

BEC-Tree Species Description: SBSmc2

The SBSmc2 represents a fire-regenerated landscape where prior to the recent outbreak of mountain pine beetle in the last decade, mature and near mature (>60 year old) made up most of the forests of this variant. Being one of the dominant subzone/variants of the lower- to mid-elevation central interior, significant timber harvesting has occurred in the SBSmc2, with 12% of the forest area being in age class 1 to 3 managed regenerated forests. With the accelerated harvesting of beetle killed the current percent of young regeneration is undoubtedly much higher.

Historically, mature natural stands were comprised of three major tree species; Lodgepole pine (39%), interior hybrid spruce (30%), and subalpine fir (25%). The oldest stands tend to be subalpine fir-dominated. Black spruce also occurs on wet, poor sites and also on some cooler aspects. With the mountain pine beetle infestation of the past several years, much of the mature lodgepole pine within the SBSmc2 is now dead or dying and salvage harvesting has increased the area harvested significantly. Natural immature stands were even heavier to lodgepole pine and many of these have been hit hard by the beetle as well. Immature stands also have a significant spruce (19%), subalpine fir (10%) and deciduous (12%; mostly aspen) component.

Age class distribution as a % of total forest area [Source: VRIMS 2008]

Stand age class	7-9 natural forest	7-9 harvested forest	4-6 natural forest	4-6 harvested forest	1-3 natural forest	1-3 harvested forest
% of total forest area	57	0	27	0	4	12

Tree species distribution in natural old/mature (age class 7-9) and natural immature (age class 4-6) as a % of the total natural old/mature and natural immature forest cover respectively [Source: VRIMS 2008]

Species	Pl	Sx	Fd	Bl	Hw	Act	At
% of total natural old/mature (age class 7-9) forest cover	39	32	<1	25	1	1	2
% of total natural immature (age class 4-6) forest cover	58	19	<1	10	<1	1	11

RESULTS data (1988 to 2006) show that post-harvest tree species composition within the SBSmc2 is dominated by lodgepole pine and hybrid spruce with a minor subalpine fir component. The inventory information on which these numbers are based does not include the recent regeneration strategies following beetle salvage logging. In light of recent insect and disease issues, as well as ongoing climate change, every effort should be made to utilize all three major coniferous tree species in more equal proportions, rather than continue to emphasize lodgepole pine over spruce and subalpine fir in regeneration strategies.

% species composition of post-harvested stands [Source: RESULTS 1988-2006]

Species	PI	S	BI	Hardwoods
% of harvested area	60	25	12	3

Author: A. Banner, R. Coupe (January 2012)

Note: the above write-up does not account for TFL forest cover/regeneration information. This is not expected to impact significantly on the tree species percentages and age class described above.