Blue Box Seminar Series

Department of Geography
PRESENTS:

Friday, March 24th, 2023
3-4pm – Remote

Join us: https://mun.webex.com/mun/j.php?MTID=m5d02e51661e51d5b11977cccd3fcc0f8

Ellise Proctor
MUN, Geography

Forest management alternatives to prescribed burning in Terra Nova National Park, NL

Terra Nova National Park (TNNP) is dominated by black spruce, which relies on fire for successful regeneration. However, active fire suppression in TNNP has significantly reduced black spruce regeneration, negatively impacting forest health. TNNP is highly interested in alternative management options to promote black spruce regeneration. Yet, to make informed management decisions, we need to determine the spatial distribution of two key ecological factors necessary for black spruce regeneration: the presence of i) viable seed and ii) favorable seedbeds. By identifying these relationships, we can geographically map the reproductive potential of black spruce in TNNP. Our findings provide a more in-depth understanding of TNNP's black spruce regeneration, directly contributing to the park's forest management.

Hannah Kosick
MUN, Geography

Drivers of change in the temperate-boreal forest refugium of Cape Breton Highlands National Park

The Acadian-Maritime boreal ecotone of Cape Breton Highlands National Park (CBHNP) contains low-elevation temperate species (Acadian forest) and isolated patches of highland boreal stands at their northern and southern geographic extremes, respectively. The cumulative effects of moose herbivory, continued warming, and an imminent spruce budworm outbreak are expected to increase ecological pressures on the boreal forest, further isolating at-risk species. In addition to these stressors, climate change could induce range shifts of Acadian forests, constraining boreal species distributions. Our study explored Acadian forest range shift potential, examined if moose are potential constraints on species expansion, and assessed the availability of species-specific seedbeds in CBHNP. Overall, this research contributes to our understanding of boreal forest resiliency in the boreal refugium of CBHNP and establishes a foundation for long-term monitoring.