

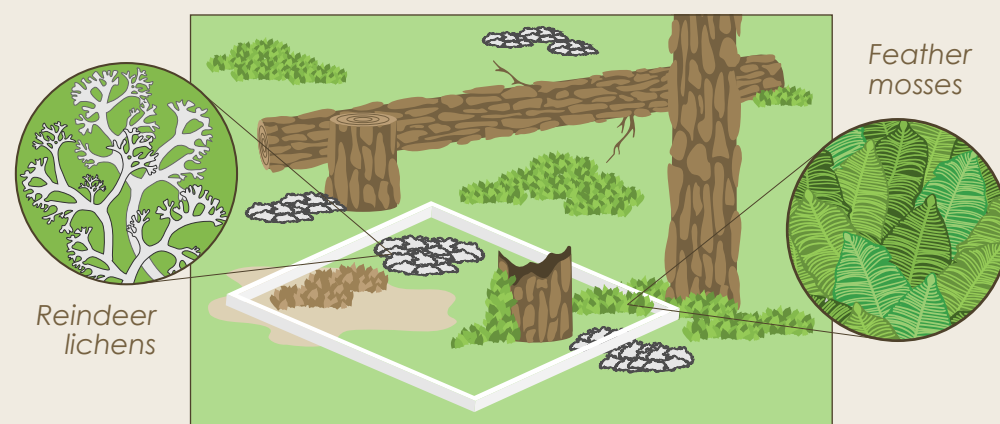
Caribou winter forage largely unchanged 19 years after canopy thinning in the old-growth, montane forests of western Alberta

Lichen is an important winter food source for caribou

Lichen species tend to be more abundant in mature forests with more open canopies.

A long-term look

Nineteen years after a sample of mature, pine forest stands in western Alberta were mechanically thinned, we measured how moss and lichen ground cover changed.

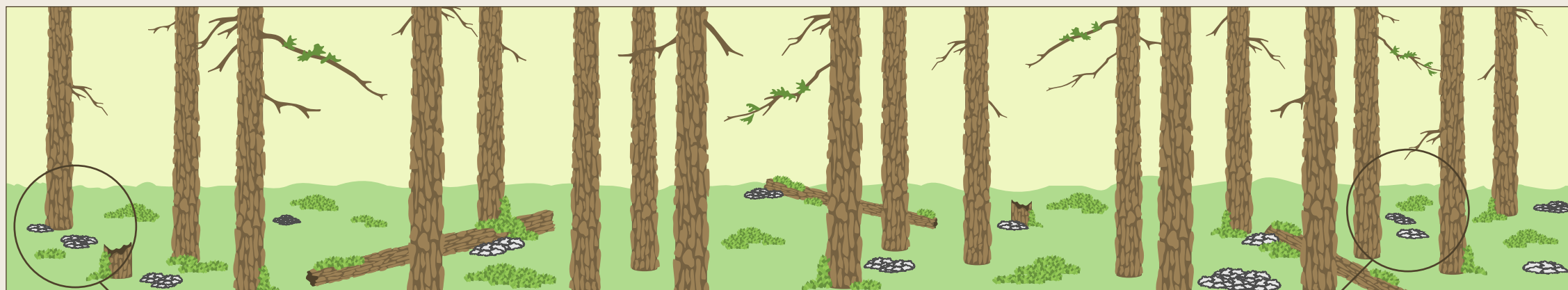


A sample vegetation plot for collecting ground cover species information

Comparing ground cover at thinned vs. unthinned forest stands

Thinned stands had less moss abundance and more bare ground. But lichen did not colonize the bare areas left by moss dieback. Its abundance remained largely unchanged or increased only slightly.

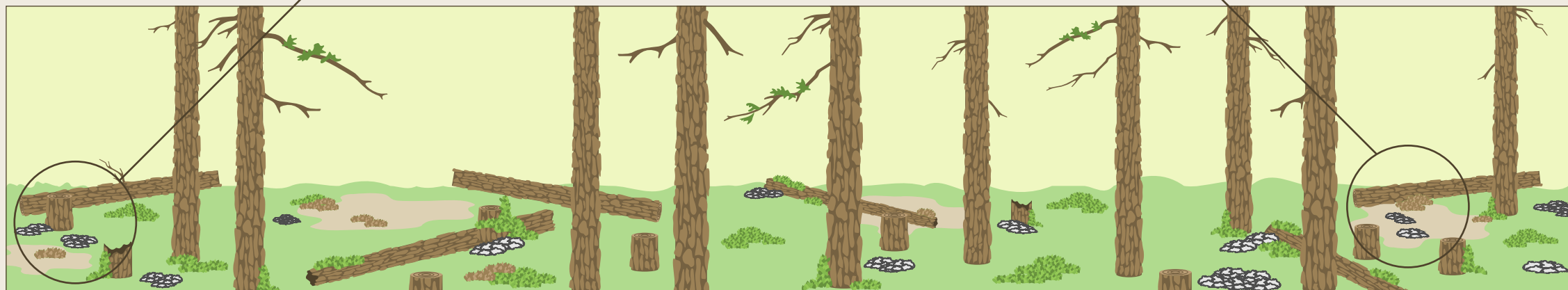
Unthinned Forest Stand



Stable or slightly increased lichen abundance

Lower moss abundance and increased bare ground cover

Thinned Forest Stand



Canopy thinning unlikely to benefit caribou

Timber harvest that partially opens the canopy likely does not promote the acceleration or augmentation of lichen growth in pine-dominated, old-growth boreal forests, therefore leaving caribou habitat suitability largely unchanged.