DIXON, D.J.
SHELTERCONE SEEDING TRIAL
IN THE INVERMERE DISTRICT
CDCA c. 1 ma Main........

634.909711
BCMF SIL
SX B3105N
1987
c. 1 ma
REPORT SX    SX83105N

INTERIM  

FINAL    X

DATE   Feb. 4, 1987

TITLE    Sheltercone Seeding Trial in the Invermere District

Report prepared by:  

D.J. Dixon    (Typed)

Report & distribution approved by:  

R.B. McNaughton    (Typed)  (for Regions - Silviculture Officer)

(a) Wide Distribution    

(b) Limited    

(i) Internal - Branch only    

(ii) External - Designated    

(iii) Ministry only

COPIES TO:

Invermere District
Nelson Region
Silviculture Branch
Radium Forest Products (formerly Revelstoke Sawmill (Radium) Ltd.)

Approved:

D.L. Oswald    (Typed)  (for Regions - Forestry Manager)
SHELTER CONE DIRECT SEEDING TRIAL

Final Report

February 4, 1987
Objectives

1. To bring the treated areas to a satisfactorily stocked condition;

2. To determine the effectiveness of Sheltercone Direct Seeding as an alternative to planting seedlings.

Discussions/Conclusions

This Final Report focuses on the Survival Surveys of the sheltercones and seedlings planted on the project locations within FL A18979.

We conducted survival surveys in the Fall of 1985 (attached table). As the results show, there was very poor survival shown with the sheltercones. In approximately 60% of the samples, the cones were found but had no seedling inside. Of the samples that had live seedlings inside, the majority of them appeared frail; generally, they were classed as in fair to poor condition, albeit alive. The average height was six cm.

The planted seedlings were classed as being in good to fair condition—pine being good and fir being fair. The average height of pine was 30cm and fir was 15cm.

Our conclusion is that in this particular trial, direct seeding did not prove to be a satisfactory alternative to planting although there appeared to have been good germination results in 1983.

Subsequent to the survival study, we did Regeneration surveys on the three areas that had been seeded. Natural fill-in was occurring, but the areas were still classed as NSR. We have scheduled the areas for fill-in planting in 1988.
### Sheltercone Seeding Survival Surveys

#### Final Summary

**Date Sown:** 83-05-18  
**Date Final Survey:** 85-09-18

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Species</th>
<th>Seedlot</th>
<th>#Planted</th>
<th>#Surveyed</th>
<th>Sample Condition</th>
<th>Nothing Found*</th>
<th>Sample Missed**</th>
<th>Survival%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Pinnacle Creek (82K16b-2)</td>
<td>Fd</td>
<td>2350</td>
<td>7188</td>
<td>200</td>
<td>63</td>
<td>16</td>
<td>116</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Pinnacle Creek (82K16b-3)</td>
<td>Fd</td>
<td>2350</td>
<td>30295</td>
<td>50***</td>
<td>13</td>
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<td>55</td>
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<td>6</td>
<td>Pinnacle Creek (82K16b-4)</td>
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<td>2350</td>
<td>20553</td>
<td>255</td>
<td>84</td>
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<td>505</td>
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<td>40</td>
<td>300</td>
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</table>

**Notes:**  
* - Sample stake and sheltercone was found with no visible evidence of a plant inside.  
** - Could not locate sample stake or sheltercone.  
*** - Only 50 samples taken, previous study in 1983 indicated only 29% survival in this sample.