SEEDLING PROTECTION TRIAL

SKUNSNAT CREEK
KISPIOX DISTRICT

TRIAL OUTLINE

OBJECTIVE:
To test the effectiveness of two different seedling protectors against rabbit browsing on newly planted trees on a high damage hazard site.

LOCATION:
Trial plots are to be located within opening 103P070-41 (C.P. 5 Block 7 of the Bell Pole Co. Ltd. F.L. A-16832) in the vicinity of Skunsnat Creek at 70.5 km on the Kispiox Forest Service Road.

WORKING PLAN:

TRIAL DESIGN

This trial will compare the effectiveness of both seedling protection netting and rigid seedling protection tubes in eliminating damage due to rabbits on a high hazard site.

The trial area is a relatively uniform stratum of 4m aspen overtopping freshly fill planted Sx 1+0 PSB 415 seedlings.

An adjoining opening was fillplanted in 1991 under similar site conditions and was subject to severe damage due to rabbit browsing.

The trial unit is approximately 2.0 ha in size and will be divided into 9 similar plots of about 0.2 ha each (see map). These plots will allow for 3 replications of protector netting treatment to be tested against 3 replications of a rigid tube protector treatment on eliminating damage due to rabbits as measured on 3 control plots. Treatment plots are to be randomly assigned.
WORKING PLAN (Continued):

TRIAL DESIGN (Continued)

Within each plot, 25 trees will be staked and tagged. Tree heights will be measured at the time of staking and recorded. Staked trees will then be assessed at dates of 1 year, 2 years, and 3 years post-installation to record survival, total height, leader increment, and damage.

TREATMENT DETAILS

TREATMENT 1 - Protex Rigid Seedling Protectors
(36 inch height, 4 inch diameter, 24 strand, UV IV, poly.)

The rigid tube protectors are a diamond mesh plastic with the addition of ultra-violet inhibitors that allow for photo-degradation over a period of approximately 30 months. The tubes are supported by a hooked wire woven through the tube and then anchored into the ground (Texguard Wire Supports, 36 inch, 9 gauge).

Installation of the tube involves screeing around the seedling to ensure a flat footing and then placing the tube over the seedling and pressing it firmly to the ground. Approximately 2 cm of clearance is desired about the seedling to the tube. The support wire is then woven through the tube about 3 times and exited at the base for anchoring 10 cm to 15 cm deep into the soil.

TREATMENT 2 - Tiller Stretch Net

The protector netting is cut to lengths that will allow the net to extend from the base of the seedling to a height of 8 - 10 cm above the terminal bud. For this trial, lengths of 40 cm to 45 cm were appropriate for the seedlings. The netting is slipped over the seedling and seated gently such that the terminal bud will not become entangled with growth. Following annual bud flush and shoot elongation it will be necessary to tend the netting by pulling gently upwards to protect any emergent leaders.

SUPERVISION

This trial will be supervised by Bell Pole Co. Ltd. staff. The person in charge and responsible for this trial will be Jacques Corstanje.