SX 85703 Q

Maple Coppice Control Trial

Working Plan

G. Ackerman

June 1985
Working Plan
Maple Coppice Control Trial
Skutz Falls - Duncan

Objectives

1. To compare the efficacy of chemical versus manual vegetation control methods on Broadleaf Maple (Acer macrophyllum).

2. To assess the effect of 2 vegetation control methods (chemical and manual) on seedling survival and growth.

Introduction

To eliminate the threat of maple trees seeding in recently logged cutblock, these non-commercial stems are felled during the harvesting process. Often, within one year after cutting, considerable resprouting will occur around the stump.

Manual treatment of this new growth can be a very time consuming process not always successful, as further resprouting may occur. In these cases, repeated visits to the site would be required to carry out additional treatments.

Treatment of the coppices with herbicides should provide the most effective method of control in terms of efficacy and costs.

Site Information

Map Sheet - 92 B 071
Land District - Cowichan Lake
Opening Number - 10
Biogeoclimatic SubZone - CDFb
Original Inventory Label - F(H) 841-M
History Key Record - V021690
Logged - 1978
Burned - 1979
Planted - May 1980, F 2+0 BR
Seedlot - 501
Post Logging Stand Tending Treatments
1983 - Manual Brushing
1984 - Chemical Brushing - Backpack Sprayers

Method

Within the trial area, three test blocks will be established with permanently marked corner posts. The test blocks will have no fixed size, but will be large enough to accommodate 20 circular assessment plots, each measuring ten square meters (radius 1.78 m). Each assessment plot will be located as to include a target maple coppice and a crop tree. Assessment plot will be identified with a permanent tag.
Treatments

To determine the efficacy of chemical versus manual vegetation control, two test blocks plus an untreated control test block will be established. Details of the treatments are outlined in Table 1.

Table 1: Details of Treatments

<table>
<thead>
<tr>
<th>Test Block</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Chemical - Spot treatment of each maple coppice using a backpack sprayer. The herbicide Roundup (glyphosate) will be applied at a solution rate of 2.25% a.i. (6.27% product).</td>
</tr>
<tr>
<td>B</td>
<td>Manual - Each maple coppice will be manually cut using conventional hand tools (eg. powersaw or sandvik).</td>
</tr>
<tr>
<td>C</td>
<td>Control - No treatment</td>
</tr>
</tbody>
</table>

The worker performing the chemical treatment will be instructed to spray all regrowth on each stump to the point of runoff. The worker performing the manual treatment will be instructed to cut and remove all regrowth from the stump.

Assessments

Prior to treatment, 20 assessment plots within each of the 3 test blocks will be established. Crop trees and target species shall be assessed prior to treatment as well as 1 and 2 years post treatment. Data collected on crop trees will include condition (good, fair, poor or dead), height and diameter (of root collar). The target species will be assessed for percent cover, average height, number of resprouts from the main stump and vigour.