Activity Summary

CrsID **DavidsonSeamount2006**

CrsProjID **OE_2005_048**

T945

1/30/2006

Deep Water Corals of the Davidson Seamount: Habitat Suitability, Taxonomy, Age and Growth

Overview of Remotely Operated Vehicle Dive T945 (DavidsonSeamount2006_ACT0015) at T945

Activity Vitals

Dates/Times/Depth

Start 1/30/2006 14:50:00

End 1/31/2006 3:00:00

Time zone UTC **UTC** 00

MaxDepth (m): -2850.0

Bndg Coordinates

North 35.8350

South 35.8208

East -122.6088

West -122.6206

System(s)

Tiburon
HD Video Camera

Data Collected

Samples
Multimedia
Data

Participants

Andrew DeVogelaere, Chief Scientist
James Barry, Co-Principal Investigator
Chad King, Navigator
Erica J Burton, Scientist
Huff McGonigal, Esq., Scientist
Lonny Lundsten, Scientist
Allen Andrews, Scientist

Overall Dive Site Ratings

1 = low; 10 = high

Uniqueness	
Health	
Disturbance	
Biodiversity	
Relief Variation (meters):	

Objectives

1. Visit a site much deeper than previous sites on this cruise.
2. Run quantitative transects over soft sediment and ridges
3. Opportunistically collect corals, animals, and rocks
4. Niskin water samples

Dive Track Description

Day 5 T945
Davidson Seamount Expedition Log: Day 5

NOAA/MBARI Objectives: Biology transects, measure currents, water samples for organic matter, and biology collections in the deep north east “Red Crescent.”

We started the day in a deep valley on the north-east end of Davidson Seamount, at a water depth of 2800 meters. Swift currents, even at this depth, seem to bring nutrients to a surprisingly diverse coral and sponge-dominated assemblage. Upon touching down we saw a variety of invertebrates that we immediately began sampling. We found several large enteropneusts (a hemichordate), a large sabellid worm, several Lepidisis bamboo corals, a stalked sponge, and many small gastropod snails. Nearby, we found sediment as we had expected and then push-cored the gravelly substratum along with an unusual pink sea cucumber. We continued across the valley floor and then began ascending a steep talus slope where we encountered several beautiful species of black corals, unusual sponges, Chrysogorgiid corals, and a multitude of yellow stalked sea lilies, reminiscent of the Truffela Trees from Dr. Suess’ Lorax. Moving along, the cable above ROV Tiburon encountered currents which were so forceful that it had difficulty heading to our next target. After several hours of slow progress towards the cone at 2300 meters, we finally reached the summit where we encountered currents of such high velocity that we were able to touch down only long enough to measure current speed and grab a rock for MBARI’s Volcanology lab. The terrain at the summit consisted of pillow lavas and talus. The biota consisted mainly of the crinoid Florometra, lithodid crabs, and sea cucumbers. We were surprised by the lack of corals at the summit of this cone, as we had expected to find a lush coral garden as has been the case on other, shallower summits.

Living Habitat Structure

Type	% Cover

Nothing recorded.

Sediments

Type	% Cover

Nothing recorded.

Geomorphology

Type	% Cover

Nothing recorded.

Anthropogenics

Type/Description

Nothing recorded.

Living Marine Resources Abundance

None (0) Single (1) Few (2-10) Many (11-100) Abundant (>100)

Pelagic Fish	
Bottom Fish	
Crustacean	
Mollusk	
Echinoderm	

Other Benthic

Nothing recorded.

Observations and Comments on Living Marine Resources:

No other comments.

Unique or Rare Invertebrates	Unique or Rare Vertebrates
Nothing recorded.	Nothing recorded.

Fish Observation and Abundance

None (0) Single (1) Few (2-10) Many (11-100) Abundant (>100)

Nothing recorded.

Other Comments/Notes