

BEC-Tree Species Description: SBPSxc

The SBPSxc represents a cold dry climate where fires of varying intensity and size were relatively common. Prior to the recent catastrophic mountain pine beetle outbreak, mature and near mature (> 60 year old) forests occupied over 80% of the forested land area in the SBPSxc. Younger natural immature forests (<60 years old) only covered about 8% of the forested area. Prior to the beetle outbreak, lodgepole pine made up most of the mature forest cover and interior spruce only about one tenth of the mature forest cover. Douglas-fir mostly occurs along the eastern edge of the subzone and only made up a small proportion of the mature forest cover. It is important to note that as a result the mountain pine beetle outbreaks in the last 30 years most of the mature lodgepole pine and the larger diameter immature trees in the SBPSxc have been killed. Depending on stand age, beetle-killed stands often have a live sub-canopy layer of immature lodgepole pine and less frequently spruce. In addition to the beetle epidemic, recent wildfires have killed stands of all age classes over large areas of the subzone. Aggressive and extensive salvage harvesting is ongoing with a focus on the most merchantable stands.

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	36	<1	46	<1	8	9

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	PI	S	Fd	At
% of total natural old/mature (age class 7-9) forest cover	85	9	4	2
% of total natural immature (age class 4-6) forest cover	92	2	<1	5

RESULTS data for the period 1988 to 2005 indicates that lodgepole pine comprises most of the regeneration on harvested sites while hardwoods and spruce comprise about 7% and 1% respectively. Species suitability is currently limited in the SBPSxc with pine being the principal species on most sites and spruce on a more limited number of sites. Aspen is also suitable on mesic and wetter sites.

% species composition of post-harvested stands [Source: RESULTS 1988-2005]

	PI	S	Fd	Hardwoods
% of harvested area	91	1	<1	7

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Notes:

- Growing season frost is and will continue to be a significant concern on many sites in the SBPSxc.
- Currently, natural Douglas-fir occurs primarily in the eastern part of the subzone and in areas adjacent to the IFD zone.
- Douglas-fir and western larch may need frost protection during establishment phase and should only be considered on sites with good air drainage.

As a result of recent catastrophic events in the SBPSxc landscape, the current forest cover inventory is not up to date in terms of stand mortality, area harvested and regeneration status, so it is not possible to properly characterize species composition over much of this subzone.