HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-427

MISSION STATUS

Location: Second finger, Penguin Banks, Molokai, Hawaii

Mission Date: September 19, 1999

Maximum Depth: 350 meters

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

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

We conducted four 30 min. transects at depths of 350, 300, 250, and 200 meters. During these transects we documented all vertebrate and invertebrate animals observed. We also conducted three bait stations (30 min. each): one at the end of the 300m transect; one at the start of the 250m transect and one at the end of the 200m transect. Any fish that appeared at the bait stations was recorded.

The sub reached bottom at 167m which was the top of 2nd finger on Penquin Banks. Substrate appeared flat, sandy with small rocky areas. Animals observed include: *Histocidaris variabilis*, numerous *Balanophyllia laysanensis*, ~15 *Seriola dumerili*, and 5-10 *Naso hexacanthus.* We headed down slope and at the edge of slope observed ~10 kalekale and 40-50 *Symphysanodon typus*. At 350m, substrate was flat, sandy, no relief and we observed numerous anemones and soft corals along the transect. Other animals observed included: crustaceans- 3 hermit crabs, 1 *Paramala japonica*, *2 Cyrtomaia smithi,* 5 galatheids, 1 *Randallia distincta*, 1 shrimp; fish – 5 flatfish, 5 *Chaunax*, ~32

Chlorophthalmus, ~14 *Chrionema*, 2 rays, 1 *Satyrichthys*, 1 Myctophid, 1 *Cytominus*. Other animals included 1 cephalopod, 6 comb jellies, and 2 starfish.

At 300m substrate was a steep rock wall with some small holes. During the transect it was observed that large stretches of the slope was covered with sand. Animals observed: Echinoderms – 5 *Stereocidaris hawaiiensis*, 1 *Actinocidaris thoamsii*, 1 *Tamaria*, 11 leaf stars; Crustacea – 2 *Randallia distincta*, 3 hermit crabs, 11 galatheids, 1 anemone crab, 8 shrimp; Cnidaria – few colonies of hard white coral, 12 anemones; Mollusc - 14 pleurobranchia; fish – 3 flatfish, 18 *Chlorophthalmus*, 13 *Chrionema*, 1 ehu, 30 Epigonus 2 scorpaenids, 14 *S. moanaloae*; and one pink worm. No fish were observed at the bait station following this transect.

Went up to 250m and conducted another bait station at which 4 gindai, 15 kalekale, 7 ehu, 2 eels and 3 kahala were observed. Seven onaga were seen swimming in the distance but did not approach the bait station. 250m transect was along a steep carbonate reef which was highly eroded with numerous holes and overhangs. A lot fewer invertebrates were observed but there was a high density of small fish along the transect. Fish observed included: 11 ehu, 2 *Chrionema*, 2 kahala, 58 kalekale, 25 onaga, 9 scorpaenids, >1000 *S. moanaloae*, 10 *H. elizabethae*, 150-200 "diamond tail"(to be identified at a later date), >100 *Grammatonotus*.

The 200m transect was also along a steep, carbonate slope but with a less eroded appearance and as such fewer holes. One urchin was quite numerous, >200 *Actinocidaris thomasii*, and there were also ~30 tamaria starfish. Small fish were again quite numerous: >3000 "diamond tail" fish, 35 *H. elizabethae*, 57 kalekale, 2 gindai, 5 scorpaenids. Bait station was conducted at end of transect during which 7 kahala, 8 opakapaka and 1 eel was observed.

We then traveled up the slope back to the top of the finger and over to the other side. Saw a yellow fish identified as *Holanthias fuscipinnis*.

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.
All goals were accomplished.

List specimens or samples collected on the mission. One crab.

Dive P5-427

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 19,1999 (date) in the following way:

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

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

c. other September 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