



Summer 2017 Updates

Your Southeast Florida Coral Reef Initiative has been busy in the last six months raising awareness for our reefs, and designing the future of our objectives for the next several years. The spring team meeting took place in March, and a second meeting will take place this September. Read below for articles about our recent events and efforts!

Earth Month 2017 Recap

Aubree Zenone, CRCP Assistant Manager

Each April, which has been designated Earth Month, we are encouraged to reflect on the natural world around us and truly appreciate the earth that we live on. In the spirit of this, the Coral Reef Conservation Program (CRCP) along with the Southeast Florida Coral Reef Initiative (SEFCRI) have designed a series of educational classes to inspire Floridians to appreciate and treasure our resources through identification! These classes are free to the public each

year, and focus on four relevant fauna and topics: Stony corals, reef fishes, marine invertebrates and, finally, a class about coral bleaching and our responses to it. This year, our classes had over 50 attendees in locations ranging from Miami-Dade to West Palm Beach, and we hope for more next year! If you'd like to receive one of these fancy certificates, that look great on resumes and CVs, please keep an eye out on our social media ([facebook.com/floridascoralprogram](https://www.facebook.com/floridascoralprogram)) for class information next spring and to register!



We also focused on attending a smorgasbord of outreach events throughout April, to spread the word about the presence and importance of our coral reefs here in South Florida. CRCP staff and representatives from Friends of Our Florida Reefs (FOFR) attended six full days of outreach



reefs.

However, just because it is no longer April, doesn't mean we can't keep celebrating Earth Month! There are things you can do every day to help and learn about our reefs. Please feel free to check out educational offerings and volunteer opportunities at www.southeastfloridareefs.net and <http://frfp.org/get-involved/>, or email coral@dep.state.fl.us for more information!

Marine Events in Southeast Florida

Mollie Sinnott, RIPR Coordinator; and Melissa Sathe, RIPR Technician



The beautiful beaches of Southeast Florida attract tourists and provide a scenic venue for many different events. Concerts, airplane acrobatics and high-speed boats are exciting and draw in large crowds of locals and tourists, both on the beach and offshore (Figure 1). When seas are calm, spectator vessel numbers increase offshore, which can impact coral reefs can

suffer if spectators anchor improperly. Anchoring on/or otherwise damaging coral reef is a violation of Florida's Coral Reef Protection Act (CRPA), Florida Statue 403.93345. The Reef Injury Prevention and Response (RIPR) team aims to work closely with Southeast Florida Coral Reef Initiative (SEFCRI) members, along with event organizers, sponsors and associated agencies before and during events throughout the year in an effort to prevent direct anchoring impacts. Each event, the RIPR team distributes printed materials including the CRPA Brochure, Mooring Buoy Brochure and the instructions to view the Southeast Florida Coral Reef Locator Map on a mobile device. These materials allow boaters to make an informed decision about where to properly and legally anchor and avoid damaging protected coral reef habitats. While organizers are often willing to promote these materials at their events, SEFCRI team members and agency partners have also been working to distribute information directly to boaters. This year, SEFCRI members partnered with the RIPR team through Engel Coolers and No Shoes Reefs at the 2017 Tortuga Music Festival in Fort Lauderdale, distributing materials to spectator vessels and helping boaters locate sandy spots to anchor. Additionally, at the recent Fort Lauderdale and Miami Beach Air Shows, the United States Coast Guard (USCG), USCG Auxiliary, and local marine

patrol units helped spread awareness and distribute materials to spectator vessels offshore.

After an event, the RIPR team investigates vessels seen on Automated Information Systems tracking software and evaluates the potential for any violations of the CRPA. The RIPR team will also survey areas of high anchoring to assess any damage caused by anchoring spectator vessels. These efforts are used to try alleviate anchor damage to the reefs during high-profile events. The RIPR team continues to explore options to lessen impacts from anchoring spectator vessels at marine events and hopes to continue to find more or new solutions to ensure reef protection. For more information on RIPR, our free buoy moorings, or our free mapping application for your phones, please email: coral@dep.state.fl.us

Southeast Florida Coral Disease Outbreak

Kristi Kerrigan, Reef Resilience Coordinator

Coral reefs are diverse ecosystems that harbor thousands of unique marine organisms and provide many goods and services for South Florida, including coastline protection from storms and flooding, natural biopharmaceutical products, habitat for many important species and tourism. These socio-economic contributions are in jeopardy, as Florida's coral reefs are currently experiencing a multi-year disease outbreak. While disease outbreaks are not unprecedented, this event is unique due to the presence of multiple diseases that have affected at least 21 coral species across the Florida Reef Tract. These diseases are highly prevalent and are estimated to have resulted in the mortality of millions of corals across Southeast Florida.



In the fall of 2014, isolated sites with significant coral disease were reported in Miami-Dade County and continued to spread north and south. In 2017, widespread disease was confirmed across approximately 126 linear miles of reef including locations as far north as Jupiter and south into the upper Florida Keys and the Dry Tortugas. At some sites, up to 50 percent of all corals, including 85-100 percent of individual species have been affected.

Among these highly affected species are some of the most predominant and important reef-building corals in Florida, as well as species that have historically been considered the most resilient.

The causes of coral diseases are difficult to determine and are not very well understood. Infectious microbes that cause coral diseases are naturally occurring (or may be introduced) and a background level of disease is not unusual for coral reefs; however, since the marine ecosystem is delicately balanced, even just a small disruption in the natural microbial levels may lead to a significant increase in coral disease. Research studies have shown that increases in water temperature, nutrient input, stormwater runoff, sedimentation and algal blooms are contributing factors to coral disease.

Since 2015, experts from many regional organizations including the Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, and numerous partners from federal, state, and local governments, universities, non-governmental organizations and the South Florida community have been working together on a multi-faceted response effort to improve our understanding. Such efforts have focused on documenting the distribution, prevalence, severity, and impacts associated with the outbreak, identifying potential pathogens, understanding potential contributory environmental factors, experimenting with treatments and other interventions and seeking additional capacity and funding to support more comprehensive



response efforts.

Boaters, divers and snorkelers are encouraged to help by submitting reports of coral disease to the Southeast Florida Action Network (www.SEAFAN.net). Coral disease is often recognized as a change in tissue color or skeletal structure (see photos). Additionally, the National Oceanic and Atmospheric Administration's Coral Disease and Health Consortium recommends that if divers observe signs of disease while on a

dive, they should not visit other sites to avoid potential disease transmission. If diving other sites is necessary, a partial bleach wash for dive gear is recommended.

New Exotic Species Reported in Miami Beach

Aubree Zenone, CRCP Assistant Manager



What is it?

A new exotic species has been reported at the Miami Beach Marina, by the Florida Fish and Wildlife Conservation Commission (FWC). The whitetail damselfish (*Dascyllus aruanus*) is a species native throughout the Indo-Pacific region, ranging from the Red Sea and east coast of Africa, to French Polynesia and Lord Howe Island.

Also known as: humbug damselfish, banded humbug, black and white damselfish, threestripe damselfish and white-tailed damselfish

Species Identification and information:

They can be identified by their distinct white body with black bars, and a solid black pelvic fin. There is also a large white spot between the eyes (see picture). The species lives in groups and shelters among branching corals, at depths of up to ~40 feet. A single female can deposit up to two thousand eggs in one laying!

What you can do:

If you see this species, it is extremely important that you report it immediately to FWC. This can be done at: <http://myfwc.com/wildlifehabitats/nonnatives/reporting-hotline/>

For more information on this species, please email coral@dep.state.fl.us or check: <https://nas.er.usgs.gov/queries/FactSheet.aspx?speciesID=2805>

New SEFCRI Vice-Chairs

We would like to take a moment to welcome our new SEFCRI Vice-Chairs, who were voted into place during our March meeting! The Vice-Chairs will assist the SEFCRI Chair in organizing stakeholder group efforts and projects. For information on how to contact your stakeholder group Vice-Chair, please contact coral@dep.state.fl.us

<u>Stakeholder Group</u>	<u>Vice-Chair</u>
Diving	Shana Phelan
State Agency	Mason Smith
Federal Agency	Jim Bohnsack
Private Business	Ron Coddington
Other Stakeholder	DD Halpern
Local Agency	Jamie Monty
Fishing	Dan Kipnis
Academic	Henry Briceno
Non-Governmental Organization	Angela Smith