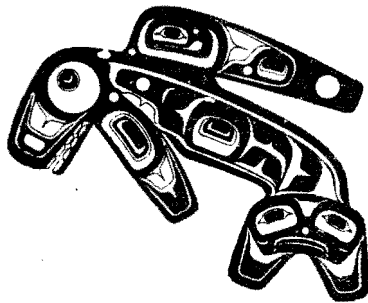


INTERPRETATION OF THE MOVEMENT OF A POLAR BEAR TRACKED VIA SATELLITE.
Fred E. Sorensen, Jr.*, and Jack W. Lentfer, National Fish and Wildlife
Laboratory, 4454 Business Park Boulevard, Anchorage, Alaska 99503 and
Department of Fish and Game, State of Alaska, 210 Ferry Way, Juneau,
Alaska 99801

In the past it has been difficult to obtain long term movement data on polar bears using standard radio equipment. In June of 1977 we attached a satellite transmitter to a mature female polar bear north of Point Barrow, Alaska, using a collar with a supporting harness. The transmitter sent signals to the Nimbus 6 satellite every fourth day for 13 months. No visual resightings of the bear were made. The resulting track was 1500 km from the release site with a significantly greater rate of movement in the summer-fall than in the winter-spring ($t = 7.09$, $p < .001$). There was no significant difference in the number of signals received. Movement of the bear was similar to the general ice movement in the area. The most probable interpretation is that the bear traveled to and denned in an area northwest of Wrangel Island, but other alternative explanations cannot be ruled out at this time.

ABSTRACTS FROM PRESENTATIONS AT THE
THIRD BIENNIAL CONFERENCE OF
THE BIOLOGY OF MARINE
MAMMALS



October 7-11, 1979

The Olympic Hotel, Seattle, Washington