HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-209

MISSION STATUS

Mission Date: 11-04-02

Location (island, bank, seamount, etc): Makapuu, Oahu

Specific Site (NE side, summit, etc): Makapuu Coral Beds, Oahu **Position (start latitude & longitude):** 21°18.000'N 157°32.625'W **Depth range:** 345-529 m

Project Title: Effectiveness of refugia on bottomfish stocks

Principal Investigator: Robert Moffitt

Address: NOAA Fisheries 2570 Dole St, Honolulu, HI 96822

Phone: 983-5373

Observer 1: Robert Moffitt **Address:** NOAA Fisheries 2570 Dole Street Honolulu, HI 96822 **Observer 2:** Jane Culp **Address:** Hawaii Undersea Research Laboratory, 1000 Pope Rd, MSB 303, Honolulu, HI 96822

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

Materials & Methods:

The main objective of this study is to complete an evaluation of the effectiveness of DLNR's bottomfish management plan. This is being accomplished with follow-up submersible surveys to our 1998 and 1999 studies, which provided baseline data on densities of onaga and ehu in two refugia and two adjacent control areas. ROV dive objectives are to characterize habitats at and near the study sites. This is being accomplished by conducting videosurveys during which all fish and invertebrate species encountered are recorded along with substrate and depth information.

Scientific data acquired:

Table 1: Biological organisms observed during the dive.

FISHES

Beryx decadactylus Squalus mitsukurii Laemonema rhodochir Holardia goslinei Lophioides miacanthus Synagrops japonica Nezumia hebatatus Saturichthys engyceras Coelorhinchus sp Ventrofossa sp Chlorophthalmus japonica macrourid Epigonus sp Bathycongrus aequorus

ECHINODERMS, CRUSTACEANS, & MOLLUSKS

Gooseneck barnacle galatheid crinoid Mediaster ornatus Heterocarpus laevigatus Aspidodiadema sp Caenopedina pulchella Gorgonacephalid

CORALS, SPONGES & OTHER INVERTS

Paramuricid blue Thouarella hilgendorfi Paramuiricid tan Corallium regale Paragorgia Lepidisis olapa Eunicella sp Calvptrophora verslusi Bebryce brunea Narella megalepis Narella sp 1 Parazoanthus sp 2 Corallium secundum Leiopathes glaberrima Bathypathes conferta Keratoisis sp 3 Regadrella sp 1 sponge ribbon Callogorgia gilberti Alcyonacean red Madrepora kauaiensis anemone Antipatharian stalked Antipatharian red Hartwigia sp

The habitat for this dive was bedded limestone with a light sediment dusting, a few areas with manganese crust and broken plates. No bottomfish were seen.

MISSION EVALUATION:

Limitations, failures, or operational problems noted: none

Recommendations for corrective action or improvement:

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

Yes. Information on an area that had not been previously surveyed was obtained. Very good images were obtained of some species for which better images were needed.

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

RCV-209 held on 11-04-02.

- a. CTD data by <u>11-04-04</u>
- b. video data by <u>11-04-04</u>
- c. other____(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