

Porcupine Caribou Herd



SUMMARY OF INDICATORS 2024

Presentation to:

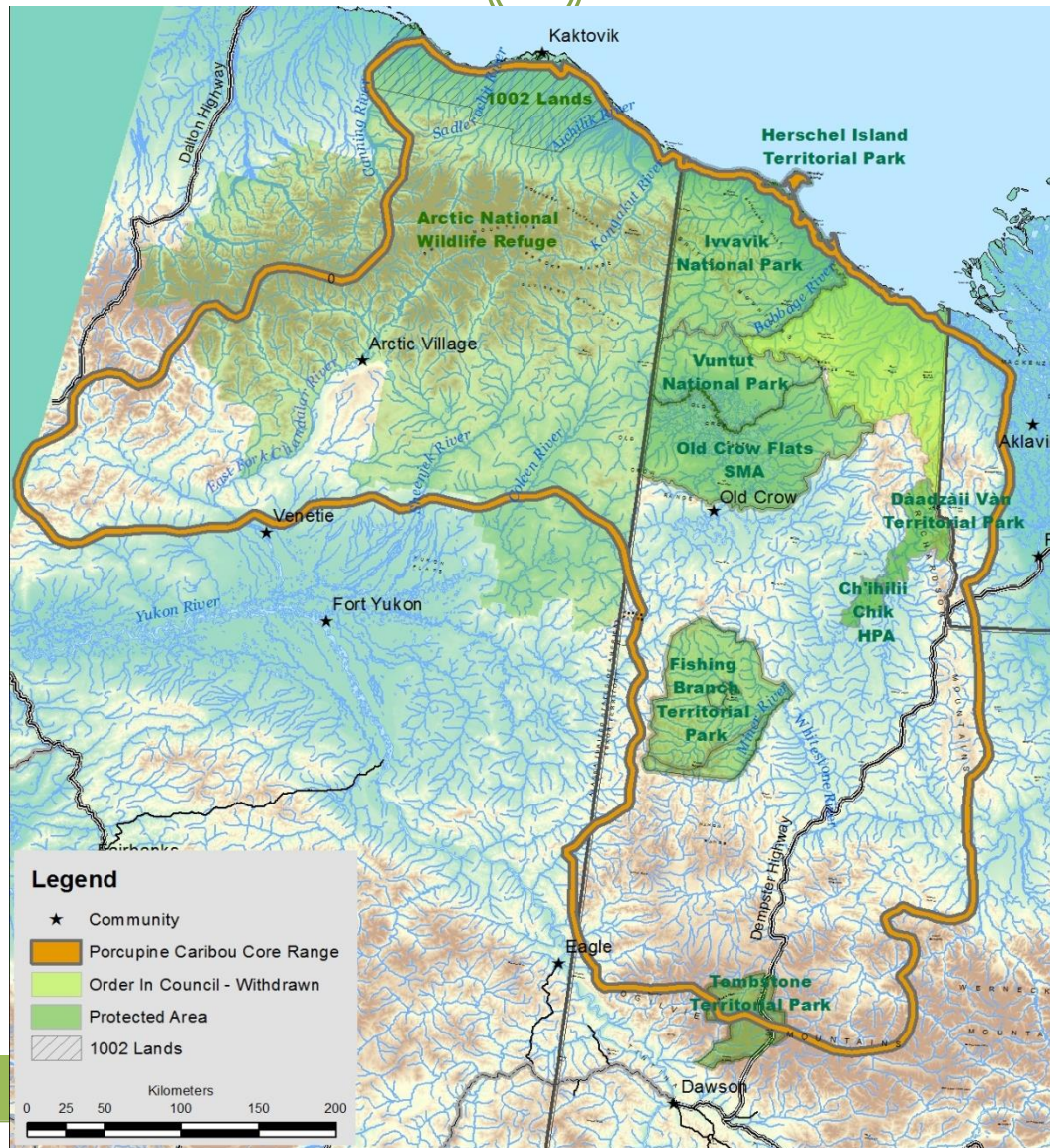
Annual Harvest Meeting

Inuvik, NT

February 13-14, 2024

By: Porcupine Caribou Technical Committee

Range of Porcupine Caribou Herd





Population

Body
Condition

Habitat

Harvest



Population Size



Methods

- Count caribou using a photocensus
- Last completed in 2017
- Attempted in 2023
 - *Unlikely to get a new number*
 - *May get a minimum count still*

Results

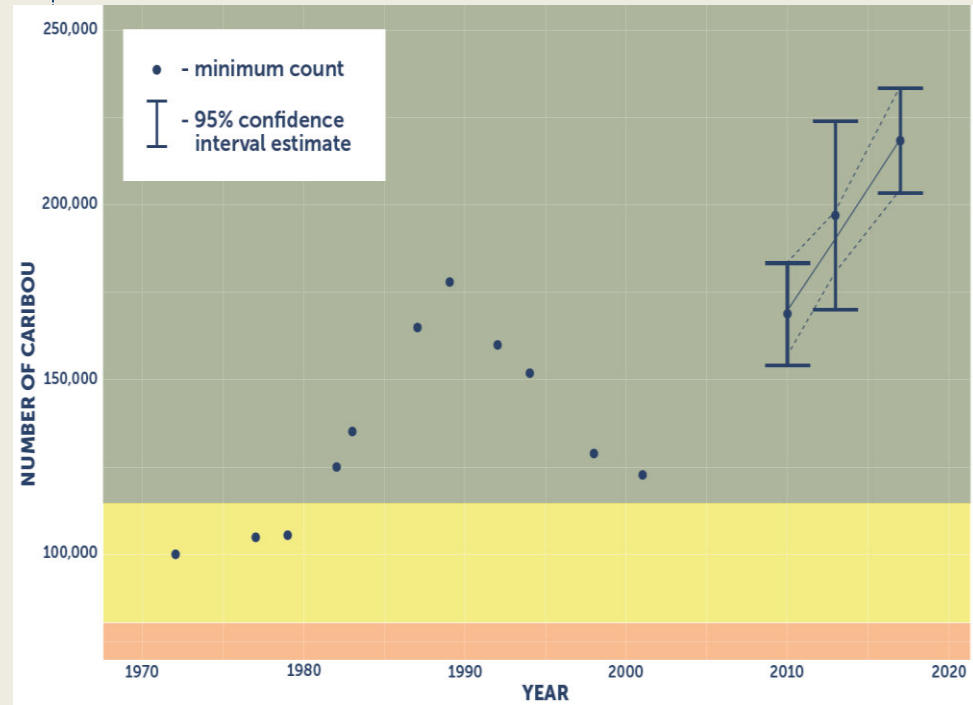


Population Size

Methods

- 218,000 caribou (202,000 - 235,000)
- Minimum count = 198,000 caribou
- Increasing 3.5% per year

Results

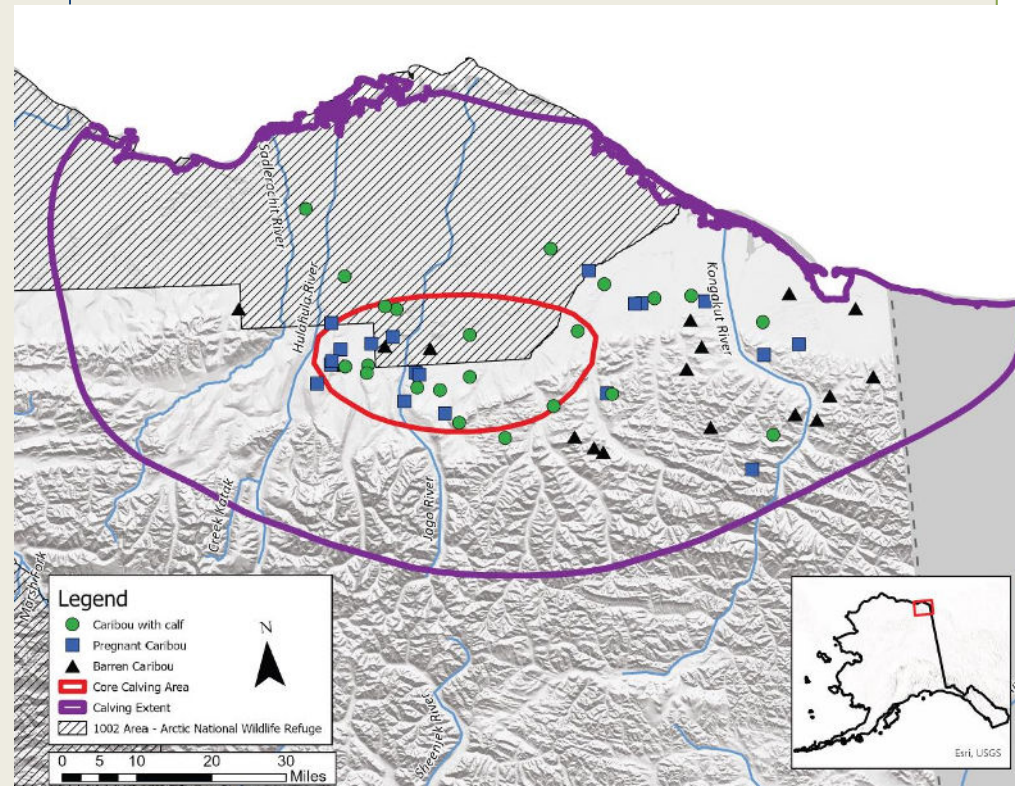


Calf Birth Rate and Survival

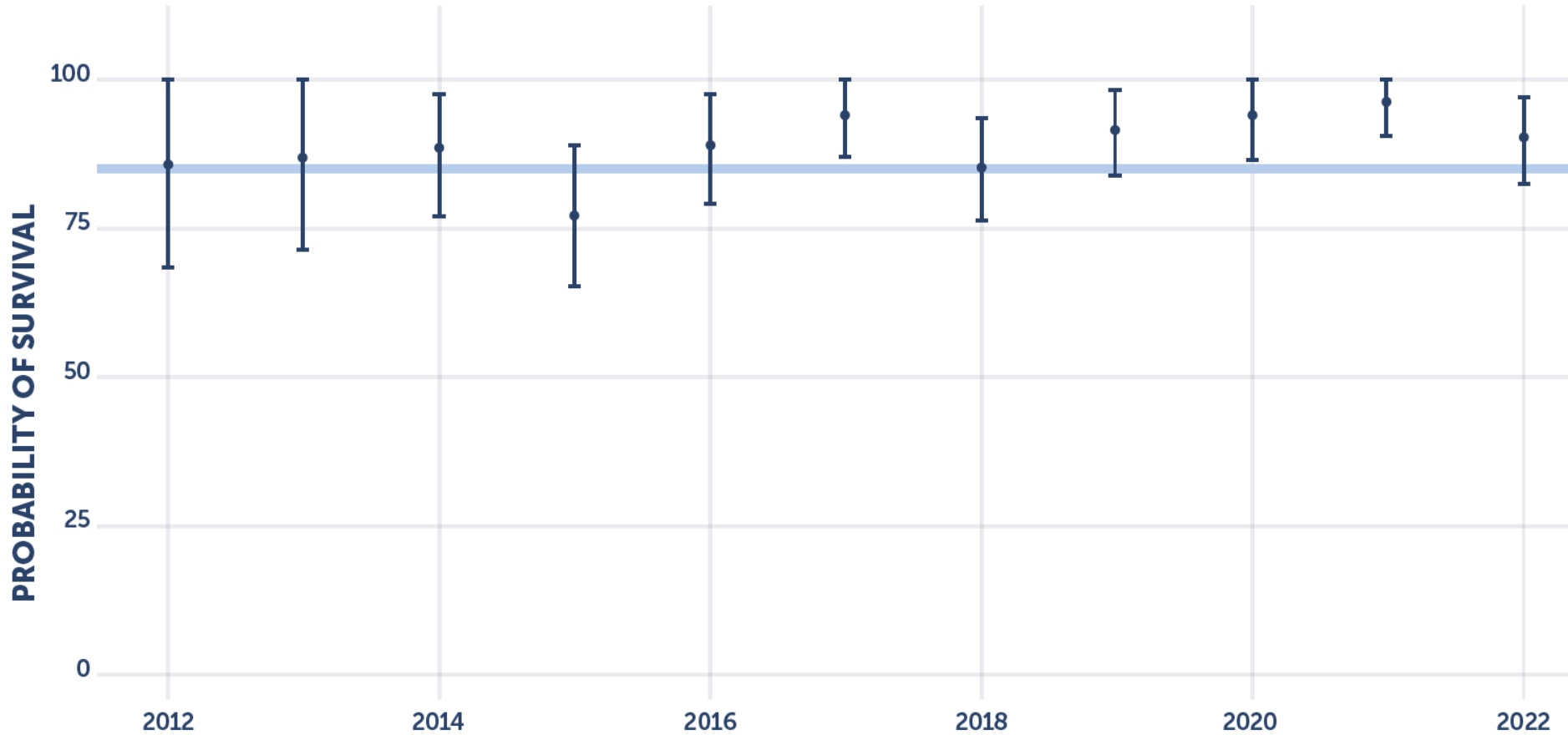
Methods

- Classify pregnancy on calving grounds (2018)
 - *81% of females pregnant*
 - *5 year average of 83%*
- 3-year-old cows = 55%
- Calf survival to 3 weeks
 - *77% of those calves survived*
 - *Long term average is 89%*
 - *After 1 month: 59 calves per 100 cows*

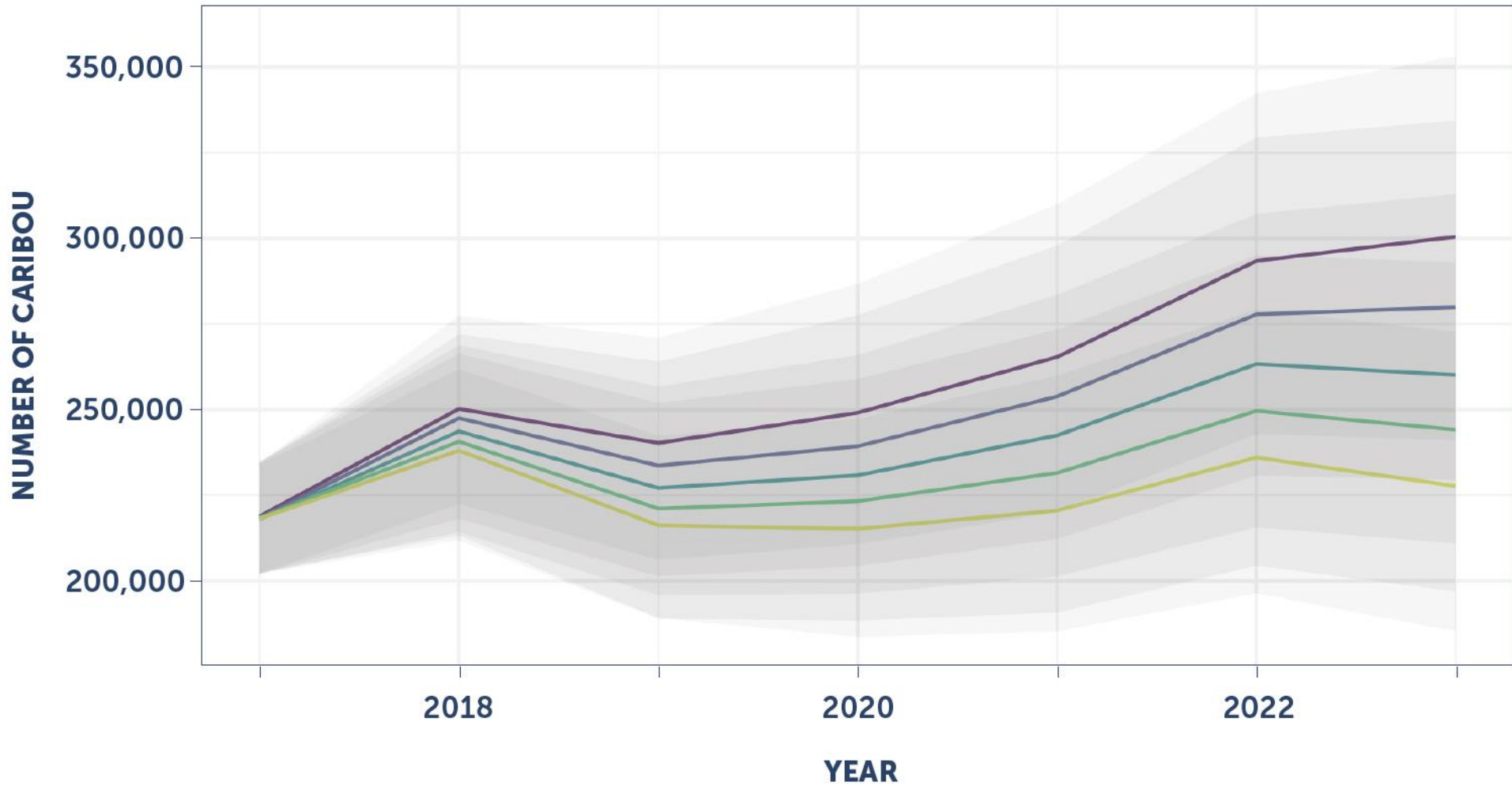
Results



Adult Female Survival



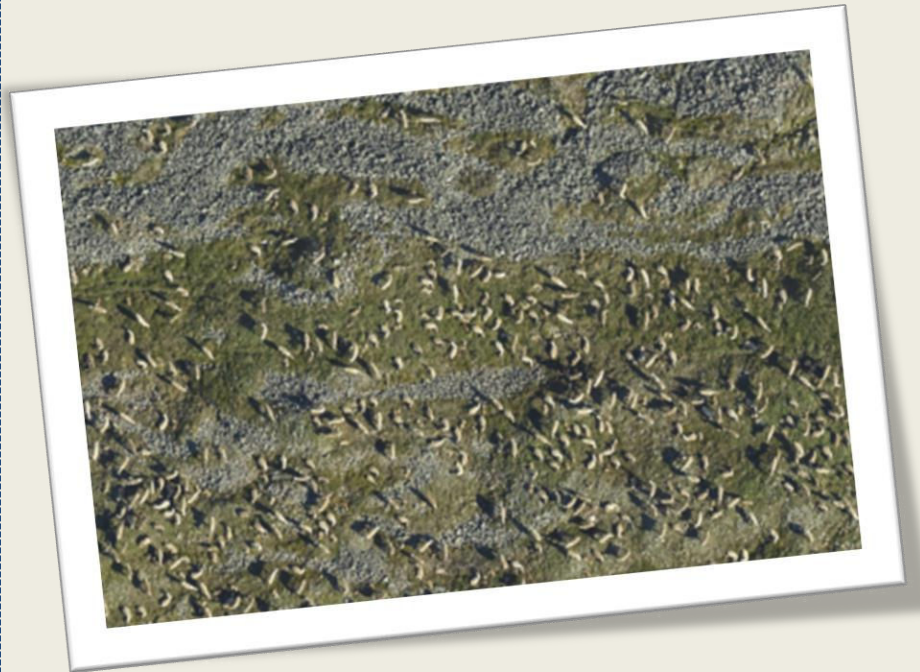
Population Model



Population Roll Up



- Herd at the highest recorded population size
- High adult survival
- Calf survival largely unknown
- Calf-cow ratio average
 - Pregnancy rate lower than average
 - Calf survival lower than average



Alaska Department of Fish and Game



Population

Body
Condition

Habitat

Harvest



Caribou Body Condition



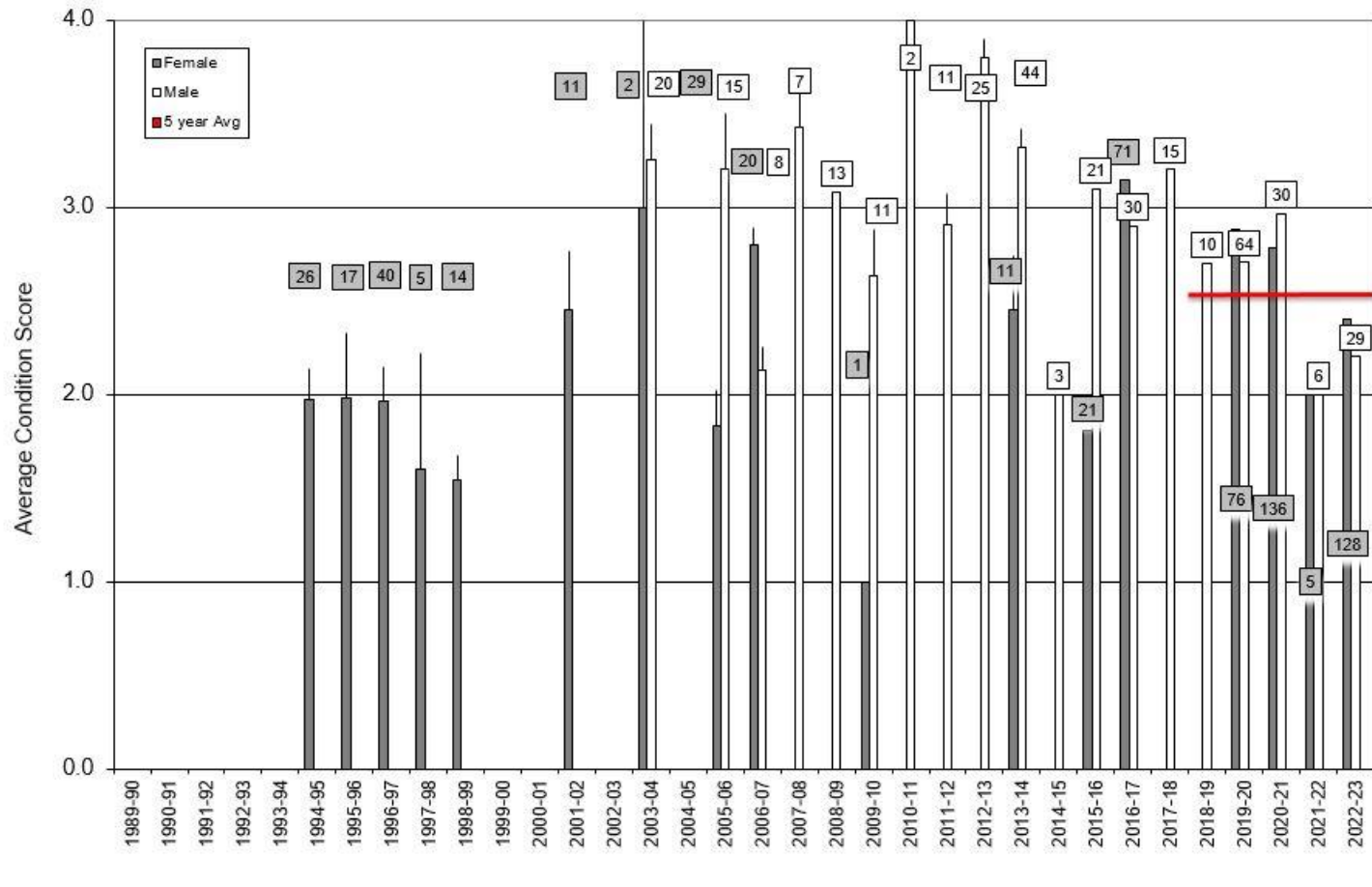
Methods

- How healthy individual caribou are by:
 - Measuring back fat
 - Hunter's ratings
 - 157 samples

Results

- Hunters rated caribou fair
- Back fat measures below average for last 5 years
- Timing of harvest factor

Caribou Body Condition



Average condition of harvested caribou
 1=poor, 2=fair 3=good 4=very good



Population

Body

Condition

Habitat

Harvest

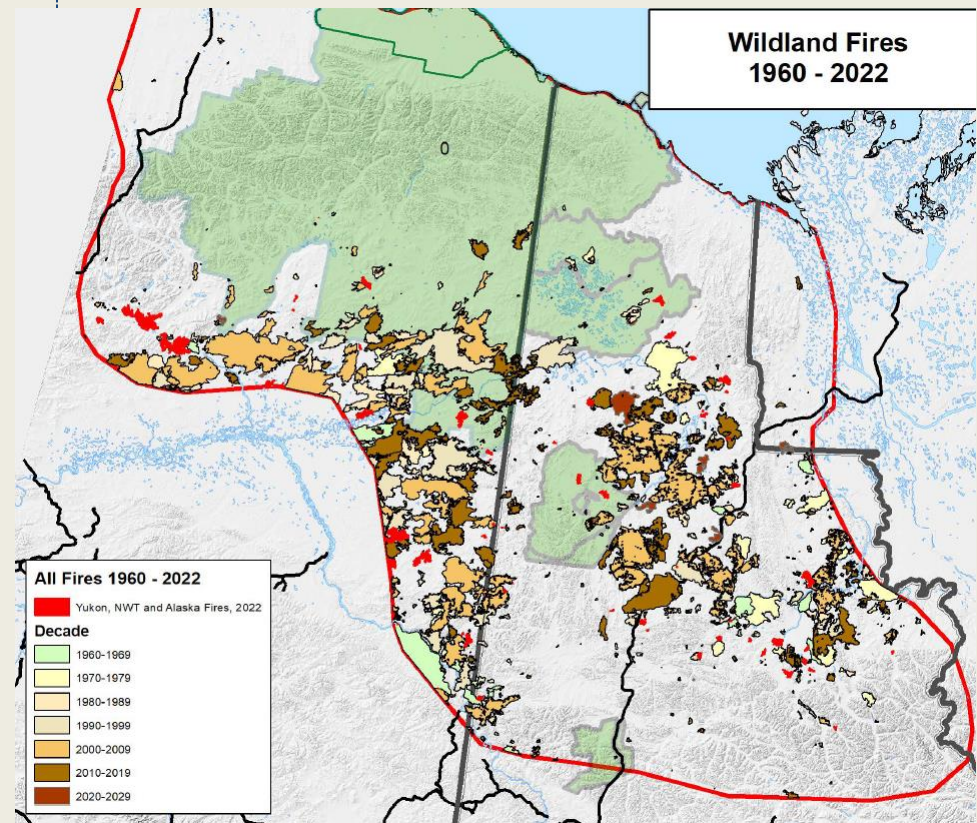


Wildland Fires

Methods

- Amount of PCH range burned as an index of range condition
- 1960—2022
- Fires in red are new as of 2022
- 2023 data not yet available

Results



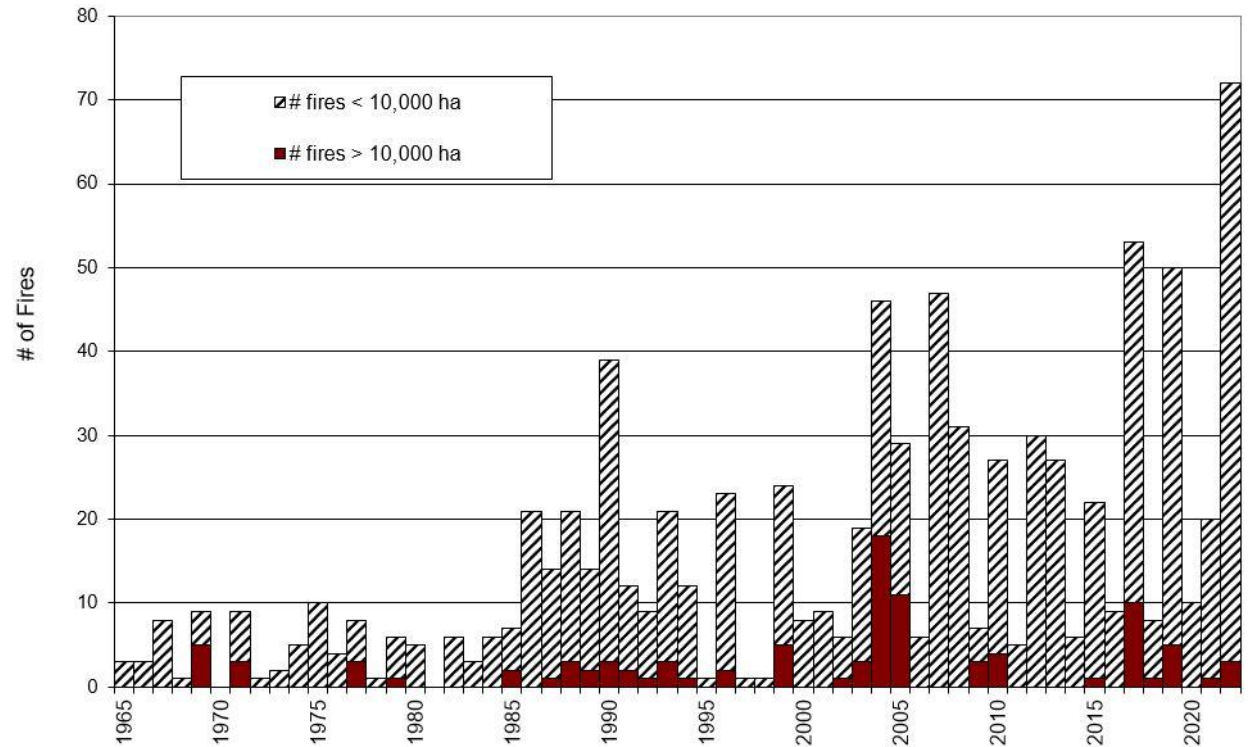


Many small fires

Limited in key habitats

2023 some large fires but few in key habitats

Total number of fires and number of large fires (greater than 10,000 hectares) in PCH range, by year



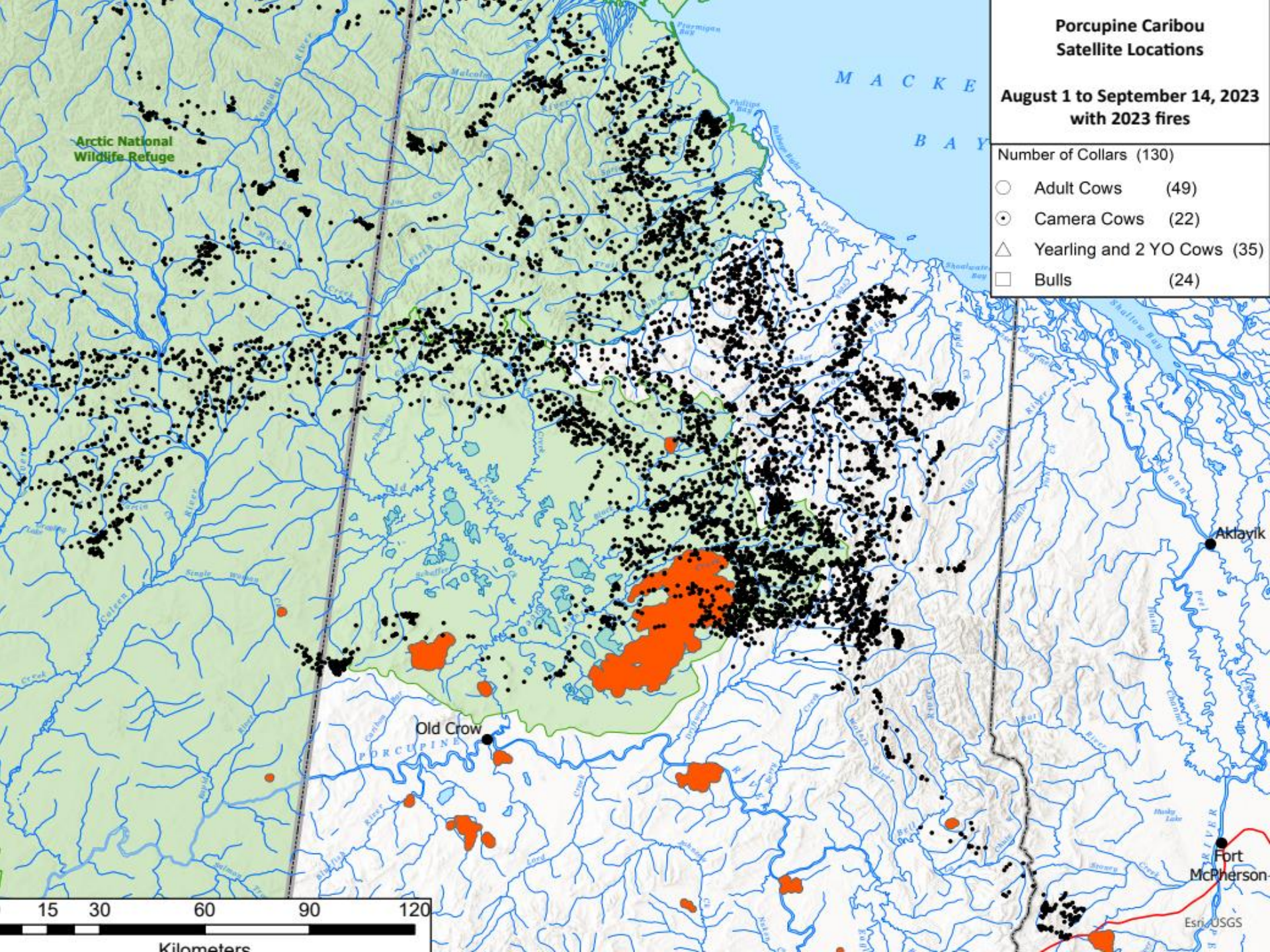
Large fires in PCH Range

Porcupine Caribou Satellite Locations

August 1 to September 14, 2023
with 2023 fires

Number of Collars (130)

○	Adult Cows	(49)
●	Camera Cows	(22)
△	Yearling and 2 YO Cows	(35)
□	Bulls	(24)



15 30 60 90 120

Kilometers

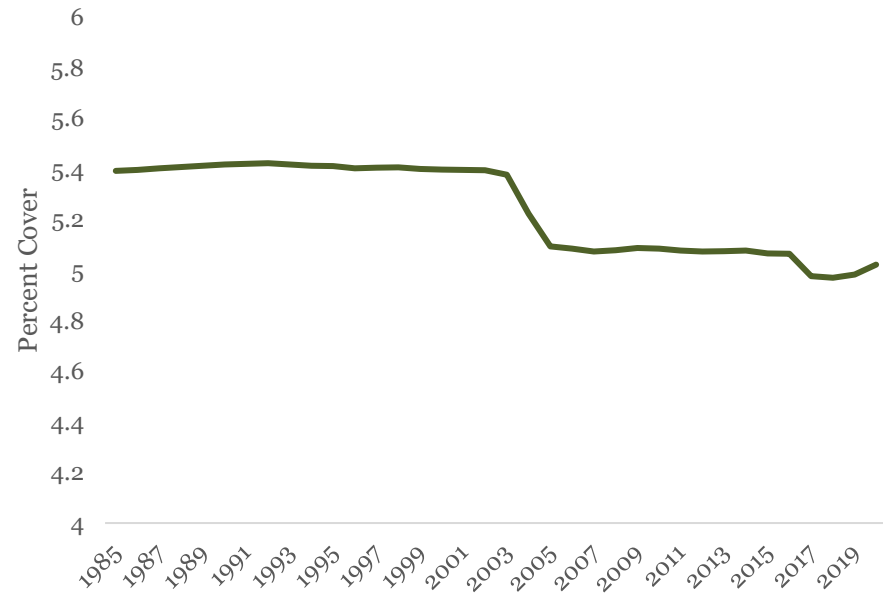
Esri/OSGS

Lichen



Methods

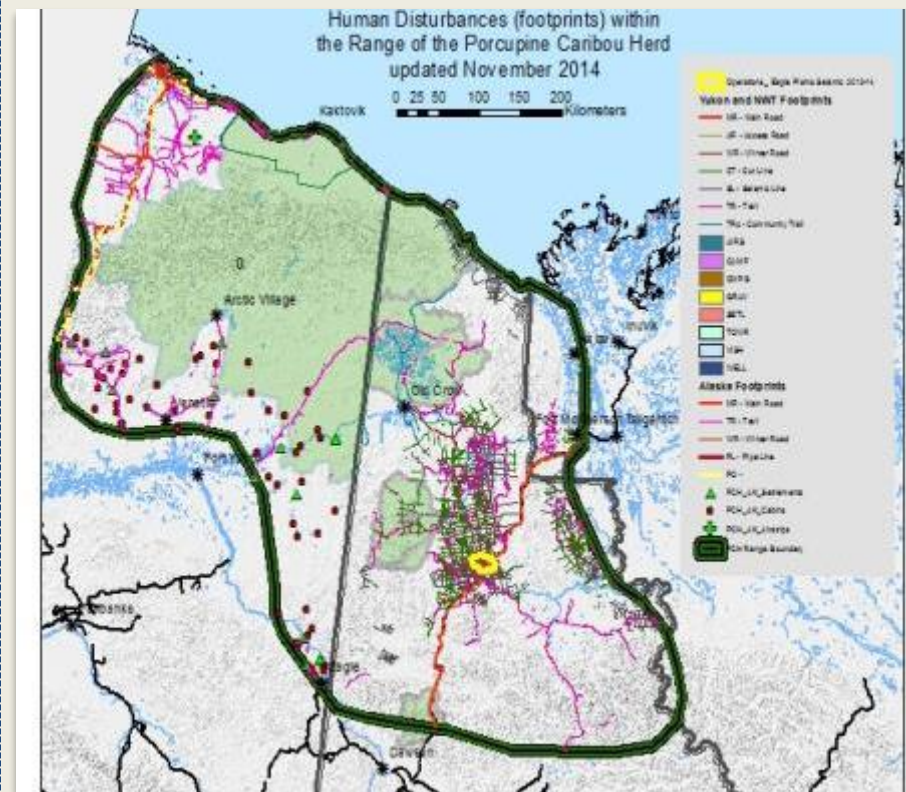
- How much ground is covered in lichen on range
- 1985 to 2020
- Satellite images used



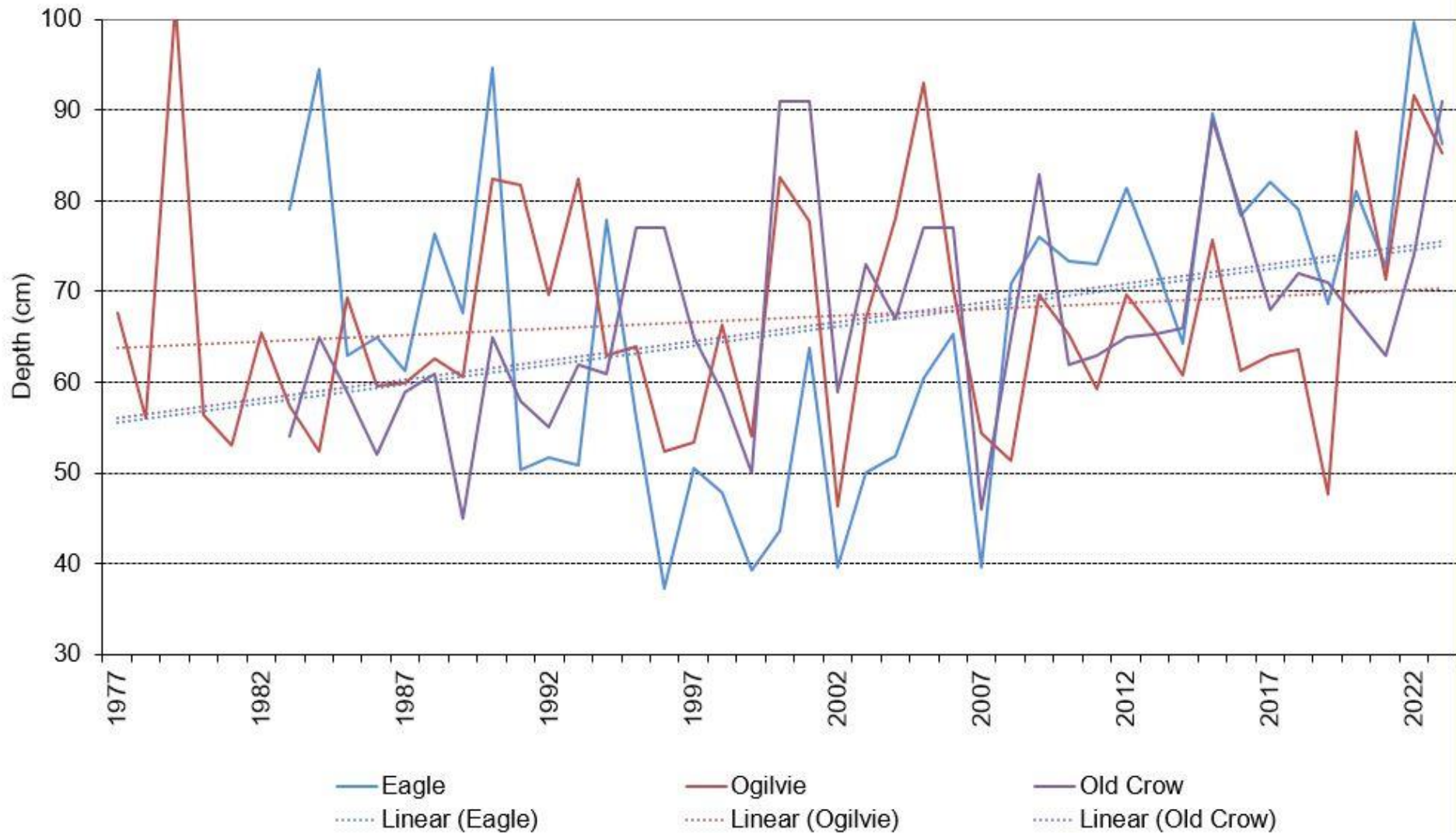
Human Disturbance and Footprint

Methods

- Measured total linear footprint for each disturbance type
- No appreciable change in footprint during 2022/23
- Oil and gas lease sales and Eagle Plains oil & gas



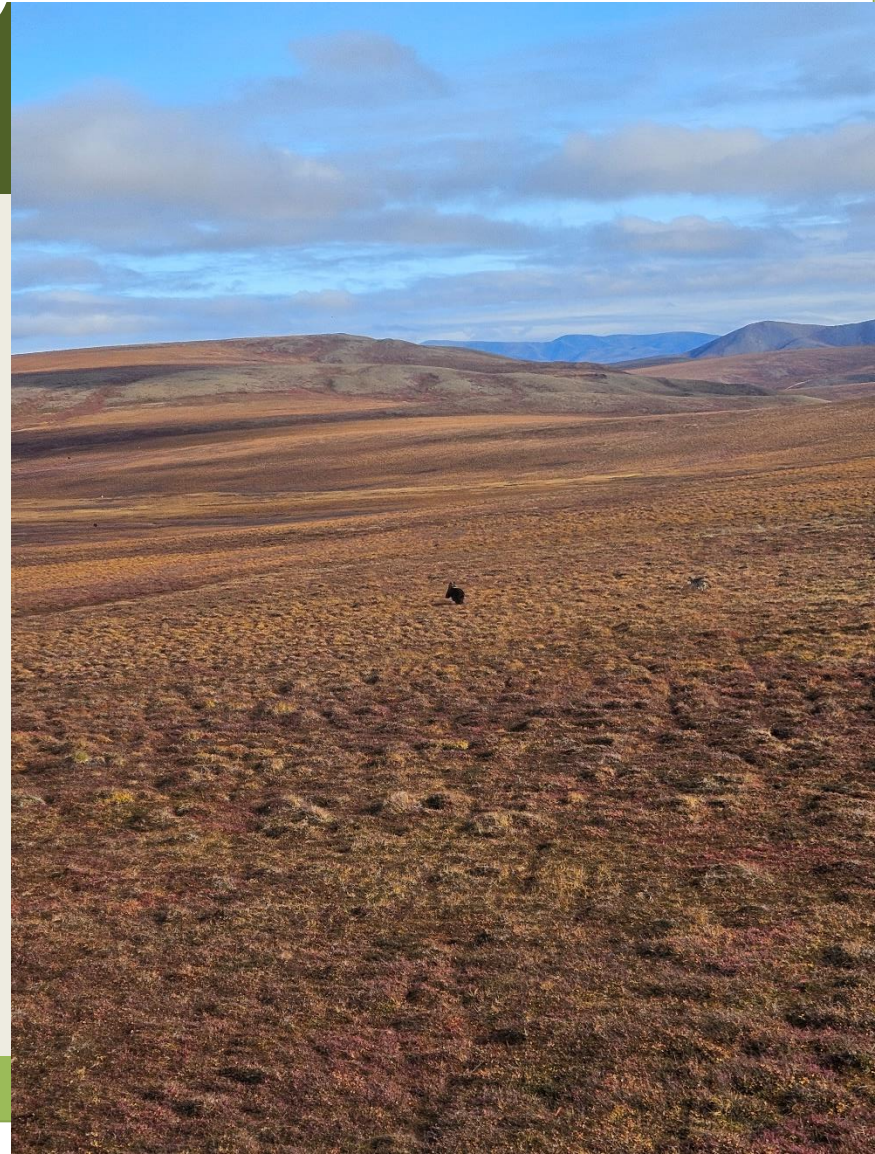
Snow Conditions



Habitat Roll Up



- Some habitat loss with fires over past two years
- Lichen hasn't changed significantly
- Snow conditions greater than average in the Yukon



Questions?



Peter Mather