HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-324

MISSION STATUS

Location: Seaward of Haleiwa, Oahu

Mission Date: Aug.20, 1997

Maximum Depth: 1000 ft.

Project Title: Investigation of insular slope fishery habitats, Oahu with emphasis on identification of bottomfish nursery grounds in relation to coastal discharge.

Principal Investigator: E. Gordon Grau

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Observer 2: Dr. Chris Kelley

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

This project has 2 primary objectives:

1. Identify nursery grounds of commercially important insular slope fish species, particularly those of the onaga (Etelis coruscans) and the ehu (Etelis carbunculus).

2. Characterize the physical and biological aspects of the grounds in relation to coastal discharge.

Dive P5-324 was directed at exploring depths of 1000 ft. to 400 ft. straight out from Haleiwa. We found a very interesting geological formation consisting of high rolling sand dunes or ridges. In the valleys between the ridges, there appeared to be some type of freshwater lens which blurred our view. We took both water and sediment samples at this area. There were very few fish, however, a much larger amount of terrestrial material (i.e. leaves, branches, etc.). There were also clay ridges running in the dunes. At 155 m. we found a rocky outcrop area with a lot of fish. We spent the rest of the dive here videotaping what we thought might be onaga juveniles, but later determined to be Symphysanodon typus.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The dive went well except for a few minor problems. Four of the water sampling bottles apparently leaked, leaving us with only 6 of the 10 samples taken. Also, we had some early problems with the video controller which was later corrected. Finally, our dive was delayed 1 hour because the bait bags fell out when the sub was lowered into the water. We had to get replacements.

Recommendations for corrective action or improvement:

The water samplers need to be fixed and on future trips bait bags need to be secured individually. Videocamera needs to be checked.

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

Yes, while not all objectives were achieved, we had an ambitious program and accomplished a lot, particularly with regard to the coastal discharge of our project. We also got some excellent videotape of a variety of fish species. In addition, the laser measuring system was very helpful during today's fish surveys.

List specimens or samples collected on the mission.

Sediment samples at 1000, 800, 600 and 400 ft.

Water samples at these depths as well.

Videotape and slides of both terrain and fish species.

Dive P5-524

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

Investigation of Insular Slope Fishery Habitats ... (project title)

held on Aug.20, 1997 (date) in the following way:

a. CTD data by Aug.20, 1998 (date)

b. voice transcripts, video, and still camera film by Aug.20, 1998 (date)

c. other Aug.20, 1998 (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