

Natural Resources Stewardship Challenges of the Pullman PMC Service Area

Eastern Washington & Oregon and northern Idaho is a mosaic of cropland, orchards & vineyards, rugged scablands, native range, and mountains. Over 2.5 million acres of dryland wheat is grown annually, and over 200 different crops are produced in the irrigated Columbia Basin. Annual rainfall is as little as 6-inches in the driest area, and snow lasts year round in the higher peaks. Winter winds strip unprotected topsoil and create dust clouds that degrade air quality for people living downwind. Melting snow erodes unprotected soil that pollutes receiving waters.

Many of the region’s streams are important for salmon and steelhead trout spawning and rearing. Our riparian areas frequently lack desirable vegetation that provides shade and woody debris for fish habitat. Streambank revegetation with desirable plants is hindered by invasive plants.

Annual weeds have replaced native vegetation in many areas, and noxious weeds such as spotted knapweed are invading our forested areas. These undesirable plants greatly impede natural revegetation and threaten wildlife that depends on a healthy environment.



The role of the Pullman Plant Materials Center has historically been to develop a source of planting stock that can be used to solve important land stewardship problems. Dr. A.L. Hafenrichter reported in 1963 that “Over 10,000 grasses and legumes have been tested for conservation use at the Pullman Plant Materials Center”. That number has grown considerably since then. The plant stock selected out of the testing program is “released” to the public. The Pullman PMC ensures that the seed stock of each of its releases is properly maintained and provided to seed growers who in turn grow and market the seed.

Prominent Pullman PMC Releases:			
‘Bromar’	Mountain Brome	‘Whitmar’	Beardless Wheatgrass
‘Sherman’	Big Bluegrass	‘Canbar’	Canby Bluegrass
‘Alkar’	Tall Wheatgrass	‘Volga’	Mammoth Wildrye
‘Latar’	Orchardgrass	‘Union Flat’	Blue Wildrye
‘Durar’	Hard Fescue	‘Covar’	Sheep Fescue
‘Secar’	Snake River Wheatgrass		

Brief History

In 1935 the Washington Agricultural Experiment Station purchased 160 acres of land east of the Washington State University campus. A signed agreement made this land available to the Soil Conservation Service (now known as the Natural Resources Conservation Service) for the operation of a Plant Materials Center (PMC). Dedicated scientists, a team of horses and CCC laborers spent the early years constructing buildings, laying out fields and installing good land stewardship practices.

During the years of 1936-40, woody plant testing and production was an important PMC activity. Nearly one million trees annually were produced for plantings in soil conservation districts. Remnants of some of these initial plantings are scattered across the landscapes of eastern Washington & Oregon and northern Idaho. Grass and legume testing at the time emphasized selecting plants for superior growth. Seeds were assembled from native populations as well as distant countries. These seeds were sown in large “initial screening” plantings and the best candidates were selected for rigorous, advanced testing. Much of the advanced testing was conducted at outlying experiment stations and private farms at Lind, Goldendale, Prosser, and Dayton, Washington, and Moro, Pendleton, Condon, and Union, Oregon, and Sandpoint, Idaho

A New Era

The need for new plant releases slowed considerably after 1990. The Pullman Plant Materials Center has released 32 plants. Over 600 plants have been released by the entire Plant Materials Program which is comprised of 27 Plant Materials Centers. There is great need for information how to ‘best’ use these plants to solve problems.

The Pullman PMC is currently evaluating techniques to successfully establish native forbs into existing grass cover, compiling & dispersing pertinent information on plants for improving pollinator habitat, and evaluating existing plant releases for the suppression of invasive species.



Native bees and butterflies provide free pollination services that contribute an estimated \$3 billion worth of crop pollination annually to the U.S. economy. With these kinds of monetary savings provided by native pollinators, it behooves us to do what we can to protect and encourage this valuable natural resource.



Thousands of acres of pasture and hayland are producing below their yield potential. Adding a legume or forb can increase yields, improve nutritive value, and do a better job of preventing weed infestations. Seeding legumes and forbs into existing grass sod could rejuvenate old pastures but this practice is risky. The plant materials program is evaluating legume and forb species, and planting techniques to improve establishment of legumes & forbs into grass sod.

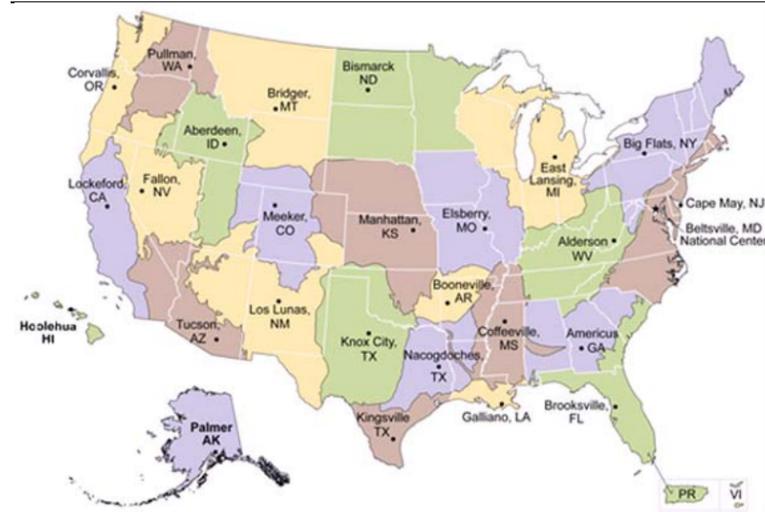
For More Information

To obtain seed, plants, or information on conservation plants developed by the Pullman Plant Materials Center, contact your local NRCS office or us at:

USDA – NRCS
Pullman Plant Materials Center
P.O. Box 646211
Pullman, WA 99164-6211
Phone: (509) 335-6892 or (509) 335-6894
Email: mark.stannard@wa.usda.gov or pamela.scheinost@wa.usda.gov

To learn more about these and other PMC activities, visit our website:
<http://Plant-Materials.nrcs.usda.gov>

National PMC Locations



Locations of 27 USDA NRCS Plant Materials Centers and their respective service areas.

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United States Department of Agriculture
Natural Resources Conservation Service

PLANT MATERIALS CENTER

Pullman, Washington

Established 1935



Harvesting 'Bromar' mountain brome and yellow sweetclover green manure trials 1937.
One man ran the team of horses and the other raked the top growth into the mower pan. John Schwendiman reported that 2 men + 2 horses could harvest 70 plots a day.

Our Vision:
PRODUCTIVE LANDS - HEALTHY ENVIRONMENT