



Harvesting Operations



Douglas Fir Cones

Bags of Harvested Seeds in the Cone Shed

About Schroeder

The John Edward Schroeder Seed Orchard is located on a 400-acre agriculture site near St. Paul, OR, in the heart of the Willamette Valley. The site has excellent terrain, soil, and climate for Schroeder's main business – production of tree seed.

Seed for four tree species is grown at Schroeder – Douglas fir, western hemlock, western red cedar, and ponderosa pine. We manage 43 separate seed orchards and provide seed for more than 25 cooperators with ODF State Forests representing 30% of the share.

Schroeder was created in 1973, when cooperative tree improvement programs were being started. As they invested in tree breeding and field testing to identify superior genotypes, cooperators also needed a way to grow seed to sow in nurseries. ODF stepped forward to acquire and manage the Schroeder site, making it possible for landowners, large and small, to share orchards they could not afford to operate independently. As the leading cooperator, ODF is in the special role of participating in individual orchards while serving as the site manager and host for cooperative programs.

What We Do

The J.E. Schroeder Seed Orchard is one of the primary sources of seed for regrowing Oregon's forests. Forest landowners must plant new trees after harvesting to ensure that forests continue to provide valuable economic, environmental and social benefits.

The seed orchard focuses on developing seed that will flourish into healthy forests by tailoring seed production to soil type and growing region. The orchard is part of a collaborative network of partners including:

- » Oregon State Forests
- » Industrial Forest Landowners
- » Oregon Seed Bank
- » Oregon State University
- » Bureau of Land Management



Contact Us

oregon.gov/odf/working/pages/seed.aspx
3700 Mahony Road NE, St. Paul, OR 97137
503-930-3517



J.E. Schroeder Seed Orchard

Growing Tree Seed for Reforestation Needs



Orchard Trees

Tree Seed Orchards

Tree seed orchards are an integral part of the forest management process, providing seeds that nurseries use to grow tree seedlings. Seedlings, in turn, are planted in forest areas.

A seed orchard is planted and managed much like a fruit orchard, except that the trees are forest species and cones are harvested instead of apples or oranges. The seeds are inside the cones and need to be extracted and cleaned before they can be sown in nursery beds.

There are advantages to growing seed in managed orchards instead of collecting it in the wild. **Orchards assure a steady supply of high quality seed that is adapted to local forest environments.** Through tree improvement, desirable genetic traits such as growth potential, wood quality, and disease resistance are enhanced.

Today, a good share of Schroeder's clients and stakeholders include State Forest districts, timber companies, and Family Forest Landowners. It is Schroeder's relationship to this public/private base – made possible through cooperative agreements – that makes it a unique business. While the Oregon Department of Forestry owns and manages the Schroeder facility, the operating costs, risks, and rewards are shared by all of the cooperators.

Products & Clients

Schroeder produces tree seed, harvested as cones and later packaged as bags of seed. The quality of the seed is usually characterized by its genetic potential for growth rate, wood quality, or disease tolerance.

At first glance, it might seem as if Schroeder is “selling” seed. Actually, all of Schroeder's seed is committed to orchard cooperators. Since cooperators pay the costs, they (not Schroeder) individually own and control their share of the seed produced. Thus, Schroeder is a service-oriented business that grows seed on behalf of cooperators who reimburse the State for the cost of managing orchards. Secondly, Schroeder offers related services.

Elements to Schroeder's Business Niche

- ✓ The mainline business is oriented toward cooperators who participate in tree improvement programs and need an orchard to produce seed. Schroeder makes orchard seed accessible and affordable to cooperators and family forest landowners.
- ✓ Schroeder satisfies State Forest needs for high quality, disease tolerant seed, growing several species to address silvicultural objectives.
- ✓ Schroeder provides a secure and stable location for orchards, clone banks, and breeding programs.
- ✓ Conventional plant breeding methods are used.
- ✓ Schroeder provides stability and expertise to further Oregon's long-term cooperative tree improvement and gene conservation efforts.

Schroeder's direct business clients are the State Forest districts and timber companies who have entered into cooperative orchard agreements. A second level of stakeholders indirectly finance and provide encouragement for orchard projects. Among these are the USDA Forest Service Cooperative Programs, forest gene conservation groups, and Family Forest landowners.



Orchards assure a steady supply of high quality seed that is adapted to local forest environments.

Picked Douglas Fir Cones

Unique Model

What is most unique about Schroeder is its public/private partnership model, which makes orchards feasible and affordable for a blend of State Forest, private industry, family forest, and federal government cooperators and stakeholders. Schroeder stands ready to address any of Oregon's forestry needs within its mission and capabilities.

Although there are other seed orchards in the Pacific Northwest, they do not tend to serve the same geographic territory as Schroeder, nor do they cater to the same client base. Privately-owned orchards generally serve the needs of a single timber company with the means to practice tree improvement independently. Schroeder was the first facility to follow the cooperative business model in the Northwest. The Bureau of Land Management adopted a similar model for its orchards in other parts of Oregon.

The cooperative model of financing and management has special significance. The entire cost of managing orchards and facilities is passed on to the cooperators. Orchard management decisions are made collectively by the cooperators, so the cooperators assume all risks and rewards and rest accountable for the cost-effectiveness of their chosen management strategies. The Orchard Manager's role is to implement these strategies in the most efficient way.