

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

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Management Applicability of Contemporary Deep-Sea Ecology and Reevaluation of Gulf of Mexico Studies

OCS Study MMS 2001-095

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, Management Applicability of Contemporary Deep-Sea Ecology and Reevaluation of Gulf of Mexico Studies. The study reviews the state of knowledge concerning deep-sea ecology and management techniques used to protect the ecosystems. A status review of contemporary deep-sea ecology found four areas of basic research especially relevant to management. First, the sensitivity of deep fauna to impact must be known. Second, the deep-sea biota is not uniform from the 200 m upper limit of deepwater to the base of the continental slope. Third, the processes that maintain a high species diversity in the deep-sea must be known if impacts are to be avoided. Fourth, if food is truly limited in the deep sea, then interruption of the processes of supply and utilization may be the most sensitive process of the ecosystem. Most information about the Gulf of Mexico typical deep-sea benthos was provided from two studies, the long-term exploratory sampling of Pequegnat and the shorter-term transect sampling of the Northern Gulf of Mexico Continental Slope (NGMCS) study. The former focused upon megafauna and proposed zoogeographic divisions on the basis of biotic and abiotic data. The latter focused upon macrofauna and addressed the validity the zoogeographic patterns through faunal analyses. A third study examined chemoautotrophic communities, which represent a distinctive ecosystem of high biomass, low species richness, specialized fauna, and partial isolation from the detritus-based food web of the surrounding deep sea.

You can obtain copies of the report from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$10.00 by referencing OCS Study MMS 2001-095. 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 <u>disburses mineral revenues</u> 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

Return to Technical Announcements