

# Mapping Ocean Wealth in St. Kitts and Nevis

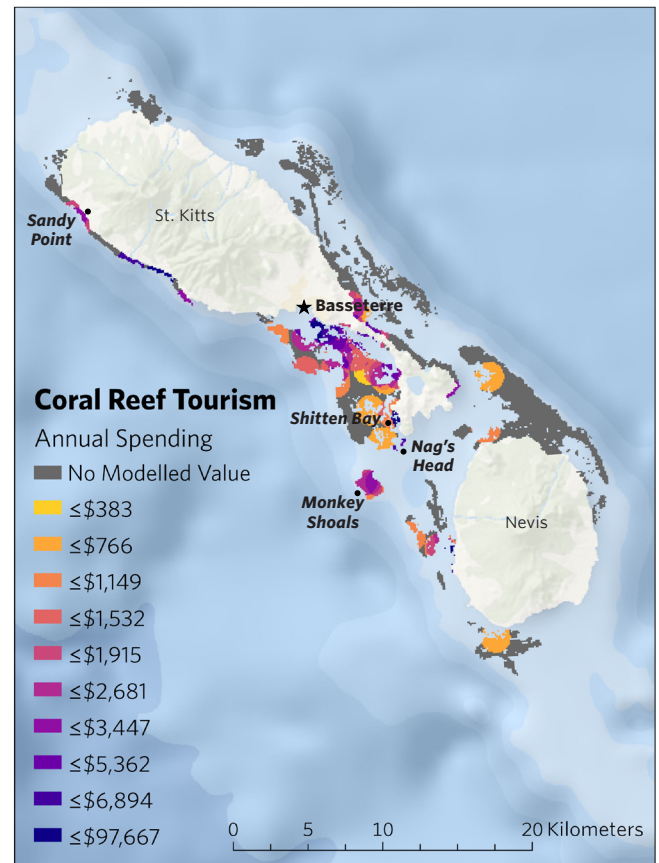
## Overview

Saint Kitts and Nevis are mountainous islands, including large forest-covered dormant volcanos; Mount Liamuiga- Saint Kitts and Nevis Peak on Nevis. The St. Kitts and Nevis Marine Management Area (SKNMMA) within the Federation contains rich coral reefs. Unique black, and popular white sand beaches, as well as nearshore coral reefs are favorites for tourists. In addition, tourists enjoy hiking through the country's inland rainforests. The country's tourism industry has been growing since 2005, when the country's government-owned sugar plantations closed. In St. Kitts and Nevis, many people rely on reef fisheries for food and income, and there has been an increasing recognition in the region to better manage these resources, especially in the face of climate change. The value of coastal and marine resources are often overlooked, but can be considerable as highlighted below.

The maps and statistics highlighted here are only a brief synthesis but point to the utility of both enumerating and mapping tourism value. Such maps and numbers may be critical in building a Blue Economy in the region, providing guidance on the location of key national assets, enabling such assets to be fully incorporated into planning, empowering communities and other users.

## Coral Reef Tourism

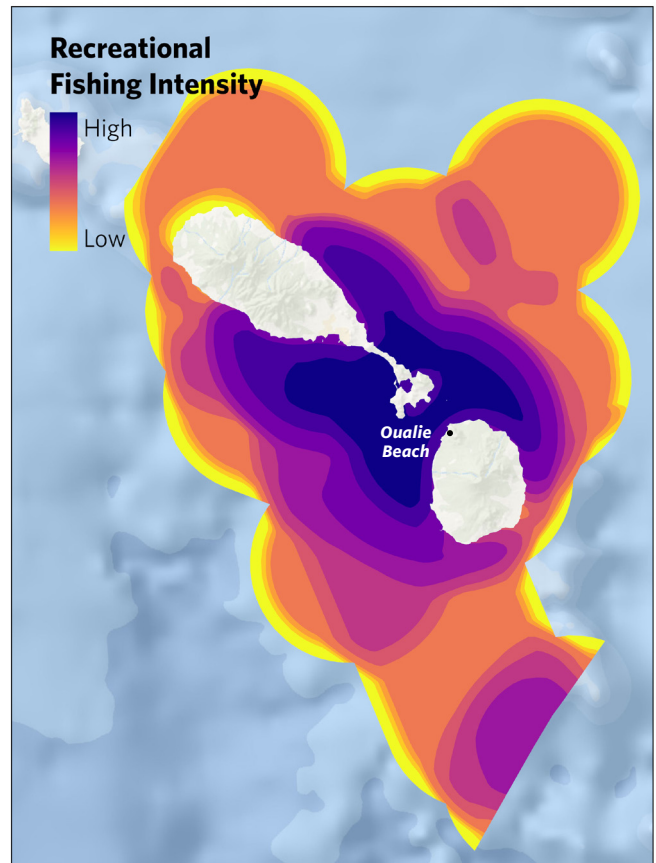
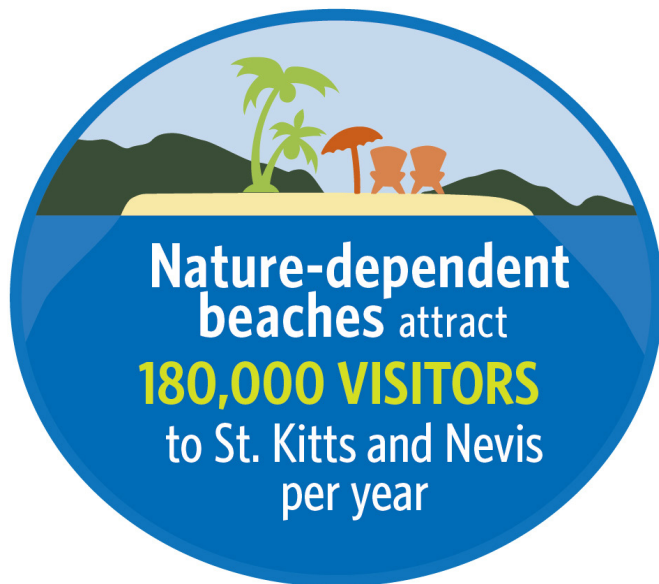
Diving and snorkeling activities on coral reefs are estimated to bring in over \$6 million (USD) in tourism expenditures annually. High values (~\$90,000 per ha) for these activities are found at the main sea port in Basseterre. Off of Sandy Point in NW St. Kitts, a tract of reef near the popular Paradise Reef dive site generates over \$260,000 per year, and is within an existing marine managed area. Around Monkey Shoals, one of the country's best dive sites, the total value is estimated at around \$500,000 per year, but the values are spread across a relatively large area. High values are also noted off SW tip of St. Kitts, Shitten Bay and Nags Head. On the west coast of Nevis, there is a reef tourism hot spot (\$84,000 per year) off Port of Charlestown on west coast, near two notable dive sites (The Vents and Aquarium).



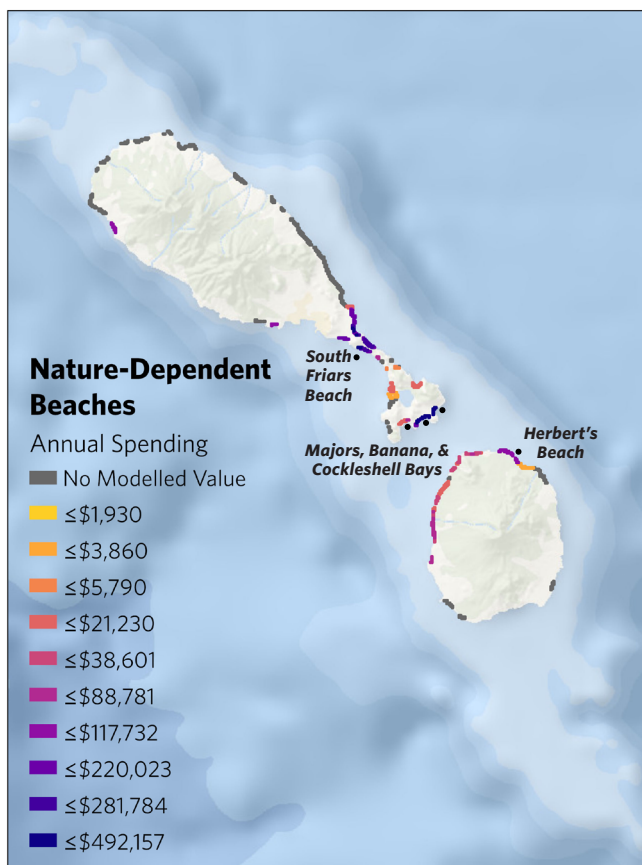
## Nature-Dependent Beaches

On the Southeast Peninsula, Cockleshell, Majors and Banana Bay are notable for palm trees, white sands, views of Nevis, and calm waters ideal for swimming. Although Banana Bay it is not as secluded as it once was due to recent hotel construction, it is still consid-

ered relatively remote from the rest of the island, and the nature-dependent tourism value of this beach is estimated at over \$7,600,000/year. Nearby, Turtle Beach is quiet, secluded, and known for its occasional whale and dolphin sightings. Visitors also enjoy its



calm waters protected by coral reefs. This beach's natural features are estimated to attract 18,000 visitors every year. South Friars Bay offers calm waters, protection from nearby coral reef, and attracts a high level of visitation and spending (>\$400,000/ha). On Nevis, Herbert's Beach (\$1,800,000/year) also offers a few good snorkeling areas offshore which contributes to its natural value for tourists.



## Recreational Fishing

Charter fishing tours are popular with visitors and draw over \$2million in tourist spending every year. We detailed the activity of 23 known operators offering fishing charters, with 6 operators concentrated in Oualie Beach area, historically home to a popular sportfishing tournament. Most sportfishing activities take place off the West coast of Nevis and the South-eastern Peninsula of St Kitts. Passengers fish for barracuda, sailfish, dolphin (Mahi Mahi), blue marlin, white marlin, wahoo, yellowfin tuna and skipjack tuna.

## Wildlife Viewing

In St. Vincent and the Grenadines, the bird-watch-The bird-watching community has recorded 101 bird species from over 10,000 reported observations. In fact, this may represent an under-utilized resource: the country's nine easily-accessible large inland ponds are home to many wading birds, while its rich forested mountains host many other species of in-

### A Note on Covid-19

The pandemic has had a dramatic impact on tourism, and will likely have also impacted patterns and effort in fisheries. The longer-term impacts are too early to predict. It is likely that national dependence on reef fisheries may have increased, raising the urgency for active management to ensure long-term stability of these. For tourism, it seems likely that the natural values, especially in low density tourism areas, will prove a key driver in tourism recovery.

demographic species of bird. Boat-based whale and dolphin watching was not found to be major tourism activity in St. Kitts & Nevis.

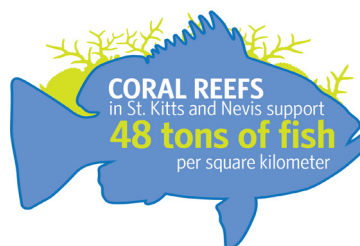
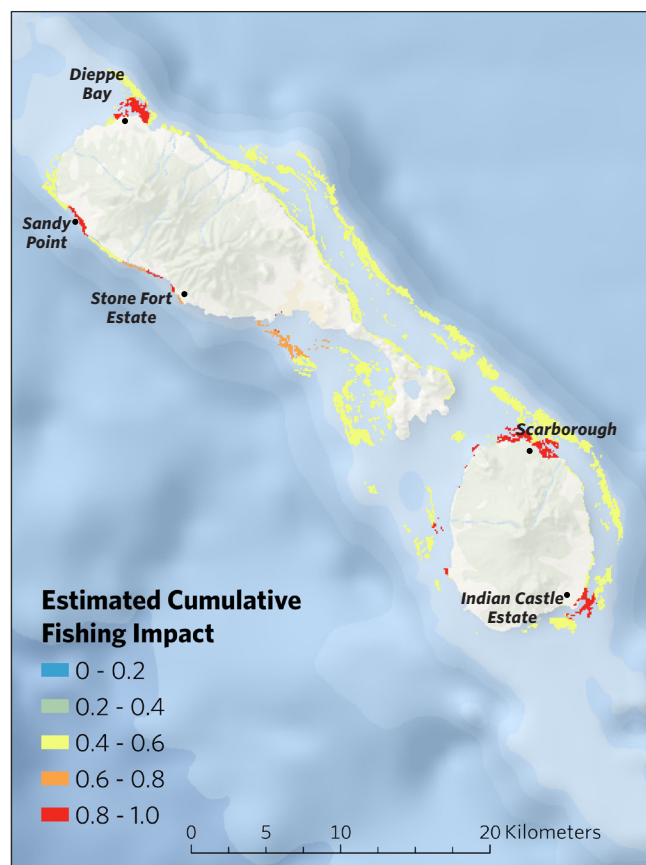
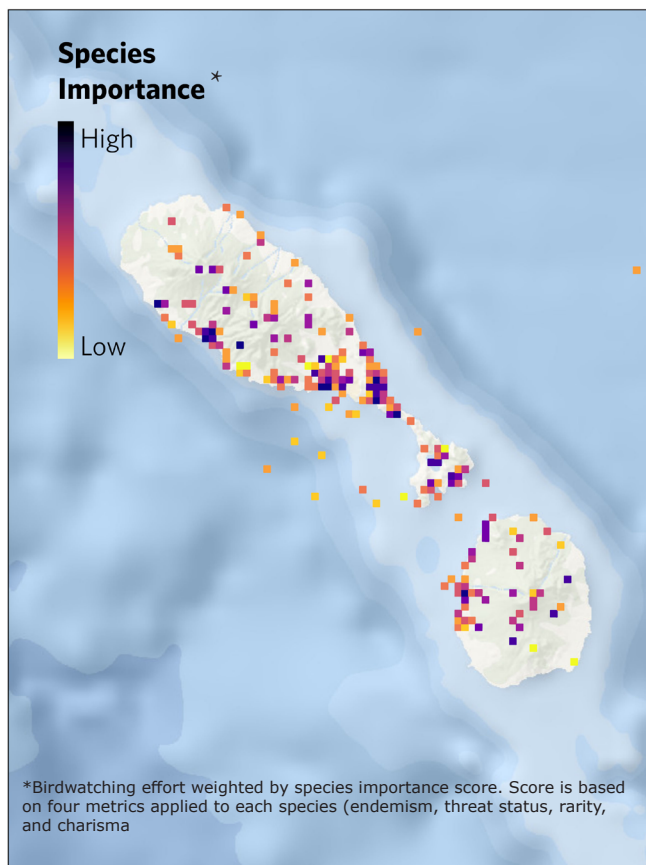
## Coral Reef Fisheries

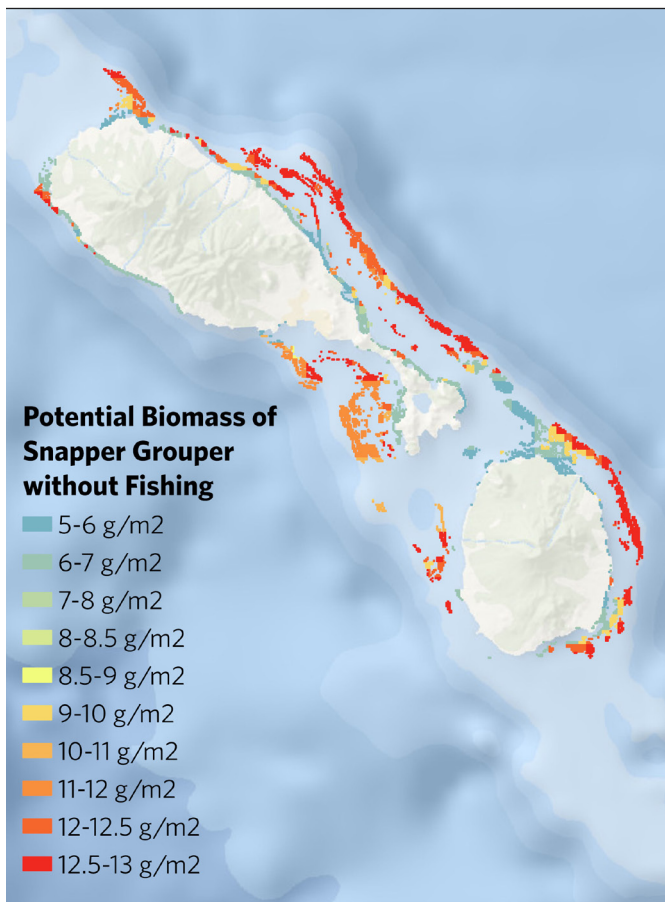
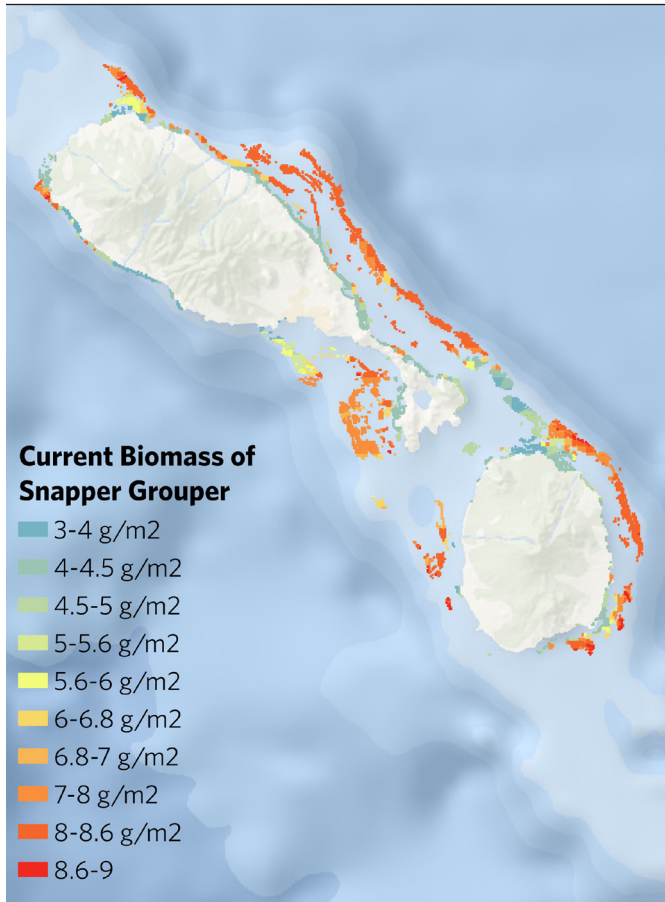
The coral reefs of St. Kitts and Nevis support an estimated a mean value of 7 g/m<sup>2</sup> for snapper-grouper snapper and grouper species and 6 g/m<sup>2</sup> for parrotfish (48 g/m<sup>2</sup> for all surveyed species). The reef areas with the highest fishing impact in the country are located off the northeastern side of the island of St. Kitts, north of Dieppe Bay, on the nearshore reef areas off Sandy Point Town, and between Middle Island and Stone Fort Estate. On Nevis, there is an extensive area (~50 ha) of highly impacted reef on the north to northwest coast, especially between Newcastle and Scarborough, as well as on the South-eastern tip of the island near Indian Castle Estate.

In general, the reefs with the lowest fishing impact are those furthest from the shore on the eastern (windward) side of the island. This could be resulting from challenges of access due to the sea conditions, distance from shore and proximity to ports or may reflect favorable environmental conditions. As expected, those areas with the lowest fishing impact show the highest biomass values, and St. Kitts and Nevis has the highest proportion of reef tracts with high current biomass values for snapper and grouper species, compared to other CROP countries.

The models show opportunities for increasing the biomass of snapper-grouper snapper and grouper species complex in several locations, most notably in the reefs off Basseterre. Reducing fishing impacts on these reefs has the potential to double snapper-grouper snapper and grouper species stocks. Any such changes could very likely have positive outcomes for the diving industry already active in this area, and would also yield potential benefits for the fishers that rely on these reefs.

Other similar opportunities can be found off the Northeast tip of St. Kitts as well as the reefs north of Charlestown in Nevis. Reductions in fishing impacts could lead to biomass values exceeding 12 g/m<sup>2</sup>. For parrotfish species, increasing coral cover on the offshore reefs on the southwestern coast of St. Kitts, and off Charlestown in Nevis would have the greatest impact on parrotfish biomass (estimated increases up to 12 12 g/m<sup>2</sup>). It is highly likely that such biomass gains could, in turn, deliver higher catch potentials in the long-run.





## Highlighted Statistics\*



On reef tourism such as snorkeling and SCUBA draws over **22,000** visitors and over **\$6.6 Million** in spending, annually



Calm, turquoise waters, lush vegetation and other natural features of St. Kitts & Nevis' beaches are responsible for over **180,000** visitors and over **\$35 Million** in annual spending



St. Kitts & Nevis has at least **23** sport-fishing charter operators. Tourists spend over **\$2.4 Million** on sportfishing tours annually

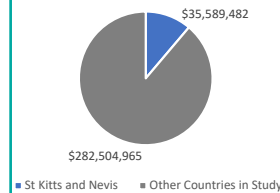


St. Kitts & Nevis coastal habitats supply over **250** hotels and restaurants with fresh seafood

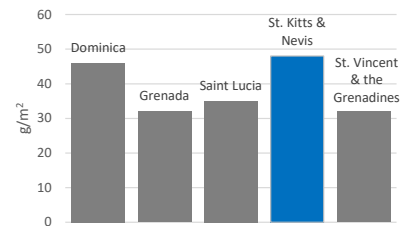


The country's reefs support **48 g/m<sup>2</sup>** in fishable biomass when accounting for all surveyed species. The average predicted gain in snapper-group biomass under reduced fishing measures across all reef areas in **52%**

St. Kitts and Nevis Natural Beach Value Contribution to Regional Expenditures



Current Coral Reef Fish Biomass for All Surveyed Species



\*Models and statistics were built to reflect values for the period immediately preceding Covid-19 (2019). Models have been built from multi-year summaries up until this date. See technical reports for details.

\*\* Dominica, Grenada, Saint Lucia, and St. Vincent & the Grenadines

## About This Project

The Global Environment Facility (GEF), the Organisation of Eastern Caribbean States (OECS) Commission, in partnership with the World Bank, is implementing the Caribbean Regional Oceanscape Project (CROP) to improve systems and put relevant structures in place in an effort to foster a Blue Economy and to promote greater consideration of the ecosystem functions and services which the ocean provides for member states. The project timeline was October 2017 - December 2021.

Under this project, The Nature Conservancy used the Mapping Ocean Wealth approach to develop ecosystem service models and maps at the scale of the Eastern Caribbean in support of CROP. The figures and statistics referenced in this summary are derived from the technical reports and datasets found at: [oceanwealth.org/project-areas/caribbean/CROP](https://oceanwealth.org/project-areas/caribbean/CROP)

**CROP Project Overview:** <https://oeecs.org/en/crop>  
**Map Viewer:** [maps.oceanwealth.org/oeecs](https://maps.oceanwealth.org/oeecs)