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INTERIOR SPRUCE STOCK TYPE
COMPARISONS IN THE IWR
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INTERIOR SPRUCE STOCK TYPE COMPARISONS IN
THE IWR (CEDAR SUB-ZONE)

Working Plan
1981

V. Grainger

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WORKING PLAN

INTERIOR SPRUCE STOCK TYPE COMPARISONS
IN THE IWH (CEDAR SUB-ZONE)

In our wet belt operations we are often unable to prepare sites for planting by mechanical means, or by fire, due to the wetness of slash and hygric, sometimes steep, ground conditions. Planting is often carried out, therefore, without prior treatment.

It appears that sturdy stock is necessary to flourish in conditions of low light and temperature under a thick vegetation canopy present in these areas. At present, we feel a healthy seedling with a vigorous well developed root system and thick sturdy stem is necessary. We now use 2+1 transplant bare root stock, when available. Other stock types may show promise as well. Chilliwack nursery has been growing 1½-½ transplant stock this past year. Also, the standard 211 plug may be underrated in its ability to do well in these conditions.

The purpose of this study is to compare various stock types of Interior Spruce in the IWH (cedar sub-zone) in the Cariboo Forest Region.

STUDY AREA

The study areas will be in the Abbott Creek area on the lower portions of CB 3 & 4 of T.S.H.L. A01964 CP32. Slope is 5 - 10% with a south aspect at 1129 metres in elevation. Soils are silt-clay and site is hygric to mesic with typical IWH (cedar sub-zone) vegetation.

Burns were attempted on both blocks (CB 3 in 1979, CB 4 in 1980) but were spotty and very light. Areas to be planted with research stock will be unburned portions of the blocks. Major seepage areas will be avoided as well.

STOCK AVAILABILITY

Three different seedlots will be used; stock types as listed.

<u>Seedlot</u>	<u>Stock Type</u>	<u>Elevation</u>	<u>Origin of Seed</u> (Map Sheet #)
#2652	SB 211 2-0 (15 cm +) 2-0 (10-15 cm) 2+1	1129 m	92P-15

Interior Spruce Stock Type Comparisons
in the IWH (Cedar Sub-zone)

Stock Availability

<u>Seedlot</u>	<u>Stock Type</u>	<u>Elevation</u>	<u>Origin of Seed (Map Sheet #)</u>
#2820	SB 211 2-0 (15 cm +) 2-0 (10-15 cm) 1½-½	915 m	93A-12
#2874	2-0 (15 cm +) 2-0 (10-15 cm) SB 211 1½-½	1067 m	93A-13

Stock will be planted, along with our operational planting, in mid May. Quality of each tree will be checked.

LAYOUT & DESIGN

300 trees of each stock type will be planted; 100 in each replica; for a total of 3600 trees. Three replicas will be planted with 12 lines in each, working north (upslope) from a baseline. Each line will consist of 100 trees of one stock type and seedlot. Each tree will be flagged and every tenth tree staked.

ASSESSMENTS

Seedlings will be measured in early September or late August. The measures and one recorder will be used with measurements taken to the nearest centimetre. First season growth and total height will be taken.

We hope to continue measurements for a minimum of five years. Re-evaluation of the project at that time would allow us to assess the value of continued data collection at that time.

Flags and fallen stakes would be replaced yearly.

COSTS

As per previously submitted breakdown;

CB	NO OF TREES	TYPE	SEEDLOT
5	10,000 8,175 18,175	PL S	2308 2652

THSL/THL	AO 1964	LELEND	CP 32-45
LAND DISTRICT	CARIBOO	RANGER DISTRICT	REGION
MAP REF	93 A II D, C	PRVU	QUESTM LAKE
COMP	ACRES	PHOTOS	

HIGHWAY		BLIDE		LOCATED ROAD		TIMBER TYPE	
SECONDARY ROAD	=====	CULTIVATED	C	(Type 1)	DURN	=====	
LOGGING ROAD	=====	SLOWDOWN	F	PROPOSED ROADS	IMMATURE	=====	
POWER LINE	-----	MEADOW	M	BUS ROADS			
FENCE	-----	ROCK	R	G.R. or T.S. BOT.			
RAILWAY	-----	ALDER	A	(G. or T.S. BOT.)			
SURVEYED LINE	-----	ALPINE	AL	G.P. or T.S. BOT.			
UNSURVEYED LINE	-----	TYPELINE		(not marked)			
PAINT LINE	-----	DROP OFF		LANDINGS			
SQUARED TREE	□	SLOPE (ft/m)		CRANE STRIP & PLOT			
CORNER FLAG	△	HEIGHT OF LAND					
IRON PIN	IP	FELLED & BUCKED		LOGGED			
POST	○	SWAMP	SW	BEARINGS			
BEARING TREE	BT	H.C.C., H.R., H.S.R.		CONTROL BURN			
HILLSITE	HS	SCURS	SC	BEETLE KILL			
OLD HILLSITE	OH	SHADE	SH	OPEN RANGE			

SCALE: 1 INCH = 20 CHAINS

DATE DRAWN MAY 22 1980

DATE REVISED Feb 21 1981

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