HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. RCV- 046, 047, 048

MISSION STATUS

Location: All dives at Penguin Bank; 046: 1st Finger, P.B.; 047: Pinnacle off 1st Finger; 048: 2nd Finger, P.B.

Mission Date: Sept. 19-20, 99

Maximum Depth: 046: 207m; 047: 317m; 048: 200m.

Project Title: Evaluation of Non Lethal Methods for Assessment of Overfished Deep Water Snapper Resources.

Principal Investigator: Robert B. Moffitt

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

Phone: 983-5373

Observer 1: Christopher Kelley

Address: Hawaii Institute of Marine Biology
P.O. Box 1346
Kaneohe, HI 96744

Observer 2: James D. Parrish *

Address: Hawaii Cooperative
Fishery Res. Unit
2538 The Mall, UH
Honolulu, HI 96822

* Also U.S. Geological Survey, U.S. Dept. of the Interior Biological Resources Division

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

A major objective was to scout these 3 areas for general physical geological characteristics and common, conspicuous flora and fauna, and characterize the properties of habitat for fishes where the fishes occur. Particular emphasis was placed on finding sites where taape (Lutjanus kasmira) and eteline native snappers occur, separately of together. For all commercial species of interest, we wanted to obtain some sense of their general density and distribution. All these results will contribute to assessment of potential interactions between taape and the etelines. A less critical objective is to identify other large, numerous of ecologically important animals that occupy the same of nearby habitats.

Techniques & Results: The RCV was deployed by the Ka'imikai-o-Kanaloa in areas that would permit it to move along pre-plotted tracts of interest:

RCV-046 began at 1903 near the southern end of the main N-S trending upper limb of 1st Finger, P.B. and moved along the eastern edge of that limb from on initial depth of 123

m on top of the finger to depths as deep as 207 m near the base of the feature, and rising with the feature again to end at 167 m depth. The general trend of the track was ~ NNE. See taapes for physical description of habitat. 1 opakapaka was seen within the first half hour at 122 m depth and 1 opakapaka ~ 20 min. before the end at 122 m depth. The fauna of noncommercial fishes was rather diverse; commonly seen species included: congrid, eels, scorpaenids, Heniochus diphreutes, Myripristis chryseres, Bembrops, bothids, priacanthids, holocentrids, and several unidentified eel taxa (perhaps including nettastomatids). Overall, this area seemed to contain some good fish habitat and a good many small - medium fishes.

RCV-047 began at 2215 at a pinnacle E of 1st Finger, near the base, on P.B., at a depth of 186 m. The RCV then traveled from this SW position, moving ~ NE across the feature with minimum depths of 159 m and descending to the sea floor and continuing to depths of 317 m just before ending the dive at 2310. The track apparently did not cross the maximum height of the feature, see taapes for physical description of habitat. Eteline fishes seen were 1 kalekale near base depth and 4 confirmed ehu at similar depths plus 3 probable ehu deeper. Kahala were present for most of the dive. Common, noncommercial species included priacanthids, scorpaenids, and eels (including congrids), but fauna not as diverse and abundant as RCV-046.

RCV-048 began at 0047 (Sept. 20, 99) at a point in the middle section of 2nd Finger just over the southern edge at a depth of 193 m, traveled diagonally across the Finger (roughly NE) and along the top at the northern edge (minimum depth of 142 m) and down, following the line of the finger on its northern side, and ending at 0229 at a depth of 200 m. See taapes for physical description of habitat.

Eteline snappers seen were: 1 kalekale early in the dive ~ near the top at 159 m, 1 gindai near the end of the dive at 165 m.

A considerable diversity of smaller, noncommercial species was observed. Taxa seen frequently or in large numbers included: emmelichthids, Roa excelsa, scorpaenids, Chromis struhsakeri, congrids (including Ariosoma bowersi) and other eels, morids, priacanthids, and Erythrocles scintillans.

Overall, the area surveyed seems to have a good deal of suitable habitat on top for small - medium fishes and fairly frequent patches of good habitat for larger fishes on the steep sides.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

Nothing new.

Recommendations for corrective action or improvement:

N/A

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 or samples collected on the mission.

None

Dive RCV-046, 047, 048

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 ..... (project title)

held on Sept. 19-20, 1999 (date) in the following way:

a. CTD data by Sept. 19, 2001 (date)

b. voice transcripts, video, and still camera film by Sept. 19, 2001 (date)

c. other Sept. 19, 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