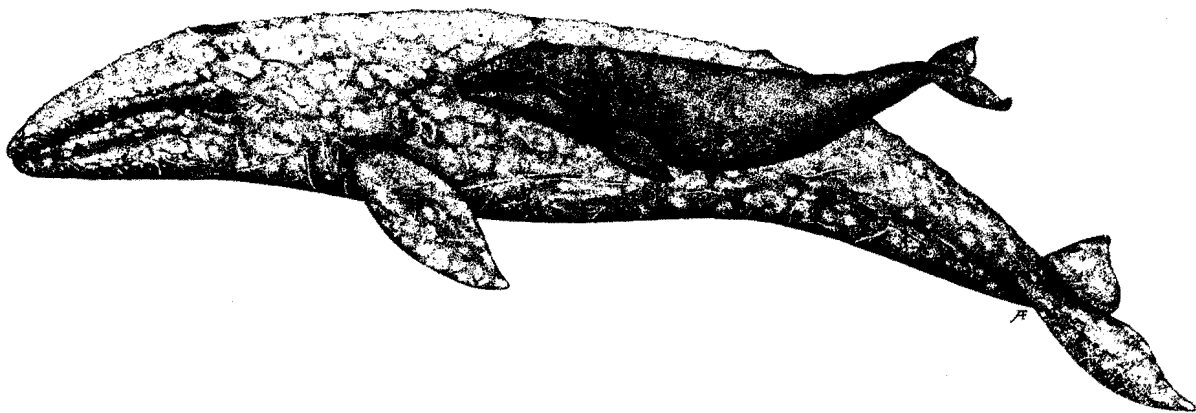


* DISTRIBUTION AND FEEDING OF WALRUSES IN BRISTOL BAY, ALASKA. Lloyd F. Lowry* and Francis H. Fay, Alaska Department of Fish and Game, Fairbanks, Alaska 99701, and Institute of Marine Science, University of Alaska, Fairbanks, Alaska 99701.

A study was conducted to determine the possible interactions between walruses (Odobenus rosmarus) and a proposed surf clam (Spisula polynyma) fishery in the southeastern Bering Sea. Distribution and abundance of walruses were determined from 12 systematic aerial surveys flown between April 1980 and May 1981. Food items were identified from stomachs of animals collected in southern Kuskokwim Bay in March 1981 (n=15) and southern Bristol Bay in May 1981 (n=4). Walruses were abundant in Bristol Bay from April to November and were scarce in January to March. They were most abundant in the clam fishery zone in April and were present in smaller numbers in March and May. Principal foods consumed were surf clams and tellins (Tellina sp.). Calculations indicate that in 1980 walruses in the proposed clam fishery area consumed 2-4 times the estimated sustainable yield of the clam resource, while in 1981 clam consumption was about 1/3 as great. Walrus predation, therefore, has a major effect on the clam stock and the possible yield for a fishery. A fishery for surf clams in this area would probably have little impact on the overall food supply of walruses using Bristol Bay.

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ABSTRACTS



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