# ASSOCIATION OF ZOOS AQUARIUMS

# **AZA-Florida Reef Tract Rescue Project**

www.aza.org/coral-reef-rescue

For additional information or to connect with the AZA-FRTRP directly, please contact the AZA-FRTRP Coordinator, Beth Firchau, <u>bfirchau@aza.org</u>

# Who We Are:

The <u>Association of Zoos and Aquariums' Florida Reef Tract Rescue Project</u> (AZA-FRTRP) is a member driven coral conservation network turning the tide on an environmental crisis causing critical habitat loss along the Florida Reef Tract (FRT) – North America's largest bank reef.

With leadership from four Florida organizations, Disney Conservation, Mote Marine Laboratory and Aquarium, Sea World, and The Florida Aquarium, select facilities are working with federal and state agencies to save stony coral tissue loss disease susceptible corals species along the FRT. Since March of 2019, and to date, nearly 2000 corals have been



placed in 19 facilities managed by AZA-accredited institutions in 12 states. Land-based facilities, called nurseries, are housing and aquarium biologists are caring for corals removed from

the FRT while researchers try to better understand the disease, its impact on the reef, and how future outbreaks can be managed. The AZA's current holding institutions **(as of 3-28-22)** include:

Adventure Aquarium	NJ
Blank Park Zoo	IA
Butterfly Pavilion	CO
Columbus Zoo and Aquarium	OH
Florida Coral Rescue Center*	FL
Fort Worth Zoo	ТΧ
Georgia Aquarium	GA
Jenkinson's Aquarium	NJ
Mote Marine Laboratory and Aquarium	FL
Nashville Zoo	ΤN
National Aquarium	MD
National Mississippi River Museum & Aquarium	IA
Omaha's Henry Doorly Zoo	NE
Moody Gardens	ТΧ
Riverbanks Zoo & Garden	SC
SEA LIFE Michigan Aquarium	MI
SEA LIFE Orlando	FL
Texas State Aquarium	ТΧ
The Florida Aquarium	FL
*A joint coral conservation collaboration made possible by SociWor	

\*A joint coral conservation collaboration made possible by SeaWorld Orlando, Disney Conservation, and the Fish & Wildlife Foundation of Florida.



#### AZA-FRTRP FRIENDS

The AZA-FRTRP has a strong support network that includes over 50 AZA member facilities and academic institutions unable, for various reasons, to hold corals. These FRIENDS contribute to working groups and provide financial and in-kind support to the rescue effort.



Participation in the AZA- FRTRP is voluntary and 30% of all AZA member facilities are supporting the AZA-FRTRP in some way.

In November 2021, the project will begin its second three-year plan to include continued management of the corals rescued from the FRT and propagation and rearing of offspring destined to rebuild the reef.

The AZA-FRTRP is a partner of the AZA SAFE Atlantic Corals program. The approved (2021-2024) SAFE Atlantic Coral Program Plan can be found <u>here</u>.

# How You Can Help the Florida Reef Tract Rescue Project:

The Florida Reef Tract Rescue Project is a network of facilities and supporters caring for nearly 2000 rescued Florida corals at the request of the Florida Fish and Wildlife Conservation Commission (FWC). Currently, funding to maintain holding space, build new space as corals grow in care, to train coral managers, and to provide resources to maintain the corals over time is critical to the project's success.

It's important to note:

- Since 2019, AZA member facilities have provided more than \$18 million US in resources and inkind services, to the rescue and long-term care of Florida corals. That is over 80% of the total investment in rescue to date.
- The care and support of a single Florida coral is estimated to cost approximately \$350US per year.
- An aquarium system suitable to house 32 Florida rescue corals can cost between \$7,000- \$10,000 US.



## HOW TO HELP:

1) The AZA-FRTRP is grateful for financial support. Support can be directed to:

Florida Reef Tract Rescue Project c/o Phil Wagner Association of Zoos and Aquariums 8403 Colesville Road Suite710 Silver Spring, MD 20910

 Many AZA facilities count on admission ticket sales and memberships to fund conservation projects like the AZA-FRTRP. You can help these valuable conservation projects by visiting your local AZA accredited zoo or aquarium or becoming a member to show your support.

**Resources and Additional Information:** 

Association of Zoos and Aquariums' Florida Reef Tract Rescue Project (project web page)

<u>AZA Network - AZA-FRTRP Communities</u> - Join the AZA-FRTRP open community on the AZA Network to receive the latest information on the Project and to network with others working to save the Florida Reef Tract. You do not have to be an AZA member or employed at an AZA facility to join the AZA Network- Just register! If you need assistance navigating the registration process, please contact the AZA-FRTRP Coordinator – <u>bfirchau@aza.org</u>

# AZA CONNECT magazine 2019

AZA CONNECT magazine 2020

AZA CONNECT magazine 2021

AZA SAFE: Saving Animals From Extinction

AZA SAFE Corals Conservation Plan 2021-2023

## Image Library:

An image library is available upon request. Contact Beth Firchau bfirchau@aza.org

Additional media resources are available for AZA-FRTRP members and those interested in sharing the story of the project. Please contact the project coordinator for details <u>bfirchau@aza.org</u>.

# **AZA-FRTRP Project Key Messaging Themes:**

- Corals and coral reefs are critical components of healthy oceans.
- The Florida Reef Tract (FRT) is in our backyard and is in the midst of an environmental crisis.
- The AZA-FRTRP is an effort of hope and empowerment:
  - "We are helping Nature respond to crisis and RECOVER".
- In an unprecedented event, AZA professionals and resources have been sought in a
  nationwide effort to support State and Federal agencies to manage and respond to a coral
  rescue. Many of the coral species being removed from the FRT have never been placed in
  human care before. Some are listed as Endangered Species Act species. Coral biologists are
  learning a great deal about these corals during the rescue operation that will help better
  manage the FRT in the future.

## **Frequently Asked Questions**

## What is the Florida Reef Tract (FRT)?

The FRT, also called Florida's Coral Reef, extends 360 miles from Port St. Lucie, Florida to Dry Tortugas National Park west of the Key West. The biodiverse area is a critical habitat for many marine animals and approximately 45 species of hard corals—seven of which are listed under the Endangered Species Act. It is the largest bank reef in the continental United States.

## What is the difference between a bank reef and a barrier reef?

The Florida Reef Tract is a BANK REEF.

A bank reef and a barrier reef are two types reef formations. Unlike the barrier reef, a bank reef is closer to shore, is characterized by ocean ward spur and groove formations, and lack a landward shallow lagoon, characteristic of barrier reefs.

Why are corals along the Florida Reef Tract dying? An unidentified pathogen causing stony coral tissue loss disease is rapidly progressing through the Florida Reef Tract causing critical habitat loss.

When was the disease first observed? The disease was first observed in 2014 off the coast of Miami-Dade County.

**Is the disease spreading?** Yes, recent reports indicate the disease has reached the Dry Tortugas National Park and has now spread throughout the Caribbean.

**How many species of coral could be impacted?** More than 20 species of corals are susceptible to stony coral tissue loss disease (SCTLD), five of which are included on the Endangered Species List. Different species have varying rates of infection and mortality. Scientific monitoring has indicated that since 2014, some Florida coral species have sustained up to 90% reduction in abundance because of stony coral tissue loss disease. Mortality rate among affected corals is 66-100%.

**Can the disease be prevented?** There currently is no method of prevention. Advancements in understanding the disease and its processes are being made but more work is needed.

# Why is rescue necessary?

Scientific monitoring indicated that since 2014, over half of the reef building corals found on the FRT have sustained up to 90% reduction in abundance because of stony coral tissue loss disease (SCTLD). As of spring 2021, the disease has progressed to the Dry Tortugas National Park in the southern-most reaches of the reef.

State resource managers felt that without some sort of safe keeping of disease susceptible coral species, the loss of these corals along the Florida Reef Tract would be eminent.

# What are the goals of the rescue?

The goal of the rescue is two-fold: 1) to prevent localized extinction along the FRT for the most vulnerable species, and 2) to maintain as much genetic diversity as possible for over 20 priority species in preparation for restoration and possible future habitat disturbances.

# From where are the Florida corals rescued?

Corals have been collected (rescued) by scientists from the Florida Fish and Wildlife Conservation Commission from reefs along the extent of the reef tract. Most corals are collected in water less than 60feet deep and within 10-20 miles off shore.

# How did the rescue work?

Coral from the FRT have been hand removed from pre-selected reef sites by research teams from the State of Florida. The corals were transported by ship to temporary holding facilities in southeast Florida to be stabilized and acclimated to human care. From there, corals were shipped by air or over land in coolers filled with water to institutions all across the country.

# Now that the corals are rescued, what is next?

The rescue was the first step towards restoration of the FRT. The next step will be reviewing the genetics of the rescued corals and developing a propagation plan to ensure optimum genetic diversity. Corals will be sexually propagated and offspring produced will be reared in human care to a size and age that will allow for their successful reintroduction to the reef ecosystem.







DATE: 3-28-23

Why are coral reefs in general important? Coral reefs protect coastal areas by buffering wave energy especially during storms and hurricanes. Additionally, coral reefs are critical components of productive oceans. They are home to a quarter of all marine species yet cover less than one tenth of the world's oceans. Their health and vulnerability to disease is impacted by warming ocean temperatures, point source and non-point source pollution, misuse of reef resources, etc.

What can we do to help coral reefs in general? Whether you live in a coastal community or inland, everyone can make choices that ensure the health of coral reefs by working to ensure the health of our waterways: lakes, rivers and oceans.

- 1. Decrease the use of single-use plastics
- 2. Clean up after your pets and dispose of waste responsibly
- 3. Encourage water conservation measures in your neighborhood

# **Additional Collaborative Communications Resources**

These resources are provided by AZA-FRTRP partners and share the wider story of the disease, the collaborative response and future plans.

# The Rs of Coral Rescue

Presented: Reef Futures 2021 Jennifer Moore (NOAA) and Lisa Gregg (FWC) co-authors 8 minute video <u>The Rs of Coral Rescue</u>

# Florida Department of Environmental Protection – communications products and websites

Communications Resources Library

FDEP Florida's Coral Reefs

FDEP Stoney Coral Tissue Loss Disease Response

# Florida Fish and Wildlife Conservation Commission

FWC Coral Rescue Dashboard

FWC Coral Rescue

AZA Coral Rescue (FWC)

## NOAA Coral Program / National Marine Sanctuaries

CORIS Coral Reef Information System

Florida's Coral Reef Disease Outbreak

**Coral Reefs and Socioeconomic Impacts** 

Socioeconomic Trends in South Florida Infographic (2014-2019)

# All NCRMP South Florida infographics

# The NOAA Iconic Reefs Initiative

Mission Iconic Reefs

Frequently Asked Questions: Mission Iconic Reefs

# **Status of Caribbean Reefs**

AGRRA - Caribbean Disease Dashboard

# NOAA CORIS Gulf of Mexico Coral Reef Report Card

Report Card Library