

<b>SPU #11</b>	<b>Yellow Cypress</b>	<b>Maritime</b>	<b>1 - 1100m</b>
Breeding and orchard production			
Program category: <b>Advanced-generation</b>			Seedling need (million): <b>1.3</b>
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**STRATEGY** Clonal testing using cuttings from families selected in a variety of first generation tests. Tests of grafted parents for wood durability. Forward selections (clonal) for seed orchard production and an advanced generation breeding population.

<b>TRAITS</b>	<b>Primary:</b>	<b>Stem volume</b>	<b>Secondary:</b>	<b>Wood quality, stem form</b>
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<b>TESTING AND PRODUCTION</b>	<b>Production Year (July 1 to June 30) -- (Cone harvest year shown)</b>																			
	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36

<b>Parents in progeny test:</b>																				
Open pollin.	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
Polycross																				
Clonal	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
F1																				
F2																				
F3																				

**Production forecast (million plantab All rooted cuttings)**

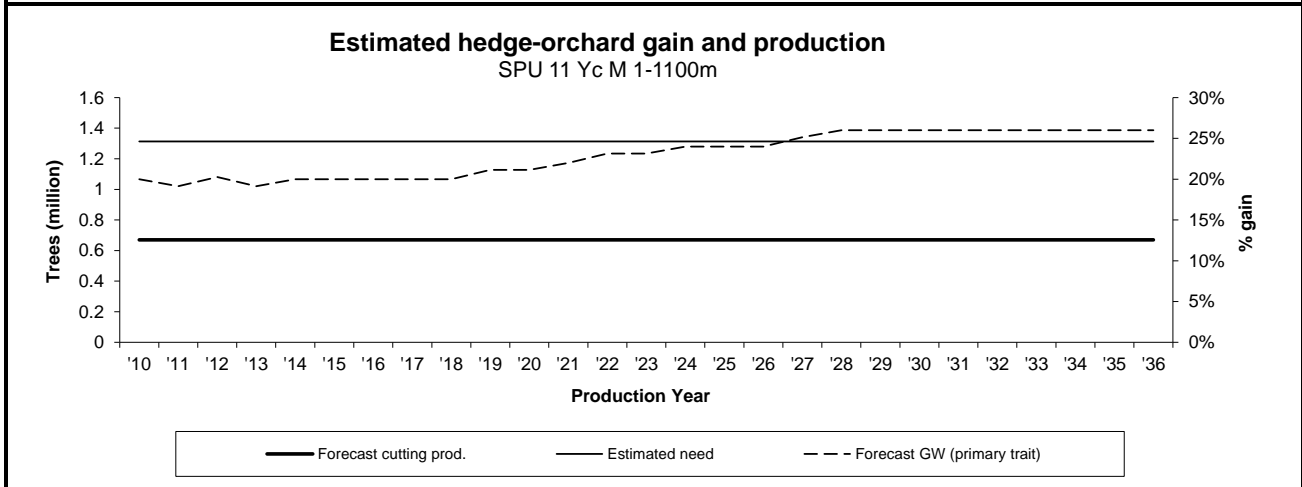
<b>Vegetative prod.:</b>																				
WFP (SFC)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
FLNRO (CLRS)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

The MFLNRO manages a yellow cypress hedge orchard at thier Skimikin site to provide non-select (class B) scion for interior use.

**Estimated gain in primary trait**

<b>Vegetative prod.:</b>																				
WFP (SFC)	20%	20%	22%	22%	22%	24%	24%	24%	24%	24%	26%	26%	26%	26%	26%	26%	26%	26%	26%	26%
FLNRO (CLRS)	20%	20%	20%	20%	22%	22%	22%	24%	24%	24%	24%	26%	26%	26%	26%	26%	26%	26%	26%	26%

<b>Total Production</b>	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
<b>Total gain</b>	20%	20%	21%	21%	22%	23%	23%	24%	24%	24%	25%	26%	26%	26%	26%	26%	26%	26%	26%	26%



The above forecasts are based on orchard status, seed inventories and seed use as of June, the year of publication, and are subject to change. Refer to the seed Planning and Registry System (SPAR) or contact the orchard manager for current seed inventories. Contact the Forest Improvement and Research Mgt. Branch, Ministry of Forests, Lands, Natural Resource Operations and Rural Development, to confirm data if used for silviculture or timber-supply planning.

**Yellow Cypress Maritime 1 - 1100m**  
 Conservation -- Seed Orchards -- Seedling Use

**SPU #11**

**GENETIC CONSERVATION STATUS**

**Conservation statistics**

Seed planning unit (SPU) area	<b>5,007,196</b>	<b>ha</b>
Area protected within SPU	<b>598,235</b>	<b>ha</b>
Percentage of SPU area protected	<b>12%</b>	
Estimated genetic reserves with >5000 mature trees based on botanical sample data	<b>&gt;4</b>	
Confirmed genetic reserves with >5000 mature trees based on forest inventory data	<b>40</b>	

**Conservation status**

Current in-situ protection status: **Very well protected**  
 Probability of maintaining > 3 protected areas with adequate population size given natural disturbance regimes: **Very high**

For further information visit <http://www.genetics.forestry.ubc.ca/cfgc/>

**ORCHARD STATUS**

Orchard location	Orchard number	Number of parents	Mean BV	# of hedge trees currently established	\$ of hedge trees planned	Target average annual steckling production per ramet at maturity	Target steckling production (mm/yr) at full production	
WFP (SFC)	hedge	24	20%	3,035	3,035	70	<b>0.21</b>	Hedge
WFP (SFC)	hedge	49	22%	2,881	2,881	70	<b>0.20</b>	Hedge
FLNRO (Saanich)	800/803	75	20%	3,550	3,550	70	<b>0.25</b>	Hedge
				<b># ramets</b>	<b>Planned # ramets</b>			
WFP (SFC)	191	44	17%	87	112			Orchard; currently inactive
<b>Total ramets</b>				<b>9,553</b>	<b>9,578</b>	<b>Total production</b>	<b>0.66</b>	

**Seed and Nursery Factors**

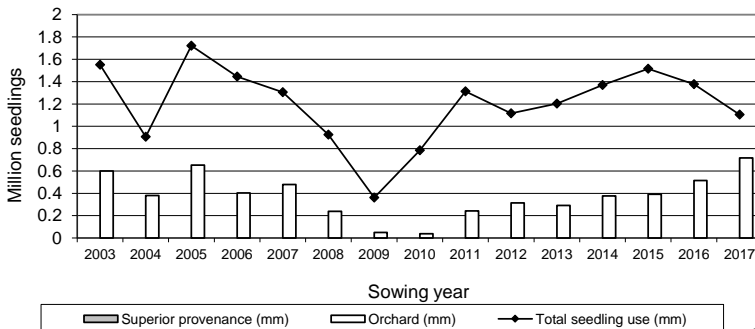
**Estimate of Required Orchard Capacity**

<b>Expected annual average steckling production per ramet = 60</b>	<b>Annual planting (million seedlings)</b>	<b>1.3</b>
	<b>Planned over-production factor</b>	<b>NA</b>
<b>Cutting recovery factor = 0.80</b>	<b>Ramets required</b>	<b>NA</b>
	<b>Ramets required with over-capacity</b>	<b>NA</b>
	<b>Projected necessary expansion</b>	<b>NA</b>

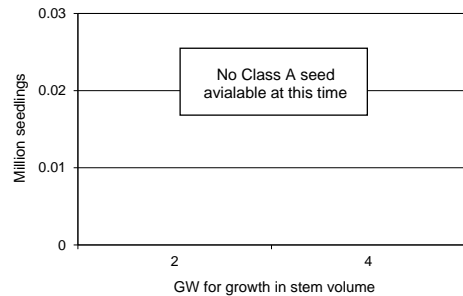
**SEEDLING USE AND SEED IN STORAGE**

**Average 5-year seedling use from SPAR (2013 - 2017)** **1.3 million**  
**Estimated years of class-A seed in storage** **0.0 years**

**Seedling Use Trend - 1995 to 2017**



**Seed in Storage by GW class**



**Notes:**

- Seedling use data include 1/2 of adjacent overlap zones, where applicable
- Sowing year: Aug 1 to July 31 (i.e. 2017 sowing year starts Aug 1, 2017)

**Notes:**

- "Reserve" and "Available" seed in the Seed Planning and Registry System (SPAR) are included.
- Class A = seed orchard; Class B+ = superior provenance; Class B = wild stand seed.
- Genetic Wroth (GW) for growth means the projected additional wood volume available at rotation compared to using Class B seed.

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