

**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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Address:

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 hawaiiicus*, 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. hawaiiicus* for the quantification of epibionts. We also collected 1 juvenile *S. hawaiiicus*, 2 benthic ctenophores and 2 other hexactinillids for identification.

Dive P5-481

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 hawaiiicus* stalks with associated fauna
- 5 adult *Sericolophus hawaiiicus* with associated fauna
- 1 Juvenile *Sericolophus hawaiiicus* with associated fauna
- 2 unidentified hexactinillid sponges
- 2 benthic ctenophores, *Lyrocteis* sp.
- 1 rock with associated fauna

