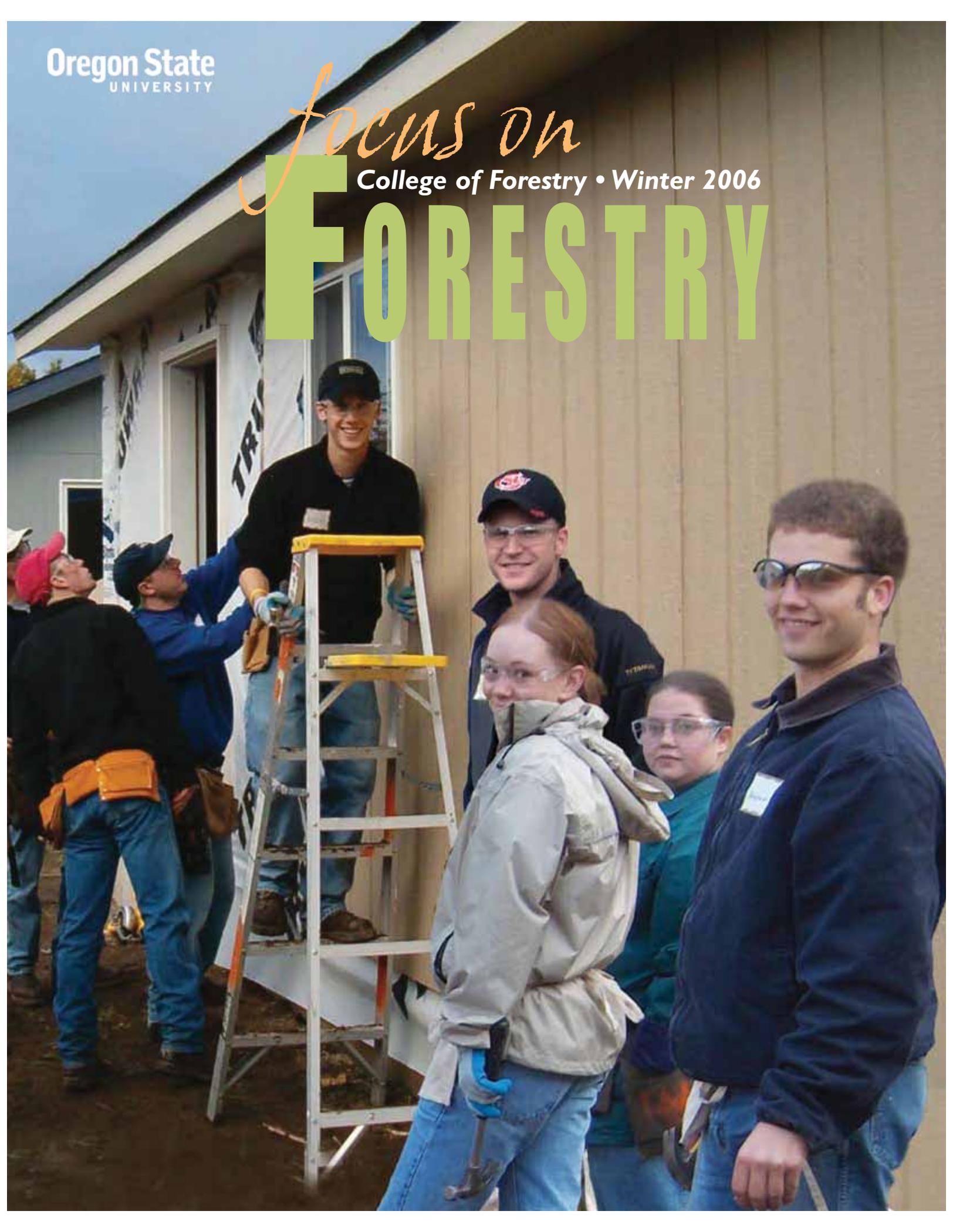


Oregon State  
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*focus on*

College of Forestry • Winter 2006

# FORESTRY



## DEAN'S COLUMN

Corvallis hums with activity and excitement this time of year as researchers and their graduate assistants return from productive weeks in the field, new faculty members move into place, and students burst back upon the campus with renewed enthusiasm and energy. These students are what I'm excited about this year!

Forestry is now home to the largest class of students (graduate and undergraduate) since 1981. We are starting the year with 624 students walking the halls of Peavy and Richardson. This represents a 15% increase over last year. This growth is not a one-year bump – our five-year trend is up 31%!

I had the chance to meet many of the new students at Annual Ring, and I was impressed. We have students from 31 states and numerous countries. They have solid academic credentials and seem committed to learning more about forestry and natural resources.

Increasing enrollment is one of our top strategic goals, so I'm pleased with the progress. Retention of current students and the addition of new students speak volumes about the people and programs in the College. Our recruiters and advisors have worked hard to contact prospective students and help them learn about the opportunities in forestry and natural resources. Our faculty continue to provide courses that prepare students for relevant and interesting careers. Our researchers offer world-class experience for tomorrow's scientists and educators. Our support staff and administrators help create an environment that enhances the learning experience. Our alumni and friends provide outstanding scholarship and program assistance through their gifts. And of final importance, our students have success in finding jobs upon graduation. Learn more about our students and on-going events as you read through this issue.

One final exciting thought about our students is that this year's freshmen will become the 100th graduating class in Forestry. We are making preparations to celebrate our Centennial – 100 years of serving Oregon's citizens, governments and industries. More on this milestone in future issues of the Focus.



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Olivia Pinon

## Research at Warm Springs Reservation

by Marie Oliver

### Confederated Tribes and the College collaborate on forestry and wood science research projects

For many years, the College of Forestry has enjoyed an excellent collaborative relationship with the Confederated Tribes of Warm Springs Reservation of Oregon. College of Forestry students and faculty members have engaged in several outreach and research projects over the years that have benefited the tribes and—through the dissemination of relevant information—the forest industry as a whole.

#### Mechanical Thinning Techniques

**Loren Kellogg**, Lematta Professor of Forest Engineering, began working in Warm Springs in 1991 when the tribes were specifically interested in thinning high-valued, high-elevation noble fir forests. The tribes had questions about the trees' response to thinning, the effect that logging scars would have on future wood quality, and harvesting techniques that would minimize stand damage. Funded by the confederated tribes, Kellogg and other team members studied these and other related questions over a five-year period. **Peter Matzka**, OSU graduate and currently assistant professor at Humboldt State University, worked with Kellogg on the harvesting aspects of the noble-fir project.

"Specifically, we provided information on alternative logging approaches, the economics for those different logging methods, and the site and stand impacts from different logging systems," says



Loren Kellogg

Kellogg. "We made recommendations on the best system for harvesting high-elevation noble fir stands with minimal damage and the lowest cost."

Last year, Kellogg began working with PhD candidate **Chad Bolding** and Faculty Research Assistant **Chad Davis** to research mechanical approaches to reducing forest fuels and thus the risk of wildfire at Warm Springs and in other Oregon forests. The team is exploring how different mechanical approaches compare from an economic and site impact perspective. Two state-of-the-art noncommercial mechanical systems are being used in the study: one flexible track machine equipped with a front mounted rotating drum masticating head, and one swing-boom style excavator equipped with a rotary disk mulching head. The machines grind up dead and dying trees, making the

fiber smaller and, in some cases, mulching it into the soil.

"In this project, we're not utilizing the biomass, we're just changing its size and shape," says Kellogg. The idea is to reduce ladder fuels and other high-risk ground fuels with the intent of reducing the risk of catastrophic wildfire. "That's the hypothesis; we really don't know. We will evaluate the silvicultural treatment effectiveness for producing more fire-resilient landscapes through modeling pre- and post-treatment conditions."

#### Forest Biomass Utilization

In addition, Kellogg and his team will be working with the Warm Springs tribes to study how forest biomass might be utilized in the future. They are interested in discovering alternative ways to harvest and convert forest fuels into energy. "The problem now is that it's not economically attractive or viable to utilize forest fuels for energy," says Kellogg. "But that's where research comes in. It's an important topic for the governor, rural communities, the forest industry, and government agencies to develop capabilities to utilize forest biomass while also reducing the risk of wildfires. One of the places that is leading the way and trying to break down some of the barriers is Warm Springs."

Kellogg says that the Warm Springs forest products industry has made considerable progress in developing a plan for a biomass energy plant, but there are still a



lot of researchable questions, such as: How much biomass resource supply is needed to keep such a facility going? Where will this supply come from? What is the most efficient and economical way to harvest and transport the material from the forest to the plant? How many new jobs can be created through biomass harvesting and utilization? What are other benefits, such as reducing the risk of wildfire and the associated environmental impacts on the landscape from wildfires? What is the energy budget balance between consuming energy to harvest biomass versus producing energy? Kellogg hopes to make progress on answering these and other questions for Warm Springs foresters in the near future.

### Sawmill Production Methods

Another recently completed project at the Warm Springs reservation was conceived about three years ago and involved faculty from the Wood Science & Engineering Department. Extension Specialist **Jim Reeb**, and Associate Professors **Jim Funck** and **Charles Brunner** worked with graduate students **Max Salichon** and **Olivia Pinon**

*Top: Jim Reeb (left), Charles Brunner, Jim Funck.*

*Right: Olivia Pinon and Max Salichon give modeling presentation at Warm Springs Forest Products Industries*



to study production methods at the Warm Springs Forest Products Industries (WSFPI) sawmill. The Warm Springs tribes were specifically interested in how the decreased availability of larger logs will affect their production.

“Like everybody else, they’re looking at what their raw material supply is going to be like in the coming years, and like everyone else they’re looking at much smaller diameters than they’re used to,” says Funck.

Working closely with the WSFPI sawmill staff, the team developed a computer model of the sawmill and used it to identify processes that constrained the mill’s current production capacity. “This helped us understand why we got some of the results we did when we introduced more small-diameter timber into the model,” says Brunner. “These are things they can correct even with today’s raw materials.” The study identified several key opportunities for improving mill production.

Next, the team made projections about how the introduction of more small-diameter timber will affect the mill’s output and identified solutions to minimize those impacts. As part of the study, the team looked at some of the mill managers’ ideas for improving production and found some unexpected solutions. “That’s the real value of doing things in a computer model,” says Reeb. “We can do all of that in the computer and answer all of these questions before they spend the time, effort, and dollars to make changes.”

Pinon and Salichon gave two well-received presentations: one to the mill’s administrators and one to the production workers. The Tribal Council is also interested in seeing a presentation.

Although the in-kind and actual expense of the project to WSFPI was over \$60,000, Reeb reported that the CEO said they would save thousands of dollars on each dollar spent on the project. “He said the payback was big,” says Reeb. In addition to gaining from the results of this particular study, the mill now has a model of their production processes that can be used in the future to answer additional questions.

Salichon and Pinon both graduated in 2005 with dual master’s degrees in mechanical engineering and wood science and engineering.

# Quantitative Sciences Group

by Marie Oliver

## QSG Supports Researchers on the Cutting Edge of Technology



Lisa Ganio

The Quantitative Sciences Group (QSG) is a loosely organized group of scientists from OSU, USDA Forest Service, Pacific Northwest Research Station, USGS Forest and Rangeland Ecosystem Science Center, and the Corvallis Research Lab of the Oregon Department of Fish and Wildlife. The group focuses on the development and application of innovative quantitative and technology tools to enhance forestry related research.

As the brainchild of **Susan G. Stafford**, former professor in the Forest Science Department, QSG has been around since the 1970s. It was formed at the very beginning of the computing revolution that put computers on everyone's desk—back when it was a novel idea to connect computers and share information. The original group was responsible for establishing the college's first computer network.

In the beginning, QSG was strongly focused on data management and networking/connectivity issues. Over time, as

technology has evolved, areas of interest have expanded to include statistical consulting, modeling, and programming. The value of the group lies in providing a way for scientists who rely on computer technology for their research to seek support, brainstorm solutions to problems, and take advantage of the opportunities available through technology.

"The field changes rapidly; you have to keep current, you have to keep up," says **Lisa Ganio**, Forest Science assistant professor and group spokesperson. For example, a QSG subgroup of spatial data managers meets once each month to talk about issues that are important to them. In addition to discussing specific problems they are having, it's a chance to discuss imminent or projected software evolution and how they can best adapt and/or take advantage of new capabilities.

A more recent focus of QSG has been to help scientists find technical experts to assist on their projects. "Researchers often need some highly skilled people in these technical fields, but because it's a specialized field, there aren't very many of them," says Ganio. "You may need an expert, but you don't need them or can't afford them full time, so there's a need to have these people available to be used as needed." The group would like to eventually have a pool of experts available for contracting on projects.

For instance, **Janet Ohmann**, a research forester with USDA Forest Service, and **Matt Gregory**, senior research assistant in Forest Science, recently received a grant from the Joint Fire Sciences Program to create a 3D visualization from a computer model that predicts vegetation over a landscape. They hired **Tim Holt**, OSU research assistant and "serious gaming" expert, on a .5 FTE appointment to create the visualization using gaming technology. The idea is to create a virtual environment

where scientists in distributed locations can interact with each other and "walk" through a forest landscape from a distance.

Through the connections at QSG, an opportunity is created for Holt's skills to be more accessible to other scientists in the future. In addition, those in the group will have first-hand exposure to the concept of using gaming technology to support their research interests, which could create new possibilities.

"We're going to be doing a lot of discovering about what the potential uses of this technology are," says Ohmann, who serves as a communication liaison for QSG between the research lab and OSU.

In attempting to further redefine QSG and explore ways to make experts like Holt more available to forest researchers, Ganio says the group may try to identify some research projects for which the group would seek funding.

Perhaps one of the biggest advantages of QSG to the college as a whole is that the group acts as a "weather vane" to identify potential issues that may affect computer users at all levels. Ganio explains: "Five years ago, system administrators for the computer group were saying 'we need to start paying attention to security.' So now we spend at least 1.0 FTE dealing with security. They were right; they knew it was coming." Additionally, she says that members of the group had wireless connectivity tests in place before that functionality really arrived on the scene.

Ganio stresses that QSG members are not necessarily computer science majors or technicians. They are scientists with master's and PhD degrees in various scientific disciplines who want to use technology to solve a problem or achieve a goal. "You can't do this kind of work unless you know the science you're involved with," she says.

# Advancing the Science around the World

by Marie Oliver

## “Retired” Professors Continue Forestry Research



Richard Hermann



Denis Lavender



Helmuth Resch

Anyone who spends much time in international forestry circles has likely heard the names of three deeply respected, “retired” OSU College of Forestry professors: Richard (“Dick”) Hermann, Denis Lavender, and Helmuth Resch. Although each is officially retired and getting on in years, they continue to influence the science through their research, writing, and leadership in international forestry organizations.

**Dick Hermann** came to the United States from his homeland of Germany in 1953. He earned a master’s from Yale University and a PhD from Oregon State and began his OSU career in the botany department in 1958. He moved to the College of Forestry in 1959. His research interests have primarily been in forest regeneration, the physiology of trees, and developing quality planting stock, particularly Douglas-fir stock. He taught silviculture courses at OSU from 1979 until his official retirement in 1988.

Hermann twice held guest professorships at the University of Goettingen in Germany, from which he received an honorary doctorate. His involvement in international forestry has included long-term leadership as a member of the executive board of the International Union of Forest Research Organizations (IUFRO), where he was head of the Silvicultural Division for many years.

At age 81, Hermann remains a professor emeritus at OSU. He is still active in IUFRO and travels throughout the world on work related to his work. In September 2005 he went to Romania to meet with a group concerned about the silviculture and gene preservation of European silver fir, a threatened species that is particularly prone to damage by air pollution. Work on silver fir has also taken him to Bulgaria, Macedonia, Spain, and Germany. He continues to work with the German Forest Service and French Forest Service on problems with Douglas-fir plantations in those countries and is a member of the Italian Academy of Forest Science. He is fluent in French in

addition to his native German and English, and he has translated numerous technical papers from French and German to English.

Hermann says one of the things he is most proud of is that he and the faculty during his time at OSU brought the college into the international limelight. “We really put this place on the map, because today you say ‘Corvallis’ in forestry circles and you don’t have to say anything else,” he says. “We have really achieved a fantastic reputation.”

**Denis Lavender** and Hermann are contemporaries at OSU and are working on a book together titled *Biology of Douglas-fir*. “We hope to create a good reference book, starting with seeds and through old growth,” says Lavender, who earned both his master’s and PhD degrees from Oregon State and stayed to become a professor of Forest Science.

In addition to Douglas-fir, Lavender’s research focused on white spruce and lodgepole pine. He created a methodology for storage and planting seedlings that has increased conifer survival rate by 20 percent, and his findings enabled reforestation of the Tillamook burn to happen an estimated 10 years earlier than would otherwise have occurred. “Our research demonstrates that conifer seedlings require specific chilling cycles, which are disrupted by global warming,” he says. “If global warming proceeds as predicted, Douglas-fir and its associates will be killed over most of the Northwest.”

After leaving OSU in 1984, Lavender served as head of the Forest Science Department at the University of British Columbia until his official retirement in 1992. He continues to serve OSU as professor emeritus.

Lavender and several colleagues spearheaded the Silvicultural Institute of British Columbia (now called Forest Management Institute of British Columbia) and a similar organization in Alberta, Canada. His other international involvements include executive leadership for IUFRO and honorary membership in the Professional Foresters Society of British Columbia. He was in executive lead-

ership for three consecutive years on the reforestation committee for the Western Forestry and Conservation Association and is a fellow of the Society of American Foresters and a founding member of that organization's Forest Science Board.

Lavender, now 78 years of age, has published well over 100 papers. "I've published papers in every decade for the last six decades; most people die first," he grins.

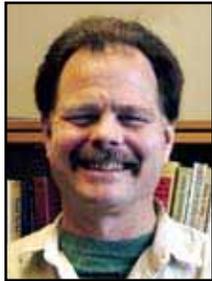
**Helmuth Resch** came to OSU via Berkeley in 1970 as professor and head of the Department of Forestry Products (now Wood Science and Engineering). He provided strong leadership that encouraged faculty and graduate assistants to strengthen existing relationships and forge new relationships between academia and industry. During his tenure, the college and two other universities obtained substantial funding from the U.S. Congress to establish three Centers for Wood Utilization Research—one for the Southern Pine region, one for Eastern hardwoods and one for Western conifers.

In 1987, Resch accepted a position as dean of research at the College of Environmental Science and Forestry at State University of New York in Syracuse. In 1992, he went back to his native Austria to take the position of director for the Austrian Forest Products Research Laboratory in Vienna. Concurrently, he was professor and department head for the Institute of Wood Science and Technology at the University for Natural Resources (the Boku). At age 72, he is currently professor emeritus at that institution.

The list of Resch's professional affiliations and accomplishments is long. In addition to serving at the executive level with several international research organizations, in 2004 he received the Distinguished Service Award from the Forest Products Research Society and an honorary doctorate from the University of Western Hungary. From 1970 to 1990, he served as a consultant for forest products manufacturing companies, a trade association, law firms, universities, and US-AID in Costa Rica, Zimbabwe, and India.

Resch's recent activities included a trip to Quebec to give the Academy Lecture at the Forest Products Meeting in June 2005. He continues to chair the Wood Technology Sector Group of a European Union-sponsored program for Cooperation in Scientific and Technological Research and is writing a book on energy use in drying wood.

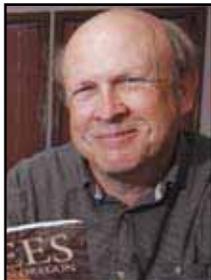
*Freya and Dick Hermann hiking in a Slovak national park.*



Bonnie Johnson



Bonnie Johnson



Bonnie Johnson

**WELCOMES and FAREWELLS**

**David Shaw** was hired as Forest Health Extension Specialist and Leader of the Swiss Needle Cast Research Cooperative, effective August 29, 2005. Shaw was formerly Senior Research Scientist, Wind River Canopy Crane Research Facility in Washington State. His PhD is in Forest Pathology from the University of Washington.

**Frederick Kamke** (PhD, 1983) returned to OSU in spring 2005 to join Wood Science and Engineering as Professor and JELD-WEN Chair of Wood-based Composites Science. Fred's research specialization is heat and mass transfer in wood and wood-based products, with emphasis on adhesion science, modeling, and the manufacture and performance of wood-based composite materials.

After 15 years in Forestry, **Robert Leichti** (a.k.a. "Doctor Bob") packed up his life-sized standee, grabbed his running shoes, and lit out for the East Coast this summer. Although he remains Affiliate Faculty in Wood Science and Engineering, his new official job is as Engineering Senior Compliance Engineer, Stanley Bostitch, in Rhode Island.

The Oregon Wood Magic Program has a new coordinator, **Leslie McDaniel**, Ed.D. Leslie has had a long career in education, serving as a teacher and administrator in a number of schools. She will work with faculty and staff on the Corvallis and Portland programs and will travel throughout Oregon to present a modified program to third and fourth graders in their schools.

**Rose Lacey** began official duties as Dean Hal Salwasser's Executive Assistant on Monday, November 14. Rose comes to the College from the Athletics Department, where for the past two years she provided executive support to Director Bob DeCarolis. After a nearly a decade on campus, Rose brings a wealth of knowledge about the University to the College.

Rose replaces **Tresa Stevens**, who retired in November after 16 years of exceptional service to the College. Best wishes, Tresa, we'll miss you!

**COLLEGE KUDOS**

**Bev Law** and **Steve Strauss** have both been honored as Aldo Leopold Leadership Fellows. The Aldo Leopold Leadership Fellowships "provide academic environmental scientists with intensive communications and leadership training to help them communicate scientific information effectively to non-scientific audiences, especially policy makers, the media, business leaders and the public. Selected through a competitive application process, Fellows have outstanding scientific qualifications, demonstrated leadership ability and a strong interest in communicating science beyond traditional academic audiences." Law completed her fellowship last year; Strauss finished his program this fall.

Professor **Stephen D. Hobbs**, Associate Dean of Research for the College of Forestry, has been named Executive Associate Dean for the College.

Elizabeth P. Ritchie Distinguished Professor **Edward C. Jensen** (Forest Resources) has been named Associate Dean for Academic Affairs.

Professor **Eric N. Hansen** (Wood Science and Engineering) has been selected to receive the 2006 University of Idaho, College of Natural Resources Mid-Career Alumni Achievement Award next May (2006).

Associate Professor **Viviane Simon-Brown** (Forest Resources, Forestry Extension) has been elected as the next President for the Association of Natural Resource Extension Professionals (ANREP).

*Pictured left to right from top: David Shaw, Frederick Kamke, Robert Leichti, Leslie McDaniel, Rose Lacey, Tresa Stevens, Bev Law, Steve Strauss, Stephen D. Hobbs, Edward C. Jensen, Eric N. Hansen, Viviane Simon-Brown*

# Supply Chain Management and Forest Road Construction

By Marie Oliver

## Researching how to plan operations at the weekly, monthly, and yearly levels to control inventory costs and to use resources most efficiently

**K**evin Boston, who earned his master's and PhD degrees at OSU, returned in 2003 as a Forest Engineering faculty member after working for one of the largest landowners in New Zealand. He was the national supply chain planner for what he says is "one of the most complicated log supply chains in the world."

"We had 40 different domestic customers, plus customers in about 10 other countries, so we had a fairly complicated system," says Boston. "And we weren't managing it very scientifically."

It was through developing some of the systems at his job in New Zealand that his interest in researching supply chain management was sparked. "There was a whole lot we didn't understand," he says. He began to wonder how best to plan operations at the weekly, monthly, and yearly levels to control inventory costs and use resources such as international transportation systems most efficiently.

Boston is beginning to establish a solid research program in supply chain management at OSU. **Karina Bohle**, his first master's student, completed her program in June 2005. Her thesis involved building a model to forecast logging production. "She came up with a simple model that I think does a good job of forecasting logging production in New Zealand," he says. "We used to have a terrible time forecasting what the crews were going to do each week. When you have 70 logging crews and 20 of them fall significantly below their target from the previous week, you have a lot of customers that don't have wood." Bohle went to work for Boston's former employer in New Zealand after graduating.

Boston's goal is to apply modern enterprise planning systems to forest and mill operations, which he says is a challenge. "The forestry environment is significantly different than most manufacturing environments," he says. He explains that most manufacturing is an assemblage process, whereas forestry is a decoupling process. "Every time you make a decision, you have co-products that are produced, so for forestry is a different sort of manufac-

turing model that standard systems don't handle well. I think a lot of people don't realize that."

He is currently working with PhD candidate Jeff Hammann on weekly forecasting systems using spatial statistics.

Another research area that Boston brings with him to OSU is forest roads—specifically the financial justification for building better logging roads. He wants to provide scientific data to companies and policymakers that will help determine the cost-benefit ratio in building better logging roads. He also wants to know whether building better logging roads will be better for the environment, and if so, how much better.

For example, in highway construction, if a crew encounters bad soil, it is simply excavated, removed, and replaced to build an engineered fill. But those opportunities don't exist when cost is a main consideration in building forest roads. "We have to work with the soils that are in place," he says. "We can move a little bit of dirt, but we're not going to haul dirt from 30 or 40 miles away for subgrades." But Boston wonders whether using better quality soils might lessen problems of compaction and thus be better for the environment in the long run.

Because this is an understudied area, the first step is to figure out how to study the problem. "We need to develop a technique to understand how we build roads," he says. "There hasn't been a lot

of work done anywhere in the world in that area, and we're still formulating the problem." He has funding through a USDA block grant from the Centers for Wood Utilization to do some initial research.

"As a university, one of our roles is to provide nonbiased science to policymakers," he says. "Right now we're looking at how to study the problem and hopefully in the future we can we really start testing hypotheses. We're just getting a toehold on this information right now."



# Twenty Year Reunion

by Marie Oliver

## Logging Engineering Graduates of the Class of 1985

Due to large timber management programs in the Pacific Northwest in the 1970s, the USDA Forest Service identified a need for forest engineering education and training among their employees. The College of Forestry's two-year Logging Engineering Training Program was sponsored by the Forest Service to meet that need.



John Sessions

The purpose was to provide a group of forest engineers within the Forest Service who had technical skills to help lay out the more complicated timber sales—the ones that generally had special technical challenges,” says **John Sessions**, Forest Engineering professor. Sessions was the program's first director from 1974 to 1978 when he was a Forest Service employee.

Although obtaining a master's degree was not required by the Forest Service, most who attended the training did earn the degree. “It became a strong personal goal for many of the students,” says Sessions. Nearly 80 Forest Service employees graduated from the program between 1975 and 1995.

As environmental concerns led to sweeping changes in Forest Service policies during the 1990s, graduates of that program may have had reason for concern regarding their chosen career path. However, most went on to enjoy distinguished careers within the Forest Service.

The seven 1985 graduates—**Paul Anderson, Karl Gleason, Stephen “Obie” O’Brien, Edwin Pugh, Rodney Stewart, Richard Toupin,** and **Samuel Wilbanks**—



Glenn Murphy

have made significant contributions to federal forestry. On July 4, 2005, six of the seven graduates and **Glenn Murphy**, professor in Forest Engineering, enjoyed a reunion and barbecue at Toupin's home in Gresham, Oregon. Murphy was a PhD candidate during that time period and was voted an “honorary member” of the US Forest Service by his classmates. He remembers the graduates fondly.

“They were a hard working group with lively minds,” he says. “Because of them, the graduate classes were full and stimulating. It was an exciting time to be a graduate student in the forest engineering program at OSU.”

Toupin's career probably best reflects the original intent behind the program. After graduating, he worked on the Siskiyou National Forest as a forest logging engineer and he is now the regional logging engineer for Region 6 of the Forest Service, which encompasses Oregon and Washington.

“Rick holds what is probably the leading logging specialist position in the Forest Service,” says Sessions. “He came to OSU to get advanced training in forest engineering and is currently doing what you might say was the ultimate aim of the program—to be able to provide that kind of expertise within the Forest Service.” Toupin is also on an advisory committee that guides the undergraduate curriculum for the Department of Forest Engineering.

Of the 1985 graduates, Anderson probably saw the biggest change in his career trajectory as a result of his participation in the program. “Paul was an excellent example of the

forester who came in and had to pick up the engineering fundamentals,” says Sessions. “It changed his entire career.” After graduation, Anderson was sent on four temporary details, then consecutively served as regional transportation planner in two locations. He is now involved in policy analysis with the Strategic Planning and Resource Assessment office in Washington, D.C. “I consider the two-year program a precious gift and in some ways the highlight of my career,” says Anderson.

Pugh and Wilbanks have had diverse engineering and other assignments since graduating and are both now in leadership positions within the Forest Service. Pugh is forest operations staff officer with the Umatilla National Forest, where he is in charge of a variety of forest programs.

“In my view, the core computer and analytical skills I acquired in the OSU Forest Engineering program, as well as the critical thinking skills and the knowledge that I made it through a difficult program, have made my career progression possible,” says Pugh. “I would like to think the program benefited the Forest Service and the public.”

Wilbanks is a district ranger with the Tahoe National Forest and is currently involved in collaborative/community forestry with the Quincy Library Group. He has been on a National Interagency Incident Management Team for the past seven years, and was deployed to provide logistical support (food, shelter, and sanitation) to approximately 5,000 police and military personnel in New Orleans after hurricanes Katrina and Rita.

O'Brien is a Forest Service logging engineer. He conducts national trainings and works on field projects, specializing in logging safety, watershed protection, and the use of logging equipment for wildfire suppression.

Stewart has worked in a variety of capacities with the Forest Service, holding positions such as forest logging system specialist, timber management assistant,

Professor Loren D. Kellogg has been named Lematta Professor of Forest Engineering

and district ranger. “The focus of the Forest Service has changed a great deal since we all graduated, and that has required a certain amount of flexibility,” he says. “My graduate school...provided me with tools and skills to help me adapt and produce.” He is currently on the Recreation, Lands, and Minerals staff with the Santiam River zone of the Willamette National Forest.

Gleason, who is also a registered professional engineer, served the Forest Service as a transportation planner for several years after graduation then resigned to join the Federal Highway Administration. He was lead designer for all reconstruction projects on the Going-to-the-Sun Road in Glacier National Park from 1996 to 2003. The roadway design team that he currently supervises constructs \$100 million projects each year for the Forest Highway and Park Roads programs in Alaska, Washington, Oregon, Idaho, and Montana.



Loren Kellogg

The Wes Lematta Professor in Forest Engineering is the result of the generosity of **Nancy and Wes Lematta** and their desire to invest in the future of the forest engineering program at Oregon State University. The professorship acknowledges Wes Lematta’s pioneering contributions in the use of helicopters in forestry and his contributions to the Oregon economy by building a strong Oregon-based company that provides jobs and economic benefits for many employees and the public. The position recognizes Columbia Helicopter’s innovative use of helicopters in logging and wildfire suppression while highlighting the benefits of helicopter logging in protecting soils and watersheds.

The Wes Lematta Professor in Forest Engineering will build on the Wes Lematta legacy by educating future generations of forestry professionals, by conducting research on advanced forest harvesting and transportation systems that help protect the long-term vitality of forests while producing economic value, and by extending the knowledge to practitioners and policy makers.

Professor Kellogg has been instrumental in a number of initiatives, education programs and research that exemplify the Lematta legacy. Kellogg is the leader of a Forest Operations Research Group which “strives to provide leadership and forest engineering expertise for forest managers and contractors, in Oregon and worldwide, to improve forest harvesting efficiencies while accomplishing goals in a sustainable and environmentally aware manner.” His research work in Oregon over the last 28 years has provided harvesting system information and demonstrations of new approaches for commercial thinning, logging mechanization, reduced impact harvesting, forest fuel reduction & smallwood utilization, and riparian area management.

Kellogg has been instrumental in developing numerous international forest engineering outreach projects and exchange opportunities for students, faculty, staff, and practicing forest engineers. He has served as an Associate Editor of the *Western Journal of Applied Forestry* and he is currently on the editorial board of the *Southern Africa Journal of Forestry*. Kellogg participated in the establish-



Photo: Columbia Helicopters©

ment of the Council on Forest Engineering (COFE) in 1978, and he has served as a Chair, Co-Chair and member of the Executive Committee. He has also served as the Harvesting, Wood Delivery and Utilization Research Group Leader in the International Union of Forest Research Organizations (IUFRO). Kellogg received his BS in Forest Management at Humboldt State University, and both his MF and PhD in Forest Engineering and Forest Science, respectively, at Oregon Sate University. Congratulations, Loren!

**Successful Forest Resources Graduate Students — Congratulations!**

Eric Toman, PhD

“Communicating the Wildland Fire Message: An Investigation of Agency Outreach Strategies”

Brad Eckert, MF

Project paper

Chantel Jimenez, MS

Project paper

## Evaluating Land-use Tradeoffs

by Marie Oliver



Top: Claire Montgomery, Randall Rosenberger

### **How do land managers find a healthy balance between economic needs and wants, aesthetics, and the sustainable ecology of a landscape?**

**H**ow does society place monetary value on specific land uses? The 2004 passage of Measure 37—the measure that requires governments to pay owners, or forgo regulation enforcement, when certain land-use restrictions reduce property values—is just one indicator that Oregonians are deeply concerned about how land-use decisions affect their economic well-being.

Research efforts by Forest Resources faculty members **Claire Montgomery** and **Randall Rosenberger** provide valuable insights that government policymakers, landowners, land managers, and others can use to make land-use decisions.

Montgomery combines economic and ecological models in an optimizing framework to determine which management strategies might best meet certain management objectives. Although her approach is largely driven by economics, she collaborates with wildlife biologists, landscape ecologists, and others to obtain

ecological models to evaluate various land-use policies.

For example, she might determine what is possible on a landscape by combining timber production and biodiversity models to ascertain the maximum timber production a land manager could expect over a particular period of time while maintaining a specified level of biodiversity. Varying the input data on the two models—length of time, number of a particular species, harvest patterns/locations, and so forth—allows her to investigate the dynamic tradeoffs involved in balancing objectives. The process becomes more complex by bringing in data from other models, such as fire or focal species.

“Right now we’re looking at timber production, biodiversity, and particular focal wildlife species on a coastal landscape,” she says. “We’re also using various models to get information we can use to predict the probabilities of fire occurrence on the landscape and model decision-making under risk of fire. We bring all

that together and try to answer a policy question.”

Montgomery points out her modeling simply provides a range of possibilities. “I don’t advise anyone to pursue a particular management strategy,” she says. Rather, she would recommend the strategy that maximizes the land’s value to society. “To do that, you have to know how much people care about these things, how much they value them.”

That’s where Rosenberger’s work comes in. Rosenberger estimates values for “nonmarket” or “quasi-market” resources. For example, he measures the benefits people derive from recreation, biodiversity, the existence of certain species, clean air, clean water, and so forth.

“Our approach is different both in kind and type of data,” says Rosenberger. “I try to understand how people value outcomes.” He works with data obtained from interviews with individual people, then controls for factors that affect their values, including income, age, education, attitudes, preferences, distance from a resource, and resource characteristics.

For example, in choosing a home, one thing a family might consider is the number of bedrooms and baths, which is easily quantified in dollars. But how do you place a value on the view or the clarity of the local lake? The answer is more complex.

“It’s really a value in tradeoff,” says Rosenberger. “We’re looking at how much of one thing people would be willing to sacrifice to obtain something else. Quite often we drive that with dollar signs, but that’s not necessary. We’re trying to discover the ‘willingness to pay’ for environmental goods and services that aren’t traded in markets.” He is quick to say that many values are nearly impossible to estimate in monetary terms, such as religious or spiritual values, beliefs about aesthetics, equitable allocations, and so forth.

One of Rosenberger’s particular areas of interest is the structure and function of rural economies and how they relate to protected natural areas and natural resources. Using historical data, he is assessing whether rural communities adjacent to wilderness areas are economically advantaged or disadvantaged. He says most of the data analyzed so far shows that such areas have a competitive advantage in drawing people to the area for recreation and settlement.

“In general, the counties that have wilderness or other protected areas near them are growing faster in jobs than counties that do not have these resources available,” he says. Migration patterns show that people want to live in pristine areas with clean air, clean water, and scenic views.

Although Montgomery and Rosenberger have not yet worked together on any projects, they see potential for collaboration in the future. They are both interested in providing information to policymakers to improve ecological and economic sustainability.

## DVD Targets Fire Management Personnel

### Communication Strategies for Fire Management: Creating Effective Citizen-Agency Partnerships

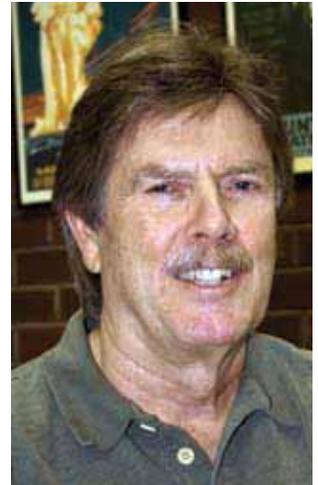
**B**ruce Shindler, professor in Forest Resources, and **Ryan Gordon**, Forest Resources PhD candidate, released a 25-minute DVD in May 2005 that is intended to assist land management personnel in working collaboratively with citizens on fire and fuel reduction strategies. The DVD is titled *Communication Strategies for Fire Management: Creating Effective Citizen-Agency Partnerships*. A written supplement called *A Practical Guide to Citizen-Agency Partnerships* gives viewers hands-on materials for use in planning and implementation.

Shindler, who has spent many years studying communication strategies, public agency-community interactions, and the social aspects of wildland fire and natural resources management, says the last thing many fire management professionals thought they would have to do in their jobs is work closely with citizens. He says these long-term professionals went into the business because they were interested in wildland fire and managing the forest landscape, and most have had little experience in responding to homeowners’ concerns or organizing partnerships to accomplish fuel reduction projects at the wildland-urban interface.

“The uncertainties of some land management practices, such as prescribed fire and thinning treatments to reduce fuel loads, can be worrisome to property owners,” he says. “It’s important for agency professionals to have an established outreach program within the community—to create partnerships with homeowner groups for accomplishing work on private property, but also to reach agreement on the use of fire and thinning on adjacent public lands.” A number of partnerships have begun to emerge in communities throughout the Pacific Northwest, and these settings are useful for demonstrating to other managers what a successful collaborative relationship looks like.

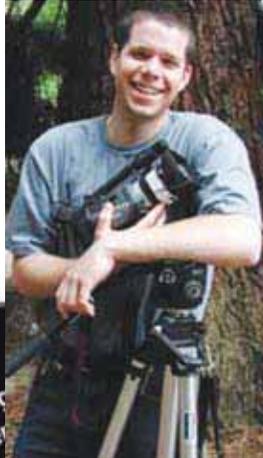
Shindler and Gordon, who graduated in 2005 with a master’s degree in natural resource education and extension, used video technology as a method for getting the collaboration message out to forestry professionals. According to Shindler, Gordon was a “shining star” in his undergraduate Natural Resource Communications course, where each student produces a five-minute video for presentation to the class. For his master’s thesis, Gordon interviewed and filmed personnel from agencies that have successfully created partnerships with citizens and community groups. He focused on three locations: a U.S. Forest Service site in Sisters, Oregon; a Bureau of Land Management site in Southern Oregon near the Rogue River; and Sequoia-Kings Canyon National Parks in California.

“In these settings, forestry personnel had worked hard at developing relationships with people in their communities and refining their own outreach



Bruce Shindler

Ryan Gordon



programs,” says Shindler. “They were excellent examples for other fire managers who were just starting out. We figured being able to see success out on the ground was much better than listening to academics from the university tell them how to do their job.”

Shindler says the project was an experiment to see how video technology would work as a research and outreach tool. By depicting the “real thing,” the DVD effectively portrays stories about the good work being done by agency fire managers and how to organize an outreach effort in local communities.

It also offers many practical suggestions and directs viewers to a companion guide that details an approach for getting started. .

Close to 400 copies of the DVD have been distributed

thus far to management units within the U.S. Forest Service, BLM, National Park Service, and Oregon Department of Forestry. “We weren’t sure what to expect but it has really taken off—we’ve even heard from fire managers in Australia about its usefulness,” says Shindler. “The feedback is that this DVD targets the audience particularly well. And a number of fire managers have said that their bosses need to see this video so they can provide the necessary support to do this important part of their jobs.”

The DVD was produced through the facilities and support of the Forestry Media Center. Project funding was provided by the Joint Fire Science Program and the U.S. Forest Service’s North Central and Pacific Northwest Research Stations.



# Modeling Carbon Cycles

by Marie Oliver

## College scientists contribute to understanding of global warming

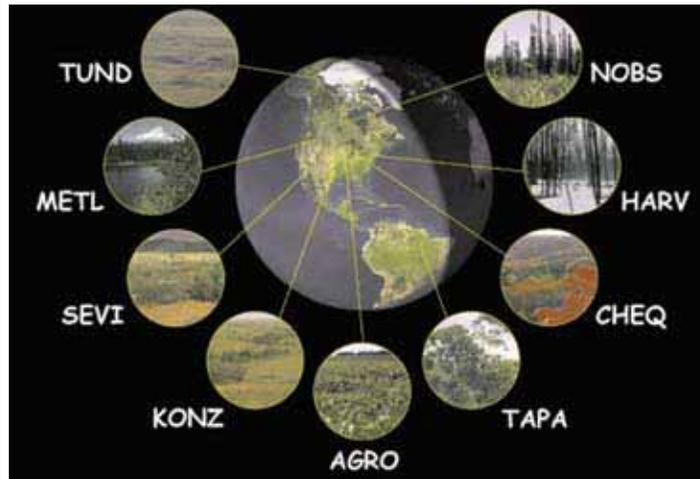


In the early 1990s, the United States signed the United Nations Framework Convention for Climate Change—a precursor to the Kyoto Protocol—and thus agreed to monitor greenhouse gas sources and sinks. In addition, the United States is involved in the Montréal Process, an initiative to develop and implement internationally agreed-upon criteria and indicators for sustainable forest management. These two imperatives coalesce in the work of **David Turner**, associate professor of ecosystem modeling in Forest Science.

Turner's current research is divided into two major projects, the first of which is a Department of Energy study of carbon sequestration in Oregon's forests.

An important aspect of understanding global warming trends is determining how forest management practices affect carbon storage and cycling. Turner runs an ecosystem model that simulates carbon sequestration in Oregon's forests to determine how forests are compensating for carbon emissions from fossil fuels. The model uses large amounts of Forest Service data, including 30 years worth of statewide remote sensing imagery, forest

Bigfoot Project Validation Sites



inventory data from hundreds of plots on public lands, more than 20 years worth of daily multidimensional climate data, and abundant soils data. Simulation results are validated in part by field observations conducted by Bev Law's research group.

The idea is to come up with a "wall-to-wall" map of Oregon's forests to learn where carbon is and is not being sequestered. "We know how much fossil fuel carbon is emitted by the state of Oregon, based on gasoline sales and so forth, and we want to know to what extent the uptake by the forest compensates for that," says Turner.

He says the model takes all this input and 'spins up,' running simulations for, say, 1,000 years. "You let the model build up its own soil carbon pools and basically bring the vegetation into equilibrium with the local climate," he says. "To whatever degree we can, we try to include the disturbance history of the stand as we bring it up to the current time, so it's our best estimate of what the carbon pool is now."

Research to date shows that carbon is accumulating on the western Oregon landscape, and it amounts to about half of the fossil fuel emissions for the state of Oregon. "Most of that is accumulating on public lands because of reduced harvesting," says Turner. "The processes of photosynthesis and respiration are allowing for accumulation, and it's not being taken off by logging and for the most part it's not being burned off."

Conversely, there is not much accumulation in the Coast Range, where there is more private land that is managed for wood production.

Turner and his colleagues are also exploring ways of modeling carbon dynamics at larger scales, and his second project is a contribution to that effort. He collaborates with Forest Service remote sensing specialist Warren Cohen on a NASA-funded project intended to refine the monitoring of global vegetation productivity.

They have set up a network of sites in various biomes—including arctic tundra, temperate forest,

grasslands, agricultural fields, and tropical rainforest—where they use ground measurements and high resolution remote sensing to get the best possible local estimates of processes such as photosynthesis and plant respiration. Their results are compared to NASA's satellite data over the same areas and used to determine the accuracy of NASA's global maps of plant productivity. The purpose is to improve the algorithms that translate reflectance data into estimates of plant production and ultimately to determine carbon flux.

"The job is really the development of those algorithms," says Turner. The study is seeking optimal approaches to simulating plant processes using satellite data and subsequently validating those estimates.

Turner says this cutting-edge work has only become possible in recent times because of increases in computer power. "It's very computationally intensive," he says. "We're doing it at increasingly finer spatial resolutions because of the gains in computational power."

The dimensional capabilities of Turner's models increase as NASA adds sensors that collect different types of data. "For example, we're able to get at vegetation characteristics like stand age and tree height, all of which can feed into the model," he says. "So my job is getting easier in the sense that we now have more information available to bring into the model at each grid cell."

Long-term, Turner hopes to add measurement and modeling of decomposition to the field sites, thus enabling him to evaluate the full carbon cycle.

# On the Shoulders of Giants

by Marie Oliver

## A tradition of mycology studies at OSU



*Edge of Burn, 2002 Biscuit Fire at research site; Typical Douglas-fir ectomycorrhiza (photos by D. Luoma)*



*Dan Luoma  
Efrén Cázares-Gonzalez*

The history of mycology on campus goes back at least to the early 1900s, when botanist Helen Gilkey's pioneering

studies brought national recognition to Oregon Agricultural College as the center for research on fungi that grow below the ground. Other accomplished mycologists such as S.M. Zeller, Frank Sipe, and William Dennison, and currently James Trappe and Joseph Spatafora, have added depth and scope to that research.

**Dan Luoma and Efrén Cázares-Gonzalez**, both assistant professors in Forest Science who did doctoral research with Professor Trappe, carry on this rich legacy. They're doing their part to expand scientific knowledge about the Northwest's abundant and diverse fungi. Both focus their research on beneficial fungi, particularly in the area of forest mycology.

The number of mycologists is small compared to other branches of plant science, which means that mycological unknowns outweigh

the knowns. Out of more than 1.5 million species of fungi worldwide, only approximately 200,000 have been classified. That means most studies in field ecology of fungi involve a taxonomic component, and Cázares-Gonzalez is part of a massive effort to broaden the number of described species.

"Any time we try to get into the endeavor of doing a project, some way or another it involves the taxonomy of the fungi," says Cázares-Gonzalez. "We have to sit down at the microscope and put a name on it, then measure whatever ecological parameters we're interested in. Every collection reflects 6 to 8 hours of lab work."

Mushrooms are among the most difficult species to classify. The majority of fungi with fruiting bodies above ground appear sporadically for a few days at certain times of the year when the conditions are just right.

"How do you observe that in miles and miles of forest? It's a challenge," he says. "Lots of sampling is involved, and there are limitations on what you can say.



*American Matsutake mushroom (photo by D. Luoma)*



Rick Abbott marking flags for the two matsutake in front, (photo by D. Luoma)

Sometimes it can take days, weeks, or months to put a name on it.” The names are based on what shows up above the ground.

Cázares-Gonzalez is currently the principle investigator on a study in Crater Lake National Park that focuses on the impact of human disturbance on all types of beneficial mycorrhizal fungi. The group is cataloging species and comparing those in disturbed areas, such as campgrounds, with those in undisturbed areas. They’re also studying the influence of fire disturbance. He is involved in a similar study at Mt. Rainier.

Luoma says it’s a lot easier to classify the below-ground, or truffle-forming varieties, and that’s been the primary focus of his research. “Partly because it’s a more manageable group to deal with, we feel like we can get a good handle on what’s going on,” he says. “We can now go back and look at the data accumulated over decades and see patterns. Certain truffles seem to be more prevalent at certain times of the year.”

However, for the past ten years, Luoma’s group has also studied the post-harvest effects of various mushroom picking methods and is getting ready to publish the results of those studies. Research revealed that, because mycorrhizae live in symbiosis with trees, heavily disturbing the trees’ rooting zone decreases subsequent mushroom production.

In addition to providing valuable information for establishing eco-friendly harvesting methods, results of this research have implications for logging methods and silvicultural prescriptions in the forest. “We’ve measured the degree to which leaving living trees on a logging site can mitigate some of the impacts to the mycorrhizal community in the soil,” says Luoma. “One of my educational messages has been how the soil is a living system unto itself and how everything above ground depends on that soil productivity. It’s taken for granted by most people.”

The 2002 Biscuit Fire burned forest areas that Luoma’s group had been studying since 1992, providing an opportunity to research the effects of fire on mycorrhizal fungi. They have found mycorrhizae that historically used only fir as a symbiotic host attached to the roots of hardwoods such as madrone and tanoak. “We’re thinking there’s an opportunity to explore the possibility that these hardwoods have been serving as a biological refuge for these fungi,” says Luoma. “This kind of interaction has never been considered among the complex of interactions in the forest.” Such a situation would undoubtedly have profound implications regarding the resilience of forest soils.

## Awarding-winning Graduate Student: Holly Barnard

**Holly Barnard**, PhD student in Forest Science has received two prestigious awards this year in recognition of her academic excellence and potential for future achievement. She has been selected to participate in a national mentorship program called MS PHDs (Minorities Striving and Pursuing Higher Degrees of Success in Earth System Science). The award will allow her to attend the annual meeting of the American Geophysical Union in December; visit NASA and universities in the San Francisco area, and spend some time working at the National Academy of Sciences. Holly also received one of the highly competitive 2005 Ford Foundation Diversity Fellowships for pre-doctoral students. The three-year fellowship provides an annual stipend of \$17,000 as well as \$5,000 to the student’s school, to be put toward tuition and fees.

Holly’s PhD research is in the field of ecohydrology, a hybrid of ecology and hydrology focusing on the interdependence of vegetation and hydrologic processes. Her studies will determine how vegetation processes, especially transpiration, affect water flow dynamics and pathways in hill slopes. Conversely, she’ll be looking at how water flow paths affect vegetation function on a landscape scale. Research of this type is helping water systems managers to understand the larger ecosystem impacts of distribution practices, promoting more sustainable development and management of water resources.

“OSU is an ideal place to carry out these studies,” Holly says. “The HJ Andrews LTER (Long Term Ecological Research)



site offers incomparable site characteristics, facilities, access to decades of useful and valuable data, and a welcoming, interdisciplinary atmosphere.” OSU is considered the nation’s premier institution for forest ecology research, and is emerging as a leader in hydrological research. The University has identified water resources as one of its key initiatives, and has committed to reinforcing its already strong interdisciplinary faculty and facilities.

OSU has also made it a high priority to enhance diversity, as one of five core values in the University’s strategic plan. In support of this, Holly is looking into re-invigorating the Black Graduate Students’ Association. The Ford Foundation offers a wealth of resources to its Diversity Fellowship recipients, including career advancement workshops, proposal, grant-writing, and research funding advice, through a network of peers and “elders.” By building connections among minority students here on campus, Holly could share these resources and inspire others to use diversity for enriching the education of all students.

*This article has been excerpted from an article written by Maia Fischler for the Fall 2005 OSU Graduate School Newsletter, Open Minds ([http://oregonstate.edu/dept/grad\\_school/gradNewsletter/Holly\\_Barnard.html](http://oregonstate.edu/dept/grad_school/gradNewsletter/Holly_Barnard.html)).*

### Successful Wood Science and Engineering Graduate Students— Congratulations!

Yuan Liu, PhD

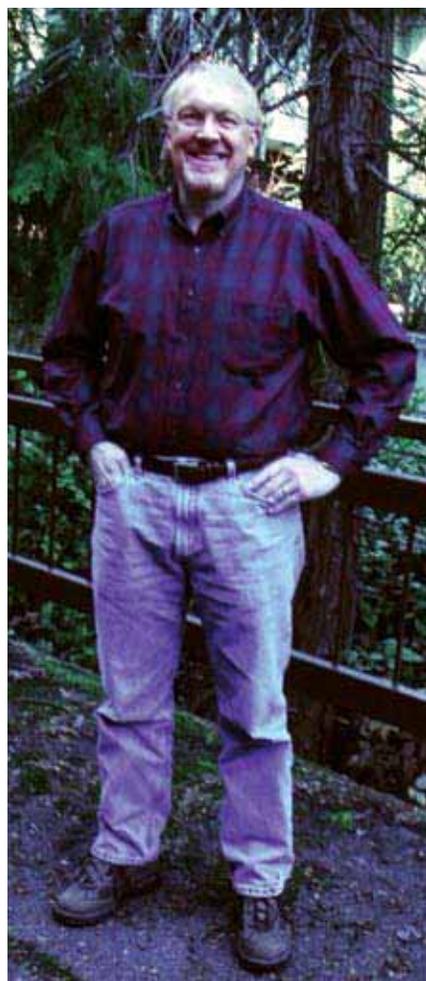
“Formaldehyde-free Wood Adhesives from Soybean Protein and Lignin: Development and Characterization”

Craig Basta, MS

“Characterizing Perpendicular to Grain Compression in Construction Applications”

Heidi Renninger, MS

“Effects of Release from Suppression of Hydraulic Architecture, Photosynthetic Capacity, and Functional Wood Characteristics in Douglas-fir and Western Hemlock”



George Swanson

## Recruiting Success

By Michael Fuller

### George Swanson’s energetic strategy includes travel, candor, and a little candy

**D**o you know five good reasons why your child should major in Forestry at OSU? **George Swanson** does. And the odds are, he’s already talked to your children about them.

In his capacity as student recruiter for the OSU College of Forestry, Swanson travels Oregon speaking to students about the importance of a college education and what OSU forestry and wood science programs have to offer them. Swanson meets with over six thousand high school students per year. Equipped with statistics, antidotes, and a box of Tootsie Pops that he exchanges with students for completed response cards; Swanson’s impact on the College of Forestry is evident in the recruitment numbers.

Since changing the recruitment strategy to include Swanson’s frequent high school presentations, Wood Science and Technology enrollment has risen more than two-hundred percent. The number of first-year freshman in the College of Forestry has more than doubled. From admitting twenty-eight new students in 2001, with Swanson’s help, the College of Forestry recently admitted sixty-eight new incoming students this fall.

“Before I took over the Wood Science and Technology position in 2001, the job detail didn’t really involve leaving the office. I knew if we were to recruit the number of students we wanted, traveling to high schools would be an integral part in our success,” says Swanson.

Swanson’s unique approach to outreach is more than just a catchy presentation. He talks with high school students candidly, speaking on topics ranging from moral responsibility and the job market, to dispelling assumptions about what a forestry degree means in Oregon’s economic climate.

“Many students I talk to think a fifty-thousand dollar a year job is just waiting for them when they graduate high school. The truth of the matter is, today’s typical mill manager is college educated,” says Swanson.

While Swanson’s primary goal is to sell the advantages of OSU’s forestry and wood science programs to incoming students, he has also had to convince high school educators and administrators of the stability and profitability of a job in forestry. “Fifteen years ago it was typical for a mill to produce 35,000 to 100,000 board feet per shift. Now, thanks to technological advances across the industry, these same mills are producing anywhere from 25,000 to 100,000 board feet per hour, hands free!”

As the forest industry as a whole becomes less labor intensive and more technology driven, Swanson predicts an even larger demand for a skilled and college-educated workforce in the future. A large part of Swanson’s job is to change the public opinion of forestry and wood science. “Most of the communities I visit were originally populated as ‘mill towns.’ Because many of the mills have since gone out of business, there is a lasting false attitude toward careers in the wood sciences.”

Swanson points out that the Pacific Northwest has a large portion of the United States’ softwood supply and that in today’s economy, six-figure jobs are available for those with college educations and knowledge of the industry. “I try to be as upfront with the kids as I can,” says Swanson. “But a lot of these kids think they can earn a 2.4 GPA in high school and walk right into Stanford.”

Swanson says unrealistic expectations of the job market lead to many students in rural areas decision to skip college. A decision, he says, is unfortunate. “The skills your parents got jobs with will not get you the same jobs,” Swanson finds himself repeating in his presentations.

Although recruiting for the College at OSU is Swanson's primary goal, he also talks about alternatives to four-year universities with his students. "I'll talk to the kids about technical schools, community college, and college life in general. So many of these students think college just means beer and football," says Swanson. Although he certainly includes the social aspects of college in his presentations, Swanson also wants prospective students to realize that there is a strong educational value to college that television shows and magazine articles often times overlook.

Swanson was hired to recruit for Wood Science and Engineering at OSU in 2001 but in 2003 his job expanded to include recruiting for all of the College's undergraduate programs. His career background includes over 30 years' experience as a fifth grade teacher in Corvallis, as well as several years of corporate experience at HP as an employment analyst and CH2M Hill as a chemist.

--- Michael Fuller is a senior majoring in Philosophy

### Students Volunteer at Habitat House



On Saturday, October 15, the OSU Student Chapter of the Forest Products Society sponsored a volunteer effort to help the Albany Habitat for Humanity International project with one of the four houses it currently has under construction.

Habitat is a nonprofit organization dedicated to building simple, decent, affordable houses in partnership with those who lack adequate shelter. According to the Habitat website, "Since 1976, Habitat has built more than 175,000 houses worldwide, providing shelter for nearly 900,000 people. Now at work in 100 countries, Habitat is building a house every 26 minutes. By 2005, Habitat houses will be sheltering 1 million people. Habitat houses are purchased by the homeowner families, who also invest a significant amount of their time in the construction."

Students helping this worthwhile effort were undergraduates **Chris Coleman, John Henricks, Stefanie Larew, Anica Mercado, R.D. Mosier, Andrew Schliebe,** and **Nick Watkins**, as well as FPS faculty advisor **Jim Funck**. According to Jim, "No fingers were lost, but a few suffered minor damage from unexpected impacts with heavy metal objects." Nevertheless, the word from students is that a good time—for a good cause—was had by all!



# Testing Utility Pole Strength and Durability

By Marie Oliver

## Research seeks to answer questions about the effect of through-boring on pole properties

**B**eginning in the late 1800s, utility companies primarily used naturally durable wood species such as American chestnut or cedar to produce utility poles. Over time, however, the availability of these species significantly decreased, forcing many utilities to substitute less durable species such as pine or Douglas-fir that needed to be treated with preservatives to prolong their serviceability.

These treatment processes worked well on some poles, but producers were unable to completely treat species with thinner sapwood such as Douglas-fir. Without the deeper treatment, Douglas-fir poles were more susceptible to the development of internal decay, which shortened their service life and threatened the markets for western wood species.

The need to improve pole performance encouraged a series of research projects at OSU and a number of local utilities, such as Bonneville Power Administration, Pacific Power, and Portland General Electric, to improve treatment. The result was the introduction of through-boring, a pretreatment process of drilling small holes through the pole in a zone a few feet above and below the groundline. At present, the holes are hand-drilled, making it a labor intensive process. However, the process has largely eliminated internal decay at the groundline.

Recently, several incidences of through-bored poles failing at the groundline during storms raised questions about how through-boring affects pole strength. Concurrently, the industry is becoming interested in automating the through-boring process. Members of the Western Wood Preservers' Institute supported research at OSU to answer questions about the effect of through-boring on pole properties and to develop information to justify the high cost of building equipment to automate the process.

"We already knew that through-boring increases the preservative penetration and creates a zone that's 100 percent protected, as opposed to just treating the outside of the pole," says **Lori Elkins**, who graduated from OSU in 2005 with a dual master's degree in wood science and civil engineering. "However, we didn't know a lot about what it was doing to the strength of the pole; it hadn't been well researched." There were also questions about what size hole would be most efficient in terms of strength reduction and preservative penetration.

As a graduate student, Elkins received funding from the Utility Pole Research Cooperative—a consortium of electric utilities, chemical companies, wood treaters, and inspection agencies—to research the issue. She began her study by doing computer modeling to investigate the effect of certain parameters on strength. "Through the modeling, we saw that hole spacing was not the critical issue," says Elkins. It was where the holes were located with respect to the pole cross-section. Minimum edge distances for hole locations needed to be established to keep holes out of the higher stressed regions of the pole.

The modeling for hole size was inconclusive. Therefore, to test the effect of hole size on the bending strength of the pole, 140 green Douglas-fir poles were brought to the OSU campus. Five groups of 28 poles each were tested: a control group plus four other groups with holes drilled at one-quarter, one-half, three-quarters, and one inch, respectively. "We used standard spacing based on preservative penetration and flow," said Elkins. "We then compared the four different hole sizes to a control pole to determine what kind of strength loss we had for each pole at each hole size."

The data is still being analyzed and results of the tests will be released to members of the Utility Pole Cooperative before being made public. Results will be submitted to



Marie Oliver

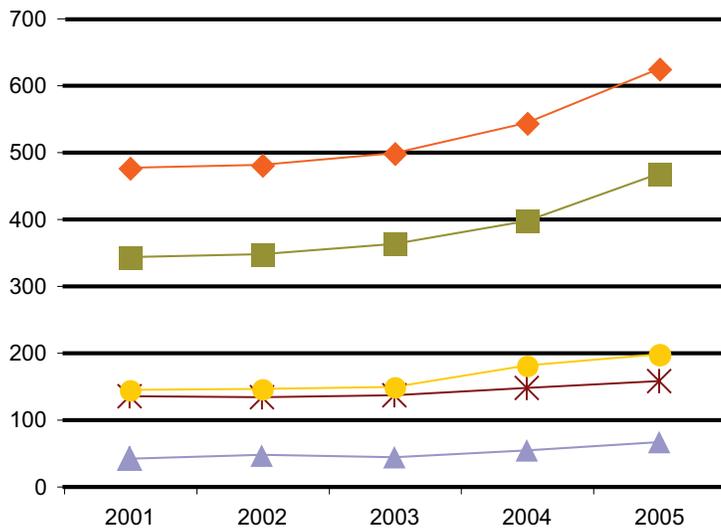
Lori Elkins

the American National Standards Institute (ANSI) for possible inclusion in future wood pole specifications. Committee members for ANSI visited OSU during the testing, and Elkins said they were impressed. The nonstandard testing method, designed by Milo Clauson, will be further researched for possible inclusion in the standards.

Elkins said the test results were meaningful and the data will show some trends that will help those in industry make more well-informed decisions for developing a through-boring pattern and account for any potential loss of strength.

Elkins accepted a position as research assistant at the OSU College of Engineering under Dr. Christopher Higgins upon completion of her master's degree.

### Forestry Enrollment “Winning Streak” Continues



- ◆ Total Student Enrollment
- Undergraduates
- ✕ Graduates
- Women
- ▲ Students of Color

Defying the National trend, enrollment in the College of Forestry increased yet again this year —up 15% from last year and a whopping 31% compared with 2001! Enrollment is at its highest level since 1981.

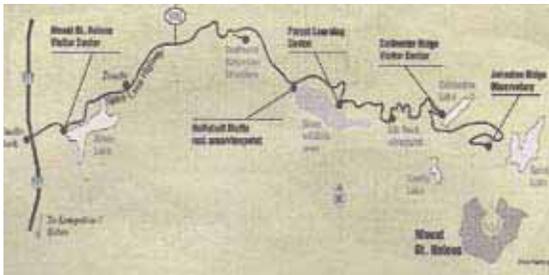
Combined efforts continue to result in record numbers of students, says **Debbie Bird McCubbin**, who leads the undergraduate recruiting team as Director of Student Services and Head Advisor. Other team members include **Clay Torset**, Student Services Advisor; **Alex Beck**, Student Services Administrative Assistant; **José Dieguez**, Latinos in Forestry Program; **David Stemper**, Pre-College Programs, **George Swanson**, Student Recruiter; and student employees **Angie Hoffard** (FM) and **Amanda Briese** (FE). The team received a powerful assist from the Forestry Media Center with the release of the new recruiting DVD this fall (see related story on page 27).

### Annual Ring and Orientation



# Mt Saint Helens Field Trip

By Matt Thompson



Aside from the occasional shared moment at the copy machine or College-sponsored coffee break, it is not often that Forest Engineering undergraduates, graduate students and faculty get the chance to intermingle as a group. Even rarer is the opportunity to do so outside the halls of Peavy Hall and in the forest.

Fortunately, the FE department was able to enjoy such an opportunity during a field trip this spring term. On May 12-14th, 2005, a group of over 40 undergraduates, graduate students and faculty embarked on a trip through Oregon and Washington to witness the application of forest engineering principles in the real world. While every opportunity to witness active forest operations and gain practical knowledge is valuable to a student, this trip was especially beneficial because of the in-depth nature of the field visits and extended interaction with forest engineering professionals. Additionally, the trip provided a unique and special opportunity for students and faculty to interact, and foster a sense of community within the Forest Engineering Department.

Organization for the “community building” field trip was spearheaded by Lematta Professor of Forest Engineering, **Loren Kellogg**. Department Head **Steve Tesch** was able to allocate funds for the trip by using a portion of the generous donations of the Konnie family.

The 3-day trip brought us to a variety of interesting and educational places. First, we visited Columbia Helicopters in Aurora, Oregon. **Max Merlich**, VP of Forest Operations, an OSU Forest Engineering alumni, provided an engaging and informative presentation on helicopter logging. Max also discussed tactical and operational planning for harvest units, and stressed the importance of performing rigorous economic analysis in the planning phase. Following the presentation we were given a tour of the facility, where Columbia performs the majority of their fleet maintenance.



We next visited Weyerhaeuser-owned land outside of Longview, WA. **Bob Keller** and **Marc Cannon**, both OSU Forest Engineering alumni, gave their fellow Beavers a great introduction to industrial forest operations and forest engineering.

May 13th we first met at Weyerhaeuser's Longview office where Marc and Bob gave presentations about the work they do for the company. Their discussions touched on the range of issues a forest engineer must deal with, including harvest unit planning, contract administration, road and transportation planning, and meeting forest practice regulations.

After the morning presentations we ventured into the field, where we witnessed active logging operations and road construction, and visited numerous bridge and culvert structures. The first operation we visited paired a Madill 120 swing yarder with a mechanical slack-pulling carriage in a running skyline, whole-tree yarding system. The second operation was a "Grabinski" system using a Madill 171 tower. Marc then took the group to several culvert sites and one bridge to discuss road construction and maintenance, and road drainage and environmental issues.

That night the group enjoyed a great social event: a BBQ hosted by Bob Keller. Students and faculty alike were able to get to know one another better, and to discuss what they had learned from the day's events in a relaxed atmosphere. By the end of the night, students were making smores and laughing by the fire. We returned to our hotel rooms full and content, anxious to start another interesting day.

On May 14th we visited a ground-based commercial thin of 24 year-old Douglas fir. Specifically we witnessed a cut-to-length operation using a forwarder paired with a single-grip harvester. Weyerhaeuser currently has thousands of acres in need of thinning, as trees planted on land impacted by the Mt. St. Helens eruption are now of thinning age. Even with the presence of high quantities of volcanic ash in the soil, the trees were already large enough to be merchantable, a testament to Weyerhaeuser's active management.

After leaving the forest we visited Weyerhaeuser's Forest Learning Center and then Mount St. Helens National Monument. There, students gained an appreciation for the massive scale of the explosion, and the need for responsible and capable natural resources management.

It was very encouraging and motivating to see OSU Forest Engineering graduates working in important, challenging positions. Students returned from the trip with a sense of confidence that their education will serve them well in the future. Furthermore, everyone enjoyed the chance to get to know each other a little better. It was heartening to see students of various ages and backgrounds interact with each other and with faculty. The trip was a complete success.

—Matt Thompson is a graduate student in Forest Engineering

## Congratulations, Gary! COF Athlete Shines at World Championships

College of Forestry senior Gary Williamson (WSE), of Elkton, Oregon, finished second overall at the collegiate level in logging sports at the 2005 STIHL® Collegiate Series championship competition. Competitors from over 30 colleges and universities in North America participated in the preliminary competitions in March, and the top six athletes were invited to compete in the championship competition in August. The collegiate championship was held during the professional STIHL® TIMBERSPORTS® Series world competition at Lake Charles, Louisiana.



In the STIHL® Collegiate Series, an athlete's ability is tested in three disciplines: the stock saw, single buck, and underhand chop. Gary said that he felt very confident in all three disciplines because of his summer training. "I tried to train in the heat of the day in Bend in an effort to prepare for competing in really hot conditions."

He flew down to Louisiana on August 24th with coach/professional competitor Mike Forrester to adapt to the climate change before the competition. Even so, he said, "It was the most miserable weather I've ever been in! Breathing was like carrying around a sack of bricks. It felt like you never knew when you were going to get another breath. It was so humid, I was soaked from just standing outside!"

Despite the weather, Gary had a great series. He finished third in the underhand chop, third in the single buck, and second in the stock saw. He was the only competitor to stay with the first place winner Will Roberts from Groton, New York. According to Gary, "Will is a great competitor and a great friend. The East Coast had a lot of really good competitors and I'm looking forward seeing the competition next year."

Gary was the youngest collegiate competitor there and the only one who has the opportunity to qualify again to compete next year. And, according to Roger Phelps, coordinator of STIHL® TIMBERSPORTS®, "It would be a really good idea for Gary to qualify again and compete as a chosen favorite to win."

Adding to an eventful weekend, Gary flew out of Lake Charles after the competition on the last plane before Hurricane Katrina hit. The hurricane was just on the outskirts of Lake Charles as the plane took off. "At the airport," Gary said, "I only felt a little bit of wind and a lot of rain, didn't think anything of it until I watched the news in Houston, Texas—I figured I was pretty lucky!"

In addition to a trophy and personal prizes from STIHL®, Gary received a cash award of \$1000, to be donated to the department or program of his choice. Gary chose the OSU Forestry Club as the recipient. Gary is the president of the Forestry Club and he received an internship with Jeld-Wen over the summer.

## Field School

### Real-World Experience Adds to Curriculum



Mark Reed

Field School provides an opportunity for students seeking a degree in Forest Recreation Resources to gain experiential education that differs somewhat from their summer work experience.

Designed as a required course for juniors and seniors, Field School is focused on current management practices in park and recreation areas and is usually hosted by an agency such as the U.S. Forest Service. The

agency makes staff available to the students for guidance during their five-day stay. In exchange, students usually provide some sort of service for the agency such as trail renovation, ecological restoration, or visitor surveys.

“Most of our students have some work experience already by the time they come to Field School,” says **Mark Reed**, the Forest Resources instructor who is responsible for the program. Field school provides an opportunity for students to study ecological zones that differ from the western Cascades of Oregon and to become familiar with recreation management issues associated with those areas, he says. Since Reed began teaching the course five years ago, Field School has changed locations twice. In the late 1990s, it was held at Grand Staircase-Escalante National Monument in Utah, which has the largest unroaded area in the lower 48 states and features wild back country noted for spectacular sandstone arches and canyons. It provided a unique study opportunity for students.

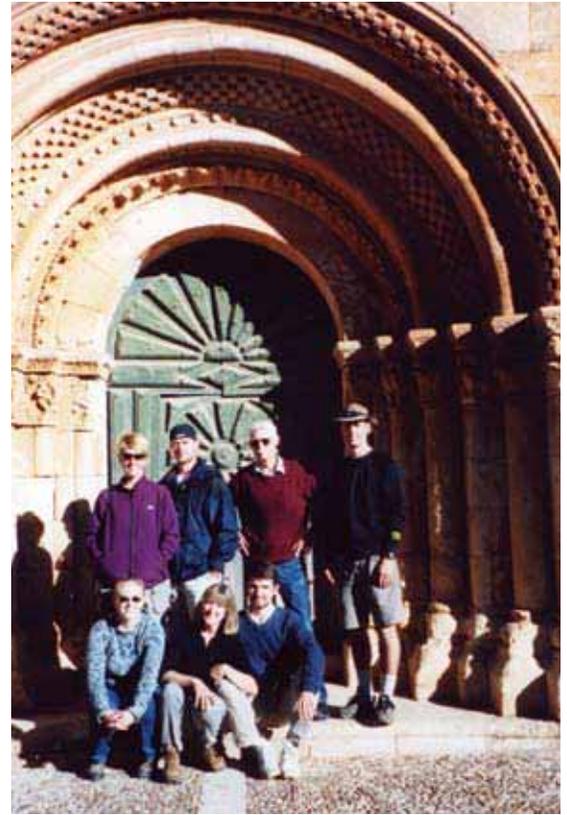
“It’s a new monument, so their management plan was still somewhat



tentative,” says Reed. “It was a great opportunity for students to have some input in forming the park’s plan.”

After five years at Grand Staircase-Escalante, the course moved to the Deschutes/Ochocho National Forest Central Oregon. Because it is an intensively visited area, the recreational resources in the Deschutes/Ochocho forests are under considerable pressure, making it a real challenge for land managers. The management team was particularly interested in working with OSU. “They kind of campaigned to have field school hosted there,” says Reed, “and they made a large number of their specialists available to work with us, so we saw it as a real opportunity to have extensive interaction with some of the most highly qualified public land managers in the country.” Students have been doing backcountry restoration work there during Field School for the past three years.





However, Central Oregon is a little too close to home for many students, so in 2005 Field School was moved to Glacier National Park in Montana. At Glacier, park staff oriented students to the park's resources, history, and management issues, and then students performed duties that helped them more fully explore some of the management issues such as fire ecology, vegetation management, back country/wilderness management, law enforcement, wildlife/visitor interactions, and wildlife management.

Glacier's unique aspects include large populations of what Reed refers to as "charismatic megafauna"—large animals that are particularly interesting to park visitors, such as moose, elk, grizzly bears, wolves, big-horned sheep, and mountain goats. "Plus, it has really dramatic mountain scenery, so that makes it one of the most popular parks in the country, with some of the most intense management issues," he says.

Another goal of Field School is to help form a stronger bond among the cohort of students who will graduate together. "It's a small professional field and they'll be interacting with one another throughout their careers, so we feel that building up that bond, that feeling of commonality, through this course is a helpful way help to prepare them for their professional lives."

In addition to the required Field School course, other optional field studies programs are available to students, such as the Wallowa Resources Field Program held in the Wallowa Whitman National Forest. Students can spend five weeks taking a three-course program sponsored by Wallowa Resources. Base camp is a historic Wallowa County ranch managed by the Nature Conservancy. The hands-on course provides an opportunity to study community-based forestry and natural resource management in a resource-dependent Oregon community that is striving to sustainably manage its ecosystems, including its forests. Instructors include experience resource and conservation professionals, land managers, and scientists.





David Zabler, Jeff Hino, and Debbie Bird McCubbin



## Behind the Scenes of the New COF Recruiting DVD

by Jeff Hino

When the College of Forestry Director of Student Services, **Debbie Bird McCubbin**, approached the Forestry Media Center (FMC) with an idea for producing an interactive recruiting DVD, we jumped at the chance. Little did we know that this would spark one of the most complex, challenging projects the FMC has ever undertaken.

This is not just another careers in forestry documentary. We decided early on to emphasize the College of Forestry experience as seen through the eyes of students. So our cameras followed four of our undergraduates as they worked their way through a “typical day” at OSU. This included everything from going to classes, taking field trips, studying, working out, eating hamburgers, and just plain having fun. These students are the ideal COF “marketers”: articulate and emphatic supporters of the program who send a clear and compelling message to a young audience in their own words.

It was obvious from our focus groups and research that students resonated with three powerful components of forestry: the chance to work outdoors, to use high technology, and to make a difference in the world. These messages play a big part in all the stories that weave through the DVD.

As is often the case with large projects, when you look at them in reverse, you can't for the life of you imagine how you ever got through it all. But the process was fascinating—traveling to meet forestry alums, interviewing with dozens of forestry folks, and having the opportunity to put a powerful message out to thousands of potential forestry students.

## GIS Day — A Popular Event

International GIS Day 2005 brought more than 400 middle school students along with parents and teachers to campus for a day of fun-filled, hands-on learning. Students navigated across campus with a GPS (global positioning system) devices, participated in games and demonstrations on GIS (geographic information systems) techniques, watched videos, and practiced their mapping skills with traditional compasses and new high-tech gadgets. The day finished up at Richardson Hall with posters, presentations, and treats.

Ellie Van Devellder gives GIS Day a “thumbs up”.



### DVD Production Factoids

The FMC shot over 30 hours of videotape for the production. • The DVD contains over 75 minutes of edited video programming • The FMC invested over 850 hours in production of the DVD • The DVD contains more than 20 interviews with undergraduate and graduate students, alumni, faculty, and industry representatives • Production travel took us to Washington, D.C., South Africa and Argentina (not to mention Philomath!) • The DVD contains an interactive link to a customized web site to provide visitors with additional program information on programs, requirements, procedures, etc. • The College produced 5,000 copies of the DVD for distribution • The DVD is accompanied by an attractive 26-page booklet that provides expanded liner notes about programs and opportunities at the College • The DVD has a secret ‘Easter egg’\* — a forestry music video that only plays if you push the right combination of buttons on your DVD player.

\*Hint: It involves the spinning Earth logo.

Too Good to Hold!

We plan to continue sending postcards out in the spring and compiling the special summer "Alumni News" issue of *Focus*. But since we also appreciate hearing from alums throughout the year, we've decided to add a new, small section for late-breaking news. We're glad to share your news and photos anytime of year! When you write, please be sure to include your class year and major, and, if you send your address, please let us know whether you would like it to be published in the *Focus*.

Class Notes

**Hal Goodyear, 1942 Forest Management, 1948 Forest Engineering** "Good old T.J.'s words of wisdom back in the early '40s ('Buy second growth') have made life easier in the "golden years." Bought some, sold some, kept some that more than pays its way and keeps me going strong."

**Tony Van Vliet, 1952, 1958 Wood Science Technology** "Finished my term as Chairman of the Board of Oregon Public Broadcasting—still on the board. Started term on State Board of Higher Education. Haven't learned how to retire—need lessons. Most important, however, are our great times with our four children (all in Oregon) and seven grandchildren." Address: tlvan@pioneer.net

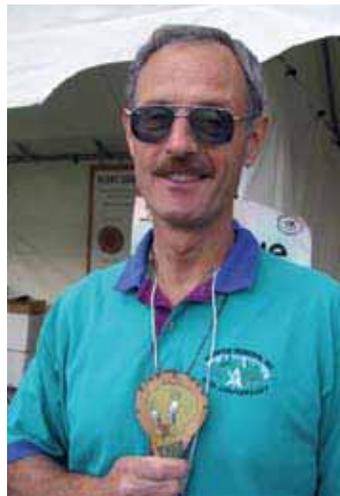
**Phil Smith, 1953 Forest Management** "For some reason I ended up in Canada about 35 years ago. Worked for several different outfits, logging superintendent, woods manager, etc. Ran a logging camp in north central B.C. for a couple of years. Woke up one winter morning and it was minus 56 degrees F. Needless to say, we did not work that day. Retired to Vancouver Island. Bought an old barn of a house. Trying now to get it livable."

**Logan Norris, 1961 Forest Management, 1964 Forest Science** "Life has changed since retiring as a professor from the College in 2001. I completed my last year of service as Chair of the Oregon salmon recovery science team, and am largely finished with consulting on herbicide risk assessments. Betty and I have easily slipped into the retirement mode. There is more fishing (never enough), travel to see children, and I have built two cedar-strip canoes. Let me know when you are in town so we can catch up." Address: 4045 NW Dale Pl., Corvallis, OR 97330

**Lea Asman Betty, 2001 Natural Resources** "I finally have a permanent job. I'm the Director Assistant at Crook County Parks and Rec. I'm giving programs and doing admin. work. I just got married in October to Kyle Betty (Texas A & M, 1999), who's a Hotshot with the Forest Service. We're living in Prineville with our dog, Kneli." Address: P.O. Box 994, Prineville, OR 97754

Congratulations to our Award-winning Alums!

College of Forestry alums **Richard Powell, 1967 Forest Management**, and **Dan Newton, 1979 Forest Management**, received national awards from the Society of American Foresters this year. One of eight national awards announced by SAF. The winners will be recognized at a special ceremony to be held at the 2005 SAF National Convention, October 19-23, in Fort Worth, Texas.



Richard Powell

Powell received the Outstanding Communicator Award, which recognizes an SAF member who displays the ability, talent, and skill to lead innovative and exemplary communications initiatives and programs that increase the general public's understanding of forestry and natural resources at the local, regional, or national level.

In his position as public outreach forester for Starker Forests Inc., of Corvallis, Oregon, Powell works to educate different segments of the public about forestry. To accomplish this, he has created and implemented several well-received and successful programs for school children, teachers, and other adults that teach his audiences about the work that foresters do and why forest management is important for both the environment and society.

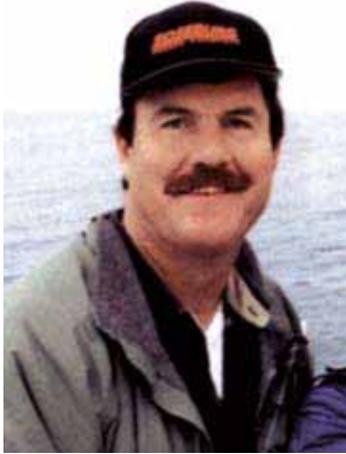
In addition to his work at Starker, Powell has organized the unique event, "Kids Day for Conservation," a free, day-long, family-oriented event focusing on natural resources education. More than 40 natural resources-oriented organizations, including environmental groups, state and federal agencies, and others participated in the event and sponsored a variety of interactive, hands-on activities. Best of all, the September 17th's Kids Day for Conservation attracted more than 1300 children and their families.

He has also helped to develop an annual, "Tree Planting Day," a free event developed for children who want to plant trees. With the help of parents, local Boy Scouts, college and high school forestry students, and Starker staff, over 600 people participate. The next Tree Planting Day will be held in February, 2006.

Powell is an active member of both the Marys Peak Chapter of the Oregon SAF and the Oregon Forest Resources Institute (OFRI) Forestry Educators Group. He also is regarded as a fixture on the staff of the Oregon Forest Institute for Teachers and a long-time volunteer with scout groups pursuing forestry merit badges. He joined SAF in 1973.

Dan Newton, son of Professor **Mike Newton** (Forest Science) was honored with a Presidential Field Forester Award, given to recognize foresters who have demonstrated excellence in forest management through professional contributions, innovative methods, and a demonstrated commitment to the profession of forestry.

Newton is the land and timber manager for Roseburg Forest Products in Roseburg, Oregon, where he is responsible for the management of approximately 450,000 acres. He is a strong advocate for intensive management and is credited with helping Roseburg reap huge ben-



Dan Newton

efits by instituting a tree-growing contest wherein the Roseburg silvicultural staff achieved a 20 percent increase in tree volume after 2 growing seasons.

In addition to his work with Roseburg, Newton was a key player on the Oregon Forest Practices Advisory Committee, which reviewed the Oregon Forest Practices Act and then reported its recommendations to the Oregon Board of Forestry. He is an active member of the Douglas Small Woodlands Association and of the local chapter of the Oregon Small Woodlands Association, an organization for which he has served on the Board of Directors for more than 10 years, much of that time as president or vice-president. In recognition for his service, the Oregon Small Woodland Association has awarded him with both its "Distinguished Achiever Award" and "Leadership Award." Newton joined SAF in 1980.

**CALLING  
ALL  
FERNHOPPERS**



The 74th Annual Fernhopper Day Celebration and College Centennial Kick-off will be May 20, 2006. Please join us!



## Ten Eycks' dedication to education benefits future forest engineers

by Sara Zaske

**Roswell Ten Eyck always knew how to inspire ingenuity among his fellow forest engineers**

After his retirement to Hawaii, the dedicated alumnus would visit the campus of his alma mater carrying a bag full of unshelled macadamia nuts, a gift that presented a challenge to open. The most inventive forest engineers found that the hinges of the heavy doors in Peavy Hall were the most efficient nutcrackers.

**Roswell Ten Eyck's** impact on the forest engineering department extends well-beyond his Hawaiian gifts. In 1998, he started a scholarship for forest engineering students in honor of his late wife, **Eula**. This year, he made an additional gift of \$100,000 to expand the scholarship's endowment to continue helping students far into the future. Today, more than 23 students have benefited from the Eula M. Ten Eyck Memorial Scholarship in forest engineering.

"This gift by Ross Ten Eyck on behalf of his wife is a testament to both of their commitments to provide educational opportunities for students," said Steve Tesch, Forest Engineering Department Head.

The scholarship was a welcome surprise for junior William Hoskins, who was happy to learn that the Ten Eycks hailed from his hometown of Sandy, Oregon. "Certainly the monetary support helps out a lot, and being from a small community, I had no idea there would be local support for scholarships," he said. "It was a real morale boost for me that people from Sandy cared about my education."

Eula Ten Eyck was a lifetime supporter of education, a passion her husband shares. Eula

taught grade school for many years, starting even before she earned her college degree by teaching in rural school houses in Kansas. She moved to Oregon in 1951, where she taught in Clackamas County schools and met Roswell Ten Eyck.

After graduating from OSU in 1950, Roswell Ten Eyck worked as a forestry consultant for 12 years and later pursued a career with the U.S. Forest Service. He also owned a woodland property in Sandy where the Ten Eycks lived until their retirement in 1982. Before her passing in 1991, Eula Ten Eyck asked her husband to ensure that her estate went to benefit education.

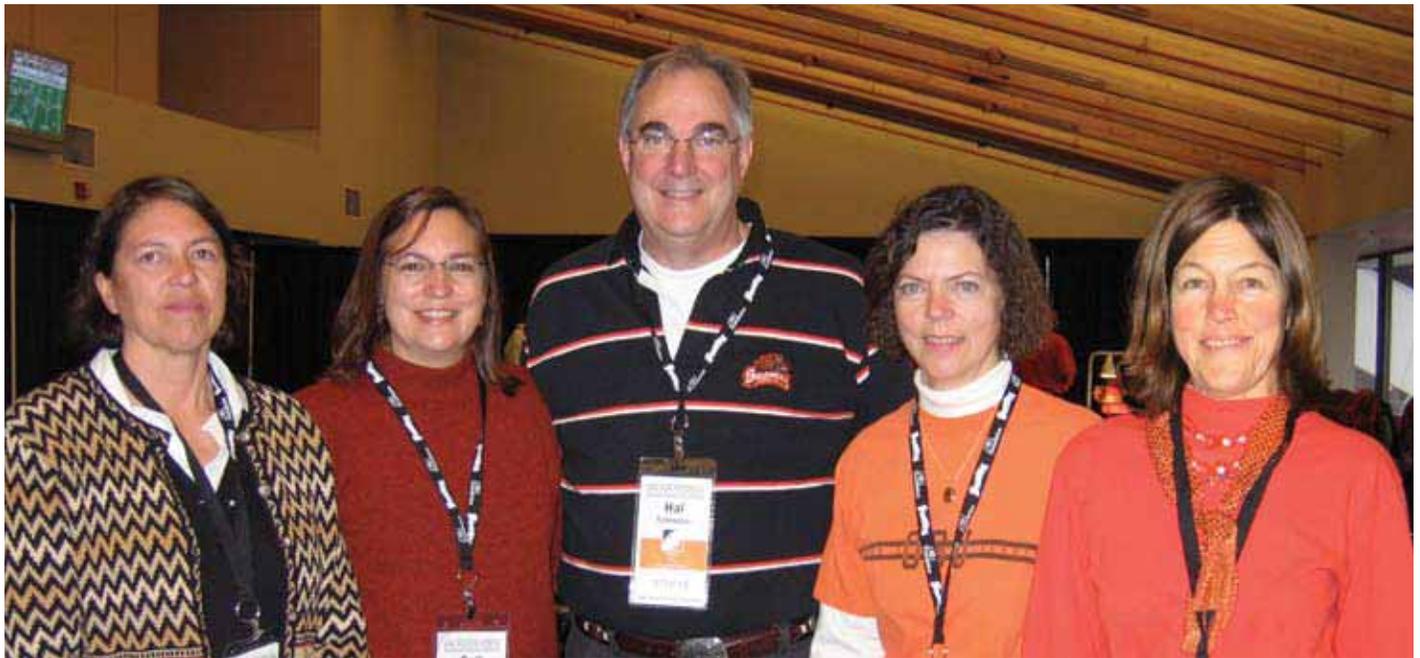
With enrollment at the College of Forestry rising 15 percent this year, the generosity of people like the Ten Eycks is especially important, said Tesch.

"The cost of a college education has been rising rapidly and many students are having a tough time paying for their tuition. Our forest engineering department is blessed with supportive alumni eager to help students have the same opportunities for a college degree that they had," he said. "I hope more alums will follow the Ten Eycks' example by establishing or contributing to scholarships that help support the rising numbers of College of Forestry students."

For more information about supporting scholarships, contact Lisa French at 541-737-2900 or [Lisa.French@oregonstate.edu](mailto:Lisa.French@oregonstate.edu).

## Daniel Boone Descendent Leaves Legacy for Wildlife Research

By Sara Zaske



*The Nobles' daughters with Dean Hal Salwasser: (from left) Kathy Noble, Gail Redburg, Hal Salwasser, Nancy Stevens, and Fran Bush.*

**D**aniel Boone once saved **Marvin Noble's** life. During World War II, Noble found himself on the edge of a cliff, surrounded by enemy gunfire with nowhere to run. A descendent of Daniel Boone, Noble had loved reading stories about the pioneer woodsman ever since he was a boy. Recalling how Boone had once escaped from a similar situation, Noble jumped off the cliff and grabbed at tree limbs to slow his fall to the ravine floor.

Marvin Noble's interest in Daniel Boone continued throughout his life, fueling his passion for hunting and wildlife. So when Marvin Boone Noble and his wife, **Eva Barclay Noble**, left 124 acres of land to Oregon State University, the couple's family felt that supporting wildlife research would be a great way to memorialize the Nobles, honoring their commitment to education, their love of wildlife, and Marvin Noble's heritage.

"My father would be smiling to know how the gift will be used," said **Nancy Stevens**, the Nobles' daughter. "Both my parents graduated from OSU and have always thought that education was one of the most important things you could do for yourself, your family, and the community."

The Nobles gift of land near Hebo, Oregon is valued at \$377,000. The couple's family decided to dedicate \$342,000 of the gift to establish the Marvin and Eva Noble Wildlife Ecosystem Health Fund in the College of Forestry.

The Noble fund will complement the Boone & Crockett Ecosystem Wildlife Health Fund, which was begun earlier this year by the big game hunting club named after Daniel Boone and Davy Crockett. Both funds will help educate students for natural resource careers and develop best practices for the management of native fish and wildlife habitats.

"The Noble Ecosystem Health Fund will enable OSU to expand studies of native wildlife and the forest and rangeland ecosystems where they live," said Hal Salwasser, dean of the College of Forestry. "This gift is certainly a fitting tribute to Marvin and Eva Noble. As major contributors to the forest products industry, the Nobles believed in giving back to their community, and they had a deep love for Oregon State University."

Marvin Noble earned his degree from OSU in fisheries and wildlife in 1938 and pursued a career in the forest products

industry. Together with his brother-in-law, Everett Barclay, Marvin Noble built the Barclay and Noble sawmill on the Alsea River, and later he purchased and operated the Noble & Bittner Plug Company in Hebo, Oregon.

Eva Noble, who also came from a pioneer family, shared her husband's love for wildlife and for learning. She graduated from OSU in 1941 and taught high school for several years. Although they attended the university at different times, Marvin and Eva Noble met on a blind date at a dance in OSU's Memorial Union. They were married for 61 years and continued to take classes long after graduation.

The Nobles were very active community members, including deep involvement with the Tillamook County school board, YMCA, community college, library, and museum. In 2000, they established a scholarship to help Nestucca High School graduates attend college. The Nobles were also very loyal to OSU, attending many football games and alumni events. They particularly enjoyed the marching band, and their gift will also provide \$35,000 for the Marvin and Eva Noble Family Marching Band Endowment at OSU.

## Our Sincere Thanks ...

**The Alice G. Marchel Trust** has made an additional gift of land valued at \$10,500 to be used for research by the Forest Science Department.

**The Autzen Foundation** has made a gift of \$5000 for the Autzen Foundation Scholarship Fund.

**Lee Ayer** has made a gift of \$1500 to the Janet K. Ayer-Sachet Scholarship Fund.

**Michael and Juliana Barnes** have made a gift of \$5000 which, combined with a matching gift from Edmund "Ned" and Harriet "Sis" Hayes, established the Oregon Small Woodlands Scholarship Fund.

**John and Jill Beuter** have made a gift of \$1000 to the Dean's Fund for Excellence and Innovation in Forestry.

**The Bridges Foundation** made a gift of \$2500 to support the Forestry Legacy Scholarship and Fellowship Fund.

**Helen Scott Carlson** has made a gift of \$10,000 to the Gordon G. Carlson Scholarship and Graduate Fellowship Endowment Fund.

**Larry and Marion Christiansen** have made a gift of \$1100 to the Forest Engineering Fund.

**Marvin and Marcia Coats** have made a gift of \$50,000 to the Willamette Industries Legacy Scholarship Fund.

The following gifts were received for the newly established Larry Hoffman Wildfire and Ecosystem Health Scholarship Endowment Fund:

**Columbia Gorge Chapter of SAF** \$5000,  
**Robert and JoAnn Hoffman** \$1000,  
**Karen Hoffman** \$4500,  
**Richard Strachan** \$10,000,  
**Richard Strachan Foundation** \$10,000,  
**Ole and Katherine Helgersen** \$125.

**Cornelius Duffie** has made an additional gift of \$5000 to the Forestry Media Center.

**James and Diane Hallstrom** have made a gift of \$1000 to the Wood Science and Engineering Fund and a gift of \$500 to the Dean's Fund for Excellence and Innovation in Forestry.

**The Heinz Family Foundation** has made a gift of \$75,000 in honor of Dr. Jerry Franklin to establish the HJ Andrews Forest Long-Term Measurement Program Endowment Fund.

**The Ralph Hull Foundation** has made a gift of \$5000 to the Ralph Hull Foundation Forestry Fund.

**The Jeld-Wen Foundation** has made a gift of \$2000 to benefit the Jeld-Wen Scholarship Fund in the Department of Wood Science and Engineering.

**Donna and Bill Knodell** have made a gift of \$2750 to the Willamette Industries Legacy Scholarship Fund.

**Mrs. Elaine Moshofsky** has donated a wooden art mural depicting Portland valued at \$4900. The mural now hangs in the knuckle of Richardson Hall.

**Katherine and Lawrence Merriam** have made a gift of \$2000 to the Catherine Cox Merriam Memorial Scholarship fund.

**John and Christine Murphy** have made a gift of \$1000 to the Wood Science and Engineering fund.

**The NB Giustina Foundation** has made a gift of \$35,000 to support the Giustina Family Forestry Research Fund.

**Michael and Jane Newton** have made a gift of \$37,500 to benefit the Newton Forest Research Fellowship Endowment fund.

**Martin and Doris Nygard** have made a gift of \$1000 to benefit the Forest Engineering fund.

**Robert and Patricia Peterson** have made a gift of \$11,126 to establish the Robert E. and Edward F. Peterson Scholarship Endowment Fund. In addition, they have made a gift of \$300 to the Dean's Fund for Excellence and Innovation in Forestry

**The Plywood Pioneers Association** has made a gift of \$ 3000 to the Billie J. Larson Memorial Scholarship Fund.

**Port Blakely Tree Farms** has made a gift of \$10,000 to establish the N. Stewart Rogers Scholarship Endowment fund.

**Samuel and Kelli Sanders** have made a gift of \$1000 to the Wood Science and Engineering fund.

**JoAnn Sedlak** has made a gift of \$8023 to the Sedlak Family Scholarship Endowment Fund in Forest Engineering.

**Judith and John Sessions** have made a gift of \$1600 to the Forest Engineering fund.

**Professor Phillip Sollins** has made additional gifts totaling \$18,390 to benefit the Tropical Ecosystems Research and Education Fund.

**The Spirit Mountain Community Fund** has made a gift of \$35,000 to the Native Woodland Conservation and Restoration Fund.

**Starker Forests, Inc.** has made an additional gift of \$35,000 to the Starker Lecture Series Fund.

**The Stewart Foundation** has made a gift of \$25,000 to the Faye and Lucille Stewart Scholarship fund in Forest Engineering.

**Roswell Ten Eyck** has made a gift of \$100,000 to the Eula M. Ten Eyck Memorial Scholarship Fund.

**Mrs. Judy Thielges** has made a gift of \$7160 to the Bart A. Thielges Memorial Scholarship Fund.

**Western Forest Genetics Association** has made a gift of \$1000 to the William B. Critchfield Award Endowment fund.

**The Weyerhaeuser Company Foundation** has made an additional gift of \$9000 to the Weyerhaeuser Research Fellowship fund in the Department of Forest Science

*Gifts received as of October 31, 2005.*

# In Memoriam



## **Robert Evan Courtney**

B, FM 1933

Robert Evan Courtney, Forest Management graduate, Phi Beta Kappa, Class of 1933 passed away in Phoenix, AZ on Tuesday, September 20, 2005 after a short illness. He worked for the Forest Service in a CCC camp in the Coronado Forest in Arizona where he met and married Fern Rex of Fort Thomas in 1935. Robert served as supervisor on the Carson National Forest and the Tonto National Forest where he came to be affectionately known as "Mr. Tonto" for his stellar work. He was widely respected by government officials and many others involved with natural resources. During WWII he served in the Seabees on Guam. He retired from the Forest Service after forty years but remained active with the Lions Club, Phoenix inner-city Boy Scouts, senior citizens, Soil Conservation Service, Phoenix Sportsman, NARFE, Amigos, The Range Society and Aldersgate Methodist Church. Robert was the author of four books and was a worldwide traveler with his wife, Fern. He is survived by his wife of 70 years, Fern, his son, Ron Courtney (Jan), daughter, Roberta Meyers, son-in-law, Jack Hannaifin and several grand children and six great-grandsons. A memorial service was held at Aldersgate Methodist Church in Phoenix, AZ.

## Coming Events Calendar 2006

### **February 7, 2006, Corvallis, OR**

SAF Job Fair, 9:30 a.m. to 3:00 p.m., Richardson Hall

### **Outreach Events**

### **January 24, 2006, Corvallis, OR**

Managing Forest Nutrition in the Pacific Northwest: Has Nitrogen Stolen the Show?

### **January 25, 2006, Portland, OR**

Salmon 2100: The Future of Wild Pacific Salmon

### **February 26 - March 1, 2006, Corvallis, OR**

Forest Products Management Development

### **March 8-9, 2006, Corvallis, OR**

The 7th Wood Adhesion Short Course

### **March 21-23, 2006, Bend, OR**

Regeneration of Interior Forests: Principles and Techniques

### **March 23-24, 2006, Corvallis, OR**

Introduction to GIS Applications in Natural Resources with ArcGIS

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