

STUDY TITLE: Marine Birds, Mammals, Turtles, and Endangered Manatee - South Atlantic and Gulf of Mexico Pilot Study

REPORT TITLE: Marine Mammals of the Southeastern United States Coast and the Gulf of Mexico

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APPLICABLE PLANNING AREAS: South Atlantic; Straits of Florida; Eastern Gulf of Mexico; Central Gulf of Mexico; Western Gulf of Mexico

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PROJECT MANAGERS: D. Smith

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KEY WORDS: South Atlantic; Straits of Florida; Eastern Gulf; Central Gulf; Western Gulf; Florida; Texas; Louisiana; endangered species; marine mammals; cetaceans; pinnipeds; synthesis; captures; aerial observations; strandings; sightings; abundance; census

BACKGROUND: Information relating to population size of marine mammals is poorly understood, therefore, adequate censusing is needed. Many marine mammals are listed as endangered or threatened, which emphasizes the need to acquire accurate information to determine their biological and ecological status. Under the sponsorship of the Bureau of Land Management, a pilot study to census the marine vertebrates of concern within the Gulf of Mexico was initiated. The present study utilized available census and location information to summarize the presence and distribution of marine mammals in the South Atlantic and Gulf of Mexico.

OBJECTIVE: To synthesize all available data and literature about cetaceans and pinnipeds within the study area.

DESCRIPTION: The study area includes the coast and adjacent continental shelf of the United States from Cape Hatteras, North Carolina to the Florida Keys; and from the Florida Keys to the United States/Mexico border near Brownsville, Texas. This report

synthesized information concerning all cetaceans and pinnipeds within the study area. Information was obtained from published literature, records of Smithsonian Institution programs, museum records, unpublished records, and aerial sightings from 1979.

Aerial sightings were from a pilot study to conduct preliminary aerial inventories of marine mammals from the Gulf of Mexico. Surveys were conducted in four study areas: Naples, Florida; Clearwater, Florida; Corpus Christi, Texas; and Brownsville, Texas. Each area encompassed shoreline borders approximately 111 km and extended 221 km perpendicular to the shoreline. Sightings were made by professional cetologists. A computerized data management system was used to tabulate and categorize all data. Observations were listed with accompanying information: species identification; geographic location; type of observation (e.g., stranding); information source; and nature of observation (i.e., number of individuals). Species accounts were prepared for each cetacean and pinniped sighted. Information such as common and scientific names, specific description, distribution, seasonal movements, status and abundance, life history, and records of occurrences was given for each species.

SIGNIFICANT CONCLUSIONS: Published information is a substantial source of observations, however, reliability of species identification, especially from taxonomically complex groups, is dubious. Few data regarding seasonal distribution of cetaceans and pinnipeds are available because observations are sporadic and in many cases no sighting date is listed. Abundance of considered species is rarely known and can only be inferred; for this reason, there is the need for adequate censusing of marine mammals in the study area. Information concerning marine mammal life histories and biology is extremely limited. This report serves as a compilation of information concerning cetaceans and pinnipeds, although numerous data gaps still exist.

STUDY RESULTS: Published sources provided 1,256 observations (49.3% of total) of cetaceans and pinnipeds in the study area. The Smithsonian's Scientific Event Alert Network and Marine Mammal Salvage Program provided 518 observation records. Museum records (some published) provided 491 observations.

A total of 2,034 observations of cetaceans and pinnipeds were recorded. Of these observations, 1,220 represented strandings, 559 were sightings, and 255 were captures. There were 1,132 individual sightings, 560 multiple individual sightings, and 342 instances that individual numbers could not be determined.

Data were biased by concentrated observation efforts in selected areas. Most observations (60%) have been recorded from the Atlantic portion of the study area and virtually no observations were available from the Caribbean. Twenty-nine cetaceans and four pinnipeds were observed. Thirty-two of these species have been stranded. Twenty of these species represented the normally occurring cetacean/pinniped fauna of the study area. The four most common species were the pygmy sperm whale *Kogia breviceps*, the short-finned pilot whale *Globicephala macrorhynchus*, the Atlantic bottlenose dolphin *Tursiops truncatus*, and the harbor porpoise *Phocoena phocoena*. Only 12% of the strandings involved live animals. Forty-two mass (five or more

individuals) strandings were recorded. Florida had the most recorded strandings due to intensive marine mammal activity and the large coastline.

Only 17 of the 33 species have been sighted. These sighting records come from both incidental observations by untrained observers and specific attempts by trained cetologists to sight selected species. Captures constituted 12.5% of the study area observations.

STUDY PRODUCT: Schmidly, D. J. 1981. Marine Mammals of the Southeastern United States Coast and the Gulf of Mexico. A final report by the U.S. Fish and Wildlife Service for the U.S. Department of the Interior, Bureau of Land Management Gulf of Mexico OCS Office, New Orleans, LA. NTIS No. PB81-212508. FWS/OBS-80/41. Contract No. 14-12-0001-29089. 165 pp.