

## BEC-Tree Species Description: IDFxM

The IDFxM is situated in the Cariboo Region and occurs primarily in the valleys of the Fraser and Chilcotin Rivers and adjacent plateau. Much of the IDFxM landscape is a mosaic of forests and grasslands. Historically, this landscape experienced frequent low-intensity wildfires. The landscape is predominantly a natural mosaic of mostly uneven-aged mature and later immature (>60 years old) Douglas-fir forests. Even-aged lodgepole pine forests are uncommon and occur mostly in areas where frost limits the establishment of Douglas-fir. Most mature and larger immature pine has been killed by recent outbreaks of mountain pine beetle. Spruce and aspen are uncommon and mostly restricted to wetter 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	55	4	31	4	3	3

As a result of very effective fire control over the past century, there has been a dramatic increase in the abundance of advance Douglas-fir regeneration in the forest understory. Most Douglas-fir dominated areas have been harvested using selected partial cutting prescriptions that maintain multi-storied stands and promote natural regeneration. Although about 11% of the forested area has been harvested, this silvicultural system has maintained the general forest composition and diversity similar to that of historical natural stands.

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	Ep	Act	At
% of total natural old/mature (age class 7-9) forest cover	8	1	88	<1	<1	2
% of total natural immature (age class 4-6) forest cover	10	1	78	<1	<1	10

RESULTS data for the period 1988 to 2004 indicates that Douglas-fir is the dominant species regenerating on harvested sites. Regeneration management strategies in the IDFxM have little impacted landscape level species composition and diversity. Natural regeneration is the dominant regeneration method. Hardwood species in managed stands are naturally regenerated and occur at similar to levels to that of immature natural stands. Species suitability is currently limited in the IDFxM with Douglas-fir being the principal species on most sites and spruce on a more limited number of sites. Although lodgepole pine has a limited natural distribution in the IDFxM, artificially regenerated pine has been shown to be successful on many sites.

% species composition of managed stands [Source: RESULTS 1988-2004]

Species	PI	S	Fd	Hardwoods
% of harvested area	12	4	81	4

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Notes:

- Successful establishment of artificial regeneration of Douglas-fir is limited by drought and on plateau areas frost is a limiting factor
- Level and gently sloping valley bottom terraces along the Chilcotin River are more prone to growing frosts and are dominated by immature pine