

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-434 MISSION STATUS

Location: Lanikai, Oahu, Hawaii

Mission Date: September 26, 1999

Maximum Depth: 552 meters

Project Title: Evaluation of non-lethal methods for assessment of overfished deepwater snapper resources

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

This day's dive objectives included; exploration of a deep pinnacle, investigation of two known gold coral beds, two 30 min. transects at 350 and 300 meters, and one 30 min. bait station at the end of the 300m transect. During the transects all vertebrate and invertebrate animals were documented and during the bait station all fish observed were recorded.

The sub reached bottom at 552m where the substrate appeared flat and sandy with numerous *Heterocarpus ensifer* and large pink anemones apparent across the substrate. We proceeded across the sand to the base of the deep pinnacle (488m) where we observed scattered areas of live hard coral (to be identified at a later date) and a litter field of dead coral rubble at the pinnacle base. We proceeded up the slope of the pinnacle and observed the hard coral becoming progressively more abundant. At the top of the pinnacle (425m) hard coral cover approached 80%. We then headed to the first gold coral bed (395m)

where 6-8 large gold coral trees were observed. Numerous *Hollardia goslinei* and *Meadia albesella* were observed around the trees.

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We proceeded up to the start of the first transect at 350m. The slope was a fairly steep hard carbonate slope with a sediment covering. Few overhangs or shelter holes were found. Invertebrates were few except for the black coral *Antipathes* sp. 1 (30-40) and the numerically dominant fish were *Symphysanodon moanaloae* (~50) and scorpaenids (15).

During the 300m transect habitat was also steep carbonate slope with sediment covering but there was a noticeable increase in habitat rugosity. Invertebrates were again sparse except for *Antipathes* sp. 1 which covered the slope (100's) and the widely distributed starfish, *Sphaeriodiscus ammophilus* (~16). The numerically dominant fish species included *S. moanaloae* (1000's), *Grammatonotus laysanus* (100's), scorpaenids (~35), and ehu (33; most were small 6-8 inches). At the bait station 3 ehu, 1 onaga, 1 scorpaenid, 1 *Gymnothorax nuttingi*, 1 unidentified labrid (short, pink horizontal stripes on body, 2 black dots on caudal fin) and 1 unidentified emmelichthyid.

Enroute to the second gold coral bed, a cave with over 20 large *Beryx decadactylus* was observed. At the second coral bed (401m) a row of large coral trees spanning 16 feet or greater was found. To the west of this coral bed, a third stand of gold coral trees was discovered (5-6 large trees).

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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.
All objectives were accomplished.

List specimens or samples collected on the mission. unidentified hard coral, 1 colony of *C. regale* and 1 *Gerardia* sp. skeleton

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 overfished deepwater
snapper resources (project title)

held on September 26, 1999 (date) in the following way:

- a. CTD data by September 26, 2001(date)
- b. voice transcripts, video, and still camera film by September 26, 2001(date)
- c. other September 26, 2001(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)

Robert B. Moffitt Principal Investigator