# Nelchina Caribou Update

#### A notorious herd

Nelchina caribou are among the most recognized of caribou herds in Alaska. For centuries, hunters that live within their range have followed this herd, and because the area is relatively close to some of the larger population centers in Alaska, interest in these animals has expanded greatly over the past few decades. The hunt structure for Nelchina caribou is unique and the strategy employed to manage the herd is different from others in the state. Whatever initially attracted your attention to Nelchina caribou, we hope that you will continue to learn about these fascinating animals.



In this bulletin, you will find a brief history of the Nelchina caribou herd, a population update including results from recent surveys, and an overview of current hunts.

#### Good times and hard times

The life of a caribou is precarious. There are times of the year when they are surrounded by plentiful food and good weather, and periods when they must travel long distances through harsh winds, digging through snow and ice to find even a little bit of life sustaining lichen. Caribou populations can fluctuate dramatically. In good years, especially

when the winter is mild, herds experience higher pregnancy and calf survival rates. In challenging years, limiting factors like a lack of food or increased pressure from predators can take a toll on the population. While elements that affect the health of a herd cannot be anticipated year to year, a cyclical pattern of booms and busts are typical over the long term.

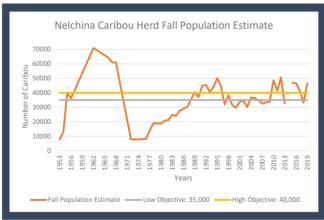
Though the size of the herd will naturally fluctuate, Nelchina caribou have been carefully managed since the 1980's to limit precipitous

declines and the slow climbs that ensue. Herd managers aim to reduce large swings to keep the herd at a sustainable level and maximize harvest opportunities. The population objective for Nelchina caribou is 35,000 to 40,000 animals.

### Recent history

In the last five years, herd abundance has fluctuated. In 2015 and 2016, the population estimate was over 46,000 each year, exceeding the objective. In 2017, managers were unable to get a count, but found high productivity (95%) and good overwinter survival. Herd managers estimated the population using this data and managed 2017 harvest

with the goal of reducing herd size. In 2018, not all of the collared caribou returned to Game Management Unit 13 and production was poor at 50% causing a dip in the population. In 2019, there was a good return of collared caribou and productivity was high at 83% which caused a jump in the population estimate. This quick dip and jump in the population size was due to animal movement and calf production which are natural fluctuations that vary each year.



Like many large herds, Nelchina caribou have experienced dramatic population swings. In the 1980's Nelchina herd managers changed their management strategy to minimize the booms and busts.

Nelchina caribou hotline: 907-267-2304 www.hunt.alaska.gov for information



## Calf production



Each June, biologists and pilots observe radio collared cows from a fixed-wing aircraft to determine pregnancy rates. Caribou are classified as pregnant if they have a calf, hard antlers, or distended udders. This is an important measure because variation in the number of calves produced can make herd numbers swing even when the adult portion of the herd is more stable.

This spring, pilots tracked 53 collared cows and found that 66% of those that were three years and older were pregnant. This is below the previous five-year average of 79% but above the 50% pregnancy rate observed in 2018. The high rate in 2019 of 83% may have affected this year's production as cows may skip a year of reproduction if raising a calf through the spring and summer leaves a cow nutritionally stressed.

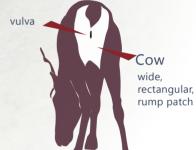
# Managing the herd for long-term sustainability

Caribou population objectives are based on the number of animals a given range can sustainably support. The Nelchina caribou herd is estimated at **44,500 caribou**, above the objective of 35,000-40,000. For the 2020/21 hunting season, herd managers encourage hunters to **harvest cows** to help bring the population within the targeted range. This strategy aims to support long-term herd health. By reducing herd size to within the population objective, the land can continue to provide for the nutritional needs of the herd.

#### Identification

The most reliable way to differentiate bulls from cows is by observing caribou from behind. Look for the presence or absence of a dark vulva patch located below the anus. The scrotum can sometimes be confused with utters, and antler size is not a positive indicator of gender.





# - Nelchina caribou hunts in GMU 13 -

- Application period for state Nelchina caribou permits is November 1-December 15 of prior year.
- Check your permit and AK hunting regulations for bag limit, salvage requirements & special instructions.
- The Federal Subsistence Board has closed Federal Subsistence lands in 13A and 13B to the harvest of moose and caribou by non-federally-qualified hunters. For more information, call 1-800-478-1456.

Hunt	Dates	2019/20 Permits	2019/20 Harvest	2020 Permits
YC495 Youth Hunt	Aug 1-5	200	113	200
CC001 Community Hunt *See Subsistence Hunt Supplement	Aug 10-Sept 20 Oct 21-Mar 31	811	256	812
RC561 Tier 1 Registration	Aug 10-Aug 31 Oct 21-Mar 31	2,788	1,112	3,065
RC562 Tier 1 Registration	Sept 1-Sept 20 Oct 21-Mar 31	2,886	1,056	3,821
DC475 Drawing, Non-res.	Aug 20-Sept 20			50
DC485 Drawing, Resident	Aug 20-Sept 20 Oct 21-Mar 31	399	172	2,000

Report harvest immediately at hunt.alaska.gov, by phone 822-3461, or at any ADF&G office.