HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-162

MISSION STATUS

Location: **Kahoolawe Island Reserve**

Mission Date: 09-01-02

Maximum Depth: 97m

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

Principal Investigator: Rick Grigg

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Observer 3: S. Whitcraft
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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-162 was located at a start position of 20:33.605 N by 156:40.956 W at a depth of 85 m, and an end position of 20:34.076 N by 156:40.128 W at a depth of 79m. Start time was 19:15 and end time was 20:28. RCV-162 was selected as a transect site just inshore of RCV-161 because a reef pinnacle was encountered on RCV-161, and it was conjectured that high relief or hard bottom substratum might be found shoreward of this area. Unfortunately this did not turn out to be the case. Instead, the substratum was primarily sand with extensive cratering presumably due to the activity of Holothurians or other bioturbating organisms. The pit craters were covered by a thin layer of silt and in some instances they were further coated by thin a diatomaceous slime, both suggesting a fairly long residence time (months ?) for the craters. Patches of *Halimeda* were observed all along this transect, but the patches were not of high density and were not continuous. *Halimeda* patches were broken up by areas of highly disturbed substratum associated with the pit craters. No bottom current was observed, nor were sand ripples seen suggesting this area is characteristically a low energy environment. Some craters, however contained carbonate rubble and small boulders indicating that strong currents may occur episodically.

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
myctophids 50+
Ariosoma marginatum 10
Dascyllus albisella 2
Selar crumenophthalmus 1
Fistularia commersonii 5
Fistularia petimba 1
Lutjanus kasmira 4
Parupeneus chrysonemus 3
Decapterus macarellus 14
Chromis struhsakeri 1
Bothus thompsoni 1
flatfish (small)2
Foa brachygrammus? 1

ECHINODERMS
ophiuroids 100+
Asterodiscides tuberculosus 1
Chondrocidaris gigantea 1
Calliaster pedicellaris 1
Astropyga radiata 3
sea cucumber pink small 1
small white seastar 1

CRUSTACEANS
Homola dickensoni 1
Portunus sanguinolentus 2
shrimp red 2
small decorator crabs on rope 2
Paramunida type galatheids 20+

MOLLUSKS
tonnid gastropod 1

CORALS
Cirrhipathes spiralis 200+
Leptoseris sp 16
Cerianthus sp 1
Telemactis sp 1
cnidarian with collar 1
domelike anemone 1
solitary dendrophyllids 100+

SPONGES
red round 30+
tan finger 6+

ALGAE
bacterial mat 4
red algae on Halimeda (some)
Halimeda (many large beds)
filamentous algae 20+

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 09-02-02 in the following way:

a. CTD data by 09-02-04

b. video data by 09-02-04

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