



# Serving the Citizens of Clackamas County!

The Oregon State University Extension Service has had faculty and staff living and working side-by-side with the people of this county for nearly 100 years. Our purpose, then and today, is the same--bring the power of the university to local communities to identify and address problems.

In our early days, Extension programs and activities focused on improving farming practices, developing home making skills and nurturing families, and teaching life skills to youth. Although we live in a very different world today than the early 1900s, our approach and priorities are the same--build stronger and healthier individuals, businesses, and communities making Clackamas County a great place for all of us to live!



Mike Bondi, Extension Regional Administrator

**More than 75,000 Clackamas County residents participated in our education programs, activities or accessed our information and services this past year.**

Nearly 50 OSU faculty and staff serve Clackamas County residents at our two primary office loca-

tions--the Clackamas County Extension office located in Oregon City and the North Willamette Research and Extension Center located just south of Wilsonville. Our 4-H/Youth Development, Family and Community Development, Home Horticulture, and Forestry/Natural Resources programs are housed at the Extension office. All of our agriculture programs are housed at the Research and Extension Center at our experimental farm near Wilsonville.

More than 75,000 Clackamas County residents participated in our education programs, activities or accessed our information and services this past year. Nearly 1,000 in the county are trained as volunteers of the OSU Extension Service each year. These neighbors extend our reach to communities by serving as 4-H Leaders, Master Gardeners, Master Woodland Managers, Family Food Educators and Wildlife Stewards. About 2000 citizens come to the Extension office each year for assistance at our Master Gardener Plant Clinic looking for help with their home garden and landscaping problems. The Plant Clinic is open daily during business hours year around.

Join our OSU Extension team in Clackamas County. Check our Extension's website at <http://extension.oregonstate.edu/clackamas/> and the North Willamette Research and Extension Center's website at <http://oregonstate.edu/dept/NWREC/>. Or, stop by the offices. Feel free to call, too. We are here to help!



The OSU Extension Service office in Clackamas County is located on the county's Red Soils Campus in the hilltop area of Oregon City.



The North Willamette Research and Extension Center is OSU's 160 acre experimental farm just south of Wilsonville and across from Charbonneau.

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## FACULTY AND STAFF – FAMILY AND COMMUNITY HEALTH

### OSU serving you in Clackamas County

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Robin Rosetta .....	Extension Faculty/Nursery – Integrated Pest Management
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Amanda Vance .....	Research Assistant/Berry Crops
Wei Yang .....	Extension Faculty/Berry Crops
Heather Andrews .....	Bio Science Research Technician/Berry Crops
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## Family Food Education Program Serves Community



ing, food preparation, food preservation and safety, food security, and gardening. Outreach is done at numerous venues, including Farmers' Markets, food pantries, schools, community centers or at community events, and food preservation and safety classes taught by the volunteers.

“Our goal is to equip our volunteers with science-based information and skills that can be shared throughout the county,” said Kelly Streit, MS, RD, Family and Community Health Extension Educator. “Our staff can't be everywhere in the county, so our volunteers help extend our reach. These volunteers also know their communities and can be more effective at identifying local needs and available resources.”

Ten new Family Food Education volunteers representing the communities of Molalla, Beavercreek, Tualatin, Canby, and Portland will complete an eight-week training program at the end of April and begin their volunteer service in Clackamas County in May. Watch for them in your community!

Family Food Educators are trained volunteers for the OSU Extension Service. They deliver educational programs that focus on nutrition and food resource management, including healthy eating, meal planning, budget-



## FAMILY AND COMMUNITY HEALTH

# SNAP Ed Downsizes with Reduced Budgets

During the past two federal fiscal years, Extension's food and nutrition education programs funded through SNAP (Supplemental Nutrition Assistance Program) have been cut back by 30%. The SNAP Education Program budget is a part of the larger federally funded Farm Bill, which has become a contentious issue in Washington D.C. in recent years.

"These budget reductions have resulted in decreased SNAP-Ed Program delivery to eligible youth, adults, families, and seniors," throughout Clackamas County by approximately one-third," according to Kelly Streit, MS, RD, and Family Community Health Ex-

ension Educator. "Programs most affected by the reduction include those directed at youth in schools where at least 50% of the students qualify for free or reduced meals, and those programs delivered at low-income residential housing sites."

Despite the reduction in funding, the Clackamas County SNAP-Ed program delivers engaging and meaningful programs at Clackamas County schools, including Clackamas River and Eagle Creek Elementary Schools located in Estacada, and also low-income residential housing sites, including Clackamas Heights in Oregon City, Hillside Park/Manor in Milwaukie, and Plaza Los

Robles in Molalla.

It is projected that up to 2800 school students will receive nutrition education lessons in their classrooms—delivered by the OSU faculty and staff during the current school year.

Streit, a Registered Dietician, says the goal of SNAP-Ed is to teach all ages, including youth, adults, families, and seniors basic skills and knowledge related to food resource management (healthy eating, budgeting, meal planning, basic food preparation, food security, etc...) and physical activity that will result in lasting behavior change.

For the past 15 years, SNAP Educa-

tion Program efforts in Clackamas County have been targeted towards youth in schools. The efforts are gradually being directed towards a wider audience at a variety of community locations, including community gardens, community and senior centers, food pantries, farmers' markets, day care centers, WIC clinics, and health centers.

In addition, the Clackamas County SNAP-Ed program now has a bilingual, bi-cultural Education Program Assistant on staff to expand the program reach into the Hispanic community.

# Farm-to-School Comes to Molalla

The Molalla River School District received a grant from the Oregon Department of Education in 2013 to implement a Farm-to-School program within that area. And, the OSU Extension Service in Clackamas County is a lead partner to assist with the education delivery of this effort.

The goal for the project is to increase the purchase and use of local foods in school lunches with a focus on food produced in the Molalla area—including rural communities adjacent to the school district (i.e. Salem, Silverton, Canby, Oregon City, and Woodburn). In addition, the project aims to promote an understanding among children and families about where to find locally produced and processed foods, and how these foods can help form a balanced diet at school and at home. Finally, Farm-to-School promotes the importance of locally-produced and processed foods to a healthy local economy.

Work on the Farm-to-School project began last fall in the Molalla School District. Over the next two school years all District schools will feature at least one or two lo-

cally grown foods at a minimum of one school lunch per week. Also, each school will inform students, staff, teachers, parents and other community members about how to access and use local foods in daily meals and snacks. In addition, Farm-to-School will promote the concept of a balanced food and activity lifestyle ("energy in to the body" from eating and drinking versus "energy out of the body" during physical activity), as well as, the importance of nutrient-dense foods. Finally, all four elementary schools in the District will host two local-foods table tasting events each year.

The first tasting table tasting events were held in November, 2013 and featured locally grown apples and winter squash. During the events 1,200 Molalla Elementary students learned about different kinds of apples and squash, how they are grown, and were provided samples of fresh apples and baked squash to taste. Canby farmer, Tom Winterrowd, attended one of the schools and talked with the children about growing the foods he provided.



## FAMILY AND COMMUNITY HEALTH

# GROW Healthy Kids and Communities begins first year in Molalla and Estacada

Generating Rural Options for Weight Healthy Kids and Communities (GROW HKC) launched its first year working in Molalla and Estacada during 2013.

GROW HKC is a federally funded childhood health promotion program focused on promoting environmental changes to make it easier for children and families to develop and sustain healthy eating and activity habits. Deborah John, a Clackamas County Extension faculty member in the Family and Community Health program, is one



of the lead researchers for the project.

GROW HKC works with community members on research to improve population health. Local resi-

dents identify and learn about what features in a home, school and community support or hinder eating healthy and being physically active. The aim is to increase the community's capacity and resources as well as support actions that improve availability, accessibility, and affordability of healthy eating and activity options. The overarch-

ing goal is to create an environment that makes it easier for all kids and families to live "weight-healthy" lifestyles.

Beginning in the fall 2012, Molalla and Estacada residents participated in community-engaged research, using camera-enabled GPS devices and maps, to learn about residents' views on the community's healthy eating and active living environment. Next, community members helped to compile a more comprehensive inventory of food and physical activity resources in their communities. When completed, both Estacada and Molalla will have an all-inclusive, interactive map displaying and showing the physical location of

every food and physical activity option in each community. The reports from these two assessments will provide information that can be used by community members and local leaders to help secure and leverage resources to improve the surrounding environment. These changes will contribute to a healthier rural community and weight among rural children.

GROW HKC is also working closely with the school districts and elementary schools in both communities to identify and support healthy school environments. Our research demonstrates that a school culture that models and supports healthy nutrition and physical activity habits, and has a supportive physical environment, helps to enhance learning, and ultimately aids healthy child development and academic performance. Some of the ways schools can do this is by displaying posters, exposing students to healthy foods and beverages through tasting tables and school gardens, promoting healthy eating and activity messages in family newsletters, and serving healthy food and providing opportunities for physical activity during school events. Our local team is partnering with school staff to determine where the schools are meeting or exceeding guidelines for a healthy school environment. We will work with the schools to prioritize improvements. The GROW HKC program also provides funding for communities to kick start improvements.

GROW Healthy Kids and Communities and Oregon State University Extension are proud to be partners with Molalla and Estacada. We look forward to the next two years, and will continue to work with local partners and volunteers to promote healthy children and families, schools, worksites, and communities across Clackamas County.



Molalla High School has formed a new 4-H Culture Club with more than 120 students. The club recently held a ground-breaking for their school gardens they will tend and bring fresh produce to the school's cafeteria.

## COMMUNITY AND URBAN HORTICULTURE

# Clackamas County Master Gardeners are the Best!

Each year special six volunteers are recognized at the annual OSU and Oregon Master Gardener Association's (OMGA) Mini-College in Corvallis for their service to their counties and communities. The OSU Extension Service Master Gardener (MG) program is a group of well-trained volunteers who provide relevant, research-based education and outreach to the general public on all aspects of the art and science of gardening.

Sherry Sheng, of West Linn, was selected as one of two Oregon Master Gardeners of the Year in the state. Sherry has served as a Master Gardener for seven years. She is a former Clackamas County MG Chapter president, works tirelessly on many State OMGA committees, and volunteered over 400 hours in 2012.

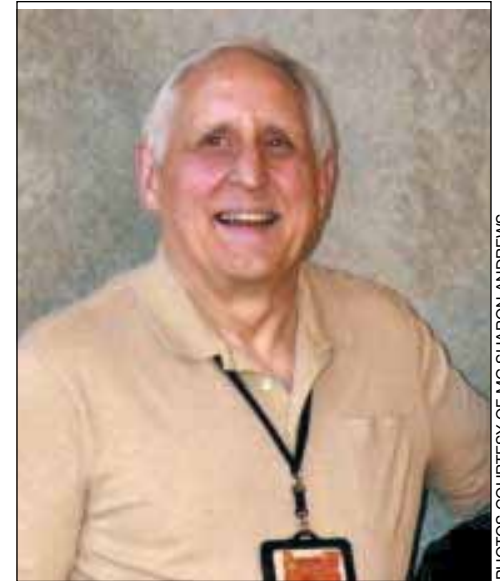
She has initiated several new MG programs including the award-winning 10-Minute University™ education program, which provides short gardening presentations to the public at places like local Farmers Markets.

Herb Davis, a Portland resident, was selected as one of two recipients of the "Behind the Scenes" statewide award which honors those whose quiet service is invaluable to the program. Herb has been chairman of the very popular annual Clackamas Spring Garden Fair held in Canby and volunteered over 350 hours in the Master Gardener program in 2012.

Congratulations to Sherry and Herb, two of our many dedicated Clackamas County Master Gardeners!



Sherry Sheng



Herb Davis

PHOTOS COURTESY OF MG SHARON ANDREWS.



PHOTOS COURTESY OF MG SHARON ANDREWS.

## Spring Garden Fair Marks 30 Years!

Like a harbinger of spring, thousands wait anxiously for the annual Clackamas Master Gardener Spring Garden Fair. The event is always the first weekend in May at the Clackamas County Event Center (Fairgrounds) in Canby. And, the 2014 fair was the 30th yearly show.

"We spend many hours planning and organizing for the Spring Garden Fair each year," said Irwin Rogers, Molalla, one of the event's organizers. "It is truly one of the very special activities that happens annually in Clackamas County." More than 200 OSU-trained Master Gardener volunteers organize the Fair each year and use the event to showcase their programs and services to the community and the county's horticultural industries.

More than 180 commercial exhibitors and local nursery vendors participate at the Spring Garden Fair each year. The event began as a way to connect local garden and landscape producers with the public—and, boy, have they! Each year about 15,000 people attend the Spring Garden Fair—the largest all-volunteer run garden fair in the U.S.

Congratulations to the OSU Master Gardeners for 30 years of service to citizens of Clackamas County.



## COMMUNITY AND URBAN HORTICULTURE



### BUFA Continues to Grow

Beginning Urban Farmer Apprenticeship (BUFA) began in 2011 as a creative approach designed to teach city dwellers what it takes to be a farmer. With the growing interest in our food supply and eating locally grown fruits and vegetables, many people think they might want to be a farmer.

“We can help,” said Weston Miller, Metro Community and Urban Horticulturalist with the OSU Extension Service. Miller says Extension has historically focused their farming education on commercial farmers—already in the business. But, BUFA is a different approach for a different audience.

BUFA provides a growing season-long (April through November), boot camp-like training to equip aspiring farmers with the knowledge and skill-

base needed to launch their career in agriculture. The idea is that urban residents could play a more significant role in providing locally grown food right in the metropolitan area—from big backyards to vacant lots and community spaces. Some BUFA participants are even considering larger-scale options outside the urban environment.

The BUFA training includes about 550 hours of instruction and hands-on work experience focused on intensive vegetable production in community and urban settings. BUFA utilizes OSU’s established curriculum Growing Farms: Successful Whole Farm Management seminar series that focuses on farm business management.

Miller says, “We get folks started

with planning and planting in the early spring; then, follow the seasons through the cultivating, weeding and pest management of the summer months; to harvesting and marketing. This is a very hands-on approach. We all learn by doing.”

Thus far, 45 have attended the eight month BUFA course. About 25 of these participants are continuing to advance their careers in agriculture including starting small-scale operations and working on area farms to get more experience.

BUFA 2014 began, again, in April. This year’s course is fully-booked with more than 30 participants. For more information, contact Miller at weston.miller@oregonstate.edu.

## AGRICULTURE

### Smart Sprayer Brings New and Exciting Concept to Growers

Nursery Integrated Pest Management Extension Agent, Robin Rosetta, returned to the North Willamette Research and Extension Center on the first of August, 2013—following an eight-month sabbatical. This was Rosetta’s first sabbatical with the university during her 19 year Extension career. The university encourages its faculty to take sabbatical leave as a way to concentrate on specific projects, complete writing or publishing, and to develop new skills that will better serve our clients.

Rosetta’s sabbatical included several study trips to different areas of the U.S., working with research and Extension faculty having similar interests, building these relationships and collaborations, and to share her work.

While on sabbatical, Rosetta spent time working on a project she has been involved in for the past three years that brings a new concept of spraying to the nursery industry for pest control—called Smart Sprayer.



The Smart Sprayer is a motorized spray system that uses computerized laser sensors to detect the size, density and presence of trees and shrubs in a field row and adjust the amount of spray to apply. Only crops plants are sprayed. When there is a gap in the field, the Smart Sprayer senses the open area and does not spray.

“Our field trials are indicating that

we are having a huge reduction in the amount of spray material needed without sacrificing the control of our pests,” according to Rosetta. Reductions up to 60% of the water and chemical used has been documented.

“We see great potential for the other agronomic crops, too. I know the berry growers are very interested.

Besides concentrating on her Smart Sprayer field trial evaluations in Oregon this past summer in the Sandy and Boring areas (cooperating with Hans Nelson Nursery and J. Frank Schmidt Nursery), Rosetta did travel to the U.S.D.A.’s Agricultural Research Service station in Wooster, Ohio to see where the sprayer prototypes are being built.

“I have been collaborating with the ARS scientists at Wooster for the past

three years on the development of this new sprayer technology to more efficiently apply pesticides to crops. This is very new technology that could radically change how we apply pesticides in farming. It was really good to get to Wooster to see their development lab and see their work. I have a much better feel for our technology now.”

When Rosetta returned from sabbatical, she hit the ground running with two field demonstrations at the Hans Nelson Nursery near Sandy. And, she orchestrated great media outreach to OPB, NPR and a wide variety of local, regional and national print media outlets.

“I really think this new technology will revolutionize how we spray. The media seems to have been very interested in this story. Our goal is to reduce the amount of wasted pesticides. We know we can reduce costs for the growers by using less water and chemical. And, we will be putting much less chemical into the environment—so, this is a win-win for everyone.”

## AGRICULTURE

# NWREC Community Open House Sets Record Attendance

The North Willamette Research and Extension Center (NWREC) hosts a Community Open House each year in late July. The event is a showcase for the faculty and staff to share the work they are doing to support farming and agriculture in the region. The Open House program is relatively new—now in its fifth year. But, interest by the public to visit the Research Center and to learn about what is done there, is growing by leaps and bounds.

Nearly 360 attended the late afternoon-early evening event in 2013. Many of the visitors were Charbonneau residents—a housing development just across the road from the Center—or were from the Wilsonville and Canby

communities. Besides educational displays about the farm and research activities, there were free farm fresh local vegetables, berry tasting, farm tour hayrides, and tractor driving opportunities—something for everyone of all ages.

“We are very excited to see the growth of this event,” said Mike Bondi, Director of NWREC. The first three Open Houses each drew about 40-60 participants. The faculty and staff at the Center assumed no one in the community really cared about what they do. I think that's changed.”

Don't miss the 2014 Community Open House on Wednesday, July 23 from 4:00 to 7:00 pm. Everyone is welcome!



## Solar Comes to NWREC

Oregon State University is installing solar energy arrays at several of its locations around the state to evaluate the practicality of this form of alternative energy for its needs. The North Willamette Research and Extension Center is one of two off-campus OSU locations participating in the project. And, by mid-December, 2013 a one-acre array completed its construction phase at NWREC's Aurora location.

Although the project had been in the planning stage for one year, the actual construction took only one month. During this time 172 steel posts were driven into the one-acre site, racking or framing was assembled for the four-row array, 868 solar panels were hung, and all the trenching and electrical wiring was installed to connect the panels and bring together in an inverter that will convert the DC current to AC.

The final steps of the project was the placing of a transformer by local power utility, PGE, and the testing, evaluation and monitoring of the system to ensure power flows back to the grid properly. It is projected that the 220-kilowatt solar array will generate about 85% of the en-

tire electrical needs of the 160-acre agricultural research center including all of the greenhouses, wells and irrigation pumps, and the office, outbuildings and meeting rooms. The solar array began producing electricity for NWREC by the end of this past January.

The solar array project is a collaborative effort between public universities around the state and the solar energy company, Solar City. Oregon State University is participating with five installations (3 on campus in Corvallis and 2 off campus). Solar City owns all of the equipment and has funded all of the installations. Solar City maintains, monitors, and operates the arrays. NWREC receives the power they produce plus has an agreement to purchase future needs at a reduced kilowatt price compared to current costs.

Check out the solar array photos on NWREC's website (<http://oregonstate.edu/dept/NWREC/>) home page for a closer look at the project and to follow its progress in the coming months. Once the solar array is fully operational, web-access will be available for monitoring the daily production of energy from the system.

## AGRICULTURE

# Tractor Training on a Roll

During the past two years, a new youth tractor safety training program has been offered in the Clackamas County area. The project is a joint effort between the Clackamas County 4-H program and the North Willamette Research and Extension Center. Thus far, more than 100 youth (ages 14 to 17) have completed the national certification training program. The purpose of the training is to provide safety knowledge general operational skills, and equipment experience to the youth. Any young person under 18 years old must be safety certified to be employed on a farm and be eligible for insurance coverage.

Jan Williams, Clackamas County 4-H Extension Agent, coordinates the program. “A lot of our 4-H youth want to work outside their family farms. We want to make sure they know safe operating procedures for farm tractors and implements.”

The farm tractor safety training includes 24-hours of teaching time—with

about ½ of the time in the classroom learning principles and the other ½ in the field operating several kinds of tractors, hooking up implements and pulling and backing trailers. Passing a written test is required, as well as, a field driving test for certification.

Local farm equipment dealers have been very generous to provide equipment for student use. Farmers and businesses have provided food for lunches, snacks and refreshments, and financial support to cover the instructional costs and educational materials.

During 2014 plans are underway to expand the program to include adult tractor safety training, too. “I see NWREC becoming a hub for farm equipment training. We have an ideal site at the farm, basic equipment, great community cooperators, staff who are excellent equipment operators, and a central location for easy access from around the Valley,” said Mike Bondi, NWREC’s Director.



# Food Handling Workshops—it's about keeping your food safe!



The *E. coli* contamination in a strawberry field in Washington County during the summer of 2011 caught area fresh fruit and produce growers by surprise. The situation could have been much more devastating than what turned out. To help avoid future problems, berry growers decided they needed training for their farm field workers and their supervisors on how to minimize the potential risk of food-borne disease contamination.

Luisa Santamaria, a nursery pathologist and bilingual educator at NWREC, was asked to lead a series of trainings during 2012 and teach three-hour food safety and handling workshops—in both English and Spanish—at four locations in the Willamette Valley. She did and the sessions were very successful, reaching more than 250 field workers

and supervisors.

The berry growers expanded their education and outreach efforts in 2013. Eight workshop locations were delivered that April and May throughout the Willamette Valley. Each workshop location included three hour English and Spanish sessions. These are “train the trainer” sessions, so it is expected that attendees will take their new knowledge and educational materials back to their farms and share with their workers. Data from 2013 indicated that trainers reached out to more than 13,000 farm field workers with the best management practices they learned in the workshops.

During the winter and spring in 2014, food safety training outreach continues targeting 20 locations and 40 three hour workshops.

## AGRICULTURE

# Battle Rages on for Control of Spotted Wing Drosophila

The Spotted Wing Drosophila (SWD) is a growing insect pest problem for fruit growers throughout the Willamette Valley. As a new invasive pest, SWD adult female flies lay their eggs in ripening strawberries, blueberries, raspberries, blackberries and stone fruit. As the fruit ripens in the summer and fall, the insect eggs continue to grow, hatch into a worm-like maggots, and become bigger and bigger. Growers can't sell their infested fruit.

Effective control of the Spotted Wing Drosophila currently requires frequent and repeated application of insecticides. Traditional ground-application methods with a tractor pulling a sprayer through the fields is often used by farmers. However, this method can knock off ripening fruits to the ground. Helicopter application of insecticides provide a quick delivery over larger areas, but is very expensive. Weather issues, helicopter availability, and field locations can make aerial applications a challenge for farmers.

Cooperating with researchers at Washington State University, Wei Yang, an Extension Agent working with small fruit crops at the North Willamette Research and Extension Center, has come up with an alternative to ground and helicopter applications of insecticides. Their concept is called, "mistigation."

Some blueberry growers in the Willamette Valley already have their fields set up with microspray sprinkler heads above the crop. These misters are used in the hot summer weather once temperatures exceed about 85 degrees to cool the fruit and avoid heat damage. Yang and his Washington State University partners thought injecting the insecticides used to control SWD into the misting system could offer a practical solution to a difficult problem.

Pan-American Berry Growers, north of Salem, has been the primary field research site for Yang's experimental work over the past four growing seasons. Jeff Flake, former Pan-American's Field Manager now working for Sandy Ridge Farm, said they were first hit by SWD in fall of 2009. "We noticed the fruit was too soft. That was the first indicator of trouble," he said. Blueberries are Pan-American's only



crop, but they grow on 400 acres—so, they are a large grower. The company harvests blueberries from early July to mid-October or even later, if the weather allows. There's a huge payoff for the later-ripening varieties, because very few blueberries are harvested in the U.S. after September. The problem, says Flake, is that mid-September becomes a particularly dangerous time for blueberries because much of the fruit in the Willamette Valley has been picked, so the SWD has a lot fewer other fruits to attack. "It puts an inordinate amount of pressure on the farm. We've found the fight from late August on is a hard battle," he says. "You must do everything you can to keep your spray program on target."

Now, with three summers of testing, Yang believes he and his team are close to perfecting the mistigation system with practical recommendations for farmers. "We have been calculating the chemical dosages that need to go into the mistigation lines for insect control, evaluating the effectiveness of different insecticides on SWD, and refining operational procedures. I think we are close to answers that will work for growers, be very cost effective, and provide consumers with the fruit quality they want."

Flake agrees. He likes the mistigation method because he doesn't have to worry about knocking off the ripening fruit with tractors and sprayers going

through his fields. Also, he likes being able to get much better insecticide coverage with mistigation than with helicopters and being able to apply his insecticides right when needed for best control. "Above 10 gallons an acre it gets too expensive to apply by helicopter," says Flake. "And at 10 gallons an acre it's tough to push the chemical deep into the bush," he says. "It doesn't

help that spotted wing likes it dark and damp - the hardest place to get that chemical in. With an airblast (ground-type) sprayer we put on 50 gallons an acre, but with the misters, we put on 300 to 500 gallons per acre. Control is much better."

The mistigation system came through recent trials comparing ground, helicopter and mistigation SWD control methods with flying colors. To test the efficacy, the scientists put small containers of SWD out in the fields with tiny holes. The mortality was well above 90%; Flake says he didn't see any emerge alive. "We're cautiously optimistic that this will be a way to stay on top of spotted-wing, and get some of the other benefits besides," he says. "Without an extremely intensive spray program you're going to lose fruit—most of it, if not all of it."

After seeing the initial damage SWD caused a few years ago, Flake really had some doubts about the blueberry industry's future profitability. He feels a lot better since seeing the mistigation system in action. "We've got our fingers crossed that we now can keep that fly at bay."

## New NWREC Website Takes Shape

Interested in keeping up-to-date on the latest developments at the North Willamette Research and Extension Center, our programs and activities? A brand new website was launched in 2013 to help.

Bio Science Research Technician, Judy Kowalski, led the effort over the past year. Although managing an up-to-date website is an on-going process, progress in 2013 provides our farmers and the public with a good way to stay abreast of what is going on at NWREC and a serve as a source for program and technical information.

Judy plans continued refinements during 2014. A link to the new solar array's energy production data will be coming on-line soon. And, a farm map will be added that details the location of all field research and demonstration areas at the Center and information about the work at these sites and findings.

Check us out at <http://oregonstate.edu/dept/NWREC/> and let us know what you think.

## AGRICULTURE

# Using Temperature to Predict Plant Development

Plant growth and development is regulated by many environmental factors—such as, temperature, moisture, day-length, nutrient status, and pest pressure. For instance, perennial plants “sense” the coming winter weather and respond to shortening day-length and cooler nights by preparing for cold weather dormancy. Soil and air temperatures trigger a plant’s response to early spring growth conditions—like when to bud out or flower. Summer growing conditions, such as air temperatures, can speed or slow a plant’s maturation toward fruit set or harvest.

Orchardists have online tools that use temperature data to help them manage their crops. But, vegetable farmers depend mainly on calendar days provided in seed catalogs and their own experience to predict crop maturity. Heat accumulation during the growing season is often more accurate and can be measured using de-

gree-days. Degree-days (DD) are key to plant development and can often be used to better predict harvest, time farming practices and improve production—at least, that’s the theory.

Nick Andrews, the Metro Small Farms Extension Agent, and a team of OSU faculty around the Willamette Valley plus, local farmers, are teaming up to unlock these DD secrets of plants—and develop online computer models to guide farm management.

In the fall of 2012, the team was awarded a three-year, \$203,000 grant from USDA’s Western Region Sustainable Agriculture Research and Education (WSARE) program to begin developing vegetable variety, weed, and nitrogen degree-day models. They plan to launch a new website called CROPTIME which will allow vegetable farmers and other agricultural professionals to use these models and develop new ones.

The team was also awarded a Clacka-

mas County Innovative Funds grant in 2013 to collect vegetable development data with farmers in Clackamas County. In addition, that grant funded a survey to find out how best to teach people to operate the website and use the models. A usability engineer from Microsoft, Inc. has trained the team how to conduct usability tests so that the website can be more intuitive for the farmers and others.

“Support from Clackamas County helped us leverage the WSARE grant by providing data from Clackamas County farms that we can use in the vegetable models. It is also helping us to improve the clarity and usability of the website we’re developing,” Andrews said.

During 2013, here’s what this project accomplished in Clackamas County:

- Collaborated with seven Clackamas county farmers and seed suppliers (Matt Battilega, Big B Farm, Aurora; Craig Hoffman, Logan Zenner Seed, Canby; Jim Bronec, Praying Mantis Farm, Canby; Manfred Schosnig, C&S Farm, Canby; Laura Masterson, 47th Ave. Farm and Luscher Farm, Lake Oswego; and Joe Siri, Siri and Son Farms, Clackamas) for field crop development data collection on 40 different varieties of 13 vegetable crops;
- Measured degree-day accumulation with automatic weather stations and field data recorders during the growing season at all farm locations;
- Conducted a vegetable variety trial at NWREC with tomatoes and peppers grown on bare ground and on plas-

tic—providing data to better understand how plastic mulch influences crop development rates;

- Implemented a survey to identify how best to design education and outreach to growers and other agricultural professionals, and;
- Conducted a “train-the-trainer” workshop on usability testing for the CROPTIME website and DD models.

Keep watching for this important project. The CROPTIME website will be available online in 2015 via the OSU Extension Small Farms and OSU Integrated Plant Protection Center websites.



## Summer Provides Great Work Opportunities for Students

Twenty seven high school students, interns, graduate students, and seasonal workers brought their talents and enthusiasm to NWREC during the summer of 2013. Never before has the Center been host to so many who have come to work and learn—side by side—with our faculty and staff.

“It was a wild and crazy summer,” said NWREC Administrative Assistant Shelley Hughes. “We had plenty of coming and going. Finding places for everyone, even around the lunch table, was a challenge.”

But, it was a great experience, too, for the young people. The grad students were all part of the Berry Research Program under Bernadine Strik’s guidance—two working on Master’s theses and one a Ph.D dissertation. Strik’s program also supported nine other college and high school students. Interns

in the Nursery, Small Farms program, and High School Scholars programs were either grant funded by the faculty or volunteered. More college and high school students supported the IR-4 and Berry Extension programs. Finally, high school students came from the surrounding communities—with several connected to NWREC as recent graduates in the 4-H Tractor Safety Training and Certification programs. Funding for these high school youth was provided by program funds or the NWREC farm budget.

The North Willamette Research and Extension Center relies on summer seasonal workers each year to assist with our research and general farm management. Anyone interested in opportunities for summer 2014 should contact the Center at 503-678-1264.

## AGRICULTURE

# Seed Orchards Look to Future for Christmas Tree Industry

Growing the best Christmas trees all starts with the seed. For decades, Christmas tree farmers have hunted the Oregon forests looking for the “perfect tree.” When they see a tree with especially good shape, color, or branching, they collect seed from the parent tree and bring it home to grow for a future crop.

Once these selected tree seeds are sprouted, they are planted in fields and evaluated to see if the offspring really do have the genetic characteristics the farmer is looking for. Since Christmas trees take from 5 to 10 years to mature before being harvested, this process of tree improvement takes a long time. For example, if you had 6-foot noble fir in your home this year somebody went out collecting the seed for your tree 10 to 15 years ago probably in the coastal mountains of Oregon. If you had a Nordmann or Turkish fir, someone in Turkey or the Black Sea area of southern Georgia in Russia had to do the same and ship the seed here.

Tree seed is the beginning of each new crop and the key to genetic improvement in the Christmas tree industry. And, Chal Landgren—OSU’s Christmas Tree Extension Specialist—has been searching for the perfect Christmas trees for the past three decades working closely with industry partners. During 2013, Landgren established two seed orchards at the North Willamette Research and Extension Center to provide a place for controlled breeding of tree parents and seed production.

Landgren’s orchards use grafted seedlings—much like a tree fruit grower does—to shorten the time frame between identifying the best trees in the forest and getting into the flowering and seed production cycle. “It’s definitely a long process, no matter how we do this. But, improving the quality of our Christmas trees is an important step to keeping this industry successful for years to come.” Oregon is the leading producer of Christmas

trees in the U.S. and has been for the past 30 years. Nearly ¼ of all real Christmas trees in homes across the nation come from our state.

The new seed orchards at NWREC include two species—Turkish fir and noble fir. Although, the orchard is barely knee high now, it already includes grafted scion wood from many of the best well-tested trees known in the industry. And, more will be added in the next few years. Landgren says, “Our first seed may arrive in, who knows, 10 years for Turkish fir, longer for noble. Since this is one of the first Turkish fir seed orchards anywhere there is much to learn. But, it’s an important step in providing a domestic supply since collecting seed in Turkey and importing can involve many restrictions, delays, and uncertainty.

Landgren received Clackamas Extension Innovation Fund support the past two years to establish his orchards.



# Russian Caneberry Nutrition Education

Over 10% of the raspberry and blackberry acreage in the Northern Willamette Valley is owned and managed by Russian growers. Many of these older generation farmers are not proficient enough in English to understand our typical Extension publications, nor do they attend our educational programs—presumably because of language or cultural differences.

Extension faculty and field representatives from fertilizer and chemical companies have noted that some of the Russian berry farmers could use help with nutrition management best practices in their caneberry fields. Even though good information is available, it isn’t always being utilized by these growers to improve their management.

Poor nutritional management leads

to a reduction in yield or quality and possibly poses environmental risk. During 2013, OSU’s Nursery Crops Research Leader, Bernadine Strik, launched a special project to address this industry need. A grant from the Clackamas County Extension Innovative Fund helped support Bernadine’s work. The goal was to adapt current written publications and workshop materials into Russian and offer an educational training just for this audience.

“In my 25 years as an Extension Specialist at OSU, I have rarely seen more than one or two Russian growers at our berry crop educational events—like our field days at the NWREC, grower meetings, or other programs,” said Strik. “Poor participation at these events may be related to the challenges

of English as a second language for these growers—especially for many of the older farm owners—and cultural differences that we haven’t always accommodated.”

Strik went on to say, “My challenge is that I don’t speak Russian. But, luckily, during 2012 I had the opportunity to hire a seasonal summer research technician who was born in the Republic of Georgia and is fluent in Russian. I could see that, working together, we could do something special for this important group of our berry growers.”

During the past year Strik teamed up with Nino Adams, who lives in Canby, to translate an existing caneberry nutrient management guide, develop a new Russian language fact sheet on the basics fertilizer management in cane-

berries, and create a workshop specially designed for the Russian berry growers.

“I feel really good about what Nino and I accomplished this past year. This was all a first step for my program and outreach to the Russian community. Now, we have excellent educational materials for the berry growers in their native language.” Strik’s workshop—delivered at NWREC in December, 2013—was attended by about a dozen Russian growers. “This was a small group, but we had the right people—the real leaders in the Russian berry community. These are the ‘early adopters.’ They will be the ones to share our information to their family and neighbors. Then, change will begin to occur on the land.”

## 4-H YOUTH DEVELOPMENT

### Energy Education Picks Up Steam

During the past year the Clackamas County Extension office has been developing, and bringing to local schools, the state's first youth energy education curriculum. Clackamas Extension District and its Innovative Fund support has helped make this effort possible. Clackamas Extension 4-H Agent, Janet Nagele, is developing the program as a part of her school science 4-H youth outreach in the county.

"Energy literacy is a critical issue for our society," Nagele said. "Helping our next generation of citizens understand energy issues and have the science knowledge about these topics is going to be essential in the years ahead. Important decisions about where our energy comes from and making personal choices about the power we use in everyday life and for business and commerce will be needed," according to Nagele.

At the heart of Nagele's energy pro-

gram is a thirteen-module, 13-hour classroom curriculum. The curriculum teaches renewable energy and energy conservation topics designed to meet Oregon State's Science and Engineering Education Standards. Teaching kits with all the necessary supplies for each lesson have been developed with enough materials to teach 30 students. Trained 4-H adult volunteers, energy professionals, and 4-H faculty members deliver in-class renewable energy and energy conservation activities and experiments.

Utilizing Clackamas Extension Innovative Funds during 2013, 862 sixth-grade students were reached in 9 schools around the County with the new energy curriculum. The Innovative Fund support covered the cost to fully implement the program and develop future funding and volunteer systems to ensure program sustainability.



### Youth Get First Taste of 4-H With Cloverbud Program

The 4-H Cloverbud program is designed to be a first exposure for children (grades K-3) who are not old enough to participate in the regular 4-H club program at age 9 or 4th grade. For the past two summers, the Clackamas County 4-H program has sponsored a Cloverbud Camp program targeting pre-4-Hers, their parents...but, in particular, our Latino community.

"4-H is not a program many Latinos know about," said Camp Coordinator and Clackamas County 4-H Extension Agent, Jan Williams. "We wanted to provide a fun, comfortable and developmentally appropriate educational setting for our first-time 4-H participants and their families."

During the summer of 2013, thirty-five youth, ages 5-10, attended two, three-day day camp experiences at the Hopkins Demonstration Forest near Beavercreek. Transportation was provided, at no extra cost, to the participants in the Molalla and Sandy areas. Special effort was made to encourage and enable Latino youth participation. 29 of the 35 youth attending were Hispanic.

Daily hikes into the woods and fields at the Hopkins Demonstration Forest provided a variety of age-appropriate activities including arts and crafts, nature hikes and stories, forestry, science, wildlife, general ecology, and natural resource conservation. Also, the camp

programs were successful in getting disadvantaged and underserved young campers (K-3rd grade) registered, expanding their opportunity to interact with nature and learn about environmental concepts that should help forge connections with earth stewardship. At the same time, creative arts, nutritious lunches and snacks, as well as, outdoor exercise all encouraged healthy lifestyles.

4-H Cloverbud Day Camp will be offered, again, in 2014. Since many of the youth targeted by the Cloverbud Camp come from families who cannot pay for the opportunity, a continuing and sustainable

source of community funding will be needed to offer this program, again. Another hope is to offer additional day-camp experiences for the next age level (9-12 years old) with an overnight camp out on the last day. Contact Jan Williams (503-655-8631) for more information about camp plans for the coming year or sponsorships.



**JOIN** | THE REVOLUTION  
OF RESPONSIBILITY

*Our most popular program for youth is the 4-H Club experience. Youth in kindergarten through 12th grade can join a club in a wide variety of project areas.*

## 4-H YOUTH DEVELOPMENT

# 4-H Clubs in Clackamas County Reach Hundreds of Youth

The 4-H Club program in Clackamas County is the largest in the state. Nearly 1,300 youth—aged 4th grade through high school—participate each year. The club program—where most youth are members of clubs led by family members or adult neighbors in their communities—has a history dating back more than 100 years in our area.

Wendy Hein, one of two Extension 4-H Agents responsible for leading the 4-H Club program in our County, says the original reasons why clubs started back in the early 1900s are still important today.

“Clubs provide an important connection to the community for our youth—a place for young people to belong and be a part of something important in their lives. Trained adult leaders share their knowledge, provide a valuable role model, hold kids accountable, and are really the glue that makes this program successful.”

In fact, according to Hein, in nationally surveys and research about various youth-serving programs across the nation, 4-H ranks the highest for its impact with youth and their development into successful adults.

“Tufts University research reports that 4-H youth excel when it comes to making positive contributions to their communities, are more civically involved, participate more in science programs outside of school, and make more healthy life choices.”

Hein says 4-H has just about something for every interest. “Pretty much the only thing that limits us is having dedicated adults who will guide the youth in our programs and their willingness to share the most important asset we all have—our time.”

In Clackamas County there are 398 adult 4-H leaders directing 126 clubs. In addition, 60 youth don't belong to traditional clubs, but instead, do projects alone as individuals,

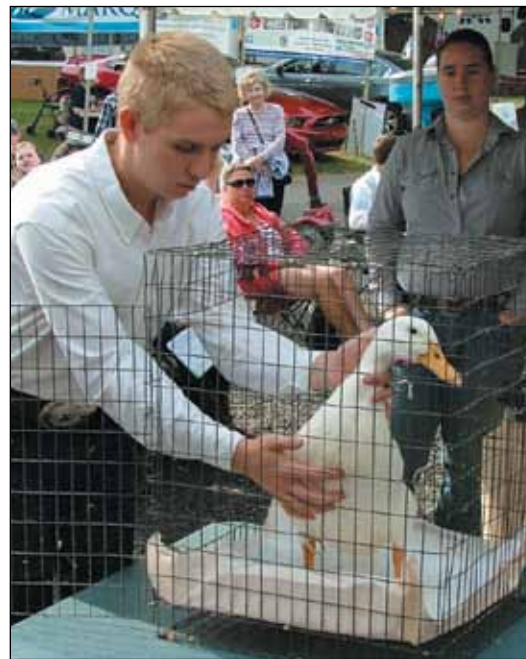
with the assistance of an adult. Here are a few other facts and figures about 4-H in Clackamas County:

- Clackamas County has 1,290 youth in 4-H clubs and 105 doing individual projects.
- 4-H has 66 project topics within its program in the County from Horse to GPS.
- 498 adults provide leadership for 4-H clubs in the County, as well as, the leadership for various committees, activities and events—including the County Fair.
- Nearly 40 adults have been 4-H leaders in the County working with youth for 20 years or more each.
- 100 new 4-H leaders are trained each year.
- The most popular 4-H club in Clackamas County is Horse with 388 youth enrolled. Second is Photography with 282. Third is Art with 235. Fourth is Clothing and Textiles with 179. Fifth is Food and Nutrition with 177 youth members. This top five group is followed by Rabbits, Horticulture, Cloverbuds (pre-4-Hers; see *Youth Get First Taste of 4-H*, page 12), Outdoor Education/Recreation, and Poultry.

Besides the 4-H Club program, 4-H also provides in-school science-based curricula for school teachers. During this past year, 2957 school children participated in 4-H through trainings in the Incredible Egg (the science of egg embryology), Fish Stewards (salmon and trout biology), and Energy (see *Energy Education Picks Up Steam*, page 12) curricula at 29 different schools in the County.

4-H day camping and overnight camping is available each year to youth in Clackamas County, too. During the past year, 135 participated in these camping opportunities.

For more information about 4-H in Clackamas County and how to get involved, contact the OSU Extension office in Oregon City. Become a part of the 4-H Revolution!



## Long-time 4-H Leaders in Clackamas County

### *REAL Dedication!*

Lavern Palmblad, Wilsonville—65 years  
 Bill Headrick, Beavercreek—60 years  
 Diane Broehl, Portland—45 years  
 Elnora Herndon, Oregon City—41 years  
 Tomalene Borquez, Tualatin—39 years  
 Teddi Poole, Wilsonville—37 years  
 George Campbell, Canby—35 years  
 Colleen LaMarsh, Molalla—35 years  
 Glendel Campbell, Canby—34 years  
 Loyal Hjelmervik, Canby—33 years  
 Cheryl Keithan, Oregon City—31 years  
 Jean McCabe, West Linn—31 years  
 Marti Preim, Mulino—30 years  
 John Headrick, Milwaukie—29 years  
 Rebecca Sintek, Sandy—29 years  
 Pat Abell, Aurora—28 years  
 Rhonda Dimick, Wilsonville—28 years  
 Becky McCall, Silverton—28 years  
 Mel Jeffrey, Oregon City—27 years  
 Karen Bragg, Sherwood—26 years  
 Sandra Cole, Mulino—26 years  
 Mary Hein, Portland—26 years  
 Vicki Smith, Colton—26 years  
 Renata Squier, Oregon City—25 years  
 Kristine Vavrosky, Oregon City—25 years  
 Dana Brown, Damascus—24 years  
 Becky Gepford, Colton—24 years  
 Gayle Burke, Gresham—23 years  
 Annabelle Morgan, Beaverton—23 years  
 Jodi Puckett, Oregon City—23 years  
 Betty Rivinus, Canby—23 years  
 Kathryn Unruh, Eagle Creek—23 years  
 Loren Unruh, Eagle Creek—23 years  
 Marcy Alexander, Oregon City—22 years  
 Denise Knight, Mulino—22 years  
 Toni Palmateer, Eagle Creek—22 years  
 Jacqueline Stonehouse, Canby—22 years  
 Beverly Davis, Woodburn—21 years  
 Paul Hardzinski, Oregon City—21 years  
 Roxie Applebee, Canby—20 years  
 Lloyd Hansen, Canby—20 years

## 4-H YOUTH DEVELOPMENT

### Meet Super Volunteer—Paula Means

Each year, the Oregon State University Extension Association honors individuals and businesses that have made significant contributions to Extension programs throughout the state. It is through these cooperators that Extension is able to accomplish so much. This past year's awards were presented at a ceremony at OSU in April. We were honored that one of our Clackamas County 4-H leaders, Paula Means, was chosen for recognition!

Paula is a dedicated volunteer who has had an enormous impact on her 4-H club members and the entire Clackamas County 4-H program. She has been a leader for 8 years, but her 4-H resume is longer than most volunteers with a lifetime of service.

Paula has started six 4-H clubs encompassing 25 different project areas. She currently leads the Furry Friends small animal club, the Chez Clovers Cloverbud club, and the Unfocused Photography club. Her clubs include youth aged 6 to 17 years old and include residents of Southeast Portland, Milwaukie, Clackamas, Gladstone, Oregon City, Canby and Sandy. Also, four years ago Paula and her husband, Shawn, founded the first shooting sports club in Clackamas County. Paula continues to



support them and is certified in Pistol.

Paula provides county-wide leadership for the 4-H program, too. She is the chair of the Awards and Recognition Committee and a past board member of the Clackamas County 4-H Leaders Association and advisor for the Ambassador Team—a special group of high school 4-Hers who work throughout the county to help promote the program and share their experiences.

Congratulations, Paula, on your special honor—very well deserved!

### Research Shows 4-H Helps Young People Excel Beyond Their Peers

The structured learning, encouragement and adult mentoring that young people receive through their participation in 4-H plays a vital role in helping them achieve success in life.

For more than a decade, preeminent youth development scholars, Drs. Richard M. Lerner and Jacqueline V. Lerner, and the team at the Institute for Applied Research in Youth Development at Tufts University, Medford, MA, partnered with faculty at America's land-grant colleges and universities to conduct this groundbreaking research. The results are influencing research and practice around the world.

The Positive Development of Youth: Comprehensive Findings from the 4-H Study of Positive Youth Development is a longitudinal study that began in 2002 and was repeated annually for eight years, surveying more than 7,000 adolescents from diverse backgrounds across 42 U.S. states.

Highly regarded as the first-ever research project of its kind, the study defined and measured positive youth development. Compared to their peers, the report shows that youth involved in 4-H programs excel in several areas. 4-H'ers are about:

- Four times more likely to make contributions to their communities (Grades 7-12);
- Two times more likely to be civically active (Grades 8-12);
- Two times more likely to make healthier choices (Grade 7);
- Two times more likely to participate in Science, Engineering and Computer Technology programs during out-of-school time (Grades 10 – 12); and
- 4-H girls are two times more likely (Grade 10) and nearly three times more likely (Grade 12) to take part in science programs compared to girls in other out-of-school time activities.

**Go 4-H! Join the Revolution!**

## Festival is Special Outreach for Important Cause

A Portland area tradition—the Festival of Trees—is a special community event that helps raise funds for Portland Providence Hospitals. Each year, and for the past 30 years, more than 20,000 people start their holidays during the first weekend of December at the

Festival in the Portland Convention Center. At the heart of the Festival are twenty-five elaborately decorated Christmas trees, each with a unique theme, wonderful decorations, and more. The trees are sponsored by area businesses, individuals or groups; decorated by volunteers; and sold at a gala auction.

The Clackamas County Extension office participated in the Festival of Trees for our second year by creating and hosting a tree space in the event. Jan Williams, 4-H Extension Agent, explained, “We believe in being part of the community. The exposure for the OSU Extension Service to many people who don't know us is a wonderful opportunity.” Williams also has a special connection to Providence Hospitals. Her husband, Mark, is a cancer survivor having been diagnosed and treated by Providence with a rare form of cancer in 2009. Today, Mark is cancer-free.

Extension's tree theme was *Grow Your Own* and encouraged gardening, food preservation, and youth participation. Extension's tree was decorated with garden implements, fruits and vegetables, watering cans, and tractors. The space featured a potting station with planting supplies, live herbs, child's garden bench, child's riding tractor/trailer, compost bin, trio of live evergreens, as well as OSU Extension publications and gift certificates for the Clackamas Tree School, Small Farms School, 4-H, and a Food Preservation class. The tree display sold for more than \$4700 at the event auction.

Many individuals and business made this year's Extension tree possible at the Festival including: Howard Wright Construction (sponsor), Wilsonville Carpet & Tile, Jordis and Michael Yost, Orchard Supply, Portland Nursery, Wilco, Hopper Brothers Nursery, Chal Landgren, Jean and Randy Bremer, Boring Bark, Clackamas County Office of Sustainability, and Clackamas County Event Center. Thank you to all for a great community effort!



## FORESTRY AND NATURAL RESOURCES



# Artists, Public Join Together in Forest

*2013 saw a brand new experience in the nearby woods, called the Forest of Arts.*

The event was a first-time project at the Hopkins Demonstration Forest near Beavercreek. Hopkins is a 140-acre community forest that attracts about 5,000 visitors annually for education programs, tours—and, simply walking in the woods.

Forest of Arts was rated a big success by visitors, exhibitors and sponsors, alike. About 800 adults and children attended the unique indoor-outdoor gathering the weekend of October 12 and 13, 2013. As they wandered through the Hopkins buildings and the sur-

rounding green forest, the visitors witnessed everything from professional oil and watercolor art and totem pole carving to crude wooden musical instruments hanging from tree limbs, beautiful hand carved walking sticks, jewelry and—even fairy houses. A few adults even joined children to create their own art by painting designs and faces on wood cookies sliced from tree branches.

“We haven’t seen this many people here before,” said Mike Bondi, Chairman of the Board of Directors at Forests Forever Inc., the non-profit that owns and manages the Hopkins Forest, south of Oregon City. “It was an outstanding event for connecting the community to us in ways that most people had not done before—coming to the forest for an art show. We had almost

100 volunteers helping, including many first-time visitors to the farm.”

Bondi and other board members of Forests Forever, Inc. (FFI) applauded the Three Rivers Artist Guild (TRAG) which cooperated with FFI in planning and staging the event. “There was a tremendous amount of enthusiasm from TRAG,” said Mike Piazza, West Linn, a FFI board member who helped with the planning.

Lynda Orzen of Oregon City, served as a project coordinator for TRAG, helped plan the event and recruited artists to participate, including several who came from beyond the Portland metro area.

“It exceeded my expectations...” Orzen said. “I didn’t think this many people would show up. All of the artists want to come back. The setting

was spectacular.”

Plans are now going forward for a repeat event at Hopkins in 2014. Orzen said more artists are being recruited and encouraged to install some form of art in the forest besides exhibiting in the buildings.

Bondi said that real purpose of the event was, “...to open our eyes to the beauty of nature and the many ways we can appreciate art through the forest medium.”

The Clackamas Federal Credit Union in Oregon City was the main sponsor for the Forest of Arts in 2013. “We were thrilled to be part of an event that brought our community together in a special way,” said Luke McMurray, Credit Union Marketing Manager.

## FORESTRY AND NATURAL RESOURCES

# New Crop—MWMs

The Master Woodland Manager (MWM) program in Clackamas County has been going strong for more than 25 years. The purpose of this program is to train a group of volunteers who support the OSU Extension Forestry and Natural Resources education and outreach within counties across the state. Clackamas County has trained more than 50 volunteers since 1987—with many still serving in their home communities around the region.

Sixteen trainees completed their six-month/nine module course—and graduated—this past November. The final session and graduation was held at the Magness Memorial Tree Farm, near Wilsonville. Six of the trainees will be volunteering in Clackamas County. Other trainees will serve in Columbia, Washington, Yamhill and Marion Counties.

The Clackamas Master Woodland Managers will assist Extension Forestry Agent, Glenn Ahrens, and his program. MWMs make field calls to visit woodland properties and answer landowner questions to direct them to needed resources for assistance. Also,

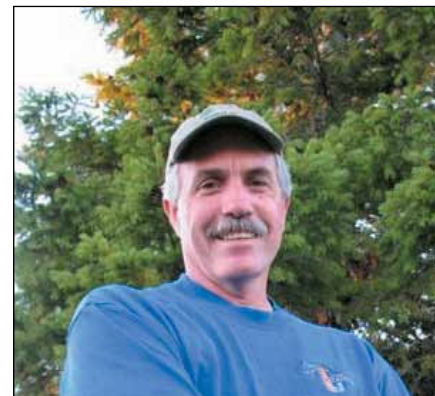
MWMs help Extension teach and organize its education programs. MWMs assist woodland tours for school groups and landowners, help collect field research data, and often take leadership roles within the forest landowner community.

According to Ahrens, “We really encourage our MWM volunteers to find their niche—what they love doing—and, put their energy and talents to work there. We each have our own areas of interest and what we are good at. The Extension Service appreciates any help our volunteers can provide to reach more people with our education.”

During the last year, Clackamas MWM’s reported about 700 hours of service in the County. “These are only the hours officially reported. We know there were many more hours volunteered, too. We all benefit—the Extension Service and, most importantly, the people of Clackamas County.”



New Crop of Master Woodland Managers Graduates in 2013



## New Forestry Agent Settling In

Glenn Ahrens began work as the new OSU Extension Forestry Agent serving Clackamas County in July, 2012. This past year, 2013, marked his first full year on the job. And, it has been a busy time for Ahrens settling in to his new county and getting to know the landowners and organizations he is working with. Ahrens came to Clackamas County following 11 years as Extension Forestry Agent in Clatsop and Tillamook Counties.

“The past year has been a blur,” said Ahrens. “We have so many landowners and so many activities going on here in forestry and natural resources that it has been hard to wrap my arms around it.”

Here’s a quick summary of what Glenn has been working on over the past year and a half...

- Designed and/or taught 45 educational programs in Clackamas County for woodland owners, professional foresters, teachers and youth, Christmas tree growers and the public that reached nearly 3,000 people.
- Taken over the leadership and management of the Clackamas Tree School—the largest annual woodland owner educational program in the U.S. Glenn helped make the 2013 version happen. Tree School 2014 was all his.
- Experienced full-immersion into

the non-profit organization, Forests Forever, Inc. and their Hopkins Demonstration Forest near Beavercreek. Ahrens represents OSU Extension on FFT’s Board of Directors. Besides a Board member, he has taken over the leadership of their Forest Management Committee and oversight for the group’s education programs. Also, Glenn happens to live at the Hopkins Demonstration Forest—so, he doesn’t get far away!

- Connected closely with the existing Clackamas County Master Woodland Manager volunteers and completed training the first group of his own volunteers (see New Crop of Master Woodland Managers Graduates in 2013 on this page).
- Spent many hours getting to know the county and the people—including more than 75 woodland owner farm visits.

According to Mike Bondi, OSU Extension Regional Administrator in Clackamas County and former long-time Extension Forestry Agent in the county, “Glenn has been a great addition to our community. He brings lots of new ideas and perspectives, has wonderful professional experience, and has real desire to be an integral part of our county. We are fortunate he was interested to come to join us here!”