



**PULLMAN  
PLANT  
MATERIALS  
CENTER**

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Agriculture**

**Natural Resources  
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Service**

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*Finding Vegetative  
Solutions to  
Conservation Problem*

**April 29, 2002**

**To: Field Offices  
Plant Materials Centers  
Plant Materials Specialists**

**Subj.: Update of Pullman PMC activities for Jan. 1 - Mar. 31, 2001.**

**The Pullman PMC quarterly update is intended to provide field staff with a short description of PMC current activities. Please take a few minutes to read it, if you make a hard copy, pass it along to others in your office, and when fully routed, feel free to file it in your recycle bin. If you wish to join our e-mail list, please contact us. Thanks!**

**PLANT DEVELOPMENT**

The Pullman PMC met with the Board of Directors of the WACD Conservation Nursery in February. The PMC and WACD discussed setting up an informal agreement allowing WACD to harvest cuttings and seed from the breeder blocks located at the PMC. Direct harvesting of cuttings and seed will save the WACD Nursery from having to establish their own cutting and seed production blocks. This effort should result in more plant materials being available from the WACD Nursery.

Larry Cooke, Wayne Crowder, and Mark Stannard met in Spokane and completed environmental assessments of all Pullman PMC plant releases. The assessment scored each plant for its conservation value, and its ability to spread and invade other plant communities. 'Manchar' Smooth Brome was identified as an environmental hazard due to its ability to spread, the availability of alternative conservation plant alternatives, and its ability to invade natural plant communities. The Pullman PMC will present the findings to the West Region Plant Materials Advisory Committee and suggest that the Pullman PMC discontinue breeder seed production of 'Manchar'.

Mark Amara, Conservationist at the Othello FO, identified a grower interested in evaluating the Douglas Fir tree germplasm that the Pullman PMC is developing. Jerry Knodel prepared 2 areas along his shelterbelt for the planting. The Lind germplasm is being compared to a commercial source of Douglas Fir. Jerry graciously offered to install a drip irrigation system to ensure good first year survival. This field planting is one of several in a 3-state area.

**TECHNOLOGY TRANSFER**

Dave Skinner participated in the Palouse Prairie Symposium held in Moscow, Idaho in March. Dave displayed some of his restoration work being conducted at the PMC. He also provided a talk to the Idaho Native Plant Society that month. Dave has

developed numerous propagation protocols and many of his findings are available on the web: [www.nativeplantnetwork.org](http://www.nativeplantnetwork.org).

Stannard participated in the Central and NE Washington NRCS Team Meetings. Attendees were provided a short talk on rooting biology of a couple important riparian plants. Cuttings from stressed, natural stands of black cottonwood were compared to cuttings taken from trees growing under nursery conditions. As expected, the nursery-grown materials rooted much better than the stressed cuttings.

#### TECHNOLOGY TRANSFER CONT'D

A Technical Note was developed by Stannard, Ogle, Scianna, Holzworth and Sunleaf entitled, "Biology, Ecology, History, Suppression, and Revegetation of Russian-olive Sites." Russian-olive is a very contentious species that has proven very undesirable in riparian and wet-saline environments. This Technical Note reviews several methods to control and revegetate sites invaded with Russian-olive. Numerous individuals provided excellent comment during this Note's development.

The Washington State Crop Improvement Association notified the PMC that one of its releases, 'Latar' orchardgrass, appeared to have changed over the years. The PMC installed a planting that compared plants from seed harvested in the 1970's to plants that were several generations younger. Anthesis dates were compared and the results show that 'Latar' has not undergone a genetic shift causing the plants to mature earlier. Rather, their seed harvest timing causes the reason that seed producers are seeing an apparent shift to early maturity. 'Latar' seed can be harvested earlier than what was originally stated.

Dave Guenther, DC Goldendale FO, and the Pullman PMC initiated a study to determine adaptation of several riparian and saline-tolerant shrubs for arid bottomlands of south-central WA. Plants were purchased from Bitterroot Nursery and Plants of the Wild, and Dave and his crew established the planting. This planting will enable Dave to confidently determine which species are best suited for CREP and continuous CRP plantings in his county.

#### MISCELLENEOUS

Sarah Troutman, SCEP appointee, completed the first germination trials of a needle-and-thread germination study. The results show that this species is much more difficult to germinate than we had anticipated. A combination of dark and cold-moist stratification is needed to ensure high levels of germination. The results also show that "blond" seed lacked good fill and germinated poorly. Dark-drown seeds germinated much better. The study will next determine what level of seed conditioning is optimal for removing the awns without damaging the seed.

The Pullman PMC offices have moved. We are now located on the second floor of WSU's Hulbert Agr. Science Bldg. The move places all WSU Ag Econ faculty on 1<sup>st</sup> floor, and locates the PMC and USDA-ARS offices on second floor. The move proved to be a great opportunity to identify materials for the recycle bin.

>>>>> **Our main office is now located in 211A Hulbert Agr Sci Bldg but our mailing address hasn't changed.** <<<<<

A photo-free, Kbyte friendly version of our 2001 Progress Report is included. A version with color photos is available in hard copy.

Mark Stannard  
PMC Team Leader