WORKING PLAN

HAND PLANTING TOOL TRIAL # SX88107Q

Sponsorship: Joint Study Between FERIC & Silviculture Branch, Ministry of Forests and Lands

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Objective:

To measure productivity and planting quality on identified and quantified site in Invermere. Tree planting tools to be tested are a Pottiputki, C-System planting tube, and a common planting shovel. This trial will be linked with the mechanical planting machine trial on an adjacent area.

General Procedure:

A crew of three planters will plant with the above tools for two days with each tool. Daily time and productivity records will be kept for each planter as well as a detailed work sample. Work samples will be comprised of two hours per/day per/planter, with observations at 30 second intervals. Planting quality will be checked using standard planting quality inspection system. The results will be analysed by FERIC and a short technical paper will be written.

Funding:

This project will be funded by FERIC with a $2500.00 budget. The Ministry of Forests and Lands will supply technical assistance in the form of planting quality inspection checkers, assistance in laying out the area, a site inspection by a Ministry soil specialist, and will also pay the planters.

Site Requirements:

The project will require enough area to provide continuous planting for 18 man days. Daily production is expected to vary between tools. The required area would be a minimum of 18 hectares, and a maximum of 30 hectares. The planting area should be divided into three sections as similar in planting difficulty, terrain, and soil type as possible. As planting quality plots will be required on as little as one days production per man, the area should be laid out with short runs for the planters. Preferably, one days production should form as close to a square as possible.

The time study staff will locate plot centers for planting quality inspections. The quality checking crew should be prepared to begin inspections from half to three-quarters of the way through the project.

Planting tools will be provided as follows. Two Pottiputkis with 50mm tubes will be purchased for the project. The Silviculture Branch has one C-System, and is having another one built. Planting shovels are expected to be supplied by the planters themselves. Time study equipment will be supplied by FERIC.
HAND PLANTING TOOL TRIALS

Location: Beaver Ridge (Contract 2, Unit D)

District: Invermere

Objective: To measure the productivity and planting quality achieved by planters using the Pottiputki and C-System Planting Tubes compared to using a standard shovel on a brushbladed site.

Process: A site was selected near Invermere and six days of planter productivity data were collected, two days on each tool. Approximately six hours of work sample data for each planter on each tool were included. This site was not prepared to the intensity required for planting tubes.

Two more trials will be done in 1989. A report will be prepared by FERIC and published in 1990.