

Genetic Conservation Program

Ensuring sound stewardship of the genetic resources of British Columbia's tree species to sustain well-adapted, healthy, productive forests. Genetic conservation objectives are met using a combination of complementary approaches. Parks, seed and clone banks, and large field trials each address elements of genetic conservation.

In Situ

Large populations of indigenous trees are conserved in parks in representative habitats throughout the range of each species.

- Cataloguing the genetic component of biodiversity in forest tree populations in protected areas to identify gaps.
- Determining population thresholds to ensure long-term sustainability and adaptability to changing environments.
- Working with agencies to fill genetic conservation gaps by prioritizing *in situ* areas and building *ex situ* reserves.



Ex Situ

Collections of representative populations are conserved in seed and clone banks, providing insurance for *in situ* populations.

- *Ex situ* seed collections are in secure long-term storage at the BC Forest Service Tree Seed Centre, providing "insurance" for native wild populations.
- *Ex situ* conservation also efficiently fills gaps where *in situ* populations are under-protected.
- Clone banks and arboreta conserve living archives of diverse populations or species.



Inter Situ

Populations of trees are tested and archived in a local environment to which they are well-adapted.

- Value is added through long-term field test data on each tree.
- Heritable traits assessed include form, growth rate and timing, pest and disease resistance, and wood quality.
- Each trial is established in a statistically sound design that minimizes risk by yielding high-quality data.



Ministry of
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