The use of herbicides for control of *Calamagrostis* grass in plantations of the Peace River

**Officer i/c:** L. Herring  
**Location:** Mile 106, Alaska Highway  
**Region/district or nursery:** Prince George/Fort St. John Forest District  
**Objective:** To determine efficacy of glyphosate, hexazinone, semazine and dalapon as chemical site-prep agents. To compare 2 levels of applications, and create a demonstration area.  
**Progress:** Progress report written.  
**Next scheduled assessment/treatment:** Progress report written  
**Report distribution:** Silviculture Branch Library  

Abandoned: Lack of time for regular maintenance of trial

April 1987
THE USE OF HERBICIDES FOR
CONTROL OF CALAMAGROSTIS GRASS
IN PLANTATIONS OF THE PEACE RIVER

SX 83405G

Establishment Report
December, 1983

L.J. Herring

SILVICULTURE
BRANCH
INTRODUCTION

Plots for both chemical and equipment comparisons were located during late May, 1983. All spray operations took place during acceptable weather conditions on July 16, 1983. Weather conditions precluded a late fall application of the three remaining treatments.

TREATMENTS

Chemical Comparison Study

Application of glyphosate was carried out using a C.P. 3 pressurized backpack sprayer. A 17% solution of Roundup in water was applied at the rate of 30 l/ha to achieve the prescribed rate of 3 kg a.i./ha on the 0.04 ha plots.

Weather conditions precluded application of hexazonine, simazine and dalapon during the fall of 1983. These will be applied in early spring 1984 immediately following snowmelt.

Equipment Comparison Study

Application of glyphosate using the C.P. 3 and U.L.V. systems was carried out on July 16, 1983 as follows: (see also Figure 1)

Block A - the C.P. 3 sprayer delivered 0.9 kg a.i./ha using an 8.4% solution of Roundup in water, and applied at a rate of 30 l/ha.

Block B - the U.L.V. backpack sprayer delivered 0.52 kg a.i./ha using a 22% solution of Roundup in water, and applied at a rate of 6.5 l/ha.

Block C - The C.P. 3 sprayer delivered 0.66 kg a.i./ha using a 6% solution of Roundup in water, and applied at a rate of 30 l/ha.

PHOTO RECORDS

At the completion of spraying, permanent photopoints were established as shown in Figure 2. Photos were taken as numbered and remain part of the experimental record.
Figure 1. Equipment comparison treatment allocations
FUTURE REQUIREMENTS

Completion of remaining chemical treatments must be carried out immediately after snowmelt in April 1984. Subsequently all corner stake markers must be replaced with posts and permanently marked. Photopoints and photographs must be completed for all treatments.

Spruce seedlings of an appropriate provenance and stock type must be established as late in the planting season as possible (early June, 1984) in order to minimize damage from herbicide residues. Seedlings should be planted at a close 2 x 2 m spacing to ensure adequate samples within each treatment cell. Consideration should also be given to planting plots of seedlings in Blocks A, B and C.
Figure 2. Location of photopoints and aspect of photo records