

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

March 2005

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Interactions Between Migrating Birds and Offshore Oil and Gas Platforms in the Northern Gulf of Mexico: Final Report

OCS Study MMS 2005-009

The Minerals Management Service (MMS), Gulf of Mexico OCS Region , announces the availability of a new study report, *Interactions Between Migrating Birds and Offshore Oil and Gas Platforms in the Northern Gulf of Mexico: Final Report* .

Year after year, millions of birds migrate during the spring and fall seasons. During these migrations, birds travel over the Gulf of Mexico, using oil and gas platforms as stopover sites. The present study was conducted over a three-year period on 13 platforms located in offshore waters of the Gulf of Mexico and sought to address the following: 1) Which species are migrants; 2) Whether there are specific migration routes; 3) When migrants use platforms for stopovers and how the timing of platform use relates to seasonal and diel timing and weather;

- 4) How many migrants use platforms as stopovers and how that number relates to the total trans-Gulf migration traffic aloft; 5) What the condition of birds that use platforms is and what determines how long they stay; 6) Whether migrants use platforms in predictable ways; and
- 7) How many migrants that stop on platforms depart successfully as opposed to how many die, and why some birds die.

Conventional wisdom had been that spring trans-Gulf migration involved a straight-line, shortest-distance flight from the Yucatan Peninsula to the upper Gulf Coast. Results of the study indicate migration is more complex and profoundly influenced by weather. In spring and fall, variation in the direction of travel may be influenced by wind. Many species may select days of travel when tail winds prevail and correlate with synoptic weather patterns over the continental United States. Favorable weather patterns may persist for more than one day. Small differences in wind direction between favorable synoptic weather patterns may correlate with subtle differences in migration routes of many species if they are steered at least somewhat by prevailing wind directions.

The study found that platforms appear to be a suitable stopover habitat for most species, and most of the migrants that stopped over on the platforms benefited from their stay, particularly in spring. The migrants used the platforms in nonrandom ways and the structures facilitated the trans-Gulf migration by providing "stepping stones" across the Gulf of Mexico.

This report is available only in compact disc format. The disc is available from the Minerals Management Service, Gulf of Me xico OCS Region, at a charge of \$15.00 by referencing OCS Study MMS 2005-009. The report may be ordered through the Minerals Management Service's on-line ordering system at http://www.gomr.mms.gov/WebStore/front.asp. 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

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

(504) 736-2519, 1-800-200-GULF, or FAX: (504) 736-2620

MMS, part of the U.S. Department of the Interior, oversees 1.76 billion acres of the Outer Continental Shelf, managing offshore energy and minerals while protecting the human, marine, and coastal environments through advanced science and technology research. The OCS provides 30 percent of oil and 23 percent of natural gas produced domestically, and sand used for coastal restoration. MMS collects, accounts for, and disburses mineral revenues from Federal and American Indian lands, with fiscal year 2004 disbursements of around \$8 billion and more than \$143 billion since 1982. The Land and Water Conservation Fund, which pays for acquisition of state and federal park and recreation land, gets nearly \$1 billion a year.

MMS Main Website: www.mms.gov
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