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WOLF AND BARREN GROUND CARIBOU RELATIONSHIP
Headwaters of the Gulkana and Susitna Rivers,

by L. L. Huffman

The caribou population in the area south of the Alaska Range, extending north and east to the Wrangell Mountains and embracing some 9,000 square miles of varying topography, is commonly called the Nelchina Herd.

In the summer and fall of 1928 this herd was estimated at about 45,000 animals, or at the maximum population peak. The previous population peak was in the years 1906 through 1910. These latter dates along with other caribou population information, were obtained from old time native residents of the area. In the fall of 1929 I personally observed thousands of caribou on the flats east of Summit Lake and also there were numerous scattered bands between Gulkana and Summit Lakes.

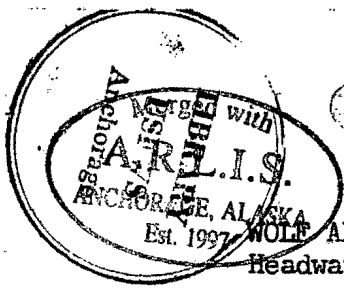
During the next few years the population appeared to remain stable with small bands showing from Sourdough, along both sides of the Richardson Highway at Hogan Hill and north to Rapids.

There was a huge migration or movement of caribou out of this area during the years of 1928 to 1930. Their directional movement was north and west, through Isabella Pass and moving west over the flats of the Delta River. After reaching the Delta River they moved northwesterly, crossing Gulkana River and continued in a direction that indicated they would eventually join up with the Alaska Yukon herd.

On Reserve

From 1935 to the year 1945, the Nelchina Herd appeared to be made up of scattered bands with no real large concentration of animals showing. The number of animals in these bands numbered from 25 to 300. They moved about in both the open tundra and forested areas. Weather conditions, available food supply, and probably flies and mosquitos, were contributing

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Nelchina Caribou Evaluation

factors to their movements. From information I obtained from various trappers of this area and from my own observations, it was estimated that from the above mentioned dates the caribou numbers had declined from a peak of about 40,000 animals to 2,500 or 3,000 head. There was a noticeable increase in animals from 1944 until 1949. The small herds became more numerous and caribou appeared in areas that had heretofore been vacant of same.

From 1950 through 1956 the bands developed into herds of considerable numbers with concentrations of thousands of animals moving about the area in various directions. Estimates as to total numbers were variable. I likened the caribou population of these latter dates mentioned, to be about the same as the peak years of the late 1920's, or around 30,000 animals. The U. S. Fish and Wildlife Service had made aerial surveys of the Nelchina Herd the past few years and their estimates are close to 40,000 head. The incidence of twinning among caribou is considered rare, so when we consider a population increase from about 3,500 animals to an estimated 40,000 animals in the span of a few years, a big question arises of how this huge increase occurred. An error in the counting technique could have been made, or the herd could have been augmented by recruits from neighboring name herds. The barriers surrounding the habitat of the Nelchina Herd are not favorable for the migration of animals into the area, and no reports have been forthcoming by trappers or local residents of movements of animals in small herds, coming into the area from the eastern boundary or Canadian side down the White River country and also from the east and north of the Nabesna area. It is also possible that many of the additions could be part of the

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Alaska Yukon Herd that migrated into this country from the Kantishna.

Summing up the changes or fluctuations in the population of the Nelchina Herd we find a maximum population peak from 1927 through 1930, then a mass migration of animals out of the area that headed north and west. Small residual bands remained; these were scattered throughout most of the Nelchina habitat. From 1948 through 1956, the herd increased to an estimated 35,000 or 40,000 head, or likened to the maximum population peak of the late 1920's.

The wolf has always been associated with the caribou herds of this area. Wolf numbers have fluctuated as disease and their food supply added or subtracted from their reproductive capacity.

In 1944 and 1945 the Predator Control unit of the Fish and Wildlife Service inaugurated control measures against the wolves of the Nelchina area. Poison sets were used extensively and the method of dropping poisoned baits from aircraft was also employed. If no suitable medium was available for bait, they would single out and shoot a caribou, then utilize the carcass by poisoning it and depositing same on a waterway. This method of so called control took a terrific toll of fur bearers and other forms of honest wildlife. In the numerous poison sets I have observed the past few years not one wolf was a victim.

Before the control measures were put into effect, I had an opportunity to fly over much of this area. I took note of the caribou numbers, their movements and pattern of distribution. I also attempted to get a census of the wolf population, their number of caribou kills, etc. The largest number of wolves I have observed is 16 in one pack. Generally they seem to be running in packs of from 6 to 9. The caribou kills I counted were never

over two or two and one-half percent of the caribou population. They put on a stimulated killing campaign or program prior to the mating and denning period. This session lasts for about six weeks and is by no means an indices of their predator activity for the other seasons of the year. When the new family of wolves emerge in the fall as a hunting unit, they constitute a formidable pack. They will attack so called big game and as a rule will weed out the apparently sick and unthrifty animals. When big game is not easy for them to take, they will turn to the smaller mammals for their food.

Since mass hunting pressure has been in vogue on caribou the past few years, many animals have been wounded or crippled by hunters. These cripples are easy victims for the predators and many kills that are attributed to the wolf are often animals that have died from the result of gunshot wounds.

The Nelchina Caribou Herd experiences a natural game cycle. The years intervening between the peak density numbers and the low density population has not been established. Evidence that I have observed over the past thirty years certainly exonerates the wolf as a prime factor in the herd's decimation. The wolf is very necessary for the economy of the herd, as they weed out the unthrifty and sick animals. By this cropping method the wolf prevents the possibility of an epizootic spreading through the herd.

Only when the wolf increases in numbers so that they impose a serious threat to the future of big game, should controls be initiated. The use of poison for wolf control in the Alaskan scene should be abolished. Hundreds of fur bearers and other forms of wildlife are killed without justification by the poison method.

An intensive study should be advanced regarding range conditions, principally seasonal food or graze abundance. Such a study could give some answers to the many phases of the caribou's ecology and greatly aid in proper and sound future management programs.

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L. L. Huffman
Paxson Lake
Gakona, Alaska

Library
U.S. Fish and Wildlife Service
911 E. 1st St.
Anchorage, Alaska 99503