Appendix: Supplementary Material

Article Title: *Fuel constraints not fire weather conditions limit fire behavior in reburned boreal forests*
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Allometrics

Table S1. Allometric equations used to calculate aboveground biomass, *reported by species. Y represents aboveground dry biomass in grams. DBH stands for diameter at breast height (measured and reported in centimeters), MSE stands for mean square error, SE stands for standard error.*

Species	Source	Equation		R^2	Published DBH range	Our DBH range
Populus tremuloides	Bond-Lamberty et al. 2002	$Log_{10}Y = 2.614 + 0.852*(log_{10}DBH)$		0.99	0.3-23.7	0.1–6.5
Populus balsamifera	Byrd 2013	$Y = 0.261e^{0.0591*DBH}$		0.86	AV 2.77	1.3–2.3
Betula neoalaskana	Bond-Lamberty et al. 2002	$Log_{10}Y = 2.462 + 1.095*(log_{10}DBH)$		0.66	0.3-0.7	0.1–23.5
Picea Mariana	Bond-Lamberty et al. 2002	$Log_{10}Y = 3.011 + 1.202*(log_{10}DBH) + -.01(AGE) + 0.972(Log_{10}DBH*AGE)$		0.97	0.5-17	0.1-20
Salix	Bond-Lamberty et al. 2002	$Log_{10}Y = 2.481 + 1.19(log_{10}DBH)$		0.54	0.3-1	0.1–8.1
Alnus	Binkley et al. 1984	Leaves	$Log_eY = 1.82 + 2.38(Log_eDBH)$	0.88	2-7	0.2–4.5
		Stem	$Log_eY = 4.5 + 2.3(Log_eDBH)$	0.88	2-7	0.2-4.5

Tree Height

Our observations of tree heights informed the upward space of the model. Given the age of reburned stands (15 years on average), tree height was much shorter in reburned plots than in mature stands, which contained birch and black spruce individuals, reaching a maximum height of 17 m (Fig. S1). Based on these observations, we set the domain of the modeled landscape to a maximum height of 20 m.

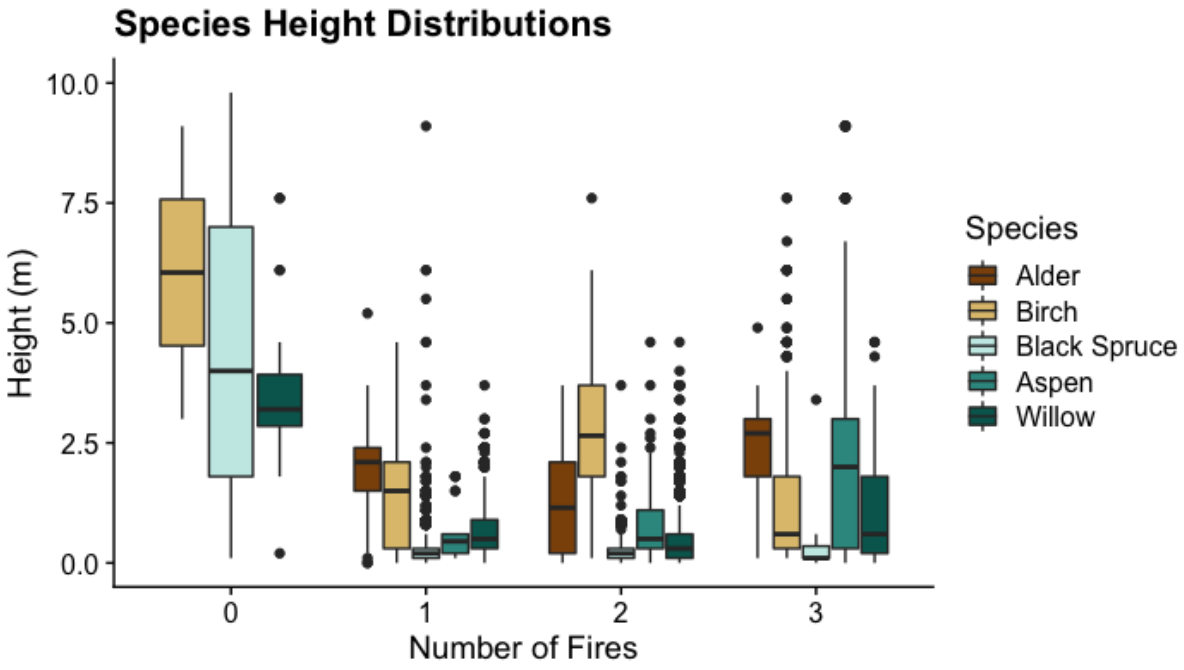

Figure S1. Heights in meters of tree species across reburn history. Dots represent outliers.