

The Sixth North American Caribou Workshop,
Prince George, British Columbia, Canada,
1-4 March, 1994.

Abstracts

A retrospective review of disease diagnoses in caribou from Canada

Trent K. Bollinger & Dwight Welch

Canadian Cooperative Wildlife Health Centre, Department of Veterinary Pathology, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0.

Abstract: We compiled reports on 418 caribou specimens submitted to veterinary diagnostic laboratories and wildlife agencies from across Canada. The earliest record was from 1969; however, the majority were from 1987 to the present. Most submissions were tissues from huntershot animals. *Brucella suis* and *Brucella* sp. (untyped) were the most common bacterial pathogens isolated, accounting for 69 and 16 cases respectively. Parasitic conditions were also common. Besnoitiosis was diagnosed in 40 cases from various locations in the Northwest Territories, northern British Columbia, Alberta, Saskatchewan and Manitoba. Cysticercosis was diagnosed in 49 cases. Fibropapillomas, likely of viral origin, were present in 5 cases. Individual cases of chondrosarcoma, pulmonary carcinoma and renal adenoma were also reported. Deficiencies in data collection were also noted; in 43% of cases the age of animal was not reported and in 42% of submissions the sex of the animal was not indicated. The Canadian Cooperative Wildlife Health Centre has established a central repository for disease diagnostic reports which will be useful in identifying disease problems and geographic occurrence of disease in caribou. A standardized reporting format which includes accurate information on location, age, and sex of animal is required.

Rangifer, Special Issue No. 9, 395

Caribou calf weight gain in relation to habitat use on summer range

Brad Griffith, Noreen E. Walsh & Thomas R. McCabe

US Fish and Wildlife Research Centre, 101-12th Ave., Box 20 Fairbanks, Alaska USA 99701.

Abstract: We estimated the relationship between daily weight gain of caribou calves and their proportional use of 5 habitats on the Arctic National Wildlife Refuge coastal plain during 1992 and 1993. Calves (1992, n=80; 1993, n=72) were captured, weighed and equipped with radio-collars when approximately 1 day old. These calves were recaptured with netguns and reweighed at approximate ages of 3 weeks (1992, n=62; 1993, n=61), and 6 weeks (1992, n=12; 1993, n=15). Proportional habitat use between weighings was estimated from aerial relocations of the collared calves. Daily gain was higher during the first 3 week period (1992, \bar{x} = 0.380 kg/D, SE = 0.051; 1993, \bar{x} = 0.441 kg/D, SE = 0.064) than during the second 3 week period (1992, \bar{x} = 0.344 kg/D, SE = 0.056; 1993, \bar{x} = 0.193 kg/D, SE = 0.091) in each year. Daily gain in each 3 week period differed between years. Habitat use differed between the first and second 3 week periods and between years. Weight gain was associated with proportional habitat use in each 3 week period and in each year, but the relationships between daily gain and habitat use varied between the two 3 week periods and between years. Positive, neutral, or negative relationships between daily gain and proportional habitat use may be used to rank habitats as having high, medium, or low value, respectively. Our results suggest that the value of a habitat can change within and between years.

Rangifer, Special Issue No. 9, 395