

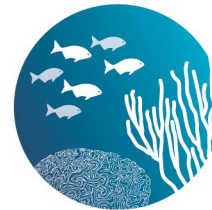


ESTUARINE, COASTAL, AND OCEAN HABITATS

Essential for a Productive Coral Reef Ecosystem

Photo: migshots.com

Coral reefs are part of an inter-connected ecosystem in southeast Florida. The productivity and health of coral reefs are closely linked to nearby coastal habitats, including nearshore hardbottom, seagrass beds, mangroves, beaches, and estuarine areas where fresh and salt water meet. Together, these habitats are among the most valuable in the world, providing us with food, shoreline protection, and recreational and commercial opportunities.



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Ensuring that these inter-connected habitats are healthy is vitally important for the humans and marine life that call Florida's coast and waters home. We have a shared responsibility to manage these estuarine, coastal, and ocean habitats wisely.

The Importance of Inter-Connected Habitats to Coral Reefs

Mainland southeast Florida's coral reef habitat spans more than 100 miles in length and 200-square miles in area.¹ Florida's coral reefs are an important natural environment that supports more than 6,000 types of marine life, including many of our locally important fisheries species.² Sea turtles depend on the reef for food and shelter, as do many large ocean inhabitants, including sharks, rays, eels, groupers, and dolphins.

Nearshore hardbottom, part of the inner coral reef system located closest to shore, is an important habitat for juvenile fish and sea turtles as well as for a variety of invertebrates and algae. This area is also home to "worm" reefs, which can be so close to the shoreline that they are exposed during low tide.

Seagrass beds provide a place for small fish and crabs to hide from predators and act as a nursery for Florida's recreationally and commercially important species - many of which depend on the coral reefs as adults. They are a source of food for a variety of marine life, from sea urchins and conch to manatees and sea turtles. They also help to maintain water clarity by trapping sediments and filtering pollutants.^{3,4}



Red mangroves (Rhizophora mangle) along the Biscayne Bay Aquatic Preserve.

Mangroves are also a vitally important component of these inter-connected coastal ecosystems. Their complex root systems help stabilize the shoreline and filter pollutants, while also providing shelter and foraging opportunities for juvenile reef fish, birds, and other marine life. It is estimated that 70% of game fish and 90% of commercial fish species in south Florida are dependent on mangrove forests during at least part of their life.⁵

Oyster reefs are vital to our estuaries, provide habitat for juvenile fish, and are a feeding ground for birds and fish, such as grouper and snapper. Oysters are also natural water filters. A single adult oyster can filter as much as 50 gallons of water per day, removing nutrients from the water and improving water quality, which is critical for seagrasses and fish.



Photo: Joe Marino

Florida's world-famous beaches and sand dunes are also an important part of our coastal habitat. Coral reefs help to protect our beaches from erosion and, in turn, these beaches protect our coastal structures and coastal habitats from the damaging effects of storms. Southeast Florida's beaches are also some of the most important sea turtle nesting sites in the state.

The Current State of Our Estuarine, Coastal and Ocean Habitats

Located within a mile of a densely populated, urban shoreline, southeast Florida's estuarine, coastal, and ocean habitats face an ever-increasing list of threats. For example, recreational and commercial activities taking place on, and in, the water, as well land-based activities, such as coastal development and pollution, are causing negative impacts to the coral reef system.⁶

In 1950, it was estimated that Florida had over five million acres of seagrass. Today, approximately only two million acres exist.⁷ Mangrove communities in south Florida have steadily disappeared since the early 1900s, as a result of coastal development.⁸ Florida's estimated 469,000 acres of mangrove forests contribute to the overall health of the state's southern coastal zone.



Spotfin butterflyfish (*Chaetodon ocellatus*) hide among the shelter of an octocoral on a southeast Florida coral reef.

Photo: Joe Marino

Over time, the loss of nearshore hardbottom habitats may lead to a reduction in the populations of marine invertebrates, such as sponges, coral and crabs, and may cause significant changes to the food web close to shore.⁹ In the inter-connected ocean and coastal environment, damage and habitat loss results in fewer natural resources for food, income, and recreation.

What You Can Do

Because the majority of southeast Florida's population lives near or within these estuarine, coastal, and ocean habitats, each person's actions are influential. You can contribute to a healthy coral reef ecosystem by ensuring these inter-connected habitats are protected and stay healthy.

Effective management options to ensure healthy estuarine, coastal and ocean habitats do exist, and everyone has a role in the management success and stewardship of Florida's ocean resources. Join **OUR FLORIDA REEFS** to help identify management actions to ensure healthy coral reefs in Miami-Dade, Broward, Palm Beach, and Martin counties.

For more information and to provide your input on the future of southeast Florida's reefs, please visit: www.OurFloridaReefs.org



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OUR FLORIDA REEFS is a community planning process of the Southeast Florida Coral Reef Initiative (SEFCRI), a collaborative, local effort started in 2004 to understand and protect our coral reefs for the benefit of all. SEFCRI is coordinated by the Florida Department of Environmental Protection's Coral Reef Conservation Program.



Southeast Florida Coral Reef Initiative



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