

Journal Publications

Case R.L., and Buckland L. 1998. **Reproductive characteristics of grizzly bears in the Kugluktuk area, Northwest Territories, Canada.** *Ursus* 10:41-47.

Abstract

Reproduction and survival of grizzly bears (*Ursus arctos*) were studied in the area southwest of Kugluktuk, Northwest Territories, between 1988 and 1995. Thirteen radiocollared female grizzly bears were monitored for up to 7 years in tundra habitat southwest of Kugluktuk. Adult survival was high (98%); the only 2 adult female mortalities were from intraspecific predation. Mean litter size was 2.03 cubs <1 year old ($n=19$), mean birth interval was 2.6 years ($n=8$), and the annual natality rate was 0.87 cubs/adult female. Mean reproductive interval between successful litters was 3.03 years ($n=6$). First cub survival was 81%, and second-year cub survival was 76-84%. Age at first parturition averaged 8.7 years ($n=6$), which is later than in other northern grizzly bear populations. However, growth curves indicated that maturity was not delayed by nutrition. The estimated finite rate of population increase (λ) was 1.026. These results indicate that the Kugluktuk grizzly bear population can sustain a small harvest provided that females are protected.