

The Changing Landscapes of Labrador

THE TEAM

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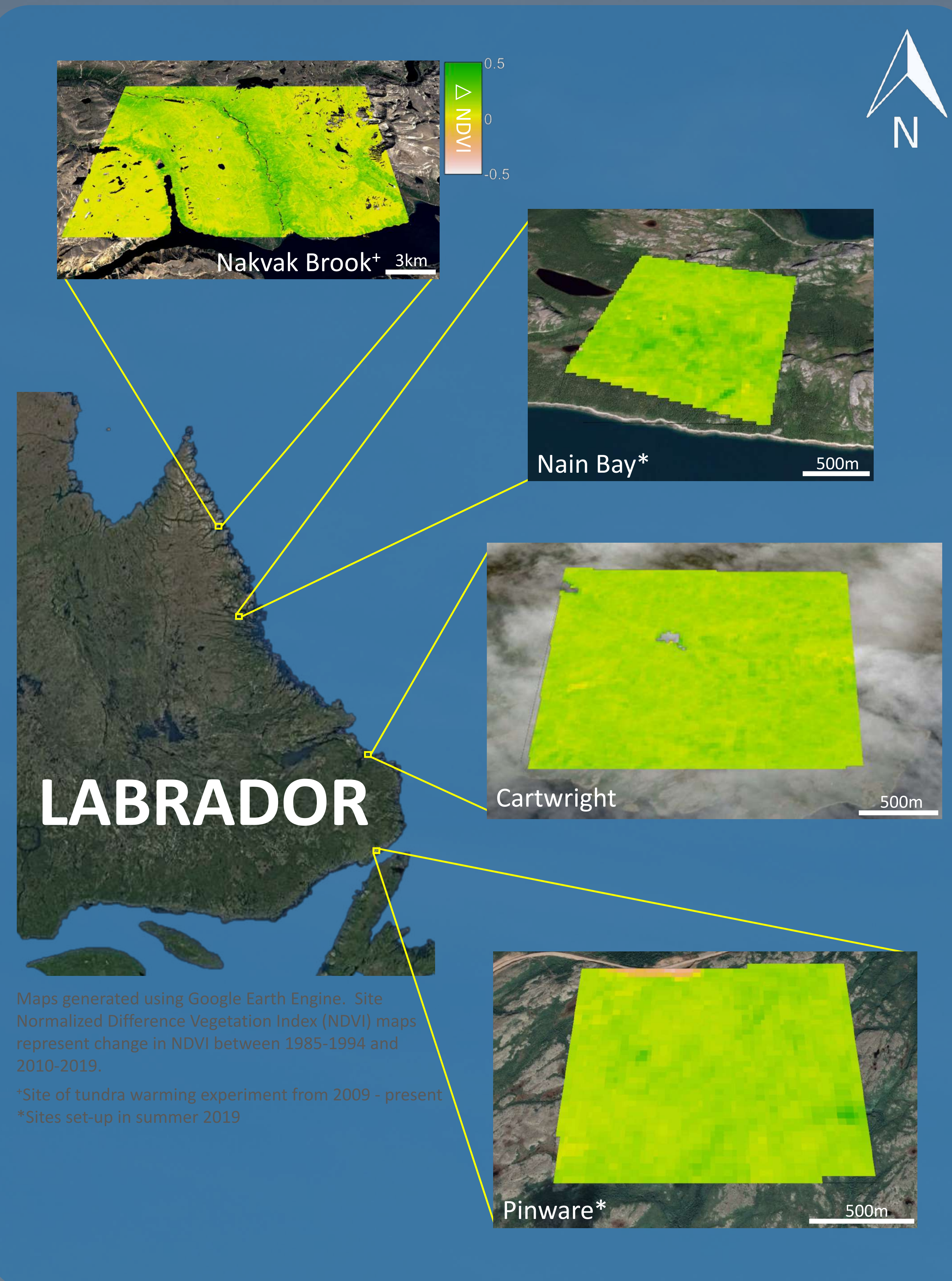


HOW DO CHANGING SNOW AND PERMAFROST CONDITIONS AFFECT PLANT BIODIVERSITY AND ECOSYSTEM FUNCTION?

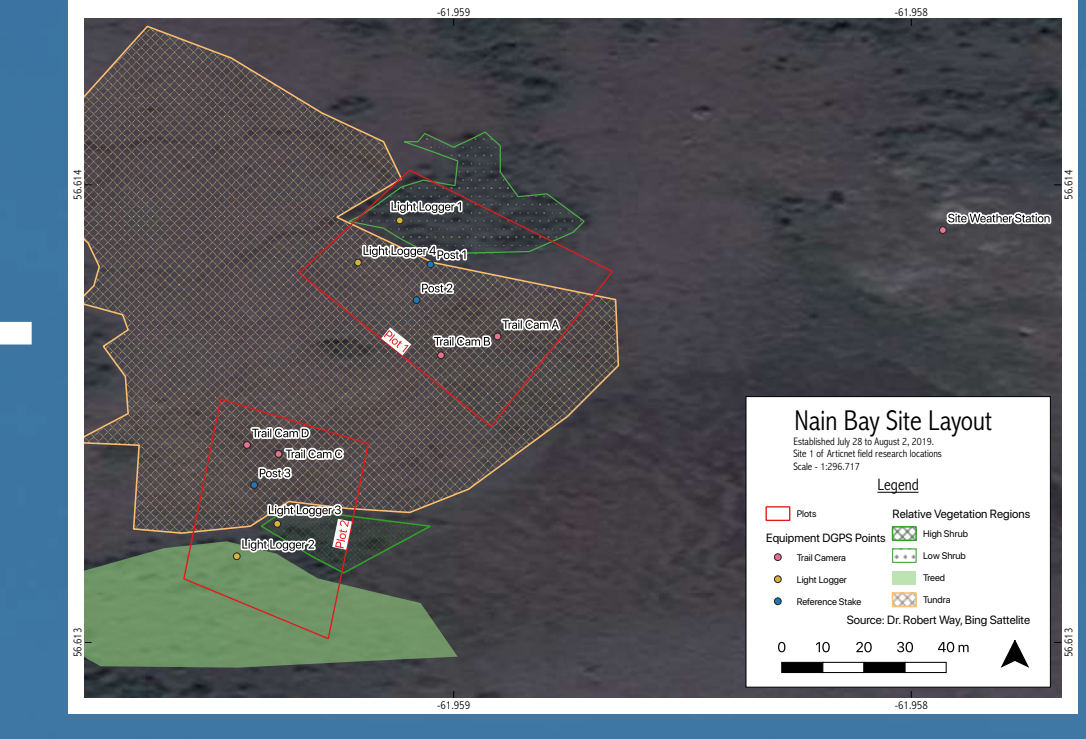
(Spoiler: We don't know yet)

OVERVIEW

Climate change and natural climate variability are impacting northern communities and landscapes. Across Labrador and northern Québec (including Nunavik, Nunatsiavut and NunatuKavut), rapid regional warming observed over the past several decades has significantly affected the quality of life for Indigenous Peoples and Northerners by reducing access to traditional lands and the availability of resources, including firewood and wildlife. Satellite and field-based data have shown that regional shrub growth has accelerated due to warming summer air temperatures with coastal Labrador and Nunavik having the fastest greening trends in North America. Using a multi-scale approach which integrates field data collection, remote sensed data, and advanced modelling techniques, we will be able to understand and predict how these landscapes will respond to future change.

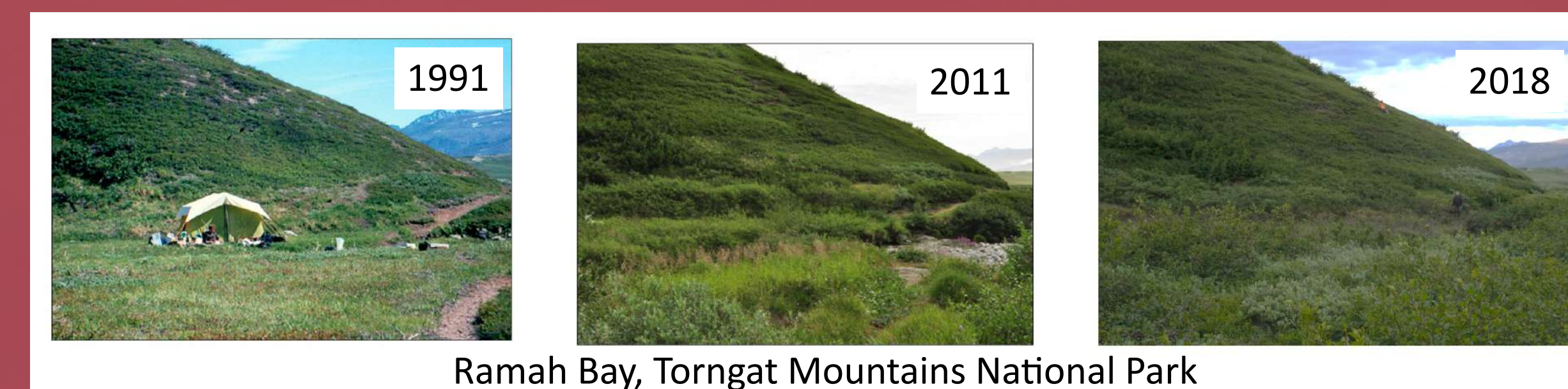


METHODS

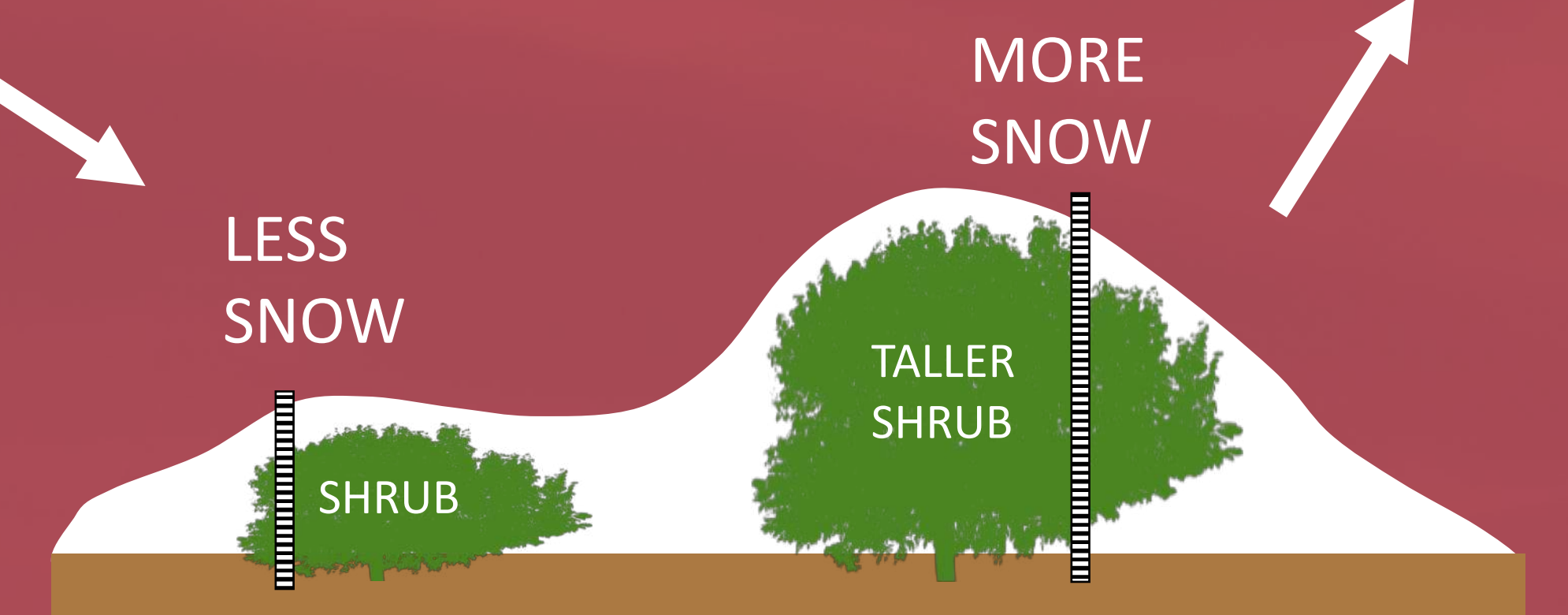


WHY SHOULD YOU CARE?

SHRUBIFICATION (aka MORE/TALLER SHRUBS) ACCELERATED BY WARMING SUMMER TEMPERATURES ACROSS COASTAL LABRADOR



Landscapes with more/bigger shrubs may have less lichen cover, an important winter forage for caribou



UPCOMING WORK

- Winter snow surveys
- Community meetings
- Additional sites set-up in Cartwright and Torngat Mountains National Park (TMNP)
- 10-year resampling of tundra warming experiment in TMNP
- New undergraduate and graduate students & postdoc = new projects



MORE INFO



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Scan code to download poster!

ArcticNet

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