

Provincial Tree Seed Center; 57 years of meeting clients needs

Opened in modest facilities in Duncan in 1957, the Provincial Tree Seed Center (TSC) has provided valuable services to nurseries, seed orchards, the forestry community, and the public through over five decades of change in forest resource management. Currently located in Surrey, this world-class facility is a model of client-focused public service.

The TSC fills two key roles in provincial reforestation. The first is to provide a full range of services related to quality-assured cone and seed processing, testing, storage, inventory management, and preparation of tree seed. The second is to protect the public interest by maintaining a seed registry and seed-use records that support the provincial *Chief Forester's Standards for Seed Use*¹ and help ensure that the quality of the provincial forest-tree genetic resource is maintained.

In BC, 200 to 260 million trees are planted annually on Crown lands. Most of this planting is done by forest companies (licensees) as part of their forest management obligations, and some is done through various provincial government reforestation programs. Seedlings are all produced in private nurseries working under contract to licensees or government. There are 22 reforestation species being grown for planting across several dozen seed zones, creating a complex mix of operational and silvicultural needs that results in a highly dynamic and diverse pattern of seed use. All of the seed for these many operations is prepared and shipped to nurseries at the request of clients, while meeting rigorous requirements that are tailored to each sowing request.

At the other end of the TSC business, cones are received from clients operating over 100 seed orchards in BC and from those making cone collections in wild stands. Nearly all cones harvested in the province go to the TSC for extraction, cleaning, testing, and seed storage. Carefully monitored freezers store over 78,800 kg of seed capable of producing 8.04 billion seedlings on behalf of clients. This dynamic seed bank is constantly changing as new seed collections are added and seed is removed for preparation and sowing in nurseries.



Photos

Top - Seed extraction and cleaning equipment at the TSC Center. (D. Kolotelo)

Bottom - TSC staff. (D. Kolotelo)

¹ The Chief Forester Standards for Seed Use set out public land standards for the use of tree seed and the maintenance of the genetic quality



At the current planting rate of about 250 million trees per year, the TSC prepares seed for approximately 2,600 sowing requests per year. In addition, seed is extracted, cleaned, tested and stored for about 240 seedlots with cone volumes processed of about 4,400 hectoliters per year. Seed inventories are maintained at the TSC on behalf of all clients. These numbers, while impressive, do not speak to the biological complexity of managing and storing seed from many species and seed zones while also meeting the exacting sowing schedules of more than 30 nurseries that are growing seedlings to meet the equally exacting requirements of their clients.

In addition to filling a key role in provincial planting programs, the TSC maintains, organizes and conducts testing of approximately 9,000 seedlots for genetic conservation purposes. This seedbank is a key component of the provincial genetic conservation program organized under the FGC. The TSC is a globally respected leader in seed processing and distribution management, and is one of only a few centers in the world that is leading operational research and development in this key area of reforestation.

Much appreciated by their clients and the Provincial Government, the TSC has received several recognition awards over the years. The best testament to the value of this organization, however, is the ongoing reliance and trust placed in it by their many clients.

Author: Jack Woods. This article originally appeared in the FGC Annual Report 2013/14.