OKEANOS EXPLORER ROV DIVE SUMMARY

Site Name	Paramount Seamount		EX 1103 GALREX - SITES OF INTEREST WOODW BROOM BY DOWN BROOM BROOM BROOM	
ROV Lead/ Expedition Coordinator	Dave Lovalvo/ Jeremy Potter		NOTE OF THE PARTY	To the state of th
General Area Descriptor	Paramount Seamount, ~225nm north of the Galapagos Islands		Marie	STOWN STOWN STOWN STOWN STOWN
ROV Dive Name	Cruise Season EX1103	Leg		Dive Number
Equipment Deployed	ROV:	2 DIVE01 Little Hercules		
	Camera Platfom:	Seirios		
ROV Measurements	 ☐ CTD ☐ Scanning Sonar ☐ Pitch ☐ Low Res Cam 1 	□ Depth □ USBL Position □ Roll □ Low Res Cam 2		✓ Altitude✓ Heading✓ HD Camera
Equipment Malfunctions	None			
ROV Dive Summary (From processed ROV data)	Dive Summary: EX1103L2_Dive01 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA			
Special Notes Scientists Involved (please provide name / location / affiliation / email)	Click here to enter text. Timothy M. Shank/ Okeanos Explorer Lead Scientist/WHOI/tshank@whoi.edu Edward T. Baker/NOAA-PMEL, Washington/Edward.baker@noaa.gov Robert W. Embley/NOAA-PMEL, Oregon/Robert.w.embley@noaa.gov Stephen Hammond/ NOAA-PMEL, Oregon/Stephen.r.hammond@noaa.gov James F. Holden/ UMASS Amherst/jholden@microbio.umass.edu Scott White/University of South Carolina/swhite@geol.sc.edu Sharon L. Walker/ NOAA-PMEL, Washington/sharon.l.walker@noaa.gov Santiago Herrera/ WHOI Exploration Command Center/WHOI/sherrera@whoi.edu T. Jennifer Lin/UMASS Amherst/tjennlin@gmail.com Catriona Munro/ WHOI Exploration Command Center WHOI/catmunro89 @gmail.com			

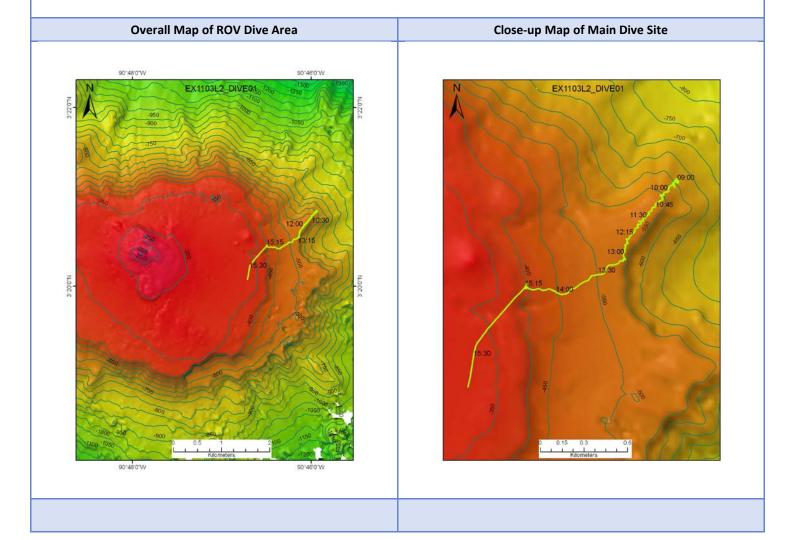
Taylor Heyl/ WHOI Exploration Command Center/WHOI/theyl@whoi.edu Lucy C. Stewart/ UMASS Amherst/Isteweart@cns.umass.edu Mashkoor Malik/ NOAA Office of Ocean Exploration & Research/mashkoor.malik@noaa.gov Meme Lobecker/ NOAA Office of Ocean Exploration & Research/ Elizabeth.Lobecker@noaa.gov

Purpose of the Dive

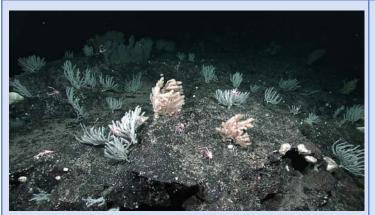
The location of this dive on the eastern side of Paramount seamount at approximately 600 meters depth was chosen based on multibeam, backscatter and current data. The goal was to characterize the biological communities on the Seamount, and make comparisons with 2010 INDEX expedition to the Sangihe Talaud region in Indonesia.

Description of the Dive:

The ROV Little Hercules began this dive at approximately 800 meters depth and moved upslope to explore the rim of the seamount. We transited to the west toward a large promontory 8 meters away. As we moved upslope, there was an increase in abundance of organisms and a general trend of high abundance of corals, but with low diversity. The summit margin was characterized by a high abundance of white brachiopods and pink brittle stars in the 400 meter shallow zone along the summit margin. Multiple ophiuroids. brachiopods, and white sponges were found on a sediment-covered seafloor with occasional isolated cobbles and small boulders and brittle stars were observed on a red rocky substrate, hypothesized to be fossil shallow-water corals.



Representative Photos of the Dive



The deep slope of the seamount zone harbors a high abundance of primnoid and paramuricid gorgonians, antipatharian black corals, and their galatheid crabs associates.



The shallow zone harbors a high diversity of different species of small primnoid gorgonians, bubblegum octocorals, and antipatharian black corals. High abundances of ophiuroid brittle stars occupy the surface of red minerals, which presumably are the remnants of an ancient shallow-water coral reef.

Please direct inquiries to:

NOAA Office of Ocean Exploration & Research 1315 East-West Highway (SSMC3 10th Floor) Silver Spring, MD 20910 (301) 734-1014