The trial was assessed on September 14, 1984 after one growing season. There was no significant difference in growth between the four treatments. The average height this year for all treatments is 24 cm; there was no significant difference in growth between the four treatments. The average height this year for all treatments is 25 cm; average increment is 11 cm; average diameter is 4.1 mm. A difference in condition was observed between treatments:

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Good</th>
<th>Medium</th>
<th>Poor</th>
<th>Dead</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>31%</td>
<td>69%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>top pruned</td>
<td>31%</td>
<td>69%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>bottom pruned</td>
<td>19%</td>
<td>77%</td>
<td>1%</td>
<td>3% (2 dead trees)</td>
</tr>
<tr>
<td>top and bottom pruned</td>
<td>20%</td>
<td>73%</td>
<td>7%</td>
<td>-</td>
</tr>
</tbody>
</table>

Donna LeLacheur  
Silviculture Planning Co-ordinator  
Cariboo Forest Region
1. Top Pruned

   Condition: Good - 23  Medium - 50  Poor - 1
   HT84:  25 cm
   INC:  11 cm
   PHT:  14 cm
   DIA84:  4.2 mm

2. Bottom Pruned

   Condition: Good - 14  Medium - 58  Poor - 1  Dead 2
   HT84:  26 cm
   INC:  11 cm
   PHT:  15 cm
   DIA84:  4.1 mm

3. Top and Bottom Pruned

   Condition: Good - 15  Medium - 55  Poor - 5
   HT84:  24 cm
   INC:  10 cm
   PHT:  14 cm
   DIA84:  4.1 mm

4. Control

   Condition: Good - 23  Medium - 52
   HT84:  26 cm
   INC:  11 cm
   PHT:  15 cm
   DIA84:  4.1 mm
Row 1 Control

Condition:  Good - 9  Medium - 16
HT84:  27 cm
INC:  11 cm
PHT:  16 cm
DIA84:  4.4 mm

Row 2 Top

Condition:  Good - 9  Medium - 14  Poor - 1
HT84:  27 cm
INC:  13 cm
PHT:  14 cm
DIA84:  4.5 mm

Row 3 Bottom

Condition:  Good - 5  Medium - 19  Poor - 1
HT84:  29 cm
INC:  13 cm
PHT:  16 cm
DIA84:  4.3 mm

Row 4 Bottom

Condition:  Good - 6  Medium - 19
HT84:  25 cm
INC:  10 cm
PHT:  15 cm
DIA84:  4.0 mm

Row 5 Control

Condition:  Good - 11  Medium - 14
HT84:  25 cm
INC:  12 cm
PHT:  13 cm
DIA84:  3.9 mm

Row 6 Both

Condition:  Good - 6  Medium - 17  Poor - 2
HT84:  27 cm
INC:  11 cm
PHT:  16 cm
DIA84:  4.3 mm
Row 7 Top

Condition: Good - 2 Medium - 23
HT84: 26 cm
INC: 10 cm
PHT: 16 cm
DIA84: 4.1 mm

Row 8 Top

Condition: Good - 12 Medium - 13
HT84: 23 cm
INC: 11 cm
PHT: 12 cm
DIA84: 4.1 mm

Row 9 Bottom

Condition: Good - 3 Medium - 20 Poor - 0 Dead - 2
HT84: 24 cm
INC: 10 cm
PHT: 14 cm
DIA84: 4.0 mm

Row 10 Both

Condition: Good - 5 Medium - 19 Poor - 1
HT84: 21 cm
INC: 8 cm
PHT: 13 cm
DIA84: 3.8 mm

Row 11 Control

Condition: Good - 3 Medium - 22
HT84: 26 cm
INC: 10 cm
PHT: 16 cm
DIA84: 3.9 mm

Row 12 Both

Condition: Good - 4 Medium - 19 Poor - 2
HT84: 25 cm
INC: 12 cm
PHT: 13 cm
DIA84: 4.2 mm
Lodgepole Pine Plug Pruning Trial

Objective: To determine the effect of mechanical root pruning on the root growth of lodgepole pine.

Stock Information: Lodgepole pine (Pli) PSB 211 1+0
Seedlot 3623 - collected 1978, seed zone 3100 - Selina Lake Nursery - World Silviculture Ltd., Oliver, B.C.

There are four treatments: 1. top pruned - top of plug sliced to prevent girdling
2. bottom pruned - bottom of plug pruned to prevent congestion and encourage a tap-root
3. top and bottom pruned
4. control

The block consists of twelve rows of twenty-five trees (total number of trees = 300). Each treatment was randomly assigned to three rows. The rows are two metres apart; the trees in each row are at a one-metre spacing.

<table>
<thead>
<tr>
<th>Row</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>* 1</td>
</tr>
<tr>
<td>3</td>
<td>* 2</td>
</tr>
<tr>
<td>4</td>
<td>* 2</td>
</tr>
<tr>
<td>5</td>
<td>* 4</td>
</tr>
<tr>
<td>6</td>
<td>* 3</td>
</tr>
<tr>
<td>7</td>
<td>* 1</td>
</tr>
<tr>
<td>8</td>
<td>* 1</td>
</tr>
<tr>
<td>9</td>
<td>* 2</td>
</tr>
<tr>
<td>10</td>
<td>* 3</td>
</tr>
<tr>
<td>11</td>
<td>* 4</td>
</tr>
<tr>
<td>12</td>
<td>* 3</td>
</tr>
</tbody>
</table>

Assess survival after one year, measure the height and diameter of trees, and select five trees at random from each row for excavation, at two years and five years.
Experimental analysis will be used to determine if there are trends in the survival and growth of the seedlings which can be attributed to root pruning techniques.

Last week we assessed the trial. There was no significant difference in growth between the four treatments. The average height this year for all treatments is 25 cm; average increment is 11 cm; average diameter is 4.1 mm. A difference in condition was observed between treatments:

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