries management. It helps identify fisheries-specific options for effective data collection, assessment models and indicators, and systems of management response to stock status.



Women in Conservation. TNC team at GCFI @ Michelle Butler/TNC

FishPath provides an objective and transparent tool to develop robust harvest strategies regardless of data and management impediments to utilize available data and other resources. It also provides pathways for adaptive management and strategic thinking.

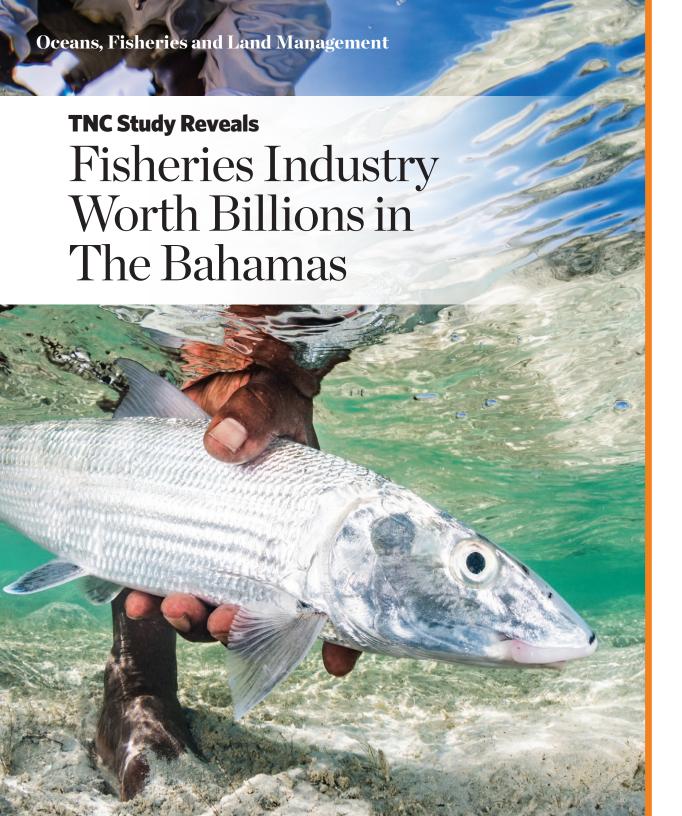
The second session, entitled "A vision for Advancing Fisheries Management in the Gulf and Caribbean Region: Navigating an Uncertain Future Using Adaptive Implementable Management (i.e., FishPath)," shared two examples and lessons learned from FishPath implementation in Indonesia and The Bahamas.



Natalie Miaoulis, Fisheries Specialist-Caribbean Program speaks at the GCFI Conference. © Michelle Butler/TNC







he Nature Conservancy (TNC) commissioned an evaluation of the economic impact of current recreational and commercial fishing in The Bahamas and will use those estimates to assess the impact of illegal, unreported and unregulated (IUU) that occurs within The Bahamas' Exclusive Economic Zone (EEZ). We hope to use this picture of the value chain and quantification of the economic harm that IUU fishing has on the Bahamian economy to advocate for better monitoring, control, and surveillance measures to enhance sustainability and advocate for the increased fiscal support to the Ministry of Agriculture and the Department of Marine Resources for the management and monitoring of marine resources. TNC and Gentner Consulting worked with The Bahamas Department of Marine Resources and other stakeholders to ensure all viable data was included. Prior to this assessment, the data available showed that fisheries contributed 1% to The Bahamian GDP. The results of this first assessment show that fishing supports at least 26,917 jobs and generates at least \$544.2 million in income, \$1.2 billion in value-added (contribution to GDP) and \$2.2 billion in total sales. Combined across both sectors, the entire fisheries value chain contributes at least 20% to the Bahamian GDP. The report also estimates that if IUU was reduced, fishing could support at least 1,523 more jobs and increase GDP by an additional \$65.4 million.

The results presented from this assessment are the first phase of a two-phase approach. Phase two will seek to refine these estimates by focusing on filling data gaps in the domestic informal sector to further include in the estimate of economic impact. Phase two will also support The Bahamas Department of Marine Resources in the implementation of a fishers' census to assist in refining the assessment and providing data to help inform improved fisheries management.

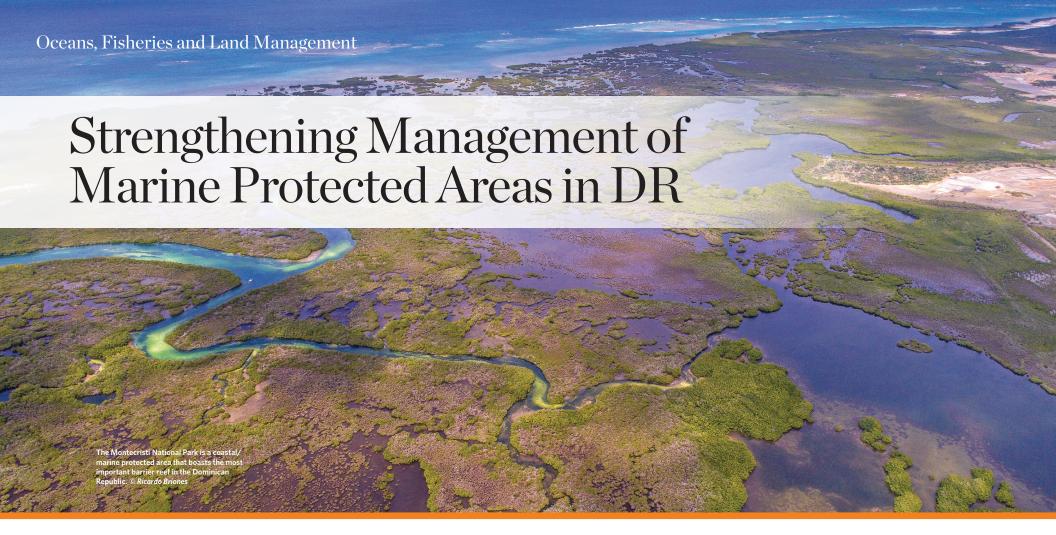
(LEFT) A veteran bonefishing guide releases a small bonefish in his favourite spot near Cat Island, Bahamas © Shane Gross FACING PAGE (CLOCKWISE) A fisherman in East End, Grand Bahamas prepares conch meat for restaurant sale © Shane Gross

A massive black grouper off Nassau, Bahamas © Shane Gross

Fish swim through protected waters in the Exuma Cays, Bahamas © Shane Gross

Fisherman in West End, Grand Bahama use fish to settle a small debt © Shane Gross





he Dominican Republic has a rich diversity of ecosystems and species that require special attention for their protection and effective management. The Nature Conservancy in collaboration with the Ministry of the Environment and Natural Resources through its Vice-Ministry of Protected Areas; the Asociación para el Desarrollo Inc. (APEDI); and the Yaque del Norte Water Fund, is leading a process to update the management plans of key Marine Protected Areas (MPAs).



Federico Franco Vice-Minister of Protected Areas, Ministry of the Environment and Natural Resources



Francisco Nunez TNC Central Caribbean Program Director

#### OPPOSITE PAGE (CLOCKWISE)

El Morro National Park, surrounded by extensive stands of mangroves and lagoons, is characterized by its ecological importance and beauty. © *Ricardo Briones* 

Mangrove roots protrude from the wetland floor at Estero Balsa Mangrove National Park, Dominican Republic © *Ricardo Briones* 

Estero Hondo Marine Mammal Sanctuary, Dominican Republic © Ricardo Briones

Flamingos feeding at Estero Balsa Mangrove National Park, Dominican Republic © *Ricardo Briones* 

Wetlands form important habitat for wildlife at Estero Balsa Mangrove National Park, Dominican Republic © *Ricardo Briones* 

El Morro National Park, Dominican Republic © Ricardo Briones



Among the MPAs that will benefit with updated management plans are the El Morro National Park, the Estero Balsa Mangrove National Park, the Montecristi Underwater National Park, the Wildlife Refuge *Cayo Los Siete Hermanos*, La Hispaniola National Park and the Estero Hondo Marine Mammal Sanctuary. All the areas are on the northwestern shores of the country facing the Atlantic Ocean.

According to Federico Franco, Vice-Minister of Protected Areas, the ministry is open to collaborating with environmental organizations that can provide valuable knowledge and experiences and help to establish strategic alliances for the effective implementation of the plans, including awareness and environmental education of local communities.

Francisco Núñez, TNC Central Caribbean Program Director stated that in addition to the MPAs, TNC will also support the ministry with the update of two other terrestrial protected areas. These are located in the so called "Madre de las aguas" (Mother of waters): the Armando Bermúdez National Park and the Valle Nuevo National Park. All the plans will be developed with the participation of experts and representatives of local communities to guarantee their viability and long-term success.

he Bahamas was honored with the fourth
Stop IUU Fishing Award by the International
Monitoring Control and Surveillance (IMCS)
Network during the 7th Global Fisheries
Enforcement Training Workshop held in Halifax, Nova
Scotia, Canada on August 3, 2023. This prestigious
recognition comes because of The Bahamas' successful
collaboration with WildAid Marine, TNC, the U.S.,
Canada, and dedicated agencies in their joint efforts
to combat illegal, unreported, and unregulated (IUU)
fishing.

Commander William Sturrup of the Royal Bahamas Defence Force proudly accepted the award on behalf of The Bahamas, representing the nation's dedication to marine conservation and their achievements in curbing illegal fishing activities. The collaboration with various stakeholders, particularly the Marine Action Partnership (MAP) comprising The Royal Bahamas Defence Force, Bahamas Department of Marine Resources, The Bahamas National Trust, WildAid, TNC, and other governmental and non-governmental organizations, has been instrumental in making a significant impact on IUU fishing in the region.

Under The Bahamas Department of Marine Resources' leadership, MAP's comprehensive strategy yielded remarkable results, including a 5-year action plan and the establishment of the Bahamas Wildlife Enforcement Network. MAP's collaboration with Fisheries and Oceans Canada, AI2, and WildAid secured over \$1 million in remote surveillance support, fostering increased cooperation among law enforcement agencies, fishing communities, and protected area managers.

The award reflects The Bahamas' commitment to safeguarding marine ecosystems and vital species like Spiny Lobster and Queen Conch.





(LEFT TO RIGHT) Gregg Casad, Mike Cenci, ASP Darren Robinson, CDR William Sturrup, Bob Farrell. Photo: https://wildaid.org





n June 15, 2023, Dr Rob Brumbaugh, Executive Director, TNC Caribbean Division, and Kelvin Alie, Conservation International (CI) Senior Vice President of Strategy, Delivery and Field Partnerships, signed a memorandum of understanding at TNC's Caribbean Office in Miami.

This collaboration between two of the world's leading environmental conservation organizations is geared at harnessing the strengths of the institutions to enable and support Caribbean nations as they work to meet their international obligations under the Global Biodiversity Framework.

The impetus for the collaboration is to scale up nature-based solutions and achieve national and regional-scale conservation outcomes that can help both nature and people to thrive.

Specifically, the MOU outlines direct actions to accomplish three shared objectives:

- Catalyze support for Small-Island Developing States (SIDS) in the Caribbean to deliver on the Kunming-Montreal Global Biodiversity Framework (GBF) for nature and people.
- Catalyze support and build capacity for Climate Adaptation and Mitigation Initiatives within Nationally Determined Contributions (NDCs) and scale up the application of naturebased solutions across shared geographies of interest.
- 3. Support the sustainable development of the Blue Economy, as defined by the World Bank, in prioritized geographies of shared interest, including sustainable fisheries, tourism, aquaculture, and other blue economy sectors, attract investment in sustainable production sectors and their equitable benefits for countries and communities.

As part of the agreement, TNC and CI will encourage the development of a more climate-resilient fisheries and tourism sectors in the Caribbean; share information regarding best practices and lessons learned with respect to the delivery and implementation of initiatives such as CI's Green-Gray Infrastructure and TNC's Resilient Islands projects; explore opportunities to enhance marine ecosystem health through the application of nature-based solutions; develop a communications plan related to each potential program and/or project collaboration; and to jointly fundraise for projects related to the scope of the MOU.



Kelvin Alie (left), Senior Vice President of Strategy, Delivery and Field Partnerships, Conservation International (CI) and Dr Rob Brumbaugh, Executive Director, TNC Caribbean Division (R) shake hands after signing the MOU. © Jason Koerner

During the signing ceremony, Dr. Brumbaugh explained, "this strategic agreement has the potential to positively impact the capacity of island nations of the Caribbean to deliver on their 2030 commitments agreed to under the [GBF] and the UN Climate Agreement." He added that the impetus for the collaboration is to scale up nature-based solutions and achieve national- and regional-scale conservation outcomes that can help both nature and people to thrive.

Mr Alie said "the collaboration will harness the strength of both institutions to enable and support Caribbean Island states to scale up natural climate solutions, support the sustainable development of the region's Blue Economy, strengthen management of protected and conserved areas, improve management of land and sea outside of protected areas and build the capacity of governments and civil society to meet 2030 commitments under the Global Biodiversity Framework."



NC Caribbean Division is partnering with the Caribbean Broadcasting Union (CBU), a not-for-profit association of public service and commercial broadcasters in the Caribbean, to support the annual Caribbean Media Awards. TNC and CBU signed an agreement in July 2023, under which TNC will sponsor two awards for excellence in environmental journalism.

One of the awards is focused specifically on coral reef reporting for television, while the other is for mangrove and sea grass beds in digital media using the feature genre.

The president of CBU, Dr. Claire Grant, warmly welcomed the new partnership with TNC. "This is a natural extension of the CBU's commitment to building capacity for, and recognizing excellence in coverage of issues that are vital to the people of the Caribbean."

The first TNC CBU awards will be presented at CBU's Caribbean Media Awards Gala in Belize on August 13, 2024.



Dr. Claire Grant, President of Caribbean Broadcasting Union (CBU)



# Former Trustee Doña Pirigua recognized

ormer TNC Caribbean Trustee from the Dominican Republic, Dr. Rosa Margarita Bonetti de Santana, affectionately known as Doña Pirigua, received both a national honor and international recognition in 2023.

A businesswoman by vocation and a conservationist by passion, Doña Pirigua received one of the Dominican Republic's highest honors, The Order of Christopher Columbus in April 2023. She received the Decoration of the Heraldic Order of Christopher Columbus in the degree of Commander for her extraordinary work in and dedication to the environment. The honor was conferred by President of the Dominican Republic, Luis Abinader Corona. The order of Christopher Columbus is awarded for service to the Dominican Republic through humanitarian, artistic and scientific merit.

Doña Pirigua was again in the spotlight in September 2023, as she was named one of the recipients of TNC's Oak Leaf Award for Volunteer Leadership for 2023. The prestigious award was announced during TNC's Volunteer Leadership Summit in Washington, DC, on September 3, 2023. The Oak Leaf Award honors volunteer leaders who embody TNC's values and whose personal accomplishments have advanced the organization's mission.





(TOP) Doña Pirigua receives her award from President Luis Abinader Corona. © Jacky Keife Hernández

(BELOW) Jennifer Morris, TNC Chief Executive Officer presents Dr. Rob Brumbaugh, TNC Caribbean Division Director with TNC's Oak Leaf Award for Volunteer Leadership for 2023 on behalf of Doña Pirigua. © TNC

Dr. Bonetti served as a TNC volunteer leader for ten years (2012-2022). As a TNC Caribbean trustee, she demonstrated extraordinary commitment through actions and activities including founding two Dominican Water Funds: Santo Domingo and Yaque del Norte.

Tributes to the distinguished

Dominican Republic businesswoman
and conservationist were led by TNC
and Propagas Foundation, of which

Dr. Bonetti is the President.

Speaking on behalf of the Propagas Foundation in respect of the national honor, Maria Paula Miquel stated, "We hold this distinction with honor, dignity and with the duty to persist in our mission of promoting national reflection on environmental issues, leaving a legacy for future generations."

Responding to the Oak Leaf award, Dr. Rob Brumbaugh, Executive Director of TNC in the Caribbean said, "These awards are welldeserve recognition of Doña Pirigua's enduring commitment to conservation globally and specifically in the Dominican Republic."



he year 2023 marked a decade since The Nature Conservancy (TNC) commenced work in Grenada and Puerto Rico. TNC programs in both islands celebrated the milestone differently.

### **Puerto Rico**

The occasion in Puerto Rico coincided with the 50<sup>th</sup> Anniversary of the Puerto Rico Department of Natural and Environmental Resources (DNER), one of TNC's partners on the island. Both organizations hosted two commemorative activities on September 29 to mark the anniversary.

The first was a conservation forum involving local stakeholders from federal, state, and local agencies as well as NGOs and the private sector hosted at the Puerto Rico Tourism Company. Panelists included local partners Roberto Viqueira of Protectores de Cuencas; Ernesto Diaz of Puerto Rico Climate Change Council; Dr. Aurora Justiniano, NOAA Coral Reef Conservation and Coastal





### (TOP TO BOTTOM)

Tania Metz (standing) Puerto Rico Program Manager moderating the conservation forum with TNC partners. © Christina Colondres

One of the Plena dancers and a guest enjoying entertainment at the celebratory reception. © Christina Colondres

Mangrove time! Board members and staff show off their mangrove propagules. before planting.

© Christina Colondres

Zone Management Liaison for Puerto Rico, and TNC Puerto Rico former Program Manager; and Magaly Figueroa, US Forest Service.

The engaging forum examined the organizations' priorities for conservation work in Puerto Rico and explored how TNC can support and accelerate conservation in the archipelago.

The forum was followed by a reception to acknowledge the years of partnership and collaboration between TNC and DNER. Anaís Rodríguez Vega, Secretary of DNER, gave remarks at the reception and complimented both organizations for their continued conservation work in Puerto Rico. Guests were treated to a full menu of Puerto Rican cultural feast with performances by a live plena band, dancers, and folkloric characters.

The audience included members of TNC Caribbean Board of Trustees, who held their fall retreat in Puerto Rico to coincide with the  $10^{th}$  anniversary celebrations and to get a better understanding of our conservation work in the territory.



### Grenada

Grenada's anniversary was highlighted on social media with a reel that showcased the exciting projects

that the Eastern Caribbean program, based in Grenada, has been spearheading. It emphasized the amazing projects focused implemented in Grenada and the Eastern Caribbean on #NaturalClimateSolutions and #MarineManagement. The EC Program staff concluded the anniversary with a staff lunch in December.





## Looking Ahead...

# Where to from here?



NC's science has informed our conservation work for more than 70 years, informing local actions aimed primarily at addressing local stressors and threats to biodiversity. Now, science has shown us that we must act globally and at greater scales to address challenges that are global in nature. To that end, we are increasingly investing our time and resources to advance conservation at national scales, and in enough places across the Caribbean to ensure that we can have a regional impact.

The Nature Conservancy established a set of organizational global goals for 2030, and our conservation work in the Caribbean is critical for achieving those goals. The organization also identified key "pathways" for enabling conservation at national scales and we are using those pathways to support and enable conservation by nations at the scales that are needed to halt and reverse biodiversity loss as well as address climate change and its impacts. We know this costs money, and we are working with nations to develop new sources of funding that can be used to address their national conservation needs. Local action still matters, of course, but as the world's largest conservation organization we must ensure that we are acting at the scale necessary for conservation to be effective.

As we look back on 2023, we are proud of what we have accomplished, and we are ready to apply what we learned and build on that success. 2024 and the years ahead are perhaps the most exciting, challenging, and most urgent years in our history. Our global 2030 Goals are extraordinarily ambitious. Yet we know they are achievable, with the right science, pathways for impact, and resources. On behalf of our team, we appreciate all that YOU do to help us move forward toward a future where people and nature thrive together.

A leatherback sea turtle heads back into the water at the Dorado Reserve, Puerto Rico © Debbie Feliciano/TNC Photo Contest 2022



# Thank you for your continued support of our work!

Il of this builds on our track record of success and is only possible because of our many supporters, partners, and contributors like you.





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DONATIONS