

### BEC-Tree Species Description: ESSFwc3

Historically, the forests of the ESSFwc3 were uneven-aged with regeneration occurring in gaps created by the death of individual trees or small groups of trees. Principal disturbances agents were wind, fire, and insect outbreaks, and openings created were generally small. Occasionally, larger fires occurred resulting in larger areas of younger even-aged stands. Mature subalpine fir stands, usually with a lesser component of Engelmann spruce, dominate the landscape. The oldest stems in old forests are often Engelmann spruce as they are often longer lived than subalpine fir. Lodgepole pine is mostly restricted to younger immature stands and drier sites.

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	84	<1	12	<1	2	1

The ESSFwc3 contains little hardwood cover. Western redcedar and western hemlock are also incidental in this variant.

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	Cw	BI
% of total natural old/mature (age class 7-9) forest cover	1	23	0	75
% of total natural immature (age class 4-6) forest cover	6	11	0	83

RESULTS data for the period 1989 to 2002 indicates that spruce and subalpine firs are the dominant species being regenerated on harvested sites. These data also indicate that species composition in managed second growth stands, compared to old natural forests, is shifting to spruce dominating over subalpine fir and that lodgepole pine in managed stands is more common than in natural forests.

% species composition of managed stands [Source: RESULTS 1989-2002]

	PI	S	BI	Hardwoods
% of harvested area	17	49	32	<1

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#### Notes:

- Old forests in the ESSFwc3 most commonly have a clumpy stem as a result regeneration establishing on rotting logs
- Two year cycle spruce budworm is a significant insect pest in the ESSFwc3 and contributes to patchy mortality of subalpine fir
- The above write-up does not account for TFL forest cover/regeneration information. This may impact the tree species percentages and age class described above in some TSAs.