

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-302

MISSION STATUS

Location: Kailua-Kona, Hawaii

Mission Date: September 21, 1996

Maximum Depth: 537 m

Project Title: Dispersal and Population Genetics of Seamount Benthos

Principal Investigator: Scott France / Lauren Mullineaux

Address: Woods Hole Oceanographic Institution
Biology Department
Woods Hole, MA 02543

Phone: (508)289-2898

Observer 1: Scott France

Observer 2: Ewann Agenbroad

Address: as above

Address: as above

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

We are measuring the genetic variation of deep-sea corals to quantify gene flow and estimate larval dispersal among disjunct habitats (seamounts and island slopes). Our objective on this dive was to collect corals for our analysis at depths between 600-400m. Coral colonies were sampled directly using the *Pisces V* manipulator arms. Our dive track climbed from 537-390m., over a steep slope, covered with dense patches of stalked sponges, and over many basalt flows and outcrops. The corals we were seeking were typically associated with these flows. We collected many samples from 18 different stations.

MISSION EVALUATION:

Limitations, failures, or operational problems noted:

The number of samples collected is limited by the size of the PVC box mounted on the submersible basket.

Recommendations for corrective action or improvement:

Design and build a larger box whose weight and volume would be appropriate for safe submersible recovery. Alternatively if specifications (weight limit, size) are known, PI could bring own.

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

This mission was most successful. We collected many individuals, each of 2 target species; collected other unknown taxa to be identified, and photographed and videotaped many organisms *in situ*.

List specimens or samples collected on the mission.

Corallium regale - 12 individuals
Branched isidid - 10 individuals
Lepidisis sp. - 2 individuals
Schizopathes (Bathypathes) conferta - 1 specimen
Unidentified purple octocoral - 1 specimen
Unidentified orange ctenophore - 1 specimen
Unidentified hydrozoan - 1 specimen
Unidentified antipatharian fan - 1 specimen
4 galatheid crabs
2 hexactinellid sponges

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

Dispersal and Population Genetics of Seamount Benthos (project title)

held on 9-21-96 (date) in the following way:

- a. CTD data by 9-21-96 (date)
- b. voice transcripts, video, and still camera film by 9-21-98 (date)
- c. other 9-21-98 (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).

_____ Principal Investigator