Ponderosa pine seed harvesting

By Cathy Hamilton-Wissmer September 19, 2018



HIDE CAPTION – 1/3

Dr. Jeff Foster, left, a JBLM ecologist, and Shayna Rossiter, forestry seasonal technician, examine Ponderosa pine cones as they gather them in buckets Aug. 21. (*Photo Credit: Cathy HamiltonWissmer*)

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By Cathy Hamilton-Wissmer

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Ponderosa pine is a tree that grows in Washington generally on the east side of the Cascades. JBLM is the only place in Western Washington where you can find the ponderosa pine.

It may occur here due to historical trading from Fort Nisqually and frequent burning by Native Americans. On-going training exercises

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continue to burn the prairie, which benefits the tree.

"The largest ponderosa pine on JBLM blew over four or five years ago in the central impact area," said Dr. Jeff Foster, an ecologist with JBLM DPW. "It was 4 feet, 5 inches in diameter, 165 feet high and over 400 years old.

Ponderosa pine can be expected reach 100 feet tall or more in Central Washington. Pine cone production, however, occurs more often on smaller trees even though it would seem like the big old trees would be more likely to produce cones. Smaller trees 50 feet tall and less still require a bucket lift truck to harvest.

Ponderosa pine on JBLM has developed into a subspecies that is different than the eastside variety so seeds must be harvested from trees on the base to propagate more of the pines on JBLM. The seed comes from the pine cones. Seeds look and act like helicopter wings so they can be dispersed far and wide with the wind.

Ponderosa pine cone crops worth picking only occur every 10 years or so and JBLM Forestry staff monitors the trees for viable crops, and this year produced a crop worth picking. Ponderosa pine cones have to be harvested before the seeds release to the wind, so timing is crucial in the gathering.

Seed harvesting was a two day event in 2018. The electricians of 627th Civil Engineer Squadron brought their bucket truck to the woods, secured it next to preidentified ponderosa pines that were loaded with ripened cones. A forestry technician was then harnessed and sent up in the bucket to remove the cones, with the aid of a pruning pole, and drop them on the ground.

They were gathered by waiting staff, stored in a burlap sack and delivered to Silva Seed in Roy for processing. The seeds will then be shipped to a Forest Service nursery in Oregon that grows the seedlings.

Staff from the 627th CES had not previously gathered ponderosa pine cones but as Sgt. Christian Lopez said, "Usually we (the electricians) will work with the bucket truck so whenever anyone needs our equipment we will help out and give them our assistance."

The seeds will undergo a germination test at the University of Oregon-Corvallis, to determine viability prior to sowing at the nursery. When the seedlings are about 2 years old, they will be shipped to JBLM for planting on forest sites where the pre-existing trees have been removed by logging.

"This helps keep costs down since nurseries are all about heat, space and water in the greenhouse," said Bruce McDonald, a DPW forester. "There are about 11,000 seeds to a pound. I'm hoping to recover about 5 pounds of seed. We picked 25 bushels of cones this year. We won't know how many pounds of seed we will have until they are processed."