

CARIBBEAN DIVISION | THE WORLD WE DEPEND ON DEPENDS ON US

# Sun-soaked islands amidst Caribbean blue this unique archipelago needs protecting

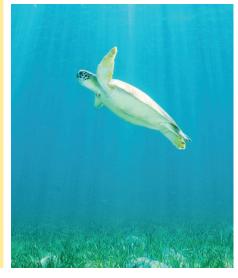
The Bahamas consists of more than 700 islands, rich with history, surrounded by over 100,000 square miles of turquoise ocean,

**brimming with life.** Verdant forests, white beaches and gem-colored corals provide a stunning backdrop for the diverse wildlife found throughout the country's islands and waters, drawing millions of visitors from around the world each year. In fact, tourism revenue in The Bahamas is estimated at \$2.6 billion annually. Fisheries, particularly staples like queen conch and spiny lobster, are the cornerstones of local economies along with the tourism sector, which means Bahamian livelihoods are inextricably linked to the health of the country's marine and coastal environments.

However, these environments are increasingly at risk due to unsustainable fishing practices, climate change, coastal development and other threats. The Nature Conservancy (TNC) has been working in The Bahamas for over 20 years, collaborating with government, partners and communities to preserve the natural resources that sustain lives and livelihoods. With TNC's support, The Bahamas is making remarkable strides toward a more secure future for nature and people.

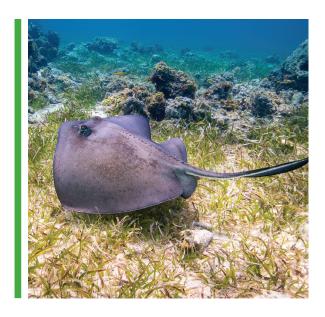
TNC has completed extensive research to inform and promote the expansion of the Bahamian marine protected areas system and has put technology in the hands of government and marine managers to foster sustainable fishing initiatives. Working directly with communities, TNC guided The Bahamas to establishing its first world-recognized sustainable fishery and today helps shape fishery practices that preserve marine environments and stabilize livelihoods. In addition, TNC and partners have launched a Coral Innovation Hub in The Bahamas, working together to accelerate large-scale coral restoration and advance the science needed to help these critical ecosystems survive for future generations.





### **Advancing Historic Marine Protections**

In 2008, an unprecedented, region-wide collaboration called the Caribbean Challenge Initiative (CCI) was launched by TNC and partners, and The Bahamas quickly became an early proponent and leader in this effort. The CCI joins countries across the Caribbean in a voluntary commitment to protect and effectively manage at least 20 percent of their nearshore marine environment by 2020 (the 20-by-20 goal). In 2015, with support from TNC, 15 new marine protected areas were declared and three areas were expanded, comprising over 11 million newly protected acres and moving the country from 3 percent to 10 percent protection of its marine and coastal environments. The following year, TNC, Bahamas Reef Environment Educational Foundation and the Bahamas National Trust launched a collaborative initiative called Bahamas Protected to pool their science and expertise, identify priority areas for protection and help advance the Bahamian government's progress toward its 20-by-20 goal.







As part of this work, TNC and partners completed a comprehensive evaluation of the economic value of the Bahamian marine protected areas system and determined it to be nearly \$6 billion annually, including the spiny lobster fishery, tourism, coastal protection and carbon sequestration benefits. Armed with this essential data, TNC and partners identified and proposed to the Bahamian government 43 new marine sites for protection which would result in the country reaching its 20-by-20 goal and doubling current protected area coverage by 2020. The proposed sites also remedy gaps that were identified in which marine resources fell short of national targets for protection of key ecosystems and marine organisms.

For Bahamian economies and communities, effective management of protected areas today and into the future is equally important as expanding protected area coverage. In fact, when countries join the CCI, they commit not only to the 20-by-20 goal but also to ensuring that protected areas are effectively managed into the future. To support these efforts, TNC and partners launched the Caribbean Biodiversity Fund (CBF)—an endowment designed to work with Caribbean governments to establish sustainable funding for perpetual protected area management.

TNC also played a key role in establishing the Bahamian Protected Areas Fund (BPAF), providing primary financial and operational support, and continues to work with the BPAF and partners to identify sustainable funding mechanisms and strategies for implementing them successfully. These funding mechanisms are designed to generate sustainable income that is matched by the CBF endowment through the BPAF, providing ongoing funding for protected area management as well as other on-the-ground marine conservation efforts. In addition to sustainable funding support, TNC works directly with marine protected area managers and other stakeholders on the ground to implement effective, long-term management of protected waters.

### **Creating Sustainable Fisheries for Nature and People**

The fishing sector in The Bahamas provides employment for tens of thousands of fishers, generates supplemental income, supports food security and underpins the tourism industry. **As in many Caribbean nations, Bahamian fisheries face significant challenges from the impacts of climate change, habitat degradation and unsustainable fishing practices, including poaching.** A dramatic decline in marine species diversity and abundance is threatening fragile ecosystems, food security and livelihoods. Working closely with local partners and communities, TNC strives to bring about long-term sustainability for Bahamian fisheries.



Leading by Example with Sustainable Certification
In 2018, TNC helped The Bahamas make history by earning the
Marine Stewardship Council (MSC) ecolabel certification for its
spiny lobster fishery—the first Caribbean fishery in the world to
achieve this renowned certification. The fishery, generating about
\$90 million per year, is one of the most important in The Bahamas.
It is the country's largest seafood export and supports thousands
of households. However, lobster populations were severely
threatened due to unregulated fishing, including harvesting of
juvenile, spawning and out-of-season lobsters.

For nearly a decade, TNC and partners worked with the Bahamian government, The Bahamas Marine Exporters Association, local fishers and other stakeholders to drastically improve the fishery so it could pass the rigorous MSC certification assessment. The certification is based on three criteria: the health of the species population, the impact of harvesting the species on the marine environment and the management of the fishery. **Achieving certification sends a message worldwide that The Bahamas is a sustainable fishery leader, while also increasing demand and securing international markets for Bahamian lobster products.** 

#### **Combining Science and Technology to Improve Fisheries**

TNC has launched a multi-stakeholder initiative to assess gaps in fishery regulation enforcement throughout The Bahamas and introduce new technologies to fill these gaps. Through this initiative, TNC is helping fishery managers and policymaking government agencies build capacity to significantly improve marine resource management and enforcement throughout the country.

For example, the queen conch, like the spiny lobster, is a precious species in The Bahamas that has suffered alarming decline due to unsustainable fishing practices. TNC is working with Bahamian government and communities to improve this fishery, particularly by utilizing a tool called FishPath. Developed by TNC and



partners, FishPath is an engagement process and decision-aiding software used to guide the selection of appropriate fishery harvest strategies. It identifies tailored, fishery-specific approaches to data collection, fish stock assessment methods and management actions, taking into account characteristics of the local marine environment as well as socio-economic data. Applying FishPath, TNC identified priority actions to guide the conch fishery to sustainability, like gaining consensus on how to determine conch maturity to inform harvesting regulations, training fishery managers in stock assessment methods and engaging with fishers so they better understand regulations. Using these key insights, TNC is working to implement an action plan for a dramatically improved conch fishery that has the cooperation of fishers and other stakeholders.

Applying new technology in another area, TNC piloted the first advanced electronic traceability system in The Bahamas. Seafood traceability is the ability to follow and uniquely identify a seafood product through all stages of harvesting, processing and distribution. Traceability has been identified as critical in efforts to advance fishery reform, combat overharvesting and help The Bahamas export seafood that is marketable globally. The pilot revealed to government and stakeholders the need for greater traceability standards and enforcement and demonstrated the efficiency of electronic systems over manual. Looking ahead, it will help determine the right choice of electronic system to use and appropriate traceability standards to implement.

Building on our experience with the lobster fishery, TNC continues to apply a science-based and collaborative approach to guide Bahamian fisheries to sustainability. **As market forces around the globe increasingly demand sustainable and traceable seafood, these efforts are vital for securing Bahamian livelihoods and economies in the future.** 

# **Using Innovation and Collaboration to Save Bahamian Coral Reefs**

Healthy coral reefs are imperative in The Bahamas. They sustain the fishing and tourism industries and provide vital protection against coastal erosion, flooding and extreme weather events. A study led by TNC determined that over 1 million visitor trips per year to The Bahamas are directly linked to coral reefs. Teaming up with some of the world's leading coral science organizations, TNC has launched a Coral Innovation Hub in The Bahamas to protect and restore the country's coral reefs like never before.







The Hub is based at the Cape Eleuthera Institute and is a partnership between TNC, Cape Eleuthera Institute, SECORE International, the Perry Institute for Marine Science and Shedd Aquarium. Through the Hub, TNC and partners are advancing cutting-edge coral reproduction techniques, like microfragmentation and facilitated sexual reproduction, to restore threatened, reef-building coral species like elkhorn and staghorn. Conservancy and partner scientists convene at the Hub during rare natural coral spawning events to collect coral eggs and sperm and apply the latest techniques in facilitated sexual reproduction to create healthy new embryos. A pilot coral spawning expedition in 2018 resulted in the creation of 1.3 million new embryos and helped advance techniques for increasing survival rates of young corals once planted back on the reef. These advancements are invaluable for scaling up coral restoration to the levels needed to address current rates of reef degradation.

The Eleuthera Hub, one of three Coral Innovation Hubs TNC has established throughout the Caribbean, also serves as a vehicle for education and knowledge-sharing among coral scientists, practitioners, educators and communities. Hands-on education is offered to local students through field trips at the Hub involving experiential learning activities. **The importance of coral reefs in building climate resilience is emphasized in education and collaboration efforts at the Hub.** This raises awareness about the threats to corals from climate change and promotes forward-looking resilience plans that incorporate reef restoration for nature-based coastal protection.

## **Building a Sustainable Future**

TNC continues, through science, technology and innovation, to help shape a resilient future for The Bahamas. Our efforts in the country are strengthened and accelerated by our partnerships with fellow leading organizations and our relationships with local government and communities. Every stride we make in protecting the ocean, improving fisheries and restoring coral reefs brings us closer to a bright future for The Bahamas where nature thrives as communities and economies prosper—and where the natural wonders of this beautiful country are preserved for generations to come.



### **OUR MISSION:** TO CONSERVE THE LANDS AND WATERS ON WHICH ALL LIFE DEPENDS



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