HAWAI'I UNDERSEA RESEARCH LABORATORY

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

DIVE: _P4-199_

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

MISSION STATUS

Location: ____Au'au Channel_____

Latitude: 20° 48.03 **Longitude:** 156° 43.125

Mission Date: ___7 Dec 2007_____ **Duration:** _7__ hours _57_ mins

Maximum Depth: ____110_____ meters

Project Title: _CRES 2007: Investigating the Deep (50 – 100 m) Coral Reefs of Hawaii_

Principal Investigator: Pyle/Montgomery/Rooney/Popp/Parrish/Smith

Address: __Bishop Museum_____

__1525 Bernice Street_____

__Honolulu, Hawaii 96817_____

Phone: __808 848 4115_____

Observer 1: _Richard Pyle_____ **Observer 2:** _Ken Longenecker___

Address: _Bishop Museum_____ **Address:** _ Bishop Museum _____

_1525 Bernice Street ___ _1525 Bernice Street ___

_ Honolulu, Hawaii 96817 _ Honolulu, Hawaii 96817

Pilot 1: _Terry Kirby_____ **Pilot 2:** _____

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

Objectives:

Observe and collect fishes associated with coral reef habitat at depths of 70-120 m. Collections using rotenone and suction sampler. Run timed visual transects for fish abundances.

Observations, findings, etc:

We ran four rotenone stations at two sites, and conducted two ten-minute visual transects. Visual transects were run concurrently with benthic transects by Pisces V. We examined several habitat types, including rocky limestone ledges with undercuts and caves, live coral fields, *Halimeda* beds, and open sand. Fish biomass and diversity was greatest around the rocky habitats.

Observed Species list:

Open sand: Unidentified gobiid, Parapercis schauinslandii, Iniistius baldwini, Plesiobatis daviesi, Aprion virescens, Malacanthus brevirostris

Rocky ledges: Xanthichthys auromarginatus, Sufflamen fraenatum, Sargocentron xantherythrum, Myriprisis chryseres, Forcipiger flavissimus, Bodianus albotaeniatus, Pseudocheilinus evanidus, Oxycheilinus bimaculatus, Labroides pthirophagus, Chromis leucura, Chromis verater, Chaetodon miliaris, Heniochus diphreutes, Centropyge potteri, Centropyge fisheri, Apolomichthys arcuatus, Gymnothorax flavimarginatus, Gymnothorax nudivomer, Gymnothorax melatremus, Synodonus sp., Unidentified scorpaenid, Odontanthias fuscipinnis, Pseudanthias bicolor, Liopropoma aurora, Oxycirrhites typus, Apogon deetsie, Ostorhinchus maculiferus, Pristiapogon maculiferus, Carangoides orthogrammus, Caranx melampygus, Mulloidichthys vanicolensis, Parupeneus multifasciatus, Chaetodon kleinii, Scarus rubroviolaceus, Trimma milta (?) , Trimma taylori, Zanclus cornutus, Acanthurus dussumieri, Acanthurus blochii, Acanthurus olivaceus, Naso brevirostris, Naso hexacanthus, Naso unicornis, Asseragodes sp., Canthigaster jactator

Halimeda: Coris ballieui, Pseudojuloides cerasinus, Oxycheilinus bimaculatus, Gunnelichthys curiosus

Live coral fields: Canthigaster coronata, Ostracion meleagris, Chromis leucura, Pseudocheilinus evanidus

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

1. Rotenone dispenser tube clogged (problem overcome in situ).
2. Small rotenone stations not as effective a larger ones
3. Insufficient battery power to collect fishes at end of dive
4. Smallest gobies not retained in suction device
5. Observer misidentification of fishes

Recommendations for corrective action or improvement:

1. Less thick rotenone or larger tube on dispenser
2. Fewer, larger rotenone stations
3. Conduct rotenone stations earlier in dive
4. Smaller-meshed screen in suction sampler
5. Observers should consult ID guides prior to and during dive

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

Yes. This dive was treated as a learning experience. Although we will refine our techniques on future dives, we were pleased with the results of this one.

List specimens or samples collected on the mission:

Station 1: Apogon kallopterus (1), Sargocentron xantherythrum (2), Chromis verater (1), Chromis leucura (1), Trimma milta (?) (4),

Station 2: Myripristis chryseres (1), Odontanthias fuscipinnis (4), Unidentified scorpaenid (4), Parapercis schauinslandii (1), Plectranthias winniensis (1), Trimma taylori (3)

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):

Investigating Deep (50 – 100 m) Coral Reefs of Hawaii

Held on 12/7/2007 (date) in the following way:

a. CTD data by 12/8/2007 (date)

b. Video and images by 12/8/2007 (date)

c. Other 12/8/2007(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).

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Principal Investigator