

ANNUAL VARIATION IN BODY TEMPERATURE OF GRIZZLY BEARS

Erich H. Follmann and L. Michael Philo
Animal Research Facility
Naval Arctic Research Laboratory
Barrow, Alaska

Harry V. Reynolds
Alaska Department of Fish and Game
Fairbanks, Alaska

ABSTRACT

Four grizzly bears (*Ursus arctos*) were captured in the northern foothills of the Brooks Range approximately 200 miles south of Barrow. The bears were instrumented with temperature-sensitive radio-transmitters in the 151 MHz range. The transmitters were placed in the abdomen of three bears and under the dorsal subcutaneous tissue of the neck in one bear. Bears were monitored from June 1977 through March 1978 with an aircraft equipped with a pair of three-element yagi antennas.

During the active season internal body temperatures of bears ranged from 36.3° to 38.6° with a mean of 37.4°C. During the denning period (October to April) the internal body temperature of bears cooled. Temperatures recorded from bears in dens ranged from 31.8° to 35.3° with a mean of 33.5°C. Temperature changes of radio-collars on bears in dens suggested that the animals moved within the dens. Body temperature changes could not be correlated with these movements. There is evidence that movement of bears during the active season resulted in elevated body temperatures.

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200 YEARS AND
200 MILES OF CHANGE

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