HAWAII UNDERSEA RESEARCH LABORATORY QUICK LOOK REPORT MISSION NO. P5-284

MISSION STATUS

Location: off Kona

Mission Date: July 23, 1996

Maximum Depth: 1193m

Project Title: Reproductive Biology of Deep-Sea Animals

Principal Investigator: Craig M. Young

Address: Harbor Branch Oceanographic Institution (HBOI) 5600 U.S. Hwy. 1 North Ft. Pierce, FL 34946

Phone: (407) 465-2400 x303

Observers: 1) Craig Young 2) Mary Sewell

Addresses: as above

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

This dive had two major goals: 1) to document patterns of zonation of echinoderms between 1100m and 400m, and to make detailed observations of the <u>Hyalonema</u> sponge beds between 400 and 500m. We confirmed the zonation pattern observed on previous dive. The dominant echinoderms at these intermediate slope depths were holothurians, which occurred in two major bands. The lower band was dominated by elasipods and synallactids and the upper band was dominated by an unidentified transparent species. Vouchers were collected. Upon encountering the sponge bed between 400 and 475m, we attempted to determine its extent. The bed ends at 375m depth and is more than 1 mile in length. Detailed video observations of orientation, density and sediment consolidation by the stalks were made. Predation by starfish was observed, as well as use of sponges by decorator crabs. A very large red platyctene ctenophore, probably new to science, was found living on the dead sponge stalks.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None.

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 was successful in every way.

List specimens or samples collected on the mission.

- 3 species holothurians
- 1 species ophiuroid 1 species asteroid
- 1 species benthic ctenophore 1 unid. hexactinellid sponge
- 2 individuals Hyalonema hexactinellid

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

Reproductive Biology of Deep-Sea Animals (project title) held on July 23, 1996

(date) in the following way:

a. CTD data by <u>7/24/96</u> (date)

b. voice transcripts, video, and still camera film by <u>7/24/98</u> (date)

- c. other <u>7/24/98</u> (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).

_____ Principal Investigator