

CREATING AN ARTIFICIAL REEF



Since the 1950s, the Sarasota Bay system has lost about 4,500 acres of hard bottom habitat due to dredge and fill activities, adversely impacting the productivity and biodiversity of Sarasota Bay's coastal lagoon system. Hard bottom habitat provides a substrate for soft corals, filtering bivalves, and crustaceans, which in turn support a variety of life stages of game and non-game finfish as well as shellfish. Historically these hard bottom habitats supported a thriving fishing industry along Florida's Gulf Coast and bay inlets.

THE NATIONAL ESTUARY PROGRAM IN ACTION

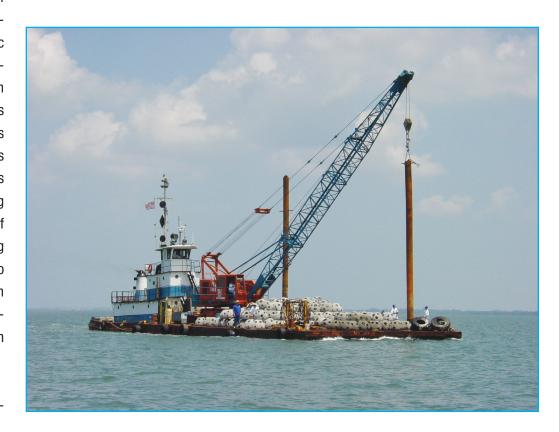
Sarasota Bay Estuary Program

The Sarasota Bay Estuary Program (SBEP) helped to establish an Artificial Reef Program in 1996 to replenish this vital habitat type. Since its inception, the SBEP and its partners have deployed approximately 5,000 artificial reef modules and other materials of opportunity (such as concrete culverts) in the waters in and near Sarasota Bay, targeting deeper areas and channel markers.

The \$674,000 project is a joint effort funded by several groups, including Manatee and Sarasota counties, Sarasota Sportsmen's Association, Mote Marine Laboratory, Florida Fish and Wildlife

Commission, and Reef Innovations, which manufactures reef balls and offers monitoring assistance. It also features a public outreach component, with children, parents, and teachers from SBEP-supported groups such as Bay Buddies and Reef Rakers assisting in reef clean-up events and artificial reef surveys. This important project is providing critical habitat for a variety of marine organisms while giving scientists an opportunity to do valuable research on bay bottom restoration. The reefs also provide more opportunities to fish in small vessels.

During 2002, the SBEP conduct-



ed two seasons of sampling on several established artificial reefs within Sarasota Bay, identifying more than 25 species, including gray snapper, gag grouper, sheepshead, and stone crab. The research indicated that a variety of reef types would be required to increase species diversity. The SBEP and its partners placed many of the reef modules in clusters of various sizes to see what size grouping of modules produces the optimum habitat for the reef organisms.

In 2006, Mote Marine Laboratory began a two-year project monitoring five of the Sarasota Bay artificial reef sites for the SBEP. Preliminary results indicate that different numbers of reef modules support different life stages of marine organisms and a variety of species. By implementing an innovative artificial reef strat-

egy—young fish are now living near the new reefs—SBEP is creating a new kind of habitat, and is increasing the biodiversity of Sarasota Bay.

Visit **www.sarasotabay.org** to learn more about this and other SBEP efforts.

EPA's National Estuary Program (NEP) is a unique and successful coastal watershed-based program established in 1987 under the Clean Water Act Amendments. The NEP involves the public and collaborates with partners to protect, restore, and maintain the water quality and ecological integrity of 28 estuaries of national significance located in 18 coastal states and Puerto Rico.

For more information about the NEP go to www.epa.gov/owow/estuaries.