BEC-Tree Species Description: ESSFwk2

Historically the forests of the Misinichinka variant of the Wet Cool Engelmann Spruce – Subalpine Fir biogeoclimatic unit (ESSFwk1) were dominated by older stands due to a longer fire return interval for the unit. Subalpine fir and Engelmann spruce dominated stands were widespread on upland sites. Lodgepole pine dominated stands occurred in dispersed areas with more recent fire history. Very rare, stunted open subalpine fir and Engelmann spruce treed bogs occur in very wet organic depressions. Black spruce occurs on some of these sites at lower elevations. Minor amounts of western hemlock and western redcedar were common adjacent to the ICH in the southern portion of the ESSFwk2. Whitebark pine occurred on scattered very dry, shallow rocky crests, and rocky warm upper slopes at the higher elevation limits of the unit. Interior Douglas-fir and trembling aspen stands were restricted to warm aspects at the lower elevation limits of the ESSFwk2.

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

<table>
<thead>
<tr>
<th>Stand age class</th>
<th>7-9 natural forest</th>
<th>7-9 harvested forest</th>
<th>4-6 natural forest</th>
<th>4-6 harvested forest</th>
<th>1-3 natural forest</th>
<th>1-3 harvested forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total forest area</td>
<td>84</td>
<td>0</td>
<td>11</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

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]

<table>
<thead>
<tr>
<th>Species</th>
<th>BI</th>
<th>Ep</th>
<th>PI</th>
<th>Se</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of total natural old/mature (age class 7-9) forest cover</td>
<td>57</td>
<td>0</td>
<td>2</td>
<td>41</td>
</tr>
<tr>
<td>% of total natural immature (age class 4-6) forest cover</td>
<td>51</td>
<td>2</td>
<td>18</td>
<td>23</td>
</tr>
</tbody>
</table>

Forest management practices of the 1960’s to present have resulted in young stands that are mostly open stands of Engelmann spruce or subalpine fir except on the eastern side of the ESSFwk2 where species regeneration is influenced by fires from the boreal plains.

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

<table>
<thead>
<tr>
<th>Species</th>
<th>B</th>
<th>PI</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of harvested area</td>
<td>30</td>
<td>2</td>
<td>68</td>
</tr>
</tbody>
</table>

Author: C. DeLong (March 2011)