1. Objectives

To determine the field performance of Cedar & Balsam seedlings grown on screeed microsites as compared to untreated microsites in a coastal Sausalito area. Also to determine the field performance of Balsam & Cedar seedlings grown on screeed microsites as compared to untreated microsites in a coastal Salmon Berry area.

2. Location

Toquart Bay

3. Trial Stock

Seedlot No.  Type  Type  Plant  Age
Ba  4207  P58312  1 yr  1 month
Cw  18785

4. Plot Design

Sausalito Site

The trial area was homogenous and characterized by even terrain, 5-10% slope, medium vegetation.
light slash and large stumps. Three replications of each of the four treatments were completed as follows:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Control (Cedar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>1 foot screen (Cedar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>1 foot screen (Balsam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2 foot screen (Cedar)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Each replication consists of 40 trees, for a total of 480 trees.

Salmonberry site

The trial area was homogenous and characterized by even terrain, 0.5% slope, heavy vegetation, medium slash and swampy. Three replications of each of the four treatments were completed as follows:
A = Control (Balsam)
B = 1 foot screef (Balsam)
C = 1 foot screef (Cedar)
D = 2 foot screef (Balsam)

Each replication consists of 40 trees for a total of 480 trees.

5. Dates of Treatment & Assessment
   Scarified Planted & Tagged: March 21 - March 30, 1988
   First Assessment: April
   Secondary Assessment: Fall 1988
<table>
<thead>
<tr>
<th>Location</th>
<th>628 to 642</th>
<th>Coordinates: S 27503.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Species</td>
<td>Tree Species</td>
<td>Diameter</td>
</tr>
<tr>
<td>1. Galatea (C.P.2)</td>
<td>Light</td>
<td>0-5%</td>
</tr>
<tr>
<td>2. Salter's jstat (C.P.9)</td>
<td>Light to 0-35%</td>
<td>44</td>
</tr>
</tbody>
</table>

Mean Machine Utilization (includes tree felling, moving between stumps and refueling):

- C.P.2: 82%
- C.P.9: 81%

Site description:

1. Site located near Walklet. Even to rolling terrain; light to medium vegetation; Average stump spacing: 3.5m, Average stump height/diameter: 260/160 cm; light slash; Humus layer: 5-10 cm; Moist S/L soil.

2. Site located near Walklet. Even terrain; medium to heavy vegetation; Average stump spacing: 3.5m, Average stump height/diameter: 300/60 cm; light to medium heavy slash; Humus layer: 4-8 cm; Wet S/L soil and Moist S/L soil.
1. Utilization at the Redleaf site was high at 82%. An average of 1 logging-loaded tree was processed per 50 min. Scheduled productivity was 48 xels/hr. Plantable spots were estimated at 416 sq ft, and the average xel & depths were length = 39 cm, width = 34 cm, depth = 7 cm.

2. Utilization at the Salmonberry site was also high at 81%. An average of 1 logging-loaded tree was processed per 62 minutes. Scheduled productivity was 44 xels/hr. Plantable spots were estimated at 450 sq ft, and the average xel & depths were length = 38 cm, width = 35 cm, and depth = 6 cm.

2 operators were evaluated, one for each site. The operator on the Redleaf site was more motivated, took fewer breaks, and put more effort into the job. The operator on the Salmonberry site was very slow, showed no interest in doing the job, and took numerous breaks.

Salad site was easier walking with machine as fewer logs less of a problem finding plantable spots. Salmonberry site was difficult for walking through due to covered slash and was harder in finding plantable spots.