WOLVERINES TAKE TO THE HILLS ON THE KENAI PENINSULA

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Abstract: Wolverines are typically thought of as wilderness animals associated with mountainous terrain. However, mountains are not necessarily a prerequisite for wolverine habitat. For example, Inupiat Eskimos in Alaska have harvested appreciable numbers of wolverines from the low-lying arctic coastal plain. Why then do wolverines have the reputation for being a "mountain animal" over much of its geographic range? The Kenai Peninsula in Alaska provides an excellent area in which to examine this question. I used wolverine harvest statistics from 1961 to 1993 to examine wolverine habitat selection on the Kenai Peninsula. Alaska Department of Fish and Game bounty and sealing forms and University of Alaska necropsy forms provided data on trappers and harvest locations. I plotted over 560 locations of harvested wolverines on 1:250,000 topographic maps. I examined the following factors that might have influenced the distribution of wolverine harvests on the Kenai Peninsula: (1) food availability, (2) dispersal, (3) trapping pressure, (4) interspecific competition, and (5) physiographic and climatic features. Approximately 8% of the wolverine harvest from 1961 to 1993 came from the lowland areas. There is no convincing evidence that the availability of food limited the number of wolverines in the lowlands. Reduced opportunity for dispersal and trapping pressure could have influenced the number of wolverines moving into the lowlands; however the number of wolverines harvested on the lowlands has not changed over the last 3 decades despite apparent changes in wolverine numbers on the rest of the Kenai Peninsula. Harvest records and recent track surveys indicate that wolverines inhabit the areas adjacent to the lowlands and, therefore, are available for dispersal onto the lowlands. There are considerable differences in climatic conditions between the lowlands and mountains. Wolverines are especially adapted for life in snow-covered environments. Wolverines use snow tunnels in large snowdrifts from early winter through early summer for protection from predators and inclement weather, for caching food, and for natal dens and rendezvous sites. Female wolverines also use snow tunnels for respite from males during the breeding season. I suggest that the climatic differences between the lowlands and the mountains are an important factor affecting wolverine distribution and, consequently, harvest distribution on the Kenai Peninsula. Therefore, the current trapping regulations closing GMU 15A to wolverine trapping is unlikely to result in significant increases in wolverine numbers in the lowland area north of the Kenai River.

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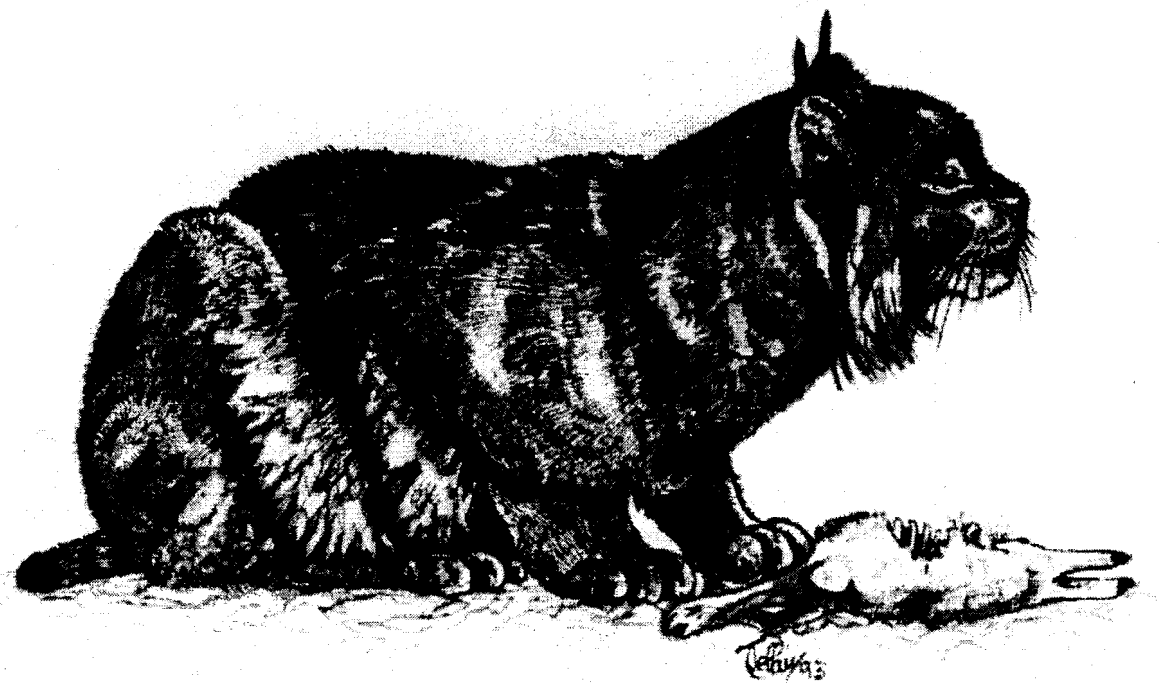

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