USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Pullman Plant Materials Center


Photo: Jim Cane, ARS

The Sweep Net

April 2010

A newsletter to keep you up-to-date on pollinator and beneficial insect habitat activities at the Pullman Plant Materials Center, the Washington State Office and beyond

Newsletter Introduction

The Pullman Plant Materials Center and Washington State Office are currently involved in multiple projects to provide NRCS, Conservation Districts and the public with state-of-the-art documents, research and conservation planning tools for establishing pollinator and beneficial insect habitat. This newsletter will provide you with updates on the status of these projects, and present interesting information about pollinators, other beneficial insects and the plants they visit. Keep reading to learn more!

Pollinator and Beneficial Insect Habitat added to Quality Criteria

With the leadership of Tim Dring, State Biologist, pollinator and beneficial insect habitat will soon be added to Quality Criteria used in the conservation planning process in Washington State. An assessment tool, which may be an addendum to current Biology Tech Note 14, will also be developed in order to evaluate pollinator and beneficial insect habitat and determine where improvements can be made. The final step will be expanding Practice Standard 643, Rare and Declining Habitats, to include pollinators and beneficial insect habitat, and develop a specification sheet for implementing the necessary improvements.

In the Mean Time….

If you need technical assistance helping a client who wants to install pollinator or beneficial insect habitat, please call: Tim Dring, State Biologist 509-323-2972, Richard Fleenor, State Plant Materials Specialist 509-323-2965, or Pamela Scheinost, PMC Agronomist 509-335-6894 and we will assist you on a case-by-case basis.

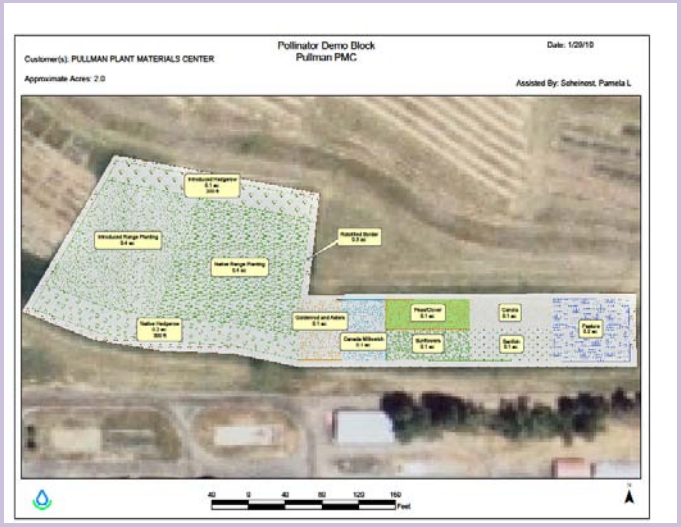
Do you have the Poster?

In 2009 the Pullman PMC developed a poster with a partial list of plant species for pollinator habitat in the Inland Northwest. It is one of the latest additions to the PMC collection of posters featuring useful conservation plants. If you do not have this poster in your office, call Pamela Scheinost (509)335-6894 to have one sent to you!

Pollinator Habitat Demonstration Planting at the PMC

This spring, nine different vegetation types will be planted in a 2 acre field at the Plant Materials Center in Pullman to demonstrate options available to land owners and managers who aspire to establish or enhance pollinator habitat on their property. The nine vegetation types include:

1) introduced hedgerow
2) native hedgerow
3) introduced range
4) native range
5) late season species
6) native perennial monoculture
7) introduced perennial monoculture
8) various introduced annual monocultures
9) Pasture



Throughout the next several years, NRCS staff, Conservation Districts, local conservation groups and the public will be able to visit this planting to learn about pollinator plants and how to manage them.

Pollinator Species Evaluation


Photo: Pamela Scheinost, NRCS

To improve the availability of seed for pollinator habitat plantings in the Columbia Basin, the PMC is evaluating native wildflower species at the WSU Experiment Station in Othello, WA. Fourteen accessions of seven species were planted in 2009, and four additional accessions will be added in 2010. Seed for this study was obtained from collections made by the PMC and State Office staff at Dry Moses Coulee near Moses Lake, WA, during the summers of 2008 and 2009, the BLM and the National Plant Germplasm System. In addition to being evaluated for their pollinator forage quality, the accessions will also be evaluated for their ability to be mechanically harvested. The best performing accessions will be recommended to commercial seed growers.

Did you know……

The most important pollinators in North America are native bees? There are about 4,000 species of native bees on this continent. Native bees enhance the pollination of many types of plants, and on a bee-per-bee basis, they pollinate several agricultural crops more efficiently than honey bees . They come in various shapes, sizes and colors, and some look like flies or flying ants. Most are solitary, nest in the ground, and do not sting. A few familiar native bees are bumble, carpenter, leafcutter, mason and sweat bees. (Xerces Society. 2007. Farming for Native Bees. Online: www.xerces.org)

Featured Pollinator


Photo: Applewood Seed Company

Leafcutter bees are solitary native bees that nest in wood cavities or hollow plant stems. They use their mouths to cut pieces out of leaves to line their nests and are sometimes very particular about what plants they use. They prefer legume flowers for obtaining nectar, and are efficient pollinators. There are more than 140 species of leafcutter bees in North America. One of the most famous is *Megachile rotunda*, which is managed by alfalfa seed producers for providing pollination services. When leafcutter bees visit alfalfa flowers, they unhinge the keel and wing petals held under tension which releases the stamens and stigma and transfers pollen. Honey bees visit alfalfa, however are able to "steal" the nectar without pollinating the flower. (Profiles of Native Bees. Pollination Canada. Online:: http://www.pollinationcanada.ca/index.php?k=102; S.L. Buchmann and G.P. Nabhan. 1996. The Forgotten Pollinators. Island Press, Washington D.C.

Featured Pollinator Plant

Western mountain aster (*Symphyotrichum spathulatum*) previously known as *Aster occidentalis,* is a native perennial forb found throughout the western U.S. and Canada in all habitats receiving 10 inches or more of annual precipitation. It is one of the few native forbs that blooms late in the growing season (July – September). The plant attracts bees, butterflies and beetles, and is an ideal component of a pollinator habitat seeding mix. Because the seed requires a cool and moist stratification period for optimal germination, it should be planted in the late fall. Check the Native Seed Network website (www.nativeseednetwork.org) for seed vendor information.


Photo: Dave Skinner, NRCS

Who We Are

The Pullman Plant Materials Center is one of 27 Plant Materials Centers throughout the country which have the responsibility of developing plant materials and technology for establishing and managing plants used in resource conservation efforts. The Pullman Plant Materials Center was established in 1935 and services the Inland Northwest region, including eastern Washington, eastern Oregon and northern Idaho. For more information, please visit our website:
http://plant-materials.nrcs.usda.gov/wapmc/index.html
Or call one of our staff:
Mark Stannard, PMC Manager 509-335-6892
Pamela Scheinost, Agronomist 509-335-6894
Dallas Spellman, Farmer 509-335-9689