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SURVIVORSHIP FROM BIRTH TO TWO YEARS IN THE DELTA CARIBOU HERD

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Abstract: The literature on natural mortality of barren-ground caribou (Rangifer tarandus) shows that the calf cohort commonly experiences ≥50% mortality. The literature is limited regarding natural mortality rates of "adult" caribou, but shows that rates are highly variable and generally are less than half that of the calf cohort. To realistically model caribou population dynamics, and hence understand and intelligently manage caribou populations, it is essential to ascertain age-specific mortality rates. Lacking empirical estimates of mortality rates for the 5-12 month and 12-24 month old cohorts, modelers have commonly assumed rates that were intermediate between rates for calves younger than 5 months and rates for adults. This paper discusses the pattern of survivorship between birth and 24 months of age. From 1979 through 1987 the mean mortality rate from birth to October was 49.7% (±14.2 SD) with a range of 21-65%. However, natural mortality rates from 5 to 24 months of age differed little from those for caribou >24 months old. Natural mortality was higher for males than females for all age cohorts.

Key Words: calf cohort, caribou, Delta Herd, mortality rate, survivorship, yearling cohort.

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