

The 2007 DOI Cooperative Conservation Award

Year 1: *Alvin* cruise, NOAA OE Signature Expedition, *Expedition to the Deep Slope 2006*

Year 2: Jason II cruise, NOAA OE website, *Expedition to the Deep Slope 2007*

Project Title: *Deepwater Program: Investigations of Chemosynthetic Communities on the Lower Continental Slope of the Gulf of Mexico*

Location: Gulf of Mexico

Project Summary

Three ocean science federal agencies, Minerals Management Service (MMS) and National Oceanic and Atmospheric Administration's Office of Ocean Exploration (NOAA OE) have partnered under the auspices of the National Oceanographic Partnership Program (NOPP) (and joined by U.S. Geological Survey) to bring together numerous cooperating groups including private companies, five universities, and individual leading scientists from both the U.S and Europe to explore and study incredible new biological communities in the deepest parts of the Gulf of Mexico. This cooperative facilitation through the NOPP partnership program greatly enhanced the achievement of the mission to discover and begin to understand ultra deepwater biological communities in the Gulf not previously known.

The goals of the project focused on the exploration and study of sensitive biological communities below a depth of 3,300 ft. These included not only remarkable chemosynthetic communities but also deepwater coral habitats in the deepest parts of the Gulf of Mexico where very little was known. The partnership support from NOAA OE, closely matching the funding provided by MMS, made possible the use of state of the art submergence facilities including the only human-occupied research submersible capable of reaching the deepest parts of the Gulf, the *Alvin*. The study brought together scientists from six universities in the U.S. and three countries in Europe through a private company. Educational outreach and classroom participation was a major component of the project as well. NOAA OE created a "signature expedition" internet site that was live during the first field effort and classroom lesson plans were created specifically for this mission that will continue to instill wonder, inspiration and motivation to children in the future. All participants were leaders in their fields and dedicated to the understanding and stewardship of the unique habitats that were the subject of the project.

The largest reserves of oil and gas in United States lie under the Gulf of Mexico. As exploration reaches into the deepest parts of the Gulf, MMS is also responsible for stewardship of that environment. The primary project mission of MMS was to study these habitats for the development of an adaptive approach to the management and protection of all sensitive biological habitats discovered concurrently with energy development in the deep Gulf. The discoveries and results of this study will be directly utilized to create or modify existing regulatory policies that require avoidance of a variety of biological habitats including chemosynthetic communities and deep coral habitats. This project will expand understanding of sensitive biological communities throughout all depths of the Gulf of Mexico.

Examples of Key Partners

Minerals Management Service
National Oceanic and Atmospheric Administration Office of Ocean Exploration
U.S. Geological Survey
TDI Brooks International Inc.
Penn State University
Louisiana State University
Harvard University
Texas A&M University-Corpus Christi
University of Georgia
Scientists from France, Germany and Austria