HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-160

MISSION STATUS

Location: **Kahoolawe Island Reserve**

Mission Date: 09-01-02

Maximum Depth: m

Project Title: **RCV bottom survey of benthic resources around Kahoolawe**

Principal Investigator: Rick Grigg

Address: Dept. of Oceanography
1000 Pope Rd.
University of Hawaii, Honolulu, Hi. 96822

Phone: 956-7186

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 bottom resources around Kahoolawe. RCV-160 was located off the northeast coast of Kahoolawe bebinning at 20:36:05 N; 156:32.8W at a depth of 84 m and ending at 20:36.46 N; 156:33:35 W at a depth of 61m.. The transect began at 19:20 and ended at 20:23. The entire transect paralleled the coast at depths ranging between 84-61 m. and was dominated by a sand community supporting *Halimeda* pastures, the sand being in large part the plates of *Halimeda*, eg. a community creating its own environment; basically an *in situ* sand producing factory. At the beginning of the transect, most of the *Halimeda* plants were partially dead, with the upper portion of the plants being bleached or consisting of dead ossicles, suggesting poor water quality or perhaps another source of disturbance. The biodiversity of the assemblage was actually higher than the more healthy stands of *Halimeda* observed on the Kuia Shoal on Transects 158 and 159 (see species list below). Another obvious difference between the Ku'ia Shoal *Halimeda* beds and those on this transect was a lack of bioturbation due to pit cratering, the substatum being relatively undisturbed. At the very end of the transect the health of the *Halimeda* significantly improved (less than 10% containing bleached or dead ossicles) and the plants were thicker and larger, more like the beds on Ku'ia Shoal.

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.
Yes

List specimens observed on the mission.

FISHES
Decapterus macarellus 13
Lactoria diaphana 2
Lutjanus kasmira 2
Arothron hispidus 2
Canthigaster coronata 1
Ariosoma marginatum 1

ECHINODERMS
Chondrocidaris gigantea 13

CRUSTACEANS
Portunus sanguinolentus 1
red crabs 3

MOLLUSKS
Fusinus sp 1

CORALS
Leptoseris sp 2

SPONGES
tan finger 200+
red and orange round 400+
red finger 50+

OTHER
Crisina radians (bryozoan) 2
orange tunicate 2
scaleworm 1

ALGAE
Padina - many clumps
Halimeda - small clumps to huge beds
blue green - in some areas

Dive RCV-160

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 09-01-02 in the following way:

a. CTD data by 09-01-04

b. video data by 09-01-04

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