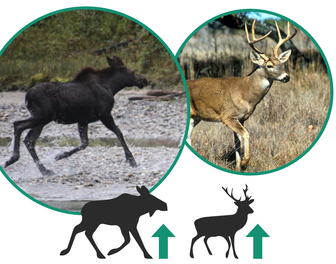
EXPERIMENTAL MOOSE REDUCTION LOWERS WOLF DENSITY AND STOPS DECLINE OF ENDANGERED CARIBOU

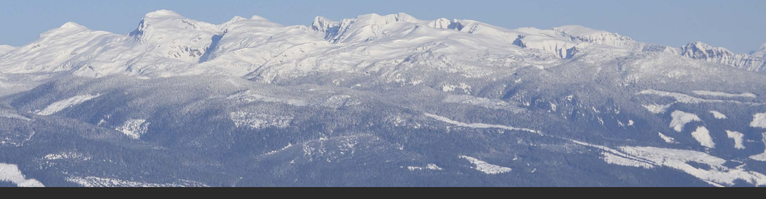
INTRODUCTION



Moose and white-tailed deer populations have **increased** in western north America due to **climate change and forestry**

This has also **increased predators** that are causing the **decline and extirpation of woodland caribou**

METHODS



We conducted a large scale (>6500 km^2), controlled experiment to determine if reducing moose to historic levels could reduce wolf density and therefore recover caribou populations

STUDY AREA:
British Columbia, Canada

TREATMENT AREA
6500 km^2

Moose reduction

Caribou stabilized

REFERENCE AREA
11500 km^2

No intervention

Caribou decline continued

RESULTS

Following the moose reduction, **the largest caribou population stabilized**, whereas in the reference area caribou populations continued to decline.

CONCLUSION

Reducing primary prey (moose or deer) can be a **viable tool to recover caribou populations**, without having to conduct intensive and continuous wolf control.

The result is promising, but **insufficient to achieve recovery**, suggesting that multiple limiting factors and corresponding management tools must be addressed simultaneously to achieve recovery for woodland caribou.

RECOVERY TOOLS CAN INCLUDE:

Primary prey reductions

Habitat protection

Occasional predator control

PeerJ

Experimental moose reduction lowers wolf density and stops decline of endangered caribou.
PeerJ 4:e3736 DOI: 10.7717/peerj.3736
http://peerj.com/articles/3736/

IMAGE CREDITS
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Wolf: Harry van Oort
Caribou: Robert Serrouya
Study Area: Robert Serrouya