HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-374

MISSION STATUS

Location: Makapuu Closed Area #6

Mission Date: Sept. 3, 1998

Maximum Depth: 402 m.

Project Title: Evaluation of non-lethal methods for assessment of overfished deep water snapper resources.

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

The objective of today's dive was to transect the hard steep feature occuring within the State of Hawaii closed bottom fish Area #6 off Makapuu Point, Oahu and conduct bait stations. The primary objective for both bait stations and transects is to quantify snapper abundance within the area. We conducted a transect at 400 m at the base of the hard steep feature. Few fish (no snappers) and some precious corals including Corallium regale. We conducted a bait station at 402 m at the end of this transect on a sandy area next to a carbonate outcropping. We observed 5 Squalus mitsukurii, and 6 Polymixia at this station. No snappers. Our 350 m transect proceeded on the seaward exposure of the feature. On this transect we observed many sharp coralline pedestals and low overhangs looking much like a lagoon reef or solution bench. Fish observed included several scorpaenids and Chaunax scattered through out and one large overhang structure with 100^{+} Epigonus. Another area with low relief cover and holes had 50^{+} Symphysanodon maunaloae and a long tailed fish that may be Owstonia sp. After this transect we traveled to the northern peak of the twin peaked feature. The top was at 328 m. We saw several small as we approached the summit. They were scattered near ledges and holes and ranged from 6-10". S. maunaloae were abundant in the same areas. We conducted

a bait station here attracting a total of 3 ehu (1~10" and 2~8"), 1 Antigonia, 1 kahala, 3 Squalus, and 1 Ophichthus. After the bait station we continued down the NW wall of the feature and returned to the summit surveying fish communities. This wall was no different than the seaward wall. Concentrations of S. maunaloae and scattered ehu (all small) were seen only near the summit. After surveying this wall we headed NW over the gradually sloping sand bottom looking for hard targets similar to those found on dive P5-373 in the unrestricted fishing area to the north. On that dive juvenile ehu and onaga were associated with small carbonate rocks in depressions in the sand. On today's dive there were no hard targets so no snappers were observed. We did come across a large patch of sea urchins and another patch of Xenophora. In both cases there were hundreds scattered over the sand at distances of about 1-2 m. The slope got steeper and coarser grained at about 200 m. and had some hard substrate including plane wreckage and carbonate at about 150-160 m. We conducted a final bait station at 152 m near a carbonate structure after observing lehi and opakapaka in the area. We attracted 2 large opakapaka (~24") and a larger kahala, and 1 moray G.berndti. After we stopped observations and proceeded to recover the "pumpkin" a hapuupuu (~18") came.

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.

Yes. Our plan was to conduct transects at depths of 400, 350, 300, 250, and 200 m on wall features where possible and conduct bait stations at 400, 300, and 200 m to attract snappers. We conducted 350 and 400 m transects today, but not 300, 250, and 200 as these depths were on a gradual sandy slope far from the more optimal hard bottoms found at 400 and 350. We conducted 3 bait stations one at 400 m, one at 328 m (the shallowest portion of the hard carbonate feature), and one at 152 m.

List specimens or samples collected on the mission.

Xenophora sp. (6 ea.)
Cidarid urchin Actinocidaris sp. (1 ea.)

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

Evaluation of non-lethal methods for assessment of... (project title)

held on Sept. 3, 1998 (date) in the following way:

a. CTD data by 9/3/2000 (date)

b. voice transcripts, video, and still camera film by 9/3/2000 (date)

c. other 9/3/2000 (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