

Enhanced Silviculture Treatments in the ICHmk3

Research Project # 96-05

Quick Sheet
#13

The objective of this project is to demonstrate intensive silviculture treatments in the moist cool subzone of the Interior Cedar Hemlock biogeoclimatic zone.

In the Cariboo, intensive silviculture opportunities have traditionally included juvenile spacing, fertilization and insignificant amounts of pruning. Pruning and fertilization are more common in coastal regions, where faster growth rates provide better economic returns.

June, 99

This stand was harvested in 1971 and planted in 1978. This is one of the earliest successful Douglas-fir plantations in the Gavin Lake block. This stand was selected for treatment because it was not free growing. Free growing is described as the conifers being 150% above brush competition, disease free, and a minimum of 5 years old. This stand has a Douglas-fir site index (reference age 50) of 25 metres, making it one of the most productive sites for timber on the Research Forest. Research and demonstration opportunities also made this site a good candidate for intensive silviculture treatments.

This project was installed in the fall of 1997 to demonstrate intensive silviculture treatments. The questions this project seeks to answer are: *can rotation length be shortened by carrying out incremental silviculture projects and are the silvicultural treatments economically feasible?*

This trial is established as a factorial experiment in a completely randomized block design. All possible combinations of juvenile spacing, fertilization, pruning and untreated controls were installed in plots that were randomly located within two replicate blocks. The blocks are characterized by different ecological site conditions.

- Juvenile space
- Fertilize
- Prune
- Control
- Juvenile space & fertilize
- Juvenile space, fertilize & prune
- Juvenile space & prune
- Fertilize & prune

In the spring of 1999 permanent growth and yield plots have been established in each plot to monitor the growth response of interior Douglas-fir to the various treatment combinations over time.

For further information, please call Bev Atkins at 392-2207.