

by Colette Weil Parrinello

The Great Blue Hole is a large sinkhole off the coast of Belize.



# ATTENTION WORLD: *Belize Saves Their Coral Reef*

**S**ea turtles float in clear waters, colorful corals hug the ocean floor, and aquatic animals glide among the mangrove roots. Welcome to the Belize Barrier Reef Reserve System, the second largest coral reef in the world (Australia's Great Barrier Reef is number one). Several years ago, this reef was in crisis, heading toward destruction. But the people of Belize fought back to save their reef's health.

## About the Belize Barrier Reef System

The Mesoamerican Reef stretches 700 miles, from Mexico's Yucatan Peninsula through Guatemala to Honduras' Bay Islands. For 185 miles, the reef passes through the Belizean water. Lagoons and atolls are on either side of the main reef and together are called the "Belize Barrier Reef System."

The reef supports more than half of Belize's population through tourism, coastal activities, real estate, and fishing.

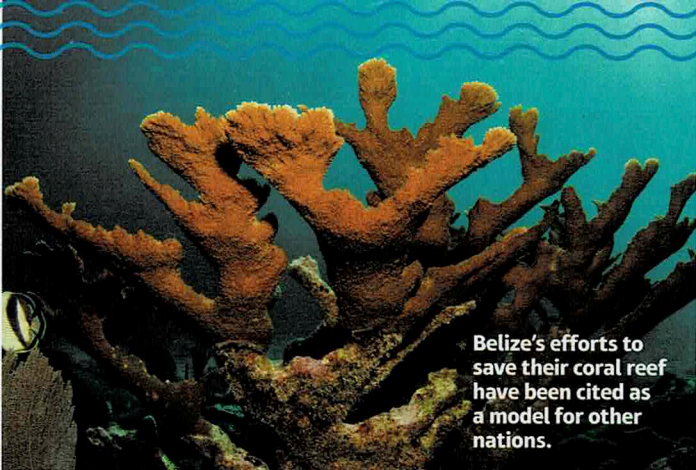
## The Damage

Hurricanes, tropical storms, unchecked oil exploration, ocean warming, overfishing, rising sea level, pollution, and uncontrolled coastal and hotel development all drove the reef into coastal deterioration and severe coral damage and bleaching.

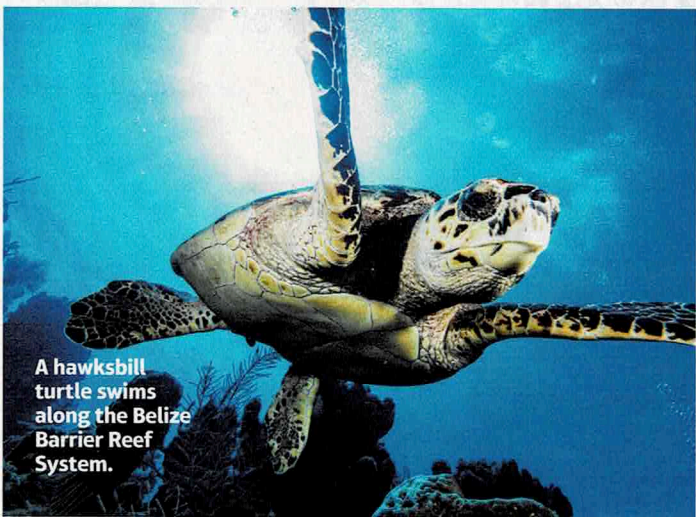
Much of the coast is three feet above sea level and suffers frequent flooding that erodes the coastline. Mangrove forests were being cleared and replaced with sand and coral rubble from nearby waters, destroying coral and seabeds.

The coral damage was so severe that the United Nations Educational, Scientific and Cultural





Belize's efforts to save their coral reef have been cited as a model for other nations.



A hawksbill turtle swims along the Belize Barrier Reef System.

Organization (UNESCO) put the reef on its List of World Heritage Sites in Danger.

### Belize Takes Action

Belizeans were outraged to learn about secret deals for oil exploration along the reef and the severity of reef damage. In 2012, environmental groups helped launch a public referendum to restore and protect the reef system. Ninety-six percent of the people supported the referendum.

With the help of UNESCO, scientists, grassroots organizations, and nongovernmental organizations, the government put a plan of controls in place to restore the reef's health.

In 2017, the government took the extraordinary action of placing a complete moratorium on oil exploration. It added regulations to protect the mangroves and national parks to control coastal erosion. Nonprofit organizations set up coral nurseries to rebuild damaged coral reef areas.

Overfishing and illegal fishing were out of control. The government set up a fishing rights program to manage access to specific fishing areas. It set aside 10% of its territorial waters as no-take marine protected areas, tripling the size of existing areas. The no-take areas help rebuild fish populations and protect habitat.

In 2018, UNESCO removed the reef from the "Danger" list. Belize's success was cited as a model for other nations.

Climate change and illegal fishing continue to be ongoing threats, but the drastic actions Belizeans took helped save their beloved coral ecosystem, the threatened coastal area, and their livelihood.

#### Colette Weil Parrinello

is a frequent contributor to children's magazines. She loves the outdoors, has walked in mangroves at low tide, seen coral bleaching in Fiji, Australia, and Hawaii, and snorkeled the Great Barrier Reef.

## FAST FACTS

- » **Mesoamerica**  
In Greek, Mesoamerica means "middle America" and refers to the geographical and cultural area from central Mexico down through Central America.
- » **World Heritage Sites**  
"World Heritage is the designation for places on Earth that are of outstanding universal value to humanity and as such, have been inscribed on the World Heritage List to be protected for future generations to appreciate and enjoy."  
—UNESCO
- » **Mangroves**  
A group of trees and shrubs that lives only in tropics and subtropics. The roots show above the waterline, tolerate salt water, and are flooded twice daily. The dense root mangle is home to aquatic animals and serves as a protective coastal buffer against storms, wind, and waves.
- » **Coral Bleaching**  
Coral and algae called zooxanthellae have a symbiotic relationship. The algae live in the coral and are the coral's primary food source. When this relationship is stressed by increased ocean temperature, pollution, extreme low tides, or exposure to high temperatures, the algae leave. Without food, the coral is bleached, turns white, and is vulnerable to disease.
- » **Symbiotic**  
The evolved interaction or close living relationship between organisms from different species to depend on each other to survive, such as coral and the algae zooxanthellae and mangrove forests and coral reefs.