

## Green Turtle Cay Project



Key West's sister city, Green Turtle Cay, located just east of Great Abaco, in the Bahamas, is the site for Reef Relief's first Bahamas project—a cooperative effort with the Green Turtle Cay Foundation, Linton's Cottages—owned by Dr. & Mrs. Brian Lapointe, Cape Air, the Edith & Curtis Munson Foundation, and residents of the island. Green Turtle Cay is home to a coral reef ecosystem comprised of coral reefs, seagrasses and mangroves which fringes much of the coastal areas. The Abaco barrier reef extends from Hole in the Wall on the south end of Abaco Island north past the Pelican Cays Land and Sea Park, Marsh Harbor, and north of Green Turtle Cay to Walker's Cay. The reef is from 3–7 miles wide and 2–15 meters deep. Conch and fish are staples of this island community and hawksbill turtles, green turtles, and loggerhead turtles nest on the coastal beaches.

Director of Marine Projects Craig Quirolo will train local divers on Green Turtle Cay to install reef mooring buoys so that boaters and divers have an easy alternative to anchoring on the fragile coral reefs surrounding this beautiful island. The Reef Relief team arrived on the island in November, 1998, and began planning efforts with a community workshop that described the project and solicited input on where the buoys should be installed. Reef Relief's DeeVon Quirolo began an educational effort with a coral reef presentation to the two elementary school classes on the island. The team returned in March to sound the bottom for the buoy locations and begin further studies. The buoys will be installed later this summer once the components have been ordered and shipped to Green Turtle Cay.



The Reef Relief Team at Green Turtle Cay. (l to r) Bill Alevizon, Craig Quirolo, Brian Lapointe. Photo by DeeVon Quirolo.

Reef Relief President Brian Lapointe, research associate with Harbor Branch Oceanographic Institution, and Craig Quirolo began a video monitoring program for the island with permanent transects from Green Turtle Cay to offshore coral reefs that will enable them to assess conditions and determine the percentage cover of corals, seagrasses, macroalgae, octocorals and sponges. Dr. Lapointe's water quality monitoring program includes taking water samples at these same sites over time and analyzing them for low level nutrient concentrations, chlorophyll *a*, turbidity and salinity. This baseline will help identify land-based sources of pollution.

Dr. Bill Alevizon, Reef Relief's fisheries expert, is involved in siting the locations for placement of "Reef Balls" that are being generously donated by the Reef Ball Foundation to establish additional coral reef habitat. "Reef Balls" are a unique design by Todd Barber of *pb*-balanced concrete structures that attract coral growth, fishes and other marine organisms.

Reef Relief is seeking tax deductible matching donations to cover project expenses. For more information, contact Reef Relief.