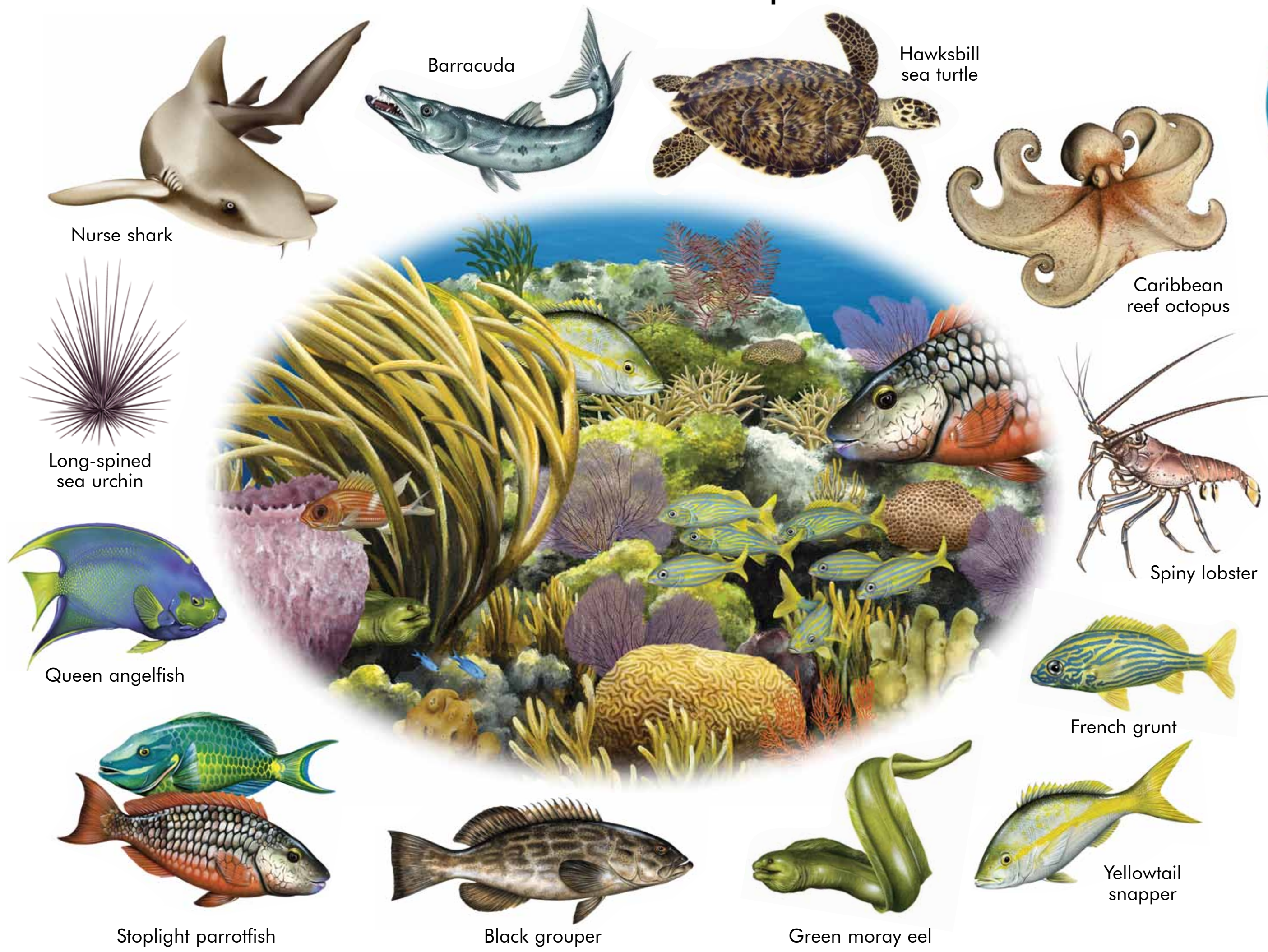


Coral Reefs Are Important



- Coral reefs provide habitat for many important species of fish, invertebrates, and sea turtles.
- Biodiversity (the number of different species) on coral reefs is higher than in other marine habitats. In fact, coral reefs make up less than 1 percent of the ocean floor, but provide habitat for more than 25 percent of marine life.

- Reefs protect our shores by reducing wave action against the coastline during major storms, such as hurricanes.
- Healthy, beautiful coral reefs are important to Florida's thriving tourism industry, which is dependent on fishing and diving.

FLORIDA'S Coral Reefs

Coral reefs are beautiful, protect our shoreline, and provide habitat for sea turtles, marine mammals, and thousands of different invertebrates, algae, and fish.

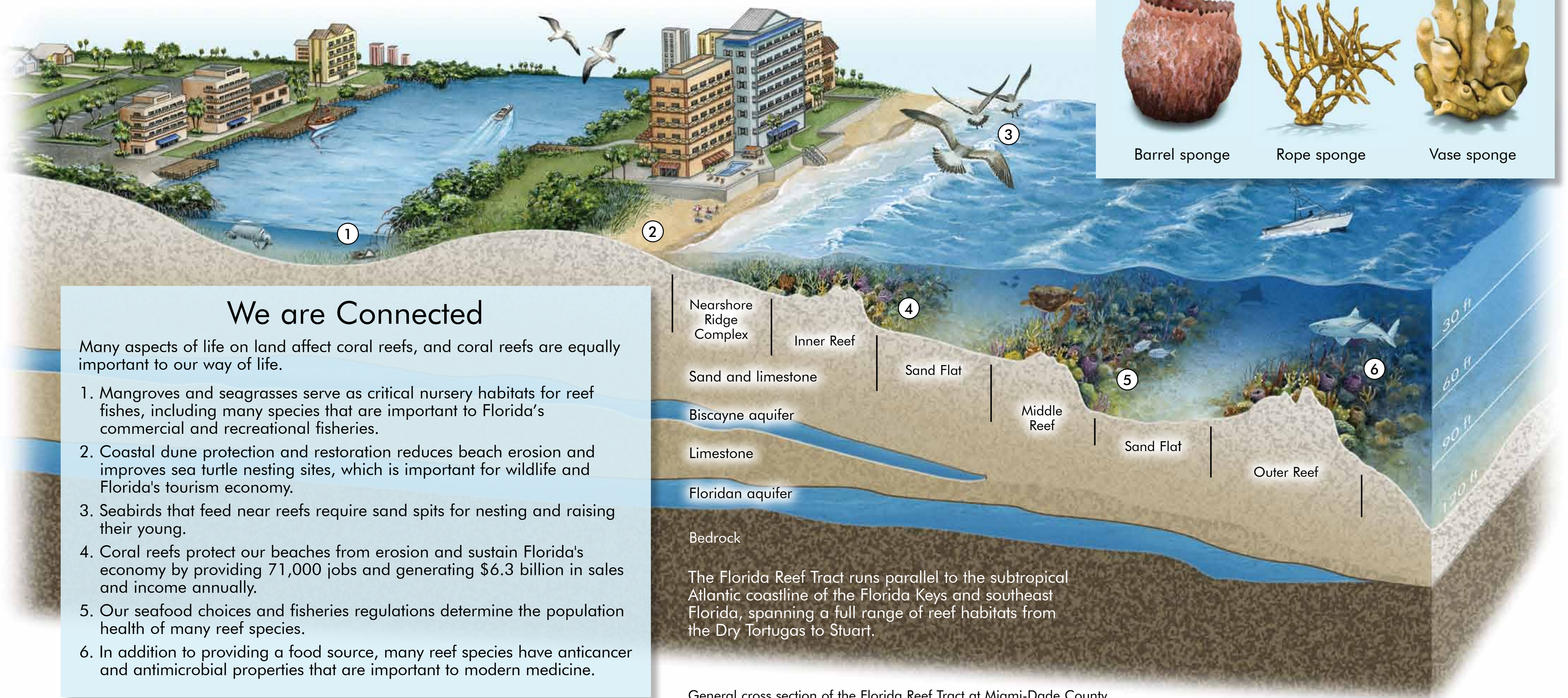
Stony Corals



Octocorals



Sponges



We are Connected

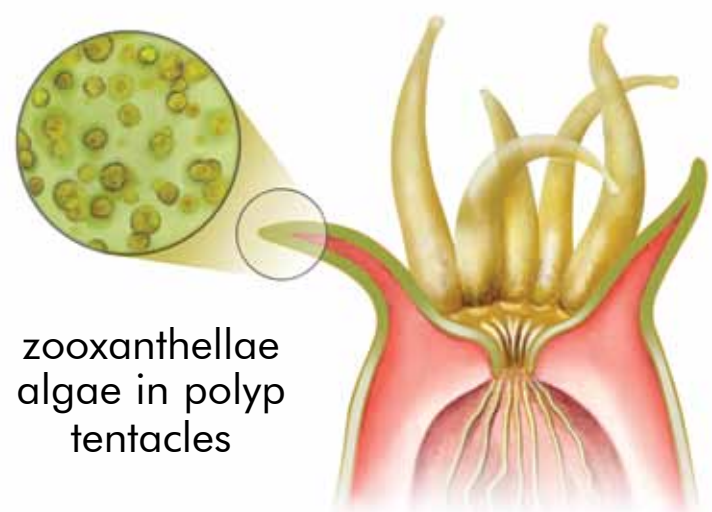
Many aspects of life on land affect coral reefs, and coral reefs are equally important to our way of life.

1. Mangroves and seagrasses serve as critical nursery habitats for reef fishes, including many species that are important to Florida's commercial and recreational fisheries.
2. Coastal dune protection and restoration reduces beach erosion and improves sea turtle nesting sites, which is important for wildlife and Florida's tourism economy.
3. Seabirds that feed near reefs require sand spits for nesting and raising their young.
4. Coral reefs protect our beaches from erosion and sustain Florida's economy by providing 71,000 jobs and generating \$6.3 billion in sales and income annually.
5. Our seafood choices and fisheries regulations determine the population health of many reef species.
6. In addition to providing a food source, many reef species have anticancer and antimicrobial properties that are important to modern medicine.

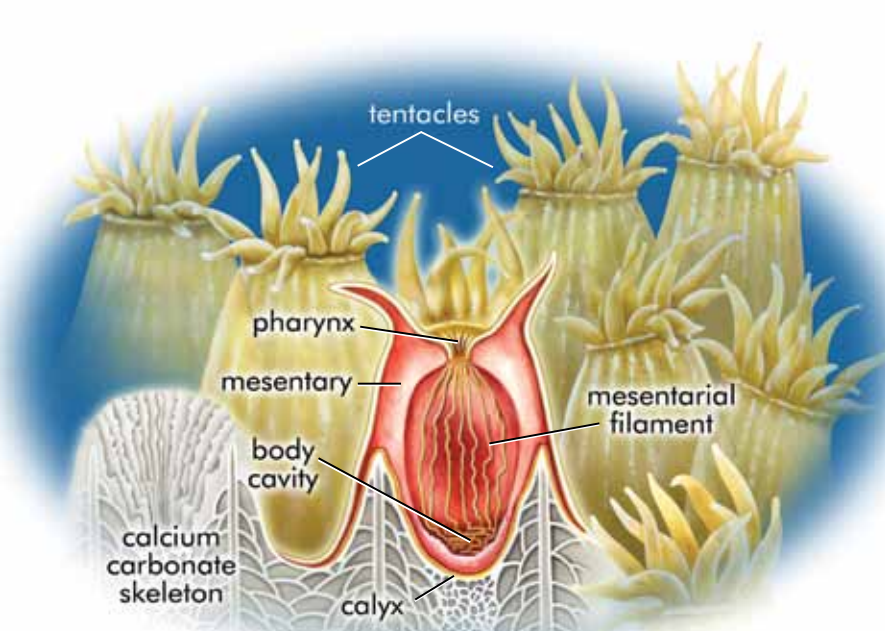
General cross section of the Florida Reef Tract at Miami-Dade County

Coral Anatomy and Growth

Corals are made up of hundreds of soft-bodied animals called polyps. The polyps form a hard calcium carbonate (limestone) skeleton where they live together in a colony. Some of these colonies can grow to over 12 ft across.



Symbiotic algae, called zooxanthellae, live inside stony coral tissues. The zooxanthellae receive shelter, nutrients, and carbon dioxide from the coral host. Photosynthesis by the zooxanthellae produces food and oxygen that are used by the corals. This photosynthetic activity also provides energy for the coral polyps to secrete their hard skeletons.



Corals reproduce asexually when coral polyps divide and create new polyps. This process is slow, with some corals growing less than 1 cm per year. Corals will also spawn sexual gametes into the water. The resulting larvae settle onto hard surfaces and start new colonies, which can take decades or centuries to grow.

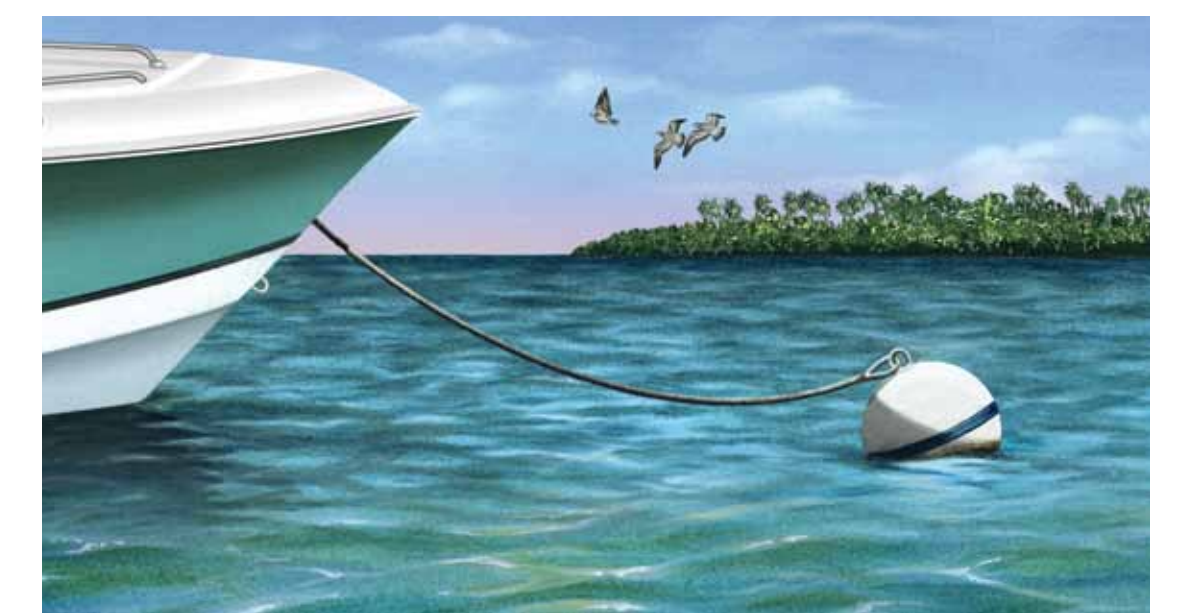
Corals Need Protection

- Improper anchoring and vessel groundings can dislodge and crush corals and other reef dwellers.
- Contaminants from urban and agricultural runoff can degrade water quality, stressing corals and leaving them more susceptible to bleaching and disease.



You Can Help

- When boating, avoid anchoring on coral reefs by anchoring in the sand or tying up to a mooring buoy.
- Dispose of household chemicals properly and use only slow-release nitrogen fertilizers on lawns and landscaping to reduce nutrient runoff to storm drains and waterways.



FLORIDA

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

Southeast Florida Coral Reef Initiative
Acting above to protect what's below.
www.southeastfloridareefs.net

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