

HAWAII UNDERSEA RESEARCH LABORATORY

QUICK LOOK REPORT MISSION NO. P5-299

MISSION STATUS

Location: West of Oahu

Mission Date: September 17, 1996

Maximum Depth: 1493 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: Ewann Agenbroad

Observer 2: Ron Etter

Address: Redfield 120
WHOI
Woods Hole, MA 02543

Address: U. Mass. Boston
Boston, MA

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). Following our series of 1993 dives and subsequent lab work, we have identified several species as the focus of our investigations. Our objectives for this dive were to collect specimens from a depth range of 900-1100 m. Corals were collected with the manipulators and placed in a collection box with a lid (an attempt to reduce the effects of wash and temperature change during recovery). We found several individuals of one of our target species, and a number of individuals from two other target species. We were still in areas with a lot of sediment, which is not ideal for corals. Some areas where sedimentary rock had broken away to form rock ledges created suitable habitat.

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, I consider this dive a success. We found several specimens of Corallium, which was one of our target species, and a few specimens of two other target species (Narella and Lepidisis). We had expected to find more of each species, but they just weren't there. We got some excellent footage and photographs of the corals we collected, as well as some unique species (fishes, sponges, crabs).

List specimens or samples collected on the mission.

- OAD101-1: Corallium sp. pink coral
- OAD102-1: Lepidisis sp. bamboo coral
- OAD103-1: Corallium sp. pink coral with ophiuroid
- OAD104-1: yellow gorgonian
- OAD104-2: Lepidisis sp. bamboo coral with anemone
- OAD104-3: Lepidisis sp. bamboo coral with anemone
- OAD104-4: Corallium sp. pink coral
- OAD104-5: yellow gorgonian
- OAD105-1: yellow gorgonian with ophiuroid
- OAD106-1: yellow gorgonian
- OAD107-1: Corallium sp. pink coral
- OAD108-1: Corallium sp. pink coral
- OAD109-1: white scleractinian coral
- OAD110-1: Narella sp. primnoid coral with ophiuroid

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 9-17-96 (date) in the following way:

- a. CTD data by 9-17-96 (date)
- b. voice transcripts, video, and still camera film by 9-17-98 (date)
- c. other 9-17-98 (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