

EXTENSION TODAY

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News from Washington State University Extension

<http://cahnrnews.wsu.edu/extensiontoday>



John Gardner, vice president for economic development and extension, sees small business development as a critical mission and priority for WSU Extension and the growth of Washington's economy. (Photo by Denny Fleenor, WSU Extension)

BUILDING SYNERGY

Small business health marks extension priority

BY DENNY FLEENOR
WSU EXTENSION

Helping small business is good for business and the economy, according to **John Gardner**, WSU vice president for economic development and extension.

"You've seen the statistics," he says, more than half of the nonfarm jobs in the United States are generated by small business. In Washington, the figure is even higher, with 55 percent of jobs in the small business sector. Add in farm jobs and the number is higher yet. The health of our economy is strongly tied to the health of small business.

It was announced last August that the state's Small Business Development Centers, a partnership with the federal Small Business Administration, would be housed in Gardner's new economic development and extension office. The SBDC had been housed in WSU's College of Business for the previous 27 years.

A logical fit

Through a variety of partnerships, the SBDC's 25 satellite offices provide no-cost expert business advisers, training and applied research to startup and existing small businesses. SBDC reports that in 2007 its advisers helped 3,090 small businesses, creating or saving more than 1,900 jobs and helping generate more than \$611 million in estimated sales impacts for business. That in turn generated nearly \$13.7 million in additional state revenues to state coffers.

SBDC state director **Brett Rogers** says the centers will continue their collaboration with the College of Business, but becoming part of extension is a logical fit.

"We've had a wonderful relationship with the College of Business, but academic units are naturally more focused on academics and teaching," Rogers says. "Extension is outreach focused, and at our core so are we."

Gardner likes the fit too, seeing the support and assistance of small business through SBDC as critical to the mission of his office.

"Small business is the bread and butter of core jobs

2007 SBDC economic impact

- Small businesses helped by SBDC advisers — 3,090
- Washington jobs created or saved — 1,909
- Capital formation — \$107.07 million
- Estimated sales impacts for business — \$611.19 million
- Return on investment — \$187 for every \$1 invested
- Additional state taxes collected — \$13.7 million

because that's usually where innovation occurs," he says. "Keep in mind that both Starbucks and Microsoft started as local small businesses."

More opportunities

Gardner says that as we increasingly move into the knowledge-based economy it is important that the state support businesses of all sizes. A dynamic economic ecosystem requires businesses in the pipeline within each phase of maturity — from startups, to growth-oriented, to mergers and acquisitions to eventual decline. Recognition that such life cycles are necessary to the economic health of a community emphasizes the importance of small and startup businesses.

"When a large industrial facility fails, the jobs are gone and the assets more easily lost," he says. "Knowledge-based dynamics mean that small businesses will change and evolve as new ideas replace old ones."

Rogers is excited by the opportunities for SBDC because of its extension affiliation.

"It opens new opportunities for professional development and cross training, and we're working on building that synergy," he says. "For example, I'd love to add a business adviser to be the state's wine guru to work with emerging wineries."

"We want to get to the point where any door a small business walks through to get assistance is the right door," he says.

More information on the services available through SBDC is available **ONLINE @ www.sbdc.org**.

CIVIC ENGAGEMENT

Expanding hands-on opportunities

BY LINDA KIRK FOX
ASSOCIATE VICE PRESIDENT AND DEAN
WSU EXTENSION

Hands-on learning is a hallmark of Washington State University Extension; it is how we have relayed research-based information to state residents for nearly 100 years. Now, with the emergence of civic engagement as a teaching tool, that hallmark is benefitting a whole new audience — students from grade school to grad school.

Actively engaging WSU students in extension programs that benefit communities around the state is a new and vital link joining the university's teaching, research and extension missions.

It enriches the education of students by giving them an opportunity to put to use what they learn in the classroom and see real-world results. It enriches the work of extension with fresh, new perspectives on community development. It enriches the state by preparing a new generation of residents to be actively involved in their home communities long after they graduate from WSU.



Linda Kirk Fox

Learning-by-doing is a traditional model for WSU Extension 4-H. Whether it's forest health, robotics or nutrition, 4-H'ers of all ages are given the opportunity to actually do an activity, rather than just watch or listen to someone else do it. Through formal and informal experiential learning, 4-H'ers come to understand the benefits of contributing to their communities and develop skills that will serve them throughout their lifetimes.

The annual Know Your Government conference featured in this issue of Extension Today is a prime example. Rather than just reading about this year's presidential elections in the newspaper, 4-H'ers from around the state developed different planks of a statewide 4-H political platform that they shared via a teleconference hosted on the WSU campus.

They got to experience the give, take and compromise that goes into developing a political platform. And at the conference, they work face-to-face with state legislators and other governmental officials to understand the workings of a state government they ultimately could control.

The lessons learned by doing are many and valuable. Students actively engaged in their communities watch and participate in the formal and informal processes that lead to decisions. They learn the hallmarks of leadership — good and bad. They gain a better understanding of the needs and challenges community residents face.

Perhaps most important, they get to see firsthand the difference active engagement can make in a community and, hopefully, choose to continue being involved.

THE CLEANUP CONTINUES

SW Washington still weathering storm

BY DENNY FLEENOR
WSU EXTENSION

The driving rains, floods, hurricane-force winds and dramatic news coverage that hit southwest Washington in December are long gone, but area residents continue to face not only the massive cleanup but also continuing damage.

"Recently a modular home in our community literally fell apart because of the effects of the storm damage," said WSU Pacific County Extension 4-H educator **Toni Gwin**. "A house also recently caught fire because of storm damage to its electrical system."

It has been estimated as many as 75 percent of the trees in the county were downed or damaged, and Gwin said damaged trees continue to fall.

She refers to Pacific County as "blue tarp city."

"There is a lot of roof damage so the county gave every house two blue tarps, and I think most of them are in use," she said. "Roofers are working their way through the community repairing the worst first."

The storm knocked out most power and phone service in the area including cell service, and roads into and throughout the region were washed out or blocked by debris. Access continues to be limited.

Center of activity

During the first few days after the storm, Gwin was one of the few able to make it to the extension office, where she fielded phone calls from the community.

"With power out, most of the calls were about food safety or asking where to find other resources," she said. She resorted to old technology to help callers.

"There was no Internet connection, but luckily I keep a big notebook of reference material so I was able to provide answers," she said.

Gwin had company in the office. County director **Steve Harbell** said the extension office became the de facto headquarters for the Red Cross and National Guard, with guardsmen living in the office.

Three-year cleanup

Harbell said wind caused most of the damage in Pacific County, but eastern Grays Harbor, Lewis and Thurston counties were inundated with floodwater.

Grays Harbor extension agricultural educator **Don Tapio** said it will be a long-term process for agricultural producers in the flooded areas to get back to normal operations.

"For many producers it's going to take months and



Don Tapio's distinctive red barn/home on his farm near Rochester is surrounded by December's flood waters. The Grays Harbor extension educator had to cope with his own flood damage while helping other local producers with theirs.

"For many producers it's going to take months and even years to clean up."

even years to clean up," said Tapio, whose own farm sustained serious damage. "I consider it to be a three-year cleanup process. Somehow thinking of it in the long term makes it easier to take on."

He said a major concern for agricultural producers in the area is the impact of contaminants spread by the floods.

"There were diesel and propane tanks that were flooded or washed away, and of course there were immediate concerns because of dead livestock and

domestic animals caught in the floods," he said. "The local health departments moved quickly to deal with the animal issue."

He said producers not only called him but also dropped by his farm to talk about their concerns.

"Right now they are concerned about such problems as nitrogen depletion, soil compaction, contamination, weed seeds spread by the flooding and potential root-rot problems," he said.

Fair goes on

Back in Pacific County, Gwin is happy to report that this year's county fair in August will be held despite heavy damage to the fairgrounds and the loss of livestock.

"Other 4-H clubs called right away to ask what they could do to help," she said. "Thanks to their support and donations of animals to our kids, the fair will go on."

Team cuts down cutworms, wins IPM award

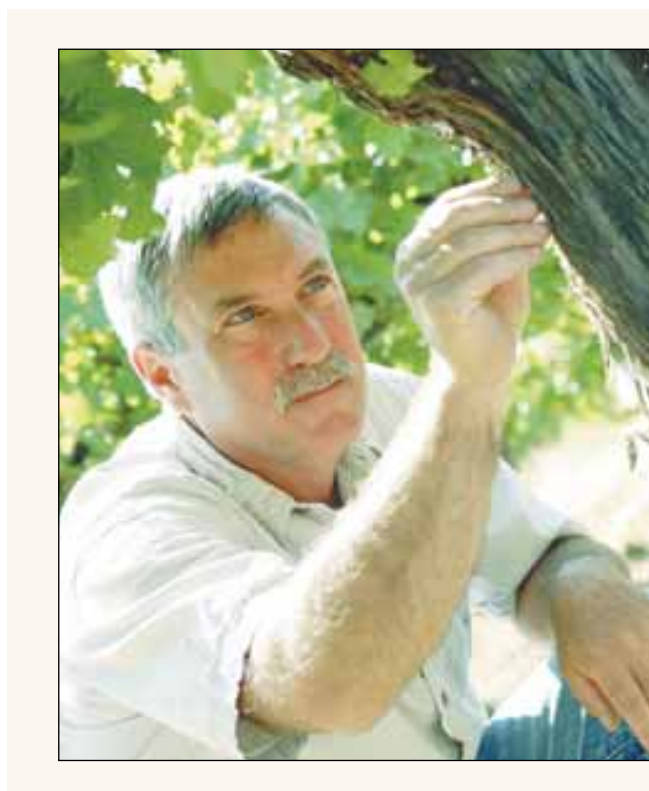
BY BRIAN CLARK
MARKETING/NEWS SERVICES

A team of WSU Extension researchers and their wine-industry collaborators has solved an expensive problem for Washington's grape growers. The Pacific Northwest Vineyard IPM (integrated pest management) team — led by agrichemical and environmental extension specialist **Doug Walsh** and based at WSU's Irrigated Agriculture Research and Extension Center in Prosser — devised an innovative technique that virtually eliminated cutworm bud damage on grapevines.

The vineyard solution saves growers about \$5.5 million a year and has resulted in an 84 percent (about 25,000 pounds per year) reduction in pesticide use. The elegance and wide industry adoption of the solution won the team the 2007 Integrated Pest Management Team Award from the national Entomological Foundation.

Precise target

Previously difficult to control, the cutworm "wakes up hungry in the spring" and immediately sets out to devour



the buds where grape clusters form, Walsh said. Before his team tackled the problem, treatment consisted of an organophosphate insecticide that also killed beneficial insects while only marginally controlling cutworm.

Walsh's team came up with

the idea of applying insecticides in a highly targeted fashion that took advantage of the cutworm's biology and avoided impacts to beneficial insects. By spraying a pyrethroid (rather than organophosphate) insecticide on the trunk of the vine where it

meets the soil, cutworms are discouraged from climbing up from the soil where they dwell to the buds where they feast.

Easy adaptation

The technique worked extremely well in early trials, according to Walsh, so the

Winning team

The award-winning team was composed of WSU research and extension personnel **Doug Walsh, Holly Ferguson, Ron Wight, Tim Waters** and **Sally O'Neal Coates**. Industry collaborators were Len Welch, an entomologist with Valent USA, an agrichemical company; Leif Olsen of Olsen Wine Estates; Kevin Corliss of Chateau Ste. Michelle Wine Estates; and Sandy Halstead, Region 10, U.S. Environmental Protection Agency.

Doug Walsh examines a grape vine for signs of insect damage.

challenge was adapting it to commercial-scale use. He knew that herbicides were being applied to the vineyard floors with sprayers that used motion sensors to prevent the trunks of grape vines from being sprayed with damaging herbicides. Was it possible to use this technology to target the trunk instead?

"I asked a technician, 'How difficult would it be to switch it over so that you just treated the trunk with an insecticide?' And it was great. The technician leaned over, pulled out the two wires that connected it, crossed them over and plugged them back in."

The simplicity of this solution, utilizing existing technology with a twist, was a key to its rapid adoption by the industry.

"The growers started using this solution," said Walsh, "and it was a real cost savings to them. They were using very little insecticide and getting very good control. The grower response within two years was universal. At this point I think every grower around here has adopted this practice in some form."

BUILDING CITIZENS

Partnerships connect students to community

BY DENNIS BROWN
WSU EXTENSION

WSU's classroom has gotten a lot bigger over the past five years, thanks to a partnership between extension and the university's Center for Civic Engagement.

The trend began when **Lisa Shipley's** introductory wildlife management course embarked on a pilot service-learning project in three counties in 2002. Since then the program has mushroomed. Last semester, extension hosted more than 20 projects across the state.

Service learning at WSU is an outgrowth of a national movement begun in the 1980s to integrate community service within the academic curriculum to prepare students to take active roles in society as well as in the workforce.

"WSU Extension seeks to connect the university to communities throughout the state," said **John Winder**, associate dean and associate director of extension. "Our partnership with the Center for Civic Engagement brings a whole new dimension to this process — engaging WSU students to extend the university to these communities."

Engagement increases

In 1985, four university presidents formed Campus Compact, a national coalition of higher education institutions committed to the public purposes of higher education, enriching communities, and educating students for civic and social responsibility. Since then Campus Compact has grown to more than 1,100 member institutions, including WSU.

WSU's Center for Civic Engagement, formerly the Community Service Learning Center, has experienced similar growth.

"When I started in 1996, my position was part time, and I was the only professional," said **Melanie Brown**, CCE director. That year, 600 WSU students participated in service-learning projects.



Monica Lotzgesell, center, a WSU senior from Monroe, helps a member of the Hunters community during a workshop in Colville last semester. Hunters is one of 22 Washington communities participating in the Horizons leadership program. (Photo by Bill Raddatz)

Civic engagement interests freshmen

A national survey of college freshmen in 2005 by the Higher Education Research Institute found that two out of three entering freshmen believe it is essential or very important to help others who are in difficulty, the highest this figure had been in 25 years.

An all-time high of 83 percent reported they had volunteered at least occasionally during their senior year in high school. More than 70 percent reported they had volunteered on a weekly basis.

More than 67 percent believed there was a good chance they would participate in volunteer or community service in college, and nearly 40 percent found the goal of becoming a community leader essential or at least very important.

"In the last couple years, we've seen between 4,000 and 5,000 participants," Brown said. "Some have done multiple projects and we're seeing more long-term placements — students who will commit a full semester or beyond."

And her staff has grown to seven full-time professionals, six graduate assistants and more than 20 undergraduate employees.

Helping Horizons

Service-learning projects with extension take a variety of forms.

Last semester, for example, teams of students in **Christine Oakley's** Sociology 433 class worked with nine Washington communities participating in the Horizons leadership program.

Horizons is an 18-month community-based program funded by the

Northwest Area Foundation. Extension is overseeing delivery of the program, which is designed to address issues of rural poverty, economic decline and demographic changes in rural communities.

Oakley's students analyzed the comments section of responses to a survey sent to all postal patrons in the nine towns. Their analysis gave them a snapshot of what residents thought about their communities and helped the students decide how they could contribute and advocate for them, said Oakley, who is an assistant clinical professor in sociology.

Other student projects have included:

- Creating an online resource directory for the city of Colville on education, veterans' affairs, health care and other topics the community was interested in.
- Building a shelter in a county park at Trout Lake.
- Developing brochures and flyers for a program in Cathlamet.
- Creating written materials to support the statewide 4-H Challenge program and the Master Gardner volunteer training program.
- Making presentations and holding open houses at Pullman's three elementary schools. They also developed marketing brochures and display boards and created and conducted after-school 4-H programs.

CCE, which has more than 150 partners in the Pullman area, hopes to launch a service-learning internship this spring within the context of its statewide partnership with extension.

"This would be a perfect opportunity for students who want a more in-depth, long-term civic engagement experience," said **Kim Freier**, CCE assistant director.

Internships will enable students to achieve academic goals and develop professional skills as they address important community issues in authentic settings.

"Our partnership with extension has helped us see that students can engage with communities in a variety of ways, face-to-face and at a distance," Freier said.

COMPLEMENT RATHER THAN COMPETE

Bremerton offices unite forces to develop businesses

BY DENNY FLEENOR
WSU EXTENSION

When WSU Kitsap County Extension chair **Arno Bergstrom** wants to confer with Olympic College Small Business Development Center adviser **Rand Riedrich**, he simply walks a couple of doors down the hall in the extension office.

This began a few years ago when extension and most county offices were relocated to the new Norm Dicks Federal Building in Bremerton, and the SBDC office was colocated in extension. On the same floor you'll find the Kitsap business assistance center and the county's community development corporation.

Bergstrom said the move fostered a new beginning for county economic development efforts.

"Coming together, we began discussing who is doing what and thinking about where we were duplicating efforts or leaving gaps," he said.

Today WSU Extension contracts with Olympic College to operate the SBDC. Together they have helped build a consortium of some 30 organizations



Olympic College's **Rand Riedrich**, business adviser for Kitsap County's Small Business Development Center, and WSU Kitsap County Extension's **Arno Bergstrom**.

and agencies in the county that work on various aspects of economic development.

"It's wonderful because it has forced us all to change our assumptions," said Riedrich. "We've identified six to eight core primary provider organizations and we've learned to complement rather than compete with one another."

Rural and well-trained

A 2007 state legislative appropriation strengthened the SBDC and led to formation of the Kitsap business development consortium, which se-

"It's wonderful because it has forced us all to change our assumptions."

— Rand Riedrich

cured block grant funding to contract for a comprehensive survey of businesses across the county.

"We're still analyzing the data, but we're already doing some things differently to adjust to the attitudes reflected in the data," Riedrich said. "I don't know of another analysis like this on small business."

Bergstrom said a common assumption is that most small businesses are located in urbanized areas, "but 42 percent of respondents described their businesses as rural. Knowing that, we can adjust to better serve rurally located

businesses."

The survey also highlighted the importance of having a well-trained local workforce. Respondents said access to a trained workforce was their top consideration in planning for expansion.

Bergstrom said the lack of a highly educated workforce also is a reason why the county hasn't attracted more high-tech jobs.

Planning the future

"Olympic College provides excellent two-year educational opportunities, but there is a perceived lack of opportunities for pursuing baccalaureate or graduate degrees," he said. "Those who go elsewhere for a degree usually don't come back."

That knowledge has launched a community discussion on how to increase access to baccalaureate degrees in the county.

The business development consortium plans to build on the survey by developing a Kitsap 2020 economic development plan.

"Then we'll have a roadmap to Kitsap County's economic future," Bergstrom said.



MOOOVED BY COWS

Animal health statewide focus of vet med director

BY DENNIS BROWN
WSU EXTENSION

WSU's new director of veterinary medicine extension planned on becoming a horse vet until cows entered her life during a summer job in graduate school.

"I met cows up in Custer, Wash.," said **Dale Moore**, who holds a joint appointment in the College of Veterinary Medicine (CVM) and WSU Extension. "I milked cows, made hay and fed calves for three months and fell in love with them."

Since moving to Pullman from California last summer, the Sacramento native has yet to work with many dairy producers, but she knows she will.

"As director of veterinary medicine extension, I'm to coordinate, develop and implement extension education programs in animal health. I've been asked to work with the dairy industry, cow-calf, stocker-feeders, swine, small ruminants and farmed salmon, so it's a big job."

Moore has been accepting invitations to speak at swine and cattle producer meetings while getting her feet on the ground.

Antibiotic resistance

One of the issues she has been discussing is animal medical waste and bacterial resistance to antibiotics.

"My husband — **William Sischo**, an infectious disease epidemiologist in CVM — has been working on that for a number of years, and it's one of the projects

we are working on together. The topic: Can we reduce the amount of antimicrobials or antibiotics we are using in food animals and still maintain their health and well-being and reduce the potential risk of antimicrobial resistance in pathogens that could affect people?"

Her primary audience is producers, as well as people who provide advice to producers.

"Whether it's a nutritionist or feed company, veterinarian — whoever is giving them advice on health and well-being of their animals," Moore said.

Collaborating on issues

Moore is developing a network of collaborators in extension and CVM who are interested swine, sheep, beef and dairy cattle.

"We talk about teaching and research issues, as well as, extension and outreach," she said.

Other efforts include:

- Participating in the Beef Quality Assurance Program, a national program including animal science faculty and county extension faculty that teaches producers how to raise high-quality cattle.
- Spearheading website development for the Western Regional Beef Quality Assurance.
- Working with WSU and University of Idaho to develop an academic/continuing education certificate in sustainable small-acreage farming and ranching.
- Working with 4-H volunteer leaders and youth to provide information and a curriculum on biosecurity and quality assurance.

Moore notes, "I'm not going to get bored."

4-H'ers get hands-on politics

Requiring the use of bio-fuel cars. Changing high school graduation requirements. Making citizenship a requirement for receipt of social services. Monitoring industry to minimize environmental pollution.

These issues were just a few addressed and advocated by some 300 Washington teens at the annual WSU Extension 4-H Know Your Government conference held in Olympia in mid-February. And they reached consensus about the planks of their platform the same way delegates in a national election do — they caucused.

Youth from 30 counties in the state met Jan. 23 in a virtual statewide caucus video conference to present and debate resolutions that resulted in a statewide platform. Twenty one 4-H gubernatorial "candidates" had the opportunity to present their views and lobby for support. It was the first caucus of its kind in the state and



Victoria Wilson, KYG candidate in Thurston County, campaigns.

gave participants a way to learn by doing, according to **Pat BoyEs**, director of the WSU Extension 4-H Youth Development Program.

"What better way to learn about the election process than for young people to work directly in their communities, identify issues, create a plan of action and then select a candidate who will best serve as an advocate for those issues?" BoyEs said.

"Democracy is not a spectator sport," said **Linda Kirk Fox**, associate vice president and dean of

WSU Extension. "It is one that requires not only the individuals to step up and take that leadership but also to have the dialogue and conversations. This caucus is just one of those opportunities."

4-H provides youth a number of opportunities to get involved in their own communities, learning how to create change and influence decision-making. Adult volunteers facilitate projects that support trying out new ideas, taking on leadership roles and working within communities to create positive change.

"Our 4-H teens have developed resolutions, campaigned for office, been mock judges, and interviewed their lawmakers," said **Jan Klein**, state 4-H teen leadership coordinator, who oversees local, regional, state and national 4-H teen activities. "They know what it's like to be able to influence opinions and realize they can make a difference."

EXTENSION BRIEFS

eExtension website launched

eExtension, a Web resource that brings the knowledge of the nation's land-grant universities to one site, debuted on Feb.

21. Content providers from across the nation's extension system can join together to produce new information and educational resources on a wide range of topics. Find eExtension **ONLINE @** www.extension.org.



Fitzgerald to head Master Gardeners

Tonie Fitzgerald, a longtime horticulture educator with WSU Extension in Spokane County, has been named the new program leader for WSU Extension's Master Gardener program.

The program provides volunteers with science-based education about many aspects of horticulture and related topics. In return, volunteers assist local extension personnel in providing information and education to gardeners in the general public.

An estimated 3,600 volunteers contributed more than 220,000 hours in 36 Washington counties last year.



Tonie Fitzgerald

State honors 4-H leadership coordinator



Jan Klein

Jan Klein, WSU state 4-H teen leadership coordinator, was recognized for her work with youth on the local, regional, state and national level during the second annual state Legislature Civic Education Day Feb. 20. Klein, who is from the Lincoln County town of Edwall, was honored as an Outstanding Civic Educator.

Master Gardeners meet with lawmakers

Volunteers representing the Master Gardener Foundation met with representatives and senators from their districts in Olympia on Feb. 5 to inform them of the work they do in partnership with WSU Extension. The program, now in its 35th year, trains volunteers to provide up-to-date information on horticulture and environmentally responsible gardening practices.

\$500,000 in ag pilot projects funded

Four agricultural pilot projects, including a Washington State University project led by **Don Nelson**, WSU Extension beef specialist, will share \$500,000 in funding from the Washington State Legislature.

Nelson's project will test the feasibility of converting land coming out of the Conservation Reserve Program into a vertically integrated grass-fed beef production system. The pilots were selected by the project's Oversight Committee and approved by the Governor's office for demonstrating the project's dual goals: increased profitability to agriculture while providing environmental benefits.

The William D. Ruckelshaus Center announced the funding.



Don Nelson

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