



# ARTIFICIAL REEFS



The word “reef” usually conjures up visions of the beautiful coral reefs that can be seen in certain parts of South Florida, the Bahamas, and the Caribbean. However, coral may actually make up less than half of the material in a reef with other organisms binding the various components together as a habitat. Any submerged feature, including those made of rock or manmade materials may be referred to as a reef.

is relatively nutrient poor, largely because they can utilize nutrients very effectively. Their species diversity is rivaled only by tropical rain forests. Reef inhabitants include many types of algae and several invertebrates, such as hard and soft corals, anemones, sponges and many species of arthropods, such as lobster, crabs and shrimp. An amazing variety of fish is also characteristic of reefs. These organisms use this unique habitat for feeding, breeding and sleeping.

Over the last several decades, nursery habitats for many fish and shellfish have been significantly reduced by the development of our coastal areas. The reduction of these habitats, along with increased pressures on our remaining coastal resources, has led to tremendous decline in the marine life population. This is why artificial reefs are so important. They provide food, shelter, protection and spawning areas for hundreds of species of fish and other marine organisms. But artificial reefs are not just for fish. They also provide alternate areas for SCUBA divers and fisherman to use, reducing the “user-pressures” that natural reefs endure.

Reefs are primarily a habitat for a wide variety of plants and animals. They flourish when the surrounding seawater



Almost anything placed on the ocean floor can become the hard base needed for reef development under the right conditions. Artificial reefs are manmade habitats built from various materials including rock, old ships, heavy-gauge steel structures, and precast concrete structures. They may also be constructed of a variety of prefabricated reef modules, designed to attract certain types of fish or other marine creatures. To create a permanent reef; however, the base material must not be tossed around by wave action, or rust away. Bundles of tires and appliances are no longer used for artificial reefs because they are too light and are moved around by storms. Additionally, the area selected for placement of the artificial reef must be relatively stable and hard, thus preventing the new reef base from sinking into the sand and rendering it useless.

