Bringing Sponges Back to Florida Bay

Sponge Restoration

Algal Bloom In the last 20 years, western Florida and the Florida Keys experienced major changes in water quality because of more frequent and intense algal blooms. Algal blooms are collections of algae that grow quickly and in high quantities. Some are toxic while others are not. They are a normal seasonal occurrence but are becoming more common for a variety of reasons. When the algae die, they decompose and absorb oxygen in the water. Because so many die in such a short time after a bloom, the water can become depleted of oxygen. Without oxygen, fish and their habitats cannot survive, causing massive fish kills and habitat die-offs.

Sponges In the Florida Keys, algal blooms cause massive sponge die-offs. Sponges provide habitat for many organisms, including spiny lobster. Without sponges, marine species that rely on them become vulnerable to predators. Floridian sponges affect fish population growth and, in turn, marine communities and fishing opportunities.

Successes To combat against habitat degradation and declines in fish populations, the Florida Fish and Wildlife Conservation Commission grows thousands of sponges. They are then planted onto the seafloor, where sponges once flourished, and the results have been amazing! The sponges reproduce through a process called 'fragmentation,' and attract tenants of all kinds. As a result, grey snapper, spiny lobster, and other species grow happily in their new healthy fish habitat.

Florida Fish and Wildlife Conservation Commission

WHY DO WE NEED HEALTHY FISH HABITAT? Healthy habitats provide native fish with abundant oxygen, food, and shelter to grow and reproduce. Habitats can help filter pollutants and maintain water quality, protect our coastlines from erosion and sea level rise, and combat climate change by absorbing carbon dioxide.

SPINY LOBSTERS

Florida Fish and Wildlife Research Institute

Status
Florida is part of a single Caribbean-wide population. Florida included about 6% of the population, making an assessment of overfishing status of the lobster population in Florida difficult.

Threats
Overfishing, habitat loss, disease

Lifespan
20 years

Maximum Size
25 inches total length, 18 pounds

Range
The Caribbean Sea, Gulf of Mexico, and as far north as the Carolinas

Fishing
Landings are predominantly from the commercial trap fishery valued at $35 million. Approximately 140,000 recreational fishermen catch about 25% of the nearly 7 million lobsters landed each year. Almost all the commercial and recreational landings from the Florida Keys.

Did You Know?
In the first stage of development, spiny lobsters are called phyllosome larvae and look like spiders. They live in the water column for 6-9 months, then settle onto the seafloor as juveniles where they molt and look more like adult lobsters. These juvenile lobsters rely on sponges for shelter from predators. The crevices within the sponges provide homes for juvenile lobsters and are critical shelter where they grow to adult size.

For more information visit:
https://www.iucnredlist.org/species/169976/6697254
https://myfwc.com/research/saltwater/crustaceans/lobster/facts/

Fundraising Goals

We need you!

- Grow **10,000 sponges** annually in Florida Bay sponge nurseries
- Donations of **$50,000 per year** or **$500,000** within 10 years

DONATE $5 TO PLANT A SPONGE IN FLORIDA BAY

$5,000 = 1 ACRE OF SPONGE HABITAT

Want to help ACFHP raise funding for this project?

Contact Dr. Lisa Havel, our Coordinator at **lhavel@asmfc.org**

Make a Connection in Your Community: Support Local Projects

ACFHP's Focus + Expertise + Network + Funding = Healthy Habitat

We rely on people like *you*. With your contribution, our growing partnership can have an even greater impact on improving fish habitat – including habitats in your favorite waterway!

To learn more about ACFHP, visit our website **www.atlanticfishhabitat.org**

FOCUS

Our work uses science, data, outreach, communication, and conservation projects to protect the Atlantic coast's vital fish habitats, including rivers, coastal waters, coral reefs, shellfish beds, and seagrasses.

EXPERTISE

We capitalize on the extensive expertise of our partner scientists and managers to ensure that the projects we undertake, and fund will have marked and long-lasting impacts to fish habitat conservation.

NETWORK

ACFHP's 75 project partners and counting *make the connection* among rivers, oceans, fishes, and humans.

FUNDING

Over the past decade, ACFHP has helped to restore 1,340 acres of fish habitat and counting, having an economic impact of over $116 million.