Plug Transplant Trial

Officer i/c: S. Willis

Location: Wansa Lake

Region/District or Nursery: Prince George East, Prince George Region

Objective: To compare the performance of Interior Spruce grown as transplanted plugs with that of PSB 313, 2+0 bareroot, and 2+1 bareroot, when planted on a brush prone site.

Progress: 2nd assessment Fall 82 completed.
Interim report completed Winter 82.

Status: Final assessment due Fall 85.
Final report due Winter 85.

Report Distribution: Research Officer, Prince George and Smithers
Silviculture Officer, Prince George and Smithers
District Manager, Prince George East
Nursery Development Officer, Silviculture Branch
Library, Silviculture Branch
Working Plan For SX 81.104 Plug Transplant Trial

1. Objectives
To compare the performance of Interior Spruce grown as transplanted plugs with that of PSB 313, 2+0 bareroot, and 2+1 bareroot, when planted on a brush prone site.

2. Location
C.P. 17, Block D, A04463 (Carrier Lumber), Prince-George T.S.A.
P.G. East District, Prince George Region.

3. Trial Stock
<table>
<thead>
<tr>
<th>Seedlot No.</th>
<th>Stock Type</th>
<th>Code</th>
<th>Nursery</th>
</tr>
</thead>
<tbody>
<tr>
<td>1856</td>
<td>PSB 313</td>
<td>PSB</td>
<td>Koksilah</td>
</tr>
<tr>
<td></td>
<td>PSB 211+1</td>
<td>1P+1</td>
<td>Surrey</td>
</tr>
<tr>
<td>2+0 Bareroot</td>
<td>2+0</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>2+1 Bareroot</td>
<td>2+1</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

4. Plot Design & Stock Requirements
4 replications (plots) x 4 stock types x 2 lines per plot x 50 trees per line = 1600 trees total.
Spacing within rows = 1.5 m; between rows = 3.0 m; between plots = 6 m.

5. Dates of Planting and Assessment
Plant May 81
Assessment Fall 81, Fall 82 and a 5 year final, Fall 83.

6. Summarize and Report
Summarize data from 2nd assessment and issue interim report Winter 82/83.
Summarize 5 year data and issue final report Winter 85/86.

7. Report Distribution
Research Officer, Prince George and Smithers
Silviculture Officer, Prince George and Smithers
District Manager, Prince George East
Nursery Development Officer, Silviculture Branch
Library, Silviculture Branch
## SURVIVAL OF VEXAR PROTECTED AND UNPROTECTED TREES

<table>
<thead>
<tr>
<th>STOCK TYPE</th>
<th>% Survival With Vexar</th>
<th>% Survival Without Vexar</th>
<th>Total Height (cm) With Vexar</th>
<th>Total Height (cm) Without Vexar</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSB 313</td>
<td>97.9</td>
<td>95.2</td>
<td>43.7</td>
<td>40.3</td>
</tr>
<tr>
<td>2+0 BR</td>
<td>63.7</td>
<td>61.2</td>
<td>-</td>
<td>24.0</td>
</tr>
<tr>
<td>2+1 BR</td>
<td>98.4</td>
<td>94.8</td>
<td>-</td>
<td>34.3</td>
</tr>
<tr>
<td>PBR 1+1+1</td>
<td>88.0</td>
<td>88.0</td>
<td>35.5</td>
<td>36.6</td>
</tr>
</tbody>
</table>

**Comments**

(a) The difference in survival between Vexar treated and untreated trees is very slight but a trend seems to exist. The trees that are Vexar treated exhibit a minimal difference in favor of this treatment by as much as 2.7%.

(b) The difference exists also in total height but there isn't any consistency. The slight difference in survival could stem from the fact that the Vexar treated trees are afforded more shade.

(c) After two years in the field it can be said that Vexar netting has had very little effect on the performance of planted trees. It must be mentioned that the Vexar netting was prescribed only for the protection of the planted trees from the local rabbit population.

(d) Lifespan of the netting is 22-28 months. Still no signs of degradation are evident after two years in the field.

(e) The sample on which the above information was collected was small, ie 50 trees of each treatment.

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*Curt Clarke*

*Nov. 10/82*