

Nushagak Peninsula Caribou

Caribou were reintroduced to the Nushagak Peninsula in February 1988, after an absence of more than 100 years. The purpose was to reestablish a herd in the area which would eventually provide local residents with the opportunity to hunt caribou. The Nushagak Peninsula caribou herd grew rapidly from 146 reintroduced caribou to over 1,000 by 1993. The dramatic growth of the herd was attributed to the initial high percentage of females in the herd, high calf production and survival rates, pristine range condition, few predators, and no hunting until 1995. The population continued to grow from 1993 to 1997, but at a slower rate and peaked at about 1,400 caribou in 1997 - 1998. Since the late 1990's the herd has continually declined and was thought to number between 500 and 550 caribou as of October 2007.

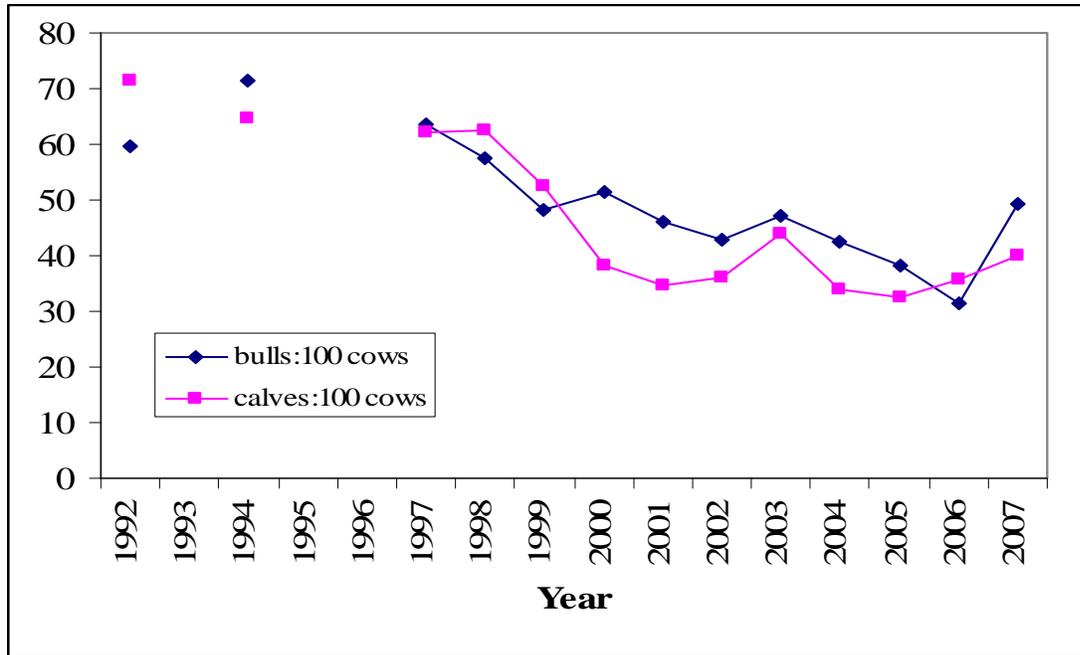


Nushagak Peninsula caribou in July

The population increase and subsequent decline in Nushagak Peninsula caribou is similar to that experienced by the much larger Mulchatna Caribou Herd which grew rapidly during the 1980's and 1990's, peaked at about 200,000 animals in 1996 – 1997, and then declined to about 45,000 caribou by July 2006.

As with most populations, the number of births in relation to the number of deaths during a certain time period dictates whether it increases, remains stable, or decreases. Nushagak Peninsula caribou produced many large groups (cohorts) of calves during the 1990's while at the same time deaths were relatively few. The bulls from these large cohorts would have been expected to start dying at age 5 or 6. This is supported by the decline in ratios observed starting in 1998. Cows live longer and experience high rates of mortality beginning around age 10. This

means that the first sizeable cohorts, perhaps 50-75 female calves produced in 1990 and 1991, would have been reaching old age in the year 2000. Beginning in 1999, fall calf recruitment rates declined noticeably.



The number of bulls and calves per 100 cows in the Nushagak Peninsula caribou herd.

Calf recruitment rates are influenced by the number of calves born in the spring, calf survival from birth to fall, and the number of cows in the population. With really good nutrition, most cows 2 years old and older will produce a calf. As nutrition declines, most of the younger (2 and 3-year olds) and older age (8-year olds and older) cows do not produce a calf. Pregnant cows that are nutritionally stressed may produce a calf that is more vulnerable to inclement weather, disease, and predation.

Biologists have also monitored use of lichen (a preferred food item) by caribou on the Nushagak Peninsula. As one might expect, the amount of lichen available now is considerably less than it was during the early 1990's. Lichens are slow growing and may take several decades to fully recover.

As the number of Nushagak Peninsula caribou declined, so to has the opportunity for subsistence hunters to harvest them. The Togiak Refuge Manager works with the Nushagak Peninsula Caribou Planning Committee in determining harvest opportunities for this herd. The Planning Committee is comprised of representatives from the Bristol Bay Native Association, Choggiung Limited, Nushagak Fish and Game Advisory Committee, Alaska Department of Fish and Game, Togiak Refuge, and the Traditional Councils of Manokotak, Togiak, Twin Hills, Dillingham, Aleknagik and Clark's Point.