

## Wolf predation on caribou: The myth of the Nelchina herd.

Victor Van Ballenberghe<sup>1</sup>

<sup>1</sup>Institute of Northern Forestry, 308 Tanana Drive, Fairbanks, Alaska, 99701. U.S.A.

**Rangifer**, Special Issue No. 1, 1986: 374

The Nelchina caribou (*Rangifer tarandus*) herd of southcentral Alaska erupted, crashed, and increased again during the period 1950 to 1981 (see: Van Ballenberghe, V. 1985. — Wolf predation on caribou: The Nelchina herd case history. *J. Wildlife Management* 49: 711 - 720). Annual survival of calves, an important determinant of population trends, was high during periods of increase but low when the herd peaked and during some years of the decline. Poor survival of calves and adults, the former related to winter severity, the latter due to hunting mortality, contributed importantly to the decline. It is unlikely that wolf (*Canis lupus*)

control triggered the eruption nor did wolf predation reduce calf survival at the herd's peak. Predation did not prevent caribou from increasing after the crash; despite a peak in wolf numbers and a 3-fold decline in prey biomass, ungulate: wolf ratios were still too high for predation to have much impact. Ingress and egress were unimportant in the population dynamics of this herd. Previous publications stressed the role of wolf predation as causing the crash of this herd and gave rise to the myth that predation was an important regulating factor for the Nelchina Herd.