



Kaua'i Coral Disease Research: DAR Interim Report

8/30/2013

Project

Overview

The central focus of Christina Runyon's PhD dissertation at the University of Hawaii at Manoa will be looking at how widespread the disease is on Kaua'i's coral reefs, whether disease levels vary seasonally, how the infection spreads to other corals, and which pathogens and environmental factors are driving these outbreaks.

Christina's field research had the generous support of DAR, SOEST, DOBOR, Limahuli Gardens, and Bubbles Below SCUBA Charters.



Coral Disease at Anini Beach



Coral Disease at Anini Beach

July 2013 Site Visit

- Surveyed 25 reef sites along Kaua'i's north shore and Na Pali coast
- Recorded coral community structure and disease levels
- Took measurements of environmental variables including turbidity, temperature, coral species richness, and fish community structure



Most Important Findings

- The coral disease is affecting three species of rice corals (*Montipora*): *M. capitata*, *M. patula*, and *M. flabellata*
- 18 of the 21 (86%) surveyed reef sites on Kaua'i's north shore showed signs of the infection
- 1 of the 4 (25%) sites on the Na Pali coast had infected coral



PhD Student Christina Runyon in the field

Next Steps

- Frequency and prevalence data collected from this summer's field investigation will be processed
- Experiments investigating how the disease infects coral and spreads to other colonies will be performed at the University of Hawaii at Manoa

Next Report:

South and east facing shores of Kaua'i will be surveyed this winter, once wave conditions there allow for SCUBA and boat work.