

EXTENSION TODAY

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News from Washington State University Extension

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From Washington to Washington

Above: The 2006 Capitol Christmas Tree is erected in front of U.S. Capitol Building. (Photo courtesy of Olympic National Forest)

Right: This year's Capitol Christmas Tree was provided by Washington state for the first time. Claire Turner, an 8-year-old WSU 4-H Network News reporter from Port Townsend, interviewed Gov. Christine Gregoire about the tree when it was presented in Olympia on Nov. 6. 4-H Network News is a youth-run Internet multimedia club in Jefferson County. The club covered the harvest of the 65-foot Pacific silver fir in the Olympic National Forest. The tree was taken on a tour of the state before it was trucked to the nation's capital. The tree, which was lit on Dec. 6, is decorated with 10,000 lights and 3,000 ornaments contributed by Washington school children. View Claire's interview at <http://4-hnews.blogspot.com/>. (Photo by Weldon Wilson, WA State Patrol)



FOOD, FERTILIZER, MANURE

Extension leads national effort to protect water

KATHY BARNARD
EXTENSION INFORMATION

Washington State University Extension is leading a nationwide program to help livestock and poultry operators and others develop ways to meet stricter environmental regulations for managing nutrients and to protect water quality by managing how and what livestock eat.

Joe Harrison, an extension specialist at WSU Puyallup, is project director for the National Feed Management Education Project, which is funded with a two-year \$425,000 grant from the U.S. Natural Resources Conservation Service (NRCS). The project manager is doctoral student **Rebecca White** of the College of Agricultural, Human, and Natural Resource Sciences Department of Animal Sciences. Leadership for the outreach team also includes Al Sutton and Todd Applegate of Purdue University, and Galen Erikson and Rick Koelsch from the University of Nebraska.

Avoiding nutrient excess

"The goal of the education project is to help producers adopt feed management practices that keep farms from accumulating excess nutrients and losing those nutrients to the environment," Harrison explained. "An ideal situation would be that everything a farmer imports onto his farm in the way of feed, fertilizer and other inputs balances with what he exports."

For example, if 25 percent of the phosphorus a cow eats in the form of dairy cattle feed is exported in the form of milk products, the farmer still has 75 percent of that phosphorus to manage. With enough land, the phosphorus in manure could be used to fertilize crops. If enough land is not available, then exporting nutrients from manure should be considered.

Protecting water quality

"Our primary goal is protecting water quality on and around the farm," Harrison said.

Livestock feed represents the largest import of nutrients to the farm, followed by commercial fertilizer.

"There are opportunities to reduce the amount of feed imports, particularly nitrogen and phosphorus, to most animal and livestock operations," Harrison said. "But they vary in how economically feasible they are and in their environmental impact. It's important that agricultural professionals understand the degree of success that can be expected both from an economic and an environmental standpoint."

The National Feed Management Education Project involves a series of training workshops held across the United States aimed primarily at the staff of the NRCS, soil and water conservation districts, nutrient management consultants, nutrition management consultants and designated nutrient management specialists of large animal operations. In addition, the American Registry of Professional Animal Scientists will develop and implement an exam to certify knowledge in the area of nutrient management.

Eleven other universities are involved with the project.

WSU-UW Policy Consensus Center named for William D. Ruckelshaus

BY DENNY FLEENOR
WSU EXTENSION

Contentious public policy issues are costly. They cost the parties involved substantial time and resources to defend their positions, and in many cases taxpayers pay as well. Regulatory agencies often are involved, and tough issues may end up in costly court battles before they are resolved.

William (Bill) Ruckelshaus has a better idea. Why not

try to anticipate contentious issues, identify the interests involved and provide a neutral forum for them to come together to find a path to resolution?

In 2003, the corporate leader and former director of the U.S. Environmental Protection Agency contacted the presidents of Washington State University and the University of Washington to propose applying the resources of both institutions to that end.

"President (V. Lane) Rawlins seized the opportunity immediately," according to WSU Extension liaison **Rob McDaniel**.

Together with UW President Mark Emmert, Rawlins authorized the resources to move ahead with the creation of the WSU-UW Policy Consensus Center.

The center's mission is to act as a neutral resource for collaborative problem solving
(See "Center," page B)



Former EPA administrator Bill Ruckelshaus and WSU President V. Lane Rawlins look on as Gov. Chris Gregoire speaks at the reception to honor Ruckelshaus by renaming the WSU-UW Policy Consensus Center for him.

Pesticide safety education affects everyone

BY DENNIS BROWN
WSU EXTENSION

A pesticide safety education program conducted by Washington State University Extension touches your life in many ways you may not realize, including the food you eat and the house you live in.

Carol Ramsay, extension pesticide education specialist, oversees a statewide program that helps nearly 25,000 private, public and commercial applicators of restricted-use pesticides to qualify for licenses issued by the state Department of Agriculture.

Private applicators include farmers, foresters and people who own private greenhouses or nurseries. Commercial applicators are people who apply pesticides for hire, including lawn-care and pest-control companies. Other licensed pesticide applicators include those who treat waterways for aquatic weeds and mosquito larvae, or treat grain in storage bins for a variety of insect pests.

Training to meet regs

Extension's role in pesticide licensing and certification training is an outgrowth of federal legislation that restricts the use of certain herbicides, insecticides, rodenticides and germicides to only those people who have demonstrated through examination that they can judiciously handle and apply these products.

"The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) assigned regulatory responsibility to state agencies, which in Washington is the State Department of Agriculture," Ramsay said. "To avoid creating another educational network, FIFRA assigned the responsibility of training to extension."

Thirty-eight county extension educators handle pesticide prelicensing and recertification training of the state's farmers and ranchers. Ramsay, in Pullman, plus **Carrie Foss** and **Becky Hines** at the WSU Puyallup Research and Extension Center, oversee training of the rest. They also develop and revise the prelicense training study manuals. WSU sells nearly 10,000 training manuals yearly.

Expert information

WSU Extension specialists also play a key role in supporting pesticide education for county extension educators and the statewide program. Weed specialists, entomologists, plant pathologists, soil scientists and integrated pest management specialists contribute lectures, participate in workshops, write fact sheets/manual chapters and answer questions.

Foss, an urban integrated pest management educator, and Hines, an extension coordinator, manage western Washington's Urban Integrated Pest



An aerial applicator releases water-soluble fluorescent dye over an absorbent string at the Moses Lake Municipal Airport. The string is analyzed to determine the spray patterns. The information helps pilots adjust pressures and nozzles to assure that they are applying crop protection and nutrient materials where they are needed and to avoid drift. The tests are part of a national program called Operation SAFE, which stands for Self-Regulation Application and Flight Efficiency. (Photo courtesy of Matthew Weaver, Columbia Basin Herald)

Management (IPM) and Pesticide Education Program. The program serves a large audience of landscape and turf professionals and offers some training in Spanish. A new area of the program offered in western Washington is focused on structural pest inspectors and pest management professionals. (See, "Unlikely construction serves training need," page C.)

While licensed applicators can recertify by retaking the WSDA's licensing exam, 95 percent choose continuing education (recertification credits) offered at WSU-sponsored events, grower meetings and professional association meetings.

Courses timely, and online

The WSU recertification courses may cover topics in the news, such as herbicides and salamanders.

"There has been a fair amount of science on that issue recently," Ramsay said. "We bring in **Allan Felsot**, a WSU environmental toxicologist, to review and interpret scientific data for the applicators."

At a recent meeting of the Washington Weed Association, Ramsay reviewed sprayer calibration. "All of them probably knew how to calibrate their sprayers, but it's always good to review how to do it and remind them of the need prior to spray season."

WSU provides recertification courses **ONLINE** @ <http://pep.wsu.edu>. Internet courses provide an avenue for



WSU Extension pesticide education specialist Carol Ramsay runs string through a fluorometer. (Photo courtesy of Matthew Weaver, Columbia Basin Herald)

instruction for people who can't make it to meetings and a way to accumulate necessary credits when the year-end deadline for recertification is around the corner.

"How can I thank you," one online user remarked. "This option makes it possible for me to get my credits without having to drive a few hundred miles to a meeting and better yet, I can

Homeowner education

The WSU Urban IPM and Pesticide Safety Education Program also dispenses advice to homeowners and gardeners at two websites.

- **At Hortsense — ONLINE** @ <http://pep.wsu.edu/hortsense> — home gardeners can find fact sheets for managing plant diseases, insects and weeds using methods that are least harmful to the environment. The site attracted 92,000 unique visitors last year.
- **At Pestsense — ONLINE** @ <http://pep.wsu.edu/pestsense> — visitors can find information to help them deal with termites, carpenter ants, mice, rats, houseflies, spiders, carpet beetles and a variety of other insect pests.

do it when I have the time."

The WSU program also offers advice to homeowners and home gardeners at two websites that attracted 92,000 unique visitors last year.

Whether it is the food you eat, the home you are planning to buy, or the roses you tend in your backyard, WSU's pesticide safety education is making your life safer.

Center...

(Continued from page A)

by bringing the capabilities of the two universities to bear on policy issues. The center has offices at both universities and draws on the faculty expertise of both institutions.

Center staff become involved in an issue only if all significantly affected parties agree to their participation. They offer training in collaborative problem solving and draw on the universities' applied research capabilities to provide reliable impartial data.

At a reception in October the two presidents and Gov. Chris Gregoire announced the renaming of the center as the William D. Ruckelshaus Center.

"There's no one like Bill Ruckelshaus," Gregoire said at the reception. "Governors, as well as several U.S. presidents, have called upon him to work on problems that have eluded resolution by the best and brightest."

The governor complimented the two university presidents for their foresight in forming the center.

In accepting the honor, Ruckelshaus, who chairs the center's advisory board, said he views the center's mission as important to ensuring that our democracy works. He also cited the important role of extension, the WSU home for the center.

"Extension is an important place for the center to be, and a natural place," he said. "Extension has people all over the state who see the problems and the issues every day. If this effort results in a better

place for us to live, we'll have really accomplished something."

In his remarks, Rawlins said the center is an important asset to the state in that it can respond not only to current issues but those that will affect our future.

"By combining our institutional strengths through the center we can make a real difference," Rawlins said. "The center creates a bridge among the universities, community leaders and policy makers bringing a neutral forum, knowledge and other tools to bear in forging solutions."

The center already has assisted with addressing some contentious environmental, workforce and economic development issues.

More information about the center and its work is **ONLINE** @ www.ruckelshauscenter.wsu.edu.

TEAMWORK ROPED IN

Six challenge courses slated for west side

BY DENNY FLEENOR
WSU EXTENSION

Building teamwork. That's what the 4-H Challenge Programs are all about.

Teamwork and partnerships also are essential to the Washington State University Extension 4-H Youth Development Program's efforts to establish up to six new outdoor challenge ropes courses in the Puget Sound region.

The ropes courses are a key element in the 4-H Challenge Programs, which also involve such activities as backpacking, rock climbing and canoeing. The ropes courses provide fun, challenging experiential learning that is facilitated by trained instructors and requires participants to work together to solve problems.

"Challenge participants learn such critical life skills as cooperation, leadership, conflict resolution, decision making and problem-solving skills, and they build self-confidence," according to **Vicky McCarley**, Thurston County Extension 4-H challenge coordinator. "Challenge programs change the way participants interact with their group and see themselves as individuals. They build healthy relationships and develop skills necessary for a successful life."

Pat BoyEs, 4-H statewide program director, said develop-



4-H ropes challenge courses help participants to develop problem-solving and collaborative skills. Up to six new 4-H ropes courses may be in operation in the Puget Sound region by next year.

ment of more ropes courses is being pursued to support new challenge programs being established in the Puget Sound region.

"We've identified potential sites and we're building partnerships to develop new courses in the central and south Puget Sound region," BoyEs said.

A premiere course is planned at Meyer's Point on Henderson Inlet in Thurston County, overlooking Puget Sound with views of Mount Rainier and the Olympic Mountains, according to BoyEs. It is being developed in collaboration with Thurston County Extension and is tentatively scheduled to open in fall 2007.

Discussions are under way with Pierce College Puyallup to establish a low ropes course adjacent to the college's new Health Education Center. If planning proceeds as expected, the course tentatively will open next summer.

BoyEs said discussions also have begun with Pierce County Parks about develop-

"Participants learn such critical life skills as cooperation, leadership, conflict resolution, decision making and problem solving,"
—Vicky McCarley

ing a new course in the greater Bonney Lake area and with the Tacoma Metropolitan Parks Board to develop two courses, one on each side of the Tacoma Narrows Bridge. An existing course owned by the Spanaway School District is also being considered for the 4-H program.

The 4-H programs are available for schools and other youth groups, as well as to businesses and agencies that want to build teamwork and enhance collaborative and problem-solving skills.

The first 4-H Challenge Program was started in 1984 with a ropes course at the WSU Demonstration Forest in the Bonney Lake community. That course has served more than 6,000 young people, 2,000 adults and involved more than 100 certified volunteers annually. Challenge programs have since been established statewide.

SHODDY IS BEAUTIFUL

Unlikely construction serves training need

BY DENNIS BROWN
WSU EXTENSION

If indeed a camel is a horse designed by a committee, it appears the same committee had a hand in designing WSU's new structural pest research and demonstration facility at Puyallup.

At first blush, the 24 x 48-foot wooden structure at the WSU Puyallup Research and Extension Center resembles a house. It has a crawl space, attic and even a wooden deck. Inside, you will find an unplumbed bathroom.

Then things get a bit strange. You will quickly notice that four kinds of siding were used on the exterior as well as four kinds of roofing materials. If you look closely, you'll see that some of the construction work is just plain shoddy.

And that's the way it is supposed to be.

The building, completed this fall, fills a critical training need for structural pest inspectors, according to **Carrie Foss**, WSU Extension urban integrated pest management coordinator.

Filling training gap

"The Washington State Department of Agriculture told us that about 30 percent of the licensing staff's time is spent providing guidance to the structural pest inspectors," Foss said, "yet this group accounts for less than five percent of the total licensees.

"Each year, WSDA also investigates a significant number of complaints about inspectors and some involve litigation. The department came to us because they saw a need for training.

"People who do structural pest inspections in homes don't have much opportunity to get hands-on training," said Foss. "The idea was to build a place where they could work with experienced inspectors and learn how to do inspections."

Flawed by design

The new structure, faults and all, simulates conditions that inspectors might find in the field. For example, part of the deck is not treated wood and some of the wood posts that support it have soil contact.

There also is damaged wood in the crawl space and, though carpenter ants are not being released into the structure, it is expected that they will find their way there.

Thirty people from all over the West attended the inaugural training at the research and demonstration facility in October. In the future, the hands-on training will be offered with classroom instruction in the nearby Allmendinger Center.

The facility was funded by a mix of public and private sources, including the Washington State Pest Control Association, the Washington State Commission on Pesticide Registration and IPM, the Washington State Department of Agriculture and private donors.



Top: WSU's structural pest research and demonstration facility, which opened this fall, offers unique opportunities for research and demonstration related to structural pests and their management. It is the only facility of its kind in the West.



Left: Brad Cyrier, a structural pest inspector, tells participants how to conduct an inspection at a structural pest workshop in October.

Below: George Sykora, pest management professional, looks at insect-damaged wood.



Pike Place Market event

Washington-grown foods and the science at technology behind them were showcased at Seattle's Pike Place Market in September. Producers were paired with WSU scientists and Extension personnel (like Carol Miles, pictured at right) to show that relationship at a public reception. Products included hearty appetizers made with grass fed beef, specialty cheeses, fresh vegetables, watermelon, breads and more.



Feeding the student 'pipeline'

WSU Extension provides a conduit via learning centers, 4-H, county offices

BY LINDA KIRK FOX
DEAN AND DIRECTOR,
WSU EXTENSION

The statistics are disturbing. Washington ranks well below the national average in the number of doctoral and professional degrees it awards.

It is 36th in the nation in per capita production of bachelor's degrees among 18- to 24-year-olds and 37th in per capita production of engineering, math and science degrees.



Linda Kirk Fox

The state is looking at revamping its entire educational system to build capacity and quality. Washington State University is working to become part of the solution with the WSU Pipeline Initiative.

Launched by President **V. Lane Rawlins** this fall, the initiative is aimed at helping Washington school children prepare for college, making their transition from high school to college easier, and enriching the K-12 math and science curriculum as well as extending out-of-school career awareness programs.

WSU Extension is poised to help in that effort with its 10 learning centers located around the state, a statewide



4-H members learn how state government works at the annual Know Your Government Conference in Olympia.

4-H youth program and offices of WSU in every Washington county.

The learning centers provide access to WSU credit courses as well as the offerings of the WSU Center for Distance and Professional Education and community college partners. Located in some of the poorest and most remote areas of the state, they help place-bound students tap into the resources of the university. And, as they ease the transition from high school to college for some students, they also become conduits for students to pursue advanced degrees.

WSU Extension's 4-H youth development annually reaches more than 80,000 children from 9 to 19 years old through after-school programs, school enrichment activities and organized clubs in every corner of the state. One of the premier youth development organiza-

tions in the country, 4-H is a community of young people learning leadership, citizenship and life skills. It also offers specific activities to hone science, math and technology skills, such as its aerospace project, the 4-H Mobile Technology Lab and programs in environmental stewardship.

The quality of 4-H participants is evident. This semester, in fact, ten 4-H members were among those honored with WSU Regents Scholarships for their academic excellence. They are leaders in their schools and communities.

With offices in each of the state's 39 counties, WSU Extension truly is the university's front door throughout the state. That resource can be leveraged to make it even more active and effective in helping high schoolers transition to a college education experience, at WSU and elsewhere.

EXTENSION BRIEFS

Ag secretary recognizes 4-H program

WSU Extension recently was recognized by U.S. Department of Agriculture Secretary Mike Johanns for its role in developing a nationwide 4-H program for children whose parents are deployed as soldiers in Iraq.

Federal employees involved with the Army 4-H Youth Development Project received Cooperative State Research, Education and Extension Service Honor Awards on Oct. 20 for "exemplary service and achievements."

The awards are the USDA's most prestigious. WSU was a key partner in the project and is listed as a primary collaborator.

Extension launches HorseQuest

Own a horse? Have questions?

Answers may be as near as your computer. With information on such topics as finding the best horse for your child, riding techniques, nutrition, diseases and equine care, HorseQuest brings university research-based information on horses to you **ONLINE** @ www.extension.org/horses.

HorseQuest is the first "eXtension" product to be launched. This interactive website provides news, events, videos, frequently asked questions and "Ask the Expert" features as well as in-depth learning modules on equine-related topics.

Organized around communities of interest, such as horses, eXtension websites and educational materials are developed by subject-matter experts in the nation's land-grant universities through communities of practice.

Twenty more communities of practice, on such topics as financial security, parenting and rural entrepreneurship, e-Organic, and consumer horticulture are expected to go online in the next year.

4-H'ers receive Regents Scholarships

Ten active 4-H members are among the 255 high school seniors around the state who were awarded WSU Regents Scholarships this Fall.

Students are nominated for the Regents Scholars Program in their junior year by their high schools or by one of nine participating Native American tribes. The top 25 students will receive four-year scholarships worth more than \$54,000 each. Other regents scholars receive two-year awards worth \$6,000 or \$8,000.

The 4-H members receiving scholarships were Kathryn Christensen, Mount Si High, Snoqualmie; Elyse Hause, Coupeville High, Coupeville; Mindy Morgan, Kiona-Benton City High, Benton City; Tyler Scherf, Selkirk High, Ione; Rebecca Sharon, Ellensburg High, Ellensburg; Elizabeth Soule, Peninsula High, Gig Harbor; Hannah Sturtevant, Meridian High, Bellingham; Robert Thonney, Prosser High, Prosser; Alex VanTuyl, Adna High, Adna; and Kylie Walchuk, River Ridge High, Lacey.

Since the program began six years ago, scholarships have been awarded to more than 2,000 students.



Robert Thonney



4-H'ers present home to new owner.

4-H Clover House completed

To celebrate the centennial of 4-H in 2002, delegates to National 4-H Congress, including delegates from Washington state, made a commitment to fund construction of a Habitat for Humanity home in Atlanta, which is the host city for National 4-H Congress. The 4-H Clover House, as it is known, was finished a year ahead of schedule and was formally presented to its new owner during the 2006 National 4-H Congress in November. Labor for the construction was donated by the management and employees of the Hyatt Regency Atlanta, host of the National 4-H Congress.

Wolfley honored by alma mater

This fall, **Blair Wolfley**, WSU Extension southwest district director and director of the WSU Vancouver Research and Extension Unit, received the University of Wyoming's College of Agriculture Alumni Award.

Wolfley, a native of Star Valley, Wyo., graduated from the University of Wyoming in 1973 with a bachelor's degree in agricultural business. He earned a master's degree in agricultural economics at the University of Washington in 1975.

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