

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-375

MISSION STATUS

Location: Mokulua Pinnacle

Mission Date: Sept. 4, 1998

Maximum Depth: 438 m.

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

Principal Investigator: Robert B. Moffitt

Address: National Marine Fisheries Service
2570 Dole Street
Honolulu, HI 96822

Phone: 983-5373

Observer 1: James D. Parrish

Observer 2: Donald Kobayashi

Address: Hawaii Cooperative Fishery
Research Unit
2538 the Mall, UH
Honolulu, HI 96822

Address: as above

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

The objective was to replicate much of the survey for commercial snappers done around the north tip of the Mokulua Pinnacle feature in *Pisces* Dive P5-373 and extend it farther around to the southwest. The submersible went to the bottom at 0854 north of the main western slope of the feature. After traveling south to the base of the main slope at 400 m depth, a bait station was set with 1 bag of mixed fish and squid for ~20 min. The only large fish attracted were 2 *Squalus* sp. sharks and 1 ray. A transect of 45 min. was made west-to-east along the 400 m contour, passing a stand of several large gold coral trees, followed at the end by direct ascent to 350 m, transect for 30 min. along the 350 m contour from east-to-west (including sighting of 1 small ehu), direct ascent to 300 m and transect for 30 min. along the 300 m contour from west-to-east. A fixed station with 2 bags of the same type bait was made at the east end of the 300 m transect. A dozen dark periods, followed by flashes of main lights and strobe with photos produced good visual observations in ambient light and photo records of ~65 onaga sightings and ~half a dozen ehu sightings. (The total number of individuals seen was probably much fewer.) Other fishes seen on the bait station included a moray eel, at least 2 *Squalus* sp., a few *Antigonia*, and a kahala. Many ehu and some onaga were seen while setting up for the bait station and/or just after it. The submersible then moved up the adjacent steep slopes, maintaining a heading southwest, but apparently traveling nearly due west in the

Dive P5-375

current, making at least 11 more sightings of ehu and at least 5 of onaga within ~25 min. The dive ended on a nearly featureless sand bottom with gentle slope at 438 m depth at time 1609. A fair abundance and diversity of small/medium size noncommercial species was seen through much of the dive. The western slope of the feature was not especially steep with a fairly deep sand covering and not much relief. The substrate and habitat on the rest of the dive area largely overlapped with that described for *Pisces* Dive P5-373.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The equipment and operational procedures seemed to function faultlessly.

Recommendations for corrective action or improvement:

N/A

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 essentially achieved its purpose. The only planned work that was cut short was survey along the western side of the feature on the top. This was due to time limitations and the navigational limits in the bottom current.

List specimens or samples collected on the mission.

N/A

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. 4, 1998 (date) in the following way:

- a. CTD data by 9/4/2000 (date)
- b. voice transcripts, video, and still camera film by 9/4/2000 (date)
- c. other 9/4/2000 (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