



Ensuring Christmas tree seed supply through new seed orchard development in the Pacific Northwest- USA

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Overview of topics

- PNW Christmas tree production
- Increasing need for quality tested seed
- Existing orchards
- Dept. of Ag Grant
- Newly established orchards
- Future plans



PNW supplies 40% of the total U.S. production of Christmas trees

- Oregon leads the U.S. in acres planted, trees harvested and number of producers.
- Douglas-fir
- Noble fir
- Others include Nordmann fir, Turkish fir, Grand fir



Need for Seed

- Less wild harvests occurring
 - Non tested seed
- Take advantage of years of progeny trials
- “Newer” species popularity growing
 - Nordmann & Turkish
- Importing seed hassles



Current PNW orchards

- Partnerships
 - Barney Douglass & Hostetlers Noble fir Orchards
- Private ownership
 - Silen & Ken Brown orchards
- Modified private
 - Hupp Noble orchard
- CO-OP
 - BLM Douglas-fir orchard
- State Agency
 - DNR- Washington, Olympia area
- Contract Managed
 - Douglas-fir/Roseburg FP

Barney Douglass Noble Fir



- Partnership orchard
- OSU/WSU assist with scion selection and testing
- PNWCTA rents land
 - Pays associated costs of harvest, maintenance and upkeep.
 - Volunteers assist w/ cone harvest
 - Seed and seedlings go back to members as benefit

Barney Douglass 2016 Cone Harvest



Hostetlers Noble fir



Privately Owned Orchards

- Owner responsible for operation and associated costs
- Sell seed on open market
 - Contract to large grower
- Very labor intensive



Modified Private Orchard

- Trees selected by PNWCTA and OSU
- Landowner responsible for all costs
- 20% seed harvest to PNWCTA for sales to members



Contract Managed Orchard

- Douglas-fir orchard managed by Roseburg Forest Products for PNWCTA
- All labor is done by RFP
- PNWCTA pays yearly fee and any cone harvest costs when needed.



Other Orchards

- DNR-Douglas fir run by the state of Washington
- Co-op BLM
 - % of harvest goes to co-op members
 - Larger growers



Specialty Crop Grant

- Funded by the Oregon Department of Agriculture
 - Provides opportunity to develop new orchards and...
 - Develop new management models
 - Improve availability of seed tested for post-harvest quality
 - Establish domestic supply of seed for Turkish and Nordmann fir



New 2017 Orchards

- Winter of 2017
- Noble fir
 - Snowshoe Evergreen,
 - Holiday Specialtrees
 - Scion to Holiday Tree Farms, Inc.
 - NWREC completion
- Douglas-fir
 - Holiday Specialtrees
 - NWREC completion



Lots of work!

- Planning for amounts of scion to collect
- Scion gathering
- Graft timing
- Mapping
- Grafters!
- Upkeep of grafts



Noble fir Orchards



Douglas-fir Orchards



NWREC

- Noble fir-.8 acres
- Turkish fir-.9 acres
- Nordmann fir-.3 acres
- Douglas-fir 1.4 acres total



Noble fir



Turkish fir



Nordmann fir



Douglas-fir



Douglas-fir



Douglas-fir

4-2017



Future plans...

- 2018 and beyond
- Planting of Snowshoe noble orchard
- New Turkish orchard-Hupps
 - others
- Expansion of existing
- Development of new models



In conclusion

Seed orchards remain the best and least expensive method to capture gains made through years of progeny testing.

It is the future of Christmas tree production in the PNW.

Source RF 15 in an Oregon growers field



Thanks to partners and cooperators!

- Pacific Northwest Christmas Tree Association (PNWCTA)
- Jan Hupp-Drakes Crossing Nursery
- Jason Hupp-Western Evergreen
- Jim Heater-Silver Mountain
- Jim Schaefer-Holiday Specialtrees, Inc.
- Ken and JoAnn Scholz, Snowshoe Evergreen, Inc.
- Ken Brown-Grower
- Jim Bays & Heather McGuire-Bays Farm
- Dr. Gary Chastagner & team, WSU

