

REEF BALL GARDENS REPLENISH CORAL REEFS

Coral Reefs are dying in the Caribbean. Around Barbados many of the fringe reefs are dead or dying and the many diverse kinds of marine life have lost their traditional habitat and are therefore disappearing as well.

In an attempt to help recover coral reef habitats, man has created artificial structures called Reef Balls that enhance coral reef ecosystems.

This new structure, a **Reef Ball Garden**, has been specially designed to create artificial coral reef habitats.



Reef Ball

They have proven to be very popular, since they are effective in encouraging coral to grow on them and this creates habitat for fish and other marine creatures.

Reef Balls are made by pouring concrete into a fiberglass mold containing a central polyform buoy surrounded by various-sized inflatable balls to make holes. There are over a dozen different standard mold sizes as well as custom sizes.

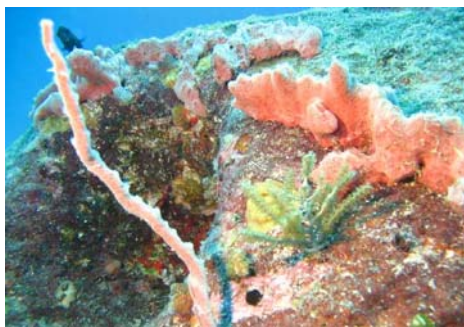
The concrete used to make these Reef Balls contains micro silica which strengthens the Balls and makes them abrasion-resistant. Reef Balls have average life expectancies of 500 years. Special concrete used must have a pH similar to natural sea water (8.3). Normal concrete pH (12) can inhibit the settlement and growth of many species of marine life including some larval corals.

Reef Balls can be used:

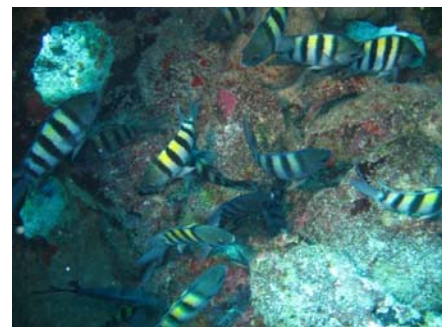
- to provide homes for fish, sea eggs, turtles, lobster and oysters
- to provide hard substrata for coral to grow
- as red mangrove planters to restore mangrove forests;
- to serve as a foundation for coral transplant and coral gardens; and
- as submerged breakwaters that can be used for coast and beach stabilization and protection against erosion.



Coral transplant on Reef Ball



Marine Life Growth on Reef Ball



Fish Habitat

In June 2004, the Barbados Marine Trust (BMT) installed 30 Reef Balls in 40 feet of water along the South Coast of Barbados. The BMT is embarking on a project to start to install 1,000 Reef Balls in 2008, which is **The International Year of the Reef**.