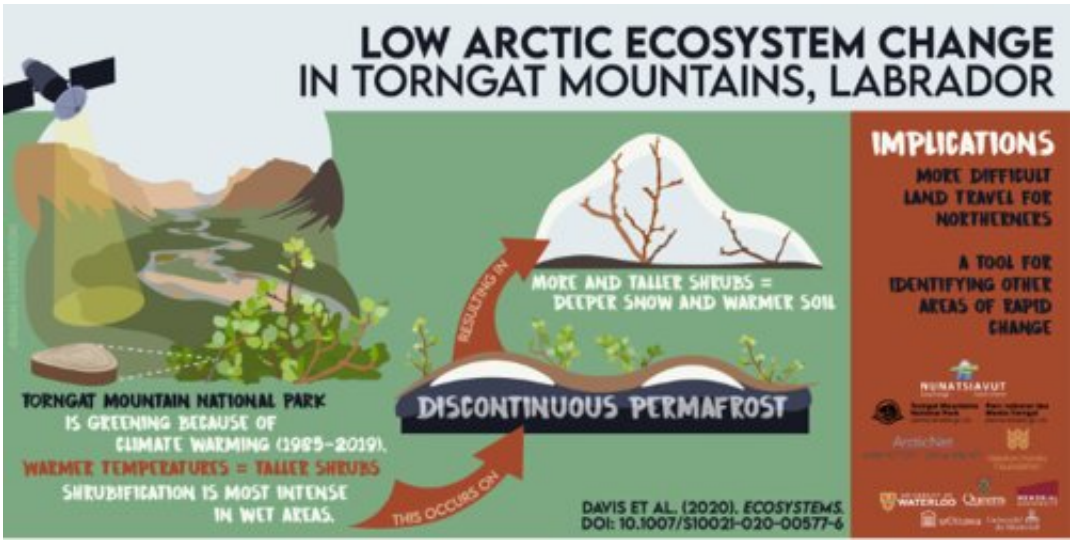
Evidence of accelerated climate change seen in Labrador mountain range

December 10 2020



Credit: University of Waterloo

Climate change is accelerating shrub growth across many northern regions, which has important consequences for people and wildlife there.

A new study led by Emma Davis, a University of Waterloo postdoctoral fellow, examines rapid shrub expansion in Torngats Mountains National Park. The changes were first detected by Inuit elders, prompting Davis' interdisciplinary team of researchers to determine how climate change is impacting Nunatsiavut, in northern Labrador.

"To understand why shrub growth is accelerating we needed data,

expertise and knowledge from many different disciplines and communities," said Davis. "Climate change in the Western Arctic has been studied extensively, our approach was to bring together a diversity of people to paint a clearer picture of where arctic climate change is going."

Traditional knowledge was a motivation for the work, now published in *Ecosystems*. The paper includes on-the-ground expertise from government partners including Darroch Whitaker an ecosystem scientist with Parks Canada and a co-author on the report.

"Rapid shrub expansion was first brought to our attention by Inuit elders and was of concern to them because shrubs can make travel on the land more difficult, provide cover that helps bears hide, and changes the way they can use the land," said Whitaker.

The study is remarkable because of the length of time of the long-term collaboration between university researchers and Parks Canada staff.

"The report was done in consultation with the park's Cooperative Management Board, and helps us better understand how this profound environmental change is affecting the ecological integrity of the park and the lives of Inuit in the region."

More information: Emma Davis et al. Plant–Environment Interactions in the Low Arctic Torngat Mountains of Labrador, *Ecosystems* (2020). DOI: 10.1007/s10021-020-00577-6

Provided by University of Waterloo