

Seed Use Efficiency Meeting

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Provincial objectives set by the multi-stakeholder Forest Genetics Council of British Columbia (FGC) call for 75% select¹ seed use by 2013, and for an average genetic worth for growth of 20% by 2020. With annual provincial planting averaging about 225 million seedlings per year across over 14 species, priority setting and seed planning are significant tasks.

The planning process involves a series of steps. Initially, there is a process for setting priorities among various seed planning units² (SPU). For SPU that meet criteria for breeding and seed orchard investments, seed needs within each zone are forecast. Historic orchard production curves are developed, and based on these, total orchard size needs are predicted. Seed use and orchard production figures are tracked and presented annually to aid orchard managers in the development of specific orchards, and to help broader planning to ensure provincial objectives are met. Breeding investments are guided by SPU priorities and by orchard development timing. Orchard roguing decisions are made by individual owners, but cooperative planning and discussions provide them with the information they need to make informed decisions. Provincial financial support for boosting seed orchard quality (seedlot genetic worth) and for adjustments to meet FGC objectives provide added incentive for orchard operators to undertake management that will ultimately support FGC objectives.

In the multi-stakeholder system in BC, orchards are owned and operated by both the public and private sectors. Providing good information on seed needs, on annual production, and on forecast production is a key element to ensuring open discussion and cooperation among participants and to the development of a comprehensive seed-production system that meets broader stakeholder objectives.

¹ Select seed is seed from trees that have been genetically selected from natural populations, including orchard seed from parents with known and positive breeding values and seed from provenances with known superior traits. No seed used in BC is genetically modified.

² A seed planning unit is a unique combination of species, seed zone, and elevation band which is used for seed planning and which have specific breeding and seed orchard populations. An example would be Douglas-fir in the maritime seed zone under 700 meters elevation.