

WHY ARE CORAL REEFS VALUABLE?



Bent Sea Rods (*Plexaura flexuosa*), like the one pictured here, are one of many soft coral species found on southeast Florida reefs.

Coral reefs are beautiful and provide a resource for recreation, education, scientific research and human inspiration. Millions of tourists and local residents enjoy scuba diving, snorkeling and fishing on Florida's coral reefs. These activities are an important source of income for Florida and its coastal communities. A study of natural and artificial reef usage in southeast Florida, showed that Florida's reefs contribute 1.8 billion dollars in income and 61,000 jobs to the local economy each year.*

Reefs protect our shorelines from the effects of storms and hurricanes, and provide many other benefits. Scientists are studying ways coral extracts may help fight diseases like HIV and cancer. Other coral compounds are already being used for bone grafting. Corals are also credited with removing and recycling atmospheric carbon dioxide, excessive amounts of which contribute to global climate change.

* Johns, Grace, M., Vernon R. Leeworthy, Frederick W. Bell, and Mark A. Bonn. *Socioeconomic study of reefs in southeast Florida: Final Report.* Hazen and Sawyer, Florida State University and National Oceanographic and Atmospheric Administration, 2003.

CORAL RELIEF

Everyone can help protect coral and hardbottom reef habitats.

- Use nautical charts, anchor in sand and use mooring buoys where they are available when boating.
- Swim well above reefs and avoid any contact with corals by your body or equipment when diving, spearfishing or lobstering.
- Enjoy observing, but do not harass marine life.
- Learn and obey fish size and catch limits and safely release fish that can't be kept.
- Properly dispose of garbage and recycling at home and work.
- Use a recycling facility for antifreeze, fertilizers, used motor oil and other household chemicals.
- Fertilize minimally and irrigate efficiently to keep phosphorus, nitrogen and other pollutants from entering our waterways.
- Avoid collecting or buying items made of coral or other marine life.

Please visit
www.southeastfloridareefs.net
for more tips on what you can do to help protect our vulnerable coral reefs.

HOW CAN YOU LEARN MORE?

To learn more about coral reefs, visit:

www.southeastfloridareefs.net

Or contact:

Florida Department of Environmental Protection
Coral Reef Conservation Program

E-mail: Coral@dep.state.fl.us

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The SEFCRI is targeting the reefs of southeast Florida that form the northern extension of the Florida reef tract in Miami-Dade, Broward, Palm Beach and Martin Counties.



Southeast Florida Coral Reef Initiative

Acting above to protect what's below.



HOW YOU CAN HELP ENSURE THE LONG-TERM SURVIVAL OF FLORIDA'S CORAL REEFS

Vision: "To develop an effective strategy to preserve and protect southeast Florida's coral reefs and associated reef resources, emphasizing the balance between resource use and protection, in cooperation with all interested parties."

With guidance from the United States Coral Reef Task Force, the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission coordinated the formation of a team of marine resource professionals, scientists, non-governmental organizations and other interested stakeholders to develop the Southeast Florida Coral Reef Initiative (SEFCRI). This initiative is a local action strategy (LAS) designed to coordinate public education and resource management for the reefs north of the Florida Keys.

The SEFCRI Team is organized into four Focus Teams, each addressing one of the key threats to local reefs:

- Lack of public awareness and appreciation (AA Team)
- Impacts associated with fishing, diving and other uses (FDOU Team)
- Land-based sources of pollution (LBSP Team)
- Maritime industry and coastal construction impacts (MICCI Team)

The SEFCRI LAS is a plan to address causes of coral degradation and provide a roadmap for successful conservation and management. The SEFCRI is intended to be a flexible, living process that evolves in response to the state of the coral reef ecosystem and the progress of implemented projects.



Elkhorn (*Acropora palmata*) and staghorn (*Acropora cervicornis*) corals are listed as threatened species under the U.S. Endangered Species Act.

Research demonstrates that coral cover on Florida's reefs has declined. Impacts associated with human activities, diminished water quality, and the increase of coral diseases and bleaching pose significant threats to the long-term survival of our reefs. There are many pressing threats to the delicate balance that allows coral to thrive.

- AA - A needs assessment study found that many of the residents surveyed within the SEFCRI region are unaware that extensive reef resources lie just offshore.*



*Shivlani, Manoj. Coral Reef Needs Assessment Study. Florida Department of Environmental Protection, 2006.

- FDOU - Physical contact from anchors, vessel groundings, fishing gear and divers can harm fragile coral polyps.



- LBSP - Land-based sources of pollution including sewage, fertilizers, chemicals and trash from residential, agricultural and industrial areas are transported to the reefs by canals and waterways. Pollution generated by people who live many miles from the nearest reef can damage and destroy coral.



- MICCI - Impacts from vessel groundings, coastal construction and dredging projects can physically damage large sections of a reef system and suspend sediments that reduce water quality and clarity necessary for healthy reefs.



- Corals are alive – reefs are created by millions of tiny animals called coral polyps.
- Reefs provide shelter, food and breeding sites for a diverse assortment of marine life. Animals varying in size from tiny shrimp to large fish, like Goliath grouper and other Florida game fish species, spend significant parts of their lives in and around coral reefs.
- Florida's current living reef system formed 5,000 to 7,000 years ago at the end of the last Ice Age.
- Reefs grow slowly – depending on the species, an individual colony grows just 1/8 inch to 7 inches a year.
- The Florida coral reef system is the third largest coral ecosystem in the world.



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