



Coral Restoration Foundation™ Dive Program Event!

Sabot Foundation is planning a 2-3 day Veteran Bio Restoration Dive in 2021 at the Coral Restoration Foundation™ location in Key Largo, FL

Coral reefs provide coastal protection for communities, habitat for fish, and millions of dollars in recreation and tourism, among other benefits. But corals are also severely threatened by rapidly worsening environmental conditions.

Biological restoration usually involves increasing the amount of living corals on the reef in areas where structure is already available. This is generally achieved through methods such as collecting and rehabilitating naturally broken coral fragments, propagating coral colonies, culturing coral larvae, or transplanting living coral colonies. The general goal of biological restoration is to regrow corals in areas where populations have been diminished or lost. This is most generally required in areas which have been impacted by bleaching, disease, predation (COTs and Drupella snails), algae overgrowth, sedimentation, etc. Following these types of mass mortality events, small coral colonies can be used to 'seed' the reef that will eventually grow large enough to become reproductive and return the balance on the reef. Biological restoration may also include integrating fish, or other nurseries and aggregation devices to restore reef balance and return vital symbiosis necessary for reef health.

Learning about Biological Restoration is a great way to engage veterans in proactive programs, providing them with an important mission they can embark upon with their peers.

Biological restoration usually involves increasing the amount of living corals on the reef in areas where structure is already available. This is generally achieved through methods such as The Dive Programs are restoration adventures that offer participants an up-close experience with scientific fieldwork and coral reef restoration. All Restoration Adventure options begin with a half day educational session where participants/students will learn about coral reef ecology, degradation and restoration efforts as well as join in mock hands-on practice of restoration methodology. They will then put that practice to work by joining in restoration-themed dives that will focus on coral nursery maintenance, coral monitoring or even coral outplanting! (All restoration activities are weather dependent.)

One-Day Dive Program:

This program will have a morning educational component with a presentation and mock hands-on land practice of underwater skills, followed by an afternoon of restoration work. The restoration activities depend strongly on the dive operator being used, the weather and the work that Coral Restoration Foundation needs done that day! Students will learn about why coral reefs are in decline and why restoration is being done to combat this decline. This program can be done over multiple days, or for just a single day.

PADI Coral Restoration Distinctive Specialty Dive Program:

This program also follows the general morning education and afternoon diving format as the one-day program, but students will dive more deeply into the science behind our work over a two-day certification program. Students will spend the first day learning about coral biology, reef ecology and the restoration work to combat reef decline as well as mock hands-on land practice of underwater skills. On the second day, students will be put in a discussion forum to explore the controversies behind restoration work, climate change and ecological paradigm shifts.

In the afternoons, students will put their dive and restoration skills to work! They will assist by maintaining one of our seven coral nurseries, by assessing outplanted corals for survivorship and health and possibly even outplanting corals onto the reef themselves.

At the end of the certification program, students that completed the program will be awarded with the PADI Coral Restoration Distinctive Specialty certification. This certification, with education renewal every year, will provide future participation at a student discount.

CRF Dive Program Outline

Techniques presented will be dictated by the work necessary to complete CRF's mission. Please note that the itinerary is always prone to change due to weather conditions, but that an alternative program will be prepared.

9:00am Arrival & Check-in at 5 Seagate Boulevard 9:30am-11:30am
Lecture & Hands-on training:
CRF presentation, reviewal of techniques, hands-on practice

Break for Lunch at 11:30

12:30pm Check-in at dive operator, 1:00pm-5:00pm Departure

Possible Itinerary 1

Dive One: Reef Dive
Monitoring of outplanted corals
Dive Two: Nursery Dive
Restoration work & cleaning Return to dock at 5:00

Possible Itinerary 2

Dive One: Nursery Dive
Restoration work & cleaning

Dive Two: Nursery Dive
Restoration work & cleaning Return to dock at 5:00

Possible Itinerary 3

Dive One: Nursery Dive
Restoration work & cleaning

Dive Two: Reef Dive
Coral Outplanting Return to dock at 5:00



Dive Program Expectations & Warnings

- ❑ All participants must hold an open water certification from an internationally recognized training agency. **Please present your certification card to the dive operator at check-in. SABOT FOUNDATION, ONLY IN CONJUNCTION WITH THEIR PARTICIPATION WITH SELECTED MILITARY VETERANS WILL ASSIST WITH ANY FEES ASSOCIATED WITH CERTIFICATION.**

- ❑ There will be one CRF staff member for every 4 program participants when planning for boat capacity.

- ❑ CRF only provides material needed for the actual work with the coral. All divers are responsible to have their own dive gear. **SABOT FOUNDATION WILL PLAN USE OF DIVE GEAR FOR THOSE WHO DO NOT HAVE THEIR OWN GEAR**

- ❑ Gloves are strongly encouraged for nursery activities, though are not required.

- ❑ Many of the CRF staff are experienced divers, however are not in the position to aid with training. Review gear set-up, skills and emergency procedures prior to dive day. Students having difficulty should be monitored by a chaperone.

- ❑ Conditions on the water can affect people in different ways! Seasickness is not fun. Please take precautions by utilizing medication, starting the evening before the dive and the morning of, to avoid an unpleasant boating experience.

- ❑ While we're ready to go on an underwater adventure, the weather doesn't always cooperate. In the case of cancellation or program alteration due to unsafe weather conditions on behalf of CRF or the dive operator, backup plans will be in place. Sometimes this happens last minute – we appreciate your understanding in advance.

- ❑ Chemicals on reefs can harm corals! Please be aware of the sunscreen you choose to use to protect your skin. Sunscreen **without** oxybenzone or nano-particles are preferred, and dive operators will thank you for avoiding aerosol sunscreens. Consider using a rash guard for sun protection, like the ones at Coral Restoration Foundation!