HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-360

MISSION STATUS

Location: Barbers Point / Ewa Beach, Oahu

Mission Date: Aug. 16, 1998

Maximum Depth: 279 m.

Project Title: Characterization of Two Types of Critical Habitat for Eteline Snappers

Principal Investigator: Gordon Grau / Chris Kelley

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Observer 1: Ben Benumof **Observer 2:** Chuck Holloway

Address: **Address:**

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

Objective was to perform reconnaissance geology; to observe and document the relationships between geologic features (lithology, current direction as indicated by ripples and sand waves, bottom morphology, etc.) and the occurrence of various types of fish species. A mixture of bottom morphologies was observed ranging from sediment rich and rippled to sediment starved and rocky (carbonate); no basaltic outcrops were observed. Ripples ranged in size from 1-2 cm in height with 10 cm wave lengths to large sand waves with 30-40 cm heights and ~2 meter wave lengths. Five sediment samples, three rock samples, and twelve water samples were collected. A wide variety of fish were observed, ranging in size from a couple cm's to over a meter (sun fish). Two main points should be noted:

1. Fish were attracted to any type of rocky outcrop w/relief. We also found two artificial reefs w/abundant fish (a boat and a plane) while on our 220 m. transect.

2. The rock or reef porosity was significant enough to allow shelter/protection for fish up to 20 cm long.

Small sediment filled channels were also observed along the 120 m transect (approximately 1-15 m. in width with 0.5-1.5 m side walls).

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

1. wire on laser broke
2. star board light broke
3. Niskin bottle 12 didn't close completely

Recommendations for corrective action or improvement:

Wire on one of the 3 lasers used for size and distance estimation broke. It was repaired after the dive. Starboard camera light was not working properly, so most video footage was obtained with the digital camera. The light was fixed after the dive. Niskin bottle was adjusted.

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

Yes, this mission surveyed the bottom, middle, and upper sections of a submerged wall, and identified several locations that would be the focus of the next dive. The geological characteristics of the wall were described in detail.

List specimens or samples collected on the mission.

Three specimens of carbonate reef were collected.

12 water samples were obtained.

5 sediment samples were collected.

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

Characterization and Assessment of Two Types of Critical Habitat for Eteline Snappers: with Main Hawaiian Islands (project title)

held on Aug. 16, 1998 (date) in the following way:

a. CTD data by Aug.16, 2000 (date)

b. voice transcripts, video, and still camera film by Aug.16, 2000 (date)

c. other Aug. 16, 2000 (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