

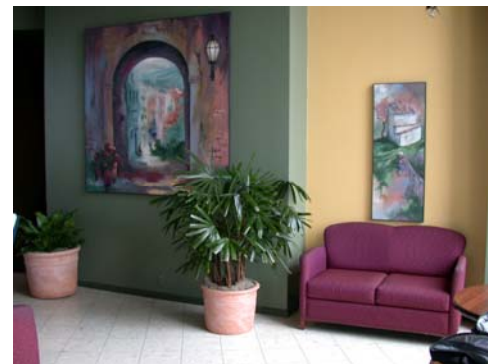


# WEST NORTHWEST

A bi-monthly newsletter to faculty/staff/retirees of WSU Long Beach, Mt. Vernon, Puyallup & Vancouver

## **FEATURE PROFILE – Environmental Horticulture is Growing to Meet Industry Needs and Environmental Concerns:** *Research helps a \$329 million business*

A day in the life of an Environmental Horticulturist can span the spectrum of natural resources. Whether working on alternatives to landscape irrigation, finding new, sustainable growing media for container plants, or conducting research on trees suitable for urban environments, Rita Hummel's work bolsters the state's nursery and greenhouse economy. Plants used in landscapes and building interiors play an important role in human health and well-being, enhance the environment, and contribute to national, state and local economies. In Washington State, nursery and greenhouse products rank seventh as an agricultural commodity, with a farm gate value of \$329 million in 2004. The expanded wholesale value of floriculture crops produced in Washington in 2004 was \$123.9 million, an increase of 13 percent from 2003.



The WSU Puyallup Environmental Horticulture program, led by Rita with Bob Riley and Susan Smith, is a research and teaching program that focuses on recycled organic materials used for container-grown plants, water conservation concentrating on irrigation needs and techniques, stress and pest resistant trees for modern landscapes, and a credited course, Hort 332, Interior Plantscaping. **Recycled organics...**Concerns about environmental impact and resource availability have fueled interest in the development of sustainable organic materials to replace sphagnum peat moss.

Sphagnum peat moss has been a standard organic component for container production since the 1950's. However, peat is a natural resource harvested from wetlands and concern about possible ecosystem damage due to its harvest is increasing. With rising costs and potential for scarcity, the search is on for other types of organic materials that can replace peat in container growing media. Composted organic waste materials are increasingly viewed as environmentally sound substitutes for peat. Rita and Craig Cogger are currently working on using biosolids as a growing media in the greenhouse production of chrysanthemums. The latest research shows a high quality potted chrysanthemum crop can be grown in biosolids media using water conserving drip or subirrigation methods. This has resulted in the City of Tacoma producing a container growing medium (potting mix) from their biosolids.



Rita tests chrysanthemum crop

**Water Conservation...** As Washington State's population continues to grow and become more urbanized, competition for water will become more intense. Landscape irrigation is estimated to account for 60% of the summertime peak water demand in urban areas. Subirrigation has been shown to conserve as much as 80% of the water used in container plant production. Research in the greenhouses at WSU Puyallup demonstrated that subirrigated chrysanthemum 'Shasta' were equal or superior to sprinkler-irrigated plants grown in a peat-perlite control medium and four recycled organic media. In replicated landscape plots at WSU Puyallup, a combination of bark mulch and recycled yard waste compost conserved soil moisture, reduced weed growth and improved tree and shrub growth.

**Trees for Modern Landscapes...** The space for growing trees in urban and suburban areas continues to shrink while public concern increases with issues of chemical pesticide use, water quantity and quality, urban air quality and passive energy conservation. These trends magnify the need to plant small, stress tolerant trees in our communities. Unfortunately the inventory of small landscape trees that possess good tolerance of environmental and biological stresses is quite limited. A research project currently under way at WSU Puyallup, in cooperation with the Landscape Plant Development Center, is developing varieties of small-stature *Pyrus* (pear) (Photo at left) and *Acer* (maple) trees that are tolerant of environmental and biological stresses and have superior landscape characteristics.



**A Virtual Classroom...** During spring semesters, Interior Plantscaping, an upper division horticulture course, is taught from WSU Puyallup to students in Pullman, Spokane, Tri-Cities and Wenatchee. Students in Interior Plantscaping learn about the selection, design, installation, management and maintenance of plantings inside commercial buildings, as well as the effects of interior plants on people and the environment. Enrollment is continuing to increase due to students outside the Horticulture and Landscape Architecture Department taking the course.

## MESSAGE FROM THE DIRECTOR

### Challenges

As we close the books on 2005 and plan ahead, it is exciting to see WSU Puyallup gaining recognition and support in our local communities and throughout the state. The front page story on WSU Puyallup in *The News Tribune* on December 16, 2005 is but one example of this growing support (<http://www.thenewstribune.com/news/local/story/5403036p-4882252c.html>). Our recognition is based on the work and results created by those of you who work from this location. Without the research, teaching, and extension programs you are responsible for, all we have to talk about is land and buildings.

This is an appropriate time to look back at past efforts and to see ahead into our future. As you will notice by the variety of programs and events that fill this newsletter, we are still very much involved in the practice of health, environmental impacts, and socially viable, economic programs. The new Sudden Oak Death bio-containment chamber and the under-construction urban pest management structural research and training facility are examples of the resurgence here that recognizes the value of the interface between human beings and their environment.

Our challenge is to grab hold of our location and proximity to nearly 60 per cent of the state's population to adopt an underlying purpose that services the residents, businesses, and communities of the Puget Sound region. A key to success is to develop new initiatives while strengthening the many programs at WSU Puyallup that have regional, state, and national impact. By continuing to develop and create programs that match the challenges of urban living and environments with applied science solutions, we will help to create a sustainable future and bring the strength and reach of Washington State University to our neighbors and constituents.

-- by Jon Newkirk, Director, WSU Puyallup

## PRESENTATIONS/MEETINGS/TRAININGS/INVITATIONS

On September 8, 2005, **Art Antonelli** presented four seminars at the Master Gardener Annual Conference held in Pullman. There were 60 veteran Master Gardeners at these talks. In October, Art presented a seminar on "Sting Insects" to over 90 attendees ( Pest Control Professionals) in Kent, WA: presented all-day training in Entomology and Pest Management to over 110 beginning Master Gardeners in Mason and Clark counties; with **Becky Hines**, Art did an all-day Insect workshop for pest management professionals in Clark county.



*Andy Bary*

**Andy Bary** gave the following presentations: "Basic Soils in the Urban Environment," Washington Environmental Health Association Northwest Region Meeting, Everett, WA, October; "Composting and Compost Utilization," Redmond, WA, October;

Sustainable Small Farming and Ranching lecture on "Equipment and Weed Control Strategies for Bio-Intensive Vegetable Farming in Western Washington," Puyallup, WA, September; Sustainable Small Farming and Ranching lecture on "On Farm Composting," in Puyallup, WA and Port Hadlock, WA, October; with **Craig Cogger** and **Liz Myhre**, "Compost Operators Training," an intensive five-day session in conjunction with Washington State Department of Ecology and Washington Organic and Recycling Council, October; with **Craig Cogger** and Anne-Marie Davey, " Can Biosolids Improve Alkali Soils Under Dryland Conditions?" Northwest Biosolids Management Association Annual Meeting, Chelan, WA, September; with Mike Hackett, "Pastured Poultry Production Research at WSU Puyallup," What's there to Cluck About? Workshop at the Snohomish County Cooperative Extension Office, October.

**Linda Chalker-Scott** gave a presentation in September at a Center for Urban Horticulture Graduate Seminar on "Restoration BMP's: Improving the success of landscape installations." In October she gave the following presentations: "Horticultural Myths," City of Seattle Pesticide Recertification,

Shoreline Conference Center, Seattle, WA.; with R. Koenig, "Urban Landscape Soil Management," at the Inland Northwest Green Industry Seminars, Spokane, WA, and at the Puget Sound Green Industry Seminars, WSU Puyallup Research and Extension Center, Puyallup, WA.

In October, WSU Small Farms Program director **Marcy Ostrom** attended the 4th National Small Farms Conference in Greensboro, N.C., where she presented on the Northwest Direct Project on farm-direct marketing for small farms and on the Cultivating Success training program for small farm producers. **Marcy Ostrom** and **Rich Hines** attended Cultural Competency: training for "respect, relevance, and results" led by ReachOut!, a King County-based non-profit that specializes in cross cultural communication. Participants in the training, attended by a dozen WSU Extension professionals and partners, are collaborating on Hmong farmer outreach as part of a contract with the USDA Risk Management Agency.

In his role as Director of the Center for Sustaining Agriculture and Natural Resources



*Chris Feise ( third from right)*

**Feise** works directly with **David Granatstein**, **Chad Kruger** and other faculty across the university who work daily on research and applications for creating solutions to climate change. In October, at a statewide conference in Seattle entitled: The Future Ain't What it Used To Be: Planning for Climate Disruption, Chris was a moderator and co-chair for the sessions on Agriculture. The conference attracted 560 scientists, community members, and government officials. The attendees at the Agriculture sessions identified three key impacts of climate change on agriculture:

and a member of the management team for the Climate Friendly Farming™ project, **Chris**

reduced water, increased pests, and increased localized temperatures.

**Dean Glawe** gave the following presentations: "The Natural History of Powdery Mildews," presented at the Center for Urban Horticulture, University of Washington, Seattle, October and "Introduction to Powdery Mildews", presented at the 2005 Far West Show, Oregon Association of Nurseries, Portland, Oregon, August; with J. F. Ammirati, B. E. Callan, F. M. Dugan, L. L. Norvell, and M.

T.Seidl: "The Pacific Northwest Fungi Project: developing a collaborative model for



Dean Glawe

inventorying biodiversity on a regional basis" was presented at the joint meeting of the Mycological Society of Japan and the Mycological Society of America, Hilo, HI, August; with F. M. Dugan, R.F. Cerkauskas, **L.J.du Toit**, S.K. Mohan, and Y. Liu. "Leveillula taurica: An emerging plant pathogen in the Pacific Northwest" was also presented at the joint meeting of the Mycological Society of Japan and the Mycological Society of America in August.

**Lindsey du Toit** attended the Pop Vriend Spinach Field Day near King's City, CA in October and gave a presentation on "Leaf spot diseases and Verticillium wilt in spinach seed production". The field day was attended by about 50 growers, breeders, field reps, consultants, researchers, and extension agents. Juan Alonso, **Lindsey du Toit**, Ron Dralle, and Babette Gundersen attended a 2-day seminar titled "Management & Leadership Skills for Supervisors & Managers", presented by the National Seminars group of the Rockhurst University Continuing Education Center in Bellevue, WA in October.

**Gary Chastagner** gave an update on postharvest research at the Washington State University 47<sup>th</sup> Annual Pacific Northwest Christmas Tree Association Tree Fair and Trade

Show. Vancouver, WA in September and presented "How SOD spreads and the challenge of stopping its spread in composting facilities," at the Organic Waste Processing Pathogen Control: Best Management Practices Workshop, Winlock, WA, September. Oral and poster presentations given at the 7<sup>th</sup> International Christmas Tree Research and Extension

Conference, Tustin, MI, in October included the following: with E. Hinesley, and **K.**



**Riley**, "Effectiveness of I-V Watering Devices in Maintaining Postharvest Freshness and Quality of Cut Christmas Trees;" with N. L. Dart, and T. L. Peever, "Population structure of *Heterobasidion annosum* infecting Christmas tree plantations in the US Pacific Northwest;" with E. Hinesley, and J. Owen, "Effect Of Two Fire Retardants On The Postharvest Moisture Retention And Flammability Of Fraser And Douglas-Fir Boughs;" with **K. Riley**, "Susceptibility of Different Sources of Douglas-fir to Rhabdocline Needle Cast and the Effectiveness of Fungicides in Controlling This Disease;" with **K. Riley**, "Assessing the risk of *Phytophthora ramorum* infection in Christmas tree plantations;" with J. Puffer, "Noble Fir Stump Removal – A Comparison Of Stump Grinding And Excavation;" with **K. Riley**, "Effect of Harvest Date on Needle Retention by Various True Firs."

**Tim Miller** gave the following presentations: "Noxious Weeds: Identification and Control", WSU/Snohomish—Skagit County Beach Watcher program, Bayview, October; "Invasive Knotweed Research Report", Clallam County Knotweed Working Group, Port Angeles, October; "Herbicide Movement and Toxicity," City of Seattle 2005 Pesticide Recertification Seminar, Shoreline, October; "IPM Workshop for Weeds", WSU Recertification and Pesticide Safety Education program, five hours of weed identification and control training, Vancouver, October.

## GLOBAL PERSPECTIVES

**John Stark** was invited to South Korea to give several talks on his work in ecological risk assessment. He gave a seminar to the National Institute of Environmental Research, Korea's equivalent to the U.S. EPA, entitled "The use of *In situ* bioassays in Pacific Northwest Waters to determine the impact of pesticide mixtures". He also gave lectures at Seoul National University entitled "New insecticides: are they safer for water quality and the environment than previous products?" and to the Department of Biological Sciences at Pusan National University on "Estimating population-level effects of pesticides and other toxicants." He attended the Asia-Pacific Entomology Congress and presented a talk entitled "Toxicity endpoints used in risk assessment: what do they really mean?" in a symposium on environmental risk assessment. Additionally, he participated in a research project involving a characterization of pollutants in Korean rivers and streams and the impact of these pollutants on aquatic organisms. He is setting up collaborative research projects with Tae-Soo Chon, a professor of biology at Pusan National University .



Researchers at a Korean research plot

**Lindsey du Toit** was invited to participate in the Bejo Zaden "Open Days & Brassica Symposium" in Warmenhuizen, Holland in September

## PUBLICATIONS

Cahill, A.L., **Chalker-Scott, L.**, Ewing, K. 2005. Wood-chip mulch improves plant survival and establishment at no-maintenance restoration site (Washington). *Ecol. Restor* 23: 212-213.

**Chalker-Scott, L.** 2005. Growing healthier trees. *Organic Gardening*. Oct/Nov: 14-15.

**Chalker-Scott, L.** 2005. The myth of stoic trees. *Washington State Nursery and Landscape Association B&B* 57(8): 10-11.

**Chastagner, G.**, and Puffer, J. 2005. Noble fir stump removal. *Christmas Tree Lookout* 38(2): 15-17.

**Chastagner, G. A.**, Osterbauer, N., and Falacy, J. 2005. *Phytophthora ramorum* surveys in Pacific Northwest Christmas tree and bough production areas. *International Forestry Review* 7(5): 258-259.

**Chastagner, G. A.**, and Riley, K.L. 2005. Sensitivity of pathogen inocula to chlorine dioxide gas. *Acta Horticulturae* 673: 335-359.

**Chastagner, G. A.**, and Kaufmann, P. 2005. Efficacy of fungicides in controlling leaf spot on bulbous iris. *Acta Horticulturae* 673: 509-511.

**du Toit, L.J.**, and Hernandez-Perez, P. 2005. Efficacy of hot water and chlorine for eradication of *Cladosporium variabile*,

*Stemphylium botryosum*, and *Verticillium dahliae* from spinach seed. *Plant Disease* 89: *in press*.

Hernandez-Perez, P., and **du Toit, L.J.** 200\_. Seedborne *Cladosporium variabile* and *Stemphylium botryosum* in spinach. *Plant Disease* 89: *in press*.

Krizek, D.T. and **Chalker-Scott, L.** 2005. Ultraviolet radiation and terrestrial ecosystems: Introduction to Symposium-in-Print. *Photochem.Photobiol* 81:1021-1025.

Koike, S.T., Matheron, M.E., and **du Toit, L.J.** 2005. First report of leaf spot of spinach, caused by *Stemphylium botryosum*, in Arizona. *Plant Disease* 89: *in press*.

Nielsen, U. B., and **Chastagner, G. A.** 2005. Genetic variation in postharvest needle retention among Nordmann fir families and grafted clones. *Scandinavian Journal of Forest Research* 20(4): 304-312.

DOI:10.1080/02827580510008365

Pappu, H.R., **du Toit, L.J.**, and Schwartz, H.F. 200\_. Sequence characteristics of *Iris yellow spot virus* (genus *Tospovirus*) isolates from the western region of the United States. *Archives of Virology*: *in press*.

### Web Publications

**Chalker-Scott, L.** 2005. The myth of rubber mulch. September.

**Chalker-Scott, L.** 2005. The myth of compost tea, episode III. October.

**Glawe, D. A.,** and Grove, G.G. 2005. First report of powdery mildew of *Scabiosa columbaria* (dove pincushions) caused by *Erysiphe knautiae* in North America. Online. Plant Health Progress doi:10.1094/PHP-2005-1024-01-BR.

**Glawe, D. A.,** and Laursen, G.A. 2005. First Report of powdery mildew on *Caragana arborescens* and *Caragana grandiflora* in Alaska caused by *Microsphaera (Erysiphe) palczewskii*.

Online. Plant Health Progress doi:10.1094/PHP-2005-1017-01-BR.

**WSU Vegetable Pathology Team.** 2005. The August/September newsletter of the WSU Vegetable Pathology Team is focused on nematode problems of vegetable crops in WA, and can be viewed at the team website: [http://mtvernon.wsu.edu/path\\_team/currentnewsletter.htm](http://mtvernon.wsu.edu/path_team/currentnewsletter.htm)

### Leaflets/Series

Antonelli, A and Glass, J. 2005. "Apple Leaf Curl Midge" and "Filth Flies," two new Pest Leaflet publications in series.

## GRANTS

The **FoodSense** program and the **Nutrition Education Network** of Washington have been funded for another year by the USDA Food and Nutrition Service, Food Stamp Office under a contract with the Department of Social and Health Service. Federal funds amount to \$4.2 million and the partner cost share (commitment of time, space and cash from community agencies and schools) is \$4.2 million. This program started in 1991 at one site. It is now in 29 sites around the state.

**Tim Miller** received \$3,223 from the Washington Commission on Pesticide registration for testing several herbicides in tulips.

**WSU's Small Farms Program** has just signed its second contract with the USDA Risk Management Agency to continue offering a popular course series on business, entrepreneurship, marketing and whole farm planning. The \$150,000 partnership allows Cultivating Success courses to be offered this year at a dozen locations in Washington and Idaho. The **Small Farms Program** also recently signed a two-year \$503,000 contract with the Risk Management Agency to continue a pioneering outreach initiative to Latino and Southeast Asian immigrant farmers.

**Lindsey du Toit**, together with Steven Koike (University of California), received \$6,000 from the Western Region IR-4 program for further evaluation of fungicide seed treatments for control of black leg of crucifer vegetable crops.

The WSU Livestock Nutrient Management Program led by **Joe Harrison** at WSU-Puyallup has received a 2-year Natural Resources Conservation Service Conservation Innovation Grant for the "Development and Integration of a National Feed Management Education Program and Assessment Tools into a Comprehensive Nutrient Management Plan." The grant award totals \$424,599 and will include the joint efforts of faculty from land grant universities in Indiana, Iowa, Nebraska, California, Texas, Oregon, and Idaho.

## HONORS AND AWARDS

In October, **WSU's Small Farms Program** won an Honorable Mention award for its poster "Organic Systems: Research for Small Farm Success" at the 4th National Small Farms Conference in Greensboro, N.C. The research team included **Craig Cogger, Andy Bary, Liz Myhre, Marcy Ostrom and David Muehleisen** at WSU. The poster was designed by **Rich Hines and Marcia Senter**.

**Gary Chastagner** received the Barney Douglass Research Award from the Pacific Northwest Christmas Tree Association on September 9<sup>th</sup>, 2005.

**Tim Miller** was elected president of the Washington State Weed Association.

Over the years, WSU REC Club has given out at least two book scholarships annually in the amount of \$250 each. Recipients must be associated with WSU Puyallup through a parent,

grandparent, or a summer time slip employee attending WSU. This year's WSU REC Book Scholarship recipients were Kariba Jack, daughter of **Grace Jack** who works with **John Stark** and Kevin Chastagner, son of **Gary Chastagner**.

## BEHIND THE SCENES

The Facilities Operations staff has had a busy year. In addition to several tasks completed at the Mount Vernon Research Center to facilitate preparations for their new campus major improvement project, staff installed a new heating system in the Puyallup administration building and finished major improvements to the guest house. They also completed the development of a new plant material grinding and drying facility to replace an existing obsolete facility.



*Lab walls going up for SOD lab*

Presently, they are working on several additional improvement projects at Puyallup: a new Sudden Oak Death bio-containment lab is under construction with the remodel of the old poultry feed mill located in building 1009; additional



*Farm five digging*

sewer connections and security systems for the south part of the Puyallup campus; constructing a new building at Farm 5 with men's and ladies ADA accessible restrooms complete with showers, and a new lunch room, an electrical system upgrade in the building adjacent to the new one, and a new on-site sewage disposal system; and the construction of a new building to provide a class room which will be used to instruct building pest control technicians and inspectors.

Much of the material and some services for construction of the septic system were donated by members of the Washington On Site Sewage Association which operates a training center here at WSU Puyallup.

## FIELD DAYS AND EVENTS

In cooperation with the Western Washington Fruit Research Foundation, **harvest tours** were conducted at the NWREC Mount Vernon on August 13, September 10 and October 8. About 80-100 people participated in each of these tours, conducted by **Gary Moulton** of the Fruit Horticulture Department. Foundation members and the public were guided through the fruit orchards to sample the diverse fruits that were ripe at each field day, see the latest new varieties, and ask questions about fruit culture, disease problems, and similar topics. On October 8, the field tour was preceded by a morning session of talks on how to select the best fruit varieties for the home orchard and grow them successfully. The speakers were Tom Thornton, owner and manager of Cloud Mountain Farm nursery, and Chris Smith, Master Gardener and gardening columnist for

the Seattle Post-Intelligencer. Dr. Bob Norton, WSU Professor Emeritus, moderated the discussions.

The **Small Farm Field Day** held at WSU Puyallup August 17 was a great success. More than 50 participants including local farmers, producers, constituents, and others learned the latest information on organic production systems, integrating chickens into a diversified cropping system, new management tools for improving soil quality, and habitat enhancement for beneficial insects. Presenters were **Craig Cogger**, **Andy Bary** and **David Muehleisen**. The group moved through six different stations and had an opportunity to network with other small farm producers and to influence future research at WSU.

The 2005 **WSU Onion Field Day**, coordinated by **Lindsey du Toit** and Mark Trent (WSU Grant Adams Area Extension

Educator), was held at L&L Farms near Connell, WA on August 26, 2005. About 100 growers, field reps, consultants, breeders, extension agents, and researchers evaluated demonstration plots of 49 onion cultivars, and received research reports on *Iris yellow spot virus* from **Lindsey du Toit** and on thrips control from Doug Walsh (entomologist at WSU Prosser IAREC). The field day was followed by a very enjoyable BBQ held at the Scooteny Reservoir Recreation Area. Thanks to Kerrick and Larry Bauman at L&L Farms for their excellent grower cooperation. For a copy of the results of the onion cultivar trial, contact Lindsey at [dutoit@wsu.edu](mailto:dutoit@wsu.edu).

The 2005 **Annual Master Gardener Conference** was held by WSU Extension on campus in Pullman, September 7th-9th. The conference commenced with a reception in the Lewis Alumni Centre where Dean Linda Kirk-Fox and Provost Robert Bates honored the 94 volunteers who donated more than twenty years of service to WSU through the WSU Master Gardener Program. The reception was followed by a tree-planting ceremony in the Alumni Arboretum. Thirty-five WSU faculty and staff presented over 75 seminars to 190 WSU Master Gardener volunteers. Topics for the



*Tree planting at the WSU Alumni Arboretum*

seminars included landscape design, entomology, plant pathology, weed science, fruit science, greenhouse science, soil science, plant propagation and basic plant science.

Seminars within these training tracks, as well as the hands-on afternoon lab sessions, served as continuing education credits within the WSU Master Gardener Program and furthered the Program's mission of "Equipping WSU Master Gardeners to educate local community members in the application of horticultural science for the sustainable management of landscape and gardens". The annual awards banquet, which included a wonderful performance by the WSU Madrigal singers, culminated in the presentation of a project award to volunteers in Benton and Franklin counties. The WSU Master Gardener Program has over 4,000 volunteers serving WSU across 36 Washington counties. Next year's conference will be held September 7-9, 2006, at South Seattle Community College.

Throughout the month of October, an exhibition on mycology at Seattle's new downtown Public Library building highlighted research on powdery mildews being done in the **Mycology Program** at WSU-Puyallup.

On October 30<sup>th</sup>, the entire Washington State 4-H team was involved in hosting over 1270 4-H Youth Development educators from across the United States, Puerto Rico and Canada for the **National Association of Extension 4-H Agents 59th annual meeting**. Team leaders were Jana Ferris of Snohomish County and WSU Puyallup's own **Kevin Wright**. WSU Provost Bob Bates welcomed the educators who converged in Seattle for the meeting to hear world renown speakers including Mark Williams (diversity) and Paul Loeb (citizen activism in an age of cynicism), attend leading edge research round tables, participate in experiential off-site learning experiences and take -in over 200 different professional development seminars throughout the week.

## GENERAL ANNOUNCEMENTS

COMING UP... Mark your calendar for the February 15 and 16 Westside Research and Extension Agriculture and Natural Resource Days. The program will be held at WSU Puyallup in the Allmendinger Center. It will feature a UW Climate Change Group Presentation; Topic Reports on Watershed Mgmt , Farming Systems, Forestry and Urban Horticulture; a discussion on the Puget Sound Salmon Recovery Plan; and roundtables on grants, collaboration and updates on what's hot in the world of research. We encourage all Westside ANR faculty and program staff to attend these meetings. This will be an excellent opportunity to learn about current research and Extension programs in western Washington and network with district and department colleagues. Final conference details and an online registration will be announced in January.

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Please send news items for the Winter edition of *West by Northwest* to Heather Schriver at Washington State University Puyallup, 7612 Pioneer Way E, Puyallup, WA 98371-4998 or e-mail: [schriver@puyallup.wsu.edu](mailto:schriver@puyallup.wsu.edu). **Deadline for the Winter edition is January 31st.** Co-editors: Heather Schriver and Tanyalee Erwin.

