

**NOAA OE funded efforts associated with WHOI Deep
Submergence Facility (DSF) assets**

**DESSC
May 25, 2006**

Catalina Martinez



Image courtesy of the MTS 04 science team, IFE, URI/IAO

NOAA OE Education and Outreach

- Reaching out in new ways to stakeholders to improve ocean literacy
- 10% of program funds support a diverse program
- Efforts focused around exciting expeditions
- Work with traditional and non-traditional programs
- Striving for equity in access

NOAA Ocean Explorer Web Site

oceanexplorer.noaa.gov

Web based alternatives to deliver information and products

Live Expedition Coverage

- Daily logs, videos, images
- 'Ask the Scientist' live link
- Telepresence
- Podcasts



Explorations | GALAPAGOS: Where Ridge Meets Hotspot

GALAPAGOS: Where Ridge Meets Hotspot

December 3, 2005 - January 10, 2006

In December 2005 and January 2006, an interdisciplinary team of 38 scientists will venture to a deep sea site north of the Galapagos Islands to conduct research on the Galapagos Spreading Center, which is part of the global mid-ocean ridge. The global mid-ocean ridge is a giant volcanic seam

Diagram of the eastern equatorial Pacific showing the location of the Galapagos Spreading Center and Galapagos Islands. Deeper regions (>3500 m deep) are blue on this map. The Galapagos Spreading Center is an east-west ridge that rises above the surrounding seafloor, and is most shallow (depth ~1600 m) north of the Galapagos Islands. Click image for larger view and image credit.

[Mission Plan](#)

[Education](#)

[Mid-Ocean Ridge](#)

[Ask an Explorer](#)

[January 10 Log](#)

[January 7 Log](#)

[January 5 Log](#)

[January 3 Log](#)

[January 1 Log](#)

Explorations | Expedition to the Deep Slope | Logs

Specializing in Bacteria

May 20, 2006

Jiljan Peterson
Graduate Student
Max Planck Institute for Marine Microbiology, Bremen, Germany

27°22.39 N
090°34.53 W

The hands-on work begins some time in the afternoon when the deep-sea submersible Alvin is brought back on deck. We have to get our samples off the sub and into cold seawater quickly - these animals have been pulled up from the cool 4 °C of the ocean floor, and will perish in the heat on deck. I am always excited when I look into the collection boxes and see that the Alvin has brought back *Bathymodiolus*, the chemosynthetic mussels that inhabit cold seeps in this area. In fact, *Bathymodiolus* can be found at vents and seeps worldwide, which makes this a great system for studying biogeography.

Scientists discovered several communities of football-size mussels, *Bathymodiolus brookeri*, at Mississippi Canyon 853 during ALVIN dive 4178. This is the biggest *B. brookeri* specimen ever collected. Upon close inspection, you may be able to see tubans from the oil that is sometimes found in the sediment around seeps. Click image for larger view and image credit.

[Mission Plan](#)

[Education](#)

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[Oil and Gas](#)

[Hard grounds](#)

[Microbiology](#)

[Ask an Explorer](#)

[May 20](#)

[May 17](#)

[May 16](#)

[May 15](#)

[May 14](#)

ridge lie directly above oceanic hotspots, earth's mantle and eruptive islands.

pagos Acoustical, 400 km-long section of a mantle plume that has

ere our surveys will al vents and other fine-

NOAA Ocean Explorer Web Site

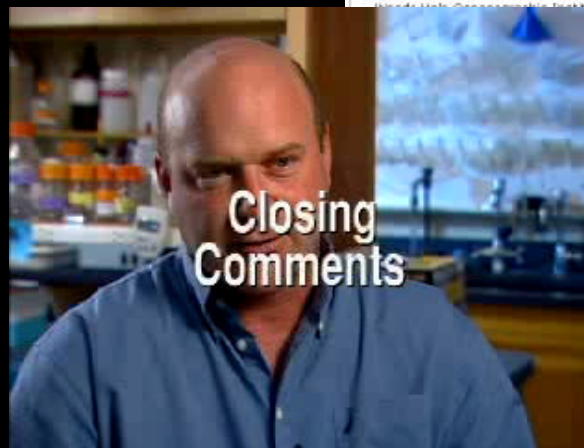
oceanexplorer.noaa.gov

Web based alternatives to deliver information and products



Virtual Participation

- Virtual Workshops
- Online courses
- Ocean AGE Careers
- List Serve



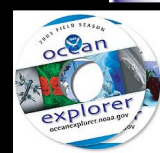
NOAA Ocean Explorer Web Site

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Web based alternatives to deliver information and products

Expedition Education Module (EEM)

- Additional resources for educators
- National Curriculum and CD ROMs
- Lesson Plans



Engage Scientists in Outreach and Education

Wide range of effort and resources

- Professional Development Institutes
- Teachers at Sea
- Classroom visits



Engage Scientists in Outreach and Education

Wide range of effort and resources

- Satellite phone calls from sea
- Shipboard tours
- Media events

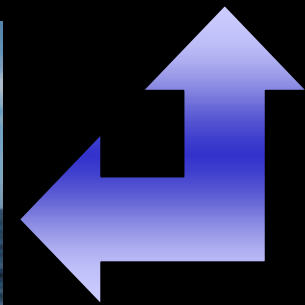


Photo by Z. Hoyt GOA02



FY 06 Efforts

GalAPAGoS Expedition (Galapagos Acoustical, Plumes, and Geobiological Surveys)

PI: Rachel Haymon, Univ of CA

Dates: December 3, 2005 – January 10, 2006

Expedition: R/V *Thomas G. Thompson* with DSL-120 and *Medea*

OE Education and Outreach Efforts: Signature Web coverage with Podcasts, 3 Lesson Plans, satellite phone press conference, several media articles



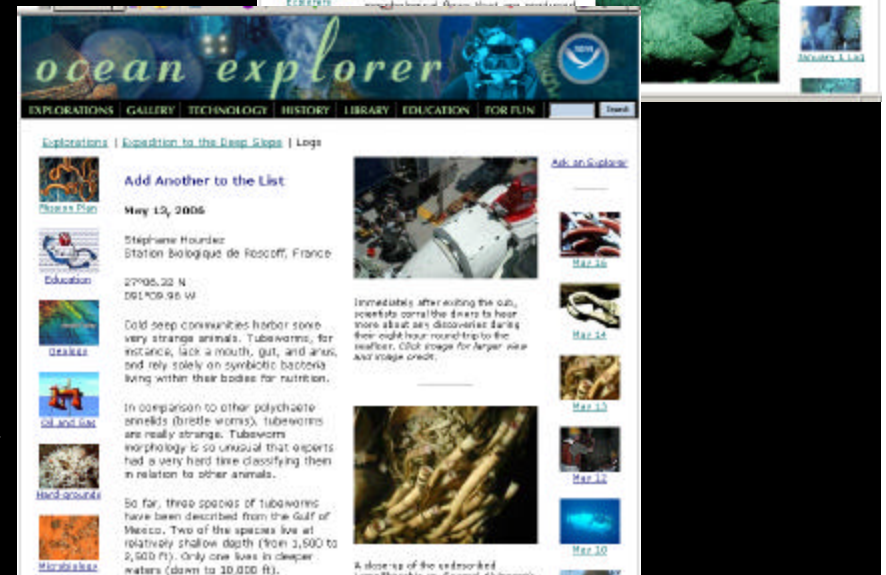
Expedition to the Deep Slope

PI: Chuck Fisher, Penn State

Dates: May 7 – June 2, 2006

Expedition: R/V *Atlantis* with the DSV *Alvin*

OE Education and Outreach efforts: Signature Web coverage, EEM with 8 Lesson Plans, satellite phone media event planned for end of cruise



FY 06 Efforts

Ancient Deep Water Shipwrecks in Greece

PI: Brendan Foley, WHOI in collaboration with HCMR (Greece)

Dates: June 21 – July 5, 2006

Expedition: Greek R/V *Aegaeo* using AUV SeaBED

OE Education and Outreach Efforts: Signature Web coverage, satellite press conference and press release scheduled

Ring of Fire

PI: Bob Embley, NOAA VENTS/PMEL

Dates: April 18 – May 13, 2006

Expedition: R/V *Melville* with *Jason/Medea*

OE Education and Outreach efforts: Signature Web coverage with Podcasts, EEM with 8 Lesson Plans, news release planned May 25 with associated video



Video courtesy of Submarine Ring of Fire 2006 Exploration, NOAA Vents Program

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Carl approaches with some caution the prospect of a career in ocean exploration.