

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV-054 through RCV-058

MISSION STATUS

Location: Off Mokapu Peninsula, Oahu, Hawaii

Mission Date: September 22-23, 1999

Maximum Depth: 300 meters

Project Title: Evaluation of non-lethal methods for assessment of over-fished deepwater snapper resources

Principal Investigator: Robert B. Moffitt

Address: National Marine Fisheries Service, Honolulu Laboratory
2570 Dole St
Honolulu, Hawaii 96822

Phone: 808-983-5373

Observer 1: James D. Parrish

Observer 2: Paul Murakawa

Address: Hawaii Cooperative Fishery
Research Unit
2538 The Mall
University of Hawaii, 96822

Address: Hawaii Division of
Aquatic Resources
1151 Punchbowl St
Honolulu, Hawaii
96813

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

Objectives: The objectives of this mission were to conduct a survey of 4 known opakapaka fishing sites off Mokapu Peninsula, Oahu (ie., "Trees", "Gindai House", "Rob's Reef", and "Herbert's House"). The purpose of these surveys were to characterize the geological and biological aspects of these habitats for opakapaka. Of particular importance was the documentation of the co-occurrence of the introduced taape, *Lutjanus kasmira*, with the opakapaka, *Pristipomoides filamentosus*, and other native eteline snappers. A less critical objective was to identify other large, numerous, or ecologically important animals that occupy the same of nearby habitats.

Techniques: The RCV-150 was deployed from the K-O-K at the start of the preplotted transect lines that bisected the targetted sites. Observers identified the fish and invertebrates encountered along the transects and made general comments regarding the substrate types that were traversed.

Findings: RCV-054 targetted the fishing location called "Trees". Neither native snappers nor taape were observed along this transect. The actual fishing location was a relatively smooth faced carbonate wall. Scorpaenids, morids, and priacanthids were observed in the general vicinity of the wall. Just prior to reaching it, a large number of *Luzonichthys earlei* were observed aggregating in a patch of carbonate rubble. RCV-055 targetted "Gindai House". This area was similar to "Trees" and consisted of a relatively steep smooth carbonate wall. Two opakapaka, however no taape, were observed during the transect. In addition, a second aggregation of *L. earlei* was encountered along with a carcharhinid shark, several kahalas, *Seriola dumerilii*, scorpaenids, and a number of other fish species. RCV-056 targetted "Rob's Reef". Due to the sea conditions, the actual transect path was several hundred meters north of this site. A relatively smooth slope was encountered at the break where neither taape nor opakapaka were observed. An anchor line hazard was encountered as the ROV moved downslope from the break. RCV-057 also targetted "Rob's Reef" and similar to the previous transect, passed north of this site. RCV-058 again targetted "Rob's Reef" and this time, the transect passed directly through this site. At the break, a large "bowl-like" carbonate formation was observed that contained taape, a kalekale, *Pristipomoides sieboldii*, holocentrids and a pomacanthid. An opakapaka was also observed just downslope from this area. Further downslope (ie., 200-225 m), two ehu, *Etelis carbunculus*, were observed. This transect documented the co-occurrence of taape and native eteline snappers and further the presence of ehu off the Mokapu headland formation.

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 carried out 5 transects and completed 3 of the 4 planned surveys on known fishing locations. The RCV-150 performed flawlessly through the evening.

List specimens or samples collected on the mission.

None

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: Evaluation of non-lethal methods for assessment of overfished deepwater snapper resources (project title)

held on September 22-23, 1999 (date) in the following way:

- a. CTD data by September 22-23, 2001(date)
- b. voice transcripts, video, and still camera film by September 22-23, 2001(date)
- c. other September 22-23, 2001(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)

Robert B. Moffitt Principal Investigator