

## ***Vegetation Team: OSE results in post-fire lichen refugia***

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### **Project Summary**

Wildfires destroy most woodland caribou forage, particularly their preferred winter forage, lichen, for up to 40 years. Seismic lines have been shown to be detrimental to woodland caribou by allowing ease of predator access to their habitat leading to increased predation rates. Yet in some places, such as sandy jack pine forests, lichens appear to successfully spread and grow on post-industrial disturbance regardless of wildfires and even in the presence of wildfire. As a result, these sites tend to serve as localized fire refugia that support lichen persistence. If this is true then it is possible that woodland caribou may be attracted to these areas, especially in post-wildfire stands where forage is limited. Here we are testing whether exploratory well pads and seismic lines are encouraging lichen growth and also acting as a local refugia of lichen.



### **Management Implications and Lessons Learned**

If exploratory well pads and seismic lines in some forests are encouraging lichen growth and acting as lichen refugia, then assumptions of lichen loss for woodland caribou habitat in these footprint features, and especially in post-fire sites, may not be well founded. And as a corollary, if woodland caribou are attracted to these local lichen-rich sites, they may experience greater interaction rates with predators (attractive sink/ecological trap) promoting further declines in woodland caribou populations.

### **Publication(s)**

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