HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-015A&B

MISSION STATUS

Location: Penguin Bank

Mission Date: 1-2 Sep 98

Maximum Depth: 340 m

Project Title: Evaluation of Non-Lethal Methods for Assessment of Overfished Deepwater Snapper Resources

Principal Investigator: Robert B. Moffitt

Address: National Marine Fisheries Service
2570 Dole St.
Honolulu, HI 96822-2396

Phone: (808) 983-5373

Observer 1: James D. Parrish

Address: Hawaii Cooperative Fishery Research Unit
2538 The Mall, Univ. Hawaii
Honolulu, HI 96822

Observer 2: Robert B. Moffitt

Address: Same as above

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

The objective was to make a continuous set of observations of benthic habitat and fish and invertebrate fauna on each of 2 roughly parallel transects along the axis of the "3rd Finger" of Penguin Bank, for comparison with daytime observations made on submersible dives and camera tows, at depths of ~200 m (Dive RCV-15A) and ~300 m (Dive RCV-15B), both on the south slope. The ship moved slowly into the wind and sea, towing the cage at an altitude of several meters above the bottom, and the ROV made excursions from the cage at altitudes from the bottom to a few meters and scanned the substrate and lower water column. Mesh bags of bait tied to the cage and the ROV bottom. Dive 15A left scent plumes continuously on both dives. Lights on the cage and ROV were used continuously. After dive 15A was completed, the ROV and cage were recovered aboard the ship, moved part way back to the starting position, but slightly further south, and deployed for Dive 15B. The ship track was adjusted to maintain the ROV on the southern slope of the "finger" at the desired depth for each of the dives.

Most of the area surveyed on both dives consisted primarily of hard, rocky bottom, some exposed, some covered by various depths of sand. The rock surface was sometimes rough at a scale up to several centimeters. Rocky relief at much larger scale was significant in most areas. In most areas and depths, the bottom sloped fairly steeply to the south; in places slopes were almost bare and precipitous. Occasional colonies of soft corals and the white, branching, deep-water hard coral occurred. Cidarid urchins were sometimes present, along with occasional asteroids. Shrimp were present but not especially abundant in the water column; they were often fairly abundant on the substrate. On both dives, many areas provided

(OVER)

apparently good habitat for for small/medium size fish in holes and under overhangs.

Fish were not abundant at either transect (depth). No large or commercially important species was seen. Small fish (all in low numbers) identified on both transects included a few Symphysanodon (at least some S. maunaloae, eels, Chlorophthalmus proridens (?), macrourids, Epigonus sp. Additional fishes seen on Dive 015A included several scorpaenids, a soldier-fish (?), a Chascanopsetta sp. (?), Laemonema rhodochir (and another morid (?). Additional species seen on Dive 015B included a spikefish Hollardia goslinei, a Chaunax umbrinus, and an unidentified callyonymid.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

See Quick Look Report Mission No. RCV-014 A&B

Recommendations for corrective action or improvement:

See Quick Look Report Mission No. RCV-014 A&B

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 within the limitations of the equipment's basic capabilities (see above).

List specimens or samples collected on the mission.

None

Dive RCV-015 A & B

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... (project title)

held on 1-2 Sept 1998 (date) in the following way:

a. CTD data by 2 Sept 2000 (date)

b. voice transcripts, video, and still camera film by 2 Sept 2000 (date)

c. other 2 Sept 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).

Robert B. Moffitt Principal Investigator