

U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

Technical Announcement

December 23, 2002 Contact: Barney Congdon

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Deepwater Program: Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology -- Year 2: Interim Report

OCS Study MMS 2002-063

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, Deepwater Program: Northern Gulf of Mexico Continental Slope Habitats and Benthic Ecology - Year 2: Interim Report.

This is the first comprehensive study of the deep Gulf since the MMS "Northern Gulf of Mexico Continental Slope Study" (NGOMCS). The new study was designed to test several hypotheses based on an improved understanding of the geochemistry and physiography of the slope. The report is presented in a single technical volume, which covers activities and preliminary results through a three-year field program. This report provides insight into program objectives, approaches, methods, and study design. The three years of deep-sea cruises on the R/V *Gyre* provided all samples and data for analysis. Station depths ranged from 300 to 3,800 m and were distributed all across the Gulf.

Investigators represented the Department of Oceanography and the Geochemical and Environmental Research Group at Texas A&M University, with participants from five other academic institutions.

For the descriptive studies in Year 1, the sampling was limited to traditional sampling devices. The study was designed to investigate community structure and function in all three MMS Planning Areas as they vary with sediment properties, chemical contaminants, and water-column chemistry and hydrography. Years 2 and 3 resampled selected stations and added several new ones in Mexican waters (in Year 3 only). This study will provide important information on deep benthic community ecology and structure, and changes with physical and geochemical character benthic habitats.

Present preliminary findings show distinct differences from station to station, including community anomalies (e.g., numbers, types, and densities of macrofauna) and geochemical differences (e.g., organic carbon and sulfate reduction rates). Respirometry rates using a "benthic lander" were added in Years 2 and 3 for comparisons of community function at selected stations proven to have distinct population differences. Patterns of faunal zonation with depth were investigated as well.

You can obtain copies of the report from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$14.00 by referencing OCS Study MMS 2002-063. You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

Minerals Management Service Gulf of Mexico OCS Region Public Information Office (MS 5034) 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394 Telephone requests may be placed at (504) 736-2519 or 1-800-200-GULF or FAX: (504) 736-2620 U.S. Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, Virginia 22161 (703) 487-4650 or FAX: (703) 321-8547 Rush Orders: 1-800-336-4700

MMS is the federal agency in the U.S. Department of the Interior that manages the nation's oil, natural gas and other mineral resources on the outer continental shelf in federal offshore waters. The agency also collects, accounts for, and disburses mineral revenues from federal and Indian leases. These revenues totaled nearly \$8 billion last year and more than \$110 billion since the agency was created in 1982. Annually, nearly \$1 billion from those revenues go into the Land and Water Conservation Fund for the acquisition and development of state and federal park and recreation lands.

-MMS-GOM-MMS's Website Address: http://www.mms.gov

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