

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-429

MISSION STATUS

Location: Second finger, Penguin Banks, Molokai, Hawaii

Mission Date: September 21, 1999

Maximum Depth: 310 meters

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

Principal Investigator: Robert E. Moffitt

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Observer 2:

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

Objectives: The objectives of this dive were to conduct an assessment of the commercially important deepwater snappers (family Lutjanidae) present on the second finger of Penguin Banks. This site is the open fishing area control for our assessments of Restricted Fishing Area 10. The data obtained from this site will be compared to:

- 1) similar data obtained from RFA10 which encloses the third finger, Penguin Banks.
- 2) similar data obtained from this site last year to determine what effect no fishing restrictions have had after one year.

Techniques: Two techniques were employed to obtain counts and estimated sizes of targetted species:

- 1) 30-minute transects at 200, 250, and 300 meter depths
- 2) 30 minute "lights-out" bait stations at 200 and 300 meter depths

Findings: We completed both bait stations and 6 transects at the target depths. A 200 m, a 250 m, and a 300 m transect were conducted that replicated previous

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transects at those depths. Two additional 250 m transects and one 200 m transect were conducted in order to survey the extent of a particularly rich snapper habitat area observed during dives P5-424 and P5-427.

The 300 m bait station attracted primarily onaga, *Etelis coruscans*, ehu, *Etelis carbunculus*, and kahala, *Seriola dumerilii*. The 200 m bait station attracted a small school (i.e., 100) of juvenile kalekale, *Pristipomoides sieboldii*, a number of onaga, and a number of gindai, *Pristipomoides zonatus*. Onaga and kalekale were the predominant target species observed on the two 200 m transects. Onaga, ehu, and kalekale were the predominant species observed on the three 250 m transects. Ehu were the predominant species observed on the 300 m transect. In addition, identification and estimated counts were made of all other fish species observed during the bait stations and transects. *Symphysanodon maunaloa* and an unidentified small "diamond-tailed fish", possibly *Gramatonotus* sp., were particularly abundant on the 250 m transect, the latter being a dominant potential prey species on the 200 m transects as well. Epigonids and *S. maunaloa* were common on the 300 m transect.

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 completed all of the planned tasks of this dive.

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 21, 1999 (date) in the following way:

- a. CTD data by September 21, 2001(date)
- b. voice transcripts, video, and still camera film by September 21, 2001(date)
- c. other September 21, 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. Moffatt

Principal Investigator