HAWAI'I UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT (QLR) for *Pisces* and *RCV-150*

DIVE: P5-736

(*Extend length of sections as needed/appropriate*)

MISSION STATUS

Location: Au` Au Channel, Maui, Hawaii

Latitude: 20°46.250 **Longitude:** 156°40.240

Mission Date: April 05, 2009 **Duration:** 7 hours 48 mins

Maximum Depth: 115 meters

Project Title: Coral Reef Ecosystem Study (CRES)

Principal Investigator: Dr. John Rooney

Address: University of Hawaii

1680 East-West Road, POST 833

Honolulu, HI 96825

Phone: 808-956-9729

Observer 1: Ray Boland **Observer 2:** Christina Bradley

Address: PIFSC **Address:** UH Oceanography

2570 Dole St. 1000 Pope Rd. MSB 214

Honolulu, HI 96822 Honolulu, HI 96822

Pilot 1: Max Cremer **Pilot 2:**

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

Objectives: The Pisces 5 will conduct 4 half hour fish surveys and opportunistically collect samples of coral and algae of a mesophotic coral reef (Leptoseris bed).

Observations, findings, etc:

The Pisces V landed near the reef at a depth of 115 meters. Pisces V moved upslope to 110 meters, deployed transect marker #8 and conducted a fish transect roughly to the Northwest along the depth contour line. The transect was paused for the collection of coral or algae samples. The transect end was marked with marker #1 at 113 meters depth. Samples were also collected at this site. The bottom consisted of primarily sand and some hard bottom with Leptoseris coral. Pisces V then moved up to the 100 meter depth contour. No marker was deployed at this site and the transect was conducted to the west and also paused for sample collecting. At the end of the transect, the Pisces V moved upslope to the 90 meter contour line. The start of the transect was marked with marker #7, conducted to the west and marked with marker # 9 at the end. Sampling was conducted at the end of the transect. The bottom of both the 100 meter and 90 meter transects was comprised of nearly 100% living Leptoseris reef. Pisces V then moved upslope to 84 meters and collected samples. The bottom flattened out so achieving the 80 meter isobath was not possible. We conducted a fish survey to the east of this mark. The transect was paused to collect algae samples. The bottom was primarily sand and algae (primarily Halimeda). Samples were also collected at this location. Pisces V then proceeded to the southwest to the edge of the Leptoseris bed and collected samples at 85 meters and then 92 meters.

Observed Species list:

Fishes:

Mypristes chryseres	*Sargocentron ensifer*	*Dactyloptena orientalis*
Pseudanthia hawaiiensis	*Liopropoma aurora*	*Ostorhinchus maculiferus*
Malacanthus brevirostris	*Caranx ignobilis*	*Caranx melampygus*
Seriola dumerili	*Aphareus rutilans*	*Lutjanus kasmira*
Mulloidichthys vanicolensis	*Parupeneus chrysonemus*	*Parupeneus cyclostomus*
Parupeneus multifasciatus	*Parupeneus pleurostigma*	*Chaetodon kleinii*
Chaetodon lunulatus	*Chaetodon miliaris*	*Chaetodon multicinctus*
Chaetodon ornatissimus	*Forcipiger flavissimus*	*Forcipiger longirostris*
Heinochus diphreutes	*Apolemichthys arcuatus*	*Centropyge potteri*
Chromis leucura	*Chromis ovalis*	*Chromis verater*
Dascyllus albisella	*Bodianus albotaeniatus*	*Bodianus sanguineus*
Cirrhilabrus jordani	*Oxycheilinus bimaculatus*	*Pseudocheilinus evanidus*
Pseudojuloides cerasinus	*Chlorurus spilurus*	*Parapercis schauinslandii*
Zanclus cornutus	*Ctenochaetus strigosus*	*Naso hexacanthus*
Sufflamen fraenatum	*Cantherhines verecundus*	*Canthigaster epilampra*
Canthigaster coronata	*Arothron hispidus*	*Torquigener randalli*

Inverts:

Leptoseris hawaiiensis	*Leptoseris yabei*	*Cirripathes* sp.
Cidaridae		

Algae:

Ulvales	Spatoglossum

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, we were able to finish all four fish surveys and collect opportunistic specimens.

List specimens or samples collected on the mission:
Leptoseris hawaiiensis Leptoseris yabei Ulvales Spatoglossum
Many other pieces of rubble.

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 (Project title):

__Coral Reef Ecosystem Study (CRES)_____

Held on _____05April09_____ (date) in the following way:

a. CTD data by _____05April11_____ (date)

b. Video and images by ___05April11_____ (date)

c. Other ____05April11_____ (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