HAWAII UNDERSEA RESEARCH LAB QUICK LOOK REPORT MISSION NO. P5-481

MISSION STATUS

Location: Kailua-Kona (19-37.642 N 156-02.159 W)

Mission Date: 30 November 2001

Maximum Depth:

Project Title: Ecological Role and Faunal Associates of Abundant Hexactinellid Sponges on the Hawaiian Slope

Principal Investigator: Craig Young

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Observer 1: Adele J. Pile

Observer 2: Henry Reiswig

Address:

Address: Flinders University School of Biological Sciences GPO 2100 Adelaide, SA 5001 Australia

Scientific Data Acquired: Prepare an abstract outlining your objectives, techniques, findings, etc.

This was the first dive of the mission so the objectives evolved around the securing of the study site and testing of new equipment. The primary goal of the dive was to establish site 14, a large bed of the study organism, *Sericolophus hawaiicus*, where a majority of the experimental work will be done. We conducted 4 horizontal transects of 20 minutes duration at 360, 400, 460, and 480 m and found that the sponge beds were densest between 360 and 460 meters. We found the highest densities of adult, juvenile, and dead stalks at 400 m and determined that the study site would be in the middle of the bed. We positioned marker 14 (N 19:37.742 W 156:02.048) at 437 m on a flat area of dense sponges with no nearby out crops which would cause damage to Pisces V if there was a strong current. We tested the sponge suckers, a device built by the PI to collect small water samples from the exhalent current of the sponges. While pulling the pin to release the spring activated plungers the entire device lifted too much and it was determined that a slight modification was required before using the sponge sucker to collect samples. We then collected 5 dead stalks and 5 adult *S. hawaiicus* for the quantification of epibionts. We also collected 1 juvenile *S. hawaiicus*, 2 benthic ctenophores and 2 other hexactinillids for identification.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

There were no limitations, failures or operational problems

Recommendations for corrective action or improvement:

none

In your opinion, did the mission essentially achieve its purpose? Compare actual work accomplished with the work that was expected to be accomplished.

The mission achieved all it's goals

List specimens or samples collected on the mission.

5 Sericolophus hawaiicus stalks with associated fauna

5 adult Sericolophus hawaiicus with associated faua

1 Juvenile Sericolophus hawaiicus with associated fauna

2 unidentified hexactinillid sponges

2 benthic ctenophores, Lyrocteis sp.

1 rock with associated fauna

Dive **P5-481**

DATA RELEASE

Data may be retained by the project leader for up to 2 years after the mission date with the following exception. NOAA may request to use photos for publication or publicity purposes at any time.

Fill in the appropriate statement below and sign this form.

I hereby release the data archived by HURL for public consumption following mission

Ecological Role and Faunal Associates of Abundant Hexactinellid Sponges on the Hawaiian Slope (project title)

held on November 30 2001 in the following way:

a. CTD data by _____ (date)

b. voice transcripts, video, and still camera film by _____ (date)

c. other _____ (date)

d. I will give my written consent to individuals wishing to use these data prior to the above dates depending on the nature of the request(s).

1. Ml for Principal Investigator