HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-156

MISSION STATUS

Location: Kahoolawe Island Reserve

Mission Date: 08-30-02

Maximum Depth: 225m

Project Title: RCV bottom survey for benthic resources

Principal Investigator: Rick Grigg

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Observer 1: D. Chave **Address:** Hawaii Undersea Research Lab 1000 Pope Road University of Hawaii **Observer 2:** C. Kelly Address: Hawaii Undersea Research Lab 1000 Pope Road University of Hawaii

Observer 3: S. Whitcraft Address: Kahoolawe Island Reserve Commission 811 Kolu St #201 Wailuku, Hawaii

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

The primary objective of the KIR surveys is to evaluate benthic resources around Kahoolawe. RCV-156 was located off the east end of the island beginning at 20:31.593 W and 156:31.045 N at a depth of 135m. The transect lasted 1hr 38 min, and ended at a depth of 217m at 20:31.969 W by 156:30.267. Except for one small outcrop of fossil reef carbonate, the bottom during the entire transect was carbonate sand ranging from fine inshore to courser offshore with a relatively high content of silt. Bottom organisms were sparsely distributed although several rare and unusual organisms were observed (see below). No species of commercial black corals were observed, nor was Carijoa present. Commercial bottom fishes were also very sparse; only two ehu were observed on the entire transect. The lack of any bottom ripples suggest that bottom currents in the area are weak. Myctophids were the most abundant small fish; several 100 were seen on the transect. Planktonic mysids were also abundant, frequently swarming in the light of the camera. The carbonate outcrop was located at 220 m and clearly a drowned feature, remnant of former reef near sea level. The transect ended at 20:45.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

None

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.

Yes, except that we were surprised at the dominance of carbonate sand as opposed to a hard bottom habitat.

List specimens and their abundance on the mission.

FISHES:

myctophids. 100+ Decapterus macarellus? 2 Aulotrachichthys prosthemius 20+ Bembrops sp1 3 Fistularia petimba -2 Bembrops filifera 1 trichiurids 11 Chrionema squamiceps 2 Carcharhinus plumbeus 1 Symphysanodon maunaloae 3 Antigonia eos 5 Ariosoma marginatum 6 Etelis carbunculus 2 Saurenchelys stylurus 5 bothid (with 3 large spots) 1 Epinephelus quernus 1 Synagrops japonicus 3 Ophidion muraenolepis 1 Gnathophis sp.

ECHINODERMS:

seastar (Asterodiscides?) 1 Calliderma spectabilis 3 Stylocidaris rufa 1 Astropecten productus 2

CRUSTACEANS

shrimp (small red) 30+ Melicertus marginatus 2 Plesionika flag 2 Progeryon mus? 1 crab on cnidarian 1 Portunus sanguinolentus

CNIDARIANS

Cirrhipathes spiralis 10+ Antipathes brown 30+ Antipathes sp2 30+ Virgularia sp 4 gorgonian white 10 anemone white 5 cerianthid brown 7 Homola dickensonii banded anemone barred anemone small primnoid 1 dendrophyllid 3

OTHER

bristleworm gastropod many huge burrows

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 bottom survey of benthic resources around Kahoolawe held on <u>08-30-02</u> in the following way:

- a. CTD data by <u>08-30-04</u>
- b. video data by <u>08-30-04</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