As forest land is subdivided, new owners seek management information

BY DENNY FLEENOR
WSU EXTENSION

Large Washington forestry owners are di-
vesting their property, and the new owners
are demanding forestry education, which
WSU Extension is providing, says Andy
Perleberg, extension forestry educator.
As an example, he points to Pierce Coun-
ty, where the Weyerhaeuser Company
recently split 4,400 acres of forest land into
20-acre home sites or mini tree farms.
"The new forest owners are looking to
extension for information because we're
trustworthy," Perleberg says.
This summer, more than 400 people at-
tended the WSU Extension Family Forest
Field Day near Cle Elum. Forest owners
from as far away as Alaska and California
attended up to six 1-hour sessions covering
about 20 topics.
"There is so much information it's like
putting your mouth up to a fire hose of
forestry education," says Perleberg.
The next field day will be Saturday,
Sept. 15, at the Hamma Hamma Tree Farm
located just off U.S. 101 on Hood Canal.
More information is available ONLINE @
www.ncw.wsu.edu/foreststewardship.
While the demand for forestry education
continues to grow, funding to put on field
days and other educational programs does
not. So Perleberg has become entrepre-
neurial in his approach.

(See "Forestry," page D)

Impact not always about dollars

BY LINDA KIRK FOX
ASSOCIATE VICE PRESIDENT AND
DEAN, WSU EXTENSION

Economic development is a critical
mission of WSU Extension. Success-
ful efforts in this field traditionally
focus on two numbers — the in-
crease in new businesses attracted
and new jobs created. WSU Exten-
sion enthusiastically embraces such
measurement and accountability.
But, it is important to recognize that
for some programs that criteria can
be too narrow and simplistic.
In higher education we have been
prone when evaluating the
impact of our work.
One extreme is to measure a pro-
ger's economical value strictly in
dollars and cents. However, you can't
put a dollar amount on everything we do. Many benefits are long term
and so tightly integrated with other
factors that it is almost impossible to
determine pure economic impact.
Does a 4-H program that develops
leadership skills of the youth in a
small community have an economic
impact? Definitely! But measuring
that in monetary terms is difficult.
The other extreme is to "go vague"
This approach indirectly asserts that
"everything we do has value, so it
must be economic development." No
doubt, an easy path requiring little
thought. But it lacks the kind of
accountability increasingly required
by those who fund us. It also pre-
vents us from focusing our resources
on areas of highest impact.
"What kind of measuring stick
should we use to gauge our success
in economic development and its
impact on the state?
WSU Extension is taking several
steps to find a balance between the
two extremes.

(See "Impact," page C)

Drinking in forestry education

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WSU EXTENSION

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(See "Forestry," page D)
Successful program looks to serve Puget Sound

BY DENNY FLENNOR
WSU EXTENSION

The Beach Watchers program to improve and protect Puget Sound is hoping to expand into a Puget Sound Partnership, a new state agency charged with creating and implementing a plan to restore the sound's health by 2020. "Extension will be working with the Puget Sound Partnership to strengthen volunteer programs, and that could help us take Beach Watchers sound-wide," said Beach Watchers creator Don Meehan, Island County extension director.

"If the resources can be made available, it could be a Puget Sound-wide effort," Meehan started Beach Watchers, a WSU Extension program, in 1990 in Island County with a $16,000 state grant. Since then, it has become a lead agency in helping to improve the health of Puget Sound and protect the coastal ecosystem. Beach Watchers is a seven-county program with 566 trained volunteers.

His intent was to apply the principles of the successful Master Gardener program to marine and fresh water ecology. Sixteen volunteers were selected for the first class; they received 100 hours of expert training on topics relating to implementing water quality and fishery conservation in trade for a pledge to return 100 volunteer hours to the program.

Meehan says he realized the potential to expand the program within its first two years. "I saw the success and the power in the community of what was being accomplished," he says.

Beach Watchers volunteers are involved in a myriad of activities in their communities that help protect and preserve delicate beaches and intertidal zones, improve water quality and restore salmon and wildlife habitat. They support scientific research, monitor shellfish for signs of paralytic shellfish poisoning, test water quality and, perhaps most important, serve as a well-trained educational resource for schools and the public. Their hands-on work might include removing tons of creosote-soaked wood from the sound, tracking juvenile salmon in the nearshore, detecting invasive species and teaching shoreline owners about how to be good stewards.

In 2004, U.S. Sen. Patty Murray and Rep. Rick Larsen championed federal funding enabling WSU Beach Watchers to expand to Callam, Jefferson, San Juan, Skagit, Snohomish and Whatcom counties. Last year, Beach Watchers volunteers provided the equivalent of 688 days of on-the-ground research and contributed more than 30,000 volunteer hours in their communities. Their outreach efforts provided information to nearly 25,000 people through workshops, fairs, festivals and aboard Puget Sound ferries.

The original Puget Sound Partnership, appointed by Gov. Chris Gregoire in December 2005, finished its work and disbanded in December 2006. Then, the 2007 Washington State Legislature approved more than $200 million for Puget Sound restoration and recovery in the 2007-2009 state funding cycle, which included creating a new state agency to develop a long-term action plan and set priorities for improving the health of the sound.

Meehan says that is a start toward his lifelong goal of bringing the program to every county with Puget Sound shoreline.

To learn more about the WSU Beach Watchers Program visit ONLINE @ www.beach-watchers.wsu.edu/regional.

To learn more about the Puget Sound Partnership visit ONLINE @ www.psp.wa.gov.

4-H teens excel among peers

WSU conference, Tufts University study reflect students’ bright future

BY DENNIS BROWN
WSU EXTENSION

Almost every summer since 1926, a contingent of 4-H’ers from across Washington has come to Washington State University in Pullman to attend the State 4-H Teen Conference, a three-day June conference with information on scholarships and financial resources available to students at WSU. A recent WSU grad participated a glimpse of college life from her perspective.

The focus on higher education at the teen conference is not new, according to Pat BoyEs, WSU director of 4-H Youth Development in Puyallup. 4-H has always worked to attract youth to higher education, but it’s approximate now than ever because preliminary results of a study at Tufts University show that 4-H’ers are outstanding college students. The study identifies 4-H’ers as high-achieving students and a top-notch group of students who are employed,” Lewis said.

A different approach is being considered for cherries. Matt Whiting, a WSU horticulturist at Prosser, and Erick Smith, a WSU graduate student from Castle Rock, are testing a mechanical cherry harvester developed by the U.S. Department of Agriculture Agricultural Research Service that knocks off stem-free cherries from trees. He estimates it could reduce harvest costs by 80–90 percent.

Designing for the future

The biggest barrier for wide use of platforms, mechanical pickers and similar technology is orchard design.

“Orchards must be redesigned to accommodate the equipment,” Lewis said. “All limbs of the tree must be trellised so that they are out of the drive row, stay in place over the season and are easily accessible to either the human or robotic arm.”

The term used in the industry to describe the result is a “fruiting wall.” Fruit is no farther than about 18 inches from the edge.

“New orchards — are taking into consideration the need to build systems that are human friendly, machine friendly and robotic friendly,” Lewis said.

While the orchard of tomorrow is expected to employ fewer people, the jobs that remain will be adapted to local conditions and specifications. The apple has to be picked with a rotation of the wrist so that the stem remains intact,” Lewis said.

Robots will have to mimic that motion and then gently place fruit in a bin, box or conveyor belt so it doesn’t bruise.

The technology will employ vision robotics to locate the fruit.

“The orchard will be mapped ahead of time to show where the fruit can be found,” Lewis said. “That map will tell the arm and hand where to go to get the apple.”

Our industry is burdened with a significant number of injuries resulting from ladder use. These injuries can be altering for the employee and costly to both the employee and employer,” Lewis said.

Designing for the future

The Washington Tree Fruit Research Commission is funding Lewis’ field research. Industry partners include Vinetech Manufacturing, Prosser, and Blueline Manufacturing, Moscow. The commission is supporting the development of robotic software and hardware in the private sector. The good news is that some of this technology is already available and needs only to be adapted to local conditions and specifications.

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“Our workshops helped teens build skills and plan for their futures while having a good time,” said Jan Klein, state 4-H teen leadership coordinator for WSU Extension. Participants learned how to manage their money, deliver a positive impression during interviews, craft better listening skills and polish interpersonal communications skills.

They learned how to take better digital photos, picked up tips on how to eat well on a budget, got certified in CPR and attended workshops that will help them plan and carry out service learning projects at home. Former Microsoft executive Linda Criddle told them how to protect their identity on the Internet. They explored gravity, electricity, magnetism, light and thermodynamics in a visit to the physics department and the visual and acoustical changes that accompany chemical reactions in the chemistry department.
Rebuilding Iraqi agriculture, starting with extension

BY DENNIS BROWN
WSU EXTENSION

While you were celebrating American independence on July 4, WSU faculty and a graduate student were flying to Iraq to begin the first phase of a two-year, multi-university training effort to update the skills of Iraqi extension workers.

“First, we trained the trainers, our counterparts at the universities in Iraq and Iraq Ministry of Agriculture,” said Chris Pannkuk, director of international research and development for WSU International Programs. The 25 Iraqi trainers then refreshed the material for presentation to the 220 employees of the Ministry of Agriculture, mostly extension workers who work with farmers, who arrived late.

“With the help of an ongoing partnership between WSU and WSU, the Ministry of Agriculture, mostly extension workers who work with farmers, who arrived late,” said Glen Hales, director of the WSU Water Resource Center.

“WSU Extension Energy Program

Poor indoor air quality (IAQ) can provoke asthma attacks, trigger allergies and even spread the common cold. For 10 years, the WSU Extension Energy Program has tested air quality in classrooms across the state and offered advice on how schools can improve conditions.

This fall, all schools in the state will have an opportunity to investigate and improve indoor air themselves, thanks to 17 IAQ monitoring stations built with $100,000 in funding from the Washington Department of Health (DOH). Schools will be able to borrow the equipment, which is managed by WSU Extention Energy Program.

“Schools will be able to improve conditions in classrooms across the state and offered advice on how schools can improve conditions,” said Bob Parker, director of the WSU Water Resource Center.

“If the air is really liked and appreciated her insight at being able to translate for us none-Arabic speakers,” Pannkuk said.

Clearing the air in Washington’s schools

BY SHEILA RIGGS
EXTENSION PROGRAM

Lit project successful

WSU Extension Energy Program

WSU EXTENSION Energy Program.

Additional money for WSU to design and assemble 12 additional stations — featuring improvements over the original designs. This total of 17 monitoring stations will allow even more Washington schools to participate.

How monitors work

Each monitoring station is outfitted with meters that measure carbon monoxide, carbon dioxide, temperature and relative humidity. A particle counter measures six size ranges of airborne particles.

The stations also include handouts and other resources including information on mold, asthma and solving IAQ problems. The instruments are set to record continuously, and software provides data in graphic format. This information makes it easy for schools to understand indoor environmental parameters and quickly recognize trends. Laptop computers and easy-to-follow user guides are also provided for downloading and analysis of data.

“School facilities staff, nurses, administrators and other stakeholders receive training in their own buildings that address their specific needs and challenges. After the assessments, the WSU program helps schools develop immediate, as well as mid- and long-term, strategies for improvements.

Service in high demand

Technical IAQ site visits for North-west schools are one of the most requested services that the WSU Extension Energy Program offers.

“We are happy to be a part of this important work that helps to promote and ensure good indoor air quality in schools,” said Pannkuk.

He added that the measurements can allow schools to meet the standards for energy management and indoor air quality management.

Energy management and indoor air quality management go hand-in-hand, Prill said. "We have found that energy management and indoor air quality management are often operated in an energy-efficient manner because the people responsible for managing the building are paying attention to both of these aspects."

Impact

(Continued from page 2)

First, we are looking to build the capacity for economic assessment among our own ranks. Three recent hires have a broader perspective related to the economic benefit of their work. For example, the Center for Economic Development and Applied Research (CEDAR), director of international research and development for WSU.

Learn more about our international work at ONLINE: www.ip.wsu.edu/overview or call Pannkuk at (509) 335-2980.

Will the U.S. effort ultimately help Iraqi farmers? There are some major hurdles to overcome before Iraqi agriculture will be able to compete for food security, availability of farm inputs and re-establishments of transportation and markets,” Pannkuk said.

Additional training workshops are planned for the fall.

http://cahnrsnews.wsu.edu/extensiontoday

August 31, 2007 • C

FIRST STEPS

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Knowledge-based economy demands WSU engagement

A conversation with John Gardner, new vice president for extension

By Denny Fleenor

WSU Extension

John Gardner assumed the new position of WSU vice president for economic development and extension on July 1. President Elson S. Floyd recruited Gardner from the University of Missouri and said the new post would be based out of Seattle.

Denny Fleenor sat down with Gardner for a conversation about his new position and his early impressions.

DF: Let’s start with how you define economic development?

JG: It relates to developing that relationship between how we interact with people’s values. To survive as a society, to sustain our natural resources, we need an organized structure in which we go about the business of being a society. That’s the economy.

DF: How does the university figure into economic development?

JG: Many people still have an ivory-tower notion that universities are outside the real world of trade and monetary exchange. But most particularly as we’ve moved from an economy based on goods to one based on ideas, a knowledge-based economy.

DF: Ideas come from places where people are taught — you learn and experience — and that’s education. That puts universities right in the middle of this busy intersection that is the knowledge economy.

The bottom line is that the university has a large role in today’s economy and a larger role in tomorrow’s economy, and we need to reorient ourselves. New forest owners need a legislature that role and play a productive part in it. My job is to characterize that changing role at WSU within teaching, research and extension. That means helping faculty and staff across the university understand and participate in our evolving role in today’s knowledge-based economy.

DF: What’s the connection with extension?

JG: It’s a logical connection because, when you look at the birth of extension at the beginning of the 20th century, we were acknowledging that know-how and ingenuity needed to be transferred regarding agriculture to the university to the populace. That was the land-grant ideal. I’d say the challenge is the same today. We have a different kind of knowledge to pass and much different tools to use.

WSU remains the land-grant institution for the entire state, and we are increasingly less geographically bound. Extension is the most extensive organized connection that exists between higher education and the average Washingtonian. WSU’s statewide physical footprint includes more than 70 facilities, mostly extension staffed, where we interact with the public. That essentially is the backbone for our touching all of Washington.

DF: So you see a need to shift how we view our role, and how?

JG: Absolutely. It’s something with which we’re responsible. It’s the challenge of putting the public good back into the public university. In my brief travels so far, and I covered about 1,200 miles in my first week on the job, it seems that everyone I’ve met is really up to the challenge and, in fact, enthused about it.

I’ve learned that I’ve got to help catalyze champions within the university to build an internal awareness about our real responsibility and obligation as a public land-grant university, and about the tremendous power and sphere of influence that we have in the knowledge-based economy.

Our sights are probably too low. I think we need to raise expectations in terms of the big ideas and the influence that we have. I’ve learned that, in our interaction with government, we need to be assertive, but we need not be intimidated in terms of the important force of knowledge on policy. So we need to engage with the government sector.

There is a bit of intimidation with the private sector too, more so than needs to be. We can be effective and still be effective, but we need to work on our asserteriveness with the private sector. And we need to ensure we maintain our credibility. I’ve got to help the faculty and staff who will be the champions — help put them in places where they can be as effective as possible with the private and government sectors. It contributes to our vision. The vision can probably be grander than most of us think.

DF: You’ve started an interaction (Denny @ john.gardner.wsu.edu), but what are other ways for faculty and staff to form ideas and interact with you?

JG: Electronically, by e-mail. I’ll try to keep as active and omnipresent that way as possible.

I’m traveling the state as quickly as possible to meet with faculty and vendors, to hear from them. To figure out our first projects. We’ve got to launch some projects that are low-hanging fruit in our Washington needs.

Then I’ve got to work on extending this network between the cultures of the university, business and government and to be an effective broker for extension, research and our teaching faculty.

Those are the tasks, and I vitally need input and advice — good, bad and indifferent. Now is not the time to be timid. Now is the time to be assertive.

Forestry

(Continued from page A)

“These owners are not buying forest land to harvest the timber,” he says. “They buy it for lots of reasons, such as privacy, recreation, being close to wildlife or providing a family legacy. They’re interested in forestry not for making a living, but for recreation in ways of their health and management planning.

New owners are primarily interested in improving the health of their land. They stand up and say, ‘What’s that?’ and then it’s reflected in their management planning toward the land.”

“Some of the most popular topics (at field days) include improving forest health, encouraging native plants, noxious weed identification, enhancing wildlife habitat and the FireWise landscaping class,” Perleberg says.

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