

Press Release from Reef Renewal Foundation Bonaire

February 20th, 2024

FOR IMMEDIATE RELEASE

Reef Renewal Foundation Bonaire Expands Capacity of Coral Nurseries

Summary

- RRFB is expanding its network of coral nurseries and restoration sites around Bonaire and Klein Bonaire.
- RRFB employs selective propagation and breeding to strengthen coral populations, targeting coral genotypes that have demonstrated resilience to rising temperatures and stony coral tissue loss disease (SCTLD).
- This project is made possible through funding from the Dutch national government and Bonaire municipal government for the implementation of nature and environmental initiatives.

(Bonaire, Dutch Caribbean) Reef Renewal Foundation Bonaire (RRFB) is expanding their network of coral nurseries and restoration sites around Bonaire and Klein Bonaire, thanks to funding from the Dutch Ministry and Bonaire municipal government. After piloting a new nursery design in 2023, they've established several new nursery sites up and down the west coast, with more planned throughout 2024.

In the initial months of the project, RRFB has already increased its nursery coral capacity by over 20%, using corals from genetic strains that have shown resilience towards stony coral tissue loss disease (SCTLD) and recent bleaching events. This is part of their wider strategy to boost the genetic diversity of Bonaire's coral populations and, in doing so, strengthen the reef.

“The process of expanding our nurseries will involve both branching and non-branching corals for a total of 10 species. We're focused on propagating species that are particularly affected by SCTLD, whose populations have become a high priority for our restoration efforts.”

- *Francesca Viridis | Managing Director, Reef Renewal Foundation Bonaire*

New Nursery Design

The installation of vertical ropes, a new type of coral nursery, is part of the expansion. Rope nurseries, made up of over 70 corals threaded through a single rope, are less prone to algae overgrowth and other types of biofouling. Parent corals are never removed from the ropes, allowing for faster restocking after fragments are outplanted. RRFB has already installed rope nurseries at Oil Slick Leap, Lighthouse Point, and Angel City, and plans to establish more

locations in 2024. Multiple tray nurseries have also been installed, which hold several species of boulder coral impacted by SCTL D.

Selective Breeding and Genetic Diversity

Nurseries will hold 10 species of branching and non-branching corals of various genetic strains (aka “genotypes”). RRFB has carefully selected genotypes that have shown the highest performance after being outplanted and demonstrated tolerance to bleaching events and SCTL D. They will continue to monitor the health of these corals before and after outplanting to inform selective breeding efforts. As the expansion continues throughout 2024, RRFB’s focus remains steadfast on enhancing the genetic diversity and resilience of Bonaire's coral reefs.

Photos

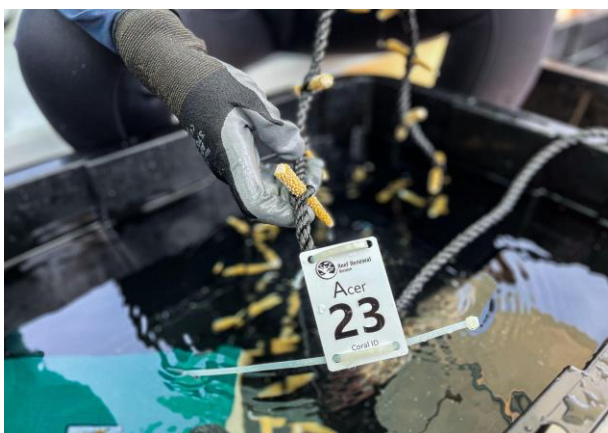
For the high-resolution photo package, please email caitie@reefnewalbonaire.org.



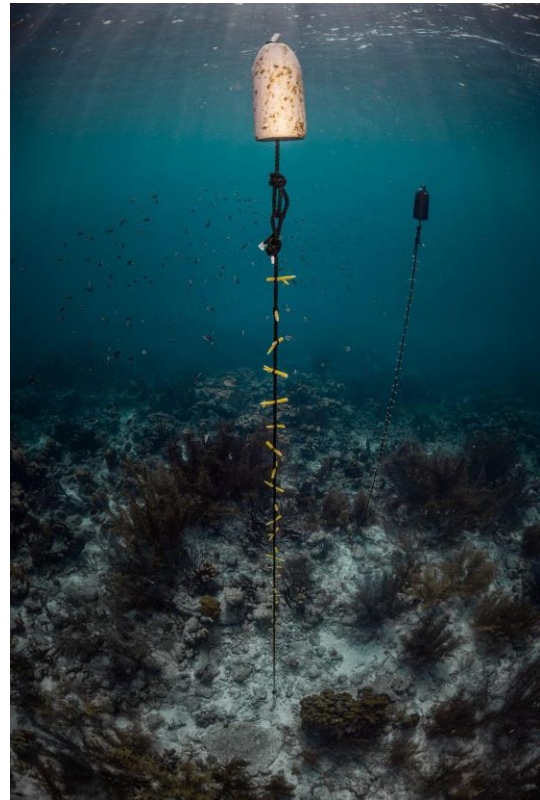
RRFB divers install 15 coral rope structures at Angel City rope nursery (Photo by Lorenzo Mittiga)



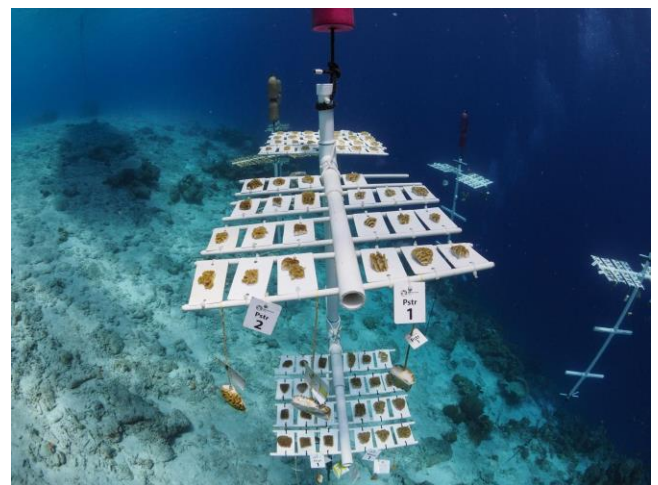
RRFB divers swim with ropes filled with coral, to install a new rope nursery at Angel City. (Photo by Lorenzo Mittiga)



*An identification tag indicates the species and genotype of staghorn coral (*Acropora cervicornis*) fragments, which will be placed in a new vertical rope nursery. (Photo by RRFB)*



*1 vertical rope structure at Angel City, holding 70 fragments of staghorn coral (*Acropora cervicornis*). (Photo by Lorenzo Mittiga)*



Tray nursery at Something Special, now located in a deeper portion of the reef, where RRFB propagates 4 boulder coral species that are highly susceptible to SCTLD. (Photo by RRFB)



*Francesca Virdis, RRFB's Managing Director, holds a rope filled with staghorn coral (*Acropora cervicornis*) during a nursery installation dive. (Photo by Lorenzo Mittiga)*

About RRFB

Reef Renewal Foundation Bonaire is a non-profit organization focused on the protection and restoration of Bonaire's biodiverse coral reefs. In collaboration with research partners and regional practitioners, RRFB implements innovative, science-based programs that expand and strengthen key populations of coral in Bonaire. Today, with the help of 14 partner dive operators around the island and a dedicated team of volunteers, Reef Renewal Foundation Bonaire has outplanted over 55,000 corals back to the reef.

To learn how to get involved or lend support, please visit www.reefrenwalbonaire.org or email info@reefrenwalbonaire.org.

