

# Coral Spawning Events at Kahalu'u Beach Park

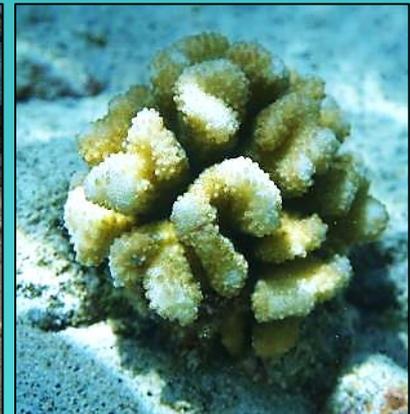
May 20-21, 2019

## Why Monitor Coral Spawning?

In 2015, an unprecedented mass bleaching (heating) event led to widespread mortality of corals in Hawai'i. The 2015 event led to >90% mortality of cauliflower coral (*Pocillopora meandrina*) along the west coast of Hawai'i Island. However, staff at The Kohala Center's Kahalu'u Bay Education Center (KBEC) discovered that a number of *P. meandrina* coral colonies survived within Kahalu'u Bay.

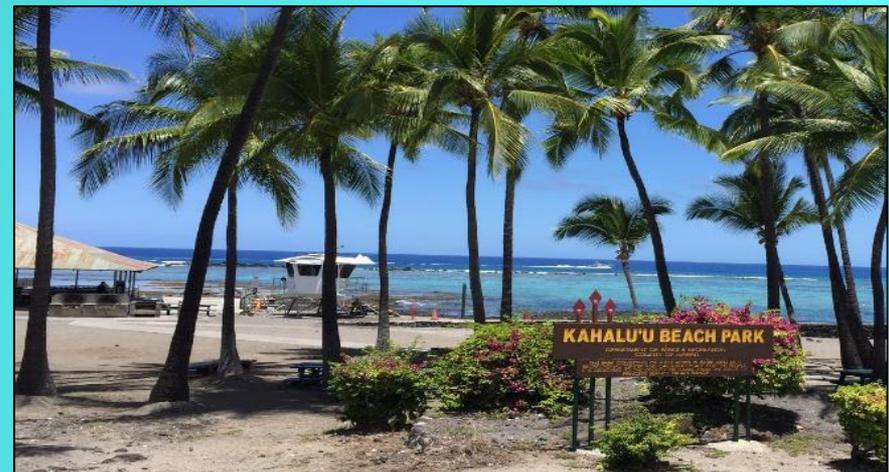
Kahalu'u Bay and Beach Park (4.2 acres) is one of the most popular snorkeling sites on Hawai'i Island, receiving over 400,000 visitors each year. Beginning in 2006, The Kohala Center worked together with UH Sea Grant Agent Sara Peck to expand the volunteer ReefTeach program. Every spring, Peck invited staff and volunteers to observe the cauliflower coral spawning events, which kicked off an ongoing and collaborative effort to: 1) better understand coral spawning cycles, 2) implement protective measures to help improve spawning success, and 3) inform the public about the state of our coral reefs and what they can do to help keep them healthy.

**The Kohala Center (TKC), through its Kahalu'u Bay Education Center (KBEC),** has been working for over 13 years to preserve and protect Kahalu'u Bay through education, research, and conservation, with a network of strong partnerships and active stewards who participate in its ReefTeach program.



## Creating a Stewardship Model

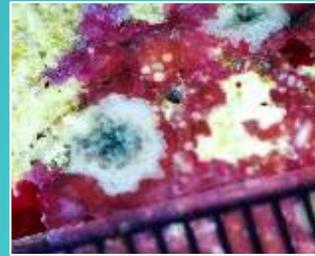
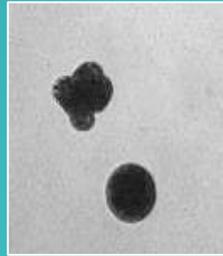
- Relationships were built with key local management agencies, community groups, businesses, and community members.
- Critical times for rest periods were discussed and planned, including coral spawning events, bleaching alerts, and disease outbreaks.
- Community stakeholders were engaged in meaningful place-based management.



## Partnerships for Reef Protection

In spring 2019, TKC requested that the County of Hawai'i permit a two-day closure of Kahalu'u Beach Park during likely spawning days, then organized ReefTeach stewards to educate the public about the closure. TKC also worked to inform the County Ocean Safety Team, local businesses, and the public about the purpose and importance of the closure.

During the closure, ReefTeachers and community volunteers stood at the park entry gates and informed visitors about the plight of corals along the Kona Coast and the importance of successful coral spawning events.



## Coral Spawning Research

A team of observers from TKC, DAR, and the University of Hawai'i at Hilo (UHH) monitored seven corals during the 2019 event, and four successfully spawned.

Samples were collected for larval grow-out and settlement at the Pacific Planktonics facility and UHH (SAP 2017-72). Researchers at UHH, DAR, and Pacific Planktonics are continuing work with the coral spat that were generated from the collected gametes.

## The Future at Kahalu'u Bay

Climate change, coastal development, increasing tourism, and pollution continue to threaten coral reefs at Kahalu'u Bay. Better management strategies, including rest periods during critical events, can help reduce local stressors and create a learning opportunity for community members and visitors alike. TKC will continue to work with our network of partners to implement creative, community-driven, and place-based models for protecting the coral reef ecosystem at Kahalu'u Bay. Mahalo to all that supported this effort!

