The Great Caribou Decline
A Study of The Western Arctic Caribou Herd
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**Population:** A census of caribou in the Alaskan Western Arctic Caribou Herd overtime. This shows a steep decline in population over the past ten years. There was a slight increase after 2016 (1).

**Occurrence:** Physical specimen data of caribou from the Western Arctic Caribou Herd. This shows a decline in specimen size after 2011 and then an increase after 2017 (2).

**Caribou:** Caribou are the only members of the deer family where both the male and female deer have horns (3).

**Wolves:** Caribou can run up to speeds of 50 mph to escape predators and hunters alive (3).

**Predators:** Wolves, which are the main predator of caribou, are not threatened in Alaska. Their population has fluctuated slightly between 7,000 and 11,000 over the past ten years. Since the wolf population has not varied greatly, this aspect most likely is not causing the decline (4).

**Male to Female Ratio:** Percentage of males compared to females in the Alaskan Western Arctic Caribou Herd. Decreased females could lead to a decrease in overall population size (4).

**A Decline in Caribou could result in...**
- Bacteria
- Moose
- Mosses
- Lichens
- Sedges
- Decreased:
  - Biodiversity
  - Hunting
  - Predators
  - Indigenous people's culture and food source

**Why does this matter?**

**Rising Temperatures:** The data shows a trend of rising annual temperatures in Alaska. The rising temperature can have an effect on the native flora and fauna. This rise in temperature seems to be a key factor in the decline of the Western Arctic Caribou Herd (5).

**Hunting:** Number of caribou hunting licenses sold over time. This shows a steady decrease in hunting licenses after 2011. If hunting was affecting the caribou population, then we logically would see an increase in population. Since this is not the case, hunting is most likely not causing the decline (6).

**Caribou diet:** Caribou eat grasses, lichens, and other small plants (1).

**7,000-11,000 Wolves**

**Bibliography**