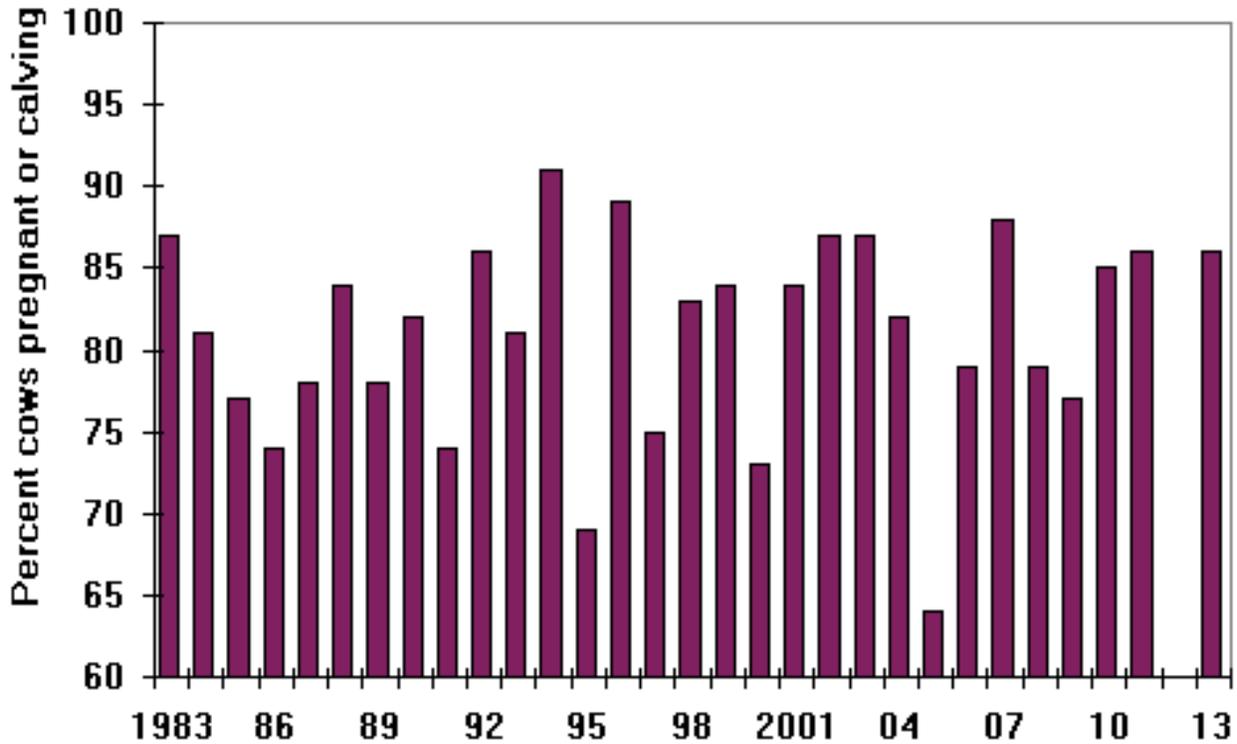


## Porcupine Caribou Herd Birth Rate



**Data Source: Alaska Dept. of Fish and Game**

### What is happening?

- This graph shows the general pattern of annual birth rates for the Porcupine Caribou Herd. In early June of each year, a sample of 40-100 female caribou are located by tracking down the signal from the radio collar they are wearing. The sighting of each of these females is then used to record signs of pregnancy or recent calving.
- The birth rate estimate in 2005 was the lowest on record for this herd. In 2013 the birth rate was estimated at 86% which is above the long term average of 81%.
- Unusually bad weather and fog in both early and late June prevented the overflights necessary to estimate birth rates in 2012.

### Why is it happening?

- Having and feeding a calf requires a lot of energy. After giving birth and nursing a calf, a cow is in poor shape and this makes it difficult for her to get pregnant in the fall. Cows that do not give birth in the spring or lose their calves soon after birth, are in good shape during the fall rut, and have a very good chance of getting pregnant. So, a summer when lots of calves are born and survive results in many cows in poor condition with a low

probability of getting pregnant in the fall. This means that fewer calves will be born the next summer. Then, because lots of cows did not give birth, there are more cows able to get pregnant during the fall and so more calves are born the next summer.

- Researchers have not documented abortions in the Porcupine Caribou herd, unlike some other caribou populations. In 1990, however, a number of cows in poor shape during the rut suffered early loss of their embryos. This situation is uncommon, however. Thus, low birth rates are most related to the conditions in the previous summer and fall.

#### Why is it important?

- The birth rate gives us valuable information. It lets us know how healthy the herd is and, along with other indicators, it helps us to predict how the population is changing.

#### Technical Notes

- Radio-collared caribou cows are checked for signs that they have recently given birth (e.g. calf at heel), lost a calf (e.g. showing enlarged udders and hard antlers) or not pregnant (e.g. no hard antlers and udders not distended).

#### See also:

- Caribou Population
- Caribou Calf Survival
- Caribou Calving Habitat Use

Off-site: Porcupine Caribou Herd

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**Data added:** March 16, 2014.